## Agenda

## Civic Works Committee

The 5th Meeting of the Civic Works Committee

March 21, 2023

12:00 PM

Council Chambers - Please check the City website for additional meeting detail information. Meetings can be viewed via live-streaming on YouTube and the City Website.

The City of London is situated on the traditional lands of the Anishinaabek (AUh-nish-in-ah-bek), Haudenosaunee (Ho-den-no-show-nee), Lūnaapéewak (Len-ah-pay-wuk) and Attawandaron (Adda-won-da-run).

We honour and respect the history, languages and culture of the diverse Indigenous people who call this territory home. The City of London is currently home to many First Nations, Metis and Inuit people today.

As representatives of the people of the City of London, we are grateful to have the opportunity to work and live in this territory.

#### Members

Councillors C. Rahman (Chair), H. McAlister, P. Cuddy, S. Trosow, P. Van Meerbergen, Mayor J. Morgan

The City of London is committed to making every effort to provide alternate formats and communication supports for meetings upon request. To make a request specific to this meeting, please contact <a href="Mailto:CWC@london.ca">CWC@london.ca</a> or 519-661-2489 ext. 2425.

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- 3. Scheduled Items
- 4. Items for Direction
- 5. Deferred Matters/Additional Business
- 6. Adjournment

# Integrated Transportation Community Advisory Committee Report

The 3rd Meeting of the Integrated Transportation Community Advisory Committee February 15, 2023

Attendance

PRESENT: T. Khan (Chair), R. Buchal, E. Eady, D. Foster, A. Husain, T. Kerr, S. Leitch, V. Lubrano, D. Luthra, M. Malekzadeh, A. Santiago, J. Vareka and K. Mason (Committee Clerk)

ABSENT: J. Collie

ALSO PRESENT: J. Ackworth, P. Adams, J. Bos, S. Corman, J. Dann, A. Dennome, J. Fullick, J. Gardiner, D. Hall, J. Michaud, A. Miller, J. Pucchio, A. Rosebrugh, K. Scherr, J. Stanford, R. Wilcox

The meeting was called at 3:00 PM.

#### 1. Call to Order

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

#### 2. Scheduled Items

2.1 Developing the 2023-2027 Strategic Plan

That it BE NOTED that the presentation, as appended to the Added Agenda, from R. Wilcox, Director, Strategy and Innovation, with respect to the Development of the 2023-2027 Strategic Plan, was received.

2.2 Kensington Bridge Municipal Class Environmental Assessment Presentation

That it BE NOTED that the presentation, as appended to the Added Agenda, from P. Adams, AECOM and J. Pucchio, AECOM, with respect to the Kensington Bridge Municipal Class Environmental Assessment, was received.

#### 2.3 New Sidewalk Program

That it BE NOTED that the presentation, as appended to the Agenda, from J. Bos, Senior Technologist, Transportation Planning and Design Division, with respect to the New Sidewalk Program, was received.

#### 2.4 Central Avenue Bike Lanes

That it BE NOTED that the presentation, as appended to the Agenda, from D. Hall, Program Manager, Active Transportation, Transportation Planning and Design, with respect to the Central Avenue Bike Lanes, was received.

#### 2.5 Cheapside Street Bike Lanes

That it BE NOTED that the presentation, as appended to the Agenda, from J. Gardiner, Transportation Technologist, Environment and Infrastructure, with respect to the Cheapside Street Bike Lanes, was received.

#### 3. Consent

3.1 2nd Report of the Integrated Transportation Community Advisory Committee

That it BE NOTED that the 2nd Report of the Integrated Transportation Community Advisory Committee, from the meeting held on January 18, 2023, was received.

3.2 Notice of Planning Application - London plan and Zoning By-law Amendments - City-Wide/Additional Residential Unit Review in Response to Bill 23 (More Homes Built Faster Act)

That it BE NOTED that the Notice of Planning Application, dated February 1, 2023, from C. Parker, Senior Planner, related to the London Plan and Zoning By-law Amendments, City-Wide/ Additional Residential Unit Review in Response to Bill 23 (More Homes Build Faster Act), was received.

3.3 Notice of Planning Application - Official Plan and Zoning By-law Amendments - Street Width Policy Review

That it BE NOTED that the Notice of Planning Application, dated February 1, 2023, from I. de Ceuster, Planner I, related to the Official Plan and Zoning By-Law Amendments for the Street Width Policy Review, was received.

3.4 Notice of Planning Application - Zoning By-law Amendment - 129-131 Base Line Road West

That it BE NOTED that the Notice of Planning Application, dated January 25, 2023, from N. Pasato, Senior Planner, related to the Zoning By-Law Amendment for the properties located at 129-131 Base Line Road West, was received.

3.5 Notice of Planning Application - Zoning By-law Amendment - h-5 Holding Zone

That it BE NOTED that the Notice of Planning Application, dated February 1, 2023, from S. Filson, Site Development Planner, related to the Zoning By-Law Amendment for h-5 Holding Zone, was received.

4. Sub-Committees and Working Groups

None

5. Items for Discussion

None.

6. Adjournment

The meeting adjourned at 4:58 PM.

## **Environmental Stewardship and Action Community Advisory Committee**

## Report

4th Meeting of the Environmental Stewardship and Action Community Advisory Committee
March 1, 2023

Attendance PRESENT: B. Samuels (Chair), D. Allick, I. ElGhamrawy, M.

Griffith, A. Hames, C. Hunsberger, C. Mettler, N. Serour, L. Vuong, A. Wittingham and K. Mason (Committee Clerk)

ABSENT: P. Almost and L. Paulger

ALSO PRESENT: M. Fabro, J. Stanford, B. Westlake-Power and

R. Wilcox

#### 1. Call to Order

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

#### 2. Scheduled Items

2.1 2023-2027 Strategic Plan Presentation

That it BE NOTED that the presentation appended to the Environmental Stewardship and Action Community Advisory Committee Agenda by R. Wilcox, Director, Strategy and Innovation, with respect to the 2023-2027 Strategic Plan, was received.

## 2.2 Smoking By-law

That the Municipal Council BE ENCOURAGED to investigate and consider an update to the corporate definition of the term "smoking" under By-law PH-10 - Smoke Free Public Places and By-law A.-6924(a)-278 - Prohibit Smoking within 9 Metres of Recreation Amenities in Municipal Parks, and Entrances to Municipally-owned Building, to include Parks and Environmentally Significant Areas, as well as vaping, and cannabis use in these areas; it being noted that the Environment Stewardship and Action Community Advisory Committee received the presentation from L. Stobo, Manager, Substance Abuse Programs Team, Middlesex London Health Unit with respect to this matter.

## 3. Consent

3.1 3rd Report of the Environmental Stewardship and Action Community Advisory Committee

That it BE NOTED that the 3rd Report of the Environmental Stewardship and Action Community Advisory Committee, from its meeting held on February 1, 2023, was received.

## 3.2 R. McGarry Resignation

That the resignation of R. McGarry BE RECEIVED with regret.

#### 4. Sub-Committees and Working Groups

4.1 Working Group Comments - 735 Southdale Road West

That the Working Group comments relating to the Notice of Planning Application dated January 26, 2023 from A. Curtis, Planner I, relating to the property located at 735 Southdale Road West BE FORWARDED to the Civic Administration for review and consideration.

#### 5. Items for Discussion

5.1 Notice of Planning Application - 1310 Adelaide Street North and 795 Windemere Road

That a Working Group BE ESTABLISHED, to review the Notice of Planning Application for Official Plan and Zoning By-law Amendments for the property located at 1310 Adelaide Street North and 795 Windermere Road; it being noted that the Environmental Stewardship and Action Community Advisory Committee received a Notice dated February 9, 2023 from N. Pasato, Senior Planner, with respect to this matter.

5.2 (ADDED) Creation of Sub-Committees / Working Groups

That it BE NOTED that the Environmental Stewardship and Action Community Advisory Committee (ESACAC) held a general discussion regarding the creation of sub-committees and working groups; it being further noted that ESACAC will defer this matter to next meeting for additional discussion.

#### 6. Adjournment

The meeting adjourned at 5:26 PM.

## **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: Hamilton Road and Highbury Avenue Intersection – Safety

Review

Date: March 21, 2023

## Recommendation

That, on the recommendation of the Deputy City Manager, Environment & Infrastructure, the following report with respect to the Hamilton Road and Highbury Avenue Intersection **BE RECEIVED** for information.

## **Linkage to the Corporate Strategic Plan**

The following report supports the 2019-2023 Strategic Plan through the focus area of Building a Sustainable City, by improving safety for all modes of transportation and building new infrastructure to support future development and to protect the environment.

## **Analysis**

## 1.0 Background Information

## 1.1 Previous Reports Related to this Matter

 Civic Works Committee – May 28, 2018 – Hamilton Road and Highbury Avenue Intersection Improvements Environmental Study Report - Notice of Study Completion

#### 2.0 Discussion and Considerations

## 2.1 Purpose

The following resolution was passed by the City Council at its meeting on November 8, 2022:

That, prior to the end of Q1 of 2023, the Civic Administration BE DIRECTED to report back to the Civic Works Committee with options to advance the timing of improvements to the intersection of Hamilton Road and Highbury Avenue, along with potential measures to reduce the number of severe accidents in the interim; it being noted that the communication, as appended to the Added Agenda, from Councillor M. van Holst, with respect to this matter, was received. (2022-C09) (5.2/14/CWC)

The purpose of this report is to present the findings from the safety review of the Hamilton Road and Highbury Avenue intersection and timing considerations for the future capital project. The report provides recommendations for the interim measures that can assist in improving safety at this location.

## 2.2 Existing Conditions

The Hamilton Road and Highbury Avenue North intersection is one of the busiest in the City. Based on counts conducted last November, approximately 58,000 vehicles, 350

pedestrians and 16 cyclists travel though this intersection on a typical day. Hamilton Road is classified as a Civic Boulevard with a speed limit of 50 km/hr and Highbury Avenue North is an Urban Thoroughfare with a posted speed of 50 km/hr and 60 km/hr north and south of the intersection respectively. Approximately 500 m south of Hamilton Road, Highbury Avenue North becomes an Expressway with a posted speed limit of 100 km/hr. Some pavement repairs on Highbury Avenue were completed in 2022 on a small section of the southbound curb lane just north of the intersection to address some localized pavement deficiencies. Figure 1 provides a recent aerial photograph of the intersection area.

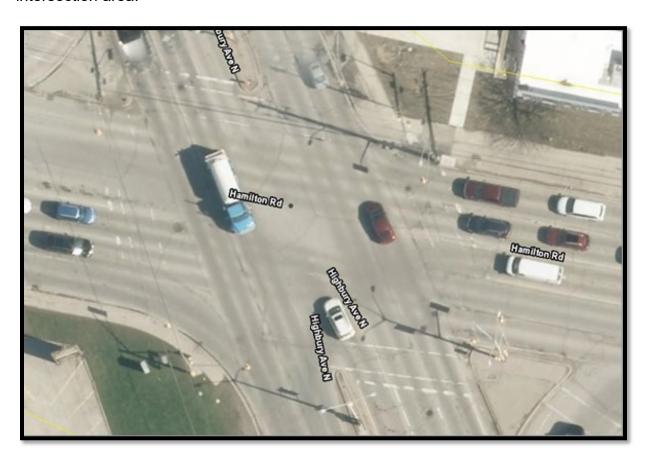


Figure 1 – Highbury and Hamilton Road Intersection

Poor compliance with regulatory speed limits, heavy traffic volumes during peak hours, the skewed configuration of the intersection, and multiple commercial and residential driveways are all factors which contribute to the number of collisions at this location.

#### 2.3 Environmental Assessment Recomendations

Based on the recommendations of the City's 2030 Smart Moves Transportation Master Plan, an Environmental Assessment (EA) study for improvements to the Hamilton Road and Highbury Avenue North intersection was completed in 2018. The EA recommended improvements consisting of additional through lanes, turning movement improvements and designated left turn lanes into commercial properties. Other proposed design features include median islands, eastbound and westbound cycling lanes, landscaping, urban design elements, new street lighting, and turning movement restrictions at some residential and commercial entrances. During the future detailed design phase, the EA recommendations will be reviewed with consideration to current design standards and practices.

The planned capital project is identified as a Growth project. As such, the timing is established via the current Development Charges Study and Roadways Growth Capital Budget. The reconstruction of the intersection to implement the EA recommendations is currently identified for 2029 with leading-year activity to acquire property and manage utility conflicts. As part of the ongoing Mobility Master Plan and future DC Bylaw

updates, the priority and timing of this project will be reviewed for opportunity to advance within the growth program.

## 3.0 Safety Review and Recommendations

#### 3.1 Collision Data Review

A statistical review of signalized intersections has been completed which considers historical collision data, normalizing factors and detailed analysis to identify collision prone locations and opportunities for safety improvements. Based on the most recent review, the Highbury Avenue North and Hamilton Road intersection ranked number 24 on the list of 360 signalized intersections.

The Transportation Planning & Design Division has reviewed the collision data and police reports for collisions which occurred at the intersection from January 1, 2017, and September 30, 2022. The collision data shows a recorded total of 231 collisions over the past six years. Of the total number of collisions, 49% were rear-end collisions, 16% sideswipe, 15% turning movement related, 8% angled, and the remaining 11% were a variety of single motor vehicle (SMV) collisions and unknown causes. There were no fatal collisions recorded in the City's database during this period. There were two reported collisions involving pedestrians. There were no reported collisions involving cyclists. There were 20 injuries listed in the collision reports, resulting in an 8.7% injury rate. Of the total, 88 collisions were property damage only and 123 collisions were non-reportable (damage less than \$2000), resulting in 38% and 53% respectively.

The police reports identify driver negligence as being the main factor for many of the collisions. The explanations and statements from the Motor Vehicle Collision Reports associated with the rear-end collisions identify that distracted driving and drivers failing to limit their speeds on approach to the intersection were the main causes of the collisions. The skew angle of the intersection and reduced sight lines also contributed to many rear-end collisions in the channelized right turn lanes. Due to the high traffic volumes and long queues experienced at this intersection, vehicles attempting to turn left into/from adjacent side streets also result in collisions as drivers sometimes leave a gap for them to initiate the turn but end up colliding with through traffic from lack of vision or awareness.

#### 3.2 Recommendations

Based on the collision data, associated collision reports, EA recommendations, and considering the timing of the future major work, the following interim measures can be considered to improve safety at the intersection:

- 1. Speed Limit Revisions: Reduce the speed limit for the northbound lanes on Highbury Avenue North approaching the intersection to 50 km/hr and provide a transition from 100 km/hr to the 80 km/hour and 60 km/hr speed zones. The necessary By-law for these revisions has been passed and the signing revisions will be completed in the Winter 2023.
- **2. Increased Enforcement:** Notify the London Police Service of the upcoming speed limit changes and request for additional enforcement.
- **3. Pavement Marking Improvements:** Refresh the pavement markings at the intersection including new pedestrian ladder crossings and stop bars. This will increase the drivers awareness and the conspicuity of the crossings.

- **4. Red Light Camera Evaluation:** Evaluate the intersection for a potential red light camera installation. This is currently under review by Traffic Engineering as part of a program review.
- 5. Mobility Master Plan: As part of the ongoing Mobility Master Plan (MMP) and future DC Bylaw updates, the timing and prioritization of the intersection improvements will be considered within program priorities. A review of the 2018 Environmental Assessment Study recommendations will also be undertaken during the design phase to ensure that the proposed improvements are consistent with current policies and standards.

With regard to traffic signal operations, it is standard practice for the City to review the signal timing for intersections every two to three years or more frequently as issues are raised.

## Conclusion

The Hamilton Road and Highbury Avenue intersection is one of the busiest in the city. The high traffic volumes on all intersection approaches, low compliance with speed limits, driver behaviour, distracted driving, and the angled or skewed configuration of the intersection all contribute to the number of collisions experienced at this location. The presence of a large number of commercial and residential entrances within the area contribute to many left-turn collisions. The proposed turning movement restrictions and access management recommendations provided in the EA study will be important to address these issues in the future.

This report identifies interim safety improvement measures that have a potential to reduce the number of collisions. These actions include speed limit adjustments, a request for greater police presence, rejuvenated pavement markings, and potential red light camera installation. The planned work associated with EA recommendations will provide the most significant and effective improvements and will be further reviewed in the design phase. The Mobility Master Plan and Development Charge Study updates will review the current construction timing of 2029 within the growth capital program priorities. The scheduling and financing of advance project preparation actions such as property acquisition will also be confirmed to support project delivery.

Prepared by: Garfield Dales, P.Eng., Division Manager, Transportation

**Planning and Design** 

Submitted by: Doug MacRae, P.Eng., MPA, Director, Transportation

and Mobililty

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

**Environment and Infrastructure** 

## **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: Contract Award: RFT-2022-319

2023 Infrastructure Renewal Program

Paardeberg Crescent, Flanders Row and Rhine Avenue

Date: March 21, 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 contract for the 2023 Infrastructure Renewal Program Paardeberg Crescent, Flanders Row and Rhine Avenue project:

- (a) the bid submitted by J-AAR Excavating Limited at its tendered price of \$6,767,602.20, excluding HST, for the Paardeberg Crescent, Flanders Row and Rhine Avenue project, **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) Development Engineering (London) Limited, **BE AUTHORIZED** to carry out the resident inspection and contract administration for the Paardeberg Crescent, Flanders Row and Rhine Avenue project in accordance with the estimate, on file, at an upset amount of \$589,583.50, including 10% contingency, excluding HST, in accordance with Section 15.2 (g) 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';
- (d) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;
- (e) 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 (RFT-2022-319); and
- (f) 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 2023 Infrastructure Renewal Program Paardeberg Crescent, Flanders Row and Rhine Avenue project. This project will reconstruct the full length of Paardeberg Crescent, Flanders Row and Rhine Avenue. A location map depicting the approximate limits of the reconstruction project is provided in Appendix 'B'.

#### Context

Paardeberg Crescent, Flanders Row and Rhine Avenue has been identified for reconstruction under the annual Infrastructure Renewal Program as the sanitary sewer, storm sewer and watermain within the project limits are at the end of their useful life. This project includes the decommissioning and removal of the Paardeberg sanitary pumping station, replacing it with a gravity sanitary sewer system. This project includes the construction of new sidewalks on one side of Paardeberg Crescent, Flanders Row and Rhine Avenue.

## **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.

## **Analysis**

## 1.0 Background Information

## 1.1 Previous Reports Related to this Matter

• Civic Works Committee – October 20, 2020, Appointment of Consulting Engineers for the Infrastructure Renewal Program, Recommendation a) (ii);

## 2.0 Discussion and Considerations

#### 2.1 Work Description

The Paardeberg Crescent, Flanders Row and Rhine Avenue project includes the following work details:

- Watermain replacement including water service renewal to the property line;
- Sanitary sewer replacement;
- New storm sewer system;
- Partial replacement of existing private drain connections;
- Decommissioning and removal of the sanitary pumping station;
- Street light replacement;
- New sidewalks on one side of Paardeberg Crescent, Rhine Avenue, and Flanders Row;
- New concrete curb and gutter;
- · Full road reconstruction including new asphalt; and
- New green infrastructure (LIDs).

Infrastructure replacement needs have been coordinated within the Environment and Infrastructure Department. The funding for this project comes from the approved Wastewater and Treatment, Water, and Transportation capital works budgets.

#### 2.2 Public Consultation

The initial project notice (dated May 6, 2021) was mailed out to properties within and flanking the project limits. Included with the notice was a survey that residents were invited to fill out and return to the City's project team to provide information on their property and input for consideration.

The subsequent pre-construction notice (dated November 18, 2022) was mailed out to properties within and flanking the project limits. Included in this notice was an invitation for residents to attend a drop-in event to view construction plans, review necessary tree removals, discuss impacts to their property and to learn more about the project. Following the meeting, project boards displayed at the meeting were made available for download on the project website.

#### 2.3 Service Replacement

In conjunction with the construction of this project, the City is replacing existing sewer private drain connections to approximately two metres behind the curb, where applicable, to help minimize future roadway excavations and to extend the service life of the roadway. As part of this project, the water service connections will be replaced to the property line. The property owner may elect to replace their private side water service connection at their own cost. Property owners may also be eligible to participate in the City's Lead Service Replacement Loan Program.

## 3.0 Financial Impact/Considerations

## 3.1 Tender Summary

The tender for the 2023 Infrastructure Renewal Program Paardeberg Crescent, Flanders Row and Rhine Avenue project closed on February 9, 2023. Five contractors submitted tender prices as listed below, excluding HST. All tenders received include a contingency of \$600,000.00.

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Contractor	Tender Price Submitted
J-AAR Excavating Limited	\$6,767,602.20
Blue-Con Construction	\$6,921,921.00
291 Construction Ltd	\$7,015,910.80
CH Excavating (2013)	\$7,645,576.61
Seawaves Development Services Inc	\$8,833,281.35

All tenders have been checked by the Environment and Infrastructure Department and Development Engineering (London) Limited. No mathematical errors were found. The results of the tendering process indicate a competitive process. The tender estimate prior to tender opening was \$6,754,212.00, including contingency, excluding HST.

#### 3.2 Consulting Engineer Services

Development Engineering (London) Limited was awarded the detailed design of the Paardeberg Crescent, Flanders Row and Rhine Avenue project by Council on October 20, 2020. Due to the consultant's knowledge and positive performance on the detailed design, the consultant was invited to submit a proposal to carry out the resident inspection and contract administration for the project. Development Engineering (London) Limited submitted a proposal which includes an upset limit of \$589,583.50, including 10% contingency, excluding HST.

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 Development Engineering (London) Limited 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 in order 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 Development Engineering

(London) Limited be authorized to carry out the remainder of engineering services, as construction administrators, for a fee estimate of \$589,583.50, including 10% contingency, excluding HST. These fees are associated with the construction resident inspection and contract administration services to ensure that the City receives the product specified and associated value. The approval of this work will bring the total engineering services for this project to \$809,319.50, including 10% contingency, excluding HST, for both detailed design and construction administration.

## 3.3 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 Operating Cost Increase
Sewer Operations	New storm sewers	\$725.00
Water Operations		\$0.00
Transportation Operations	New sidewalks	\$1,818.00
Total		\$2,543.00

## Conclusion

Civic Administration has reviewed the tender bids and recommends J-AAR Excavating Limited be awarded the construction contact for the 2023 Infrastructure Renewal Program Paardeberg Crescent, Flanders Row and Rhine Avenue project.

Development Engineering (London) Limited 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 resident inspection and contract administration services as it is in the best financial and technical interests of the City.

Prepared by: Kyle Chambers, P.Eng.

**Division Manager, Sewer Engineering** 

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: D. Gough, K. Johnson, A. Rozentals

Appendix 'A' - Sources of Financing

Appendix 'B' - Location Map

#### #23054

March 21, 2023 (Award Contract)

Chair and Members

Civic Works Committee

RE: RFT-2022-319 - 2023 Infrastructure Renewal Program - Paardeberg Crescent, Flanders Row and Rhine Avenue (Subledger WS22C00J)

Capital Project ES241422 - Infrastructure Renewal Program - Sanitary Sewers

Capital Project ES254023 - Infrastructure Renewal Program - Stormwater Sewers & Treatment

Capital Project ES515023 - Pumping Station Optimization & Renewal

Capital Project EW376523 - Infrastructure Renewal Program - Watermains

Capital Project TS301423 - Road Network Improvements (Local and Rural)

Capital Project TS512322 - Street Light Maintenance

J-AAR Excavating Limited - \$6,767,602.20 (excluding HST)

Development Engineering (London) Limited - \$589,583.50 (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	This Submission	Balance for Future Work
ES241422 - Infrastructure Renewal Program - Sanitary Sewers	·			
Engineering	2,000,000	1,282,197	129,152	588,651
Construction	10,409,529	6,369,464	1,482,494	2,557,571
City Related Expenses	25,000	630	0	24,370
ES241422 Total	12,434,529	7,652,291	1,611,646	3,170,592
ES254023 - Infrastructure Renewal Program - Stormwater Sewers and Treatment				
Engineering	2,000,000	0	81,591	1,918,409
Construction	11,212,878	0	936,550	10,276,328
City Related Expenses	100,000	0	0	100,000
ES254023 Total	13,312,878	0	1,018,141	12,294,737
ES515023 - Pumping Station Optimization and Renewal				
Engineering	20,000	0	2,171	17,829
Construction	430,972	0	24,929	406,043
ES515023 Total	450,972	0	27,100	423,872
EW376523 - Infrastructure Renewal Program - Watermains				
Engineering	2,500,000	357,963	108,103	2,033,934
Construction	15,787,375	4,128,149	1,240,877	10,418,349
EW376523 Total	18,287,375	4,486,112	1,348,980	12,452,283
TS301423 - Road Network Improvements				
Engineering	252,689	0	252,689	0
Construction	9,673,296	22,621	2,900,521	6,750,154
TS301423 Total	9,925,985	22,621	3,153,210	6,750,154
TS512322 - Street Light Maintenance				
Engineering	300,000	112,990	26,252	160,758
Construction	2,510,852	99,597	301,342	2,109,913
TS512322 Total	2,810,852	212,587	327,594	2,270,671
Total Expenditures	\$57,222,591	\$12,373,611	\$7,486,671	\$37,362,309

#### #23054

March 21, 2023 (Award Contract)

Chair and Members
Civic Works Committee

RE: RFT-2022-319 - 2023 Infrastructure Renewal Program - Paardeberg Crescent, Flanders Row and Rhine Avenue (Subledger WS22C00J)

Sources of Financing	Approved Budget	Committed To	This Submission	Balance for Future Work
ES241422 - Infrastructure Renewal Program - Sanitary Sewers	-			
Capital Sewer Rates	7,934,529	7,652,291	282,238	0
Drawdown from Sewage Works Renewal Reserve Fund	2,250,000	0	0	2,250,000
Canada Community-Building Fund	2,250,000	0	1,329,408	920,592
ES241422 Total	12,434,529	7,652,291	1,611,646	3,170,592
ES254023 - Infrastructure Renewal Program - Stormwater Sewers and Treatment				
Capital Sewer Rates	1,242,500	0	1,018,141	224,359
Drawdown from Sewage Works Renewal Reserve Fund	9,820,378	0	0	9,820,378
Canada Community-Building Fund	2,250,000	0	0	2,250,000
ES254023 Total	13,312,878	0	1,018,141	12,294,737
ES515023 - Pumping Station Optimization and Renewal				
Capital Sewer Rates	450,972	0	27,100	423,872
EW376523 - Infrastructure Renewal Program - Watermains				
Capital Water Rates	12,193,444	4,486,112	1,348,980	6,358,352
Drawdown from Water Works Renewal Reserve Fund	4,668,931	0	0	4,668,931
Canada Community-Building Fund	1,425,000	0	0	1,425,000
EW376523 Total	18,287,375	4,486,112	1,348,980	12,452,283
TS301423 - Road Network Improvements				
Capital Levy	9,125,985	22,621	3,153,210	5,950,154
Drawdown from Transportation Renewal Reserve Fund	800,000	0	0	800,000
TS301423 Total	9,925,985	22,621	3,153,210	6,750,154
TS512322 - Street Light Maintenance				
Capital Levy	2,467,863	212,587	327,594	1,927,682
Drawdown from Transportation Renewal Reserve Fund	342,989	0	0	342,989
TS512322 Total	2,810,852	212,587	327,594	2,270,671
Total Financing	\$57,222,591	\$12,373,611	\$7,486,671	\$37,362,309

#### #23054

March 21, 2023 (Award Contract)

Chair and Members Civic Works Committee

RE: RFT-2022-319 - 2023 Infrastructure Renewal Program - Paardeberg Crescent, Flanders Row and Rhine Avenue (Subledger WS22C00J)

	Approved Budget	Committed To Date	This Submission	Balance for Future Work
Financial Note: Engineering	ES241422	ES254023	ES515023	EW376523
Contract Price	\$126,919	\$80,180	\$2,134	\$106,234
Add: HST @13%	16,499	10,423	277	13,810
Total Contract Price Including Taxes	143,418	90,603	2,411	120,044
Less: HST Rebate	-14,266	-9,012	-240	-11,941
Net Contract Price	\$129,152	\$81,591	\$2,171	\$108,103
Financial Note: Engineering continued	TS301423	TS512322	Total	
Contract Price	\$248,319	\$25,798	\$589,584	
Add: HST @13%	32,281	3,354	76,644	
Total Contract Price Including Taxes	280,600	29,152	666,228	
Less: HST Rebate	-27,911	-2,900	-66,270	
Net Contract Price	\$252,689	\$26,252	\$599,958	<del>-</del>
Financial Note: Construction	ES241422	ES254023	ES515023	EW376523
Contract Price	\$1,456,853	\$920,351	\$24,498	\$1,219,415
Add: HST @13%	189,391	119,646	3,185	158,524
Total Contract Price Including Taxes	1,646,244	1,039,997	27,683	1,377,939
Less: HST Rebate	-163,750	-103,447	-2,754	-137,062
Net Contract Price	\$1,482,494	\$936,550	\$24,929	\$1,240,877
Financial Note: Construction continued	TS301423	TS512322	Total	
Contract Price	\$2,850,355	\$296,130	\$6,767,602	
Add: HST @13%	370,546	38,497	879,789	
Total Contract Price Including Taxes	3,220,901	334,627	7,647,391	_
Less: HST Rebate	-320,380	-33,285	-760,678	
Net Contract Price	\$2,900,521	\$301,342	\$6,886,713	_
Total Engineering and Construction	\$7,486,671	_		_

**Note 1:** There will be additional annual operating costs of \$725.00 for Sewer Operations and \$1,818.00 for Transportation Operations.

Jason Davies
Manager of Financial Planning & Policy

jg

Rhine Avenue from Flanders Row to Wistow Street Flanders Row from Wistow Street to Paardeberg Crescent



London C A N A D A 300 Dufferin Avenue, PO Box 5035 London, Ontario N6A 4L9 www.London.ca

Project Area



Project Area

## **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: Contract Award: RFT-2022-315

2023 Infrastructure Renewal Program

**Quebec Street** 

Date: March 21, 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 contract for the 2023 Infrastructure Renewal Program Quebec Street project:

- (a) the bid submitted by J-AAR Excavating Limited at its tendered price of \$6,336,365.87, excluding HST, **BE ACCEPTED**; it being noted that the bid submitted by J-AAR Excavating Limited was the lowest of seven bids received and meets the City's specifications and requirements in all areas;
- (b) Archibald Gray & McKay Engineering Ltd., **BE AUTHORIZED** to carry out the resident inspection and contract administration for the Quebec Street project in accordance with the estimate, on file, at an upset amount of \$534,600.00, including 10% contingency, excluding HST, in accordance with Section 15.2 (g) 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';
- (d) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;
- (e) 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 (RFT-2022-315); and
- (f) 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 2023 Infrastructure Renewal Program Quebec Street project. This project will reconstruct Quebec Street, from Oxford Street East to the Canadian Pacific rail line. A location map depicting the approximate limits of the reconstruction project is provided in Appendix 'B'.

#### Context

Quebec Street has been identified for reconstruction under the annual Infrastructure Renewal Program as the sanitary sewer, storm sewer and watermain within the project limits are at the end of their useful life. This project will also provide the infrastructure necessary to complete future combined sewer separation on Oxford Street East.

## **Linkage to the Corporate Strategic Plan**

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

- Building a Sustainable City:
  - o London's infrastructure is built, maintained, and operated to meet the long-

term needs of our community by replacing aged and failing infrastructure with new materials and sizing new infrastructure to accommodate future development.

## **Analysis**

## 1.0 Background Information

#### 1.1 Previous Reports Related to this Matter

• Civic Works Committee – June 22, 2021, Appointment of Consulting Engineers for the Infrastructure Renewal Program, Recommendation a) (ii).

#### 2.0 Discussion and Considerations

#### 2.1 Work Description

The Quebec Street project includes the following work details:

- Watermain replacement including water service renewal to the property line;
- Storm sewer and sanitary sewer replacement;
- Partial replacement of existing private drain connections;
- New cycling infrastructure;
- Removal of a lane of traffic for vehicles;
- Intersection alterations;
- · Replacement of existing sidewalk; and
- Full road reconstruction including new asphalt, curb, and gutter.

Infrastructure replacement needs have been coordinated within the Environment and Infrastructure Department. The funding for this project comes from the approved Wastewater, Water, and Transportation capital works budgets.

#### 2.2 Public Consultation

The initial project notice (dated September 2, 2021) was mailed to properties within and flanking the project limits. Included with the notice was a survey that residents were invited to fill out and return to the City's project team to provide information on their property and input for consideration.

The subsequent pre-construction notice (dated November 18, 2022) was mailed to properties within and flanking the project limits. Included in this notice was an invitation for residents to attend a drop-in event to view construction plans, review necessary tree removals, discuss impacts to their property and to learn more about the project. Following the meeting, project boards displayed at the meeting were made available for download on the project website.

## 2.3 Service Replacement

In conjunction with the construction of this project, the City is replacing existing sewer private drain connections to approximately two metres behind the curb, where applicable, to help minimize future roadway excavations and to extend the service life of the roadway. As part of this project the water service connections will be replaced to the property line. The property owner may elect to replace their private side water service connection at their own cost. Property owners may also be eligible to participate in the City's Lead Service Replacement Loan Program.

#### 3.0 Financial Impact/Considerations

#### 3.1 Tender Summary

The tender for the 2023 Infrastructure Renewal Program Quebec Street project closed on January 26, 2023. Seven contractors submitted tender prices as listed below, excluding HST. All tenders received include a contingency of \$500,000.00.

Table 1: Summary of submitted tender prices

Contractor	Tender Price Submitted
J-AAR Excavating Limited	\$6,336,365.87
L82 Construction Ltd	\$6,678,297.24
CH Excavating (2013)	\$6,775,879.44
Blue-Con Construction	\$6,850,000.00
Bre-Ex Construction Inc	\$7,448,871.35
Seawaves Development Services Inc	\$7,738,546.50
291 Construction Ltd	\$8,555,067.48

All tenders have been checked by the Environment and Infrastructure Department and Archibald Gray & McKay Engineering Ltd. No mathematical errors were found. The results of the tendering process indicate a competitive process. The tender estimate prior to tender opening was \$7,122,000.00, including contingency, excluding HST.

## 3.2 Consulting Engineer Services

Archibald Gray & McKay Engineering Ltd. was awarded the detailed design of the Quebec Street project by Council on June 22, 2021. Due to the consultant's knowledge and positive performance on the detailed design, the consultant was invited to submit a proposal to carry out the resident inspection and contract administration for the project. Archibald Gray & McKay Engineering Ltd. submitted a proposal which includes an upset limit of \$534,600.00, including 10% contingency, excluding HST.

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 Archibald Gray & McKay Engineering Ltd. 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 in order 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 Archibald Gray & McKay Engineering Ltd. be authorized to carry out the remainder of engineering services, as construction administrators, for a fee estimate of \$534,600.00, including 10% contingency, excluding HST. These fees are associated with the construction resident inspection and contract administration services to ensure that the City receives the product specified and associated value. The approval of this work will bring the total engineering services for this project to \$952,600.00, including 10% contingency, excluding HST, for both detailed design and construction administration.

## 3.3 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 Operating Cost Increase
Sewer Operations		\$0.00
Water Operations		\$0.00
Transportation Operations – Bike Lanes	970 meters of new bike lanes	\$8,778.50
Total		\$8,778.50

## Conclusion

Civic Administration has reviewed the tender bids and recommends J-AAR Excavating Limited be awarded the construction contact for the 2023 Infrastructure Renewal Program Quebec Street project.

Archibald Gray & McKay Engineering Ltd. 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 resident inspection and contract administration services as it is in the best financial and technical interests of the City.

Prepared by: Kyle Chambers, P.Eng.

**Division Manager, Sewer Engineering** 

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: D. Gough, K. Johnson, A. Rozentals

Appendix 'A' - Sources of Financing

Appendix 'B' - Location Map

#23053

March 21, 2023 (Award Contract)

Chair and Members Civic Works Committee

RE: RFT-2022-315 - 2023 Infrastructure Renewal Program - Quebec Street

(Subledger WS22C00G)

Capital Project ES241422 - Infrastructure Renewal Program - Sanitary Sewers

Capital Project ES543619 - Storm Sewer Built Area Works

Capital Project EW376523 - Infrastructure Renewal Program - Watermains

Capital Project TS144622 - Road Networks Improvements (Main)

Capital Project TS173919 - Active Transportation

Capital Project TS406722 - Traffic Signals - Maintenance

Capital Project TS512322 - Street Light Maintenance

J-AAR Excavating Limited - \$6,336,365.87 (excluding HST)

Archibald Gray & McKay Engineering Ltd. - \$534,600.00 (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	This Submission	Balance for Future Work
ES241422 - Infrastructure Renewal Program - Sanitary Sewers	·			
Engineering	2,000,000	1,134,021	148,176	717,803
Construction	10,409,529	4,613,199	1,756,265	4,040,065
City Related Expenses	25,000	630	0	24,370
ES241422 Total	12,434,529	5,747,850	1,904,441	4,782,238
ES543619 - Storm Sewer Built Area Works				
Engineering	913,886	469,946	189,163	254,777
Construction	25,846,206	5,329,150	2,242,055	18,275,001
ES543619 Total	26,760,092	5,799,096	2,431,218	18,529,778
EW376523 - Infrastructure Renewal Program - Watermains				
Engineering	2,500,000	245,654	112,309	2,142,037
Construction	15,787,375	2,797,011	1,331,138	11,659,226
EW376523 Total	18,287,375	3,042,665	1,443,447	13,801,263
TS144622 - Road Networks Improvements (Main)				_
Engineering	1,000,000	274,781	51,482	673,737
Construction	12,234,025	3,325,967	610,190	8,297,868
City Related Expenses	241	241	0	0
TS144622 Total	13,234,266	3,600,989	661,672	8,971,605
TS173919 - Active Transportation				
Engineering	1,193,203	1,010,413	16,620	166,170
Construction	12,484,865	8,078,901	196,999	4,208,965
City Related Expenses	12,418	12,418	0	0
TS173919 Total	13,690,486	9,101,732	213,619	4,375,135

#23053

March 21, 2023 (Award Contract)

Chair and Members Civic Works Committee

RE: RFT-2022-315 - 2023 Infrastructure Renewal Program - Quebec Street

(Subledger WS22C00G)

Estimated Expenditures continued	Approved Budget	Committed To Date	This Submission	Balance for Future Work
TS406722 - Traffic Signals - Maintenance				
Engineering	500,000	313,763	17,857	168,380
Construction	3,378,531	0	211,644	3,166,887
Traffic Signals	464,170	464,170	0	0
TS406722 Total	4,342,701	777,933	229,501	3,335,267
TS512322 - Street Light Maintenance				
Engineering	300,000	104,586	8,404	187,010
Construction	2,510,852	0	99,597	2,411,255
TS512322 Total	2,810,852	104,586	108,001	2,598,265
Total Expenditures	\$91,560,301	\$28,174,851	\$6,991,899	\$56,393,551
Sources of Financing				
ES241422 - Infrastructure Renewal Program - Sanitary Sewers				
Capital Sewer Rates	7,934,529	5,747,850	1,904,441	282,238
Drawdown from Sewage Works Renewal Reserve Fund	2,250,000	0	0	2,250,000
Canada Community-Building Fund	2,250,000	0	0	2,250,000
ES241422 Total	12,434,529	5,747,850	1,904,441	4,782,238
ES543619 - Storm Sewer Built Area Works				
Drawdown from Sewage Works Renewal Reserve	11,908,241	4,256,217	435,188	7,216,836
Drawdown from City Services - Stormwater Reserve Fund (Development Charges) (Note 2)	14,851,851	1,542,879	1,996,030	11,312,942
ES543619 Total	26,760,092	5,799,096	2,431,218	18,529,778
EW376523 - Infrastructure Renewal Program - Watermains				
Capital Water Rates	12,193,444	3,042,665	1,443,447	7,707,332
Drawdown from Water Works Renewal Reserve Fund	4,668,931	0	0	4,668,931
Canada Community-Building Fund	1,425,000	0	0	1,425,000
EW376523 Total	18,287,375	3,042,665	1,443,447	13,801,263
TS144622 - Road Networks Improvements (Main)				
Drawdown from Transportation Renewal Reserve Fund	2,595,185	0	0	2,595,185
Canada Community-Building Fund	10,639,081	3,600,989	661,672	6,376,420
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#### #23053

March 21, 2023 (Award Contract)

Chair and Members Civic Works Committee

RE: RFT-2022-315 - 2023 Infrastructure Renewal Program - Quebec Street

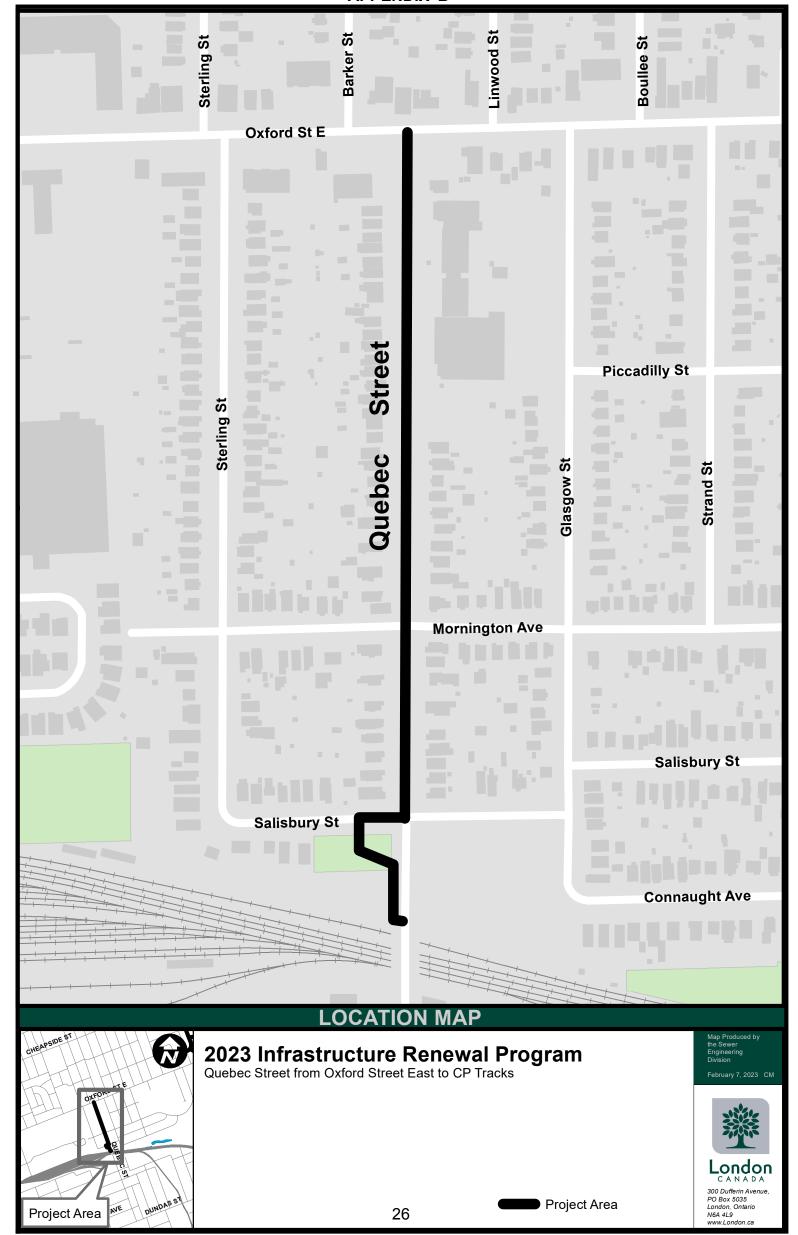
(Subledger WS22C00G)				
Sources of Financing continued	Approved Budget	Committed To Date	This Submission	Balance for Future Work
TS173919 - Active Transportation				
Capital Levy	391,425	391,425	0	0
Debenture By-law No. W5654-291 (Note 1)	6,421,581	4,196,651	103,577	2,121,353
Drawdown from City Services - Roads Reserve Fund (Development Charges) (Note 2)	6,822,456	4,458,632	110,042	2,253,782
Other Contributions	55,024	55,024	0	0
TS173919 Total	13,690,486	9,101,732	213,619	4,375,135
TS406722 - Traffic Signals - Maintenance				
Capital Levy	3,742,553	777,933	229,501	2,735,119
Drawdown from Transportation Renewal Reserve Fund	600,148	0	0	600,148
TS406722 Total	4,342,701	777,933	229,501	3,335,267
TS512322 - Street Light Maintenance				
Capital Levy	2,467,863	104,586	108,001	2,255,276
Drawdown from Transportation Renewal Reserve Fund	342,989	0	0	342,989
TS512322 Total	2,810,852	104,586	108,001	2,598,265
Total Financing	\$91,560,301	\$28,174,851	\$6,991,899	\$56,393,551
Financial Note: Engineering	ES241422	ES543619E	EW376523	TS144622
Contract Price	\$145,613	\$185,891	\$110,366	\$50,591
Add: HST @13%	18,930	24,166	14,348	6,577
Total Contract Price Including Taxes	164,543	210,057	124,714	57,168
Less: HST Rebate Net Contract Price	-16,367 \$148,176	-20,894 \$189,163	-12,405 \$112,309	-5,686 \$51,482
Net Contract i nec	Ψ140,170	Ψ103,103	Ψ112,303	ψ31,402
Financial Note: Engineering continued	TS173919	TS406722	TS512322	Total
Contract Price	\$16,333	\$17,548	\$8,258	\$534,600
Add: HST @13%	2,123	2,281	1,074	\$69,499
Total Contract Price Including Taxes	18,456	19,829	9,332	604,099
Less: HST Rebate	-1,836 #46,630	-1,972	-928	-\$60,088
Net Contract Price	\$16,620	\$17,857	\$8,404	\$544,011
Financial Note: Construction	ES241422	ES543619E	EW376523	TS144622
Contract Price	\$1,725,889	\$2,203,277	\$1,308,115	\$599,636
Add: HST @13%	224,366	286,426	170,055	77,953
Total Contract Price Including Taxes	1,950,255	2,489,703	1,478,170	677,589
Less: HST Rebate	-193,990	-247,648	-147,032	-67,399
Net Contract Price	\$1,756,265	\$2,242,055	\$1,331,138	\$610,190
Financial Note: Construction continued	TS173919	TS406722	TS512322	Total
Contract Price	\$193,592	\$207,983	\$97,874	\$6,336,366
Add: HST @13%	25,167	27,038	12,724	\$823,729
Total Contract Price Including Taxes	218,759	235,021	110,598	7,160,095
Less: HST Rebate	-21,760 \$106,000	-23,377 \$211,644	-11,001 \$00,507	-\$712,207
Net Contract Price  Total Engineering and Construction	\$196,999 <b>\$6,991,899</b>	\$211,644	\$99,597	\$6,447,888

**Note 1: Note to City Clerk:** The City Clerk be authorized to increase Debenture By-law No. W.-5654-291 by \$1,469,979 from \$4,951,602 to \$6,421,581.

**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 \$8,778.50 for Transportation Operations - Bike Lanes.

#### **APPENDIX 'B'**



## **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: Planned Rebuild of Incinerator Systems at Greenway

Wastewater Treatment Plant – Single Source

Date: March 21, 2023

## Recommendation

That, on the recommendation of the Deputy City Manager, Environment & Infrastructure, the following actions **BE TAKEN** with respect to the upcoming renewal of the incinerator at the Greenway Wastewater Treatment Plant:

- a) the Civic Administration **BE AUTHORIZED** to single source certain goods and services required, as described in this report;
- b) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached hereto as Appendix 'A'; and
- c) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.
- d) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project.

## **Executive Summary**

#### **Purpose**

This report informs Council of an upcoming, planned renewal of the sludge incineration process at Greenway Wastewater Treatment Plant. It also seeks Council approval in advance for single source procurement of certain goods and services.

#### Context

Incineration is the final process in the disposal of waste solids generated at London's five wastewater treatment plants. Administration is developing plans for its replacement within fifteen years, but the functionality of the existing incinerator must be maintained until the new system is ready for operation. Continued functionality requires a complete rebuild, which is expected to bridge the gap until the new strategy is in place. The unique nature of the project requires the hiring of specialized suppliers and service providers that warrant single source procurement in some instances.

## **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; and manage the infrastructure gap for all assets.

## **Analysis**

## 1.0 Background Information

### 1.1 Previous Reports Related to this Matter

Civic Works Committee, October 4, 2022 – Emergency Repair of Incinerator Systems at Greenway Wastewater Treatment Plant.

Civic Works Committee, June 18, 2019 – Single Source Procurement – Greenway Reheater

Civic Works Committee, May 26, 2014 – Single Source Purchase of Pre-Heater Heat Exchanger and Re-Heater Heat Exchanger at Greenway Wastewater Treatment Centre

#### 2.0 Discussion and Considerations

#### 2.1 Sludge Incineration at Greenway WWTP

The Greenway Wastewater Treatment Plant is the City's largest treatment plant. It is also the location of a centralized solids handling facility that processes the waste sludge removed from wastewater at all five City wastewater treatment plants in preparation for disposal. This final stage of the treatment process is essential for the safe and effective operation of the treatment facilities to ensure the protection of public health and the environment.

Incineration takes the solids removed from wastewater through the treatment process and burns them at temperatures approaching 900 degrees Celsius. This reduces the solids to an inert ash that is ready for safe disposal. In this manner, the City safely treated over 4,800 dry tons of waste solids in 2021.

There is no standby or spare incinerator at Greenway. If the incinerator is out of service it requires Greenway Operations to utilize a lime stabilization process that neutralizes contaminants in the dewatered sludge and allows for transportation and disposal. This process is costly; supply of lime, trucking costs and disposal fees can total \$60,000 per week or more. It is also not always possible to continuously haul stabilized solids, as compared with incineration that can run regularly, meaning that hauling may not always be able to keep up with process demands. This leads to increased and extended sludge storage and can result in plant upsets.

## 2.3 Accelerated Incinerator Renewal Timing

Given the essential nature of the incinerator, a full asset renewal was planned. The majority of the budget required for a full renewal of the incineration system was allocated in 2024, and this renewal would allow the incinerator to remain in service for an estimated 10-15 years beyond that. Since this renewal is expected to be the last one possible for the existing infrastructure, the next strategy for solids management will need to be finalized and ready to commence the transition by 2034. Planning efforts are ongoing to develop integrated strategies for solids handling and disposal that align with other initiatives in the City.

Unfortunately, recent experience with duct work failures and observations regarding the condition of the current incinerator shell have forced staff to revise the previously developed timing. Preparations are now underway to initiate the procurement of goods and services to allow for work to commence as soon as possible rather than waiting until 2024. As a result, the primary purpose of this report is to seek approval to advance a portion of the budget currently allocated to 2024 to the current year for immediate use for some key procurements.

#### 2.4 Procurement Process

The re-build of an incinerator and associated systems is a complex, time-consuming and costly undertaking. A wide array of specialized service providers and suppliers are required in order to successfully deliver a system that will provide reliable service for over a decade. Because London's incinerator system is somewhat unique – there are only four other plants in the province that employ incineration, and each employs different strategies of operation – there is a significant advantage in some cases to directly contracting firms with prior experience with the City's system.

In order to better inform Council, all of the expected procurements required for the incinerator renewal project are listed in the following table. It is important to note, however, that the request for approval relates only to the first section of the table (Section A). The remainder is expected to be procured within standard procurement practices and utilizing available capital budgets. The type of procurement is also listed, with a justification for any non-competitive processes to follow.

Item/Work Task	Budgetary Estimate	Procurement Process	Vendor		
Section A - Essential Tasks/Purchases that must be completed in 2023					
Engineering Services – Detailed Design and Contract Administration	\$812,646 + contingency = \$860,000	SS-2023-050 Single Source – uniquely qualified firm	Jacobs Engineering		
Pre-Heater (Primary Heat Exchanger) with plenums	US\$1,921,000 + contingency = \$3,330,000 CDN	SS-2023-051 Single Source – Previous supplier with high quality products. Long lead times.	Arvos/Schmidtsche- Schack		
Re-Heater (Secondary Heat Exchanger)	US\$371,000 + contingency = \$630,000 CDN	SS-2023-051 Single Source – Previous supplier with high quality products. Long lead times.	Arvos/Schmidtsche- Schack		
Main Burner Replacement	\$163,384 + contingency = \$200,000	SS-2023-052 Single Source – Specific design for main burner. Long lead times	Lakeside Process Controls		
Sub-total Section A	\$5,020,000				
Section B - Important Futi	ure Purchases (	For Information On	ly)		
Expansion Joints	\$500,000	Tender with Pre- Qualification			
Refractory Brick Pre- Purchase	\$400,000	Tender			
Incinerator Re-build General Contract	\$5,000,000	Tender with Pre- Qualification for General and Sub- Contractors			

Fluidizing Blower Purchase	\$600,000	Tender with Pre- Qualifcation	
Stack Upgrades	\$1,200,000	Tender with Pre- Qualification	
Venturi Scrubber	\$500,000	Tender with Pre- Qualification	
Sub-total (Section B)	\$8,200,000		
Total (Section A + B)	\$13,220,000		
Total Budget Available	\$11,000,000	Includes 2023, 2024 and 2025 budgets	

Table 1: Expected Procurements

Section A in Table 1 above identifies four essential procurements required for the renewal of the incinerator. These items are brought forward now as a result of timing or long lead times that, if not initiated now, could impact the ability to complete the incinerator renewal in 2024. All four are single source procurements for which approval is requested, are exclusive of taxes but include some contingency as noted below.

First, Jacobs Engineering has recently provided multiple reviews of the City's incinerator and related systems, while key staff from the proposed team participated in the last incinerator rebuild in 2008 under the employ of a different consulting firm. This direct experience with London's incinerator, coupled with significant experience with other incinerator systems in Ontario, results in the Jacobs team being uniquely qualified for this assignment. This design work must be undertaken now to enable construction to occur in 2024. Therefore, Civic Administration requests approval to award this project to Jacobs Engineering as described in clause 14.4.e ("The required...services are to be supplied by a particular supplier having special knowledge, skills, expertise or experience.") and per 14.5.a.ii of the Procurement of Goods and Services Policy ("Awards which qualify to be considered as a Single Source...require [that] Committee and City Council must approve as award greater than \$50,000."). For conservative budgetary purposes, a contingency of just over \$47,000 is added to allow for unforeseen adjustments during design and construction.

The second and third single source requests relate to the purchase of large heat exchangers. The pre-heater is a large heat exchanger that uses the very hot flue gas leaving the incinerator to pre-heat the fresh air being provided to the incinerator. This process is an important step in the functionality and efficiency of incinerator operation. The re-heater is a smaller heat exchanger that functions in much the same way, although its primary function is to impart additional heat to the flue gas prior to it entering the stack. This reduces condensation in the flue gas, which extends the life of the stack itself. These pieces of equipment are part of the duct system but are long-term consumable items. Arvos/Schmidtsche-Schack (Arvos) provided the currently installed heat exchangers following previous experience with other vendors that were less than satisfactory. Staff is satisfied with the quality of products provided by this vendor. Lead times for this equipment are very long (38-42 weeks), and staff are recommending that Arvos be awarded the supply contract as a single source because of their strong past performance, the ability to supply an exact replacement for existing equipment and to reduce the duration of the construction contract. The applicable sections of the Procurement of Goods and Services Policy are 14.4.d ("There is a need for compatibility with goods or services previously acquired."), 14.4.e and 14.5.a.ii. These quotes were provided in US dollars and so have been adjusted to include a contingency for fluctuating exchange rates and volatility in the market for raw materials. It is hoped it will not be required.

The final single source request is for a replacement main burner. During the last upgrade it was discovered that the main burner in the incinerator, responsible for firing

during start-up to bring the bed up to temperature, was damaged and required replacement. The replacement was specially designed and installed under the Organic Rankine Cycle engine project as part of a larger gas train replacement at that time. Minor improvements have since been made to the design, such that this customized unit is now unique to the application at Greenway. Pricing has already been obtained from the vendor, with the estimate identified including an allowance for shipping. Quoted lead times are very long (28-36 weeks), so pre-purchase is recommended given the critical nature of this component. Given the challenging environment in which this equipment is installed, staff intend to purchase a replacement plus a spare unit. As with the heat exchanger purchase, the applicable sections of the Procurement of Goods and Services Policy are 14.4 d, 14.4.e and 14.5.a.ii. This purchase has also had a contingency added to account for volatility in the supply chain. It is hoped it will not be required.

Note that shipping of the pre-heater and re-heater will be an extra cost, currently projected at US\$42,000. This amount is only an estimate at this time, and has been adjusted to include a contingency for fluctuating exchange rates. However, because of specialized shipping requirements and ensuring responsibility rests with Arvos until the heat exchangers are received, this will also be awarded as a single source. Staff will work with Arvos to mitigate the cost of this item prior to shipping.

The costs listed in Section B are budgetary estimates only, intended to provide a scale of the undertaking but not a final overall budget for the project. While the total projection currently exceeds the expected available budget, this will be refined during detailed design and the work scope adjusted accordingly. If a requirement for additional funds is confirmed, then a future report will be presented to Council, if necessary. Further details can be found in Section 3 of this report.

Other than the four single source procurements, all other contracts and purchases required to renew the incinerator system and manage sludge disposal are planned to be conducted either by tender in accordance with the Procurement Policy or under the terms of existing contracts.

It is noted that deferral of any aspect of this project carries operational risk. All items identified in both Sections A and B of Table 1 are aging equipment that have exceeded their original expected service lives. They will all need to be replaced eventually. Maintenance programs are in place that have been successful in extending service lives as much as possible, but each additional year increases the risk of a failure that cannot be repaired. This would result in a long shut-down while replacement equipment is procured and installed, the cost of which could easily match or exceed the replacement cost estimate. If a change in conditions results in a reduction of the projected remaining service life, a separate report would be prepared in order to obtain funding required for replacement.

#### 2.5 Ongoing Emergency Replacement

Notwithstanding the preceding discussion regarding the planned refurbishment of the incinerator system, the deterioration of expansion joints in the current incinerator duct system has necessitated replacement in the short term. The purchase of the replacement expansion joints has been initiated under the emergency procurement provisions of the Procurement of Goods and Services policy. The full impact of the measures taken to repair the duct will be reported to Council once known.

#### 3.0 Financial Impact/Considerations

Wastewater Treatment Operations has planned for the renewal of the incinerator. The expected timing was 2024 to commence design and award construction. Due to the observed condition of the existing systems and lead times for key pieces of equipment, some aspects of the renewal work needs to be commenced as soon as possible.

Of note is the fact that preliminary projections for the overall cost of the incinerator renewal exceed the total available budget in years 2023-2025. This can be explained, in

part, due to rapidly increasing costs in recent years but also due to an expanding scope of work over what was previously contemplated. Accordingly, Table 1 is broken into two sections. The first, Section A, identifies work that must be completed in the short term, while Section B identifies future purchases that could possibly be amended or deferred based on the result of detailed design and any budgetary constraints. If, upon completion of the contemplated pre-purchases and the detailed design assignment, it is established that budget is available then as many of the remaining tasks will be undertaken as possible. Sources of funding have been identified for the single-source procurements identified in this report, and funding for the overall renewal will be reevaluated as part of the 2024-2027 Multi-Year Budget development process, including a full review of potential funding sources to mitigate any budgetary shortfall, if any.

Accordingly, the source of financing at this time relates only to those items listed in Section A of Table 1. It is expected that this should be sufficient to initiate procurement of the most critical aspects of the incinerator renewal, keeping the overall project on track.

#### Conclusion

Sludge incineration is an essential part of the City's wastewater solids disposal strategy. Unplanned shut-downs are costly and increase the level of operational risk to wastewater treatment processes. The City has plans to embark on a new solids management strategy within 10-15 years, but a renewal of the incinerator and all associated systems is required in order to maintain operations until that time. The specialized nature of some aspects of the work warrants a portion of the procurement to be conducted in non-competitive ways as described in this report, but the majority of the contracts and purchases required will be awarded competitively. Work will completed within existing and planned capital budgets, with any additional funds being requested of Council in a future report as required.

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

#### #23056

March 21, 2023 (Award Contract)

Chair and Members
Civic Works Committee

RE: Planned Rebuild of Incinerator Systems at Greenway Wastewater Treatment Plant - Single Source

(Subledger FS23GW01)

Capital Project ES3080 - Greenway Incinerator Refurbishment Jacobs Engineering - \$860,000.00 (Engineering Services)

Arvos/Schmidtsche-Schack - \$3,330,000.00 (Pre-Heater)

Arvos/Schmidtsche-Schack - \$630,000.00 (Re-Heater) Lakeside Process Controls - \$200,000.00 (Main Burner)

#### **Finance Supports Report on the Sources of Financing:**

Finance Supports confirms that the cost of this project cannot be accommodated within the financing available for it in the Capital Budget, but can be accommodated by advancing financing from the forecasted 2024 capital plan, 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	Additional Requirement (Note 1)	Revised Budget	Committed To Date	This Submission
Engineering	2,190,035	0	2,190,035	1,314,899	875,136
Construction	6,131,123	0	6,131,123	6,131,123	0
City Related Expenses	607,501	0	607,501	607,501	0
Vehicles and Equipment	1,691,893	3,440,914	5,132,807	899,591	4,233,216
Total Expenditures	\$10,620,552	\$3,440,914	\$14,061,466	\$8,953,114	\$5,108,352
Sources of Financing					
Capital Sewer Rates	3,445,422	0	3,445,422	3,445,422	0
Debenture By-law No. W5590-307	1,812,530	0	1,812,530	145,092	1,667,438
Drawdown from Sewage Works Renewal Reserve Fund	5,362,600	3,440,914	8,803,514	5,362,600	3,440,914
Total Financing	\$10,620,552	\$3,440,914	\$14,061,466	\$8,953,114	\$5,108,352
Florida No. Followsky					

Financial Note: Engineering	Engineering
Contract Price	\$860,000
Add: HST @13%	111,800
Total Contract Price Including Taxes	971,800
Less: HST Rebate	-96,664
Net Contract Price	\$875,136

Financial Note: Vehicles and Equipment	Pre-Heater	Re-Heater	Main Burner	Total
Contract Price	\$3,330,000	\$630,000	\$200,000	\$4,160,000
Add: HST @13%	432,900	81,900	26,000	540,800
Total Contract Price Including Taxes	3,762,900	711,900	226,000	4,700,800
Less: HST Rebate	-374,292	-70,812	-22,480	-467,584
Net Contract Price	\$3,388,608	\$641,088	\$203,520	\$4,233,216

Total Engineering and Vehicles and Equipment \$5,108,352

**Note 1:** The additional requirement can be accommodated by advancing a portion of the 2024 forecasted budget. Upon Council approval of the recommendation, the 2024 forecasted budget for project ES3080 will be revised.

Kyle Murray
Director, Financial Planning and Business Support
jg/lp

## **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: Contract Award: Tender RFT-2023-001

Southdale Road West and Colonel Talbot Road Roundabout

Date: March 21, 2023

## Recommendation

That, on the recommendation of the Deputy City Manager, Environment and Infrastructure, the following actions **BE TAKEN** with respect to Southdale Road West and Colonel Talbot Roundabout Project (Tender RFT-2023-001):

- (a) The bid submitted by J-AAR Excavating Limited, at its tendered price of \$8,670,199.14 excluding HST, **BE ACCEPTED**; it being noted that the bid submitted by J-AAR Excavating Limited was the lowest of seven bids received and meets the City's specifications and requirements in all areas;
- (b) AECOM Canada Ltd., **BE AUTHORIZED** to complete the contract administration and construction inspection for this project as per the AECOM Canada Ltd. work plan, in the total amount of \$517,600.00 excluding HST;
- (c) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached, hereto, as Appendix A;
- (d) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;
- (e) the approvals given, herein, **BE CONDITIONAL** upon the Corporation entering into a formal contract for the material to be supplied and the work to be done relating to this project (Tender RFT-2023-001); and
- (f) the Mayor and the City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

## **Linkage to the Corporate Strategic Plan**

Municipal Council's 2019-2023 Strategic Plan identifies "Building a Sustainable City" and "Growing our Economy" as strategic areas of focus. The following report supports the Strategic Plan by implementing and enhancing safe and convenient mobility choices for pedestrians, cyclists, transit, and automobile users.

## **Analysis**

## 1.0 Background Information

#### 1.1 Previous Reports Related to this Matter

- June 19, 2012 Civic Works Committee London 2030 Transportation Master Plan
- October 2012 Planning and Environmental Committee –The Southwest Area Secondary Plan Report
- September 7, 2016 Civic Works Committee London ON Bikes Cycling Master Plan
- January 10, 2017 Civic Works Committee Environmental Assessment Appointment of Consulting Engineer

- April 2, 2019 Civic Works Committee Southdale Road West and Bostwick Road Improvements Environmental Study Report
- May 6, 2019 Strategic Priorities and Policy Committee Approval of 2019 Development Charges By-Law and DC Background Study
- July 23, 2019 Civic Works Committee Southdale Road West Improvements Phase 1 Detail Design and Tendering Services – Appointment of Consulting Engineer
- October 20, 2020 Strategic Priorities and Policy Committee 2021
   Development Charges Update Covering Report and Proposed By-law
- August 31, 2021 Civic Works Committee Outcome of Climate Lens Screening Applied to Major Transportation Projects
- November 2, 2021 Civic Works Committee Initiation of the Mobility Master Plan Development
- March 29, 2022 Civic Works Committee Southdale Road West and Colonel Talbot Road Roundabout Detail Design and Tendering Services – Appointment of Consulting Engineer

## 1.2 Purpose

This report recommends award of construction tender RFT-2023-001 for the Southdale Road West and Colonel Talbot Road roundabout project to J-AAR Excavating Limited. It also recommends that the existing engineering agreement with AECOM Canada Ltd. be extended to include contract administration and construction supervision required for this project.

## 1.3 Background

Southdale Road West and Colonel Talbot Road are both identified as Civic Boulevards in the London Plan and their intersection represents a vital link in the City of London's mobility network.

Recent and future developments in southwest London will increase pedestrian, cyclist, transit, and motorist movements at this intersection. This project will enhance the functionality and safety of the intersection by better accommodating the significant turning movements and bringing the intersection to current design standards. The project will follow the complete streets approach and will improve traffic capacity, active transportation connectivity and accessibility for the adjacent communities, and safety for all users.

An Environmental Assessment (EA) for the Southdale Road West corridor from Colonel Talbot Road to Pine Valley Boulevard was completed and the Environmental Study Report (ESR) was approved by Council in April 2019. The ESR identified the transportation infrastructure needs for the Southdale Road West corridor and recommended that this work be completed in phases, with the current proposed phasing:

- Phase 1 Southdale Road West, from Bostwick Road to Pine Valley Boulevard (construction substantially competed in 2022)
- Phase 2 Southdale Road West and Colonel Talbot Road intersection (this phase pertains to this report)
- Phase 3 Southdale Road West, from Colonel Talbot Road to Bostwick Road

The Phase 2, Southdale Road West and Colonel Talbot Road roundabout project was originally scheduled to begin construction in 2024. In order to improve coordination with other adjacent projects it was recommended that construction timing for the roundabout project be advanced to 2023 as part of the 2023 Budget Amendments approved by Council on February 14, 2023.

The Phase 2 of the Southdale Road West improvements was recently reviewed using the Climate Emergency Screening Tool. This review supported a complete streets approach for these incomplete rural corridors that currently lack some pedestrian, cycling and transit amenities. Reconstruction to a Civic Boulevard standard is recommended as an effective approach to provide sustainable mobility choices.

A map of the Southdale Road West corridor improvements is included below.

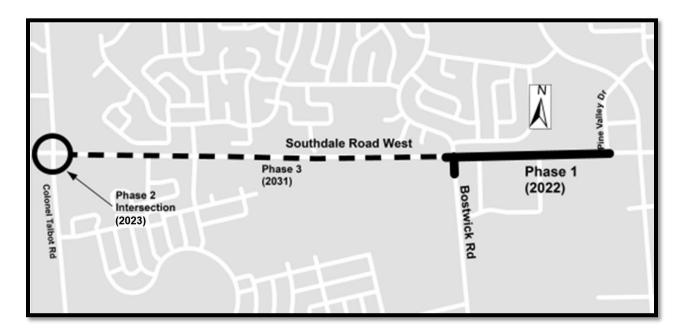


Figure 1: Phases of the Southdale Road West corridor improvements

#### 1.4 Other Future Network Improvements in Southwest London

Other future-years planned improvements in the area to address growth include:

- Colonel Talbot Road from Southdale Road West to James Street to be upgraded to a complete street standard including new active transportation facilities.
- Bostwick Road, from Southdale Road West to Wharncliffe Road to be improved and realigned.
- Southdale Road, from Wickerson Road to Byronhills Drive to be improved to a complete street standard including new active transportation and safety improvements.
- Wickerson Road, from Southdale northerly 650m to be improved to a complete street standard including new active transportation facilities.
- The Bradley Avenue extension, from Wonderland Road to Bostwick Road is currently scheduled as a longer term initiative.
- Pack Road improvements

The City has initiated a new Mobility Master Plan which will consider the timing of these future growth projects in coordination with the Growth Management Implementation Strategy and next Development Charges Background Study.

#### 2.0 Discussion and Considerations

### 2.1 Project Description

The Southdale and Colonel Talbot Road roundabout project was identified as a priority in the Smart Moves 2030 Transportation Master Plan (TMP) and the Transportation Development Charge Background Study.

Improvements to this intersection will include:

- A new two-lane roundabout with pedestrian crossovers on all four intersection legs including signage, flashing beacons and pavement markings to meet accessibility requirements,
- New sidewalks and boulevard improvements
- New in-boulevard bike paths,
- New street lighting,
- Tree planting and other landscaping,
- Improvements to meet current Accessibility for Ontarians with Disabilities Act (AODA) standards,
- Underground infrastructure work consisting of water, storm sewer, and sanitary sewer system improvements.

#### 2.2 Advance Works

This project will require the relocation of various utilities including, London Hydro and Bell Canada. Coordination with these utility companies has been underway in support of the project to ensure that the necessary utility relocations are completed in a timely and efficient manner.

Tree removals have been completed in advance of the utility relocations and the upcoming construction activities. New trees will be planted as part of this project.

### 2.3 Traffic Management and Communications

A pre-construction public meeting was held on November 23, 2022 to provide an update and share information about the upcoming construction. Property owners, residents, emergency services and businesses located near the project area were invited to attend.

A detailed traffic staging plan and a pedestrian management plan have been developed and included in the construction plans. These plans will balance mobility and access during all stages of construction while allowing the project to be completed in a timely and cost-effective manner. It is anticipated that, during construction:

- Access to homes and businesses will be maintained,
- Temporary traffic signals will be in operation at the intersection,
- Traffic movements will be maintained along Southdale Road West and Colonel Talbot Road (south leg) for most of the construction.
- Colonel Talbot Road (north leg) is expected to be closed for the majority of the construction phase with a detour in place.
- A short duration, full closure of the intersection will be required and it is anticipated that this closure will be in place for two weeks. A detour will be in place during the full closure.
- Construction activities will be coordinated with London Transit Commission (LTC) and emergency services.

The traffic management plan will be communicated, monitored, and adjusted during construction based on traffic conditions.

#### 2.4 Construction Schedule

Construction of the Southdale Road West and Colonel Talbot Road intersection is planned in 2023. The construction of the roundabout is anticipated to be mostly undertaken in one construction season (i.e. early May to December), with the placement of the final layer of asphalt and completion of any remaining minor works in the 2024 construction season.

#### 2.5 Procurement Process

The request for tenders (RFT) was published on January 31, 2023. Tenders for RFT-2023-001 were opened on February 15, 2023. Seven contractors submitted prices as listed below (excluding HST).

Contractor	Company Name	Tender Price Submitted
1.	J-AAR Excavating Limited	\$8,670,199.14
2.	L82 Construction Ltd.	\$8,678,359.20
3.	Birnam Excavating Ltd.	\$9,004,719.25
4.	Bre-Ex Construction Inc	\$9,089,902.17
5.	CH Excavating (2013)	\$9,659,812.36
6.	PV-EX Construction Ltd.	\$9,687,405.00
7.	291 Construction Ltd.	\$10,067,540.60

All tenders have been checked by the City's consultant, AECOM Canada Ltd., and the Environment & Infrastructure Service Area. No mathematical errors were found, and the bids were determined to be compliant. The submitted low bid by J-AAR Excavating Limited is 4% below the tender estimate that was prepared prior to the tender opening. The tender results indicate competitive pricing from the construction industry and represent good value for a project of this size, scope, and complexity recognizing current market and supply chain conditions. All tenders include a contingency allowance of \$825,000.

The tender amount can be funded from the City's Transportation Planning & Design, Stormwater Engineering, and Water Engineering capital project budgets.

### 2.6 Consulting Services

AECOM Canada Ltd. was awarded the detailed design of the Southdale Road West and Colonel Talbot roundabout project by Council in March 2022, after previously completing the associated Environmental Assessment (EA) Study. With the consultant's knowledge and performance during the EA and detailed design phases of the project, the consultant was invited to submit a proposal to carry out the contract administration and construction inspection. 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. The review of assigned personnel and hourly rates for

various activities are in alignment with the original competitive procurement process and other city infrastructure assignments.

The continued use of AECOM Canada Ltd. on this project for the construction administration phase 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. The City's requirement for the creation of record drawings following construction requires the reviewing professional engineer to seal the drawings based on field verification and ongoing involvement. This requirement promotes consultant accountability for the design.

In accordance with Section 15.2(g) of the Procurement of Goods and Services Policy, Civic Administration is recommending that AECOM Canada Ltd. be authorized to carry out the remainder of engineering services, as contract administrators, and complete the project for a fee estimate of \$517,600.00 excluding HST.

# 3.0 Financial Impact/Considerations

### 3.1 Operating Cost

Anticipated annual operating costs associated with additional infrastructure is summarized below:

Service Area	Rationale	Increase in Annual Operating Cost
Roadway Operations	Additional maintenance required for the roadway, bike paths, sidewalks, and additional pavement markings.	\$27,386
Traffic Engineering	Additional costs for streetlights, pavement markings at intersections and electrical equipment	\$7,492
Parks Operations	Additional landscaping, cutting grass	\$39,000
Forestry Operations	Additional tree maintenance	\$430
Sewer Operations	Operating cost for new storm sewer and sanitary sewer improvements	\$1,100
Water Operations	Watermain chamber maintenance	\$225
Solid Waste Operations	Collection and disposal of new garbage receptacles	\$3,300

The property tax supported operational budget impacts will be addressed as part of the annual assessment growth case process where appropriate, while the additional Water and Wastewater costs will be addressed in future budget processes.

## Conclusion

Civic Administration has reviewed the tender bids and recommends that the construction contract for the Southdale Road West and Colonel Talbot Road roundabout project be awarded to J-AAR Excavating Limited in the amount of \$8,670,199.14 (excluding HST), in accordance with Section 8.5(a)ii of the City of London's Procurement of Goods and Services Policy.

It is recommended that AECOM Canada Ltd. be awarded to carry out the contract administration and construction inspection services of the Southdale Road West and

Colonel Talbot Road roundabout project in the amount of \$517,600.00 (excluding HST), in accordance with Section 15.2(g) of the Procurement of Goods and Services Policy, as it is in the best financial and technical interests of the City.

Improvements to the Southdale Road West and Colonel Talbot Road intersection are necessary to accommodate planned growth in the area. Construction of a new two-lane roundabout and associated improvements to the pedestrian, cycling, and transit amenities will ensure that this intersection meets the long-term needs of the growing community in southwest London.

Prepared by: Garfield Dales, P.Eng.

**Division Manager, Transportation Planning and Design** 

Submitted by: Doug MacRae, P.Eng., MPA

**Director, Transportation & Mobility** 

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

**Deputy City Manager, Environment & Infrastructure** 

Attach: Appendix A – Source of Financing

c: Steve Mollon, City of London

Lauren Pasma, City of London Michelle Morris, City of London Violetta Sypien, City of London Ian Blevins, AECOM Canada Ltd.

### Appendix "A"

#### #23052

March 21, 2023 (Award Contract)

Chair and Members Civic Works Committee

RE: RFT-2023-001 Southdale Road West and Colonel Talbot Road Roundabout

(Subledger RD220003)

Capital Project ES514819 - Wastewater Strategic Links

Capital Project EW376523 - Infrastructure Renewal Program - Watermains

Capital Project TS126417 - Rural Intersections Capital Project TS126419 - Rural Intersection

Capital Project TS1336 Intersection - Southdale - Colonel Talbot (Roundabout)

J-AAR Excavating Limited - \$8,670,199.14 (excluding HST) AECOM Canada Ltd. - \$517,600.00 (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:

detailed source of financing is:					
Estimated Expenditures	Approved Budget	Committed To Date	This Submission	Balance for Future Work	
ES514819 - Wastewater Strategic Links					
Engineering	529,458	496,467	32,991	0	
Construction	7,355,176	4,222,153	552,620	2,580,403	
Construction (LTC, Casino, Start.ca)	163,594	163,594	0	0	
ES514819 Total	8,048,228	4,882,214	585,611	2,580,403	
EW376523 - Infrastructure Renewal Program - Watermains					
Engineering	2,500,000	239,829	5,825	2,254,346	
Construction	15,787,375	2,699,444	97,567	12,990,364	
ES376523 Total	18,287,375	2,939,273	103,392	15,244,710	
TS126417 - Rural Intersection					
Engineering	3,994	3,994	0	0	
Construction	504,476	167,217	337,259	0	
TS126417 Total	508,470	171,211	337,259	0	
TS126419 - Rural Intersections					
Engineering	27,092	0	0	27,092	
Construction	801,698	418,012	163,607	220,079	
TS126419 Total	828,790	418,012	163,607	247,171	
TS1336 - Intersection - Southdale - Colonel Talbot (Roundabout)	t				
Engineering	1,447,186	498,361	487,894	460,931	
Construction	9,487,169	144,120	7,671,741	1,671,308	
TS1336 Total	10,934,355	642,481	8,159,635	2,132,239	
Total Expenditures	\$38,607,218	\$9,053,191	\$9,349,504	\$20,204,523	
Sources of Financing					
ES514819 - Wastewater Strategic Links					
Drawdown from Sewage Works Renewal Reserve Fund	788,464	471,862	58,561	258,041	
Drawdown from City Services - Wastewater Reserve Fund (Development Charges) (Note 1)	7,096,170	4,246,758	527,050	2,322,362	
Other Contributions (LTC, Casino, Start.ca)	163,594	163,594	0	0	
ES514819 Total	8,048,228	4,882,214	585,611	2,580,403	
	-				

#### #23052

March 21, 2023 (Award Contract)

Chair and Members Civic Works Committee

RE: RFT-2023-001 Southdale Road West and Colonel Talbot Road Roundabout

(Subledger RD220003)

Capital Project ES514819 - Wastewater Strategic Links

Capital Project EW376523 - Infrastructure Renewal Program - Watermains

Capital Project TS126417 - Rural Intersections Capital Project TS126419 - Rural Intersection

Capital Project TS1336 Intersection - Southdale - Colonel Talbot (Roundabout)

J-AAR Excavating Limited - \$8,670,199.14 (excluding HST) AECOM Canada Ltd. - \$517,600.00 (excluding HST)

Sources of Financing continued	Approved Budget	Committed To Date	This Submission	Balance for Future Work
EW376523 - Infrastructure Renewal Program - Natermains				
Capital Water Rates	12,193,444	2,939,273	103,392	9,150,779
Drawdown from Water Works Renewal Reserve Fund	4,668,931	0	0	4,668,931
Canada Community-Building Fund	1,425,000	0	0	1,425,000
ES376523 Total	18,287,375	2,939,273	103,392	15,244,710
S126417 - Rural Intersection				
Orawdown from City Services - Roads Reserve Fund Development Charges) (Note 1)	508,470	171,211	337,259	0
S126419 - Rural Intersections				
Drawdown from City Services - Roads Reserve Fund Development Charges) (Note 1)	828,790	418,012	163,607	247,171
FS1336 - Intersection - Southdale - Colonel Talbot Roundabout)				
Debenture By-law No. W5684-134 (Note 2)	1,366,793	80,310	1,019,953	266,530
Orawdown from City Services Roads Reserve Fund Development Charges) (Note 1)	434,850	434,850	0	0
Debenture By-law No. W5684-134 (Serviced hrough City Services - Roads Reserve Fund Development Charges)) (Note 1 and 2)	9,132,712	127,321	7,139,682	1,865,709
TS1336 Total	10,934,355	642,481	8,159,635	2,132,239
Fotal Financing	\$38,607,218	\$9,053,191	\$9,349,504	\$20,204,523
Financial Note: Engineering	ES514819	EW376523	TS1336	Total
Contract Price	\$32,420	\$5,724	\$479,456	\$517,600
ndd: HST @13% Total Contract Price Including Taxes	4,215 36,635	744 6,468	62,329 541,785	\$67,288 584,888
ess: HST Rebate	-3,644	-643	-53,891	-\$58,178
Net Contract Price	\$32,991	\$5,825	\$487,894	\$526,710
Times alal Natas Comptonistics	50544040	F14/070500	T0400447	T0400440
Financial Note: Construction Contract Price	<b>ES514819</b> \$543,062	<b>EW376523</b> \$95,880	<b>TS126417</b> \$331,426	TS126419
Contract Price  Add: HST @13%	\$543,062 70.598	\$95,880 12,464	\$331,426 43,085	\$160,777 20,901
Fotal Contract Price Including Taxes	613,660	108,344	374,511	181,678
Less: HST Rebate	-61,040	-10,777	-37,252	-18,071
Net Contract Price	\$552,620	\$97,567	\$337,259	\$163,607
Financial Note: Construction continued	TS1336	Total		
Contract Price	\$7,539,054	\$8,670,199		
Add: HST @13%	980,077	1,127,125	<u> </u>	
Total Contract Price Including Taxes	8,519,131	9,797,324		
Less: HST Rebate	-847,390	-974,530		
Net Contract Price	\$7,671,741	\$8,822,794		

\$9,349,504 Note 1: 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 2: Note to City Clerk: The City Clerk be authorized to increase Debenture By-law No. W.5684-134 by \$10,437,384.00 from \$62,121.00 to \$10,499,505.00.

Note 3: There will be additional annual operating costs of \$27,386 for Roadway Operations, \$7,492 for Traffic Engineering, \$39,000 for Parks Operations, \$430 for Forestry Operations, \$1,100 for Sewer Operations, \$225 for Water Operations and \$3,300 for Solid Waste Operations.

**Total Engineering and Construction** 

# **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: White Oak Road Upgrades - Appointment of a Consulting

**Engineer for Construction Administration** 

Date: March 21, 2023

# Recommendation

That on the recommendation of the Deputy City Manager, Environment & Infrastructure, the following actions **BE TAKEN** with respect to the appointment of a consulting engineer for the construction administration and supervision of White Oak Road two-lane upgrades from Exeter Road to Blakie Road:

- (a) R.V. Anderson Associates Limited **BE AUTHORIZED** to complete the contract administration and construction supervision required for this project, all in accordance with the estimate on file, at an upset amount of \$362,043 excluding HST, and in accordance with Section 15.2 (g) of the City of London's Procurement of Goods and Services Policy;
- (b) the financing for the 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 assignment;
- (d) the Mayor and City Clerk BE AUTHORIZED to execute any contract or other documents including agreements, if required, to give effect to these recommendations.

# **Linkage to the Corporate Strategic Plan**

The following report supports the 2019-2023 Strategic Plan through the focus area of Building a Sustainable City, by increasing access to transportation options, improving safety for all modes of transportation and building new infrastructure to support future development and to protect the environment.

## **Analysis**

## 1.0 Background Information

## 1.1 Previous Reports Related to this Matter

- Civic Works Committee June 19, 2012 London 2030 Transportation Master Plan
- Civic Works Committee September 7, 2016 London ON Bikes Cycling Master Plan
- Strategic Priorities and Policy Committee May 6, 2019 Approval of 2019 Development Charges By-Law and DC Background Study
- Civic Works Committee June 1, 2021 White Oak Road 2-Lane Upgrades from Exeter Road to 400m South – Appointment of Consulting Engineer

#### 2.0 Context

The purpose of this report is to recommend the appointment of a consulting engineer to provide contract administration and construction supervision services for the White Oak Road Upgrades project. The award of the construction tender for the project is anticipated to proceed separately through the delegated administrative approval process of the Procurement of Goods and Services Policy.

The need for improvements to White Oak Road from Exeter Road to Blakie Road was identified in the 2019 Development Charges Study. White Oak Road in the area of the project is classified as a Civic Boulevard that carries over 5,000 vehicles per day and directly serves light industrial areas. The City of London Cycling Master Plan also identifies the need for the extension of cycling lanes to fill a gap south of Exeter Road. The sanitary sewer on White Oak Road currently terminates just north of Blakie Road and will be extended to service lands on the north side of Exeter Road also as part of this project.

#### 3.0 Discussion and Considerations

#### 3.1 Project Objectives

The key features of this project include:

- Complete street improvements including new active transportation connections from Exeter Road to Blakie Road completing the gap in the current area cycling network and a new sidewalk on the west side of White Oak Road connecting to employment lands;
- Extension of the sidewalk on the north side of Exeter Road from White Oak Road easterly to connect to the existing sidewalk network;
- Extension of the sanitary sewer along White Oak Road to the north side of Exeter Road to provide for future land servicing;
- White Oak Road pavement condition improvements;
- Improved roadway lighting;
- A rebuild of the White Oak Road and Exeter Road intersection including new traffic signals and improvements to meet current accessibility requirements; and
- Stormwater management and drainage improvements in the area.

The project limits are shown in Figure 1 below.

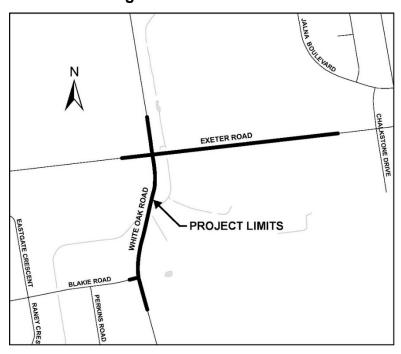


Figure 1. Project Location

The Climate Emergency Screening Tool (CEST) was applied to this project and highlighted the importance of completing the area walking and cycling networks as key components to provide improved mobility options.

Construction of this project is scheduled to commence this spring and is anticipated to be mostly completed at the end of 2023 with surface asphalt paving in 2024. In accordance with the City's Goods and Services Procurement Policy, the construction contract for this project is planned to be awarded administratively.

#### 3.2 Consulting Services

R.V. Anderson Associates Limited was awarded the detailed design and tendering of the White Oak/Exeter Road upgrades project by Council on June 1, 2021. With the consultant's knowledge and performance during the detailed design phase of the project, a proposal for construction contract administration was requested. Staff have reviewed the technical and financial submission for the contract administration phase of this project, including the time allocated to each project task, along with hourly rates provided by the consultant. The review of the submission confirmed that the time allocations are appropriate and hourly rates are consistent with the initial competitive procurement and other infrastructure assignments.

The continued use of R.V. Anderson Associates Limited for the contract administration phase of the project is of financial advantage to the city because this firm has specific knowledge of the project and has undertaken work for which duplication would be required if another firm were to be selected. The City's requirement for the creation of professionally-sealed record drawings under this assignment also promotes accountability for the design.

Therefore, in accordance with Section 15.2 (g) of the City of London's Procurement of Goods and Services Policy, Civic Administration is recommending that R.V. Anderson Associates Limited be authorized to carry out the remainder of engineering services, as contract administrators, and complete this phase for a fee estimate of \$362,043 excluding HST.

## Conclusion

This project will complete gaps in the existing cycling and sidewalk networks, extend sanitary sewer servicing, improve the condition of existing infrastructure and improve accessibility. R.V. Anderson Associates Limited has demonstrated an understanding of the city's requirements for this phase of the project, and it is recommended that this firm continue as the consulting engineer for the purpose of construction administration and supervision as it is in the best financial and technical interests of the City.

It is recommended that R.V. Anderson Associates Limited be appointed to undertake the construction administration for the White Oak Road Upgrades project from Exeter Road to Blakie Road in the amount of \$362,043 (excluding HST) in accordance with Section 15.2 (g) of the City of London's Procurement of Goods and Services Policy.

Prepared by: Garfield Dales, P.Eng., Division Manager, Transportation

**Planning and Design** 

Submitted by: Doug MacRae, P.Eng., MPA, Director, Transportation

and Mobililty

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

**Environment and Infrastructure** 

Attach: Appendix A: Source of Financing

cc: Steve Mollon, Manager, Purchasing and Supply

Fabio Rueda, Procurement Officer, Purchasing and Supply

Gary McDonald, Budget Analyst R.V. Anderson Associates Limited

#23051

March 21, 2023

(Appoint Consulting Engineer)

Chair and Members Civic Works Committee

RE: White Oak Road Upgrades - Construction Administration

(Subledger RD210010)

Capital Project ES514819 - Wastewater Strategic Links

Capital Project TS125421 - Localized Roadworks

Capital Project TS1366 - White Oak Road - Exeter Road to 400m South

Capital Project TS406721 - Traffic Signals - Maintenance Capital Project TS512321 - Street Light Maintenance

R.V. Anderson Associates Limited - \$362,043.00 (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	This Submission	Balance for Future Work
ES514819 - Wastewater Strategic Links				
Engineering	496,467	369,473	126,994	0
Construction	7,388,167	4,222,153	0	3,166,014
Construction (LTC, Casino, Start.ca)	163,594	163,594	0	0
ES514819 Total	8,048,228	4,755,220	126,994	3,166,014
TS125421 - Localized Roadworks				
Engineering	139,080	3,562	4,769	130,749
Construction	411,857	304,648	0	107,209
City Related Expenses	233	233	0	0
TS125421 Total	551,170	308,443	4,769	237,958
TS1366 - White Oak Road - Exeter Road to 400m South				
Engineering	457,450	253,961	203,489	0
Construction	3,756,550	1,237	0	3,755,313
Utilities	116,000	0	0	116,000
TS1366 Total	4,330,000	255,198	203,489	3,871,313
TS406721 - Traffic Signals - Maintenance				
Engineering	500,000	190,125	24,872	285,003
Construction	2,088,926	365,219	0	1,723,707
Traffic Signals	1,674,818	1,674,818	0	0
City Related Expenses	1,987	1,987	0	0
TS406721 Total	4,265,731	2,232,149	24,872	2,008,710
TS512321 - Street Light Maintenance				
Engineering	300,000	272,600	8,290	19,110
Construction	2,677,367	449,338	0	2,228,029
TS512321 Total	2,977,367	721,938	8,290	2,247,139
Total Expenditures	\$20,172,496	\$8,272,948	\$368,414	\$11,531,134

#### #23051

March 21, 2023

(Appoint Consulting Engineer)

Chair and Members Civic Works Committee

RE: White Oak Road Upgrades - Construction Administration

(Subledger RD210010)

Capital Project ES514819 - Wastewater Strategic Links

Capital Project TS125421 - Localized Roadworks

Capital Project TS1366 - White Oak Road - Exeter Road to 400m South

Capital Project TS406721 - Traffic Signals - Maintenance Capital Project TS512321 - Street Light Maintenance

R.V. Anderson Associates Limited - \$362,043.00 (excluding HST)

#### **Sources of Financing**

FS514819.	. Wastewater	Strategic	linke

ES514819 - Wastewater Strategic Links				
Drawdown from Sewage Works Renewal Reserve Fund	788,464	459,163	12,699	316,602
Drawdown from City Services - Wastewater Reserve Fund (Development Charges) (Note 1)	7,096,170	4,132,463	114,295	2,849,412
Other Contributions (LTC, Casino, Start.ca)	163,594	163,594	0	0
ES514819 Total	8,048,228	4,755,220	126,994	3,166,014
TS125421 - Localized Roadworks				
Capital Levy	551,170	308,443	4,769	237,958
TS1366 - White Oak Road - Exeter Road to 400m South				
Debenture By-law No. W5677-207 (Note 2)	428,670	25,265	20,145	383,260
Drawdown from City Services - Roads Reserve Fund (Development Charges) (Note 1)	2,000,220	229,933	183,344	1,586,943
Debenture By-law No. W5677-207 (Serviced through City Services - Roads Reserve Fund (Development Charges)) (Note 1 and 2)	1,901,110	0	0	1,901,110
TS1366 Total	4,330,000	255,198	203,489	3,871,313
TS406721 - Traffic Signals - Maintenance				
Capital Levy	3,801,989	2,232,149	24,872	1,544,968
Drawdown from Capital Infrastructure Gap Reserve Fund	463,742	0	0	463,742
TS406721 Total	4,265,731	2,232,149	24,872	2,008,710
TS512321 - Street Light Maintenance				
Capital Levy	2,719,971	721,938	8,290	1,989,743
Drawdown from Capital Infrastructure Gap Reserve Fund	257,396	0	0	257,396
TS512321 Total	2,977,367	721,938	8,290	2,247,139
Total Financing	\$20,172,496	\$8,272,948	\$368,414	\$11,531,134
Financial Note: Contract Price Add: HST @13% Total Contract Price Including Taxes Less: HST Rebate Net Contract Price	\$124,797 16,224 141,021 -14,027 \$126,994	<b>TS125421</b> \$4,687 609 5,296 -527 \$4,769	<b>TS1366</b> \$199,970 25,996 225,966 -22,477 \$203,489	<b>TS406721</b> \$24,442 3,177 27,619 -2,747 \$24,872
Financial Note: Contract Price Add: HST @13% Total Contract Price Including Taxes Less: HST Rebate Net Contract Price	<b>TS512321</b> \$8,147 1,059 9,206 -916 \$8,290	Total \$362,043 47,065 409,108 -40,694 \$368,414		

**Note 1:** 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 2: Note to City Clerk: The City Clerk be authorized to increase Debenture By-law No. W.5677-207 by \$2,291,922.00 from \$37,858.00 to \$2,329,780.00.

# **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: 2023 Renew London Infrastructure Construction Program

and 2022 Review

Date: March 21, 2023

## Recommendation

That, on the recommendation of the Deputy City Manager, Environment and Infrastructure, the following actions Be TAKEN:

- a) the report concerning the 2023 Renew London Infrastructure Construction Program **BE RECEIVED** for information; and
- b) Civic Administration **BE DIRECTED** to initiate a bylaw amendment to reinstate the temporary traffic diversion arrangement on Dundas Place as a construction mitigation for the 2023 construction season.

# **Executive Summary**

The purpose of this report is to provide Committee and Council with a review of the 2022 Renew London Construction Program and highlight major City construction projects planned for 2023. This report outlines successes and lessons learned from 2022 and identifies potential risks for the upcoming construction season and the measures planned to mitigate those risks. This report includes the following information.

- 2.1 A review of the 2022 Renew London Program including a program overview, discussion of carryover work and budget implications.
- 2.2 A look ahead to the 2023 Renew London Program.
- 2.3 A summary of emerging construction industry pressures and several initiatives to mitigate potential impacts for 2023.
- 2.4 An overview of the various construction mitigation, customer service and communication strategies applied to support Londoners through construction.

Additional supporting information has been included as appendices for reference.

# Linkage to the Corporate Strategic Plan

The annual Renew London infrastructure Program supports several measures under Municipal Council's 2019-2023 Strategic Plan. The program helps in Building a Sustainable City by constructing new infrastructure that supports future development, protects the environment, and manages the infrastructure gap. The program is also related to Growing our Economy by increasing public and private investment in strategic locations. Lasty, the Renew London Construction program strives to Lead in Public Service by providing Londoners with valued customer service, timely communication, and coordination to minimize impacts.

# **Analysis**

## 1.0 Background information

#### 1.1 Previous reports related to this matter

Civic Works Committee – November 2, 2021 – Dundas Place Temporary Traffic Diversion Monitoring and Consultation

Civic Works Committee – January 11, 2022 – Ontario Regulation (O.Reg.) 406/19 On-Site and Excess Soil Management

Corporate Services Committee – January 31, 2022 – Procurement of Goods and Services Policy Revisions Resulting from the Pandemic and Current Business-Related Needs

Civic Works Committee – March 29, 2022 – 20223 Renew London Infrastructure Construction Program and 20212 Review

Civic Works Committee – February 22, 2023 – RFT-2022-311 Dedicated Locate Services Contract Award - Irregular Result

#### 1.2 Context

The Renew London Infrastructure Construction Program manages the sustainability of London's infrastructure through a combination of road, bridge, bicycle, sewer, water, sidewalk and intersection improvements. The program addresses existing lifecycle needs, system improvements, and growth-related priorities.

Renew was created to drive efficiency in infrastructure delivery and minimize delays and inconveniences to the public during construction by coordinating annual capital construction projects. As leaders of the program, City staff are responsible for managing City construction projects and providing onsite inspection where required. This oversight helps to ensure projects are well-communicated, completed on time and on schedule, and safely built in accordance with plans, specifications, and City standards.

#### 2.0 Discussion

# 2.1 Review: 2022 Renew London Infrastructure Construction Program

### 2022 Construction program overview

The 2022 Renew London Infrastructure Program constructed many projects to expand and improve City of London infrastructure. 2022 featured key transportation improvement projects that have enhanced road safety, improved traffic flow for motorists, cyclists, pedestrians, and transit users and maintained infrastructure in a state of good repair.

Overall, 2022 was a successful construction season with the reconstruction of 60 lane kilometres of road, 134 kilometres of sanitary and storm sewers, and 7.5 kilometres of watermains. Staff managed a portfolio of Council-approved projects totalling approximately \$190 million.

The cycling network expanded significantly in 2022 with the completion of three important projects: rehabilitating the Fanshawe Park Road boulevard bike lanes, adding protected bike lanes on Brydges and Wavell Streets and completing the East-West

bikeway with the protected bike lane on Queens Avenue. Cycling improvements also occurred at the intersections of Ridout Street and Commissioners Road and William Street and Oxford Street, on Ridout from King Street to Queens Avenue with Phase 2 of the Downtown Loop and by adding cycling facilities on Southdale Road and William Street. These projects make London's roads safer for all users, encourage more emissions-free travel and leverage existing cycling investments by connecting to more people and places. Overall, the cycling network expanded by 11.5 km in 2022.

Appendix A captures details of the 2022 Top 10 infrastructure renewal list and highlights some noteworthy projects from last year.

### 2022 contract carryover work

Minor finishing touches remain on some 2022 construction projects. This work is often surface work including the top layer of asphalt and installation of permanent pavement markings. These finishing touches are included in 2022 tenders, but generally completed for road reconstruction projects in the subsequent year to optimize material placement in better weather. The top coat of asphalt will be placed on 28 lane-kilometres of road in 2023. Downtown Loop Phase 2 was mostly completed in 2022, with a portion of Queens Avenue between Clarence and Wellington Streets deferred to 2022 along with typical spring clean up work. Carryover work will be coordinated with the 2023 construction program to ensure conflicts with projects in nearby areas are .

## **Budgets and schedules**

The City managed approximately \$190 million in infrastructure construction project work in 2022. The Construction and Infrastructure Services (CIS) Team takes great pride in delivering London's annual construction program on time and on budget. To support this, the team continues to develop tools to monitor performance metrics throughout construction. Project Management Dashboards track and monitor construction project progress against the established budget and estimated working days and ensures all invoices are paid in accordance with prompt payment legislation requirements.

Clear, defendable contract documents, engaged project management and active schedule and budget monitoring are tools used to safeguard awarded contract budgets. Contracts also include a contingency to account for typical issues or change orders that can pop up in any project, often related to unforeseen underground conditions and utility coordination complications.

The impacts of the COVID-19 pandemic have mostly settled over 2022. During COVID, many industries and economic sectors, including municipal construction had observed an increase in the use of contingency funds across all projects. Project teams monitored the issue through 2022 and have seen a decrease in contingency use as compared to 2021. Change orders as a percentage of contract value decreased from 5.41% in 2021 to 3.9% in 2022. Staff will continue to monitor contingency use across all projects.

With an annual construction program of this scale, there can be projects that encounter budget impacts that exceed the available contingency due to challenges that could not have been anticipated by the contractor, consultant, or the City. At the conclusion of 2022, the majority of projects are expected to be completed on or ahead of schedule and remain on budget. Unused contingency funds are returned to program budgets to support additional infrastructure renewal the following year.

The following 2022 projects were impacted by budget pressures that exceeded the awarded contract value:

Water and Wastewater Infrastructure Renewal Project

- English Street and Lorne Avenue
- Churchill Avenue and Manitoba Street

The combined value of these contract increase requests reflects an overall budget variance of 0.2%, compared to the estimated 6.1% in net returned contingency overall.

A companion report has been prepared for the projects noted above to recommend contract amendments in accordance with the Purchasing and Services Policy. That report is included for the same March 21, 2023, Civic Works Committee agenda.

Additionally, the budgets for the Pottersburg Phase 1, Victoria Street, and the 2020 Dundas Old East Village projects are being closely monitored as they complete carry over work in 2023. The project teams are evaluating all options to keep these projects within budget and will follow the requirements of the Procurement Policy should additional funds be required at a later date.

### 2.2 2023 Renew London Infrastructure Construction Program

#### 2023 construction program overview

The 2023 budgets will invest in key priority areas to support the city's growing population needs and make improvements to aging infrastructure. Focus remains on essential infrastructure and investments in replacing or building much-needed roads, water, and wastewater infrastructure.

The City is committing approximately \$200 million in construction improvements in 2023. This 2023 program includes lifecycle renewal investments of \$53 million for road improvements, \$67 million for sewer improvements, and \$42 million for water system improvements.

Development charges and provincial and federal funding also continue to contribute to several important 2023 projects, such as the Colonel Talbot/Southdale Road Roundabout, Downtown Loop Phase 3, Wellington Gateway Phase 1 (Wellington Street) and East London Link Phase 2 (King/Ontario/Dundas). Delivering these investments through integrated projects reduces costs by coordinating underground infrastructure work with the rehabilitation of roads, curbs, and sidewalks. This will improve and extend the lifecycle of London's critical road, water and sewer infrastructure and the reliability of its systems while protecting the environment.

There will be 80 lane-kilometres of road reconstructed, 20 kilometres of sanitary and storm sewers replaced or added, and 12 kilometres of watermain rebuilt in 2023. Over 25 intersections improvements will be constructed to address safety concerns in growing areas. More than 16 kilometres of new bike lanes and 14 kilometres of new sidewalk will be added and about 26 kilometres of existing sidewalks replaced. Cycling and sidewalks infrastructure will be built to improve safety, connectivity and accessibility while supporting the Climate Emergency Action Plan

In addition, 4.5 kilometres of watermain and 8.5 kilometres of sewers will be relined without having to dig trenches. These trenchless programs accomplish the goals of upgrading the infrastructure while allowing for significant capital cost avoidance and minimized social impact to residents and businesses by avoiding open cut construction.

The Top 10 Construction Projects are selected each year to provide an overview of the upcoming year's work and impacts. The 2023 projects involve areas across London, including the Colonel Talbot/Southdale Road Roundabout project, Fanshawe and Richmond Intersection Improvement project, three phases of Rapid Transit, and the second season of construction for the Adelaide Street North Underpass and Victoria Bridge Replacement projects. There are many other essential underground road and underground infrastructure upgrades and continued improvements to the cycling network throughout the city as well.

Appendix B captures details of the 2023 Top 10 projects.

Visit <u>london.ca/roadconstruction</u> to learn more about the 2023 infrastructure projects and to view an <u>interactive story map</u> of this year's Top 10 Construction Projects. Communications efforts on the overall 2023 construction program and targeted communications on specific projects are either already underway or will be launching very soon.

#### **Downtown construction and Dundas Place**

The Downtown core will experience focused investments again in 2023 with Phase 3 of the Downtown Loop project on Wellington Road and continuation of Phase 2 Downtown Loop project on portion of Queens Ave. Phase 2 of the East Link on King Street will start in Old East Village in the spring this year and will be closely coordinated with the other Core projects. While the 2023 projects have been scheduled to minimize disruptions to traffic, commuting around the city will be impacted. Residents are encouraged to plan ahead and exercise patience when traveling around construction zones. After significant investments in the core in recent years, there will be less construction activity planned in and around the core after 2023.

With the aim to support Dundas Place as a gathering place for patios, entertainment and events, as well as an important east-west connection for cyclists and pedestrians, administration is recommending reinstatement of the temporary traffic diversion arrangement on Dundas Place as a construction mitigation for the 2023 construction season.

This is yet another year of significant construction downtown which could subject Dundas Place to high volumes of cut-through traffic. This approach has been applied during the last two core construction seasons after previous consultation, evaluation and reporting to Civic Works Committee. The arrangement reduces cut-through traffic on Dundas Place by restricting motor vehicle in-flow at Wellington and Ridout Streets and encouraging drivers to access Dundas Place via Talbot, Richmond, and Clarence Streets to reach their destination. The detailed implementation throughout the area would be subject to adaptation based on construction impacts, traffic and Dundas Place operations.

For the longer-term, a Dundas Place operational review will consider various aspects including traffic management and the traffic diversion as one of several considerations for the ongoing management of Dundas Place.

## 2.3 Emerging construction industry pressures

2023 is on track to surpass 2022 as the City of London's largest construction season in terms of both the number of projects and the value of the work. The construction industry in London and across Ontario is going through a period of considerable change with new standards, legislative requirements, and market conditions. There are several risks for the upcoming construction season that may impact project budgets, schedules, staff resources.

#### **General trends**

#### Excess soil management regulation

The Ministry of Environment, Parks and Conservation (MECP) has finalized amendments to O. Reg. 406/19: On-Site and Excess Soil Regulation ("Excess Soil Regulation") requiring soil sampling and testing, as well as documentation, tracking and registration of excess soil leaving construction sites. Contractors will be required to identify potential re-use sites for excess soil in their bids and complete additional post-contract award soil sampling and testing before construction can proceed in full.

Initially implemented January 1, 2022, MECP paused the regulation provisions in April 2022 to help provide more time for understanding and refining the regulation. Amendments were made to make the Excess Soil Regulation more practical and focused on higher-risk movements of soil by removing requirements for low-risk projects and by providing more flexibility when storing excess soil. The amended requirements have now came back into effect as of January 1, 2023.

The schedule and budget implications of excess soil sampling on City contracts remain untested until the industry has experienced one or two construction seasons under the new provincial regulations. Excess soil sampling and testing activities required prior to starting site excavation have the potential to add weeks to an already-constrained construction season. Industry engagement has also flagged concerns for potential backlogs at environmental testing laboratories and potential shortages in qualified staff for these facilities. The impacts to projects are difficult to assess without experience applying the new regulations on specific projects. London's early 2023 projects have experienced some budget implications. In the interim, extra contingency costs are being incorporated into project budgets, particularly for larger projects requiring significant excavation. It is anticipated that, as the industry adapts to the new regulations, anticipated costs to specific projects will be better defined during the planning and design process. Staff will monitor the budget and schedule implications of this regulation over the coming construction seasons.

### Intersection work

On all construction projects, the City aims to minimize impacts on the travelling public, nearby residents and transit, while completing the work efficiently and on budget. If a signalized intersection will be impacted by construction, the Highway Traffic Act requires that a paid duty officer is in place for traffic control or a full intersection closure is necessary. The switching to temporary traffic signals and activating permanent traffic signals requires the scheduling of several parties (contractor, City's traffic signal maintenance contractor, consultant staff, city staff and off-duty police) which can influence the schedule of subsequent work.

Recognizing that full intersection closures are more impactful, the City typically works with London Police to determine if an officer available for traffic control. If an officer is

not available to perform traffic control on a specific date, the City considers other options, which could include:

- Adapting construction plans to shift the date for intersection work to one where an
  officer is available
- Completing the work during off-hours or through the night, when a full intersection closure is less impactful on the travelling public and transit

In cases where it is not possible to adapt construction plans without significant schedule or cost implications, the City will consider a full intersection closure as a last resort. In 2022, there were several instances where a full intersection closure was required, including for work in intersections on Brydges Street, at Commissioners Road and Ridout Street, and on Dundas Street. Where possible, intersection closures happened during off-hours or at night to reduce the impacts on the public.

### Security of Construction Sites

City construction sites have been experiencing increased challenges related to security and safety of job sites. After-hours security is becoming an increasing necessity for several reasons with reported incidents of vandalism, trespassing and material theft becoming more brazen. Tender items for private security are being added to some contracts, particularly in the core, and staff regularly emphasize to contractors the need to secure the site and safely store loose construction materials as much as is practical. Project teams also continue to coordinate with Community Informed Response (CIR) when responding to social issues in and around construction sites.

### Schedule pressures

Infrastructure renewal and growth projects have become increasingly complex in recent years with servicing partners seeking to align multiple renewal needs, utility coordination and innovative design elements requiring specialized sub-trades all of which can impact the length of a construction contract. As is, many of these projects require a full construction season to complete the required works, often with finishing touches and cleanup work carrying over into the spring. Supply chain interruptions, labour shortages and industry capacity have the potential to create additional pressures to the construction window in 2023 and beyond.

### Supply chain interruptions

The City has seen firsthand in the marketplace the impacts of global supply chain interruptions. Most capital projects require the contractor to source materials, which delays the purchase until the contracts are awarded. Pre-ordering can be challenging for those materials requiring 'shop drawings' from the awarded contractor. Pre-ordering construction materials also requires careful consideration for storage and inventory while maintaining care-and-control of the items. It is critical that successful contractors are provided as much time as possible to order project materials to reduce the impacts of supply chain concerns. Global supply chain issues will continue to be a significant risk in 2023, impacting the supply of vehicles and equipment, steel and plastic products, electronics and other necessary materials and equipment.

#### Labour shortages

Labour shortages and increasing costs for skilled labour can add risk, which generally equates to increased project costs and longer project schedules. Many industries, including construction, are facing labour shortage issues as they struggle to return to regular working capacity post-COVID-19. Elevated rates of staff turnover and

vacancies have also been affecting local consultants and City teams, which City staff manage with strong mentoring programs to quickly onboard new staff so they can hit the ground running.

#### **Industry capacity**

2023 is the City of London's largest construction season to date, with senior government funds contributing to several "mega-projects" on top of the usual slate of critical infrastructure renewal and growth projects. At the same time, the residential building industry remains busy with many local contractors and subcontractors also working to support expanding new developments across London. It will be important to monitor and coordinate across projects, particularly later in the season when multiple jobs will be looking for temperature-dependant asphalt, concrete and pavement-marking work to complete or stabilize projects prior to freeze-up.

## **Budget pressures**

City staff continue to keep a close watch of economic pressures influencing project budgets and projects teams were successful in limiting our budget exceedances in 2022. Still, we know that the factors impacting the cost of these projects are not going away anytime soon.

Inflationary pressures for consumers and businesses have been well-documented over the last year and construction is no exception. One indicator of the impacts of inflation on construction pricing is the Statistics Canada Non-Residential Building Construction Price Index, which increased 12.5% over the last 12 months. The Building CPI is useful to track overall national economic trends.

Meanwhile, surging interest rates over the last six months and the resultant ballooning carrying costs of borrowing has added a new element of risk and profit erosion to the great proportion of construction businesses reliant on debt.

### Material costs

Supply chain interruptions have the potential to drive material costs over the duration of the construction season. Price increases have already been observed for items such as personal protective equipment (PPE), steel, copper, aluminum, lumber, paper products, electronics (micro chip shortages which also impact vehicle and heavy equipment deliveries and prices), plastics, utilities and fuel. Tender bid prices may also increase due to late or uncertain construction start dates associated with supply chain delays.

# Asphalt cement index

The City of London experienced almost \$450,000 in extra costs for placing asphalt on projects in 2022 associated with projects tendered in 2021and 2022. This cost is related to the Asphalt Cement (AC) Index charge to the project. The AC charge is the price the road authority pays for asphalt cement and is directly linked to the published price index of the commodity, as set out by the Ministry of Transportation. In many cases, the cost of asphalt increased dramatically between the time of contract tendering and asphalt paving. This cost increase was unpredictable and is not within the City's control to mitigate, noting AC impacts on 2023 projects will be closely monitored to better inform future project budgets. Projects could see savings if the AC price index drops post-tender, however the rise in the price of petrochemicals being experienced globally due to the situation in Ukraine may escalate AC charges in 2023.

#### Late season construction costs

The above-noted schedule pressures have the potential to delay the start of construction, ultimately driving more projects later into the construction season and possibly pushing some works to the following year. There is also potential for additional charges if contractors need to perform work too far into the fall or winter ("winter heat charges"). While cleanup and deficiency work in the spring is normal, pushing larger components of the contract to the following year can have direct project costs and extend the impacts on residents and businesses.

### 2023 Infrastructure renewal program mitigations

Over the last three years, the COVID-19 pandemic and global supply chain interruptions have significantly impacted many industries and economic sectors, including municipal construction. While the complex and ever-shifting conditions make it challenging to anticipate implications for the 2023 construction season with precision, the team continues to monitor industry trends and implement measures to minimize likely risks, disruptions and financial pressures. The goal is to continue prioritizing flexible planning and mitigation strategies to appropriately respond to emerging issues.

Several initiatives and actions have already been implemented in an effort to alleviate the potential impacts of anticipated schedule and budget pressures.

### Locate services

The timely provision of utility locates are a critical first step for any construction project to help ensure construction schedules are met, eliminate the potential for standby charges resulting from late locates, and provide additional flexibility when planning or making changes to the work plan.

Some capital projects over the last few years experienced extended waits for underground utility locates stemming from a combination of locate service providers having difficulty retaining staff through the pandemic combined with significantly higher than anticipated demand as both growth and public infrastructure investment hit record or near-record levels

Building on the success of the City's 2022 trial Dedicated Locator program, the City will again provide the Dedicated Locate Service for its construction projects in 2023 using the now available Provincial Dedicated Locate program administered by its regulator, Ontario One Call. Utilizing the Provincial program simplifies administration yet meets all of the City's requirements to provide the superior locate service needed to help meet project schedules and control construction costs.

#### Early tender calls

The City's multi-year budgeting approach allows for better planning and provides greater certainty to the construction industry. Early notice of construction plans ensures the City can secure contractors and achieve value for money for taxpayers. The tender list is shared with the industry in the fall so they can thoroughly prepare and bid on upcoming projects, mitigating the risk of price increases, and delivering the best possible value for taxpayers. Earlier tendering and timelier contract award yields significant efficiencies and cost savings. Earlier tendering creates a more competitive bidding environment and streamlines the process for road reconstruction and underground infrastructure renewal projects.

## 2.4 Delivering construction excellence for London

The establishment of the Core Construction Program in 2018 represented a fundamental shift in the way the City approaches construction projects. The teams managing construction projects have continued to build on that approach by expanding resources and communications to ensure it is providing "above and beyond" service to business and community stakeholders affected by construction.

This annual Renew London report is more than a review of the current and previous year's Infrastructure Construction Programs. It also provides an opportunity to highlight the many construction mitigation, customer service and communication strategies applied to support Londoners through construction.

In 2022, the annual Renew London report transitioned to capturing these fundamental strategies in supporting appendix documents. This year and going forward, this section of the Renew report will continue to highlight key lessons learned from the previous construction season to be incorporated into these strategy summaries year over year. This section also highlights planned initiatives to support continuous improvement in the delivery of the City's annual construction program.

### **Construction mitigation strategies**

2022 was a record year for construction with a major focus in the core area to improve connections through Downtown and Old East Village, resulting in significant traffic changes for drivers, transit riders, cyclists and pedestrians throughout the construction season. Project teams have continued to develop an understanding of the social challenges and the need for business relations and extensive public engagement and stakeholder outreach before and during construction.

Daily deliveries, commercial and residential access, sidewalk access, and security are all important issues to consider when constructing projects in these urban environments. Courtesy wayfinding signage was installed to assist drivers in reaching key commercial areas and attractions. Project teams learned about managing the growing need for enhanced security to keep City and Contractor property safe. Maintaining pedestrian access throughout construction zones with regard for AODA requirements to support people with disabilities continues to be a major priority for all construction sites.

In 2022, the City continued to support temporary courtesy park and pick-up locations downtown for customers and food delivery drivers when making quick food and parcel pickups. These short-term are being reviewed to see where they can be made permanent or would benefit from modification. Additionally, staff continue to scrutinize the core for additional opportunities to implement additional on-street parking to mitigate project impacts and support businesses.

Maintaining road access is not possible for all construction zones. Traffic control plans are established at the start of projects and consider all modes, including vehicles, transit, cyclists and pedestrians. Detour signs are installed to help road users navigate the project area and traffic changes and road restrictions are informed in advance through Public Service Announcements (PSAs), email notifications, social media and direct outreach to impacted stakeholders. City-branded wayfinding signs are installed around construction zones in the core area to help pedestrians navigate through and around construction zones safely.

Appendix C contains a more comprehensive description of measures used to mitigate the impacts of construction for all Londoners.

#### Communications and customer service strategies

In 2022, the City continued to prioritize strong communications efforts to support local businesses and keep Londoners informed during construction, especially in the core area.

Working closely with core area BIAs – and relying on valuable feedback from residents and businesses gathered through recent Core Construction surveys and public outreach – the team continued to prioritize communications tools and resources that provide the most value to stakeholders.

From having a dedicated, on-the-ground business relations coordinator, to enhancing wayfinding signage and advertising, the team applied a variety of traditional and digital tactics to support businesses through construction of two rapid transit projects – Downtown Loop Phase 2 and East London Link Phase 1 – as well as Victoria Bridge and the Adelaide Underpass projects.

Strong, evidence-based communications efforts will continue to be applied this year to support businesses in the core area. At the beginning of 2022, 96 businesses who participated in the Core Construction survey continued to identify personal interactions with City staff, online resources, signage, and parking accommodations as the most effective initiatives to support them in serving customers during construction – so these will continue to be areas of focus. Innovative tactics designed to help the team share construction information in a more timely manner are also being explored.

Appendix D contains a detailed description of communications efforts used to keep the community informed before and during construction.

### **Construction and Infrastructure Services: planned initiatives**

The corporate restructuring in 2021 established Construction and Infrastructure Services (CIS) which brought together the Construction Administration, Major Projects, and Geomatics Divisions to create a "centre of excellence" around construction infrastructure support services. The CIS team is involved in the administration, coordination and communication of delivering the majority of the City's capital construction program on an annual basis.

### <u>Standard Contract Document annual review – process update</u>

London's Standard Contact Documents (LSCD) define the basis of all City construction contracts including both parties' roles, responsibilities, and detailed description of the work or service such as drawings, specifications, procedures, any other conditions, etc.

Each year, the City undertakes a collaborative LSCD review with input from local contractors and consultants to continuously improve contract language and maintain clear, organized standards. This process is also used to identify potential cost efficiencies in both work methods or materials. As a result of this annual, collaborative process to continuously improve the City's standard contract language, London is recognized in the province as providing clear, organized, quality standard contract documents.

In 2022, staff worked with industry partners to review the LSCD annual process to further enhance engagement and issue resolution, develop improved document templates and formalize the process schedule and deliverables.

## Explore options for a "Good Neighbour" constructor program

London is fortunate to have strong local and regional industry that has supported the City's ongoing efforts to enhance construction administration for the annual infrastructure program. Building on that relationship, CIS has established a working group focused on developing a program that captures best practices contractors can use to be a "good neighbour" in the communities they are working in. Principles of a good neighbour constructor might include:

- Supporting robust communications with affected neighbours
- Keeping a clean and tidy job site
- Maintaining an accessible site and helping those with disabilities navigate it easily
- · Demonstrating a respectful workplace
- · Respecting the environment
- Engaging and supporting local businesses

Once developed, this program could be branded and promoted to the public as a symbol of how the City and its contractors take pride in their job sites.

### Enhanced street-level engagement

Through development of the Neighbourhood Connectivity Plan Engagement Strategy Pilot, staff have heard a clear desire for earlier engagement at the street level when the work is impactful to the streetscape, such as addition of a new sidewalk or tree removals. Whether the City is seeking input on various design scenarios or there is only one viable design solution, it is important to provide residents an opportunity to learn about design considerations and share their views in advance of a finalized design. CIS is continuing the Neighbourhood Connectivity Plan pilot into 2023 with the specific goal of further developing a consistent approach for street-level engagement that can be implemented by project managers across all projects, regardless of the delivery program.

### Community employment benefits (CEB)

As a requirement of the Investing in Canada Infrastructure Program (ICIP) funding, all projects with over \$10 million in federal contributions are required to participate in the Community Employment Benefits (CEB) initiative. The goal of the initiative is to leverage infrastructure investments to benefit the communities and neighbourhoods where that infrastructure is built. Projects featuring CEB in 2022 include the three Rapid Transit Phases and the Adelaide Grade Separation.

The 2022 ICIP projects saw the employment of three CEB employees qualified under the Recent Immigrant and Youth categories and that were enrolled in Fanshawe College's Construction Engineering Technology program. They have benefited through hands-on experience with a large construction project and had the opportunity to practice their English skills in a professional setting. Rapid Transit construction is slated to continue to 2027 with multiple contracts per year and we look forward to seeing more and more CEB employees hired through this program.

## Conclusion

The Renew London Construction Program manages the sustainability of London's infrastructure through a combination of road, bridge, bicycle, sewer, water, sidewalk and intersection improvements. The annual program is planned to address asset needs for infrastructure lifecycle renewal while at the same time ensuring that the growth requirements of the community are met in a timely manner.

2022 was a successful construction season with a portfolio of Council-approved projects totalling approximately \$190 million. In spite of persistent economic pressures stemming from labour shortages, pricing escalations, and global supply chain impacts, the majority of 2022 projects are expected to be completed on or ahead of schedule and remain on budget. A companion report has been included on this agenda for those projects in which budget pressures exceeded the awarded contract value.

The 2023 proposed construction portfolio is currently estimated at just over \$200 million. The program will reconstruct 80 lane-kilometres of road, add or replace 20 kilometres of sanitary and storm sewers, rebuild 12 kilometres of watermain and remove approximately 0.25 kilometres of combined sewer. Over 25 intersections will be improved along with adding more than 16 kilometres of new bike lanes, 14 kilometres of new sidewalk will be added and replacing about 26 kilometres of existing sidewalks. A robust communications plan for the overall 2023 program has already begun and targeted plans for individual projects are either underway or launching shortly.

Emerging market conditions and new regulations will continue to place pressure on project schedules and budgets. Advance measures have been taken to help mitigate these potential project risks, such as offering a Dedicated Locater Service for City projects, and early tender posts for the largest projects. While it is challenging to predict how global and local pressures may affect the 2023 construction season, the team continues to monitor industry trends and prioritize flexibility and mitigation strategies in order to appropriately respond to emerging issues and ongoing pandemic impacts.

The City strives offer robust construction mitigations as well as sustained, sincere, and strategic communications as part of its annual construction program. Lessons learned from 2022 projects and anticipated risks associated with the 2023 construction season have been communicated to project managers to support design and future project planning.

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City Manager, Environment and

Infrastructure

APPENDIX A – 2022 Renew construction program top 10 list and project highlights

APPENDIX B – 2023 Renew construction program top 10 list

APPENDIX C – Construction mitigations strategies

APPENDIX D – Communications and customer service strategies

cc: Accessibility Community Advisory Committee

Integrated Transportation Community Advisory Committee

**London Transit Commission** 

Downtown London Business Improvement Association Old East Village Business Improvement Association

# **APPENDIX A – 2022 Renew construction program list**

The chart below identifies the Top 10 City projects in 2022, the status and tendered contract amount.

Three noteworthy 2022 construction projects, noted in the 2022 project highlights below, implemented exciting new infrastructure and various transportation projects made big achievements in further expanding London's cycling network.

Project	Tendered contract amount (millions)	Status
Adelaide Street North Underpass: Improved mobility and road improvements	\$60.19 M	3-year project 2022 site work included building temporary diversion road
Downtown Loop Phase 2 and Municipal Infrastructure Improvements (Queens Avenue and Ridout Street North)	\$17.2M	2-year project. Phase 2 mostly completed in 2022 with streetscape, sidewalks to be completed in 2022 and portion of Queens between Clarence and Wellington deferred to 2022. Phase 3 scheduled for 2022.
East London Link Phase I (King Street)	\$20.9M	2-year project Phase 1 mostly completed in 2022 with streetscape, sidewalks to be completed in 2023. Phase 2 scheduled for 2023
Southdale Road West Improvements	\$10.5 M	2-year project Project mostly complete in 2022 with sidewalk work and noise wall scheduled for 2023
Victoria Bridge Replacement	\$22.8 M	2-year project Truss bridge removed in 2022 and foundation work for new structure underway. Bridge components and new arch structure to be installed in 2023.
Mud Creek Phase 2	\$9 M	2-year project Deferred to fall 2023 into 2024.
Kilworth Bridge Rehabilitation	(estimated) \$ 500k (estimate)	1-year project Deferred to 2023.
Queens Avenue Road and Cycle Rehabilitation	\$1.65 M	1-year project Majority of project complete in 2022 with permanent line markings to be placed 2023
Pottersburg Phase I Reconstruction	\$5.8 M	1-year project Construction in 2022 mostly complete with minor streetscape elements in 2023
Brydges Street	\$5.9M	2-year project Project mostly complete with minor streetscape elements in 2023

## 2022 project highlight: Adelaide Street North Underpass

The Adelaide Street Underpass is a complex multi-year project. Reconstruction of Adelaide Street North from Elias Street to 80m north of McMahen Street, as well as Central Avenue from William Street to Elizabeth Street started in Spring 2022 and is anticipated for completion in Fall 2025. In 2022, the focus has been on preparatory work to advance the major excavation of the actual underpass in 2023. This included replacing underground services and infrastructure on surrounding streets and constructing a temporary detour road around the excavation area.



Above: Aerial view of the Adelaide Underpass construction site.

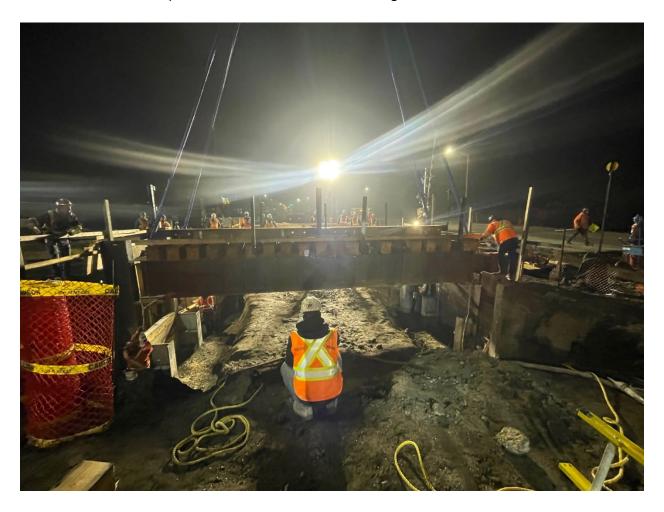
Installation of a groundwater cut-off wall was also completed to prevent groundwater from entering the underpass, the groundwater cut-off wall is formed by constructing a series of intersecting reinforced concrete piles. Drilling and pouring of piles started early summer and was completed by mid-September of 2022.



Above: Drilling operations to install a cut-off wall for groundwater on Adelaide Street

North

Completing the groundwater cut-off-wall system was critical as a portion of it runs underneath where the Canadian Pacific Railway tracks cross Adelaide Street and needed to be replaced to sustain the temporary rail bridge that is required while the contractor builds the permanent abutment and steel girder structure.



Above: Overnight operations to install a temporary rail bridge to support Canadian Pacific railway operations during construction of the Adelaide Underpass.

## 2022 project highlight: Victoria Bridge Replacement

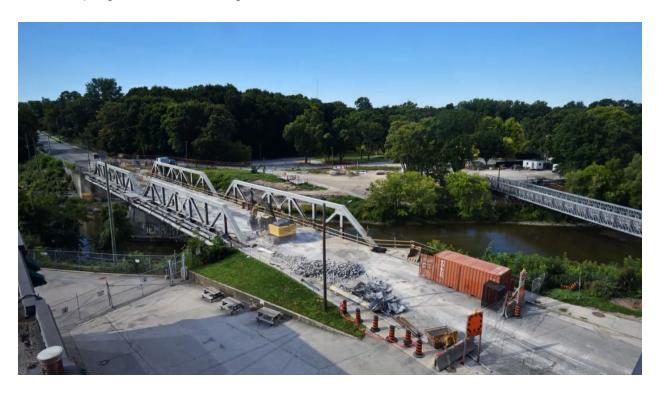
Another massive and complex project that is underway is the replacement of the Victoria Bridge on Ridout Street between Thames Park and Horton Street. The existing bridge will be replaced with a new "through arch" structure, which will include a widened deck surface to better accommodate bicycle traffic, pedestrians, and improved connectivity with the Thames Valley Parkway.

The work started in 2022 with the installation of a temporary active transportation bridge that also supports temporary active utilities relocated from the demolished bridge.



Above: Installation of a temporary active transportation bridge to support pedestrian and cycling connections across the Thames River during construction.

Removal of the existing concrete bridge deck and steel truss frame has also been completed in 2022. Currently, construction of the new arch foundation that will support the bridge at its four corners is underway on the northwest side. Below photos shows the work progress between August and December of 2022.



Above: Aerial view of construction works at the Victoria Bridge on Ridout Street North.



Above: Winter works at the Victoria Bridge site.

There was also sensitive in-water work that required a high degree of environmental sensitivity in the approach to removing materials from this part of the Thames River, which is home to several Species At Risk, including 'Rayed Bean' and 'Round Pigtoe' mussels, as well as the 'Silver Shiner' and 'Black Redhorse' fish species.





Above: Crews completing sensitive in-water works required to protect several at risk species, including 'Rayed Bean' and "Round Pigtoe' mussels that are part of the Thames River ecosystem.

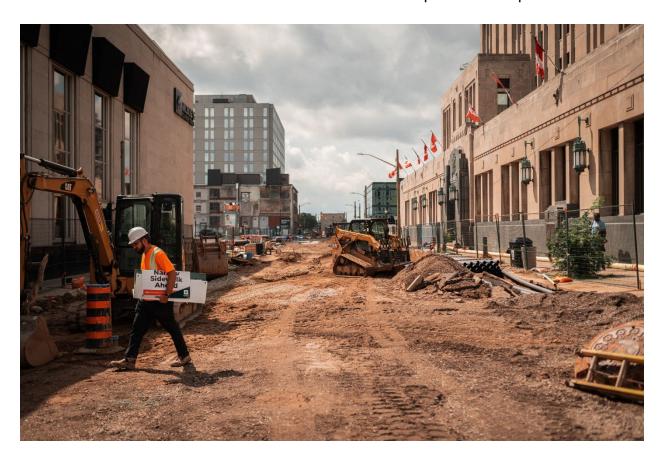
### Downtown Loop Phase 2 and East London Link Phase 1 Rapid Transit Projects

Phase 1 of the Downtown Loop was built in 2021, with some finishing touches completed in 2022 on King Street. Most of Phase 2 was constructed in 2022 along Queens Avenue and Ridout Street North.

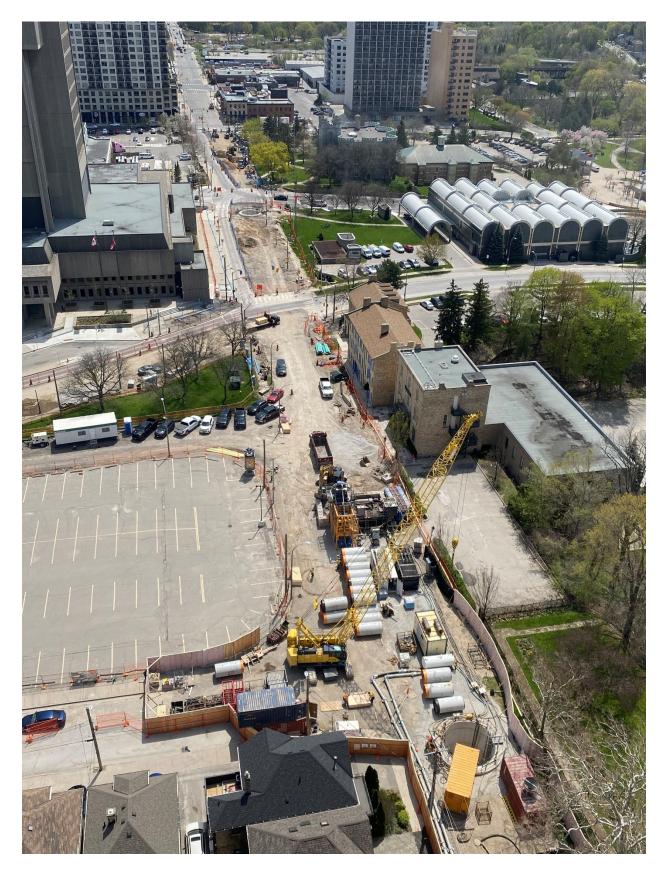
Phase 2 of the Downtown Loop was especially complex as it required extensive underground work to separate aging sewers, install new infrastructure, watermains and utilities. The 2022 Downtown Loop contract is the largest core project to be undertaken in a single construction season, covering more than six blocks of infrastructure work.

An exciting part of Downtown Loop Phase 2 was the micro-tunneling work on Ridout Street North. This work required 24-hour drilling operations to install a new deep, large sanitary sewer that would have been incredibly impactful to construct with an open trench. Working around the clock was needed because once the drilling works began, the micro-tunneling equipment had to operate continuously until they reached the end of the receiving pit near the Dundas Street intersection. The drilling was completed successfully in about a week and a half.

Further mitigation measures were in place during the micro-tunneling operations to minimize impacts to residents and businesses, including installing vibration monitors and sound barriers to reduce noise and dust while crews completed this important work.



Above: Downtown Loop Phase 2 construction site at Queens Avenue between Richmond Street and Talbot Street.



Above: Aerial view of the micro-tunneling operations at Ridout Street North for the Downtown Loop Phase 2 project. The Launching Pit is visible at the bottom of the picture and the Receiving Pit can be seen at the top of the picture near Ridout and Dundas.

Phase 3 of the Downtown Loop project will occur in 2023 along Wellington Street from Queens Avenue to York Street. Some planned carry-over work will occur in 2024 to add permanent red bus-only lane markings and bus stop shelter infrastructure, which will follow under a separate contract.

This multi-year project will add transportation and transit improvements above ground, while repairing and replacing aging sewers, watermains and other underground infrastructure.



Above: Aerial view the Downtown Loop Phase 2 construction site at the Queens Avenue and Richmond Street intersection.

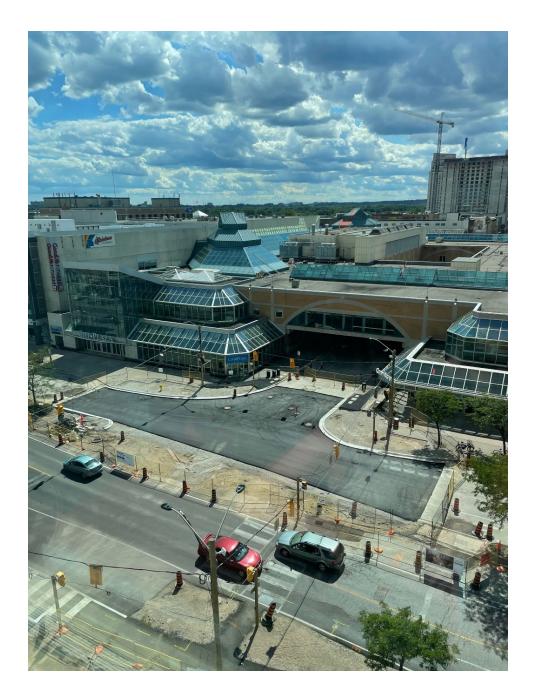
The Downtown Loop is the first of London's new rapid transit system, with the aim of providing Londoners with safer, more efficient transit operations. Once the Downtown Loop is complete, it will serve as a hub for future east and south legs of rapid transit extending across London, including the East London Link and Wellington Gateway.

Reconstruction work on Phase 1 of the East London Link Rapid Transit project has also begun in 2022. The first phase of the East London Link started on King Street from Lyle Street to Wellington intersection. This project included 7 blocks of full road reconstruction and underground servicing upgrades.

The overall strategy has been to work in multiple blocks at once which has kept the project efficient and helped complete the bulk of this work in one construction season.



Above: East London Link Phase 1 construction site at King Street.



Above: Aerial view of the East London Link Phase 1 construction site at the King Street and Wellington Street intersection.

## Cycling infrastructure improvement projects

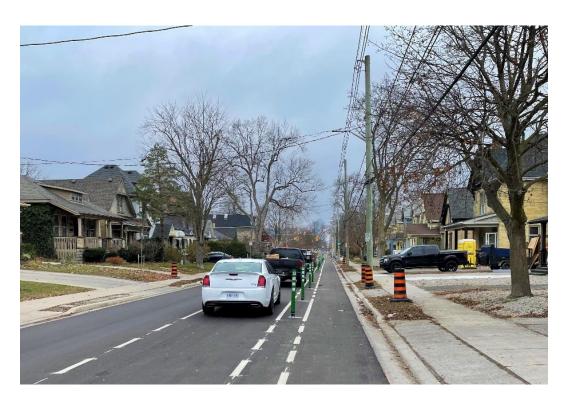
The final project of the East-West Bikeway was completed on Queens Avenue, incorporating a full road rehabilitation between Quebec Street and Maitland Street. The locations of the existing westbound bike lane and parking lane were swapped to provide a protected cycling facility that provides the westbound connection for cyclists from Old East Village to William Street.

There were other cycling projects that started in 2021 and completed in 2022. The second phase of Brydges Street was completed adding bike lanes between Egerton Street and Highbury Avenue. The protected bike lanes east of Hale Street on Brydges Street, Wavell Street and bike lanes on Saskatoon Street were completed and offer a comfortable cycling facility connecting to the Kiwanis Park pathway, East Lions Community Centre, and two elementary schools.

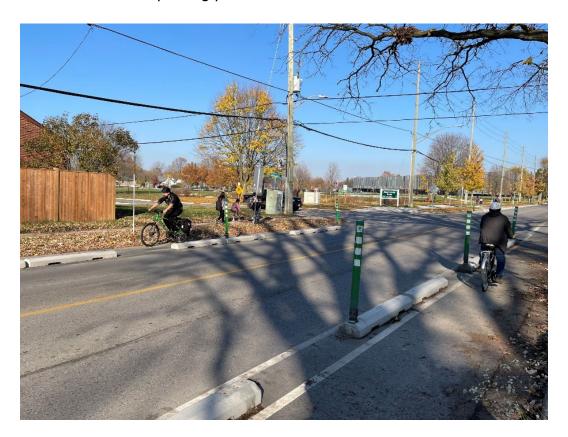
The Fanshawe Park Road Boulevard Cycling Lane project rehabilitated the sixth phase of the existing boulevard cycling lanes on Fanshawe Park Road between Wonderland Road and Adelaide Street. As part of the larger road rehabilitation project on Fanshawe Park Road further west, the boulevard cycling lanes were also rehabilitated between

Hyde Park Road and Dalmagarry Road. Both of these projects also included accessibility measures to support AODA requirements and improved waiting areas at bus stops.

A protected intersection at Ridout Street & Commissioners Road was completed that improves safety for all road users and completed a missing link in the Upper Queen Street and Ridout Street bike lanes. At William Street and Oxford Street, a new walking and cycling crossing was added that allows pedestrians and cyclists to cross Oxford Street, to connect neighbourhoods, bus stops and provide a cycling alternative to Adelaide Street.



Above: New parking-protected bike lanes on Queens Avenue



Above: New protected bike lanes on Wavell Street



Above: New protected intersection at Ridout Street & Commissioners Road



Above: New walking and cycling crossing at Oxford Street & William Street

# APPENDIX B – 2023 Renew construction program list & Top 10

The 2023 City's Top 10 Construction Projects are selected each year to provide an overview of the upcoming year's work and impacts. City staff have identified the Top 10 projects that will take place during the 2023 construction season.

The Top 10 are selected based on the following criteria:

- Scope of work (e.g., complete utility and sewer rebuild, asphalt resurfacing)
- Construction duration
- Location in relation to other nearby projects and the expected future benefits
- Road classification
- Road user impact
- Transit impact
- Impact to neighbours
- Proximity to events, schools, community centres, parks, cycle routes
- Economic impact and Government funding
- Supply chain exposure
- Excess Soil

# 2023 City's Top 10 construction projects

# **Adelaide St North Underpass**

Work Type: Improved Mobilty. COLBORNE ST Tender: \$60.2M OXFORD ST. E. Benefits: Improved mobility, new sewer PICCADILLY ST. ADELAIDE ST. N. infrastructure, and enhanced lighting. MCMAHEN ST. PALL MALL ST. Temporary sidewalk closures LTC route impacts CENTRAL AVE. CENTRAL AVE. Road closure ELIZABETH ST. Road closure ELIAS ST. DUFFERIN AVE.



Above: Adelaide Street North Underpass

# **Downtown Loop Phase 3**

(Wellington Street from Queens Avenue to York Street)



**Work Type:** Rapid Transit and Municipal Infrastructure Improvements

**Tender:** \$13.6M

Public Transit Infrastructure Stream (PTIS)

Benefits: : Improved mobility, connectivity to transit, streetscaping and water and sewer infrastructure upgrades to accommodate future growth.

Temporary sidewalk closures



LTC route and stop impacts





Phased road and lane restrictions



Website: getinvolved.london.ca/downtownloop



Above: Downtown Loop Phase 3

# **Wellington Gateway Phase 1**

(Wellington Street from York Street to north of the Thames River)

YORK ST. HORTON ST. E WELLINGTON ST. GREY ST. GRAND AVE.

Work Type: Rapid Transit and Municipal Infrastructure Improvements

**Tender:** \$14.9M

Public Transit Infrastructure Stream (PTIS)

Benefits: Improved mobility, connectivity to transit, streetscaping and water and sewer infrastructure upgrades to accommodate future growth.

★ Temporary sidewalk closures



LTC route and stop impacts



Phased road and lane restrictions



Website: getinvolved.london.ca/wellingtongateway



Above: Wellington Gateway Phase 1

# **East London Link Phase 2**

(King Street, Ontario Street and Dundas Street)



**Work Type:** Rapid Transit and Municipal Infrastructure Improvements

Tender: \$16.9M

Public Transit Infrastructure Stream (PTIS)

Benefits: Improved mobility, connectivity to transit, active transportation improvements, streetscaping and water and sewer infrastructure upgrades to accommodate future growth.

Temporary sidewalk closures



LTC stop impacts



Lane restrictions



Lane restrictions



Website: getinvolved.london.ca/eastlondonlink



Above: East London Link Phase 2

# Victoria Bridge Replacement



Work Type: Infrastructure Renewal

**Tender:** \$22.8M

Benefits: Replace an aging 1920s truss bridge with new through arch-structure and improve active transportation network with wider sidewalks and extend bike lane connection to Thames Park.

Temporary active transportation bridge

TC route impacts



Temporary active transportation bridge

Road closure



Website: getinvolved.london.ca/victoriabridge



Above: Victoria Bridge Replacement

# **Mud Creek Phase 2**



Work Type: Stormwater Improvement

Tender: \$9M (Estimated)

Benefits: Alleviate existing and future flooding concerns identified in the Mud Creek Subwatershed Environmental Assessment.



★ Temporary restrictions



No LTC impact



Road closure



Website: getinvolved.london.ca/mud-creek-phase-2



Above: Mud Creek Phase 2

# **Fanshawe Park Road and Richmond Street Intersection Improvements**



Work Type: Municipal Infrastructure and

Intersection Improvements

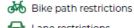
Tender: \$14.7M

Benefits: Improved mobility to enhance comfort and safety for all road users, asphalt in-boulevard bike paths, new sidewalks, streetscaping and underground infrastructure upgrades to accommodate future growth.

Temporary sidewalk closure



LTC route and stop impacts



📥 Lane restrictions



Website: getinvolved.london.ca/fanshaweandrichmond



Above: Fanshawe Park Road and Richmond Street Intersection Improvements

# Southdale and Colonel Talbot Roundabout



**Work Type:** Municipal Infrastructure and Intersection Improvements

Tender: \$8.7M

**Benefits:** Improved comfort and safety for all road users by reconfiguring the intersection as a roundabout, install inboulevard bike paths and new sidewalks, streetscaping and underground infrastructure upgrades to accommodate future growth.

★ Sidewalk restrictions

LTC route and stop impacts

Road closures and restrictions



Website: getinvolved.london.ca/southdaleroundabout



9

Above: Southdale and Colonel Talbot Roundabout

# Quebec Street Infrastructure Renewal

OXFORD ST. E

QUEBEC ST.

MORNINGTON AVE.

CONNAUGHT AVE.

CONNAUGHT AVE.

CANADIAN PACIFIC

RAIL LINE

Work Type: Infrastructure Renewal Project (IRP)

Tender: \$6.3M

**Benefits:** Aging infrastructure replacement, installation of new cycling infrastructure and sidewalks, streetscaping and underground infrastructure upgrades to accommodate future growth.

X

Intermittent sidewalk closures

\_

LTC route impacts

Road closures (local traffic only)

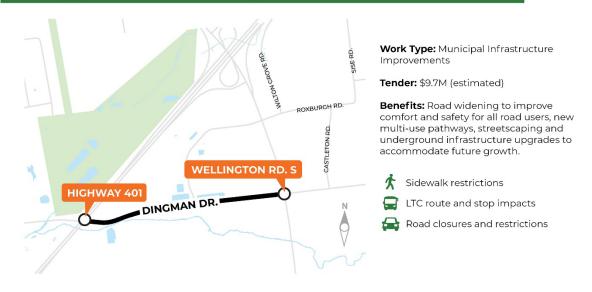
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 $We b site: {\bf get involved.london.ca/quebec}$ 



Above: Quebec Street Infrastructure Renewal

# **Dingman Drive Improvements**







Above: Dingman Drive Improvements

#### **APPENDIX C – Construction mitigation strategies**

The teams managing construction projects are regularly drawing upon lessons learned through the annual Renew Program to raise the bar on public service when supporting business and community stakeholders affected by construction. The following strategies are applied to help mitigate the impacts of construction for Londoners.

# **Project coordination mitigations**

The Renew London Infrastructure Program was created to drive construction efficiency by coordinating capital construction projects across Environment and Infrastructure. There are additional opportunities for City Staff to coordinate projects across internal and private partners to avoid potential overlapping construction impacts.

### Core Area Construction Coordination Committee (CAC3)

The CAC3 was established in 2018 to better coordinate transportation impacts in the core stemming from known projects and permits in or affecting right-of-way, to inform core construction communications. Coordination of all construction activities in densely developed parts of the city, which are used intensively day and night by multiple diverse users, involves collaboration across several City divisions. Effective communication is paramount internally and with the City's private partners, transit, and emergency services. The committee focuses on anticipating and minimizing impacts and achieving equity in the travel experiences of all road users (pedestrians, cyclists, transit users and motorists) through weekly meetings during the construction season. In 2022, the corearea boundary being monitored by the Downtown Construction Coordination Committee extends from Horton Street to Oxford Street and from the Thames River to Ontario Street.

# **Utility Coordinating Committee**

The mandate of the Utility Coordinating Committee (UCC) is to provide advanced planning of infrastructure work in the municipal right-of-way for over 20 different public and private organizations. Coordinating this work is a complex challenge compounded by hundreds of emergency and routine operational repairs undertaken by City Roads, Water, Sewer and Forestry Operation teams annually. There has been a significant increase in project applications for telecom companies which will continue as fibre to the home programs blanket most areas of the city.

Advanced cumulative planning through the UCC allows the City staff to better respond to proposed and unplanned work and helps visualize the effects of all projects relative to others and promotes better definition of specifications around scheduling of contracts. The City's goal is to ensure that construction is planned and sequenced in a manner that minimizes impacts on traffic and disruption to the public.

#### Phasing and staging projects

Through experiences on several recent larger projects, the City has recognized the benefits of splitting large scale projects into phases over multiple years or into stages by location within a single season, where possible. As with most projects there are inevitable challenges that can affect a project's schedule. With a project spread out over multiple years the impact of any delays is minimized and the cost to the City can be significantly reduced and controlled. Phasing projects over multiple years can have benefits, but other factors such as funding, local impacts, and transportation impacts need to be considered when deciding if this approach is appropriate.

# **Mobility mitigations**

All work is being scheduled to minimize impacts on traffic as much as possible from the perspective of all road users. Construction schedules may vary due to weather and other factors, so it is important that Londoners stay alert and be prepared to adapt to changing conditions.

During construction, the public are advised to plan their travel in advance, consider alternate routes, be aware that street parking may be impacted, obey signage around work zones and be patient while traveling in and around work zones throughout the city. The City takes an active approach to coordinating construction to reduce prolonged disruption to local residents and the travelling public. Where possible, staff consider all the potential construction needs of a particular area and liaise with outside agencies such as the utility companies to coordinate their construction needs and plan how to complete the work together in stages or at the same time.

#### Pedestrian impacts

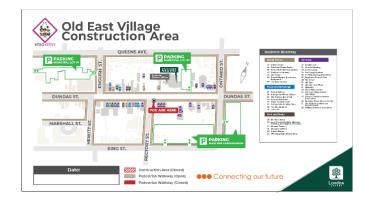
Accessibility around construction projects is a key consideration for all the City's construction activities. City contracts require that an accessible pathway through a construction site be maintained to the extent possible. When encountering certain project and site-specific constraints or disruptions, it is not always possible to continuously provide a safe and accessible route through a construction site. When construction activities require the temporary closure of an existing sidewalk for safety, the public will be notified of the disruption as per O. Reg. 191/11, Part IV.2, s. 80.48 (Accessibility for Ontarians with Disabilities Act, 2005, "AODA"). Where applicable, signage will be installed on site at either end of the work indicating that the sidewalk is closed. This will alert pedestrians to use an alternate route. While this alternate route may not always be most convenient way to reach a particular destination, it will ensure that the public is not entering into an unsafe situation.

Where possible, City projects include requirements to construct temporary hard surface sidewalks and, in some cases, temporary ramps to better facilitate accessible pedestrian movement. Navigational signage is also placed on site around large core area construction projects to support pedestrians and businesses.

2022 Core Construction projects such as Phase 2 of the Downtown Loop project on Queens Avenue and Phase 1 of the East London Link on King Street included enhanced site security, improved lighting, additional signage, and enhanced walkways to improve public safety. These improvements for pedestrians were implemented to provide a more comfortable and secure construction environment for residents, businesses, and visitors.



Above: Examples of navigational signage used around the construction area.



Above: Example of pedestrian navigation maps to installed around construction sites.

# Cyclist impacts

Cyclists are an important consideration when designing and planning all infrastructure projects. While many projects include building new bike lanes and improving existing bike infrastructure, construction sites themselves are potential hazards for cyclists. City's bicycle routes should be safely accommodated through or around work zones. When possible, the City creates detour routes for cyclists, posts signage around construction, and shares notices, public service announcements and maps online about closures.



Above: Traffic changes on Dundas Place to support safety and mobility for all during core construction.



Above: Example of bike detour signs to help cyclists navigate construction safely.

#### Traffic impacts

Congestion and disruption caused by public and private construction is disruptive to all road users. City staff manage programs to mitigate the impacts as much as possible by reviewing all projects from a traffic and construction detour impact perspective. Some projects will require road closures to complete the planned construction for the safety of the contractor and the public, while others may only require lane restrictions. In any case, a detour to safely redirect traffic around the disturbed areas and permit the work to be completed in a timely manner will be implemented.

To optimize vehicle traffic flow in the areas affected by planned detours, the City may adjust traffic-signal timing, in addition to installing advance warning signage and optimizing apps such as Waze to recognize the closure. The City will have greater ability to adjust traffic signal operation as the Intelligent Traffic Signal project benefits are realized. As an effective and highly visible tool, more electronic Portable Variable Message Signs are being utilized throughout the city to provide drivers with current updates/detour routes digitally, on a larger screen.

Notwithstanding posted detour routes, increased traffic volumes are often observed on some neighbourhood streets near construction areas as drivers look for shortest routes around the closures. In some cases, temporary neighborhood traffic calming measures may be implemented to mitigate this behavior.

The City strives to minimize the disruption to the public during construction and maintain access to the maximum extent possible. Separating a construction project into stages to maintain use is often considered. However, it can often lengthen the duration of a project, creates challenges from a constructability and increased capital cost perspective. A balance needs to be established that satisfies both objectives. City staff believe this balance has been achieved with the 2022 Renew London construction Program.

# Transit impacts

City staff work closely with the London Transit Commission ("LTC") to identify construction impacts affecting bus routes. LTC prepares and communicates detour routes as needed throughout construction projects. Several projects for 2023 will impact LTC routes, and these route changes will be listed on the Detours section of LTC's website.

# **Access mitigations**

### Pedestrian/sidewalk access

Maintaining sidewalk access throughout construction zones, especially in the core area, continues to be a challenge when sidewalk work is required. Contractors are asked to maintain clearly labelled pedestrian maps and signage in advance of pathway closures. Where necessary, crews also provide a temporary smooth surface of plywood, asphalt, or concrete within the sidewalk area for pedestrians.

# AODA and supports for people with disabilities

There are many people in our community who due to age, infirmity, injury or other reasons are dealing with mobility challenges and for them a construction zone can present lots of unexpected terrain and obstacles. Strategies to support accessibility during construction include clearly marked pedestrian routes with large signage at eye level to support those using mobility devices and brightly coloured fencing to help those

with low vision. All construction workers are required to have AODA training and are encouraged to keep an eye for anyone that may be struggling and give a little extra assistance.

#### Motor vehicle access

While maintaining road access is not possible in all construction zones, two-hour free parking is being offered through the recently approved Core Area Action Plan to incentivize drivers to continue to visit despite the removal of on-street parking in the work zone. The City will also assist visitors through the use of advance warning signs, social media updates and public service announcements.

# Temporary and courtesy park and pick-up locations

To help support businesses during the COVID-19 pandemic and construction, the City added short-term spots throughout the core area for customers and food delivery drivers when making quick food and parcel pickups. Temporary and courtesy park and pick-up locations will continue to be available throughout the 2023 construction season.

### Receiving deliveries

Local businesses rely on the delivery of goods to operate. Understanding this, temporary loading zones have been designated in advance and will be clearly marked for retailers, suppliers, and rideshare services. In exceptional circumstances, new loading areas may be negotiated and installed. Concierge services can also be made available to assist with large or complex deliveries.

#### Service interruption mitigations

Service interruptions can be extremely disruptive to businesses. Over the past few years, communication has been improved around planned service interruptions in the core area. Bi-weekly emails are sent to businesses from the project manager detailing what work has been completed, and what upcoming work is expected in the area. Tailored email notifications are also shared with impacted businesses at least 24 hours in advance of a service disruption, unless there is an emergency, in which case notice is provided as soon as possible.

# Site condition mitigations

# Cleanliness of work site

Clean work zones are an important factor to deliver on positive experiences during construction. Sidewalk and street sweeping, sharps management, cigarette butt disposal, periodic window-washing, garbage/recycling receptacles for the general public and waste pickup for those living and working in the area will be included in tenders where possible. Coordination at/near key destinations (city-wide) Major closures led by third parties at or near critical destinations, such as hospitals, schools, community and seniors' centres are critical to the community. Though internal training, increased efforts with regards to communication plans in these important locations. This includes increased oversight of third parties such as CN/CP Rail and utility groups.

# Social impacts

The City has continued to develop an understanding of the social challenges of working in a dense and urban environment. Daily deliveries, commercial and residential access, sidewalk access, and security are all important issues to consider when constructing projects in these environments. It is important for the project teams to stay nimble and flexible when it comes to how to implement and stage a project, while continuing to listen to the challenges that local businesses and residents face.

# Security enhancements

In 2022, there was a need for additional security on several projects, to keep City and Contractor property safe during inactive periods of the project. Several incidents on projects also required the involvement of security personnel on site during working hours to assist with the safety of workers. The projects teams have learned when to increase the security presence on site.

### **APPENDIX D – Communications and customer service strategies**

As London experiences larger and more complex construction projects, the City is prioritizing communications to ensure impacted businesses, residents, and property owners are informed before and during construction.

On a typical construction project, stakeholder outreach takes place before work begins to review and discuss potential impacts, such as property access and accessibility, collect contact information, solicit feedback, and share project details. Information gathered during these conversations is essential to shaping communications for each project.

To streamline communications between the City, impacted stakeholders, construction crews, and key private partners – such as London Transit and emergency services – a Construction Project Manager is assigned to each project. The Project Manager's contact information is shared before construction begins and members of the public are invited to connect with the Project Manager at any time during construction. This role is essential to ensure up-to-date information is always accessible, and to assist with construction inquires and issues, manage Renew London updates, and keep Communications staff informed.

Anticipating exact impacts and unforeseen situations may be difficult due to the complexity and changing conditions for each project. However, Construction Project Managers work closely with Communications to ensure Londoners and impacted businesses and residents are informed about road closures, lane restrictions, sidewalk disruptions and other construction impacts that may arise. Key private partners and emergency services are kept informed on an ongoing basis through direct communications with Construction Project Managers, public service announcements, and the daily Renew London Road Report email.

# **Communications and correspondence**

While frequency of correspondence may differ depending on the project's location, scope, duration, and traffic and social impacts, the following communication methods may be used to inform Londoners who live, work, or own property in proximity to a Cityled capital construction project:

# Road construction projects

- Construction notice letter
- Direct communication with Construction Project Manager (email, phone, inperson)
- Advance warning and detour signage
- Updates on the Renew London website

### Major construction projects

Any of the tactics above, plus:

- A minimum of three project update letters
- Project-specific web page on london.ca and/or getinvolved.london.ca
- Public engagement webinars and/or pre-recorded presentations
- In-person drop-in sessions
- Public service announcements (PSAs sent to media and posted on london.ca/newsroom) media updates
- Email notifications and updates to project-specific email subscribers
- Social media updates to communicate traffic impacts

Core/commercial area construction projects
Any of the tactics above, plus:

- A Construction Business Relations Coordinator, whose primary focus is on supporting businesses through the construction process. Working closely with core area BIAs, the Business Relations Coordinator becomes a familiar face to impacted businesses through ongoing, in-person and virtual outreach, and ensures business concerns and questions are addressed by the project team. In previous construction seasons, this role was temporary. However, recognizing the value of this dedicated business support position, in 2022, this role was made permanent, and will be an ongoing resource for major construction projects moving forward.
- Ongoing communications and promotions with Downtown London and Old East Village and other BIA's where applicable
- Custom wayfinding signage and navigation maps
- Collateral materials such as construction toolkits and contact cards
- Radio ads and social media advertising

#### Navigation

The City continuously promotes the use of the following tools to help Londoners navigate construction safely and efficiently whether they drive, bike, walk, or take transit:

- Navigation apps: Londoners continued to be encouraged to use navigation apps such as Waze or Google Maps to find alternative routes during construction.
- Renew London interactive map: By visiting london.ca/roadwork residents can search by street to learn if their commute will be impacted.
- **Honk app:** Through an official partnership with Honk, drivers can continue to find and pay for parking nearby during construction. This year, core area visitors can take advantage of two-hour complementary parking at designated locations using the Honk app within the promotional period.
- LTC's online trip planner: City staff work alongside LTC to promote use of their trip planner and detour updates during construction.

#### Core construction program

The City of London has a vision to revitalize the Core Area as the cultural, civic, retail, and economic heart of London, and as a great place to live. Revitalization of the core area is essential to support city growth and mobility in the future. Not only are there several City-led projects planned in the core in 2023, but private development and private utility projects will continue as well.

The core construction program supports area businesses and resident with additional resources such as a construction tool kit, enhanced wayfinding signage, small events, and marketing campaigns all using a consistent tagline "Connecting our future."

Enhanced communications and engagement will continue in 2023 to support construction in the core and surrounding areas. Key projects include the Downtown Loop Phase 3, East London Link Phase 2, Wellington Gateway Phase 1, Victoria Bridge Replacement, and Adelaide Underpass.

# Community relations

Based on lessons learned early in 2022, the City continues to build its formalized construction mitigation program in the core. This program provides enhanced resources and communications on core construction projects to:

- Provide a positive experience for visitors and locals
- Encourage movement in and around the construction zone
- Enable easy access to City services and staff
- Promote impacted areas and support businesses in partnership with the BIAs
- Prioritize and facilitate project information sharing
- · Foster community collaboration where possible

Program elements can be identified by its tagline: Connecting our future.

# Connecting our future.

# **Measurement**

To better understand the effectiveness of the core construction program, the City launched a post-construction survey in early 2022 targeted towards residents, businesses, and property owners in the core area.

The 2022 survey was issued after significant core construction in 2020 and 2021. The goal of the survey was to help the City understand stakeholders' top concerns and issues related to construction, in order to provide focused communication and construction mitigation efforts where they matter most.

More than 90 impacted stakeholders responded to the 2022 survey, providing invaluable feedback to inform communications efforts in 2022 and 2023 core construction and beyond.

The most effective and well received communications identified through the survey were:

- Email notifications
- Project web page
- Construction letters and notices
- Sidewalk signs
- Information from the BIA
- · Conversations with City staff

The survey also identified the top five areas suggested for improvement:

- Pedestrian/sidewalk access
- Motor vehicle access
- Personal and property security
- On-street parking
- Receiving deliveries

City staff are using these survey results to refine the core construction program and are currently exploring ways to incorporate the feedback into other construction projects across London. Recognizing the value of stakeholder input on overall communications efforts, the team intends to continue soliciting feedback through a Core Construction survey at the end of each construction season.

#### **Accomplishments**

### Public engagement (city wide)

In 2020, the City launched an improved public engagement website – Get Involved. This platform continues to be the main online space for residents to provide comments, questions, and feedback on different projects across London. The improvements made to the Get Involved website more interactive to allow new and different types of digital engagement opportunities, and the website has been used to host information about multiple construction projects.

As in-person opportunities to meet with residents and businesses are slowly becoming more available, project teams are starting to implement in-person outreach to connect with impacted stakeholders in addition to virtual meetings and events. In-person participation at local events, such as the Home Show and 'membership mixers' led by core area BIAs provide an opportunity to engage with residents, businesses and those directly impacted by construction.

It is recognized that not all Londoners are able to access project information online. Project teams also offered a variety of other options and accommodations to ensure that everybody was able to receive this information. This included mailed letters, phone conversations, and printed construction information delivered to residents and businesses.

#### Business relations coordinator

To streamline communications between the City, construction crews and businesses, a permanent Construction Business Relations Coordinator role has been created to support core area projects. This role was originally created as a temporary position during Dundas Place and core-area construction in 2018, but has been consistently identified by businesses as an essential one-on-one support. Through this position, businesses have a dedicated resource to assist with high-priority issues like access to their stores and parking, and a trusted conduit who is responsible for sharing – and addressing – their feedback with the project team.

#### Email notifications and bi-weekly updates (core area)

All core construction projects provide the added benefit of direct email notifications to residents, business and property owners who choose to subscribe. Through this channel, the Construction Administration team has been able to provide advance notification about service interruptions, work occurring near properties, and major site changes. This method of communication also achieved an above-average open rate of 49% and was identified as the most effective communication tactic in the post-construction survey. Email notifications are being extended this year to share project milestones and updates for the Fanshawe Park Road and Richmond Street Intersection Improvements project as well as the Colonel Talbot/Southdale Road Roundabout project.

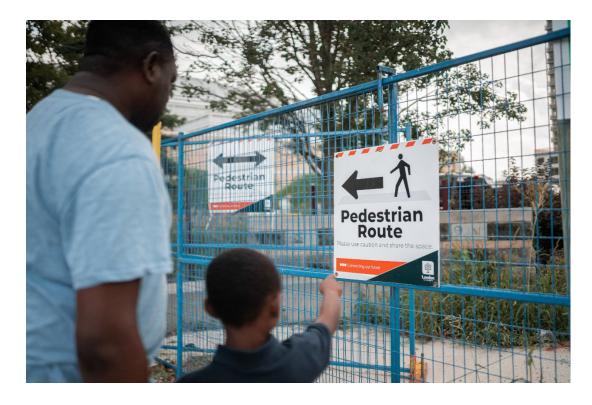
# Construction letters and notices (city-wide)

To equip residents with more accessible, easy-to-read project information, the City of London has made all its construction letters AODA compliant with the goal of improving readability for all. Additional improvements include a reorganization of content where necessary and making information about project impacts, timelines, and options to stay informed more prominent.

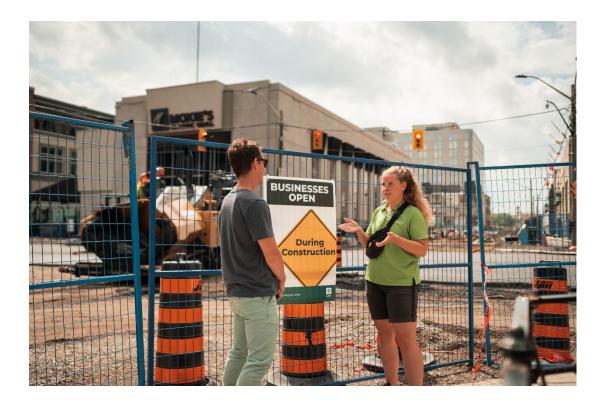
# Wayfinding signage (core area)

In 2022, improved construction pedestrian signage was used to help label accessible routes within core construction zones. These additions were received positively by residents and businesses, and they will be applied to 2023's core area projects. When possible, signage will be installed in advance of sidewalk closures and temporary narrow or uneven surfaces. Regularly updated, clearly labeled pedestrian navigation maps will also be produced and posted where applicable. All signs will be carefully designed to clearly state the specific impact without dissuading people from travelling through the area(s) leading up to the closure.

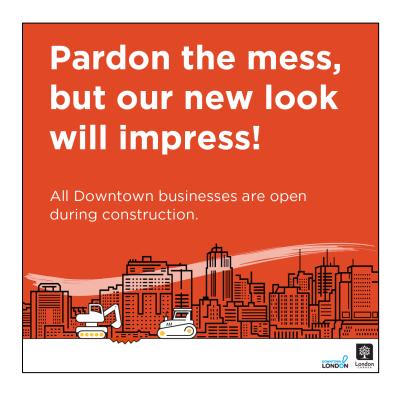
Last year, the City and Downtown London partnered on multiple signage initiatives in the core area to offer some "surprise and delight" within construction zones. Songthemed signs with construction puns garnered a great deal of social media attention, earning thousands of impressions online and drawing more attention to the downtown core during construction. In Old East Village, the City partnered with the BIA to create enhanced wayfinding signage to promote access to nearby businesses. Moving forward, the City will continue to work with BIAs & community members to exercise creativity through signage and other methods.



Above: Navigational sign showing a safe pedestrian route at the Ridout Street North and Dundas Street intersection.



Above: 'Business open' sign used downtown to help support businesses during construction.



Above: A series of signs and social media graphics created in partnership with Downtown London to promote businesses using construction themed puns.



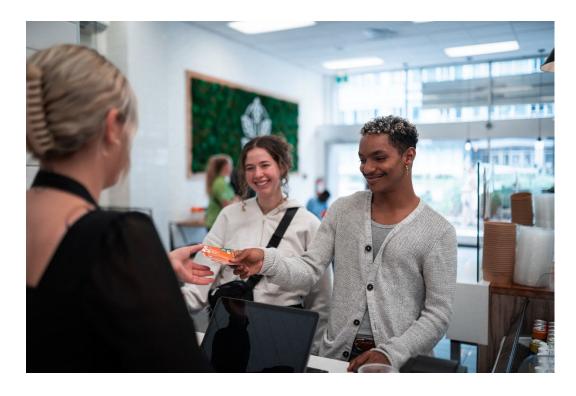
Above: Navigational sign indicating access to properties in Old East Village.

#### Promotion of the core during construction (core area)

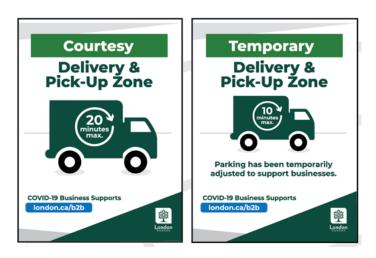
Promoting the core with the help of Downtown London and the Old East Village BIA will continue in 2023. Similar to last year, radio, billboards, social media, and other advertising will be used to communicate construction impacts and support businesses.

Promotional videos were filmed in partnership with Downtown London featuring businesses and the area during construction.

Construction Dollars as part of the Core Area Action Plan were distributed to customers in the form of contest prizes, promotions, and giveaways through the BIAs and their businesses. The Construction Dollars program will continue through 2023 to support businesses impacted by construction in the core area. Similar to last year, Construction Dollars will be distributed by the BIAs through contests, events and other initiatives. Parking promotions and accommodations for customers will continue to be coordinated for 2023. Last year, discount codes for free parking were offered using the Honk app, and temporary park and pick-up locations were made available for customers and delivery drivers.



Above: Customers using construction dollars at a local business downtown.



Above: Courtesy and temporary park and pick-up signs

# **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: Contract Price Increase: Infrastructure Renewal Program

Date: March 21, 2023

# Recommendation

That, on the recommendation of the Deputy City Manager, Environment and Infrastructure, the following actions **BE TAKEN** with respect to the English Street and Lorne Avenue Reconstruction project; and the Churchill Avenue and Manitoba Street Reconstruction project:

- a) Lorne Avenue Reconstruction (Tender RFT21-16) consulting contract value with AECOM Canada Ltd. BE INCREASED by \$90,000.00 to \$479,141.50 (excluding HST) in accordance with Section 20.3 (e) of the Procurement of Goods and Services Policy;
- b) Churchill Avenue and Manitoba Street (Tender RFT21-130) construction contract value with Elgin construction Company Limited **BE INCREASED** by \$180,000 to \$4,266,261.95 (excluding HST) in accordance with Section 20.3 (e) of the Procurement of Goods and Services Policy;
- c) Churchill Avenue and Manitoba Street (Tender RFT21-130) consulting contract value with JL Richards BE INCREASED by \$41,000 to \$395,596.00 (excluding HST) in accordance with Section 20.3 (e) of the Procurement of Goods and Services Policy;
- d) the financing for these projects **BE APPROVED** as set out in the Sources of Financing Report <u>attached</u> hereto as Appendices 'A.'
- e) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with these projects; and,
- f) the Mayor and City Clerk BE AUTHORIZED to execute any contract or other documents, if required, to give effect to these recommendations.

# **Executive Summary**

The Renew London Infrastructure Construction Program manages the sustainability of city infrastructure through a combination of road, bridge, bicycle, sewer, water, sidewalk, and intersection improvements. The program addresses existing lifecycle needs, system improvements, and growth-related priorities. Overall, 2022 was a successful construction season with the reconstruction of 60 lane kilometres of road, 134 kilometres of sanitary and storm sewers, and 7.5 kilometres of watermains. Staff managed a portfolio of Council-approved projects totalling approximately \$190 million.

The combined value of these contract increase requests reflects an overall budget variance of 0.2%, compared to the estimated 6.1% in net returned contingency overall.

The English Street and Lorne Avenue Reconstruction project consultant contract requires an amendment to address extended contract administration services related to additional groundwater found on English Street, prolonging the construction schedule.

The Churchill Avenue and Manitoba Street Reconstruction project contractor and consultant contracts require amendments to address underestimated quantities in the original tender.

The City's Procurement of Goods and Services Policy requires Council approval for these contract amendments.

# **Linkage to the Corporate Strategic Plan**

The following report supports the Strategic Plan through the strategic focus areas of Building a Sustainable City, Growing Our Economy and Leading in Public Service by helping to manage the infrastructure gap, improving our water, wastewater and stormwater infrastructure and services, and enhancing safety for all road users.

# **Analysis**

# 1.0 Background Information

# 1.1 Previous Reports Related to this Matter

Civic Works Committee – March 30, 2021 – Contract Award: Tender RFT21-16 – 2021 Infrastructure Renewal Program – English Street and Lorne Avenue Reconstruction

Civic Works Committee – June 1, 2021 – Appointment of Consulting Engineers for the Infrastructure Renewal Program

Civic Works Committee – March 29, 2022 – Contract Price Increase: 2021 Water/Wastewater Infrastructure Renewal Report

# 2.0 Discussion and Considerations

### 2.1 Discussion

#### **English Street and Lorne Avenue**

In April 2021, the City began construction on English Street and Lorne Street to replace sewers and watermain, along with surface works including sidewalk, curb, and asphalt replacement. Original hydrogeological studies completed in advance of construction indicated that the amount of underground water that needed to be removed from the necessary excavations was minimal. During the first year of construction, the project encountered significant unforeseen underground water requiring a dewatering permit and extending the construction timeline.

In April of 2022, Council approved additional funding of \$675,000 to increase the City's construction contract with CH Excavating. At this time additional funding was not requested for our consultant, AECOM.

The duration of work in 2022 was greater than anticipated, with construction closing out in late 2022. While AECOM worked diligently to minimize their additional costs, they incurred additional expenses beyond the budget of their original contract contingency. An additional \$90,000 in consulting fees is required to close out construction administration of the English Street contract.

#### Churchill Avenue and Manitoba Street

In April 2022, the City began construction on Churchill Avenue and Manitoba Street to replace sewers and watermain, along with surface works including sidewalk, curb, and asphalt replacement. During construction, it was determined that quantities were underestimated for some items in the tender document.

Early in the project, it was decided to use a granular road base material to backfill sewer and watermain trenches versus native material due to soil conditions. This approach will ensure the longevity and performance of the upgraded infrastructure. This change reduced the available contingency by almost \$200,000. When it came time to rebuild the road, more soil needed to be excavated to address the subgrade issues, increasing the cost of both excavation and the granular base used to the fill the larger trenches.

The contractor also encountered multiple driveways in poor condition, requiring higher material quantities. Existing infrastructure required modification to the design and location of several private drain connections (PDC's), resulting in additional quantities of both storm and sanitary PDC's.

The starting contingency for this project was \$401,000. In December of 2022, as per section 20.3 (d) of the Procurement of Goods and Services Policy, an administrative increase of 3% or \$119,000 was authorized to be added to the contract with Elgin Construction. In addition to this increase it has been determined that an additional \$180,000 will be required to complete this contract in 2023. Carry-over work to be completed in 2023 includes top asphalt and pavement markings.

It should be noted that while the estimated quantities for these tender items were exceeded, the necessary added scope was implemented through the contract and the contractor, Elgin Construction, honoured their competitive unit prices. In other words, the cost of this added scope is very similar to the theoretical bid price had the tender included these quantities. The City has not been disadvantaged by adding these additional quantities after tender close.

The increase in tender quantities extended both the scope and duration of the project. As a result, an additional \$41,000 is required for the consultant, J.L. Richards and Associates Limited, to complete the construction administration and inspection services on this project.

# 3.0 Financial Impact/Considerations

English Street and Lorne Avenue Reconstruction Consulting Contract
An additional \$90,000 in consulting fees for AECOM is required to cover the additional costs for extending the project into 2022 due to the additional dewatering requirements. This funding is available in the approved water, sanitary, and stormwater capital budgets per the Source of Financing attached as Appendix 'A'.

Churchill Avenue and Manitoba Street Construction and Consulting Contracts

An additional \$180,000 for our contract with Elgin Construction is required to complete the project contract, due to errors in the tender quantities. An additional \$41,000 is required for our consultant, JL Richards, to complete the inspection services on this project due to the extended project duration. This funding is available in the approved water, sanitary, and stormwater capital budgets per the Source of Financing attached as Appendix 'A'.

# Conclusion

In accordance with Section 20.3 (e) of the Procurement of Goods and Services Policy, it is recommended that the contract value be amended for English Street and Lorne Avenue Reconstruction project consulting contract and the Churchill Avenue and Manitoba Street Reconstruction project construction and consulting contracts.

Prepared by: Ugo DeCandido, P.Eng., Division Manager,

**Construction Administration** 

Submitted by: Jennie Dann, P.Eng., Director, Construction

and Infrastructure Services

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

City Manager, Environment and

Infrastructure

Attach: Appendix 'A' – Sources of Financing:

English Street and Lorne Avenue Reconstruction (RFT21-16)

Churchill Avenue and Manitoba Street Reconstruction (RFT21-130)

cc: Aaron Rozentals, Division Manager, Water Engineering

Kyle Chambers, Division Manager, Sewer Engineering

Gary McDonald, Budget Analyst, Finance & Corporate Services

#### #23059

March 21, 2023 (Contract Increase)

Chair and Members Civic Works Committee

RE: Contract Price Increase: Infrastructure Renewal Program

(Subledger WS21C00A) - Lorne Ave.

(Subledger WS22C00C) - Churchill and Manitoba

Capital Project ES241421 - Infrastructure Renewal Program - Sanitary Sewers

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

Capital Project ES254022 - Infrastructure Renewal Program - Stormwater Sewers and Treatment

Capital Project EW376522 - Infrastructure Renewal Program - Watermains

Capital Project TS301422 - Road Network Improvements (Local and Rural)

AECOM Canada Ltd. - \$90,000.00 (excluding HST) - Lorne Avenue Reconstruction - RFT21-16

Elgin Construction Company Limited - \$180,000.00 (excluding HST) - Churchill Avenue and Manitoba Street - RFT21-130

JL Richards - \$41,000.00 (excluding HST) - Churchill Avenue and Manitoba Street - RFT21-130

### **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	This Submission	Balance for Future Work
ES241421 - Infrastructure Renewal Program - Sanitary Sewers	-			
Engineering	1,930,170	1,891,158	38,160	852
Land Acquisition	9,133	9,133	0	0
Construction	18,492,347	18,467,314	25,033	0
City Related Expenses	8,802	8,802	0	0
ES241421 Total	20,440,452	20,376,407	63,193	852
ES254021 - Infrastructure Renewal Program - Stormwater Sewers and Treatment				
Engineering	1,544,373	1,506,213	38,160	0
Land Acquisition	210,537	207,167	0	3,370
Construction	9,931,780	9,460,978	0	470,802
City Related Expenses	11,150	11,150	0	0
ES254021 Total	11,697,840	11,185,508	38,160	474,172
ES254022 - Infrastructure Renewal Program - Stormwater Sewers and Treatment				_
Engineering	906,074	906,074	0	0
Construction	11,962,339	11,884,492	77,847	0
City Related Expenses	8,562	3,168	0	5,394
ES254022 Total	12,876,975	12,793,734	77,847	5,394
EW376522 - Infrastructure Renewal Program - Watermains				
Engineering	2,665,658	1,448,689	15,264	1,201,705
Construction	16,438,350	14,498,894	67,060	1,872,396
City Related Expenses	395,967	395,967	0	0
EW376522 Total	19,499,975	16,343,550	82,324	3,074,101

# Appendix "A"

# #23059

March 21, 2023 (Contract Increase)

Chair and Members
Civic Works Committee

RE: Contract Price Increase: Infrastructure Renewal Program

(Subledger WS21C00A) - Lorne Ave.

(Subledger WS22C00C) - Churchill and Manitoba

( 3				
Estimated Expenditures continued	Approved Budget	Committed To Date	This Submission	Balance for Future Work
TS301422 - Road Network Improvements (Local and Rural)				
Construction	10,857,389	9,167,078	54,950	1,635,361
City Related Expenses	252,349	252,349	0	0
TS301422 Total	11,109,738	9,419,427	54,950	1,635,361
Total Expenditures	\$75,624,980	\$70,118,626	\$316,474	\$5,189,880
Sources of Financing				
ES241421 - Infrastructure Renewal Program - Sanitary Sewers				
Capital Sewer Rates	11,282,518	11,282,518	0	0
Drawdown from Sewage Works Renewal Reserve Fund	6,766,836	6,702,791	63,193	852
Canada Community-Building Fund	2,250,000	2,250,000	0	0
Other Contributions	141,098	141,098	0	0
ES241421 Total	20,440,452	20,376,407	63,193	852
ES254021 - Infrastructure Renewal Program - Stormwater Sewers and Treatment				
Capital Sewer Rates	820,480	820,480	0	0
Drawdown from Sewage Works Renewal Reserve Fund	8,575,865	8,063,533	38,160	474,172
Canada Community-Building Fund	2,250,000	2,250,000	0	0
Other Contributions	51,495	51,495	0	0
ES254021 Total	11,697,840	11,185,508	38,160	474,172
ES254022 - Infrastructure Renewal Program - Stormwater Sewers and Treatment				
Capital Sewer Rates	1,269,668	1,269,668	0	0
Drawdown from Sewage Works Renewal Reserve Fund	9,351,280	9,268,039	77,847	5,394
Canada Community-Building Fund	2,250,000	2,250,000	0	0
Other Contributions	6,027	6,027	0	0
ES254022 Total	12,876,975	12,793,734	77,847	5,394
EW376522 - Infrastructure Renewal Program - Watermains				
Capital Water Rates	12,175,544	12,175,544	0	0
Drawdown from Water Works Renewal Reserve Fund	6,581,005	3,424,580	82,324	3,074,101
Canada Community-Building Fund	743,426	743,426	0	0
EW376522 Total	19,499,975	16,343,550	82,324	3,074,101
	-			

#23059

March 21, 2023 (Contract Increase)

Chair and Members
Civic Works Committee

RE: Contract Price Increase: Infrastructure Renewal Program

(Subledger WS21C00A) - Lorne Ave.

(Subledger WS22C00C) - Churchill and Manitoba

(Subledger WS22C00C) - Churchill and Manitoba				
Sources of Financing continued	Approved Budget	Committed To Date	This Submission	Balance for Future World
TS301422 - Road Network Improvements (Local and Rural)				
Capital Levy	1,088,200	1,088,200	0	0
Drawdown from Capital Infrastructure Gap Reserve Fund	926,433	19,384	29,487	877,562
Drawdown from Transportation Renewal Reserve Fund	800,000	16,738	25,463	757,799
Canada Community-Building Fund	8,295,105	8,295,105	0	0
TS301422 Total	11,109,738	9,419,427	54,950	1,635,361
Total Financing	\$75,624,980	\$70,118,626	\$316,474	\$5,189,880
Financial Note: (Excluding HST)	ES241421	ES254021	ES254022	EW376522
Listed by Engineering and Construction Awards				
AECOM Canada Ltd RFT21-16 - Engineering	\$37,500	\$37,500	\$0	\$15,000
Elgin Construction Company Limited - RFT21-130 - Construction	0	0	76,500	49,500
JL Richards - RFT21-130 - Construction	24,600	0	0	16,400
Total Per Capital Project	\$62,100	\$37,500	\$76,500	\$80,900
Financial Note: (Excluding and Including HST)	TS301422	Total Excluding HST	Total Including HST	
Listed by Engineering and Construction Awards				
AECOM Canada Ltd RFT21-16 - Engineering	\$0	\$90,000	\$91,584	
Elgin Construction Company Limited - RFT21-130 - Construction	54,000	\$180,000	\$183,168	
JL Richards - RFT21-130 - Construction	0	\$41,000	\$41,722	_
Total Per Capital Project	\$54,000	\$311,000	\$316,474	_
Financial Note: Charges per Capital Project - Engineering Contract Increase	<b>ES241421</b> \$37,500	<b>ES254021</b> \$37,500	<b>EW376522</b> \$15,000	<b>Total</b> \$90,000
Add: HST @13% Total Contract Price Including Taxes	4,875 42,375	4,875 42,375	1,950 16,950	11,700 101,700
Less: HST Rebate	-4,215	-4,215	-1,686	-10,116
Net Contract Price	\$38,160	\$38,160	\$15,264	\$91,584
Financial Note: Charges per Capital Project - Construction Contract Increase	<b>ES241421</b> \$24,600	<b>ES254022</b> \$76,500	<b>EW376522</b> \$65,900	<b>TS301422</b> \$54,000
Add: HST @13%	3,198	9,945	8,567	7,020
Total Contract Price Including Taxes	27,798	86,445	74,467	61,020
Less: HST Rebate Net Contract Price	-2,765 \$25,033	-8,598 \$77,847	-7,407 \$67,060	-6,070 \$54,050
NET CONTROL FINE	φ∠ϋ,∪აპ	φ11,041	φυ/,υυυ	\$54,950

# Appendix "A"

#### #23059

March 21, 2023 (Contract Increase)

Chair and Members Civic Works Committee

RE: Contract Price Increase: Infrastructure Renewal Program

(Subledger WS21C00A) - Lorne Ave.

(Subledger WS22C00C) - Churchill and Manitoba

Financial Note: Charges per Capital

Project - Construction continued

Contract Increase \$221,000

Add: HST @13% \$28,730

Total Contract Price Including Taxes 249,730

Less: HST Rebate -\$24,840

Net Contract Price \$224,890

Total Construction and Engineering \$316,474

Jason Davies Manager of Financial Planning & Policy

jg

# **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: Amendment to Lease Agreement with SunSaver 4 Limited

For Public Electric Vehicle (EV) Charging Stations

Date: March 21, 2023

# Recommendation

That, on the recommendation of the Deputy City Manager, Environment & Infrastructure, with respect to the Lease Agreement with SunSaver 4 Limited for public electric vehicle (EV) charging stations on municipal property, the following actions **BE TAKEN:** 

- a) the draft amending by-law attached as Appendix "A" BE INTRODUCED at the Municipal Council meeting to be held on April 4, 2023 to:
  - i) approve the Lease Amending Agreement between The Corporation of the City of London ("City") and SunSaver 4 Limited ("SunSaver") in the form attached as Appendix "A", Schedule "1";
  - ii) authorize the Mayor and City Clerk to execute the Lease Amending Agreement; and
  - iii) delegate authority to the Deputy City Manager, Environment and Infrastructure and/or designate to approve future amendments to Exhibit's "A" and "B" of the SunSaver Lease Agreement dated June 2<sup>nd</sup>, 2020 and authorize the Mayor and City Clerk to execute future amending agreements.

# **Executive Summary**

Natural Resources Canada's (NRCan) Zero-Emission Vehicle Infrastructure Program (ZEVIP) provides up to 50 per cent of equipment and installation costs, administered through a series of procurement rounds. The City of London's existing Lease Agreement with SunSaver was associated with the first procurement round. These charging stations are owned and operated by SunSaver under the ChargerCrew brand name on approved municipal properties. SunSaver pays the City of London an annual nominal gross rent of \$10 per parking spot plus a supplementary rent based on a percentage of net revenue generated annually.

In 2022, SunSaver informed City staff that one of their other clients was unable to proceed with charging stations that had received ZEVIP funding and asked whether the City of London would be interested in these stations. After discussions with SunSaver, it was agreed that one of these charging stations would be added to the existing list of leased parking spots for installation at 824 Dundas Street (Municipal Parking Lot Number 7) to expand public-serving EV charging in an underserved area of London. This location is near both the Old East Village commercial area as well as the Western Fair District.

The current amended location and the proposed approach will expand public EV charging services at no capital or operating cost to the City of London. This approach does not prevent other EV charging businesses from applying for Federal funding and approaching the City of London (or other businesses) for potential arrangements.

# **Linkage to the Corporate Strategic Plan**

Municipal Council's 2019-2023 Strategic Plan for the City of London continues to recognize the importance of reducing greenhouse gas emissions from transportation. Providing EV charging stations at public-serving municipal facilities addresses three of the five Areas of Focus, at various levels:

- Strengthening Our Community
- Building a Sustainable City
- Growing our Economy

On April 23, 2019, the following was approved by Municipal Council with respect to climate change:

Therefore, a climate emergency be declared by the City of London for the purposes of naming, framing, and deepening our commitment to protecting our economy, our eco systems, and our community from climate change.

On April 12, 2022, Municipal Council approved the Climate Emergency Action Plan which includes Area of Focus 4, Transforming Transportation and Mobility.

# Context

# 1.0 Background Information

# 1.1 Purpose

The purpose of this report is to provide Civic Works Committee (CWC) with details to:

- 1. approve the Lease Amending Agreement between The Corporation of the City of London ("City") and SunSaver 4 Limited ("SunSaver") (Appendix "A", Schedule 1);
- 2. authorize the Mayor and City Clerk to execute the Lease Amending Agreement; and
- 3. delegate authority to the Deputy City Manager, Environment and Infrastructure and/or designate to approve future amendments to Exhibit's "A" and "B" of the SunSaver Lease Agreement dated June 2nd, 2020. Note that there would be the limitations on the delegation of authority for future amendments to a limit of thirty (30) parking spaces and be subject to solicitor review.

# 1.2 Previous Reports Related to this Matter

Lease Agreement with SunSaver 4 Limited for New Public Electric Vehicle (EV)
 Charging Stations (May 26, 2020 meeting of the CWC, Item #2.5)

# 2.0 Discussion and Considerations

The Government of Canada has published proposed regulations that set zero emission vehicle sales targets for manufacturers and importers of new passenger cars, SUVs, and pickup trucks. The regulations will require that at least 20 percent of new vehicles sold in Canada will be zero emission by 2026, at least 60 percent by 2030, and 100 percent by 2035.

The Government of Canada, through Natural Resources Canada's (NRCan) Zero-Emission Vehicle Infrastructure Program (ZEVIP), also provides up to 50 per cent of equipment and installation costs and is administered through a series of procurement rounds targeting different market segments such as public charging, employee charging, fleet vehicle charging, and multi-unit residential building tenant charging. The City of London's existing Lease Agreement with SunSaver was associated with the first procurement round. These charging stations are owned and operated by SunSaver

under the ChargerCrew brand name on the approved municipal properties. SunSaver pays the City of London an annual nominal gross rent at the beginning of each year of \$10 per parking spot plus a supplementary rent as for each charging station based on a percentage of net revenue generated annually as identified below:

- 7.5% of the annual net revenue\* earned during the Term being ten (10) years; and
- 45% of the net revenue earned during any Extension Term thereafter.
  - \* Net revenue is defined as the total revenue earned minus the electricity consumption and other costs incurred to build, operate, and maintain the charging stations as per Generally Accepted Accounting Principles (GAAP).

SunSaver has participated in subsequent ZEVIP procurement rounds with other clients for charging stations. In 2022, SunSaver informed City staff that one of their other clients was unable to proceed with charging stations that had received ZEVIP funding and asked whether the City of London would be interested in these stations. After discussions with SunSaver, it was agreed that one of these charging stations would be added to the existing list of leased parking spots for installation at 824 Dundas Street (Municipal Parking Lot Number 7) to expand public-serving EV changing in an underserved area of London. This location is near both the Old East Village commercial area as well as the Western Fair District.

# 3.0 Financial Impact/Considerations

This proposed approach will expand public EV charging services at no capital or operating cost to the City of London. The operating and maintenance costs for the charging stations are the responsibility of SunSaver, with annual rent payments to be used to cover any incidental costs associated with Facilities staff providing support tasks for SunSaver's EV chargers. Given that this new location is also a municipal parking lot, there is also the potential to increase parking revenue from EV drivers making use of the charging stations given that parking fees will still need to be paid while charging their vehicle.

# Conclusion

This proposed approach will expand public EV charging services at no capital or operating cost to the City of London, with the added potential to increase parking revenue at that location. The new location will be in an undeserved area for EV charging, located close to both the Old East Village commercial area as well as the Western Fair District.

Prepared by: Jamie Skimming, P.Eng.

Manager, Energy & Climate Change

Prepared by: Bill Warner, AACI, Papp, Director, Realty Services

Submitted by: Jay Stanford, M.A., M.P.A.

**Director, Climate Change, Environment & Waste** 

Management

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

**Deputy City Manager, Environment and Infrastructure** 

Appendix A A By-law to approve the Lease Amending Agreement between The

Corporation of the City of London ("City") and SunSaver 4 Limited

("SunSaver")

# **APPENDIX A**

A by-law to approve the Lease Amending Agreement between The Corporation of the City of London ("City") and SunSaver 4 Limited ("SunSaver")

Bill No.

By-law No.

A By-law to approve the Lease
Amending Agreement with SunSaver 4
Ltd. for the purpose of leasing parking
spots on property owned by The
Corporation of the City of London for
use as publicly-accessible electric
vehicle changing stations; and to
authorize the Mayor and City Clerk to
act on behalf the City of London and
execute the Agreement.

WHEREAS section 2 of the Municipal Act, 2001, S.O. 2001, c.25, as amended, provides that municipalities are created by the Province of Ontario to be responsible and accountable governments with respect to matters within their jurisdiction and each municipality is given powers and duties under this Act and many other Acts for the purpose of providing good government with respect to those matters;

AND WHEREAS section 9 of the Municipal Act, 2001 provides that a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under this or any other Act;

AND WHEREAS section 10 of the Municipal Act, 2001 provides that a municipality may provide any service or thing that the municipality considers necessary or desirable for the public; and may pass by-laws respecting economic, social and environmental well-being of the municipality, and may pass by-laws respecting services and 'things the municipality is authorized to provide';

AND WHEREAS Municipal Council for the City of London approved a Lease Agreement between The Corporation of the City of London ("City") and SunSaver 4 Limited ("SunSaver") pursuant to By-law No. A.-7985-138 passed June 2<sup>nd</sup>, 2020 to lease parking spaces on City-owned lands to permit the installation of public electric vehicle charging stations (the "SunSaver Lease Agreement");

AND WHEREAS it is deemed appropriate to amend the Lease Agreement to rearrange the locations of the approved charging stations;

AND WHEREAS subsection 5(3) of the Municipal Act, 2001 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. The Lease Amending Agreement between the City and SunSaver, in the form attached as Schedule "1", is hereby authorized and approved;
- 2. The Mayor and City Clerk are hereby authorized to execute the Lease Amending Agreement substantially in the form authorized and approved under Section 1 of this by-law.
- 3. The Deputy City Manager, Environment and Infrastructure and/or designate is hereby delegated the power to approve future amendments of the SunSaver Lease Agreement, subject to the limitations contained in section 4 of this by-law.

- 4. The authority of the Deputy City Manager, Environment and Infrastructure and/or designate to act under section 3 of this by-law, is subject to the following:
  - i. such agreements operate to amend only Exhibits "A" and "B" of the SunSaver Lease Agreement for the purposes of changing the location or number of the leased parking spaces described within said exhibits;
  - ii. such agreements shall not result in an overall increase in the number of parking spaces leased under the SunSaver Lease Agreement to more than 30 spaces total;
  - iii. such agreements are in a form satisfactory to the Deputy City Manager, Legal Services:
  - iv. such agreements do not require additional funding or are provided for in the City's current budget; and
  - v. such agreements do not contain any financial arrangement, guarantee, indemnity or similar commitment that would increase, directly or indirectly, the indebtedness or contingent liabilities of The Corporation of the City of London.
- 5. The Mayor and City Clerk are hereby authorized to execute amending agreements approved by the Deputy City Manager, Environment and Infrastructure and/or designate, under the authority delegated by section 3 of this by-law.
- 6. This by-law shall come into force and effect on the day it is passed.

PASSED in Open Council,

2023

Josh Morgan Mayor

Michael Schulthess City Clerk

First reading – April 4, 2023 Second reading – April 4, 2023 Third reading – April 4, 2023

#### **SCHEDULE 1 - LEASE AMENDING AGREEMENT**

This Agreement dated the _	day of	, 2023
BETWEEN:		

### THE CORPORATION OF THE CITY OF LONDON

(the "LESSOR")

OF THE FIRST PART

- and -SUNSAVER 4 LTD. (the "LESSEE")

OF THE SECOND PART

WHEREAS by a Lease Agreement dated the 2<sup>nd</sup> day of June, 2020, (the "Lease") as approved by Council by the passing of Bylaw No. A-7985-138, the Lessor has agreed to grant to the Lessee a lease of a portion(s) of the real property described in Exhibit "A" (the "Lands"), being the area(s) described in Exhibit "B" (the "Leased Area"), for the purposes of constructing and operating electric vehicle charging stations ("EV Stations") to charge electric vehicles (the "Project");

AND WHEREAS the parties desire to amend the terms and conditions of Lease to include Municipal Parking Lot #7 (824 Dundas Street) as described herein;

NOW THEREFORE this agreement witnesseth that in consideration of the mutual covenants contained here and for other good and valid consideration, the receipt of which is hereby acknowledged, the parties agree that the Lease shall be amended as follows:

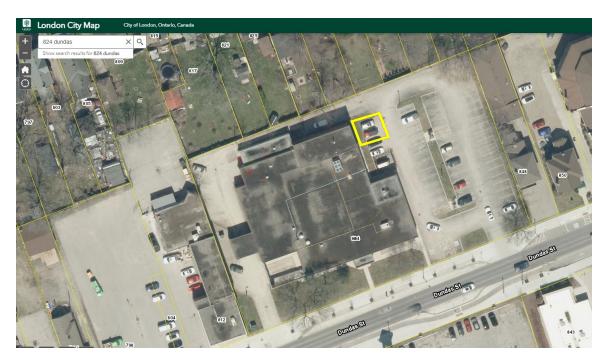
1. Exhibit "A" of the Lease is deleted in its entirety and replaced with the following:

# EXHIBIT "A" DESCRIPTION OF LANDS

Proponent	Description of Lands (Location)	No. of Parking Spots Allocated to Proponent
SunSaver 4	RBC Convention Centre – indoor parking (300 York Street)	6
Ltd	Medway Arena (119 Sherwood Forest Square)	2
	Kinsmen Recreation Centre (20 Granville St.)	2
	Tourism London (696 Wellington Rd. South)	2
	South London Community Centre (1119 Jalna Blvd.)	2
	East Lions Community Centre (1731 Churchill Ave.)	2
	Bostwick Community Centre (501 Southdale Ave.)	4
	Oakridge Optimistic Community Park (825 Valetta St.)	2
	Stronach Community Centre (1221 Sandford St.)	4
	Municipal Parking Lot No. 7 (824 Dundas St.)	2
	Total	28

2. Exhibit "B", wherein the portions of the Leased Area are diagramed and described, a new Section 10 is included as follows:

# 10. Municipal Parking Lot No.7 – 824 Dundas St.



One Level 2 EC chargers located at the North/East corner of the parking lot of the building.

- 3. The Lessor and Lessee each represents and warrants that it has the right, full power and authority to agree to amend the Lease as provided in this Agreement.
- 4. The terms, covenants and conditions of the Lease remain unchanged and in full force and effect, except as modified by this Agreement. All capitalized terms and expressions when used in this Agreement have the same meaning as they have in the Lease, unless a contrary intention is expressed in this Agreement.
- 5. This Agreement shall enure to the benefit of and be binding upon the parties hereto, the successors and assigns of the Lessor and the permitted successors and permitted assigns of the Lessee.
- 6. It is understood and agreed that all terms and expressions when used in this Agreement, unless a contrary intention is expressed herein, have the same meaning as they have in the Lease.

**IN WITNESS WHEREOF** the Parties have executed this Agreement as of the date first written above.

Address of Lessor: 300 Dufferin Ave,	"The Corporation of the City of London"
London, ON N6A 4L9	Ву:
	Printed Name:
	Title:
	I have the authority to bind the corporation
	"The Corporation of the City of London"
	Ву:
	Printed Name:
	Title:
	I have the authority to bind the corporation
Address of Lessee:	"SunSaver 4 Ltd."
	Ву:
	Name:
	Title:
	I have the authority to bind the corporation

# **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: Award of Construction Administration Services, Landfill Gas

Flaring Facility Replacement at the W12A Landfill Site

Date: March 21, 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 construction administration services to Comcor Environmental Ltd. for the construction of the landfill gas flaring facility replacement at the W12A landfill site:

- a) Comcor Environmental Ltd. **BE APPOINTED** to carry out construction administration services for the landfill gas flaring facility replacement at the W12A landfill site, in the total amount of \$217,520, including a contingency of \$28,380, excluding HST, in accordance with Section 15.2 (g) of the City of London's Procurement of Goods and Services Policy;
- b) the financing for the work identified in (a), above, **BE APPROVED** in accordance with the "Sources of Financing Report" attached hereto as Appendix "A";
- c) Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this work; and
- d) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

# **Executive Summary**

Committee and Council previously approved the award of an engineering services contract for the Environmental Compliance Approval (ECA) package preparation, detailed design and project tendering assistance of the Landfill Gas (LFG) Flaring Facility replacement at the W12A to Comcor Environmental Ltd. (Comcor). The Ministry of Environment, Conservation and Parks (MECP) approved the ECA application to replace the existing LFG Flaring Facility on November 17, 2022 (ECA Number 1028-CKDR4S). It is currently anticipated that tendering of the replacement LFG Facility will proceed in Spring 2023, with project commissioning in Spring 2024.

The funds required for this award and LFG Flaring Facility replacement are available within the existing capital budget.

This report seeks approval from Committee and Council to award the subsequent phase of construction administration services related to the LFG Flaring Facility replacement to Comcor in accordance with the Procurement of Goods and Services Policy Section 15.2 g, in section 15.0 Appointment of Professional Consulting Services.

# **Linkage to the Corporate Strategic Plan**

Municipal Council continues to recognize the importance of solid waste management and the need for a more sustainable and resilient city in the development of its 2019-2023 - Strategic Plan for the City of London. Specifically, London's efforts in solid waste management address three Areas of Focus, at one level or another:

- Building a Sustainable City
- Growing our Economy
- Leading in Public Service

On April 23, 2019, the following was approved by Municipal Council with respect to climate change:

Therefore, a climate emergency be declared by the City of London for the purposes of naming, framing, and deepening our commitment to protecting our economy, our eco systems, and our community from climate change.

The LFG collection and Flaring Facility at the W12A Landfill is a key component of London's upcoming Climate Emergency Action Plan. LFG is approximately 50% methane gas which is 25 times more potent greenhouse gas (GHG) than carbon dioxide. In 2022, the existing LFG collection and Flaring Facility captured and destroyed 171,000 tonnes CO<sub>2eq</sub> of GHG. This GHG reduction is equivalent to removing 43,000 cars from the streets of London for the year.

# **Analysis**

# 1.0 Background Information

# 1.1 Previous Reports Related to this Matter

Relevant reports that can be found at <a href="www.london.ca">www.london.ca</a> under City Hall (Meetings – Council and Standing Committees) include:

- Award of Consulting Services for Detailed Design and Tendering for a New Landfill Gas Flaring Station (March 2, 2021, meeting of the Civic Works Committee (CWC), Item#2.9)
- Environmental Assessment Updates and Preferred Method to Expand the W2A Landfill (September 22, 2020, meeting of the Civic Works Committee (CWC), Item #2.11)
- Landfill Gas (LFG) Utilization: Next Steps in the Development of a Renewable Natural Gas (RNG) Facility (September 24, 2019, meeting of the CWC, Item #2.4)

#### 1.2 Existing Landfill Gas Generation

The W12A Landfill operates an enclosed LFG flaring facility that is sized to combust a maximum of approximately 1,700 standard cubic feet per minute (scfm) of LFG. The LFG collection system and Flaring Facility are approved under ECA No. A042102.

The flare began operation on June 30, 2004, and initially burned approximately 500 scfm of LFG. The amount of LFG that is captured has increased over the years as the area of completed landfill within the approved waste disposal footprint has increased and new LFG wells were installed, and the addition of horizontal LFG collectors (starting in 2020) has been employed for additional odour control. As a result of expanding the capacity to collect LFG and the incorporation of horizontal LFG collectors, the volumetric capacity of the existing LFG flaring facility was reached in approximately Q4 of 2020.

#### 1.3 Future Landfill Gas Generation

The amount of LFG currently being collected has not been observed to decrease in the last few years and the flare continues to run at its maximum capacity of 1,700 (scfm). It is assumed that the use of horizontal collectors in addition to the traditionally used vertical extraction wells in the most recent LFG collection system expansion has increased the collection efficiency of the collection system.

LFG generation modelling was completed as part of the EA for the proposed expansion of the W12A Landfill. The modelling estimates that the amount of LFG to be flared will peak in 2049 at approximately 3,700 scfm.

# 1.4 Status of Renewable Natural Gas (RNG) Negotiations

On October 1, 2019, Council directed staff to potentially supply renewable natural gas (RNG) to FortisBC Energy Inc. through a future facility at the landfill, subject to the outcome and Council approval through a request for proposal (RFP) process. Discussions with FortisBC have resumed. They were on hold due to regulatory discussions in British Columbia, the pandemic, and the impacts and uncertainties occurring in energy markets.

#### 2.0 Discussion and Considerations

# 2.1 Project Description

The existing LFG Flaring Facility is operating at capacity and will not be able to destroy more landfill gas until a new larger flaring station is constructed. The next LFG collection system expansion is anticipated to occur in Winter 2023-2024 in consideration of the current final capping progress within the existing approved waste footprint. The MECP has approved the ECA application to replace the existing LFG Flaring Facility. Construction of a new larger flaring facility includes the following improvements:

- Accommodate increasing landfill gas flow collected from new waste at W12A;
- Has been sized to accommodate the expected landfill gas produced from the proposed expanded W12A landfill:
- Destroy more GHG gases and mitigate potential odour emission from the landfill; and
- Establish infrastructure for a future potential RNG project.

### 2.2 Appointment of Comcor Environmental Ltd.

Comcor has specialized experience in the field of design, installation and operation of LFG Flaring Facilities. The firm has provided these specialized services since 1985 and is located in Cambridge, Ontario with operations staff also based out of satellite offices in Mississauga, Niagara Falls, Ottawa and Moose Creek, Ontario and Winnipeg, Manitoba. Comcor currently operates and maintains over 20 landfill gas collection, flaring and/or utilization facilities across Canada, with 16 of these projects being located in Ontario. Comcor has also completed design work, on-site supervision and commissioning as associated with the majority of these facilities.

Comcor completed the design and oversaw installation of the existing LFG collection and Flaring Facility and several LFG collection system expansions at the W12A landfill site. Comcor is also currently under contract by the City to operate and maintain the existing LFG Flaring Facility.

Comcor was previously awarded the engineering services contract related to the EPA approval, detail design and tendering assistance for the LFG Flaring Facility replacement by Council on March 23, 2021. Using Comcor for the subsequent construction administration services related to the new LFG Flaring Facility construction will expedite the project without losing time to seek and review alternative proposals. Comcor has specific knowledge of this project whereas other consultants would need time to review the new LFG Flaring Facility design details.

Considering the above, Comcor was invited to submit a proposal to carry out the engineering services related to the construction contract administration of the replacement Landfill Gas Flaring Facility. Staff have reviewed the fee submission in detail considering the various activities, time allotted to each project task and related hourly rates provided. The review supports the hiring of Comcor on this project.

The continued use of Comcor on this project for the 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 accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy (15.0 Appointment of Professional Consulting Services), Civic Administration is recommending Comcor Environmental Ltd. be authorized to carry out the EPA approval, detailed design and tendering process for this project for a fee of \$217,520 (excluding HST). The fee includes a 15% contingency of \$28,380.

# 3.0 Financial Impact/Considerations

### 3.1 Capital Budget

The funds required for this award and LFG Flaring Facility replacement are available within the existing capital budget.

The Sources of Financing Report is attached hereto as Appendix "A".

# 3.2 Operating Budget

It is expected there will be no increases in annual operating costs for the landfill associated with operation of the new LFG Flaring Station. This is expected as the installation of new equipment such as centrifugal fans and variable frequency drives will be more efficient even though the overall system will have more volumetric capacity.

# Conclusion

Comcor Environmental Ltd. has demonstrated an understanding of the City's requirements for this project and hiring Comcor Environmental Ltd., will expedite completion of the project. It is recommended that Comcor continue as the Consultant and provide construction administration services for the new LFG Faring Facility at the W12A landfill site, as it is in the best financial, community and technical interests of the City.

Prepared by: Mike Losee, B.SC

**Division Manager, Waste Management** 

Submitted by: Jay Stanford, MA, MPA

**Director, Climate Change, Environment & Waste** 

Management

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

**Deputy City Manager, Environment and Infrastructure** 

Appendix A – Source of Financing

#### #23062

March 21, 2023 (Award Contract)

Chair and Members
Civic Works Committee

RE: Award of Construction Administration Services, Landfill Gas Flaring Facility Replacement at W12A Landfill Site (Subledger LF210001)

Capital Project SW604020 - Landfill Gas Collection

Comcor Environmental Ltd. - \$217,520.00 (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	This Submission	Total
Engineering	50,000	0	50,000
Construction	560,605	221,349	339,256
Total Expenditures	\$610,605	\$221,349	\$389,256
Sources of Financing			
Canada Community-Building Fund	610,605	221,349	389,256
Total Financing	\$610,605	\$221,349	\$389,256
Financial Note:			
Contract Price	\$217,520		
Add: HST @13%	28,278	_	
Total Contract Price Including Taxes	245,798		
Less: HST Rebate	-24,449		
Net Contract Price	\$221,349	<del>_</del>	

Jason Davies

Manager of Financial Planning and Policy

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