# Agenda
# Civic Works Committee

6th Meeting of the Civic Works Committee

March 18, 2019, 12:00 PM

Council Chambers

Members

Councillors P. Squire (Chair), M. van Holst, S. Lewis, S. Lehman, E. Peloza, Mayor E. Holder

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The Committee will recess at approximately 6:30 PM for dinner, as required.

Pages

**1. Disclosures of Pecuniary Interest**

**2. Consent**


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| 2.2 | 2nd Report of the Transportation Advisory Committee | 12 |
| 2.3 | 3rd Report of the Cycling Advisory Committee | 18 |
| 2.4 | Amendments to the Traffic and Parking By-law | 24 |
| 2.5 | Appointment of Services for Dingman Creek Surface Water Monitoring Program (ES2452) | 36 |
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| 2.8 | Mornington Area Storm Drainage Servicing Municipal Class Environmental Assessment: Notice of Completion | 67 |
| 2.9 | Blue Communities Program Feasibility | 83 |
| 2.10 | Toilets are Not Garbage Cans Sticker Initiative | 87 |
| 2.11 | Contract Award: 2019 Watermain Cleaning and Structural Lining Tender No. 16-105 | 93 |
| 2.12 | Single Source 19-05 Tree Pruning and Removal Services | 98 |
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| 2.14 | Appointment of Consulting Engineer for the Detailed Design & Tendering of the Churchill Avenue Infrastructure Renewal Project | 110 |
| 2.15 | Highbury Avenue Noise Study and Review of Local Improvement Noise | 115 |

Barrier Policies and Procedures

a. Highbury Noise Barrier Petition 130

**3. Scheduled Items**

3.1 Items not to be heard before 12:10 PM and 12:15 PM - PUBLIC PARTICIPATION MEETING - Proposed Water By-law (W-8) and Wastewater & Stormwater By-law (W-28) Amendments 131

**4. Items for Direction**

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**5. Deferred Matters/Additional Business**

5.1 Deferred Matters List 156

**6. Adjournment**

# Rapid Transit Implementation Working Group

# Report

1st Meeting of the Rapid Transit Implementation Working Group
February 21, 2019
Council Chambers

Attendance

PRESENT: M. Cassidy (Chair), Councillors J. Helmer, S. Hillier, A. Hopkins, A. Kayabaga, S. Lehman, E. Peloza, P. Squire and M. van Holst, T. Khan, T. Park, S. Rooth; and P. Shack (Secretary)

ALSO PRESENT: K. Burns, J. Kostyniuk, D. MacRae, S. Maguire, K. Paleczny, A. Rammeloo, J. Ramsay, C. Saunders, S. Spring, B. Westlake-Power

The meeting was called to order at 4:30 PM.

## 1. Call to Order

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

## 2. Organizational Matters

2.1 Election of Chair and Vice Chair for the Term Ending November 30, 2019

That it BE NOTED that the Rapid Transit Implementation Working Group elected M. Cassidy and M. van Holst as the Chair and Vice Chair, respectively, for the term ending November 30, 2019.

## 3. Scheduled Items

3.1 Autonomous Vehicle and Ridesharing

That it BE NOTED that the Rapid Transit Implementation Working Group, held a general discussion, with respect to Autonomous Vehicle and Ridesharing; it being noted the attached presentations, were received:

- J. Kostyniuk, Traffic and Transportation Engineer, City of London;
- B. Kirk, B.Sc., P. Eng, Executive Director, Canadian Automated Vehicles Centre of Excellence;
- E. Olson, Ph.D., CEO May Mobility Inc.; and
- Dr. A. Shalaby, Ph.D. P. Eng., Associate Director of the iCity Centre for Automated and Transformative Transportation System.

## 4. Consent

4.1 5th Report of the Rapid Transit Implementation Working Group

That it BE NOTED that the 5th Report of the Rapid Transit Implementation Working Group, from its meeting held on November 8, 2018, was received.

4.2 Municipal Council resolution adopted at its meeting held on December 5, 2018, with respect to the Appointments to the Rapid Transit Implementation Working Group

That it BE NOTED that the Municipal Council resolution adopted at its meeting held on December 5, 2018, with respect to the Appointments to the Rapid Transit Implementation Working Group, was received.

**5. Items for Discussion**

None.

**6. Deferred Matters/Additional Business**

None.

**7. Adjournment**

The meeting adjourned at 7:20 PM.

# Autonomous Vehicle and Ridesharing Background Information

Rapid Transit Implementation Working Group

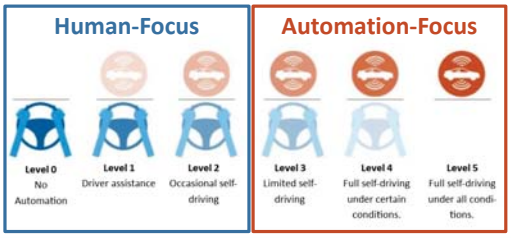
February 21, 2019

# Autonomous Vehicles

- Ideally, **Autonomous Vehicles (AVs)**:
  - Are capable of **"sensing" the surrounding environment**;
  - Use AI, sensors, and GPS to **successfully and safely navigate a transportation system**; and
  - Provide **major improvements to road safety** by eliminating human driver error and distraction.

# Automation Levels Defined

- The **Society of Automotive Engineers (SAE)** international standard that classifies vehicles automated driving systems from:
  - **Level 0 = No Automation** to **Level 5 = Full Automation**




# Connected Vehicles

- Interrelated with AVs, **Connected Vehicle (CV)** technology provides up-to-date information to vehicles through a **variety of communications channels**.
- Types of CV technology include:
  - **Vehicle-to-Vehicle (V2V)**
  - **Vehicle-to-Infrastructure (V2I)**
  - **Vehicle-to-Everything (V2X)**

# Ridesharing and MaaS

- An app that **creates, manages, and pays** for trips.
- Subscribe to **travel packages** tailored to customer needs.
- MaaS include services such as:
  - **Transit integration;**
  - **Ridesharing and taxi integration;**
  - **Car sharing/rental integration;**
  - **Bicycle sharing integration; and**
  - **Other third-party service integration.**

# Expert Speakers

Barrie Kirk, B.Sc., P.Eng.
Executive Director,
CAVCOE

Edwin Olson, Ph.D.
CEO, May Mobility

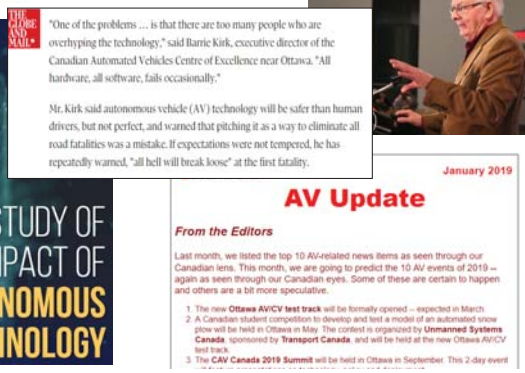
Dr. Amer Shalaby, P.Eng.
Associate Director,
iCity Centre

CAVCOE

# Autonomous Vehicles and Ridesharing

**Presentation to the City of London's RTIWG**
**Barrie Kirk, P.Eng.**
**Executive Director, CAVCOE**
**February 21, 2019**

CAVCOE


"One of the problems ... is that there are too many people who are overhyping the technology," said Barrie Kirk, executive director of the Canadian Automated Vehicles Centre of Excellence near Ottawa. "All hardware, all software, fails occasionally."

Mr. Kirk said autonomous vehicle (AV) technology will be safer than human drivers, but not perfect, and warned that pitching it as a way to eliminate all road fatalities was a mistake. If expectations were not tempered, he has repeatedly warned, "all hell will break loose" at the first fatality.

January 2019

AV Update

*From the Editors*

Last month, we listed the top 10 AV-related news items as seen through our Canadian lens. This month, we are going to predict the 10 AV events of 2019 -- again as seen through our Canadian eyes. Some of these are certain to happen and others are a bit more speculative.

1. The new **Ottawa AV/CV test track** will be formally opened -- expected in March
2. A Canadian student competition to develop and test a model of an automated snow plow will be held in Ottawa in May. The contest is organized by **Unmanned Systems Canada**, sponsored by **Transport Canada**, and will be held at the new Ottawa AV/CV test track.
3. The **CAV Canada 2019 Summit** will be held in Ottawa in September. This 2-day event

2

## New York City 1900

3

## New York City 1913

4

## Deployment Timing

| | |
|---|---|
| **Now: 1st gen** | • **Advanced Driver Assistance Systems (ADAS) in commercial cars**<br>• **Commercial, low-speed, fully-automated vehicles for applications in controlled environments** |
| **2020-2022: 2nd gen** | • **First street-legal, fully-autonomous cars**<br>• **No steering wheel, pedals, etc.**<br>• **Focus: driverless taxis, urban applications, limited rollout**<br>• **In US first, then Canada** |
| **2020s** | • **Ramp-up in capability and deployment**<br>• **AVs increasing part of total Vehicle Kilometres Travelled (VKTs)** |
| **2030s: 3rd gen** | • **Advanced fully-automated vehicles: go anywhere, any time in almost any weather** |

## Deployment Challenges

- Extreme weather
- Work zones, detours
- Traffic signals AND police officer
- Pedestrian prediction
- Hand gestures
- Reversing
- Regulations
- Insurance

CAVCOE

6

## Fewer Collisions

- Driver error a factor in 93% of collisions
- AVs expected to be much safer than human drivers
- Hopefully we can reduce collisions by 80%

Ottawa Citizen



motoring

News Lifestyle Vehicles Road tests Customs & Classics Bikes Motorsport

Volvo aims to make 'crash-proof' car

CNN tech

U.S. government pushes to end traffic deaths as fatalities sharply rise

VISION4EVER NETWORK

ite A Community of Transportation Professionals

- **Great goals but unachievable !!!**
- All hardware, software fails occasionally
- 7% of collisions have nothing to do with the driver
  - Will happen whether a human or computer is driving
- There will be collisions, fatalities, injuries - but far fewer



## Mobility-as-a-Service (MaaS)

- Aka “Transportation-as-a-service”, “Personalized mass transit” or “Micro-transit”
- Trend to driverless taxis
  - Call one via smartphone
  - Slightly more expensive than premium transit ticket
  - Reduced personal car ownership
- Merging of business models: regular taxi, ride sharing, car rental, transit



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NEWS VIDEO WEATHER TRAFFIC I-TEAM POLITICS SPORTS PROGRAMMING LOCA

Ohio Statehouse Newsroom

**Bus drivers' union threatens strike over driverless buses**

By: Jason Aubry

Posted: Sep 18, 2018 04:58 PM EDT
Updated: Sep 18, 2018 06:00 PM EDT

11.6K

## Impacts on City of London

- Charging infrastructure
- City economy (insurance sector)
- City revenues (traffic tickets, parking)
- City vehicles
- Data (ownership, privacy)
- Delivery robots on sidewalks
- Electricity
- Parking
- Policing
- Public
- Security / surveillance
- Traffic management
- Transit (reduced ridership, infrastructure, union)
- Transportation policies and regulations
- Urban planning, housing
- Zoning



## Conclusions

- AVs will lead to huge, disruptive changes to our personal lives and society
  - Key benefit: computers will be much better drivers than humans
  - Major municipal opportunities and challenges
- Changes to our world will start slowly in 2020
  - By early 2030s, our lives, cities will be very different

## Recommendations

- Have a vision for 2050
  - Plan for the future, not the past
- Appoint full-time in-house CAV expert
- Take city-wide approach
  - City-wide working group (Scope of CAVWG ?)
- Ensure that all transportation / transit master plans assess impact of CAVs

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## Follow-up

- Barrie Kirk
  - bkirk@cavcoe.com
  - 613-271-1657
- ***AV Update***
  - Free monthly newsletter with AV news from Canada and around the world
  - www.cavcoe.com for latest issue, subscription link

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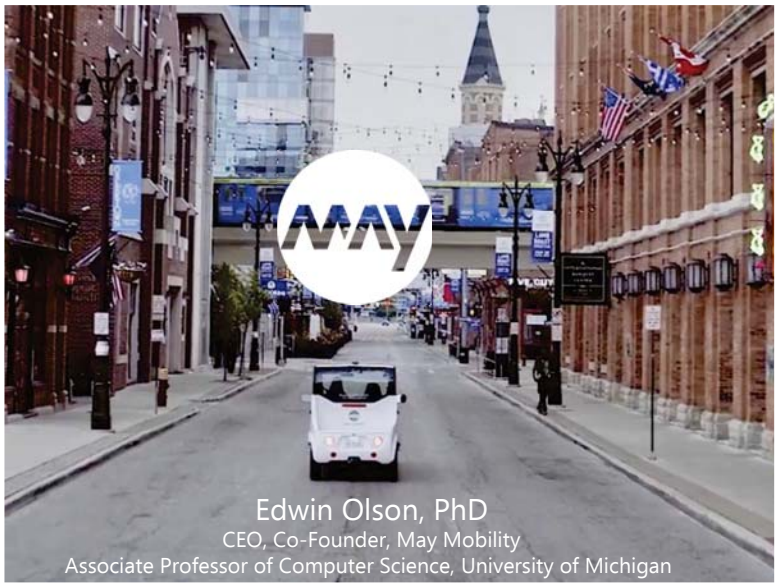
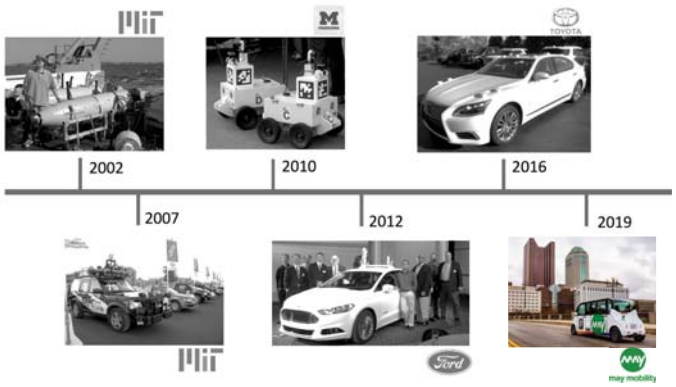



## Edwin Olson, PhD



### Opportunity

Increase access to healthcare, education, and economic opportunity to underserved areas. Provide cost-effective mobility options to the disabled and elderly.

### Safety

Drivers are at fault in 81% crashes annually in the United States alone

### Congestion

Traffic costs commuters hours each day and slows economic development. Many cities and regions also require more space allocated to parking than human adding 67% to building costs.

## Taking an incremental path

Safety

Technology

Regulatory

Learning

2018 WAS A GOOD YEAR

### MAJOR MILESTONES

Focusing on enterprise and government contracts, we have gained significant experience around the technology and service side

**$33 million**
Total funding through Seed and Series A rounds

**1st Deployments**
Our deployments were the first commercial and publicly available

**40,000 Rides**
Over 40,000 rides in less than eight months of service

**+69 NPS Score**
Quality service has increased ridership for our partners

## Solving real problems today

Columbus, OH

Providence, RI

Grand Rapids, MI

Detroit, MI

# Transit in the Era of Automated and Shared Mobility Technologies

**Amer Shalaby, Ph.D., P.Eng.**
iCity CATTS, Associate Director

**RTIWG Meeting – City of London**

**February 21, 2019**

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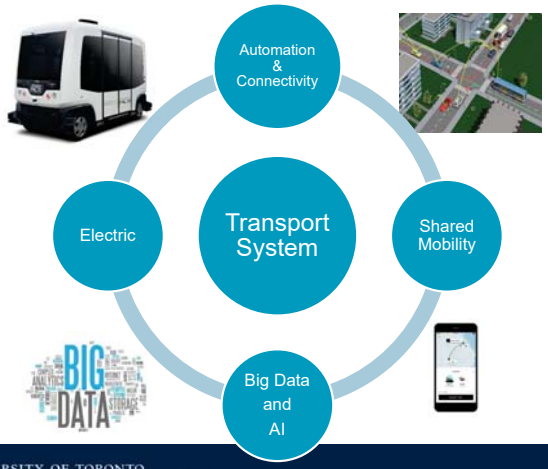
Transportation Research Institute

## CATTS

Centre for Automated & Transformative Transportation Systems

- A new centre within UTTRI (University of Toronto Transportation Research Institute)

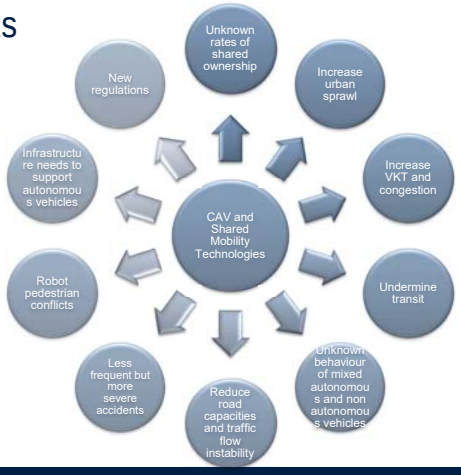
## Major Trends






## The Promise

## The Threat: Risks, Unknowns & Unintended Effects






## The Evidence (thus far)

Effects of ride-sourcing on:

- Auto ownership and VKT
  - Negligible change in auto ownership
  - High rates of VKT increase due to latent demand and deadhead trips
- Traffic Congestion and GHG
  - Increase in congestion in large cities
  - Increase in commute times and congestion in cities with poor transit service
- Transit Ridership
  - Generally, ride-sourcing is competitive with transit, particularly in contexts characterized by low order transit
  - Complements high order transit (e.g. metro) serving as a FM/LM service

## Higher order transit is the most space efficient of all modes, offering the highest person capacity

## Higher order transit is the ultimate form of "Shared Mobility"

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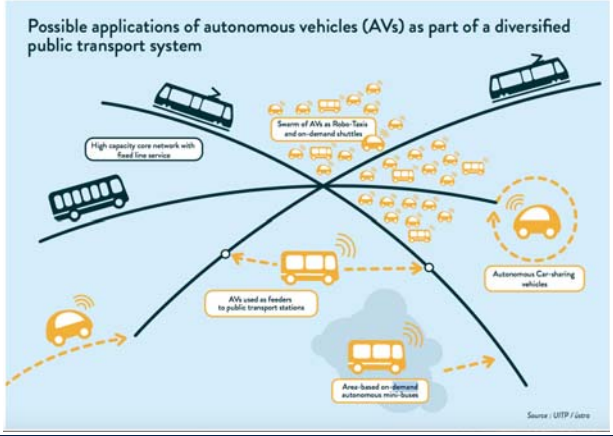
## The Transit Future

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## The Transit Future

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## Thank You!

# Transportation Advisory Committee

# Report

2nd Meeting of the Transportation Advisory Committee
February 26, 2019
Committee Room #4

Attendance

PRESENT: D. Foster (Chair), G. Bikas, D. Doroshenko, T. Khan, P. Moore, L. Norman and J. Scarterfield and J. Bunn (Committee Secretary)

ABSENT: G. Debbert, H. Moussa and A. Stratton

ALSO PRESENT: M. Elmadhoon, Sgt. S. Harding, J. Kostyniuk, T. Macbeth and A. Miller

The meeting was called to order at 12:16 PM.

**1. Call to Order**

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

**2. Scheduled Items**

None.

**3. Consent**

3.1 9th and 1st Reports of the Transportation Advisory Committee

That it BE NOTED that the 9th and 1st Reports of the Transportation Advisory Committee, from the meetings held on November 27, 2018 and January 22, 2019, respectively, were received.

3.2 Notice of Planning Application - Official Plan Amendment - Victoria Park Secondary Plan

That it BE NOTED that the Notice of Planning Application, dated January 9, 2019, from M. Knieriem, Planner II, with respect to an Official Plan Amendment for the Victoria Park Secondary Plan, was received.

3.3 Notice of Public Meeting - Official Plan Amendment - Draft Old East Village Dundas Street Corridor Secondary Plan

That it BE NOTED that the Public Meeting Notice, dated January 24, 2019, from K. Killen, Senior Planner, with respect to an Official Plan Amendment for the Draft Old East Village Dundas Street Corridor Secondary Plan, was received.

3.4 Notice of Public Update Meeting - Riverside Bridge Over CN Rail Rehabilitation

That it BE NOTED that the Notice of Public Update Meeting, from I. Bartlett, Stantec Consulting Ltd. and J. Fullick, City of London, with respect to Riverside Bridge over CN Rail Rehabilitation (1-BR-08), was received.

3.5 Wonderland Road Improvements - Class Environmental Assessment Study

That it BE NOTED that the presentation, as appended to the agenda, from J. Johnson, Dillon Consulting, with respect to the Wonderland Road Improvements Class Environmental Assessment Study, was received.

## 4. Sub-Committees and Working Groups

None.

## 5. Items for Discussion

5.1 Business Travel Wise Program Expansion - Commute Ontario

That it BE NOTED that a verbal update from A. Miller, Co-ordinator Transportation Demand Management, with respect to the Business Travel Wide Program Expansion and Commute Ontario, was received.

5.2 2018 TAC Work Plan - Final

That the attached 2018 Transportation Advisory Committee Work Plan Summary BE FORWARDED to the Municipal Council for their information.

5.3 2019 TAC Work Plan - Draft

That it BE NOTED that the Transportation Advisory Committee (TAC) held a general discussion with respect to the 2019 TAC Work Plan.

## 6. Deferred Matters/Additional Business

6.1 (ADDED) 2018/2019 TAC Budget

That it BE NOTED that the Transportation Advisory Committee (TAC) held a general discussion with respect to the 2018 and 2019 TAC budgets.

## 7. Adjournment

The meeting adjourned at 1:58 PM.

**TRANSPORTATION ADVISORY COMMITTEE**
**2018 WORK PLAN**
**(as at December 2018)**

Updated: January 11, 2019

| | Project/Initiative | Background | Lead/ Responsible | Proposed Timeline | Proposed Budget | Link to Strategic Plan | Status |
|---|---|---|---|---|---|---|---|
| TAC 18.1 | Shift Rapid Transit | The TAC is in an excellent position to determine, in concert with the city and other key organizations, how community stakeholders can best support progress on the Shift Rapid Transit Strategy, including funding requests to government as well as inform Londoners on its progress. Items planned to date:<br>• Transit Project Assessment Process | **TBD** | Ongoing | | Building A Sustainable City<br>1A | **Update: SHIFT Municipal Advisory Group, led by Jennie Ramsay reports that no meetings are scheduled. TAC will be contacted for a rep to replace Amir Farahi if this changes.** |
| TAC 18.2 | Dundas Place | TAC will provide input on Dundas Place (London's 1st Flex Street) design (2018) and implementation plans (2020). | Sarah Brooks | Ongoing | | Beautiful Places and Spaces<br>5B | Design Input provided Jan 2018. **Complete.** |
| TAC 18.3 | Complete Streets Design Manual | A complete street is one that is designed to accommodate the mobility needs of all ages, abilities and modes of travel. Safe and comfortable access for pedestrians, bicycles, transit users and the mobility challenged are not design after-thoughts, but are integral to the planning of the street from the start | City Staff | Q3-2018 | | Building A Sustainable City | Presentation received April 24th. Draft manual reviewed June 1st - 25th. **Complete.** |
| TAC 18.4 | New Sidewalk Program | Committee input on the annual Warranted Sidewalk Program. A Byron Southwood Pedestrian Mobility Study is planned for 2018 | City Staff | Q2-2018 | | Building A Sustainable City | Presentation received April 24th. **Complete.** |
| TAC 18.5 | Connected And Autonomous Vehicles (CAV) | In recent years, there has been significant advancement in CAV technology. It is no longer a question of if the technology will disrupt the way we travel within our cities, but a question of when. While discussions on the potential benefits of driverless vehicles have increased, it is not well understood what the adoption of the technology will mean for London. It is time for policymakers and transportation professionals to proactively evaluate, assess and plan for the onset of vehicle automation. | Hani Moussa | Q2-2019 | | Building A Sustainable City<br>1A, 2B, 5B<br><br>Growing Our Economy<br>3A, 4B, 4C | Initial Presentation received June 26th.<br><br>**Next steps TBD.** |
| TAC 18.6 | TAC Work Plan | A Work Group has been established to review City Staff recommendations received in April and to finalize an integrated draft TAC Work Plan for approval. As of the July 24th meeting, the WG has been directed to develop a detailed work plan & a process to add new items. | Tariq Khan<br>Dan Foster | Q3-2018 | | TAC Terms of Reference - Planning | Final Draft approved by Civic Works. **Complete**. Dan Foster will continue to update the WP and WIP documents. |

| | Project/Initiative | Background | Lead/ Responsible | Proposed Timeline | Proposed Budget | Link to Strategic Plan | Status |
|---|---|---|---|---|---|---|---|
| TAC 18.7 | Update to Traffic Calming Practices & Procedures Process Document | The overall purpose of the Traffic Calming document is to provide a comprehensive process that addresses local neighbourhood traffic issues in the City. The program is intended to restore identified problem streets back to their intended function through acceptable traffic calming measures, and hence, preserve and enhance the quality of London communities. Council approved the current document in 2013. The intent is to update this document based on the new "Canadian Guide to Traffic Calming" document published jointly in 2017 by the Transportation Association of Canada (TAC) and the Canadian Institute of Transportation Engineers (CITE). | City Staff Amanda Stratton | Q1-2019 | | Leading in Public Service | Maged Elmadhoon presented Draft Recommendations to TAC on November 27th.<br><br>TAC WG established. **1st WG meeting TBD.** Comments due Jan 31st.<br><br>City Staff to finalize the document in early 2019. |
| TAC 18.8 | TDM Best Practice Research – Land Use Policies | Considering the TAC specific interest in Land Use Policies, the Committee can work with City staff to research and document best practices from other North American municipalities that integrate land use decisions with TDM. Specifically, municipalities where land use encourages transit, vanpooling, carpooling and active transportation (such as walking and cycling), as well as infrastructure to encourage telework. | City Staff | **Ongoing** | | Strengthening Our Community<br><br>Building A Sustainable City<br><br>Growing Our Economy | Lowest priority of the 3 TDM items submitted in 2018. Ties into implementations of Rapid Transit, Cycling Master Plan & Complete Streets Manual projects. **Update: timing to "Ongoing"** |
| TAC 18.9 | Vision Zero London Road Safety Strategy | Monitor progress and provide suggestions on London Road Safety Strategy action items. | LMRSC/Jayne Scarterfield | Q1-2019 | | Leading in Public Service | **Update: 2019 planning is underway. Next meeting in Feb 2019.** |
| TAC 18.10 | Transportation Intelligent Mobility Management System (TIMMS) | Project includes upgrading current traffic signal communications systems, development of a new Transportation Management Centre, adaptive "smart" traffic signals along select corridors, enhanced transit signal priority, travel time monitoring, incident/event identification and management and real-time information.<br>The TIMMS project would be implemented over the next decade or so with major upgrade work likely occurring in 2019. TAC is in a position to advise Council in their potential support of the project, including feedback on the scope of work and input on technologies used. | City Staff | Q4-2018 | | Strengthening Our Community<br>5E, 5F<br><br>Building A Sustainable City<br>1C, 2A, 2C<br><br>Leading in Public Service<br>5B, 5D | TAC to provide feedback on the TIMMS Implementation Plan.<br><br>**Overdue** |
| TAC 18.11 | Transportation Management Association (TMA) | The City has received funding from the Public Transit Infrastructure Fund (PTIF) to develop a feasibility study and business case for developing a Downtown Transportation Management Association (TMA) which would be a 1st for London. TAC will be consulted for recommendations for invitees for a TDM Primer session and input on governance model and geographic area for TMA. | City Staff | Ongoing | | Strengthening Our Community<br><br>Building A Sustainable City<br><br>Growing Our Economy | TDM Primer planned for early 2019 and is tied to Rapid Transit. Other Consultations will be ongoing. |

| | Project/Initiative | Background | Lead/ Responsible | Proposed Timeline | Proposed Budget | Link to Strategic Plan | Status |
|---|---|---|---|---|---|---|---|
| TAC 18.12 | Business Travel Wise Program Expansion | City Staff plans to engage local employers to participate in the program which encourages commuting Londoners to use options other than driving alone through programs and incentives. The ***Commute Ontario*** project will include actions such as:<br>- expanded carpooling<br>- ***ActiveSwitch*** walking and cycling rewards program<br>- ***Emergency Ride Home*** program<br>- ongoing campaigns, incentives and rewards<br>- tracking tools to measure ROI | City Staff | Ongoing | | Strengthening Our Community<br><br>Building A Sustainable City<br><br>Growing Our Economy | **Update: Commute Ontario has launched. Staff request TAC members to suggest companies to participate in the program or Allison can provide information to forward to contacts.** |
| AC 18.13 | Byron South Neighbourhood Sidewalk Connectivity Plan | In April 2018 Council directed Staff to develop a neighbourhood strategy for the implementation of sidewalks surrounding the Byron Southwood PS to improve pedestrian safety If approved, Staff will complete the design phase as well an impact assessment and begin construction in the Spring of 2019. | City Staff | Q2-2019 | | Building A Sustainable City | Plan presented to TAC September 25th. Comments provided. **Complete.** |
| TAC 18.14 | Wilton Grove Rd Reconstruction | Highbury Ave to East City Limit. Tentative start April 2019. | City Staff | Q3-2019 | | Building A Sustainable City | Plan presented to TAC by Henry Houtari on November 27th. Comments provided. **Complete.** |
| TAC 18.15 | ReThink Zoning Draft Terms of Reference for input by TAC | City Advisory Committees have been asked by Council to review the draft Terms of Reference before a finalized version is brought to Council for approval. This will be the first of several opportunities for comment on this multi-stage process. | City Staff<br>Amanda Stratton | Q1-2019 | | Building A Sustainable City | Presentation made by Justin Adema Nov 27th. **TAC WG established to review TAC 18.07 will add this to their Work Plan. Comments due Jan 31st.** |
| TAC18.16 | TAC Terms of Reference | In preparation for the City Clerk pending Review of Advisory Committees, a Workiing Group lead by tariq Khan has been established to review the TAC Terms of Reference. | Tariq Khan | Q1-2019 | | Leading in Public Service | **1st WG meeting TBD.** |
| **Environmental Assessment Studies** | | | | | | | |
| TAC EA 18.1 | Southdale Road W & Bostwick Rd Improvements | Study for improvements to Southdale Road West between Pine Valley Blvd and Colonel Talbot Rd. The study will also address Bostwick Rd north of Pack Rd. | City Staff | Q4-2019 | | Building A Sustainable City | Presentation received June 26th. Follow-up presentation made September 25th. **Complete.** |
| TAC EA 18.2 | Adelaide St & CPR Grade Separation | Study for improvements to Adelaide St at the CPR rail line. | City Staff | Q2-2018 | | Building A Sustainable City | Presentation received June 26th. **Complete.** |

| | Project/Initiative | Background | Lead/ Responsible | Proposed Timeline | Proposed Budget | Link to Strategic Plan | Status |
|---|---|---|---|---|---|---|---|
| TAC EA 18.3 | Clarke Rd Widening | Study for improvements to Clarke Rd. from Veterans Memorial Pkwy Extension to Fanshawe Park Rd East | City Staff<br>Tariq Khan<br>Dan Foster | Q1-2019 | | Building A Sustainable City | Initial Presentation received July 24th. Referred to TAC Review Sub-Committee for report in September. **Complete.** |
| TAC EA 18.4 | Discover Wonderland | Environmental assessment for Wonderland Rd from Southdale Rd to Sarnia Rd. | City Staff | Q4-2018 | | Building A Sustainable City | Present study to TAC on September 25th.<br><br>Publish PIC 1 Notice (Oct 3rd & 4th) in Sept 20th & 27th Londoner.<br>**Overdue** |
| TAC EA 18.5 | Intersection: Western & Sarnia Roads | Study for improvements to Western Rd and Sarnia Rd / Philip Aziz Ave Intersection. | City Staff | Q2-2019 | | Building A Sustainable City | Project awaiting co-ordination with BRT. |

# Cycling Advisory Committee

# Report

3rd Meeting of the Cycling Advisory Committee
February 20, 2019
Committee Room #4

Attendance

PRESENT: D. Doroshenko (Acting Chair), D. Foster, R. Henderson, J. Jordan, D. Szoller, M. Zunti and J. Bunn (Acting Secretary)

ABSENT: D. Mitchell, W. Pol and R. Sirois

ALSO PRESENT: K. Grabowski, Sgt. S. Harding, L. Maitland, A. Miller and S. Wilson

The meeting was called to order at 4:04 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 Thames Valley Parkway, North Branch Connection Project

That it BE NOTED that the attached presentation from C. Watson, Dillon Consulting Limited, with respect to the Thames Valley Parkway North Branch Connection Project, was received.

**3. Consent**

3.1 2nd Report of the Cycling Advisory Committee

That it BE NOTED that the 2nd Report of the Cycling Advisory Committee, from its meeting held on January 16, 2019, was received.

3.2 Notice of Planning Application - Zoning By-law Amendment - 945 Bluegrass Drive

That it BE NOTED that the Notice of Planning Application, dated February 6, 2019, from C. Lowery, Planner II, with respect to a Zoning By-law Amendment for the property located at 945 Bluegrass Drive, was received.

3.3 Notice of Planning Application - Zoning By-law Amendment - 1081 Riverside Drive

That it BE NOTED that the Notice of Planning Application, dated January 31, 2019, from N. Pasato, Senior Planner, with respect to a Zoning By-law Amendment for the property located at 1081 Riverside Drive, was received.

3.4 Notice of Planning Application - Official Plan and Zoning By-law Amendments - 1631-1649 Richmond Street

That it BE NOTED that the Notice of Planning Application, dated February 6, 2019, from C. Lowery, Planner II, with respect to Official Plan and Zoning By-law Amendments for the properties located at 1631-1649 Richmond Street, was received.

## 4. Sub-Committees and Working Groups

None.

## 5. Items for Discussion

5.1 Request for Funds

That the expenditure of $300.00 from the 2019 Cycling Advisory Committee (CAC) budget BE APPROVED for R. Henderson to attend the 2019 Ontario Bike Summit Conference being held in Toronto on April 1 and 2, 2019; it being noted that R. Henderson will report back on the Conference at a future CAC meeting.

## 6. Deferred Matters/Additional Business

6.1 (ADDED) London Police Service Pamphlet

That the pamphlet, entitled "Drivers, Pedestrians, Cyclists - We're in this Together", submitted by Sgt. S. Harding, BE REFERRED to the next meeting of the Cycling Advisory Committee for further discussion and comments.

## 7. Adjournment

The meeting adjourned at 4:51 PM.

## Project Background

The Thames Valley Corridor is London's *most important natural, cultural, recreational and aesthetic resource.* The river corridor is a complex system of sensitive ecological habitats, intensive public recreation areas and developed urban lands which are all interconnected by a municipal pathway system, the *Thames Valley Parkway (TVP).*

- A Class Environmental Assessment was completed in July 2016 which selected the preferred route to connect the Thames Valley Parkway, from Richmond Street to Adelaide Street
- The preferred alignment includes two new pedestrian bridges over the Thames River
- Detailed Design was initiated in 2017
- Construction is anticipated to begin in late Spring 2019 and be completed in the Fall of 2020.

## Design Overview

- Thames Valley Parkway (TVP) Extension:
  - Connects to existing TVP at Ross Park and North London Athletic Fields
  - Easements for the pathway have been provided by the Sisters of St. Joseph, Scouts Canada and Western University
  - Pathway includes an emergency access connection to Tetherwood Boulevard.
- Pedestrian Bridges:
  - Two new bridges will be constructed – at Ross Park and North London Athletic Fields
  - Both bridges are nearly identical designs, providing a consistent look and allowing for efficiencies in the design and construction approach
  - Pathway across the bridges is 4 m wide to provide a comfortable width for two directions of travel by cyclists, pedestrians and other users.
- An Environmental Impact Study (EIS) was completed as part of the Class Environmental Assessment (EA) process and commitments are being met. Throughout the design and construction planning phase, the design team has worked closely with staff from the Upper Thames River Conservation Authority (UTRCA) and City Ecologists. Their input has been incorporated into the plans.

## Construction Overview

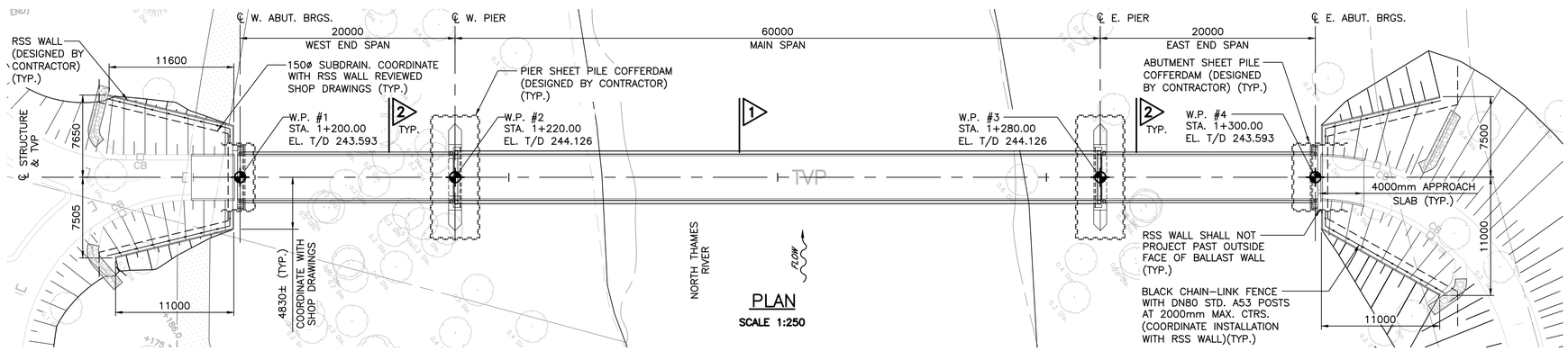
**Subject to receiving final permit/approvals and approval of Council, the schedule includes:**

- Tender – February/March 2019
- Construction start – June 2019
- Construction may continue over the winter of 2019/2020 or shut down for a period of time
- Construction complete – anticipate October 2020.

**Construction highlights include:**

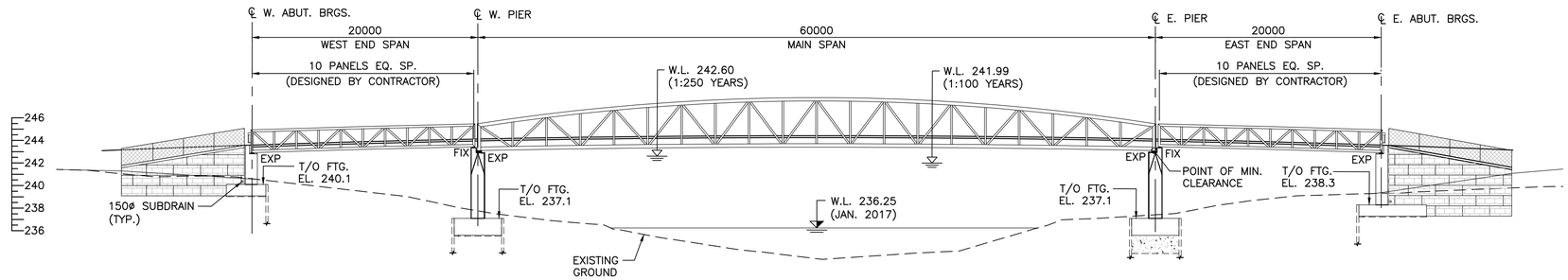
- A temporary access will be constructed from Windermere Road, along Scouts Canada and Western University property to provide access north of the river.
- Construction traffic is only permitted on Tetherwood Boulevard to construct the emergency access pathway. The access will not be used as the primary access for construction vehicles entering the site.
- The Contract includes measures to reduce impacts to the natural environment, including:
  - Minimize tree removals required
  - Exclusionary fencing to restrict wildlife from entering the construction area
  - Tree removals outside of the bird nesting season (April 1 to July 31)
  - Landscape plan to restore the area and compensate for trees and other vegetation removed
  - In-water work is not planned
  - Ecologist and landscape architect will be included on the construction administration team.

# THAMES VALLEY PARKWAY NORTH BRANCH
# PROPOSED PLAN




## PLAN

SCALE 1:250

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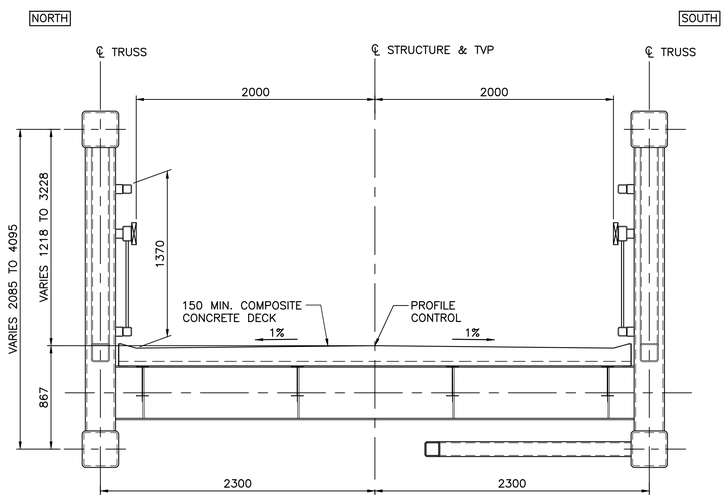


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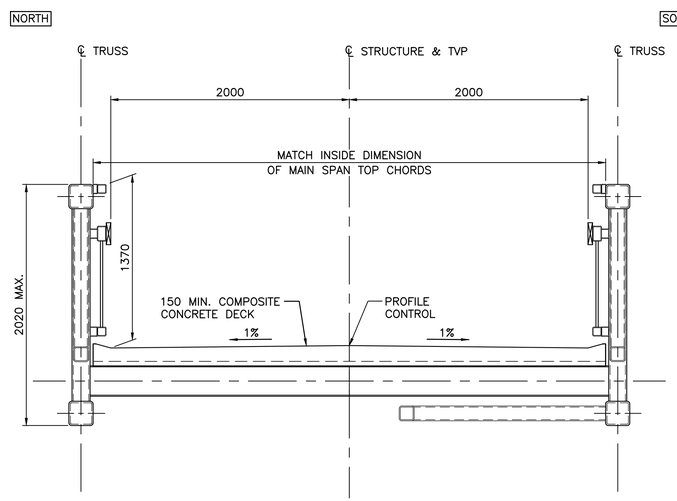


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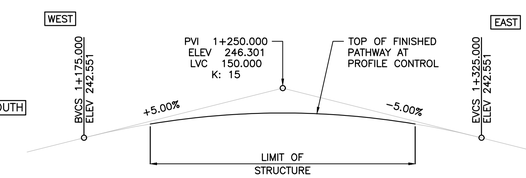
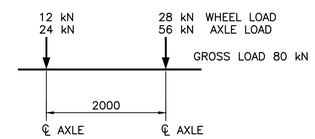



## VERTICAL PROFILE

N.T.S.




## ELEVATION

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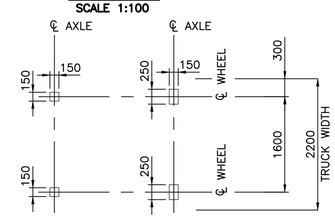


## PLAN

## MAINTENANCE VEHICLE LOAD

SCALE 1:100

## GENERAL NOTES

1. CLASS OF CONCRETE
   UNLESS OTHERWISE NOTED 35MPa, CLASS C-1

2. CLEAR COVER TO REINFORCING STEEL
   FOOTINGS 100 ± 25
   REMAINDER 70 ± 20 UNLESS OTHERWISE NOTED

3. REINFORCING STEEL
   REINFORCING STEEL SHALL BE GRADE 400W. (UNLESS NOTED OTHERWISE)

   BARS MARKED WITH PREFIX 'S' DENOTE STAINLESS STEEL BARS.

   STAINLESS STEEL BARS SHALL BE TYPE 316 LN OR DUPLEX 2205 WITH A MINIMUM YIELD STRENGTH OF 500 MPa.

   UNLESS SHOWN OTHERWISE, TENSION LAP SPLICES FOR REINFORCING STEEL BARS SHALL BE CLASS B.

   BAR HOOKS SHALL HAVE STANDARD HOOK DIMENSIONS USING MINIMUM BEND DIAMETERS, WHILE STIRRUPS SHALL HAVE MINIMUM HOOK DIMENSIONS. ALL HOOKS SHALL BE IN ACCORDANCE WITH THE STRUCTURAL STANDARD DRAWING SS12-1, UNLESS INDICATED OTHERWISE.

4. STRUCTURAL STEEL
   ALL STRUCTURAL STEEL SHALL CONFORM TO CSA STANDARD CAN/CSA-G40.20/G40.21 GRADE 350AT OR GRADE 350A. ALL HOLLOW STRUCTURAL SECTIONS SHALL BE CLASS C.

   MEMBER SIZES WITH THE SUFFIX 'FC' ARE FRACTURE CRITICAL MEMBERS. THE CHARPY IMPACT REQUIREMENTS FOR FRACTURE CRITICAL MEMBERS SHALL BE 27 JOULES AND THE TEST TEMPERATURE SHALL BE -20°C FOR BASE METAL AND -30°C FOR WELD METAL.

   MEMBER SIZES WITH THE SUFFIX 'PTM' ARE PRIMARY TENSION MEMBERS. THE CHARPY IMPACT REQUIREMENTS FOR PRIMARY TENSION MEMBERS SHALL BE 27 JOULES AND THE TEST TEMPERATURE SHALL BE 0°C FOR BASE METAL AND -30°C FOR WELD METAL.

   ALL LENGTHS SHOWN ARE IN THE HORIZONTAL PLANE AND MEASURED AT 20°C.

   THE CONTRACTOR SHALL ENSURE THE STABILITY OF ALL COMPONENTS DURING HANDLING, TRANSPORTATION AND ERECTION UNTIL THE STRUCTURAL STEEL IS IN ITS FINAL LOCATION WITH ALL PERMANENT BRACING, CONNECTIONS AND SUPPORTS IN PLACE.

   UNLESS OTHERWISE NOTED THE MINIMUM FILLET WELD SHALL BE AS FOLLOWS:

| MATERIAL THICKNESS OF THICKER PART JOINED (mm) | MINIMUM SIZE OF SINGLE PASS FILLET WELD (mm) |
|---|---|
| TO 12 INCLUSIVE | 5 |
| OVER 12 TO 20 | 6 |
| OVER 20 TO 40 | 8 |
| OVER 40 TO 60 | 10 |
| OVER 60 TO 120 | 12 |

   BRIDGE SUPERSTRUCTURES SHALL BE CAMBERED TO THE VERTICAL PROFILE SHOWN ON THIS SHEET AND SHALL INCLUDE AN ALLOWANCE FOR THE SUPERSTRUCTURE DEAD LOAD DEFLECTION.

   THE ENDS OF TRUSSES AND VERTICALS SHALL BE TRULY VERTICAL UNDER FULL DEAD LOAD.

   ALL BUTT WELDS IN TOP AND BOT. CHORD SHOP SPLICES SHALL BE MADE WITH COMPLETE JOINT PENETRATION GROOVE WELDS AND FINISHED FLUSH BY GRINDING WHERE NECESSARY IN THE DIRECTION OF APPLIED STRESS. ALL CHORD SPLICES SHALL BE IDENTIFIED TO THE CONTRACT ADMINISTRATOR.

   ALL BOLTS SHALL BE ASTM A325 TYPE 3, 7/8" DIAMETER UNLESS OTHERWISE NOTED. BOLT THREADS SHALL BE EXCLUDED FROM THE SHEAR PLANES.

## CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL ESTABLISH THE BEARING SEAT ELEVATIONS BY DEDUCTING THE ACTUAL BEARING THICKNESS FROM THE TOP OF BEARING SEAT ELEVATIONS. IF THE ACTUAL BEARING THICKNESSES ARE DIFFERENT FROM THOSE GIVEN WITH THE BEARING DESIGN DATA, THE CONTRACTOR SHALL ADJUST THE REINFORCING STEEL TO SUIT.

2. RETAINED SOIL SYSTEM (RSS) WALLS SHALL HAVE THE FOLLOWING ATTRIBUTES:
   APPLICATION WALL/SLOPE
   PERFORMANCE HIGH
   APPEARANCE HIGH

3. THE LOCATION, DIMENSION AND ELEVATIONS OF THE ABUTMENT AND PIER BEARING PEDESTALS, BEARING SEATS AND BALLAST WALLS SHALL BE ADJUSTED TO COORDINATE WITH REVIEWED SUPERSTRUCTURE WORKING DRAWINGS.

4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS OF THE PROPOSED WORK AND ALL DETAILS ON SITE AND REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR BEFORE PROCEEDING WITH THE WORK.

5. NO IN-WATER WORK IS PERMITTED.

## LIST OF APPLICABLE STANDARD DRAWINGS

| | |
|---|---|
| OPSD 3101.150 | WALLS, ABUTMENT, BACKFILL, MINIMUM GRANULAR REQUIREMENT |
| OPSD 3102.100 | WALLS, ABUTMENT, BACKFILL DRAIN |
| OPSD 3290.100 | PIERS CUTWATER ASSEMBLY |

DRAWING NOT TO BE SCALED
100 mm ON ORIGINAL DRAWING

| EXISTING SERVICES | DRAWING #, SOURCE | DATE | AS CONSTRUCTED SERVICES | COMPLETION |
|---|---|---|---|---|
| | | | | |

| DETAILS | |
|---|---|
| DESIGN | CDW |
| DRAWN BY | JBP |
| CHECKED | CSH |
| APPROVED | CSH |
| DATE | JAN 2018 |

| No. | REVISIONS | DATE | CONSULTANT |
|---|---|---|---|
| 1 | ISSUED FOR TENDER | FEB 2019 | DILLON CONSULTING |

CONSULTANT OR DIVISION: DILLON CONSULTING

ENGINEER'S STAMP: LICENSED PROFESSIONAL ENGINEER C. D. WATSON 100216166 PROVINCE OF ONTARIO

ENGINEER'S STAMP: LICENSED PROFESSIONAL ENGINEER C. S. HAINES 100107739 PROVINCE OF ONTARIO

London CANADA — CORPORATION OF THE CITY OF LONDON

SCALE: METRIC
DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN

TITLE: THAMES VALLEY PARKWAY – NORTH BRANCH

GENERAL ARRANGEMENT

ROSS PARK

PROJECT No. 176484

SHEET No. S1

PLAN FILE No.

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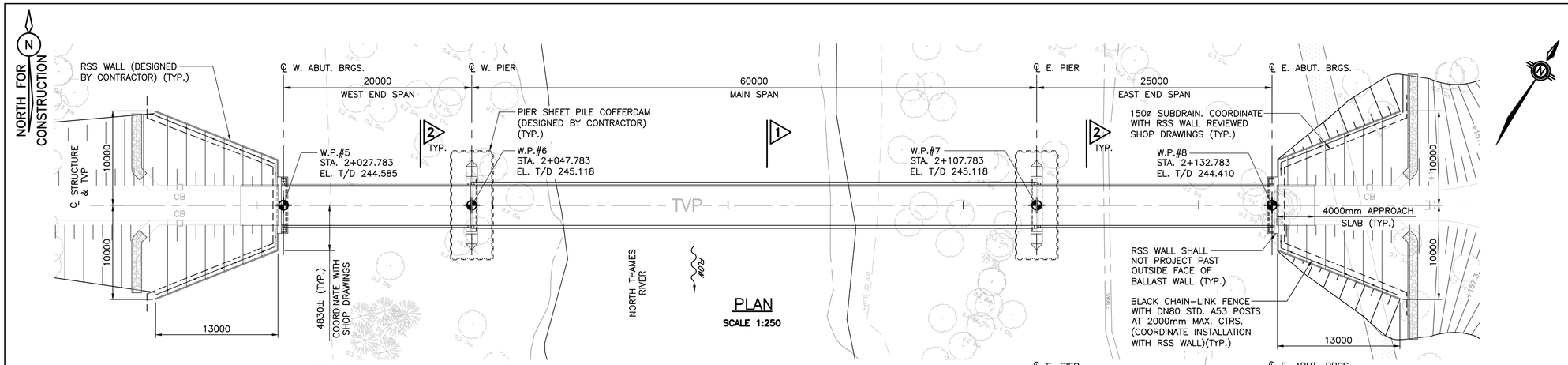
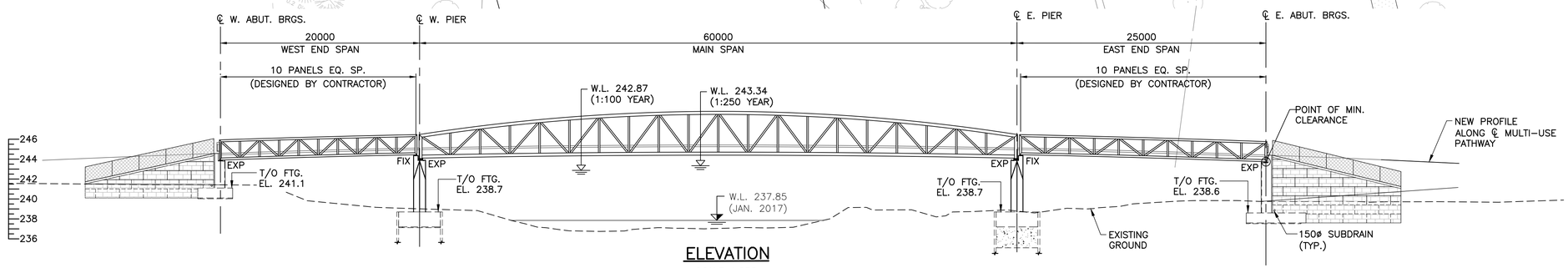
## GENERAL NOTES

REFER TO SHEET S1 FOR NOTES.




## PLAN

SCALE 1:250




## ELEVATION

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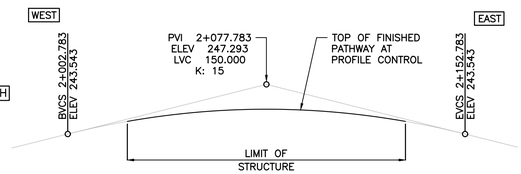
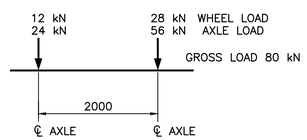



## VERTICAL PROFILE

N.T.S.

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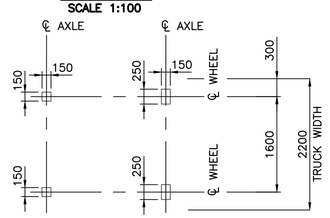
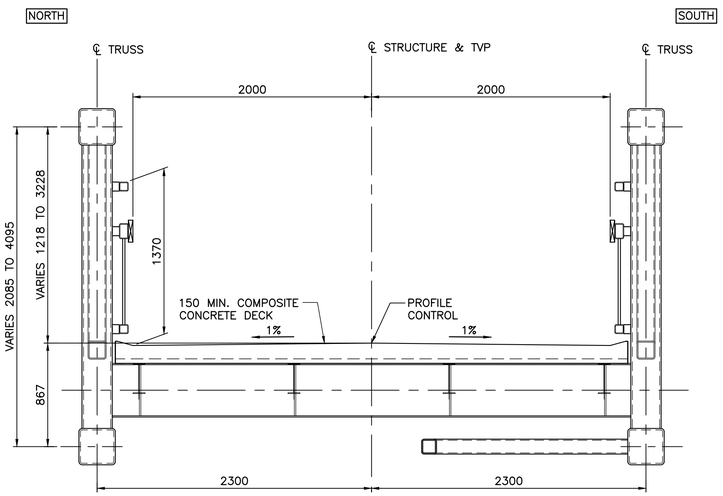



## PLAN

## MAINTENANCE VEHICLE LOAD

SCALE 1:100

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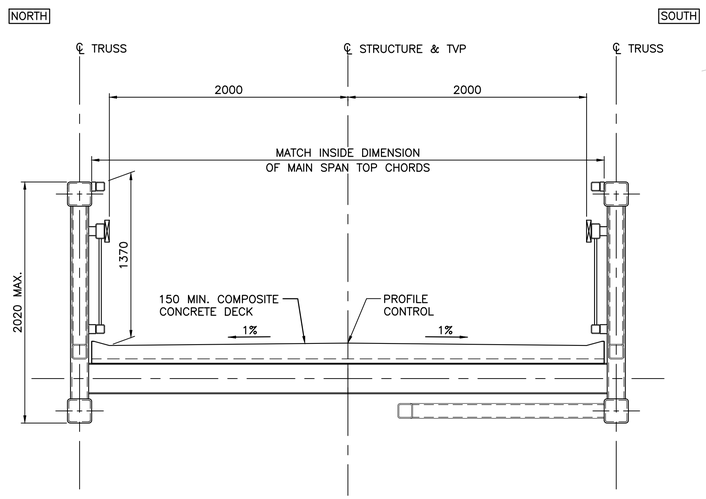


2

SCALE 1:25

DRAWING NOT TO BE SCALED
100 mm ON ORIGINAL DRAWING

| EXISTING SERVICES | DRAWING #, SOURCE | DATE | AS CONSTRUCTED SERVICES | COMPLETION |
|---|---|---|---|---|
| | | | | |

| DETAILS | |
|---|---|
| DESIGN | CDW |
| DRAWN BY | JBP |
| CHECKED | CSH |
| APPROVED | CSH |
| DATE | JAN 2018 |

| No. | REVISIONS | DATE | CONSULTANT |
|---|---|---|---|
| 1 | ISSUED FOR TENDER | FEB 2019 | DILLON CONSULTING |

CONSULTANT OR DIVISION

DILLON CONSULTING

ENGINEER'S STAMP
LICENSED PROFESSIONAL ENGINEER
C. D. WATSON
100216186
PROVINCE OF ONTARIO

ENGINEER'S STAMP
LICENSED PROFESSIONAL ENGINEER
C. S. HAINES
100107739
PROVINCE OF ONTARIO

London CANADA

CORPORATION OF THE CITY OF LONDON

SCALE
AS NOTED

METRIC
DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN

TITLE
THAMES VALLEY PARKWAY – NORTH BRANCH

GENERAL ARRANGEMENT

ATHLETIC FIELD

PROJECT No. 176484

SHEET No. S3

PLAN FILE No.

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| | |
|---|---|
| **TO:** | **CHAIR AND MEMBERS<br>CIVIC WORKS COMMITTEE<br>MEETING ON MARCH 18, 2019** |
| **FROM:** | **KELLY SCHERR, P. ENG., MBA, FEC<br>MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER** |
| **SUBJECT:** | **AMENDMENTS TO THE TRAFFIC AND PARKING BY-LAW** |

## RECOMMENDATION

That on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, the attached proposed by-law (Appendix A) **BE INTRODUCED** at the Municipal Council meeting to be held on March 26, 2019, for the purpose of amending the Traffic and Parking By-law (PS-113).

## 2015-19 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus area of **Building a Sustainable City** by improving safety, traffic operations and residential parking needs in London's neighbourhoods.

## BACKGROUND

The Traffic and Parking By-law (PS-113) requires amendments (Appendix A) to changes as a result of the Dundas Place project. The recommended amendments to support the new street configuration are shown in Figures 1 to 4. It should be noted that parking on Dundas Street between Ridout Street North and Wellington Street will be free for the first hour and the second hour is paid using the Honk smart phone application or with a pay and display meter receipt.

It is also recommended that the existing turn restrictions on Dundas Street be revised to exempt bicycles to improve active transportation.

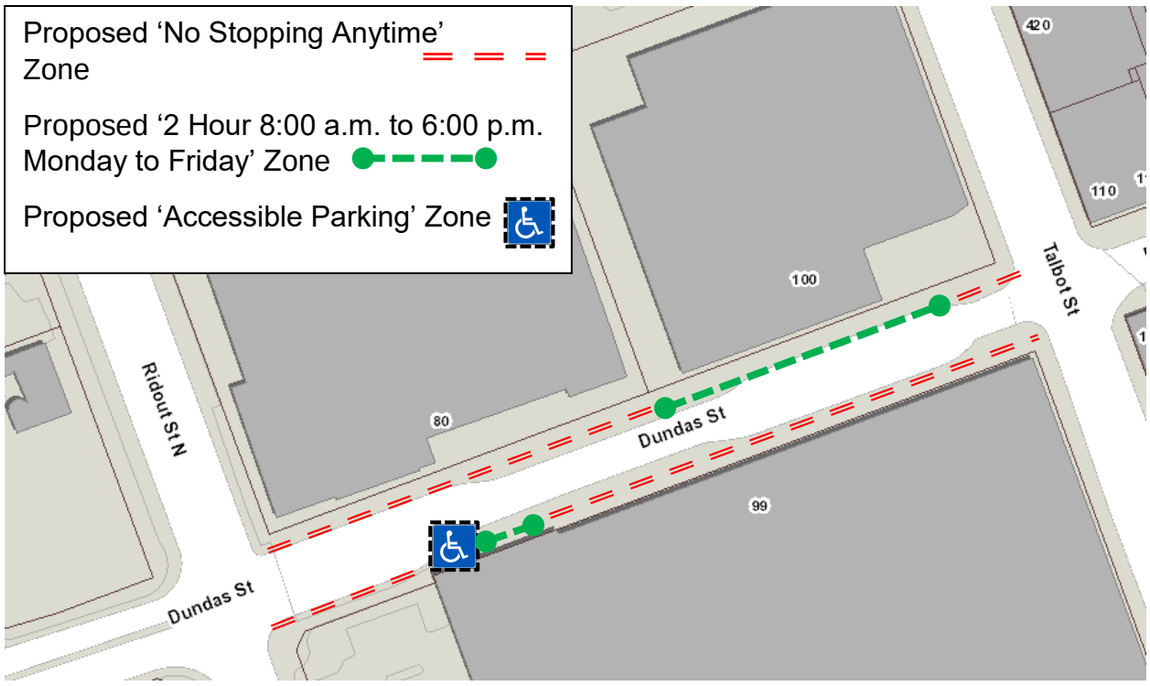



Figure 1: Dundas Street from Ridout Street N to Talbot Street Proposed Parking Regulations

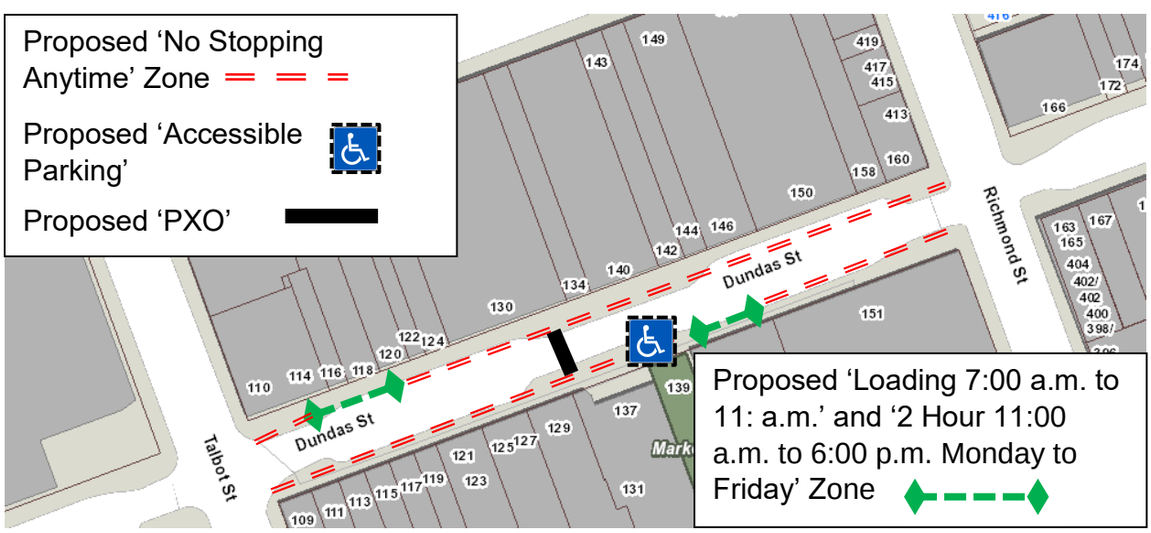



Figure 2: Dundas Street from Talbot Street to Richmond Street Proposed ParkingRegulations

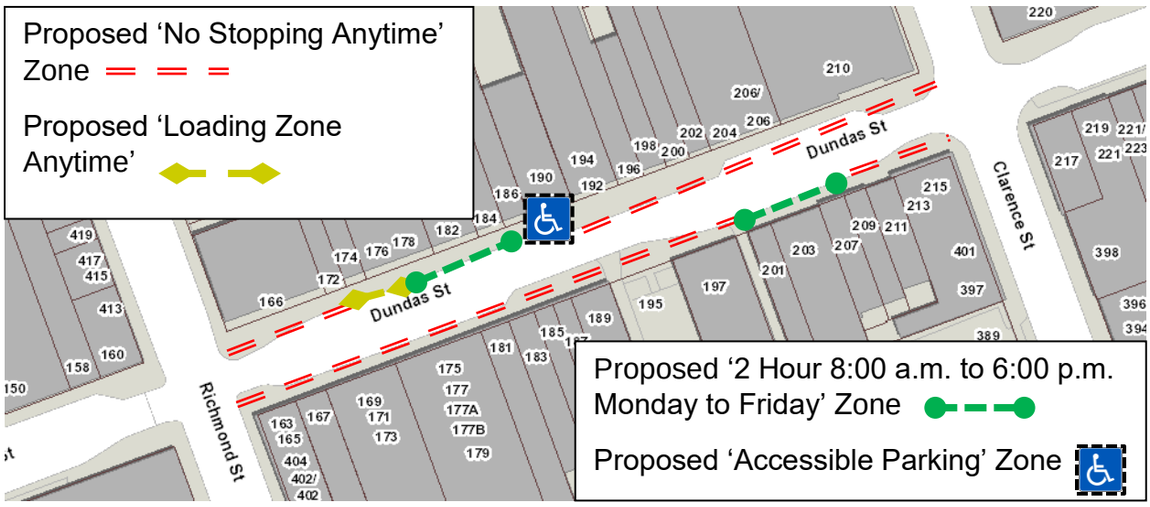



Figure 3: Dundas Street from Richmond Street to Clarence Street Proposed Parking Regulations

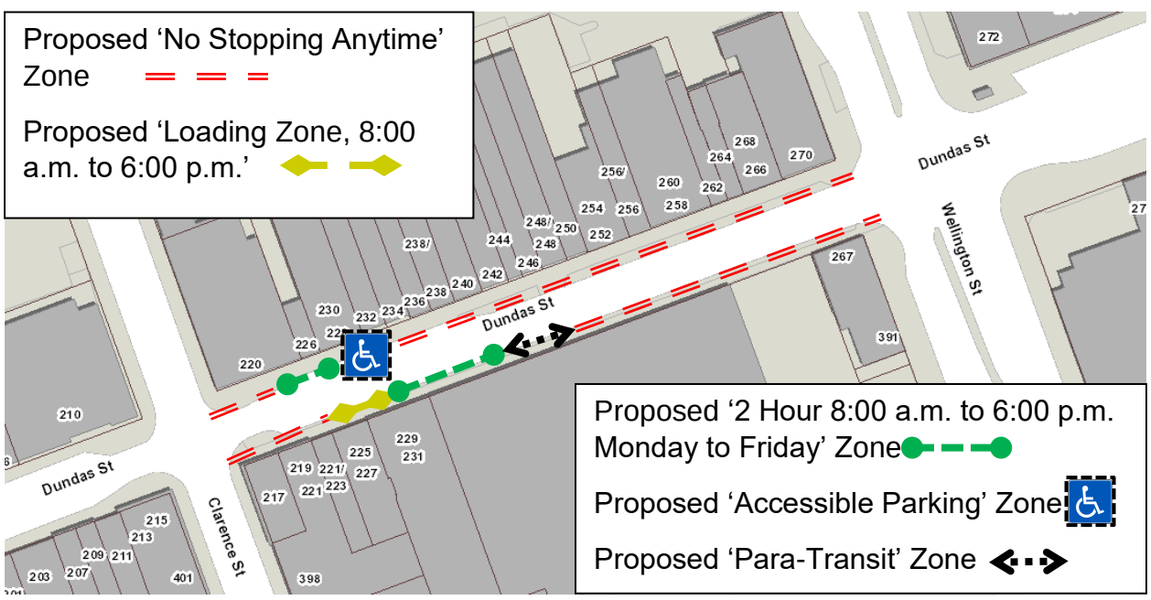



Figure 4: Dundas Street from Clarence Street to Wellington Street Proposed Parking Regulations

Amendments to Schedule 1 (No Stopping), Schedule 2 (No Parking), Schedule 4 (Taxi Stands), Schedule 5 (Loading Zones), Schedule 8 (Prohibited Turns), Schedule 13.1 (Pedestrian Crossovers), Schedule 20 (On-Street 2 Hour Metered Parking) and Schedule 27 (Designated Parking Spaces – Disabled Persons) to address the above changes.

This report was prepared by Doug Bolton and Shane Maguire of the Roadway Lighting and Traffic Control Division.

| PREPARED BY: | REVIEWED AND CONCURRED BY: |
|---|---|
| | |
| **SHANE MAGUIRE, P. ENG.<br>DIVISION MANAGER,<br>ROADWAY LIGHTING AND TRAFFIC CONTROL** | **DOUG MACRAE, P.ENG., MPA<br>DIRECTOR, ROADS AND TRANSPORTATION** |

| RECOMMENDED BY: |
|---|
| |
| **KELLY SCHERR, P.ENG., MBA, FEC<br>MANAGING DIRECTOR,<br>ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER** |

\\FILE2\users-u\estr\Shared\Administration\COMMITTEE REPORTS\Civic Works\2019\DRAFT\02-20\CWC - TRAFFIC PARKING BY-LAW AMENDMENTS CWC February 20 2019 Council March 5 2019 Ver. 2.docx

March 11, 2019/db

Attach: Appendix A: Proposed Traffic and Parking By-Law Amendments

cc. City Solicitor's Office
Parking Office

**APPENDIX A**

**BY-LAW TO AMEND THE TRAFFIC AND PARKING BY-LAW (PS-113)**

Bill No.

By-law No. PS-113

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

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

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

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

**1. <u>Paratransit Stop</u>**

Section 12.1 of by-law PS-113 is amended by adding the following:

e) The south side of Dundas Street from a point 71 m east of Clarence Street to a point 78 m east of Dundas Street

**2. <u>No Stopping</u>**

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

| | | | | |
|---|---|---|---|---|
| Dundas Street | North | Richmond Street | A point 70 m east of Richmond Street | Anytime |
| Dundas Street | North | A point 62 m west of Ridout Street N | Ridout Street N | Anytime |
| Dundas Street | North | A point 184 m west of Ridout St N | A point 89 m west of Ridout Street N | Anytime |
| Dundas Street | North | A point 55 west of Talbot Street | A point 35 m west of said Street | Anytime |

| | | | | |
|---|---|---|---|---|
| Dundas Street | North | Talbot Street | A point 70m east of Talbot Street | Anytime |
| Dundas Street | South | A point 55 m west of Richmond Street | Richmond Street | Anytime |
| Dundas Street | South | Ridout Street N | A point 31 m east of Ridout St N | Anytime |
| Dundas Street | South | A point 184 m west of Ridout Street N | Ridout Street N | Anytime |
| Dundas Street | South | A point 67 m west of Talbot Street | Talbot Street | Anytime |

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

| | | | | |
|---|---|---|---|---|
| Dundas Street | North | Ridout Street N | A point 96 m east of Ridout Street N | Anytime |
| Dundas Street | North | A point 24 m west of Talbot Street | A point 18 m east of Talbot Street | Anytime |
| Dundas Street | North | A point 38 m east of Talbot Street | A point 31 m east of Richmond Street | Anytime |
| Dundas Street | North | A point 78 m east of Richmond Street | A point 19 m east of Clarence Street | Anytime |
| Dundas Street | North | A point 39 m east of Clarence Street | Wellington Street | Anytime |
| Dundas Street | South | Ridout Street N | A point 34 m east of Ridout Street N | Anytime |

| | | | | |
|---|---|---|---|---|
| Dundas Street | South | A point 55 m east of Ridout Street | A point 112 m east of Talbot Street | Anytime |
| Dundas Street | South | A point 134 m east of Talbot Street | A point 116 m east of Richmond Street | Anytime |
| Dundas Street | South | 30 m west of Clarence Street | 30 m east of Clarence Street | Anytime |
| Dundas Street | South | A point 77 m east of Clarence Street | Wellington Street | Anytime |

**3. <u>No Parking</u>**

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

| | | | | |
|---|---|---|---|---|
| Dundas Street | Both | A point 89 m east of Clarence Street | A point 82 m west of Wellington Street | Anytime |
| Dundas Street | North | A point 42 m east of Ridout Street N | A point 116 m east of said street | Anytime |
| Dundas Street | North | A point 70 m east of Talbot Street | A point 60 m west of Richmond Street | Anytime |
| Dundas Street | North | Richmond Street | A point 70 m east of Richmond Street | Anytime |
| Dundas Street | South | A point 31 m east of Ridout Street N | A point 67 m west of Talbot Street | Anytime |
| Dundas Street | South | A point 65 m east of Talbot Street | A point 55 m west of Richmond Street | Anytime |

| | | | | |
|---|---|---|---|---|
| Dundas Street | South | A point 25 m west of Richmond Street | Richmond Street | Anytime |
| Dundas Street | South | A point 28 m west of Clarence Street | Clarence Street | Anytime |
| Dundas Street | South | Richmond Street | A point 63 m west of Clarence Street | Anytime |

**4. <u>Taxi Stands</u>**

Schedule 4 (Taxi Stands) of the By-law PS-113 is hereby amended by **deleting** the following row:

| | | | | |
|---|---|---|---|---|
| Dundas Street | North | A point 62 m east of Clarence Street | A point 73 m east of Clarence Street | 9:00 p.m. to 6:00 p.m. |
| Dundas Street | South | A point 51 m east of Richmond Street | A point 65 m east of said street. | 9:00 p.m. to 6:00 p.m. |

**5. <u>Loading Zones</u>**

Schedule 5 (Loading Zones) of the By-law PS-113 is hereby amended by **deleting** the following rows:

| | | | |
|---|---|---|---|
| Dundas Street | North | From a point 62 m east of Clarence Street to a point 73 m east of Clarence Street | 6:00 a.m. to 9:00 p.m. |
| Dundas Street | North | From a point 60 m west of Richmond Street to a point 45 m west of the said street | 8:00 a.m. to 6:00 p.m. |

| | | | |
|---|---|---|---|
| Dundas Street | South | From a point 52 m east of Talbot Street to a point 65 m east of the said street | 8:00 a.m. to 6:00 p.m. |
| Dundas Street | South | From a point 62 m west of Clarence Street to a point 49 m west of Clarence Street | 8:00 a.m. to 6:00 p.m. |

Schedule 5 (Loading Zones) of the By-law PS-113 is hereby amended by **adding** the following rows:

| | | | |
|---|---|---|---|
| Dundas Street | North | From a point 18 m east of Talbot Street to point 38 m east of Talbot Street | 7:00 a.m. to 11:00 a.m. |
| Dundas Street | North | From a point 31 m east of Richmond Street to a point 44 m east of Richmond Street | |
| Dundas Street | South | From a point 122 m east of Talbot Street to point 135 m east of Talbot Street | 7:00 a.m. to 11:00 a.m. |
| Dundas Street | South | From a point 30 m east of Clarence Street to a point 44 m east of Clarence Street | 8:00 a.m. to 6:00 p.m. |

**6. <u>Prohibited Turns</u>**

Schedule 8 (Prohibited Turns) of the By-law PS-113 is hereby amended by **deleting** the following rows:

| | | |
|---|---|---|
| Dundas Street with Talbot Street | Eastbound and & Westbound | Left (3:00 p.m. to 6:00 p.m. Monday to Friday) |

| | | |
|---|---|---|
| Dundas Street with Talbot Street | Eastbound and Westbound | Right (7:00 a.m. to 9:00 a.m. & 3:00 p.m. to 6:00 p.m. Monday to Friday) |

Schedule 8 (Prohibited Turns) of the By-law PS-113 is hereby amended by **adding** the following rows:

| | | |
|---|---|---|
| Dundas Street with Talbot Street | Eastbound and Westbound | Left (3:00 p.m. to 6:00 p.m. Monday to Friday) Bicycles Excepted |
| Dundas Street with Talbot Street | Eastbound and Westbound | Right (7:00 a.m. to 9:00 a.m. and 3:00 p.m. to 6:00 p.m. Monday to Friday) Bicycles Excepted |

**7. <u>Pedestrian Crossovers</u>**

Schedule 13.1 (Pedestrian Crossovers) of the By-law PS-113 is hereby amended by **adding** the following row:

| | |
|---|---|
| Dundas Street | 76 m east of Talbot Street |

**8. <u>On-Street 2 Hour Metered Parking</u>**

Schedule 20 (On-Street 2 Hour Metered Parking) of the By-law PS-113 is hereby amended by **deleting** the following rows:

| | | | | |
|---|---|---|---|---|
| Dundas Street | North | Talbot Street | Colborne Street | 8:00 a.m. to 6:00 p.m. |
| Dundas Street | North | Ridout Street N | 33m easterly | 8:00 a.m. to 6:00 p.m. |
| Dundas Street | North | Ridout Street N | A point 42 m east of Richmond Street | 8:00 a.m. to 6:00 p.m. |
| Dundas Street | South | Talbot Street | Adelaide Street N | 8:00 a.m. to 6:00 p.m. |

Schedule 20 (On-Street 2 hour Metered Parking) of the By-law PS-113 is hereby amended by **adding** the following rows:

| | | | | |
|---|---|---|---|---|
| Dundas Street | North | Ridout Street N | A point 18 m east of Talbot Street | 8:00 a.m. to 6:00 p.m. |
| Dundas Street | North | A point 18 m east of Talbot Street | A point 38 m east of Talbot Street | 11:00 a.m. to 6:00 p.m. |
| Dundas Street | North | A point 38 m east of Talbot Street | A point 31 m east of Richmond Street | 8:00 a.m. to 6:00 p.m. |
| Dundas Street | North | A point 44 m east of Richmond Street | Colborne Street | 8:00 a.m. to 6:00 p.m. |
| Dundas Street | South | Ridout Street N | A point 122 m east of Talbot | 8:00 a.m. to 6:00 p.m. |
| Dundas Street | South | A point 122 m east of Talbot | A point 135 m east of Talbot | 11:00 a.m. to 6:00 p.m. |
| Dundas Street | South | A point 135 m east of Talbot | A point 71 m east of Clarence Street | 8:00 a.m. to 6:00 p.m. |
| Dundas Street | South | A point 78 m east of Clarence Street | Adelaide Street N | 8:00 a.m. to 6:00 p.m. |

**9. <u>Designated Parking Spaces – Disabled Persons</u>**

Schedule 27 (Designated Parking Spaces – Disabled Persons) of the By-law PS-113 is hereby amended by **adding** the following rows:

| | | | | |
|---|---|---|---|---|
| Dundas Street | North | A point 71 m east of Richmond Street | A point 78 m east of Richmond Street | 2 Hours |

| | | | | |
|---|---|---|---|---|
| Dundas Street | North | A point 32 m east of Clarence Street | A point 39 m east of Clarence Street | 2 Hours |
| Dundas Street | South | A point 34 m east of Ridout Street N | A point 42 m east of Ridout Street N | 2 Hours |
| Dundas Street | South | A point 115 m east of Talbot Street | A point 122 m east of Talbot Street | 2 Hours |

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

PASSED in Open Council on March 26, 2019

Ed Holder, Mayor

Catharine Saunders, City Clerk

First Reading – March 26, 2019
Second Reading – March 26, 2019
Third Reading – March 26, 2019

| | |
|---|---|
| **TO:** | **CHAIR AND MEMBERS<br>CIVIC WORKS COMMITTEE<br>MEETING ON MARCH 18, 2019** |
| **FROM:** | **KELLY SCHERR, P.ENG., MBA, FEC<br>MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER** |
| **SUBJECT:** | **APPOINTMENT OF SERVICES FOR<br>DINGMAN CREEK SURFACE WATER MONITORING PROGRAM<br>(ES2452)** |

## RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the appointment of Upper Thames River Conservation Authority (UTRCA) for Surface Water Monitoring of the Dingman Creek Subwatershed:

a) The Upper Thames River Conservation Authority **BE AUTHORIZED** to carry out a three year surface water monitoring pilot program in concert with the City of London in the total amount of $562,075.00, including contingency, excluding HST. This is a unique program for which the UTRCA offers licenses as well as full services to complete this work per 14.4e) & h) of the Procurement of Goods and Services Policy;

b) the financing for the project **BE APPROVED** in accordance with the "Sources of Financing Report" attached hereto as Appendix 'A';

c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;

d) the approvals given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract; and,

e) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

## PREVIOUS REPORTS PERTINENT TO THIS MATTER

PEC – November 12, 2018 – Upper Thames River Conservation Authority Dingman Creek Subwatershed Screening Area Mapping

CWC – October 6, 2015 – Dingman Creek Subwatershed Stormwater Servicing Strategy Schedule C Municipal Class Environmental Assessment

CWC – February 3, 2013 – Contract Award T13-89 Dingman Creek Stormwater Management Erosion Control Wetland (ES2682)

CWC – November 20, 2012 – A by-law to amend the Official Plan for the City of London, 1989 relating to lands located in the southwest quadrant of the City, generally bounded by Southdale Road West, White Oak Road, Exeter Road, Wellington Road South, Green Valley Road, and the Urban Growth Boundary.

## 2015 – 2019 STRATEGIC PLAN

The following report supports the 2015 – 2019 Strategic Plan through the strategic focus areas of Building a Sustainable City including:

- Robust Infrastructure 1B – Manage and improve water, wastewater, and stormwater infrastructure; and
- Responsible Growth 5B – Build new transportation, water, wastewater and stormwater infrastructure as London grows.

## BACKGROUND

### Purpose

The purpose of this report is to seek approval to award funding to UTRCA for the completion of a three year pilot project for water quality and the establishment of flow monitoring stations within Dingman Creek. This pilot program will include a comprehensive review, compilation, and analysis of historical surface water monitoring data, and the continuation of existing water monitoring and reporting of the Dingman Creek Subwatershed.

### Context

The Dingman Creek Subwatershed is 17,200 hectares with flows tributary to the Thames River. The Dingman Creek has the largest subwatershed within the City of London, with 74% of the subwatershed within the city limits. This subwatershed is generally located in the southern portion of the City in an area that is planned for significant future development, primarily in the area associated with the Southwest Area Secondary Plan (SWAP).

## DISCUSSION

Over the past 10 years, the City of London has carried out surface water monitoring programs including aquatic invertebrate (benthic) and water chemistry within the Dingman Creek. Benthic monitoring has been completed by consultants with yearly results submitted to the City. City staff over the past 30 years have collected monthly water chemistry data at a number of established locations along Dingman Creek. Through these programs, a historical surface water dataset has been collected; however, comprehensive data analysis to determine baseline conditions, trends, and an overall review of conditions with Dingman Creek is outstanding. The purpose of the proposed three year surface water monitoring pilot program is to:

a) Continue collection of baseline aquatic invertebrate and water chemistry data to build upon the existing historical dataset;
b) Compile existing historical monitoring data into a single database that can be shared, accessed and utilized by both UTRCA and the City;
c) Develop a comprehensive Dingman Creek Subwatershed Surface Monitoring Report that includes various annual monitoring parameters. This report can be updated at regular intervals to consider overall trends of the Dingman Creek system; and,
d) Establish new flow and level monitoring stations in Dingman Creek to calibrate and verify future floodplain and stormwater modeling efforts.

The results and findings of the surface water monitoring pilot program may assist to determine targets as part of the on-going “Dingman Creek Subwatershed Stormwater Servicing, Schedule C Municipal Class Environmental Assessment” (Dingman EA).

Through the proposed pilot program, the City and UTRCA will work together to streamline surface water monitoring data collection, data sharing, and reporting. Benefits of this collaborative approach will be consistency in data collection, reduction in

data collection duplication, and archiving of data through UTRCA's existing Western Ontario Environmental Database (WOED) that is accessible to the City and UTRCA.

The UTRCA have experienced and knowledgeable staff that are trained in performing surface water monitoring tasks as part of their day-to-day activities. These staff are well versed in surface water monitoring protocols and have a vested interest in ensuring consistency and reliability in data collection. Additionally, UTRCA owns specialized equipment and software licences (Water Information Systems by KISTERS (WISKI)), as well as an existing water flow monitoring network which will support the proposed pilot project. Together UTRCA's local expertise and resources will provide a full-complement to undertake the proposed pilot program. This monitoring program will also supplement the UTRCA's preparation of the Dingman Creek report card.

Review of UTRCA's work plan costs demonstrates this pilot project will offer better value for service than previous proposals from the private industry. UTRCA's work plan for benthic data collection, analysis and reporting is just under $1,700.00 per site (in 2019 dollars). Comparable work plans submitted by private consultants included costs just under $2,000.00 per site (in 2015 dollars). The UTRCA's overall work plan also includes $135,000.00 capital costs for purchasing of monitoring equipment that will be permanently installed and offer long-term flow and level data at three locations in Dingman Creek.

**Project Schedule**

This pilot program is anticipated to be completed in Q2 2021. The findings of the historical data review will be completed in Q1 2020 and may be considered in the development of a future subwatershed targets and monitoring as part of the on-going Dingman EA. Upon completion of the pilot program City and UTRCA staff will determine a way forward for future monitoring efforts within Dingman Creek.

## CONCLUSIONS

This project will be the first step in establishing a continous data sharing service between the City and UTRCA.The Dingman Creek Surface Water Monitoring Program pilot project will continue to build upon existing historical datasets and provide both the City and UTRCA with an understanding of observed trends and access to Dingman Creek data available.

**Acknowledgements**

This document has been prepared by Adrienne Sones, P.Eng. Environmental Services Engineer within the Stormwater Engineering Division.

| SUBMITTED BY: | REVIEWED AND CONCURRED BY: |
|---|---|
| | |
| **SHAWNA CHAMBERS, P.ENG.<br>DIVISION MANAGER<br>STORMWATER ENGINEERING** | **SCOTT MATHERS, MPA, P.ENG.<br>DIRECTOR, WATER AND<br>WASTEWATER ENGINEERING** |
| **RECOMMENDED BY:** | |
| | |
| **KELLY SCHERR, P.ENG., MBA, FEC<br>MANAGING DIRECTOR<br>ENVIRONMENTAL SERVICES AND CITY ENGINEER** | |

Attach: Appendix ‘A’ – Sources of Financing

cc: John Freeman, Manager, Purchasing and Supply
Chris Harrington, UTRCA
Gary McDonald, Budget Analysis
Alan Dunbar, Financial and Corporate Services
Jason Davies, Financial Planning and Policy
Chris Ginty, Purchasing and Supply
Adrienne Sones, Stormwater Engineering

**APPENDIX 'A'**

**#19023**

Chair and Members
Civic Works Committee

March 18, 2019
(Appointment of Services)

**RE: Dingman Creek Surface Water Monitoring Program**
**(Subledger NT19ES05)**
**Capital Project ES2452 - Water Quality and Storm Flow Conveyance Monitoring Program**
**The Upper Thames River Conservation Authority - $562,075 (excluding H.S.T.)**

**FINANCE & CORPORATE SERVICES REPORT ON THE SOURCE OF FINANCING:**

Finance & Corporate Services confirms that the cost of this project can be accommodated within the financing available for it in the Capital Works Budget and that, subject to the adoption of the recommendations of the Managing Director, Environmental and Engineering Services and City Engineer, the detailed source of financing for this project is:

| **ESTIMATED EXPENDITURES** | **Approved Budget** | **Committed To Date** | **This Submission** | | **Balance for Future Work** |
|---|---|---|---|---|---|
| Engineering | $2,220,000 | $1,605,842 | $571,968 | | $42,190 |
| City Related Expenses | 20,000 | 17,593 | | | 2,407 |
| **NET ESTIMATED EXPENDITURES** | **$2,240,000** | **$1,623,435** | **$571,968** | **1)** | **$44,597** |
| **SOURCE OF FINANCING:** | | | | | |
| Drawdown from Sewage Works Reserve Fund | $2,240,000 | $1,623,435 | $571,968 | | $44,597 |
| **TOTAL FINANCING** | **$2,240,000** | **$1,623,435** | **$571,968** | | **$44,597** |

**Financial Note:**

| | | |
|---|---|---|
| 1) | Contract Price | $562,075 |
| | Add: HST @13% | 73,070 |
| | Total Contract Price Including Taxes | 635,145 |
| | Less: HST Rebate | 63,177 |
| | Net Contract Price | **$571,968** |

JG

Jason Davies
Manager of Financial Planning & Policy

| | |
|---|---|
| **TO:** | **CHAIR AND MEMBERS<br>CIVIC WORKS COMMITTEE<br>MEETING ON MARCH 18, 2019** |
| **FROM:** | **KELLY SCHERR, P.ENG., MBA, FEC<br>MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER** |
| **SUBJECT:** | **2019 RENEW LONDON<br>INFRASTRUCTURE CONSTRUCTION PROGRAM** |

## RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following information report concerning the 2019 Renew London Infrastructure Construction Program **BE RECEIVED** for information.

## PREVIOUS REPORTS PERTINENT TO THIS MATTER

Civic Works Committee – January 10, 2017 - 2017 Renew London Infrastructure Construction Program

Civic Works Committee – March 19, 2018 - 2018 Renew London Infrastructure Construction Program and 2017 Renew London Post Construction Overview Report

## 2015-19 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus areas of *Building a Sustainable City* and *Leading in Public Service* directly and indirectly as follows: Addressing the infrastructure gap, building robust infrastructure, enhancing safety for all road users in the city, and managing and improving our water, wastewater and stormwater infrastructure and services. Our commitment to public service is delivered upon via the Renew London Infrastructure Construction Program which focuses on customer service excellence, efficiency, timely communication and coordination to minimize impacts on the public.

## BACKGROUND

### Purpose

The purpose of this report is to provide Committee and Council with an overview of the planned City major construction projects for 2019 and to provide an overview and evaluation of the 2018 Renew London Infrastructure Construction Program. This report will identify potential risks for the upcoming construction season, and outline lessons learned from 2018.

**Context**

The City is responsible for a transportation system that promotes the movement of goods and services while providing for transportation mobility choices for residents. An efficient transportation system promotes business, creates employment, provides social opportunities and saves lives.

The Environmental and Engineering Services Department ("EESD") undertakes approximately 200 capital works projects and programs per year. Our goal is to provide safe, dependable, affordable and environmentally responsible services that help London's communities thrive and the city prosper.

Sustainable infrastructure through the provision of road, sewer, water, sidewalk, traffic signal and streetlight assets is managed through the Renew London Infrastructure Construction Program. The program addresses existing lifecycle needs, system improvements, and growth-related priorities. It was created to drive efficiency in infrastructure delivery and minimize delays and inconveniences to the public during construction.

As the leaders of the program, City staff are responsible for overseeing City construction projects and providing onsite inspection where required. This oversight ensures projects are communicated, built in accordance with plans, specifications and City standards, completed on time, within set budget limits and following proper safety procedures.

## 2019 RENEW LONDON INFRASTRUCTURE CONSTRUCTION PROGRAM

**Discussion**

A number of construction projects are currently scheduled for implementation in 2019. Extensive review and coordination has been carried out at project and program levels to reduce potential impacts.

There will be 111 lane km of road reconstructed, 8 km of sanitary and storm sewers, and 8 km of watermain rebuilt. Approximately 2 km of combined/ redundant sewer will be removed, having a significant benefit to the environment.

In addition, 6 km of watermain and 8 km of sewers will be lined trenchless. These trenchless programs allow for significant capital avoidance and minimized social impact by avoiding open cut construction.

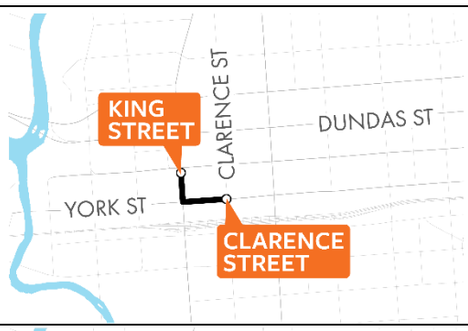
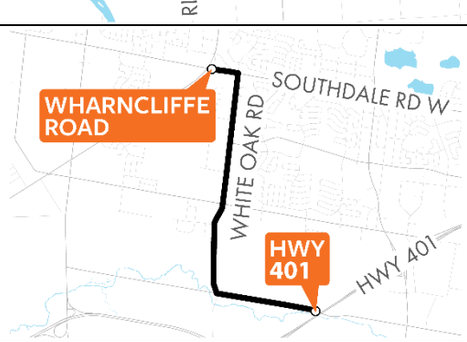
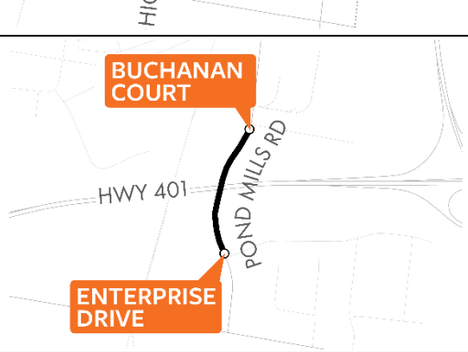
The City is investing approximately $132 million in building road infrastructure projects in 2019. The 2019 program includes approximately $60 million of road improvements, $44 million of sewer improvements and $28 million of water improvements. These investments will improve and extend the lifecycle of London's critical road, water and sewer infrastructure.

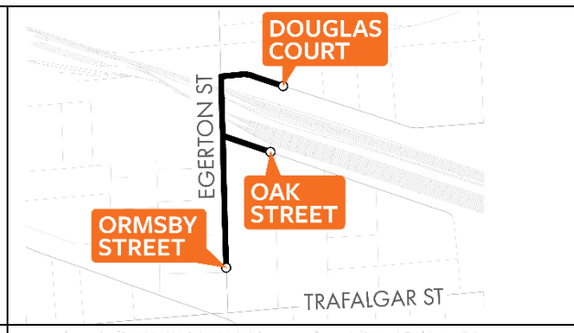
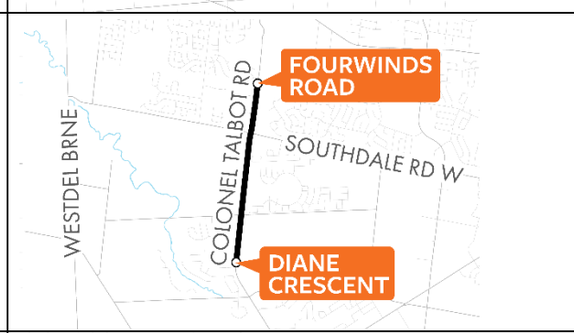
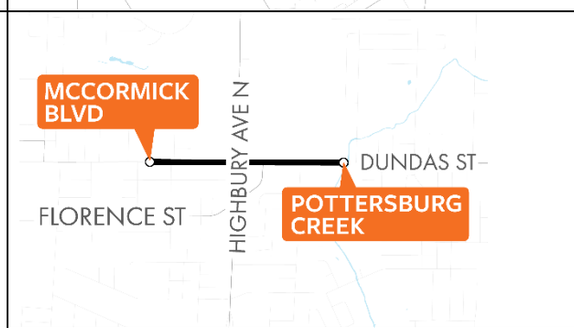
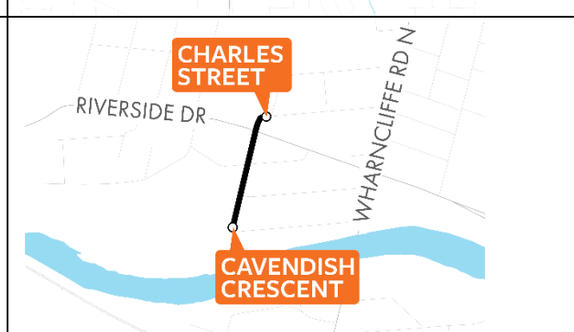
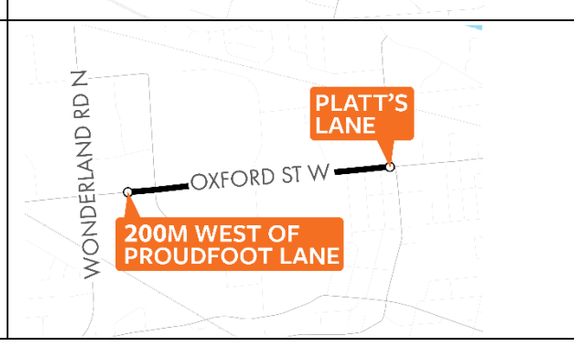
A complete map of city-wide 2019 construction projects can be viewed by residents on the City's website.

**Top 10 City Projects**

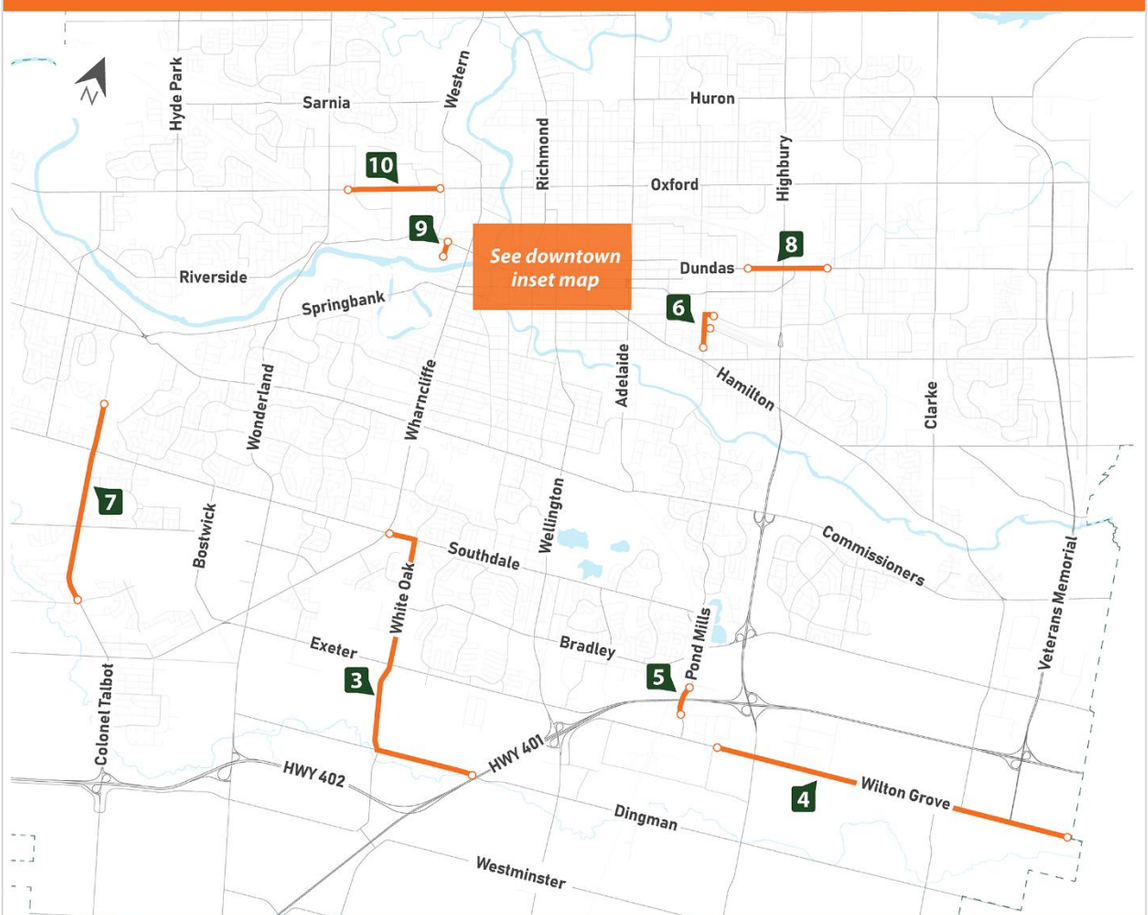
City staff have evaluated and identified the top 10 City projects that will take place during the 2019 construction season. These projects were selected based on the following criteria:

- Scope of work
- Construction duration
- Location
- Road classification
- Traffic impact
- Transit Impact
- Impact to neighbours
- Proximity to events, schools, community centres, parks, cycle routes

| | | |
|---|---|---|
| 1 |  | **York & Talbot Streets**<br>Downtown Sewer Separation<br>Temporary sidewalk closures<br>LTC route impacts<br>Phased road closures<br>Phased road closures<br>Website: london.ca/YorkTalbot |
| 2 | | **Dundas Place (Phase 2)**<br>Core Infrastructure Renewal<br>Temporary sidewalk closures<br>LTC stop impacts<br>Road closure<br>Road closure<br>Website: dundasplace.ca |
| 3 |  | **Dingman Forcemain**<br>Wastewater Operations Improvement<br>Temporary sidewalk closures<br>LTC stop impacts<br>Bike lane restrictions<br>Lane restrictions<br>Website: london.ca/DingmanForcemain |
| 4 | | **Wilton Grove Road**<br>Road and sewer improvement<br>Road closure<br>LTC route impacts<br>Road closures and detours<br>Road closures and detours<br>Website: Coming soon |
| 5 |  | **Pond Mills Road**<br>Watermain Improvement<br>Road closure<br>LTC route impacts<br>Road closure<br>Road closure<br>Website: Coming soon |

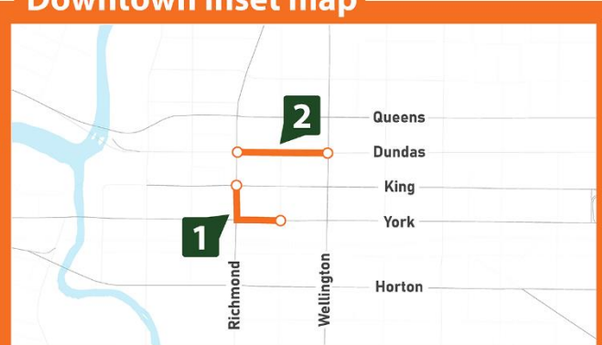
| | | |
|---|---|---|
| 6 |  | **Egerton Phase 2**<br>Infrastructure Renewal<br>Temporary sidewalk closure<br>No LTC impact<br>Phased road closures<br>Phased road closures<br>Website: [london.ca/EgertonStreet](https://www.london.ca/EgertonStreet) |
| 7 |  | **Colonel Talbot Forcemain**<br>Wastewater Operations Improvement<br>Temporary sidewalk closures<br>LTC route impacts<br>Lane restrictions<br>Lane restrictions<br>Website: [london.ca/ColonelTalbot](https://www.london.ca/ColonelTalbot) |
| 8 |  | **Dundas Street East**<br>Road Improvement<br>Temporary sidewalk closure<br>LTC route impacts<br>Lane restrictions<br>Lane restrictions<br>Website: Coming soon |
| 9 |  | **Cavendish Phase 2**<br>Infrastructure Renewal<br>Temporary sidewalk closure<br>LTC route impacts<br>Road closure<br>Road closure<br>Website: [london.ca/CavendishCres](https://www.london.ca/CavendishCres) |
| 10 |  | **Oxford Street West**<br>Road Improvement<br>Temporary sidewalk closure<br>LTC route impacts<br>Lane restrictions<br>Lane restrictions<br>Website: Coming soon |

# TOP 10 INFRASTRUCTURE PROJECTS 2019




1. York & Talbot Streets
2. Dundas Place (Phase 2)
3. Dingman Forcemain
4. Wilton Grove Road
5. Pond Mills Road
6. Egerton Street (Phase 2)
7. Colonel Talbot Forcemain
8. Dundas Street East
9. Cavendish Crescent (Phase 2)
10. Oxford Street West

## Downtown inset map



**Risks**

There are several risks for the upcoming construction season that may impact project budgets and schedule. The noted risks are as follows;

Downtown 2019 Construction

London is continuing to experience a renewed vitality in its downtown as the city grows. Not only are there a number of City lead projects occurring in the core in 2019, but continued private development, private utility projects, and public events and festivals will continue to occur as well.

Coordination of all these activities involves collaboration across a number of City divisions and constant communication internally and with the City's private partners, transit and emergency services. City staff remain focused on anticipating and minimizing impacts to the four dimensions of transportation (pedestrians, cyclists, transit users and motorists) through the Downtown Construction Coordination Committee. The committee was established 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. The group meets weekly to examine anticipated transportation impacts in the Core, roughly bounded by Horton Street, The Thames River, Oxford Street, and Colborne Street.

Business Impacts

During this increase in construction volume of work on London roads, it is especially important to reduce potential impacts of construction on businesses, pedestrians and commuters. The loss of parking spaces, diverted traffic, unexpected power outages and noise and dust typically accompany the large scale projects.

The City will continue to protect businesses by communicating in advance and working with the business owners to mitigate construction impacts based on their operations. Signage that lets the public know businesses are still open in construction zones is a simple and effective way to lessen the disruption. Phasing construction, so it's not all happening at the same time, and identifying issues and developing plans to make any disruptions as painless as possible, can also minimize disruption to business.

Safety

Contractor and worker safety is a significant and serious concern for the City. The 2018 construction season saw a number of incidents around the city where drivers endangered workers on site. One of the main concerns is drivers not respecting work zones, not obeying temporary traffic signals and flag persons, and speeding through construction zones.

Public education and enforcement is critical in improving driver habits, and City staff are committed to working with our contractors to report dangerous drivers and educate the public wherever possible. It's important to continue to obey signage that is in place even when there are no vehicles or workers present and not enter a work zone or drive past signage.

The City is also working in partnership with the Technical Standards and Safety Authority ("TSSA") to ensure safe practices are being followed by all City hired contractors. Review of safety practices and procedures is an ongoing process, and City hired contractors are required to submit all Health and Safety documentation with every payment request. Additionally, any health and safety concerns are raised at every on-site coordination meeting, and as necessary. Safety is a continuing collaborative effort between the contractor, City, regulatory agencies, and the public.

Spring Workload (2018 Projects)

The 2018 construction season saw a significant amount of work and included complicated and challenging projects. As a result, there is work such as removal of temporary sidewalks, boulevard restoration, and final surface features, to be completed on a number of major 2018 projects this spring and summer.

Ultimately, the contractors will still be required to meet their contractual scheduling requirements for 2019 work, however progress will need to be monitored closely.

Wilton Grove Construction

With the announcement of the new Maple Leaf Foods processing plant at the south end of London major infrastructure work is underway. Improvements to the underground infrastructure and roadways are required in order to better service the large number of industrial facilities around the Wilton Grove/ Highbury area. The next two years will see improvements to the area over multiple projects which will cause temporary impacts to traffic and will require detours.

Continued coordination and communication with transit, businesses, and resident in this area is critical to minimize impacts to all operations.

Rail Crossing Approvals and Flagging

When any City of London construction project requires work on land owned by a railway, approval is required from the owner of the railway (typically either Canadian Pacific, "CP", or Canadian National Railways, "CNR"). Flagging personal is required for any work within the railways right-of-way, and flagpersons are assigned and provided by CNR and CP. These approvals can be challenging to obtain and railway flagpersons can be difficult to coordinate, which can lead to significant delays to a City lead construction project. Projects with rail crossings in 2019 include Frances Street and Egerton Street (Phases 1 and 2).

**Coordination and Considerations**

Vehicular Impacts

Traffic congestion is a concern for the City, businesses and users of the roadway. 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 and all City projects are reviewed from a traffic and construction detour impact perspective. Some locations will require road closures to complete the planned construction for the safety of the contractor and the public. Each closure will include a detour to safely redirect traffic around the disturbed areas and permit the work to be completed in a timely manner. The planned detours are as short a route as possible while keeping traffic on a similar class of roadway and not directing traffic through local neighbourhood streets.

Notwithstanding the detour routes, residents should expect increased traffic volumes on some local roads 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. Traffic signal phase timing adjustments are made, where possible, in the network surrounding construction projects to facilitate deflected traffic and help reduce delays.

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 is often considered and has the advantage of minimizing the inconvenience to the general public, local businesses and residents however it also 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 2019 Renew London Infrastructure Construction Program.

Pedestrian Impacts

Accessibility during construction projects is a key design consideration for all of the City's construction activities. City contracts typically require 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 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 erected on site at either end of the work indicating that the sidewalk is closed. This will alert pedestrians to find an alternate route. While this alternate route may not always be the quickest and most convenient way to a particular destination, it will ensure that the public is not entering into an unsafe situation.

Where possible, City projects will include requirements to construct temporary hard surface sidewalks to better facilitate accessible pedestrian movement.

Transit Impacts

City staff work closely with the London Transit Commission ("LTC") to identify construction impacts that affect bus routes. The LTC is very responsive at preparing and communicating detour routes when necessary. Several projects for 2019 will impact LTC routes, and these impacts will be listed on the Service Updates section of LTC's website (londontransit.ca). This website is also a useful tool to get real-time info to find out exactly where your bus is so you can better plan your trip and schedule your day.

Cyclist Impacts

Cyclists are an important consideration when designing and planning all of our infrastructure renewal projects. While many of our projects include new cycling lanes and improved infrastructure for London's cycling community, construction does create a hazard for cyclists. Cyclists should exercise caution around construction sites and follow all construction signs. When bikes lanes are closed due to construction motorists should yield to cyclists and share the road, however this may not always occur. For this reason cyclists should always remain diligent and alert around constructions sites.

**Communications**

The City continuously looks for ways to improve and enhance construction communications, with a goal of being inclusive of all forms of transportation: motorists, cyclists, transit users and all pedestrians. Various divisions are working towards providing clear, timely and actionable public notifications related to route interruptions, utility work and emergencies related to the right of way, city-wide. While frequency of correspondence may differ depending on the project's location, scope, duration and social impact. The following communication methods can be expected when living, working or owning property in proximity to a construction project:

Typical Construction Projects

- Introduction of project staff
- One or more construction notice letters
- On-site advanced warning signage
- Road impact updates available on Renew London website

Emergencies, Major Road Impacts or Reconstruction Projects

Any of the techniques above, plus:

- Project-specific web page on london.ca
- Public meeting
- Public Service Announcements posted on london.ca
- Social media updates posted on Facebook and Twitter

Core Construction Projects

Any of the techniques above, plus:

- Face-to-face meetings with Business Relations Manager
- Opportunity to sign up for project-specific email updates
- Impact-specific email updates to local properties affected
- Project meetings held in partnership with the BIA as needed

It is important to note that before work begins on a typical construction project, discussions take place with stakeholders to review methods of communicating during construction, impacts to property access, accessibility issues or special accommodation requests and to collect feedback and contact information. Information shared during these conversations is then used to develop the communications plan and tactics for the area impacted.

In addition to the methods of communication noted above, the City keeps project stakeholders such as local organizations and venues, business associations, school and school bus providers, LTC and emergency services informed through direct communication with Project Managers, the delivery of Public Service Announcements (PSAs) and the daily Renew London Road Report email.

Once a project begins, road construction teams and utility groups are managing many activities. The state of road closures, lane restrictions and sidewalk disruptions are constantly changing making it difficult to predict what the exact impacts will be at any given point in time. While we do our best to confirm the accuracy of the information with the contractor, City crew or third-party completing the work before issuing PSAs, unforeseen delays or changes to the construction schedule can occur.

To ensure up-to-date information is always accessible, project contacts are established and shared with those impacted before construction starts. Members of the public are invited to connect with the project manager to verify details, ask questions or share concerns during the project. This helps ensure issues are dealt with in a timely manner and that solutions can developed. If, at any time, members of the public encounter a road disruption they'd like to know more about, they are encouraged to check Renew London.

The Renew London web application can be accessed visiting london.ca/roadwork or by clicking the icon (left) on london.ca's homepage.

Navigating Construction

Waze is the world's largest free, community-based traffic and navigation app. It contains information about local traffic disruptions and road closures in London. To leverage the benefits of real-time data-sharing among local drivers, the City will start to market the app more heavily as part of all existing construction and transportation communication programs. Increased use of the hands-free Waze app can help connect those driving in our City by keeping each other informed on the go. This year's construction program will also be complimented by more pedestrian, cyclist and transit mitigation actions identified in the Mitigation section of this report.

The Waze Navigation & Live Traffic app (left) can be downloaded on GooglePlay or the App Store.

**Core Construction Communication**

Last year it was recognized that, in addition to the usual private-sector requests to do work in the City's right of way, multiple municipal infrastructural renewal projects would be simultaneously occurring in a relatively condensed area in the central part of the city. The core construction program was initiated to better connect stakeholders with information before, during and after construction through the delivery of sustained, communications related to work happening in the City's core, roughly bounded by Horton Street, The Thames River, Oxford Street, and Colborne Street. The newly created multi-organizational Downtown Construction Coordination Committee will continue to lead a core construction program in 2019. The communications portion of this program looks at core construction projects and how to best communicate any impacts resulting from weather, other construction, development and special events to business and property owners, residents and the travelling public.

It is the City's goal to make growth in our core area a positive experience for all road users and to increase the understanding of the reasons for the work (e.g. aging infrastructure) happening in our downtown. Because of this, tactics will continue to incorporate visuals and messages that speak to the greater vision for core improvements including: improved connectivity, preparing for growth and sustainability.

The current core construction campaign can be recognized by its vibrant orange colour and tagline: Connecting our future. Through these efforts, the City is implementing new approaches to share timely, accurate, and proactive information. Based on lessons learned in 2018, 2019 communications will focus on:

- Refining methods of targeting and delivering information to stakeholders
- Demonstrating value in infrastructure improvement investments in London's core
- Actively engaging the community in construction milestones
- Supporting access to businesses, parking and loading whenever possible
- Contributing to positive experiences during construction
- Raising awareness of traffic mitigation efforts

- Continuing to improve web presence and ease of access to project information through digital channels

Core construction banner at the York and Wellington overpass shown above.

Core construction project sign shown above.

**Dundas Place Communication**

While the second phase of the Dundas Place downtown revitalization project will officially begin after JUNO Week ends on March 18, 2019. Preparatory work for Phase 2 began in January of 2019. To continue to deliver on the unique communications plan developed for Dundas Place, the project team has maintained contact with Dundas Place email subscribers, business owners and those following the project on social media through the winter months. In partnership with the BIA and the new Dundas Place Manager, 2019 communications strategy will focus on:

- Maintenance of the weekly construction update blog and dundasplace.ca as the primary hub of information related to the project
- The development of programs that encourage movement and maximize time spent on all four blocks of Dundas Street
- Seeking additional opportunities for two-way dialogue between the City and business owners, property owners and residents between Richmond Street and Wellington Street
- Education about how to use the new flex street now that the first two blocks from Richmond to Ridout are complete
- Documenting and celebrating community building initiatives and activations
- Collecting input from the Dundas Place community and flexibly address issues

Dundas Place pedestrian navigation map

Dundas Place construction barrier signage featuring community members

## 2018 PROGRAM REVIEW

### Overview of 2018 Projects

The chart below identifies the top 10 City projects in 2018, the status and tendered contract amount.

| Project | Tendered Contract Amount | Status |
|---|---|---|
| Western/Wharncliffe Widening | $8.0m | Sidewalks, sod, top coat asphalt to be complete. |
| Dundas Place from Ridout to Wellington | $26.7m | Phase 1: surface features, Phase 2: Richmond to Wellington to be complete. |
| Main Street from Campbell to Dingman Creek | $8.3m | Sidewalks, sod, top coat asphalt to be complete. |
| York Street from Thames River to Talbot | $7.0m | Sidewalks, curbs, and top coat asphalt to be complete. |
| Wonderland / Wharncliffe Bostwick Pumping Station | $7.3m | Minor sewer work, top coat asphalt to be complete. |
| Egerton from Dundas to CN rail tracks | $5.8m | Final watermain crossing under CN tracks, top coat to be complete. |
| Wonderland / HWY 402 Highway 401 to Highway | $6.6m | Top coat asphalt to be complete. |
| Colonel Talbot Pumping Station and Forcemain Project(s) | $2.0m | Restoration to be complete. |
| Hamilton/Sackville from Chelsea to Egerton | $4.1m | All Sackville Street work, sidewalks, boulevard restoration, top coat asphalt to be complete. |
| Talbot Street from Fullerton to Kent | $1.7m | Sidewalk, boulevard finishes, signals, top coat asphalt to be complete. |

### 2018 Accomplishments

In 2018, the demand for road impact information was evident, with 21,407 visits to the Renew London landing page, more than 550 Customer Relationship Management (CRM) inquiries and ongoing social media inquiries. To better equip the public with road impact information, the City of London expanded its Renew London construction program with additional channels including more frequent PSAs, social media updates related to construction, project-specific web pages, direct email and more local media outreach. In total, the City issued more than 90 PSAs and achieved 91% neutral or positive media coverage. These new ways of “pushing” out information helped media, local radio, the LTC, the BIA and local venues distribute information to their followers / listeners / riders / attendees in a timely manner.

Core Construction

Dundas Street, York Street and Talbot Street were selected as pilot projects for the 2018 Core Construction program. Having dedicated staff and external partners committed to the success of this program allowed us to conduct more in-person meetings, respond to the needs of business owners more promptly and better manage event schedules and the needs of those most impacted by construction downtown.

| | |
|---|---|
| <br>Core construction notice sign installation outside of downtown apartment building. | • The City produced a video and series of radio ads in partnership with local business owners.<br>• A core construction landing page was developed to improve ease of access to downtown construction information.<br>• Project-specific core construction email lists were generated for Dundas and Talbot as well as York which had a 67.6% open rate.<br>• The City partnered with LTC on a promotion to raise awareness for service disruptions due to construction.<br>• Worked with the contractor to alter construction staging to accommodate access to parking for the duration of the York Street project. |

Dundas Place: London's first flex street

Dundas Place (Phase 1) construction, from Ridout to just east of Richmond, was highly successful because of the availability of on-site contacts, frequent pedestrian navigation updates and community engagement initiatives.

| | |
|---|---|
| <br>London Fringe Festival program centrefold featuring the Dundas Place Project Manager, Jonny Ngai. | • 90% of Dundas businesses and property owners engaged in pre-construction one-on-ones and community meetings.<br>• Gained more than 800 Dundas Place email list subscribers.<br>• Maintained 50% average email open rate.<br>• 48% participation in Dundas Place community photo shoot for construction hoarding and other tactics.<br>• Received 17,041 Dundas Place website visits.<br>• Maintained weekly Dundas Place blog from April to December 2018 earning 30,598 blog post views.<br>• Earned 106,700 impressions on the Dundas Place Twitter account. |

Blackfriars Bridge Rehabilitation

Blackfriars Bridge construction milestones were celebrated in unique ways throughout the duration of the project through live streaming, unique media opportunities and community events.

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|---|---|
| <br>Hundreds of people crossing the Blackfriars Bridge at its grand opening. | • The #BlackfriarsBridge hashtag was trending on Twitter nationally on Aug 15, 2018.<br>• More than 250 people in attendance and 10 community partners participating at the grand opening event.<br>• Monthly updates showcased on blackfriarsbridge.ca.<br>• More than 30,000 views on Blackfriars Bridge Facebook videos<br>• Engaged community in selection of decorative bridge signage.<br>• Incorporated significant community members (e.g. Isaac Crouse descendants) in the promotion and execution of grand opening.<br>• Collaborated with local artist on a one-of-a-kind Blackfriars Bridge perpetual calendar. |

Western Road and Wharncliffe Road Widening

As an area highly populated with students, the Western / Wharncliffe Road Widening required direct coordination with Western University, local residences and the LTC.

| | |
|---|---|
| <br>Students walking on sidewalk during Western / Wharncliffe construction. | • Developed project-specific landing page including construction safety tips for students.<br>• Coordinated delivery of information to students with the LTC and Western University.<br>• Conducted on-site meeting with university rep(s) to understand community concerns.<br>• Worked closely with community members to improve accessibility in the area.<br>• Re-opened the corridor to four lanes of traffic in 2018 improving traffic flow and improve travel times. |

**Customer Service**

As part of the Municipal Council approved Service London Implementation Plan, 2018 was the third year of CRM integration into City of London construction projects. This platform captures and is a conduit for customer interactions and complaints which get directed to Project Managers assigned to City construction projects. Construction Administration received over 569 CRM inquiries in 2018. Program features will be enhanced in upcoming years which will improve interaction with our customers over time.

**Budget and Schedule**

The City managed $187 million in infrastructure construction project work in 2018. All projects are nearing completion and are currently within the approved contract value to-date.

Construction contracts for the City of London are usually tendered based on a specified number of “working days” allowed to reach substantial completion (contract milestone). Rain days, Saturdays, Sundays and holidays do not count towards the working day count. However, contracts are sometimes configured to encourage work on weekends. Additional work and unforeseen conditions may increase the number of working days allowed within a contract when there is justification. Liquidated damages (cost for late delivery of a project) are assessed against the contractor once the number of allowed working days has been exceeded.

While a number of City projects had work continue into December, these projects had a number of working days added due to unforeseen challenges that could not have been anticipated by the contractor, consultant, or the City. Projects from 2018 that encountered extended project schedules include:

- Talbot Street
- Main Street
- Hamilton Road
- York Street
- Western Road/ Wharncliffe Road

While most projects have work to be completed in 2019, all but one project, Talbot Street, are currently within their contractually allotted number of working days. The City is currently working with their consultant and the contractor to reconcile the extents of these liquidated damages for the Talbot Street contract.

The Hamilton Road project has a significant amount of work to complete in 2019, including the underground work on Sackville Street. This portion of work was deferred to 2019 once it became clear that the work could not be completed in 2018 due to a number of unforeseen conditions. Additionally, sidewalks and boulevard restoration work on Hamilton Road will also need to be completed in the 2019 construction season. The top coat of asphalt was always scheduled to be completed in 2019, and will occur once the above noted work has been completed.

The Main Street project is forecasting a potential minor budget overage, with several additional costs having encumbered the contract contingency. Additional costs include: revision to the concrete sewer pipe specification, additional work around boulevard trees, temporary sidewalk work and coordination around utilities. The project team is currently working with the project consultant to remain within budget, however an increase in contract value may be necessary.

**Lessons Learned From 2018 Construction Season**

Pedestrian Pathways

Maintaining pedestrian pathways around construction sites can create very challenging situations that are specific and unique to each construction site. Throughout the 2018 construction season a number of issues were noticed that can be improved for 2019.

a) Contractors parking on sidewalks and pedestrian pathways is unacceptable and all contractors will be reminded at the beginning of the 2019 season to ensure this does not occur. Continual monitoring will be necessary to eliminate this practice.
b) Where temporary watermains cross pedestrian pathways, the pathways should be covered with temporary asphalt to create a hard surface and not a granular material as was noted on some projects in 2018.
c) When construction activities require the closure of a sidewalk, signage should be provided to alert pedestrians of the closure at a location that allows them to take an alternate route without wasting time. The City is aware of some instances in 2018 where pedestrians continued down a sidewalk only to find out that the sidewalk is closed, requiring significant backtracking.

Public and Private Infrastructure Roadway Coordination

Coordination between all construction projects that occupy the City Right-of-Way created challenges during the 2018 construction season. As always, our goal is to reduce traffic disruption on City-led construction projects on our roads by taking effective and responsible action to coordinate City projects in advance as much as possible. There are many other individual construction activities by third parties within the road that impacts traffic flow. These private initiatives include works such as utility cuts for service repairs or new installations, street events and parades, and lanes/road closures to support development projects.

Advance planning of infrastructure work in the municipal right-of-way for 21 different public and private organizations is the mandate of the Utility Coordinating Committee (UCC). Coordination is compounded and complicated by hundreds of emergency and

routine operational repairs undertaken by City Roads, Water, Sewer and Forestry Operation teams annually. Coordination of all these works is a challenge.

Advanced cumulative planning allows the City 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 our contracts. The Corporate goal is to ensure that construction is planned and sequenced in a manner that will minimize impacts on traffic and disruption to the public.

Through routine coordination meetings with all applicable City departments we can continue to minimize the disruption to the public from all works on the City right of way.

Construction Impact to Trees

There are two types of impacts that construction can have on trees;

a) Impacts that are require to facilitate construction, and;
b) Unnecessary damage due to construction equipment and practices

Specific tree removal on some projects is unavoidable in order to facilitate the installation of new underground infrastructure, sidewalks, curbs, and road widenings. The City is typically replacing very old infrastructure where surrounding trees have been planted decades earlier (and therefore had significant growth). Specialized construction methods, such as trenchless technologies, are employed wherever reasonable in order to minimize the disturbance to trees. Additionally, excavation done near trees is typically done by a vacuum excavation truck to minimize the damage done to roots.

In order to prevent unnecessary damage due to construction equipment and practices, the City requires that all contractors follow a rigorous tree protection plan. While City staff and their consultants diligently monitor the contractor's use of tree protection strategies, damage can still occur. Contractors who damage trees are financially penalized through the City contract.

Tree Protection Strategy – Construction Impact Mitigation

Intersection Improvement Projects

Over the last few years, the City has prioritized infrastructure improvements to various aged intersections in the City with projects whose scope may include traffic signal rebuilds, lighting improvements, new sidewalk, curb and tactile plates to current AODA

requirements, and improvements to the bike facilities, including enhancing transitions (green crossride pavement markings) from boulevards across intersections.

These projects are very complex from a coordination perspective and require a great deal of thought into scheduling, moving traffic around the site safely, and working in confined areas. Key equipment delays (signal poles and arms) and nature of constructing and coordinating subcontractors for this unique work led to chronic commuter and public complaints in 2018, notably the Adelaide and Windermere Intersection Improvement project. Lane closures are intermittent as required throughout staging of construction and this can compound public frustration for a project that is already experiencing delays.

About 15 more localized Intersections projects are planned for 2019 and steps have been taken internally to create stringent contracts. Reducing working day hours and limiting work zones can lead to increased costs but should be considered noting increasing penalties for late work and working with suppliers in advance of projects should help mitigate some of the issues experienced in 2018.

Public Perception

A common complaint that the City received in 2018 related to the perception of absent work sites. While it may appear at times that little work is being completed, coordination is required by the contractor to ensure all work is completed in the correct sequence given the complexity of the work, number of subcontractors and other external utility providers. The required work must be completed in the proper sequence and must be finished prior to lane shifts, starting another phase or moving on to the next critical path operation.

Testing of soils, water, asphalt, concrete, compaction, etc. can also lead to durations of minimal activities on site giving a perception that no work is being done. In fact this testing is some of the most critical work on a project, ensuring public safety and value for money.

## CONCLUSION

The City has $6.8 B of water/wastewater infrastructure and $2.1 B of transportation Infrastructure. The timely replacement and upgrade of those assets is critical to ensuring long term sustainability of those services and managing the infrastructure gap. The Renew London Infrastructure Construction Program has been planned to address asset needs for the lifecycle renewal while at the same time ensuring that the growth requirements of the community are met in a timely manner and improving water quality in the Thames River.

Overall, 2018 was a successful construction season with the reconstruction of 73 lane-km of road, 15 km of sanitary and storm sewer, and 9 km of watermains. The City managed a portfolio of Council approved projects totalling about $187 million and all projects are nearing completion and are currently within the approved contract value to-date with only one contract at risk of a minor exceedence.

Since the completion of the 2018 construction season, levels of service and safety have been improved for pedestrians, cyclists, transit users and vehicular traffic. Traffic flow has moved more efficiently and roads are better able to handle the large volume of vehicles using the City’s transportation network.

The top 10 2019 projects have been identified noting downtown will experience major interruptions with Dundas Phase II and York Street Phase II projects.

While the 2019 projects have been scheduled in a manner to minimize social impacts on traffic, commuting around the city will be impacted and as such, residents are encouraged to plan ahead and exercise patience in construction zones.

Lessons learned from 2018 projects and anticipated risks associated with the 2019 construction season have been communicated to project managers to support design and future project planning. The City strives to deliver sustained, sincere and strategic communications as part of its core construction program and to continue to elevate city-wide road impact information through providing meaningful road information to all. Strategies that may be adapted and procedures that can be improved have been identified and will be implemented in 2019 construction projects where applicable.

**ACKNOWLEDGEMENTS:**

This report was prepared by Ugo DeCandido, P.Eng. and Brian Nourse, P.Eng., of the Construction Administration Division, Jim Yanchula, MCIP RPP, Manager, Downtown Projects & Business Relations, and Megan Hutchison, Communications Manager, Public Engagement (Construction and Transportation). The report was reviewed by staff in Water Engineering, Wastewater and Drainage Engineering, Stormwater Management, Wastewater Treatment Operations, Roadway Lighting and Traffic Control, and Transportation Planning and Design service areas.

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February 26, 2019
/ud

cc: Transportation Advisory Committee

| | |
|---|---|
| **TO:** | **CHAIR AND MEMBERS<br>CIVIC WORKS COMMITTEE<br>MEETING ON MARCH 18, 2019** |
| **FROM:** | **KELLY SCHERR, P. ENG., MBA, FEC<br>MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER** |
| **SUBJECT:** | **CONTRACT AWARD: TENDER NO. RFT 19-03<br>2019 INFRASTRUCTURE RENEWAL PROGRAM<br>AVALON STREET RECONSTRUCTION PHASE 2 PROJECT** |

## RECOMMENDATION

That on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the award of contracts for the 2019 Infrastructure Renewal Program Avalon Street Reconstruction Phase 2 Project:

(a) the bid submitted by Bre-Ex Construction Inc. at its tendered price of $3,498,808.52, excluding HST, **BE ACCEPTED**; it being noted that the bid submitted by Bre-Ex Construction Inc. was the lowest of ten bids received and meets the City's specifications and requirements in all areas;

(b) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached, hereto, as Appendix ‘A’;

(c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;

(d) the approval given, herein, **BE CONDITIONAL** upon the Corporation entering into a formal contract, or issuing a purchase order for the material to be supplied and the work to be done, relating to this project (Tender RFT19-03); and

(e) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

## PREVIOUS REPORTS PERTINENT TO THIS MATTER

Appointment of Consulting Engineers, Infrastructure Renewal Program 2016-2017, Civic Works Committee, June 2, 2015, Agenda Item # 5

Increase in Engineering Fees 2017 Infrastructure Renewal Program Contract 14 Avalon Street, Civic Works Committee, May 24, 2017, Agenda Item # 4

2018 Infrastructure Renewal Program Consultant Construction Supervision Awards Cavendish Crescent and Avalon Street Projects, Civic Works Committee, April 17, 2018, Agenda Item # 10

## 2015-2019 STRATEGIC PLAN

The 2015-2019 Strategic Plan under Building a Sustainable City identifies Robust Infrastructure, more specifically to this report; 1B – Manage and improve our water, wastewater and stormwater infrastructure and services.

## BACKGROUND

### Purpose

This report recommends award of a tender to a contractor for the infrastructure renewal within the following limits:

- Avalon Street in its entirety;
- the east boulevard of Clarke Road from 35 metres south of CP Rail to Avalon Street;
- Parkhurst Park South, south of Pottersburg Creek and within an easement over 1839 Parkhurst Avenue; and
- Clarke Road, between Culver Drive and Trafalgar Street for the installation of cathodic protection measures on the steel watemain.

A project location map is included for reference in Appendix ‘B’.

### Context

Avalon Street has been identified as a high priority in the infrastructure renewal program due to the poor condition of the municipal infrastructure, which dates between the late 1940s to the early 1950s. The current sanitary sewer routing, which is in an easement between 1836 and 1840 Avalon Street toward Parkhurst Avenue has been problematic for quite some time will be rerouted to Clarke Road as part of this project.

## DISCUSSION

The Avalon Street Reconstruction Phase 2 Infrastructure Renewal Project includes the following improvements:

- installation of sanitary sewers and private drain connections where requested;
- installation of storm sewers and private drain connections where requested;
- replacement of storm outlet and storm sewer in Parkhurst Park South and within an easement over 1839 Parkhurst Avenue;
- installation of rain gardens as a low impact development stormwater management strategy (LIDs);
- installation of watermain and individual water services to property line where applicable;
- full road reconstruction including new asphalt, curb and gutter, and sidewalk; and
- installation of cathodic protection measures to extend the life of the existing steel watemain on Clarke Road, between Culver Drive and Trafalgar Street.

The Avalon Street Reconstruction Phase 1 Infrastructure Renewal Project on Clarke Road (constructed in 2018) included the installation of a sanitary sewer under CP Rail and Pottersburg Creek. The Avalon Street Reconstruction Phase 2 Project will include work on Clarke Road, Avalon Street, Parkhurst Park South, and within an easement on 1839 Parkhurst Avenue.

Infrastructure renewal needs have been coordinated within the Environmental and Engineering Services Department. The funding for this project comes from the approved 2019 Wastewater and Treatment, Water, and Transportation Capital Works Budgets.

**Public Consultation**

A project update meeting to address questions and concerns was held on November 16, 2017 for all owners and residents within and immediately bordering the project area. This meeting was well attended with no significant concerns noted.

A road closure on Clarke Road is scheduled for the first weekend of May 2019 for a sanitary sewer crossing. Advanced warning and detour signs will be in place prior to this closure.

**Service Replacement**

In conjunction with the construction of this project, the City is administering the Private Drain Connection Subsidy Program, which allows property owners within the project's limits an opportunity to voluntarily replace their sewer connections at a reduced cost. As part of this project, the water service connections will be replaced to the property line at the City's cost and the property owner may elect to replace their private side connection at their own cost. Homeowners may also be eligible to participate in the Lead Service Extension Replacement Loan Program.

**Tender Summary**

Tenders for the 2019 Avalon Street Reconstruction Phase 2 Project were opened on January 31, 2019. Ten contractors submitted tender prices as listed below, excluding HST.

| **Contractor** | | **Tender Price Submitted** |
|---|---|---|
| 1 | Bre-Ex Construction Inc. | $3,498,808.52 |
| 2 | Blue-Con Construction | $3,581,829.95 |
| 3 | Sierra Infrastructure Inc. | $3,611,185.79 |
| 4 | J-AAR Excavating Limited | $3,631,289.50 |
| 5 | 291 Construction Ltd. | $3,732,527.30 |
| 6 | CH Excavating (2013) | $3,850,460.43 |
| 7 | Elgin Construction | $3,990,359.65 |
| 8 | Van Bree Drainage and Bulldozing Limited | $4,088,511.30 |
| 9 | Omega Contractors Inc. | $4,094,602.26 |
| 10 | L82 Construction Ltd. | $4,210,737.73 |

All tenders have been checked by the Environmental and Engineering Services Department and the City's consultant, R.V. Anderson Associates.

The tender estimate just prior to tender opening was $4,280,646.03, excluding HST. All tenders include a contingency allowance of $400,000.00.

Additional annual sewer operating costs of $200.00 are identified for additional maintenance holes and catchbasins. There are no additional operating costs associated with water operations.

## CONCLUSIONS

Award of the 2019 Infrastructure Renewal Program Avalon Street Reconstruction Phase 2 Project to Bre-Ex Construction Inc. will allow the project objectives to be met within the available budget and schedule.

**Acknowledgements**

This report was prepared within the Wastewater and Drainage Engineering Division by John Bos, C.E.T., Technologist II, and reviewed by Kyle Chambers, P. Eng., Environmental Services Engineer.

| **SUBMITTED BY:** | **REVIEWED & CONCURRED BY:** |
|---|---|
| | |
| **TOM COPELAND, P. ENG**<br>**DIVISION MANAGER**<br>**WASTEWATER AND DRAINAGE ENGINEERING** | **SCOTT MATHERS, MPA, P. ENG.**<br>**DIRECTOR**<br>**WATER & WASTEWATER** |
| **RECOMMENDED BY:** | |
| | |
| **KELLY SCHERR, P.ENG., MBA, FEC**<br>**MANAGING DIRECTOR**<br>**ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER** | |

Attach: Appendix ‘A’ – Sources of Financing
Appendix ‘B’ – Project Location Map

c.c. Aaron Rozentals
Doug MacRae
Alan Dunbar
John Freeman
Ugo DeCandido
Jason Davies
Gary McDonald
R.V. Anderson Associates
Bre-Ex Construction Inc.

**APPENDIX 'A'**

**#19025**

Chair and Members
Civic Works Committee

March 18, 2019
(Award Contract)

**RE: 2019 Infrastructure Renewal Program - RFT 19-03**
**Avalon Street Reconstruction Phase 2 Project**
**(Subledger WS19C007)**
**Capital Project ES241418 - Sewer Infrastructure Lifecycle Renewal**
**Capital Project ES242819 - Erosion Remediation Open Watercourses Management and Reclamation**
**Capital Project EW3547 - Trunk Watermain Cathodic Protection Upgrades**
**Capital Project EW378718 - Main Replacement with Major Roadworks**
**Capital Project TS301419 - Road Network Improvements**
**Bre-Ex Construction Inc. - $3,498,808.52 (excluding H.S.T.)**

**FINANCE & CORPORATE SERVICES REPORT ON THE SOURCES OF FINANCING:**

Finance & Corporate Services confirms that the cost of this project can be accommodated within the financing available for it in the Capital Works Budget and that, subject to the adoption of the recommendations of the Managing Director, Environmental & Engineering Services & City Engineer, the detailed source of financing for this project is:

| **SUMMARY OF ESTIMATED EXPENDITURES** | | **Approved Budget** | **Revised Budget** | **Committed to Date** | **This Submission** | | **Balance for Future Work** |
|---|---|---|---|---|---|---|---|
| **ES241418-Sewer Infrastructure Lifecycle Renewal** | | | | | | | |
| Engineering | | $1,939,666 | $1,939,666 | $1,139,666 | | | $800,000 |
| Engineering (Utilities) | | 8,420 | 8,420 | 8,420 | | | 0 |
| Land Purchase | | 44,767 | 44,767 | 44,767 | | | 0 |
| Construction | | 12,484,427 | 12,484,427 | 10,883,957 | 1,521,795 | | 78,675 |
| Construction (PDC Portion) | 2) | 176,000 | 192,000 | 176,000 | 16,000 | | 0 |
| Construction (Bell Contributions) | | 1,023,538 | 1,023,538 | 1,023,538 | | | 0 |
| City Related Expenses | | 114,848 | 114,848 | 109,915 | | | 4,933 |
| | | 15,791,666 | 15,807,666 | 13,386,263 | 1,537,795 | | 883,608 |
| **ES242819-Erosion Remediation Open Watercourses Management and Reclamation** | | | | | | | |
| Engineering | | 70,000 | 70,000 | | | | 70,000 |
| Construction | | 250,000 | 250,000 | | 105,532 | | 144,468 |
| | | 320,000 | 320,000 | 0 | 105,532 | | 214,468 |
| **EW3547-Trunk Watermain Cathodic Protection Upgrades** | | | | | | | |
| Construction | | 293,000 | 293,000 | | 193,736 | | 99,264 |
| City Related Expenses | | 2,000 | 2,000 | | | | 2,000 |
| | | 295,000 | 295,000 | 0 | 193,736 | | 101,264 |
| **EW378718-Main Repl with Major Roadworks** | | | | | | | |
| Engineering | | 432,144 | 432,144 | 432,144 | | | 0 |
| Construction | | 3,817,856 | 3,817,856 | 2,326,890 | 745,152 | | 745,814 |
| Construction (London Hydro) | | 136,396 | 136,396 | 136,396 | | | 0 |
| Construction (Rygar Apt. Development) | | 21,300 | 21,300 | 21,300 | | | 0 |
| | | 4,407,696 | 4,407,696 | 2,916,730 | 745,152 | | 745,814 |
| **TS301419-Road Network Improvements** | | | | | | | |
| Engineering | | 100,000 | 100,000 | | | | 100,000 |
| Construction | | 9,560,531 | 9,560,531 | 20,454 | 978,173 | | 8,561,904 |
| | | 9,660,531 | 9,660,531 | 20,454 | 978,173 | | 8,661,904 |
| **NET ESTIMATED EXPENDITURES** | | **$30,474,893** | **$30,490,893** | **$16,323,447** | **$3,560,388** | 1) | **$10,607,058** |
| **SUMMARY OF FINANCING:** | | | | | | | |
| **ES241418-Sewer Infrastructure Lifecycle Renewal** | | | | | | | |
| Capital Sewer Rates | | $7,093,000 | $7,093,000 | $7,093,000 | | | $0 |
| Drawdown from Sewage Works R.F. | | 2,990,708 | 2,990,708 | 585,305 | 1,521,795 | | 883,608 |
| Federal Gas Tax | | 4,500,000 | 4,500,000 | 4,500,000 | | | 0 |
| Cash Recovery from Property Owners (PDC Portion) | 2) | 176,000 | 192,000 | 176,000 | 16,000 | | 0 |
| Other Contributions (Utilities) | | 1,031,958 | 1,031,958 | 1,031,958 | | | 0 |
| | | 15,791,666 | 15,807,666 | 13,386,263 | 1,537,795 | | 883,608 |
| **ES242819-Erosion Remediation Open Watercourses Management and Reclamation** | | | | | | | |
| Drawdown from Sewage Works R.F. | | 320,000 | 320,000 | | 105,532 | | 214,468 |
| **EW3547-Trunk Watermain Cathodic Protection Upgrades** | | | | | | | |
| Drawdown from Capital Water Reserve Fund | | 73,750 | 73,750 | | 48,434 | | 25,316 |
| Clean Water & Wastewater Fund | | 221,250 | 221,250 | | 145,302 | | 75,948 |
| | | 295,000 | 295,000 | 0 | 193,736 | | 101,264 |
| **EW378718-Main Repl with Major Roadworks** | | | | | | | |
| Capital Water Rates | | 3,110,000 | 3,110,000 | 2,759,034 | 350,966 | | 0 |
| Drawdown from Capital Water Reserve Fund | | 1,140,000 | 1,140,000 | | 394,186 | | 745,814 |
| Other Contributions (London Hydro) | | 136,396 | 136,396 | 136,396 | | | 0 |
| Other Contributions (Rygar Apt. Development) | | 21,300 | 21,300 | 21,300 | | | 0 |
| | | 4,407,696 | 4,407,696 | 2,916,730 | 745,152 | | 745,814 |
| **TS301419-Road Network Improvements** | | | | | | | |
| Capital Levy | | 9,057,861 | 9,057,861 | 20,454 | 978,173 | | 8,059,234 |
| Drawdown from Capital Infrastructure Gap R.F. | | 602,670 | 602,670 | | | | 602,670 |
| | | 9,660,531 | 9,660,531 | 20,454 | 978,173 | | 8,661,904 |
| **TOTAL FINANCING** | | **$30,474,893** | **$30,490,893** | **$16,323,447** | **$3,560,388** | | **$10,607,058** |

**APPENDIX 'A'**

**#19025**

Chair and Members
Civic Works Committee

March 18, 2019
(Award Contract)

**RE: 2019 Infrastructure Renewal Program - RFT 19-03**
**Avalon Street Reconstruction Phase 2 Project**
**(Subledger WS19C007)**
**Capital Project ES241418 - Sewer Infrastructure Lifecycle Renewal**
**Capital Project ES242819 - Erosion Remediation Open Watercourses Management and Reclamation**
**Capital Project EW3547 - Trunk Watermain Cathodic Protection Upgrades**
**Capital Project EW378718 - Main Replacement with Major Roadworks**
**Capital Project TS301419 - Road Network Improvements**
**Bre-Ex Construction Inc. - $3,498,808.52 (excluding H.S.T.)**

1) **Financial Note:**

| | ES241418 | ES242819 | EW3547 | EW378718 | TS301419 |
|---|---|---|---|---|---|
| Contract Price | $1,511,198 | $103,707 | $190,385 | $732,264 | $961,255 |
| Add: HST @13% | 196,456 | 13,482 | 24,750 | 95,194 | 124,963 |
| Total Contract Price Including Taxes | 1,707,654 | 117,189 | 215,135 | 827,458 | 1,086,218 |
| Less: HST Rebate | 169,859 | 11,657 | 21,399 | 82,306 | 108,045 |
| Net Contract Price | $1,537,795 | $105,532 | $193,736 | $745,152 | $978,173 |

| **Financial Note..continued** | TOTAL |
|---|---|
| Contract Price | **$3,498,809** |
| Add: HST @13% | 454,845 |
| Total Contract Price Including Taxes | 3,953,654 |
| Less: HST Rebate | 393,266 |
| Net Contract Price | **$3,560,388** |

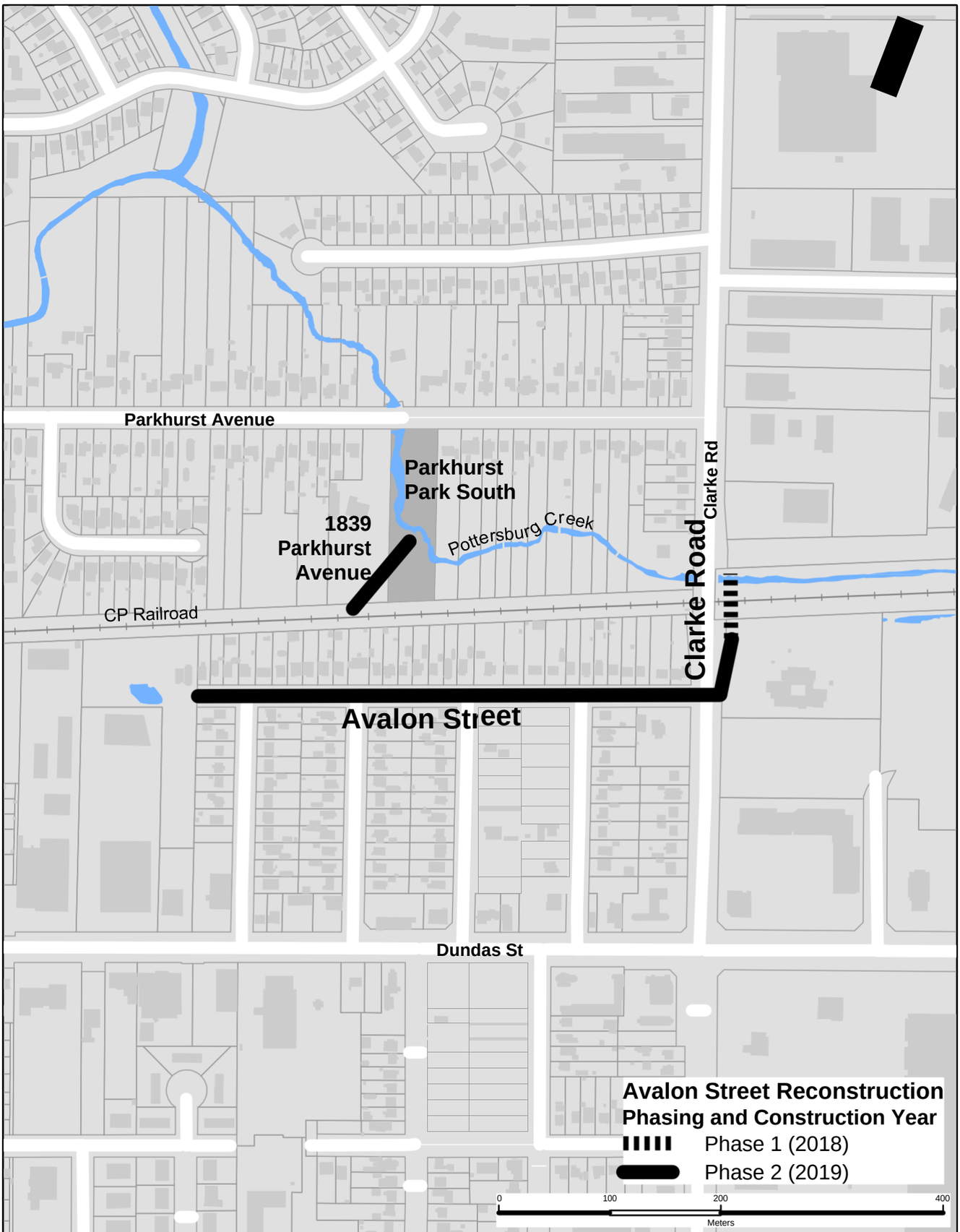
2) The expenditures have increased to accommodate the PDC (Private Drain Connections) funding towards this project.

3) Additional annual sewer operating costs of $200.00 are identified for additional maintenance holes and catch basins. There are no additional operating costs associated with water operations.

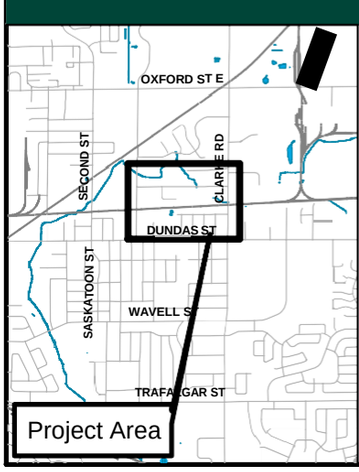
JG

Jason Davies
Manager of Financial Planning & Policy

## APPENDIX 'B'




## LOCATION MAP




**2019 Infrastructure Renewal Program**
**Contract 14**

Avalon Street (all)
Clarke Road from 35 m south of CP Rail to Avalon Street
Parkhurst Park South and 1839 Parkhurst Avenue

Map Produced by
the Wastewater &
Drainage Engineering
Division

January 29 2019 JB

London
CANADA


*300 Dufferin Avenue,*
*PO Box 5035*
*London, Ontario*
*N6A 4L9*
*www.London.ca*

| | |
|---|---|
| **TO:** | **CHAIR AND MEMBERS<br>CIVIC WORKS COMMITTEE<br>MEETING ON MARCH 18, 2019** |
| **FROM:** | **KELLY SCHERR, P.ENG.<br>MANAGING DIRECTOR ENVIRONMENTAL<br>& ENGINEERING SERVICES AND CITY ENGINEER** |
| **SUBJECT:** | **MORNINGTON AREA STORM DRAINAGE SERVICING<br>MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT:<br>NOTICE OF COMPLETION** |

## RECOMMENDATION

That, on the recommendation of the Managing Director Environmental & Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the Mornington Area Storm Drainage Servicing Environmental Assessment:

(a) The preferred stormwater management alternative, executive summary attached as Appendix 'A', **BE ACCEPTED** in accordance with the Schedule B Municipal Class Environmental Assessment process requirements;

(b) A Notice of Completion **BE FILED** with the Municipal Clerk; and,

(c) The Municipal Class Environmental Assessment Schedule B Project File for the Mornington Area Storm Drainage Servicing **BE PLACED** on public record for a 30-day review period.

## PREVIOUS REPORTS PERTINENT TO THIS MATTER

Civic Works Committee, October 24, 2017 – Appointment of Consulting Engineer – Mornington Area Storm Drainage Servicing Environmental Assessment

Civic Works Committee, October 4, 2016 – Infrastructure Canada Phase 1 Project Requests Clean Water and Wastewater Fund, Agenda Item # 8.

## 2015 – 2019 STRATEGIC PLAN

The following report supports the 2015 – 2019 Strategic Plan through the strategic focus area of Building a Sustainable City including:

- Robust Infrastructure 1B – Manage and improve water, wastewater, and stormwater infrastructure.

## BACKGROUND

### Purpose

The purpose of this report is to identify the preferred alternative for the Mornington Area Storm Drainage Servicing Schedule 'B' Municipal Class Environmental Assessment (EA), and recommend filing the Notice of Completion for the study to initiate the statutory 30-day public review period.

### Context

The existing storm drainage and sanitary servicing infrastructure within the study area (location map attached as Appendix 'B') is approaching or exceeds 100 years of age, has capacity constraints, and requires improvements. The Mornington Area Storm

Drainage Servicing Municipal Class Environmental Assessment (Class EA) reviewed alternative solutions to address the capacity concerns within the existing storm drainage infrastructure and included the development of a sanitary servicing strategy. The preferred storm drainage and sanitary solution addresses existing capacity deficiencies, infrastructure condition, and will mitigate flooding impacts within the neighbourhood. In addition, future combined sewer separation on Oxford Street and Sterling Street will be able to occur once infrastructure is renewed along Quebec Street.

A combined sewer is a type of sewage collection system that is designed to collect and convey both sanitary sewage and surface runoff in a single pipe. Separating these combined sewers will provide a significant environmental benefit by removing stormwater from the sanitary sewer system; reducing the amount of stormwater treated at the City's sewage treatment plants, and reducing the number of overflows to the Thames River.

## DISCUSSION

Storm and sanitary sewer infrastructure along Quebec Street is in poor condition, under capacity and approaching 100 years of age. This infrastructure is at the end of its service life and requires renewal. Additionally, combined sewers exist upstream of Quebec Street on Sterling Street and along Oxford Street. A storm relief sewer, constructed in the late 1950s, also exists along Quebec Street. The relief sewer was constructed to relieve stress on the sanitary sewer network and reduce the risk of sewer backups into basements.

A Schedule B Municipal Class Environmental Assessment (Class EA) was initiated to identify a suitable storm outlet to accommodate infrastructure renewal along Quebec Street and to allow for combined sewer separation to occur along Oxford Street and Sterling Street. In October 2017, the City of London appointed Stantec Consulting (Stantec) to complete engineering services for the Class EA. The evaluation of alternative solutions was completed with consideration to socio-economic, environmental and technical factors.

The implementation of the preferred alternative will facilitate the following:

- infrastructure renewal on Quebec Street with a suitable storm outlet;
- combined sewer separation along Oxford Street and Sterling Street;
- elimination of the stormwater contributions to the relief sewer, to alleviate existing sewer capacity concerns;
- reduction in sanitary sewer overflows to the Thames River; and
- reduction of the potential for surface flooding.

### Public/Stakeholder Consultation

As part of the study, one Public Information Centre (PIC) was conducted. Notifications for the meeting were published two weeks preceding the PIC as well as on the City's webpage. The meeting was held on October 24, 2018 at the Boyle Community Centre located at 530 Charlotte Street. The meeting was attended by the public and affected property owners. Notifications of the project were also sent to applicable federal, provincial, and municipal stakeholders, and local First Nations communities.

### Preferred Alternative

The preferred stormwater management alternative includes both a storage component and sewer network upgrades. The storage component includes an expansion of the existing stormwater management pond (Mornington Pond) within McCormick Park and the sewer work required to direct stormwater flows from Quebec Street to the proposed expanded facility.

A stormwater management pond/facility (SWMF) is an engineered structure constructed to gather rainfall and surface water runoff. The pond temporarily stores water and then

releases it at a controlled rate. Controlling the flow of stormwater protects downstream lands from erosion and flooding. In addition, stormwater ponds are constructed to be an attractive feature with an environmental benefit. Stormwater management facilities are designed to be surrounded by natural vegetation and to provide a habitat for birds and animals.

The proposed SWMF expansion was sized to retain stormwater from contributing drainage area along Oxford Street and Quebec Street and release it at a controlled rate that does not cause downstream flooding. The Mornington Pond and proposed expansion will share an existing outlet that ultimately discharges into the Burbrook Place trunk storm sewer system. The preliminary pond configuration is presented as Appendix 'C'. Pedestrian pathways are to be reinstated throughout the project area to ensure that existing trail connections are maintained. Although construction will cause temporary disruption to the property, the project provides the potential opportunity to improve the landscaping and trail connections for the local community.

The proposed sewer network upgrades include infrastructure renewal along Quebec Street along with the separation of combined sewers along Oxford Street from Curry Street to Mornington Street and Sterling Street from Mornington Avenue to Salisbury Street to remove storm flows from the sanitary system. The infrastructure renewal will redirect all storm catchments which currently discharge into the relief sewer to help reduce stress on the downstream system and reduce the risk of basement flooding.

**Agency Comments**

The Ministry of Natural Resources and Forestry has reviewed the EA and had no specific concerns for the study area.

The Ministry of Tourism, Culture and Sport (MTCS) had no specific comments. The MTCS Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscape Checklist was completed and did not identify any impact on the cultural heritage resources.

**Environmental Assessment Next Steps**

The following steps will be taken to finalize the Mornington Area Storm Drainage Servicing EA:

1. Upon Acceptance by Council, commence the 30-day review period:

    - A "Notice of Completion" will be published identifying that the study report is available for public review for the mandatory 30 calendar days at City Hall – 9th Floor and online at: www.london.ca/MorningtonEA

    - Stakeholders are encouraged to provide input and comments regarding this study during this time period. Should stakeholders feel that issues have not been adequately addressed, they can provide written notification within the 30-day review period to the Minister of the Environment, Conservation and Parks requesting further consideration. This process is termed a "Part II Order". Subject to no requests for a Part II Order being received, the project file will be finalized.

2. Construct the Preferred Alternative

    - It is estimated that the construction of the project will take place within the next five years. Permits and approvals for the proposed works will be obtained at the detailed design stage from the appropriate regulatory authorities.

## CONCLUSIONS

The Mornington Area Storm Drainage Servicing Environmental Assessment was undertaken to determine a suitable storm outlet to provide for infrastructure renewal along Quebec Street and to allow for combined sewer separation on Sterling Street and Oxford Street. Moving ahead with this project will assist in reaching the Canada-Ontario Lake Erie Domestic Action Plan target of separating 80 percent (17 km) of the City of London's combined sewer system by 2025. The preferred alternative provides a strong technical solution that also mitigates environmental impacts and alleviates the possibility of basement flooding in the Quebec Street area. Staff recommend that the preferred servicing alternative identified in the EA be posted for the 30-day public review period.

**Acknowledgements**

This document has been prepared with assistance from Paul Yanchuk, EIT, in the Wastewater and Drainage Engineering Division.

| **SUBMITTED BY:** | **REVIEWED AND CONCURRED BY:** |
|---|---|
| | |
| **TOM COPELAND, P. ENG.**<br>**DIVISION MANAGER**<br>**WASTEWATER AND DRAINAGE ENGINEERING** | **SCOTT MATHERS, MPA, P. ENG.**<br>**DIRECTOR, WATER AND WASTEWATER** |
| **RECOMMENDED BY:** | |
| | |
| **KELLY SCHERR, P. ENG., FEC**<br>**MANAGING DIRECTOR,**<br>**ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER** | |

Attach: Appendix 'A' – Executive Summary
Appendix 'B' – Location Map
Appendix 'C' – Preferred Alternative

cc. Nelson Oliveira, Stantec
Alan Dunbar, City of London
Jason Davies, City of London

# Appendix 'A'
# Executive Summary

# 1.0 EXECUTIVE SUMMARY

## 1.1 INTRODUCTION

The City of London retained Stantec Consulting Ltd. to complete a Schedule B Class Environmental Assessment (Class EA) for the Mornington Area Storm Drainage Area. Quebec Street, between Oxford Street and Dundas Street is underserviced by aging sanitary and storm sewers and currently does not have a suitable storm outlet. This area has had historical basement flooding, sewer overflows, and capacity constraints related to the sanitary sewer system, therefore a sanitary sewer servicing strategy is also required. This project has been carried out in accordance with the requirements for Schedule B projects under the terms of the Municipal Engineers Association Municipal Class Environmental Assessment process (2000, as amended in 2007, 2011, and 2015), an approved Class under the Ontario Environmental Assessment Act.

The study area is located within a developed community in the core of London, Ontario. The area is mostly residential with some commercial properties along Oxford Street and Dundas Street. A CP Rail Corridor with Switching Yard is located within the study area, which crosses under the Quebec Street overpass. There is an existing Stormwater Management Facility (SWMF) in McCormick Park to the northeast of the CP Rail Corridor.

Historical record drawings indicate the area was known to be developed in circa. 1915, with some sewers installed in the 1800's. As the city developed and capacity issues arose, a Relief Sewer was constructed along Quebec Street and Oxford Street in the 1950's which drains to the west along Lorne Avenue and discharges to the Thames River. The intention of the Relief Sewer was to reduce flows in the sanitary sewer network and reduce the risk of basement flooding by constructing sanitary sewer overflow connections into the Relief Sewer.

In a 2013 Pre-Design Report for the 2013 Infrastructure Renewal work along Burbrook Place, prepared by Dillon Consulting Ltd., capacity concerns were noted along the Oxford Street storm sewer system and it was recommended an alternative storm outlet be investigated. The report identified three (3) potential stormwater storage facility sites and the potential need for land acquisition, which triggered the need for a Schedule B Class EA to evaluate the alternative solutions.

## 1.2 CLASS EA APPROACH

The intent of the Mornington Area Storm Drainage Servicing Schedule B Class EA is to address public, agency and First Nations community requirements and concerns, as well as to ensure a reasonable range of alternatives are fairly assessed and reviewed in a public forum before being finalized and carried forwarded into implementation. Schedule B projects are required to complete Phase 1 and 2 of the Class EA planning process. These phases include the identification of a problem or opportunity, and the identification and evaluation of a reasonable range of alternative solutions. The Class EA process is

then documented in a Project File that is submitted for a 30-day mandatory public, agency and Indigenous community review period.

## 1.3 CONSULTATION

Members of the public were notified of project commencement and were invited to attend Public Information Centre (PIC) by way of delivered letters to residents in the study area and on the City's website. The PIC notification was also published in the Londoner newspaper and the PIC display material was posted on the City's website. An Indigenous Consultation Log was completed for this project to document the consultation process with Indigenous Communities contacted as part of the Class EA process.

## 1.4 PHASE 1 – PROBLEM AND OPPORTUNITIES

A number of previous studies were reviewed in order to determine the need and justification for undertaking this study. Previous studies reviewed included:

- 2013 Infrastructure Renewal Contracts Tender T13-20 – Contract #9 Burbrook Place – Draft Preliminary Design Report (Burbrook Place – Draft PDR). Dillon Consulting Ltd., January 2013.
- Pall Mall Street Sewershed Hydraulic Modeling Report (CH2M Hill, September 2014).

Based on the review of background information, the following Problem and Opportunity Statement has been developed:

> *The existing storm drainage and sanitary servicing infrastructure within the study area is approaching or exceeds 100 years of age, has capacity constraints, and requires improvements. The Mornington Area Storm Drainage Servicing Municipal Class Environmental Assessment (Class EA) will review alternative solutions to address the capacity concerns within the existing storm drainage infrastructure and will include the development of a sanitary servicing strategy. The preferred storm drainage and sanitary solution should address existing capacity deficiencies and infrastructure condition and mitigate flooding impacts within the neighbourhood, while minimizing disruption to existing properties.*

## 1.5 PHASE 2 – EXISTING CONDITIONS

The study area includes local storm sewers, local sanitary sewers, and a storm Relief Sewer. The majority of the storm sewers drain to Queens Avenue at the south west of the Study Area and discharge into the North Branch of the Thames River. Storm sewers east of the Study Area drain to the Burbrook Trunk sewer and storms sewers north of the CP Rail corridor are directed to the Mornington SWMF and discharges to a storm sewer trunk adjacent to the Burbrook Trunk sewer. Both ultimately discharge into the South Branch of the Thames River.

The Pall Mall / Lorne Avenue Relief Sewer (Relief Sewer) was constructed to alleviate capacity issues and runs from Oxford Street, south along Quebec Street and west to Lorne Avenue. A separate branch runs north of Quebec Street and flows west of Queens Avenue the connects to the main Relief Sewer.

A portion of the sanitary sewer along Oxford Street, east of Curry Street, acts as a combined sewer and captures flows through connected catchbasins. Separation of this sewer was considered during this project. There is also a total of 14 sanitary sewer overflow (SSO) connections which discharge into the storm and relief sewer. The sanitary sewers along Quebec Street north of the CP Rail Corridor discharge to the Pall Mall Sanitary Trunk Sewer whereas the sanitary sewers south of the CP Rail Corridor discharge to the Vauxhall Sewershed . Reverse overflows have been observed and flap-gates have been recommended in previous studies, but not implemented.

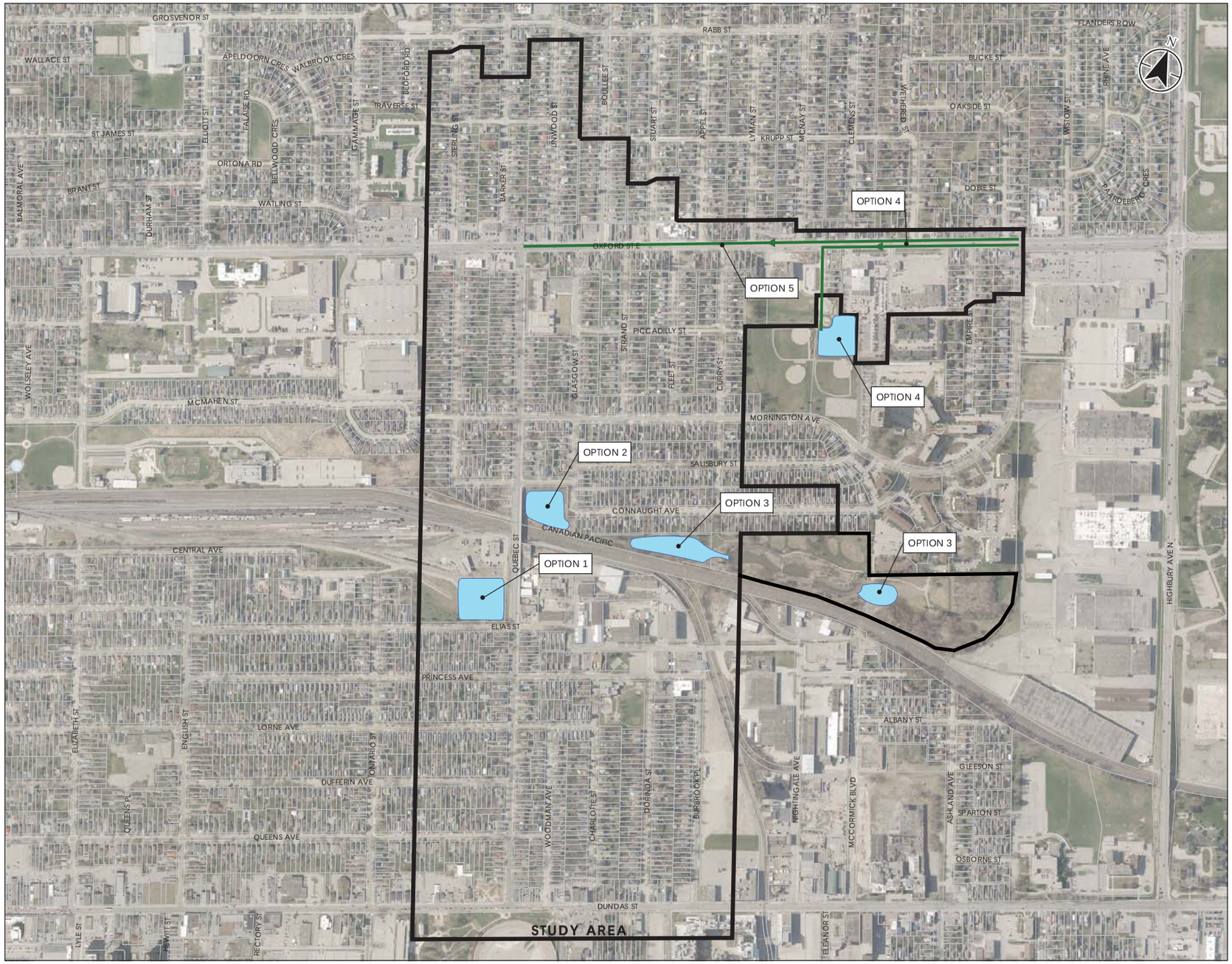
A desktop review was also undertaken of the socio-economic, cultural, and natural environments within the study area in order to identify potential impacts of the alternative solutions being considered. Species at Risk (SAR) tree species were identified within the general study area. Blue ash trees were identified on the edge of the rail corridor and the SWMF and require a minimum of a 23 m radius root protection zone for each tree. The 23 m buffer zone has been identified and shall protect the species from construction disturbances through appropriate tree protection fencing.

## 1.6 PHASE 2 – ALTERNATIVE SOLUTIONS AND EVALUATION

After the problem / opportunity statement was established and justification for the project was determined, alternative solutions were developed. Socio-economic environment, cultural environment, and the natural environmental criteria were identified to evaluate each alternative. To address the existing capacity concerns with the storm and relief sewer system for the area north of the CP Rail Corridor, the following types of alternative solutions were considered:

- Do Nothing
- Stormwater Storage Solutions
- Stormwater Network Upgrades
- A Combination of Storage and Network Upgrades

It was determined a storage solution would have a greater impact on the sewer network performance when compared to the sewer network upgrade solutions. Sewer network upgrades were refined based on the alternative storage solutions evaluated. **Table 1-1** provides summary of the alternative solutions, as depicted in **Figure 1**, which were reviewed as a part of this report. The alternatives focus on the stormwater storage solutions. Various network upgrades have been identified in conjunction with the recommended solution, as described in Section 1.7.




Stantec

Legend

- Study Area
- Proposed SWM Pond
- Proposed Inlet/Outlet Sewer

0 100 200 metres

1:8,000 (At original document size of 11x17)

**Notes**

1. Coordinate System: NAD 1983 UTM zone 17N
2. Base features produced using City of London Open Data.

Project Location
City of London

165630127 REVA
Prepared by ASB on 2019-01-11

Client/Project
CITY OF LONDON
MORNINGTON AREA STORM DRAINAGE SERVICING
ENVIRONMENTAL ASSESSMENT

Figure No.
**1**

**DRAFT**

Title
**Longlisted Alternatives**

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**Table 1-1: Longlist of Alternative Solutions**

| Alternative Solutions | Screening |
|---|---|
| Alternative 0: Do Nothing | **Shortlisted** |
| Alternative 1: Elias Street CPR Switching Yards | Eliminated |
| Alternative 2: Former Furniture Factory Lands | - |
| A. Discharge into the existing Storm Sewer along Quebec Street | **Shortlisted** |
| B. Discharge into the existing Relief Sewer along Quebec Street | **Shortlisted** |
| C. Discharge to the existing Mornington SWM Facility outlet and divert into the Burbrook Place sewer. | Eliminated |
| Alternative 3: Mornington Stormwater Pond Expansion | **Shortlisted** |
| Alternative 4: Infiltration Beds in Mornington Park | Eliminated |
| Alternative 5: Exfiltration Pipe within the Right-of-Way | Eliminated |

Following the review of longlisted alternatives, Alternatives 1, 2C, 4, and 5 were eliminated and were not further reviewed. Alternative 1 was not carried forward due to the significant impact on the existing CP Rail switching yard operations and the unlikelihood that CP Rail would not endorse the sale of these lands. Alternative 2C was eliminated as this solution would require discharging to Burbrook Place Trunk Sewer, which is known to be nearing capacity, and requiring additional storage in the existing Mornington SWMF. Alternative 4 would require another alternative be implemented to address all storm flows in the study area, therefore the benefit of this alternative was minimal. Alternative 5 was not carried forward as the water table and clay soils would hinder the performance of an exfiltration pipe system.

The shortlisted alternatives include the “Do-Nothing” Alternative (Alternative 0) along with Alternatives 2A, 2B, and 3. Alternative 2A involves the construction of a SWMF on the Former Furniture Factory property. The SWMF would be designed to function as a dry pond, which would outlet to the existing Quebec Street storm sewer.

Alternative 2B involves the construction of a SWMF on the Former Furniture Factory property. The SWMF would be designed to function as a dry pond, which would outlet to the Relief Sewer along Quebec Street.

Alternative 3 involves the expansion of the existing Mornington SWMF to provide storage for the Quebec Street Sewer System. The lands associated with this alternative are located north of the CP Rail Corridor and are currently owned by the City of London and make-up part of McCormick Park. The flows would be temporarily stored and discharged into the Burbrook Place trunk sewer system.

An evaluation of the shortlisted alternatives was completed, in which the impacts to the natural, socio-economic and technical environments were reviewed. Alternative 3 was identified as the recommended alternative. The Key advantages and disadvantages identified for Alternative 3 are provided below:

**Advantages:**

- Provides sufficient stormwater storage volume to accommodate storm flows from the upstream catchment area for a 100-year storm event;

- This alternative provides the greatest improvement to sewer performance and a greater reduction in the risk of flooding within the study area when compared to the other alternatives; and
- Acquisitions of lands is not required as the storage facility is already City owned property.

**Disadvantages:**

- Requires a large portion of existing parkland to be repurposed for stormwater management; and
- The implementation of a stormwater storage facility within the McCormack Park lands would require significant tree removals, including the removal of trees that were recently planted in 2013 by volunteers.

The feasibility of low impact development (LID) opportunities was also reviewed. There are many opportunities to implement LID features in the area and it was recommended these opportunities are reviewed in more detail as a part of the City's Infrastructure Renewal Program.

## 1.7 RECOMMENDED ALTERNATIVE

Alternative 3, which includes the expansion of the existing Mornington SWMF to provide storage for the Quebec Street Storm Sewer System has been identified as the recommended solution. Network upgrades are required, including the installation of a separate storm sewer along Oxford Street from Curry Street to Mornington Avenue and along Sterling Street where the existing systems operate as combined sewers. The solution also includes upgrading the storm sewer along Quebec Street and Oxford Street as a part of the Infrastructure Renewal program.

The lands are owned by the City and will not require any land acquisition. Consultation with City of London Parks Planning staff and ReForest London will be required during the design phase of this project. It is anticipated that impacts to the SAR tree species located within McCormick Park can be avoided through site design, and a buffer area has been identified. Provided the buffer area is maintained and mitigation measures implemented, a permit under the Endangered Species Act is not anticipated but shall be confirmed during detailed design.

Due to the south sloping topography, and lack of storm outlet within the study area, minimal sewer performance improvements in the south area are anticipated. It is recommended that further investigation be completed to review the capacity within the separated storm system downstream.

In conjunction with the stormwater management facility, stormwater network upgrades have also been identified as part of the recommended solution and will consist of the following components:

- Reconstruction of the storm sewer system along Oxford Street and Quebec Street;
- Separation of combined sewers along Oxford Street and along Sterling Street; and
- Remove storm flows from the Relief Sewer.

The current storm sewer along Quebec Street does not provide sufficient capacity to accept additional storm flow, therefore the storm catchments contributing to the Relief Sewer cannot be diverted to the storm system until it is upgraded. The storm sewer network upgrades will involve reconstruction of the separated storm sewer along Quebec Street and Oxford Street East, and sewer separation along Sterling Street, to allow all storm flows to be captured by the separated storm system. This will eliminate storm flows from entering the Relief Sewer under typical operation. The recommended stormwater storage solution is depicted in **Figure 2**, and the network upgrades are identified in **Figure 3**.

Stantec

Legend

- Blue Ash Tree Location (approximate)
- Blue Ash Buffer (23 metres)
- Proposed New Storm Sewer
- Proposed Decommissioning of Storm Sewer
- Existing Storm Sewer
- Existing SWM Pond
- Proposed SWM Pond
- Proposed Pathway Connection

0 25 50 metres
1:2,000 (At original document size of 11x17)

**Notes**
1. Coordinate System: NAD 1983 UTM zone 17N
2. Base features produced using City of London Open Data.

Project Location
City of London

165630127 REVA
Prepared by KDB on 2019-01-11

Client/Project
CITY OF LONDON
MORNINGTON AREA STORM DRAINAGE SERVICING
ENVIRONMENTAL ASSESSMENT

Figure No.
**2**

DRAFT

Title
**Recommended Solution - Stormwater Storage Facility**

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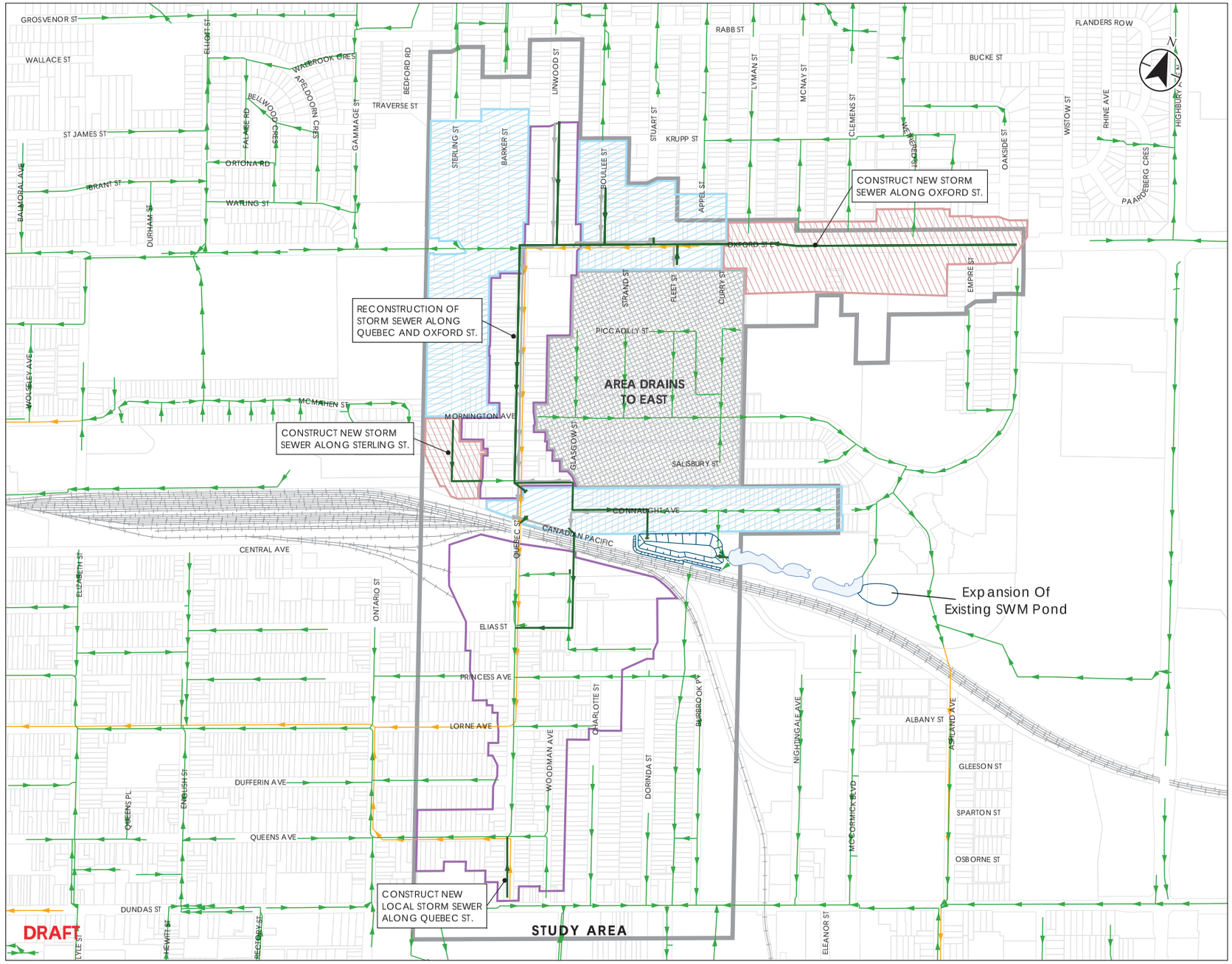


Stantec

Legend

- Study Area
- Proposed New Storm Sewer
- Proposed Decommissioning of Storm Sewer
- Existing Storm Sewer
- Existing Storm and Relief Sewer
- Proposed SWM Pond
- Existing SWM Pond
- Existing Local Storm Sewer Area
- Combined Sewer Area to be Separated
- Storm Sewer Area to be Diverted from Relief Sewer to Local Sewer
- Area Tributary to Mornington SWM Pond

0 250 500 metres

1:8,000 (At original document size of 11x17)

**Notes**

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced using City of London Open Data.

Project Location
City of London

165630127 REVA
Prepared by KDB on 2019-02-15

Client/Project
CITY OF LONDON
MORNINGTON AREA STORM DRAINAGE SERVICING
ENVIRONMENTAL ASSESSMENT

Figure No.
**3**

DRAFT

Title
**Recommended Solution - Stormwater Network Upgrades**

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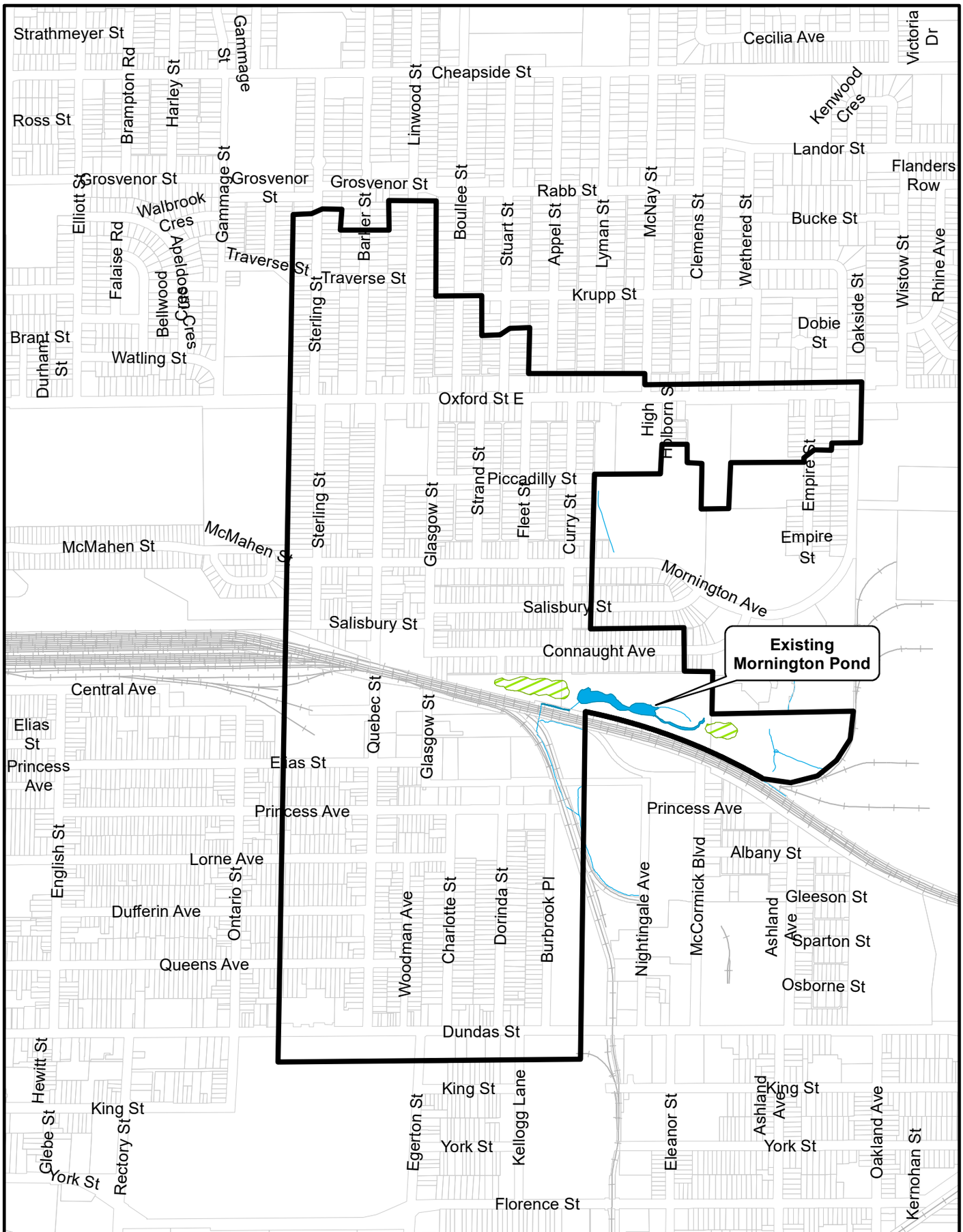
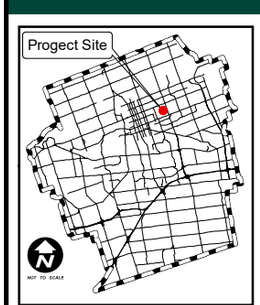



# APPENDIX 'B' - LOCATION MAP
# MORNINGTON AREA STORM DRAINAGE SERVICING - EA




1:10,000

0 0.125 0.25 0.5
Kilometers

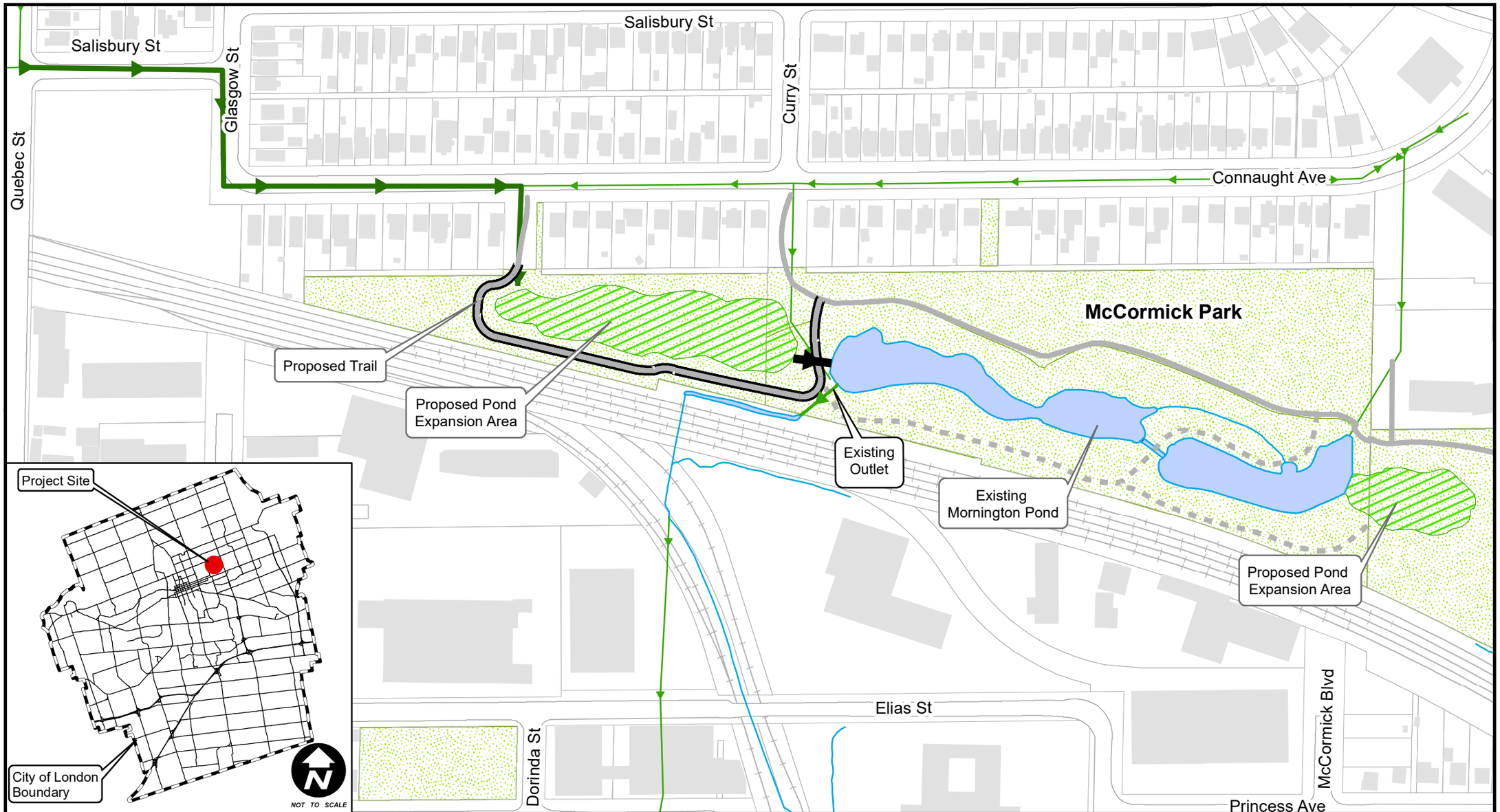
**Legend:**

- Study Area
- Land Parcel
- Proposed Mornington Pond Expansion
- Existing Mornington Pond
- Railroad

Map Produced by Wastewater and Drainage Engineering

*300 Dufferin Avenue, PO Box 5035 London, Ontario N6A 4L9 www.London.ca*

London CANADA




## APPENDIX 'C' - PREFERRED ALTERNATIVE - MORNINGTON AREA STORM DRAINAGE SERVICING ENVIRONMENTAL ASSESSMENT

0 20 40 80
Meters

**Legend**

- Existing Mornington Pond
- Proposed Dry Pond
- Park
- Buildings
- Parcels
- Proposed Storm Sewer
- Connection to Existing Pond
- Outlet
- Existing Storm Sewer
- Paved Trail
- Unpaved Path
- Proposed Trail
- Railways

Map Produced by Wastewater and Drainage Engineering

*300 Dufferin Avenue, PO Box 5035 London, Ontario N6A 4L9 www.London.ca*

London CANADA

| | |
|---|---|
| **TO:** | **CHAIR AND MEMBERS<br>CIVIC WORKS COMMITTEE<br>MEETING OF MARCH 18, 2019** |
| **FROM:** | **KELLY SCHERR, P.ENG., MBA, FEC<br>MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER** |
| **SUBJECT:** | **BLUE COMMUNITIES PROGRAM FEASIBILITY** |

## RECOMMENDATION

That on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, the following report regarding the Council of Canadians' Blue Communities Project and its application to the City of London **BE RECEIVED** for information.

## PREVIOUS REPORTS PERTINENT TO THIS MATTER

- 6th Meeting on the Advisory Committee on the Environment, Wednesday, May 02, 2018, Scheduled Items #2.2

## 2015-2019 STRATEGIC PLAN

The 2015 – 2019 Strategic Plan identifies these objectives under Building a Sustainable City: 1B – Manage and improve water, wastewater, and storm water infrastructure and services; 3D – Encourage waste reduction and other environmentally friendly behaviours.

## BACKGROUND

### Purpose

The purpose of this report is to respond to the following resolution by the Advisory Committee on the Environment:

> b) the Civic Administration BE REQUESTED to report back to the appropriate committee with respect to the feasibility of implementing the Blue Communities Program in London; it being noted that the Advisory Committee on the Environment received a verbal presentation from J. Picton-Cooper with respect to this matter.

### Context

On May 2, 2018, the Advisory Committee on the Environment received a verbal presentation from J. Picton-Cooper, of the London Chapter Council of Canadians, regarding the Blue Communities Project. The Blue Communities Project was developed by the Council of Canadians, the Blue Planet Project, and the Canadian Union of Public Employees (CUPE) in 2009 to support a "water common's framework". The project involves encouraging municipalities to pass resolutions that recognize water as a shared resource for all, so that organizations can treat water as a common good with a shared responsibility for its safekeeping and accessibility.

## DISCUSSION

### Blue Community Requirements

To become a Blue Community, resolutions must be passed that:

| | |
|---|---|
| Resolution 1: | Recognize water and sanitation as human rights. |
| Resolution 2: | Ban or phase out the sale of bottled water in municipal facilities and at municipal events. |
| Resolution 3: | Promote publicly financed, owned, and operated water and wastewater services. |

The project's focus is to challenge the privatization, commodification, and corporate control of water occurring around the world, including the promotion of generating private funds for infrastructure through public private partnerships (P3s). Blue Community resolutions are not legally binding; however the designation will be lost should actions or policies be carried out in contravention of resolutions.

**City of London Feasibility**

Many of the City's existing operations and programs align with the Blue Communities Project's resolutions; however, several significant changes to core business processes would be required to fully comply with the resolutions.

***Resolution 1: Recognize water and sanitation as human rights.***

The Blue Communities initiative promotional literature states that:

> "If a municipality has a policy that cuts off a resident's water or wastewater services, this would go against the human rights to water and sanitation resolution and the municipality would not be eligible to become a Blue Community."

The City of London currently uses service disconnections as a last resort when water billing is severely in arrears. Customers are provided with multiple avenues to address arrears. Small arrears (sub $100) receive standard invoices indicating applicable late charges. Larger arrears are followed with a warning letter, and an invitation to contact London Hydro if needed. Hand delivered notices with warnings of potential disconnects are presented if no action has been taken on the account. To date in 2019, there have been no water disconnections. In 2018, there were ten (10) water disconnections to prevent frozen pipes (not for non-payment of water bills), and there were zero (0) water disconnections in 2017.

The City offers a Customer Assistance Programs for those with difficulty paying their bill. A 25-cent fixed fee that is applied to each monthly bill for all single family residential water customers in London. These funds are collected over the year and applied to the customer assistance program. The funding is collected in a special reserve fund and will be drawn against for:

- Helping low-income Londoners deal with crisis situations on their monthly water bills using existing programs managed and delivered through partnerships with London Hydro, the Salvation Army, and the City;
- Helping low-income Londoners make changes to the fixtures in their homes to help lower their monthly water use. (On average 40% of home water use is from the toilet); and
- Helping London's water customers pay for water and wastewater charges one time that have occurred as a result of a plumbing failure in their homes.

***Resolution 2: Ban or phase out the sale of bottled water in municipal facilities and at municipal events.***

Resolution 2 requires municipalities to take active steps to reduce the sale of bottled water in municipal facilities and events, with the eventual goal of banning their sale entirely. There is currently a ban on the sale of bottled water in municipal facilities including all solely owned and operated arenas and community centers. Facilities that are operated or occupied by a partner are subject to their own policies. Vendors at

events where the City's water stations are available (the "Thirstmobile" and "Thirstations") are encouraged to not sell bottled water as a condition of their use.

The City of London currently has a bottled water ban in place in municipal facilities; however, future work would be required to develop a plan to eventually fully phase out bottled water with third parties.

***Resolution 3: Promote publicly financed, owned, and operated water and wastewater services***

The City of London water and wastewater systems and the Lake Huron and Elgin Area Primary Water Supply Systems are all publicly financed, owned, and operated. Resolution 3 can be met without changes to existing operations.

**Feasibility Review**

In order to meet the requirements of the Blue Communities project the City of London will require a major change to its current arrears billing practice. If Council would like to further consider Blue Community status, it is recommended that further work be undertaken to understand the financial implications of the initiative. This would include contacting other Blue Communities and exploring other effective means of collecting arrears.

## CONCLUSIONS

The Blue Communities project values generally align with the City of London water service's approach to providing compassionate services to our community. The City of London's current practices differ from those proposed by the Blue Communities project; however, our programs do support those with financial challenges albeit in a different way. If Council wants to further explore a Blue Community designation, additional research and changes to our current business processes would be required.

**Acknowledgements**

This report was prepared with the assistance of Daniel Hsia, P.Eng. Water Demand Manager.

| PREPARED BY: | REVIEWED & CONCURRED BY: |
|---|---|
| | |
| **AARON ROZENTALS, P.ENG., DIVISION MANAGER, WATER ENGINEERING** | **SCOTT MATHERS, MPA, P. ENG., DIRECTOR, WATER AND WASTEWATER** |

| RECOMMENDED BY: |
|---|
| |
| **KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER** |

CC: Daniel Hsia

| | |
|---|---|
| **TO:** | **CHAIR AND MEMBERS<br>CIVIC WORKS COMMITTEE<br>MEETING ON TUESDAY, MARCH 18, 2019** |
| **FROM:** | **KELLY SCHERR, P.ENG., MBA, FEC<br>MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER** |
| **SUBJECT:** | **TOILETS ARE NOT GARBAGE CANS STICKER INITIATIVE** |

## RECOMMENDATION

That, on the recommendation of the Managing Director of Environmental and Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the requests of the 7th Report of the Advisory Committee on the Environment, June 6, 2018:

a) The "Toilets Are Not Garbage Cans" sticker initiative **CONTINUE** as a voluntary program rather than a required program at all City of London facilities.

## PREVIOUS REPORTS PERTINENT TO THIS MATTER

None.

## 2015-19 STRATEGIC PLAN

This project initiative supports the Strategic Plan with respect to Building a Sustainable City-Robust Infrastructure through a public information campaign to protect the sanitary sewer system.

## BACKGROUND

### Purpose

This report is in response to requests received from the Advisory Committee on the Environment (ACE) to replace the voluntary "Toilets Are Not Garbage Cans" sticker initiative with a required program at all City of London facilities.

### Context

Wastewater Treatment Operations in conjunction with Corporate Communications have developed a sticker for placement in washrooms advising that "Toilets Are Not Garbage Cans". A presentation was given on June 6, 2018 to the Waste Sub-committee of ACE to outline the goal of the sticker initiative. The presentation was well received and led to the following requests, resolutions b) i,ii and iii from ACE, attached as Appendix 'A':

- Require all bathroom stalls within City of London facilities to display the stickers;
- Assign a staff member to the initiative for follow up by ACE; and
- Report back to ACE on the feasibility of requiring all facilities that receive City of London funding to display the sticker in all bathroom stalls.

## DISCUSSION

Non-human waste material including wipes, dental floss, feminine hygiene products, condoms and other debris can plug wastewater equipment and collection systems and can also combine with other wastes such as fats, oils and greases (FOG) to form large “reinforced” masses throughout the sanitary system; both lead to additional operational and maintenance costs and increase the risk of system overflows. The washroom sticker was developed to inform residents that toilets and the sanitary system are not designed for garbage disposal. The sticker campaign also compliments the “Your Turn” grease cups which are promoted at many events and distributed to organizations across the City. Both initiatives are intended to raise the awareness of the problems associated with disposing these materials into the sanitary system.

There are approximately 1,000 toilets in 128 City operated facilities. From the outset installing the stickers has been voluntary with some facilities receiving a direct benefit if their sanitary systems are prone to plugging with flushed debris. Other sites may be more prone to vandalism and replacing the stickers can become an additional maintenance item. The labour and material costs to install the stickers in the 128 sites is estimated at $5,200.00 plus ongoing maintenance and monitoring. Expanding the program to all city funded facilities could easily double this cost in addition to the resources required to maintain a site inventory and contact list; the stickers cost $187.00 per 1000.

The “Toilets Are Not Garbage Cans” sticker initiative is voluntary and is also available to institutions outside of those operated or funded by the City. The sites voluntarily displaying the stickers maintain them at no cost to the City outside of the cost of the stickers themselves. Low cost is important in an information program as its effectiveness cannot be easily quantified and it allows complimentary programs such as the grease cups to be implemented. Making the stickers mandatory at all City of London sites will dramatically increase the cost of the initiative and may displace current and future programs aimed at improving the reliability of the wastewater system.

As an alternative to a mandatory program the stickers can be offered to other City facilities for voluntary installation and maintenance as part of their normal washroom maintenance activities. This will increase the exposure of the stickers without the resources required to manage a mandatory program.

## CONCLUSIONS

While it may be desirable to have these stickers displayed in all City of London facilities, it is not cost effective to implement the program as requested by Advisory Committee on the Environment. Expanding the distribution and maintenance of the “Toilets Are Not Garbage Cans” stickers on a voluntary basis is the recommended approach.

**Acknowledgements**

This report was prepared with the assistance of Tony Van Rossum, Environmental Services Engineer, Barry Orr, Sewer Outreach and Control Inspector, Wastewater Treatment Operations and Val Morgado, Manager, Facilities Maintenance and Operations.

| **PREPARED BY:** | **REVIEWED BY:** |
|---|---|
| | |
| **GEORDIE GAULD**<br>**DIVISION MANAGER**<br>**WASTEWATER TREATMENT OPERATIONS** | **SCOTT MATHERS, MPA, P.ENG.**<br>**DIRECTOR**<br>**WATER, WASTEWATER AND TREATMENT** |

| **RECOMMENDED BY:** |
|---|
| |
| **KELLY SCHERR, P.ENG., MBA, FEC**<br>**MANAGING DIRECTOR**<br>**ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER** |

Attach: Appendix ‘A’ - Municipal Council Resolution, June 26, 2018
Appendix ’B’ - Toilets Are Not Garbage Cans Sticker

cc: Tony Van Rossum, Wastewater Treatment Operations
Barry Orr, Wastewater Treatment Operations
Val Morgado, Manager, Facilities Maintenance and Operations
Glynis Tucker, Corporate Communications
Alan Dunbar, Financial and Corporate Services
Jason Davies, Financial Policy and Planning

**Appendix 'A'**

**Council Resolution- June 26, 2018**

P.O. Box 5035
300 Dufferin
Avenue
London, ON
N6A 4L9

June 27, 2018

K. Scherr
Managing Director, Engineering and Environmental Services and City Engineer

I hereby certify that the Municipal Council, at its meeting held on June 26, 2018 resolved:

That, the following actions be taken with respect to the 7th Report of the Advisory Committee on the Environment from its meeting held on June 6, 2018:

a) the Managing Director, Environmental and Engineering Services & City Engineer BE REQUESTED to review the presentation appended to the 7th Report of the Advisory Committee on the Environment from C. Marsales, Senior Manager, Waste Management Service, City of Markham, with respect to the Markham Waste Diversion Strategy "Mission Green" and explore the feasibility of implementing a similar program in City of London facilities and report to the Civic Works Committee;

b) the Civic Administration BE REQUESTED to report to the Civic Works Committee, as soon as possible, on the undertaking of the following with respect to the "Toilets Are Not Garbage Cans" public awareness sticker initiative, coordinated by B. Orr, Sewer Outreach and Control Inspector:

i) requiring all bathroom stalls within City of London facilities to display the "Toilets Are Not Garbage Cans" sticker;

it being noted that the above-noted sticker previously approved for use by the City of London Communications Department, is currently displayed in some, but not all, City of London facility bathroom stalls and is being displayed, voluntarily, by many organizations, including retail stores, restaurants and schools;

ii) identifying to the Advisory Committee on the Environment (ACE) the key Civic Administration who would be responsible for implementing the above-noted action, so that the ACE may follow up on the progress of the implementation and in order to have a specific contact who can advise the ACE of the reasons why a sticker is not displayed in certain instances; and,

iii) reporting back to the ACE by September 7, 2018 with respect to the feasibility of requiring all facilities that receive City of London funding, including, but not limited to, Centennial Hall, the Covent Garden Market, Museum London, London Public Library locations, police and fire stations, Tourism London, the London Convention Centre, Dearness Home, Kettle Creek Conservation Authority, Lower Thames Valley Conservation Authority and the Upper Thames River Conservation Authority, to display the above-noted sticker in all bathroom stalls;

it being noted that the Waste Sub-Committee report, appended to the agenda, was received;

The Corporation of the City of London
Office 519.661.2500 x4856
Fax 519.661.4892
hlysynsk@london.ca
www.london.ca

c) J. Ramsay, Project Manager, Rapid Transit, BE ADVISED that M. Bloxam will represent the Advisory Committee on the Environment (ACE) on the Municipal Advisory Group related to Rapid Transit; it being noted that S. Hall will act as an alternate representative for the ACE on the Advisory Group; and,

d) clauses 1.1, 2.2, 2.3, 3.1 to 3.6, 5.1 and 5.2, BE RECEIVED. (3.1/11/PEC)

C. Saunders
City Clerk
/lm

cc. B. Orr, Sewer Outreach and Control inspector
J. Ramsay, Project Director, Rapid Transit
P. Shack, Committee Secretary
CWC Deferred List
Chair and Members, Advisory Committee on the Environment

The Corporation of the City of London
Office 519.661.2500 x4856
Fax 519.661.4892
hlysynsk@london.ca
www.london.ca

**APPENDIX 'B'**

**Toilets Are Not Garbage Cans Sticker**

| | |
|---|---|
| **TO:** | **CHAIR AND MEMBERS<br>CIVIC WORKS COMMITTEE<br>MEETING ON MARCH 18, 2019** |
| **FROM:** | **KELLY SCHERR, P.ENG., MBA, FEC<br>MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER** |
| **SUBJECT:** | **CONTRACT AWARD:<br>2019 WATERMAIN CLEANING AND STRUCTURAL LINING TENDER NO 16-105** |

## RECOMMENDATION

That on the recommendation of the Managing Director, Environmental & Engineering Services & City Engineer, the following actions **BE TAKEN** with respect to the award of contract for the 2019 Watermain Cleaning and Structural Lining Project:

(a) the bid submitted by Aquarehab (Canada) Inc., 2145 Michelin Street, Laval, Quebec, Canada, Drive, H7L 5B8, at its tendered price of $6,659,520.48 (excluding H.S.T.), for the 2019 Watermain Cleaning and Structural Lining program, **BE ACCEPTED**; it being noted that this is the third year of a three year contract submitted by Aquarehab (Canada) Inc. and where unit prices were carried over from the original tendered contract plus a four percent increase as stipulated in the original contract. The original bid submitted by Aquarehab (Canada) Inc. in 2017 was the lower of two bids received. The City has the sole discretion to renew the contract based on price and performance;

(b) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached hereto as Appendix 'A';

(c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;

(d) the approval given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract or issuing a purchase order for the material to be supplied and the work to be done relating to this project (Tender 16-105); and

(e) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

## PREVIOUS REPORTS PERTINENT TO THIS MATTER

Contract Award: 2017 Watermain Cleaning and Structural Lining Tender No 16-105, March 7, 2017 Civic Works Committee, Agenda Item #7

Contract Award: 2018 Watermain Cleaning and Structural Lining Tender No 16-105, April 17, 2018 Civic Works Committee, Agenda Item # 2.9

## 2015-2019 STRATEGIC PLAN

This report supports the Strategic Plan in the following areas:

- Building a Sustainable City: robust infrastructure; manage and improve water infrastructure and services.

## BACKGROUND

**Purpose**

This report recommends the award of Tender No. 16-105 to undertake 7.4 km of watermain cleaning and structural re-lining as shown on the location map in Appendix 'B'.

**Context**

Since 1989, the City has been rehabilitating watermains using innovative trenchless technologies which include cement mortar lining and more recently structural lining. These methods allow the City to eliminate water quality problems (red/rusty looking water), improve fire flows, gain additional years of life from the mains and delay the need for full replacement reconstruction projects which are both expensive and socially disruptive. The aesthetic water quality in these rehabilitated watermains is dramatically improved.

## DISCUSSION

There are two forms of watermain lining undertaken by the City; cement mortar lining and structural lining. Cement mortar lining involves the cleaning of the host watermain and re-lining the pipe wall with a thin layer of cement. This process effectively protects watermains from internal corrosion but does not improve the overall strength of the pipe. Structural lining involves the same cleaning of the host watermain but is designed to structurally support the watermain by installing a composite liner into the host pipe. This process creates a stand-alone structurally sound liner in the old pipe.

Over the last several years there has been a shift in focus to structural lining; concentrating on areas of the City where there are no lead services, no other current infrastructure replacement needs (i.e. roads or sewers), and a high frequency of main breaks on cast iron watermains. In areas where structural lining has been performed, the occurrence of watermain breaks has dropped to zero in most cases. Structural lining also extends the life of watermains by 50 years or more and when done on watermains that meet the criteria above, costs 40-50% less than traditional open-cut watermain replacement. In general, trenchless technologies, such as structural lining, have substantially lower social and environmental impacts when compared to traditional open-cut techniques.

The current project, involves the cleaning and structural lining of approximately 7.4 kilometers of watermain on Antrim Crescent, Cantley Crescent, Osgoode Drive, Kinburn Crescent, Mendip Crescent, Willow Lane, Masson Court, Metcalfe Crescent, Bessemer Road, Royce Court, Bessemer Court, Newbold Court, Newbold Street and Adelaide Street South. The cost to replace this length of watermain by traditional construction methods including restoration would be approximately $13,000,000.00 or roughly double the cost of structural lining.

The work is scheduled to take one hundred and thirty (130) working days to substantially complete and will start this spring, following approval of this report.

A project location map is attached as Appendix 'B' for reference.

**Tender Summary:**

The tender total for the 2019 Watermain Cleaning and Structural Lining Program is $6,659,520.48 (exclusive of H.S.T.). This includes a contingency allowance of $600,000.00 (exclusive of HST).

## CONCLUSIONS

Award of this contract to Aquarehab (Canada) Inc. is consistent with the three-year contract award undertaken in 2017. The work in 2019 will be the third year of a three-year contract. Undertaking this structural lining work allows the City to achieve the objective of rehabilitating water infrastructure which has been subject to breaks. It is in the best financial and technical interests of the City to proceed with the award of this contract for watermain cleaning and structural lining.

**Acknowledgements**

This report was prepared within the Water Engineering Division by Dave Chromczak, C.E.T., Technologist II.

| **SUBMITTED BY:** | **CONCURRED BY:** |
|---|---|
| | |
| **AARON ROZENTALS, P.Eng**<br>**DIVISION MANAGER**<br>**WATER ENGINEERING DIVISION**<br>**ENVIRONMENTAL AND ENGINEERING SERVICES** | **SCOTT MATHERS, MPA, P. ENG**<br>**DIRECTOR**<br>**WATER & WASTEWATER**<br>**ENVIRONMENTAL AND ENGINEERING SERVICES** |

| **RECOMMENDED BY:** |
|---|
| |
| **KELLY SCHERR, P.ENG., MBA, FEC**<br>**MANAGING DIRECTOR,**<br>**ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER** |

Attach: Appendix ‘A’ – Sources of Financing
Appendix ‘B’ – Project Location Map

c.c. John Freeman, Ugo DeCandido, Gary McDonald, Alan Dunbar, Ugo DeCandido, Aqua Rehab Inc.

**APPENDIX 'A'**

**#19027**

Chair and Members
Civic Works Committee

March 18, 2019
(Award Contract)

**RE: 2019 Watermain Cleaning and Structural Lining Tender #16-105**
**(Subledger WT190002)**
**Capital Project EW356318 - Main Rehabilitation**
**Capital Project EW356319 - Main Rehabilitation**
**Aquarehab (Canada) Inc. - $6,659,520.48 (excluding H.S.T.)**

**FINANCE & CORPORATE SERVICES REPORT ON THE SOURCES OF FINANCING:**

Finance & Corporate Services confirms that the cost of this project can be accommodated within the financing available for it in the Capital Works Budget and that, subject to the adoption of the recommendations of the Managing Director, Environmental & Engineering Services & City Engineer, the detailed source of financing for this project is:

| **SUMMARY OF ESTIMATED EXPENDITURES** | **Approved Budget** | **Revised Budget** | **Committed to Date** | **This Submission** | | **Balance for Future Work** |
|---|---|---|---|---|---|---|
| **EW356318-Main Rehabilitation** | | | | | | |
| Construction | $6,172,900 | $6,172,400 | $5,143,554 | $603,828 | | $425,018 |
| City Related Expenses | | 500 | 69 | | | 431 |
| | 6,172,900 | 6,172,900 | 5,143,623 | 603,828 | | 425,449 |
| **EW356319-Main Rehabilitation** | | | | | | |
| Construction | 6,172,900 | 6,172,900 | | 6,172,900 | | 0 |
| **NET ESTIMATED EXPENDITURES** | **$12,345,800** | **$12,345,800** | **$5,143,623** | **$6,776,728** | 1) | **$425,449** |
| **SUMMARY OF FINANCING:** | | | | | | |
| **EW356318-Main Rehabilitation** | | | | | | |
| Capital Water Rates | $6,172,900 | $6,172,900 | $5,143,623 | $603,828 | | $425,449 |
| **EW356319-Main Rehabilitation** | | | | | | |
| Capital Water Rates | 6,172,900 | 6,172,900 | | 6,172,900 | | 0 |
| **TOTAL FINANCING** | **$12,345,800** | **$12,345,800** | **$5,143,623** | **$6,776,728** | | **$425,449** |

1) **Financial Note:**

| | **EW356318** | **EW356319** | **Total** |
|---|---|---|---|
| Contract Price | $593,384 | $6,066,136 | $6,659,520 |
| Add: HST @13% | 77,140 | 788,598 | 865,738 |
| Total Contract Price Including Taxes | 670,524 | 6,854,734 | 7,525,258 |
| Less: HST Rebate | 66,696 | 681,834 | 748,530 |
| Net Contract Price | $603,828 | $6,172,900 | $6,776,728 |

JG

Jason Davies
Manager of Financial Planning & Policy

**APPENDIX B**

**LOCATION MAP**

**2019 Watermain Cleaning and Lining**

| | |
|---|---|
| **TO:** | **CHAIR AND MEMBERS<br>CIVIC WORKS COMMITTEE<br>MEETING ON MONDAY, MARCH 18, 2019** |
| **FROM:** | **KELLY SCHERR, P. ENG<br>MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER** |
| **SUBJECT:** | **SINGLE SOURCE 19-05<br>TREE PRUNING AND REMOVAL SERVICES** |

## RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services & City Engineer, following actions **BE TAKEN** with respect to the award of Tree Pruning and Removal Services:

a) That approval hereby **BE GIVEN** to enter into a three year with two additional option years contract for Tree Pruning and Removal Services to Davey Tree Expert Co. of Canada, Limited, 500 – 611 Tradewind Drive, Ancaster, Ontario, L9G 4V5;

b) That Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with these contracts;

c) Approval hereby given **BE CONDITIONAL** upon the Corporation negotiating satisfactory prices, terms and conditions with Davey Tree Expert Co. of Canada, Limited to the satisfaction of the Manager of Purchasing and Supply and the Managing Director, Environmental & Engineering Services & City Engineer; and

d) Approval hereby given **BE CONDITIONAL** upon the Corporation entering into a formal contract or having a purchase order relating to the subject matter of this approval.

## BACKGROUND

**Purpose**

The purpose of this report is to seek Council approval to establish a three year with two additional optional years single source contract with Davey Tree Expert Co. of Canada, Limited to provide tree pruning and removal services for the City of London Transportation and Roadside Operations Division.

Tree pruning and removal service is an annual program that is performed on and ongoing basis as the Forestry Division has embarked upon a trim cycle reduction to reduce risk, promote tree health and demonstrate due diligence. The contracted crews will supplement city staff in performing these tasks. The contractors' duties include tree pruning, removal, stumping and Emerald Ash Borer tree injections.

Contractors are relied upon to perform the above mentioned duties during regular work hours, off hours and for emergency response. Currently, the City has a need for increased forestry planned maintenance services beyond the traditional pruning cycle. Increased maintenance will be required due to the Emerald Ash Borer program and possible Oak wilt.

## DISCUSSION

**Purchasing Process**

An open to the public Request for Qualification was issued January 8, 2019 for the tree pruning and removal services. Two potential bidders submitted the pre-qualification documents but subsequently only one (1) bidder; Davey Tree met the pre-qualification requirements. The submissions were reviewed and evaluated on the following requirements:

- Qualifications Requirements
- Experience
- Equipment
- References
- Health and Safety

**Financial Impact**

The estimated annual expenditure is $1,653,151.00 which is based on the estimated annual hours and tendered hourly rates. Funding for this project is available in the Forestry Operating budget 710501.325600 and Capital Account PD 2044 Emerald Ash Borer Management, as detailed in Appendix ‘A’ (attached) Source of Financing.

## CONCLUSION

Civic Administration have reviewed the tender bid and recommends that Davey Tree Expert Co. of Canada Inc. be awarded the contract, it being noted that only one compliant bidder met the expectations asked in the pre-qualification stage and it is being reported as a Single Source as per the Procurement of Goods and Services Policy Section 14.4 (d) & (e). “There is a need for compatibility with goods and/or services previously acquired or the required goods and/or services will be additional to similar goods and/or services being supplied under an existing contract (i.e. contract extension or renewal); and “The required goods and/or services are to be supplied by a particular supplier(s) having special knowledge, skills, expertise or experience”.

**Acknowledgements**

This report was prepared by Andy Beaton, Manager Forestry Operations and Chris Rinehart, Procurement Specialist, Purchasing and Supply.

| **SUBMITTED BY:** | **RECOMMENDED BY:** |
|---|---|
| | |
| **JOHN PARSONS**<br>**DIVISION MANAGER, ROAD OPERATIONS AND FORESTRY** | **DOUG MACRAE, P. ENG**<br>**DIRECTOR, ROADS &TRANSPORTATION** |
| **REVIEWED AND CONCURED BY:** | |
| | |
| **KELLY SCHERR, P. ENG, MBA, FEC**<br>**MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER** | |

Appendix ‘A’ Source of Financing

**APPENDIX 'A'**

**#19019**

Chair and Members
Civic Works Committee

March 18, 2019
(Award Contract)

**RE: Single Source 19-05**
**Tree Pruning and Removal Services**
**Capital Project PD2044 - Management of Emerald Ash Borer Infestation**
**Operating Business Unit 710501 - Forestry Operations**
**Davey Tree Expert Co. of Canada, Limited - $1,653,151.00 (excluding H.S.T.)**

**FINANCE & CORPORATE SERVICES REPORT ON THE SOURCES OF FINANCING:**

Finance & Corporate Services confirms that the cost of this project can be accommodated within the financing available for it in the Capital Works Budget and that, subject to the adoption of the recommendations of the Managing Director, Environmental & Engineering Services & City Engineer, the detailed source of financing for this project is:

| **ESTIMATED EXPENDITURES** | **Approved Budget** | **Revised Budget** | **Committed To Date** | **This Submission** | | **Balance for Future Work** |
|---|---|---|---|---|---|---|
| **PD2044 - Management of Emerald Ash Borer Infestation** | | | | | | |
| Construction | $3,200,000 | $3,192,801 | $2,802,922 | $389,879 | | $0 |
| City Related Expenses | | 7,199 | 7,199 | | | 0 |
| | 3,200,000 | 3,200,000 | 2,810,121 | 389,879 | | 0 |
| **Business Unit 710501 (Forestry Operations)** | | | | | | |
| Contract Services (710501.325600) | 1,648,366 | 1,648,366 | 239,802 | 1,292,368 | | 116,196 |
| **NET ESTIMATED EXPENDITURES** | **$4,848,366** | **$4,848,366** | **$3,049,923** | **$1,682,247** | **1)** | **$116,196** |
| **SUMMARY OF FINANCING:** | | | | | | |
| **PD2044 - Management of Emerald Ash Borer Infestation** | | | | | | |
| Capital Levy | $3,200,000 | $3,200,000 | $2,810,121 | $389,879 | | $0 |
| **Business Unit 710501 (Forestry Operations)** | | | | | | |
| Contract Services (710501.325600) | 1,648,366 | 1,648,366 | 239,802 | 1,292,368 | | 116,196 |
| **TOTAL FINANCING** | **$4,848,366** | **$4,848,366** | **$3,049,923** | **$1,682,247** | | **$116,196** |

1) **FINANCIAL NOTE:**

| | **PD2204** | **BU 710501** | **TOTAL** |
|---|---|---|---|
| Contract Price | $383,135 | $1,270,016 | $1,653,151 |
| Add: HST @13% | 49,808 | 165,102 | 214,910 |
| Total Contract Price Including Taxes | 432,943 | 1,435,118 | 1,868,061 |
| Less: HST Rebate | 43,064 | 142,750 | 185,814 |
| Net Contract Price | $389,879 | $1,292,368 | $1,682,247 |

lp

Jason Davies
Manager of Financial Planning & Policy

| | |
|---|---|
| **TO:** | **CHAIR AND MEMBERS<br>CIVIC WORKS COMMITTEE<br>MEETING ON MARCH 18, 2019** |
| **FROM:** | **KELLY SCHERR, P. ENG., MBA, FEC<br>MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER** |
| **SUBJECT:** | **CONTRACT AWARD: TENDER NO. 19-23<br>ARTERIAL ROAD REHABILITATION PROJECT<br>CONTRACT No. 1** |

## RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the award of a contract for the 2019 Arterial Road Rehabilitation Project Contract No. 1:

(a) the bid submitted by Coco Paving Inc. (London), at its submitted tendered price of $4,571,000.00 (excluding H.S.T.), for said project **BE ACCEPTED**; it being noted that the bid submitted by Coco Paving Inc. (London) was the lowest of two (2) bids received and meets the City's specifications and requirements in all areas;

(b) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached hereto as Appendix ‘A’;

(c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;

(d) the approval given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract for the material to be supplied and the work to be done relating to this project (Tender 19-23); and,

(e) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

## 2015-19 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus area of Building a Sustainable City by addressing and managing the infrastructure gap. The improvements provided by this contract will improve mobility for cyclists, transit, automobile users and pedestrians.

## BACKGROUND

**Purpose**

This report recommends the award of a tender related to the construction contract for the rehabilitation/resurfacing of major roads in the City of London.

## DISCUSSION

The City of London is responsible for a transportation system that promotes the movement of goods and services and strengthens economic growth. The road network provides mobility choices for residents and improves quality of life. Good roads promote business, create employment, provide social opportunities, improve emergency response and create markets.

The City of London has a comprehensive pavement management system that monitors and renews roads in the most cost-effective manner and forms a part of the broader Corporate Asset Management Strategy. The annual Life Cycle Program to repair and resurface main roads (arterial, primary collectors, expressways and freeways) ensures our roads remain safe and in good repair.

This is the first of two contracts through which the Major Road Network will be renewed. The road rehabilitation program is delivered through a series of contracts grouping similar works to increase competition. Pavement renewal also occurs in a coordinated manner through the infrastructure renewal contracts which include water and sewer needs.

This 2019 Arterial Road Rehabilitation No. 1 contract includes the road segments listed below (and illustrated in maps in Appendix A). The following roadways will be undergoing pavement rehabilitation processes, such as mill & pave and pad/overlay, using funding from the approved 2019 Main Road Network Improvement Budget. The type of rehabilitation is a function of the existing pavement structure, condition and strategy or a response to a specific issue. Strategies include considerations such as desired service life. Some rehabilitations aim to create a new pavement for a long service life and others are shorter term holding strategies if a larger scope project is on the horizon.

| | | |
|---|---|---|
| A. | Oxford Street West-1 | Woodward Avenue/Platt's Lane to 200m west of Proudfoot Lane |
| B. | Oxford Street West-2 | Median modification at Capulet Walk |
| C. | Sunningdale Road East | Highbury Avenue North to Clarke Road |
| D. | Sunningdale Road West | Wonderland Road North to Hyde Park Road |
| E. | Wellington Road | Southbound lanes surface replacement only between Commissioners Road and Southdale Road |
| F. | Wharncliffe Road S-1 | Elmwood Avenue to Springbank Drive |
| G. | Wharncliffe Road S-2 | Campbell Street to Exeter Road/Bostwick Road |

**Traffic Management**

An essential part of the project will be communication with residents and businesses along each road segment regarding schedule, duration, expected impacts, and to introduce key project members from the contractor and the City. In general, impacts on the community and through traffic will be short in duration.

Oxford Street West-1, Wellington Road and Wharncliffe Road South-1 within the limits of this contract allow for concrete repairs and maintenance hole adjustments to be completed during daytime hours. All paving related work is restricted to night work between 7:00 pm and 7:00 am to reduce traffic congestion on these arterial roadways.
Every effort is being made to ensure Londoners are aware of construction zones and traffic detours resulting from road work. Daily updates are provided through the City's website, www.london.ca/construction with information about road closures, ongoing and upcoming projects on City streets. The social impact of this work is being mitigated through coordination and communication.

The specific communication strategies include:

- 2019 construction program media release;
- Social media (Facebook and Twitter); and
- Renew London Website (project updates, daily email to media and emergency services).

Residents are encouraged to adapt by:

- Planning commutes and using alternative routes;
- Utilizing transit (www.ltconline.ca), carpooling (www.londoncarpools.ca), riding bikes or walking; and
- Adjusting travel times to avoid peak travel times.

**Tender Summary**

Tenders for the 2019 Arterial Road Rehabilitation Project - Contract No.1 (Tender 19-23) were opened on Thursday, February 7, 2019. Two contractors submitted tender prices as listed below (excluding HST).

| CONTRACTOR | | TENDER PRICE (SUBMITTED) | CORRECTED TENDER PRICE |
|---|---|---|---|
| 1. | Coco Paving Inc. (London) | $ 4,571,000.00 | --- |
| 2. | Dufferin Construction Company | $ 4,770,156.75 | --- |

All tenders have been checked by the Environmental and Engineering Services Department, and no errors were found.

The tender estimate just prior to tender opening was $6,317,000.00 (excluding HST). These tenders are an indication of a competitive environment considering the number of qualified local service providers, and illustrate the benefit of tendering projects early in the construction season.

There are no anticipated additional annual operating costs to the Environmental and Engineering Services Department associated with the approval of this tender.

Contract design and preparation was undertaken by City staff. Contract administration and onsite inspection services will be provided by City staff, primarily from the Construction Administration Division.

## CONCLUSION

Civic Administration reviewed the tender bids and recommends Coco Paving Inc. (London) be awarded this 2019 Arterial Road Rehabilitation Project – Contract No. 1 in the amount of

$4,571,000.00 (excluding HST). Upon Council approval and contract award, staff will confirm a schedule with the contractor and initiate a communication program for the various construction locations.

**Acknowledgements**

This report was prepared with assistance from Trevor Hitchon, C. Tech, Technologist II, Jane Fullick, C.E.T., Senior Technologist and Karl Grabowski, P. Eng., Transportation Design Engineer, all from the Transportation Planning and Design Division.

| **SUBMITTED BY:** | **RECOMMENDED BY:** |
|---|---|
| | |
| **DOUG MACRAE, P. ENG., MPA**<br>**DIRECTOR, ROADS AND TRANSPORTATION** | **KELLY SCHERR, P.ENG., MBA, FEC**<br>**MANAGING DIRECTOR**<br>**ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER** |

Attach: Appendix A – Source of Financing
Appendix B – Map of Locations

cc: John Freemen, Manager, Purchasing and Supply
Gary McDonald, TCA
Trevor Hitchon, Technologist II
Jane Fullick, Senior Technologist
Karl Grabowski, Transportation Design Engineer
Coco Paving Inc. (London), 1865 Clarke Road, London ON N5X 3Z6

**APPENDIX 'A'**

**#19018**
March 18, 2019
(Award Contract)

Chair and Members
Civic Works Committee

**RE: Contract Award: Tender No. 19-23**
**Arterial Road Rehabilitation Project Contract No. 1**
**(Subledger RD190002)**
**Capital Project TS144619 - Road Network Improvements (Main)**
**Coco Paving Inc. (London) - $4,571,000.00 (excluding H.S.T.)**

**FINANCE & CORPORATE SERVICES REPORT ON THE SOURCE OF FINANCING:**

Finance & Corporate Services confirms that the cost of this project can be accommodated within the financing available for it in the Capital Works Budget and that, subject to the adoption of the recommendations of the Managing Director, Environmental and Engineering Services and City Engineer, the detailed source of financing for this project is:

| **ESTIMATED EXPENDITURES** | **Approved Budget** | **Committed To Date** | **This Submission** | | **Balance for Future Work** |
|---|---|---|---|---|---|
| Engineering | $1,000,000 | $176,668 | | | $823,332 |
| Construction | 12,766,068 | 2,085,479 | 4,651,450 | | 6,029,139 |
| **NET ESTIMATED EXPENDITURES** | **$13,766,068** | **$2,262,147** | **$4,651,450** | **1)** | **$6,852,471** |
| **SOURCE OF FINANCING:** | | | | | |
| Capital Levy | $3,116,482 | $2,262,147 | $854,335 | | $0 |
| Federal Gas Tax | 9,846,026 | | 3,797,115 | | 6,048,911 |
| Drawdown from Capital Infrastructure Gap Reserve Fund | 803,560 | | | | 803,560 |
| **TOTAL FINANCING** | **$13,766,068** | **$2,262,147** | **$4,651,450** | | **$6,852,471** |

**Financial Note:**

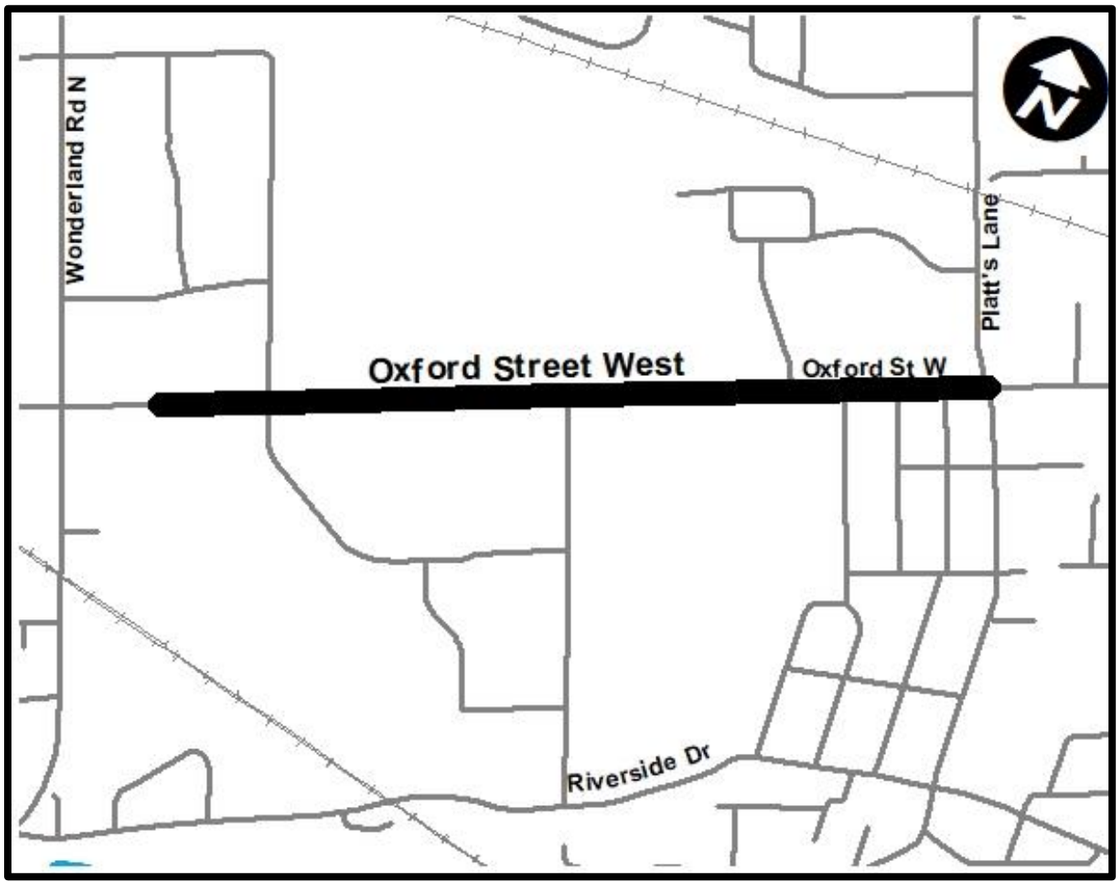
| | | |
|---|---|---|
| 1) | Contract Price | $4,571,000 |
| | Add: HST @13% | 594,230 |
| | Total Contract Price Including Taxes | 5,165,230 |
| | Less: HST Rebate | 513,780 |
| | Net Contract Price | **$4,651,450** |

lp

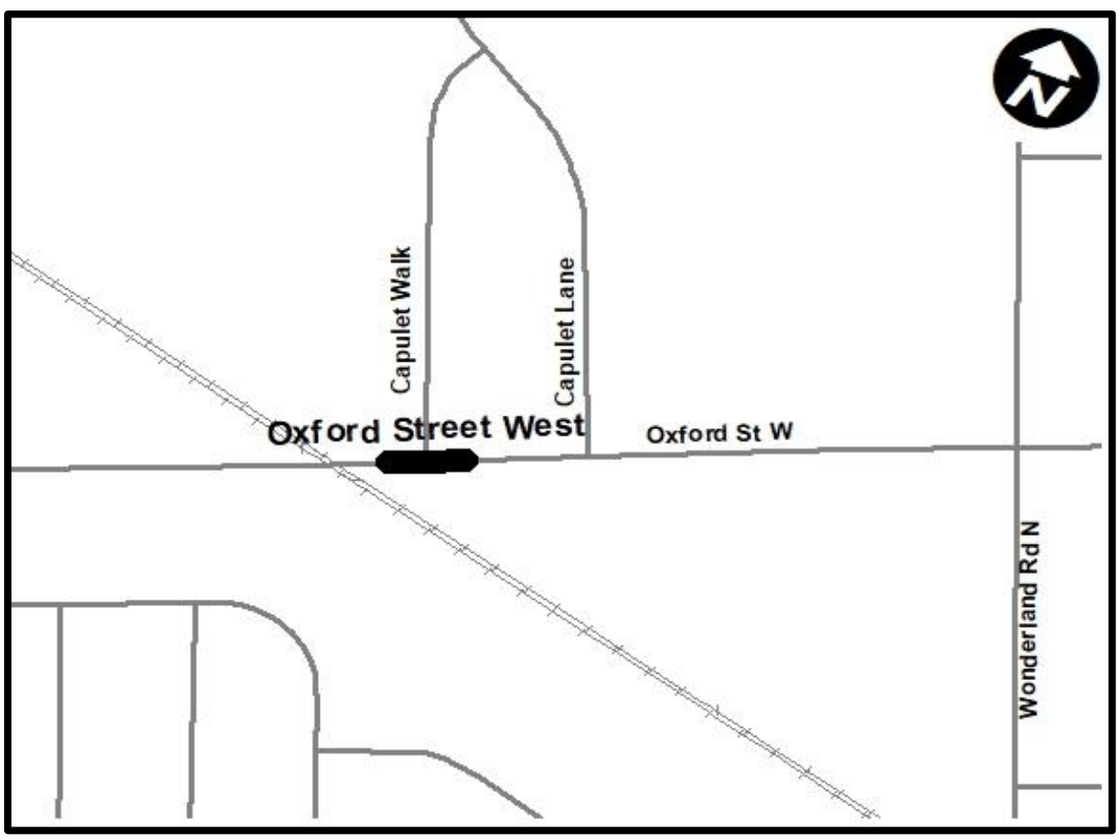
Jason Davies
Manager of Financial Planning & Policy

**APPENDIX B**
**LOCATION MAPS**

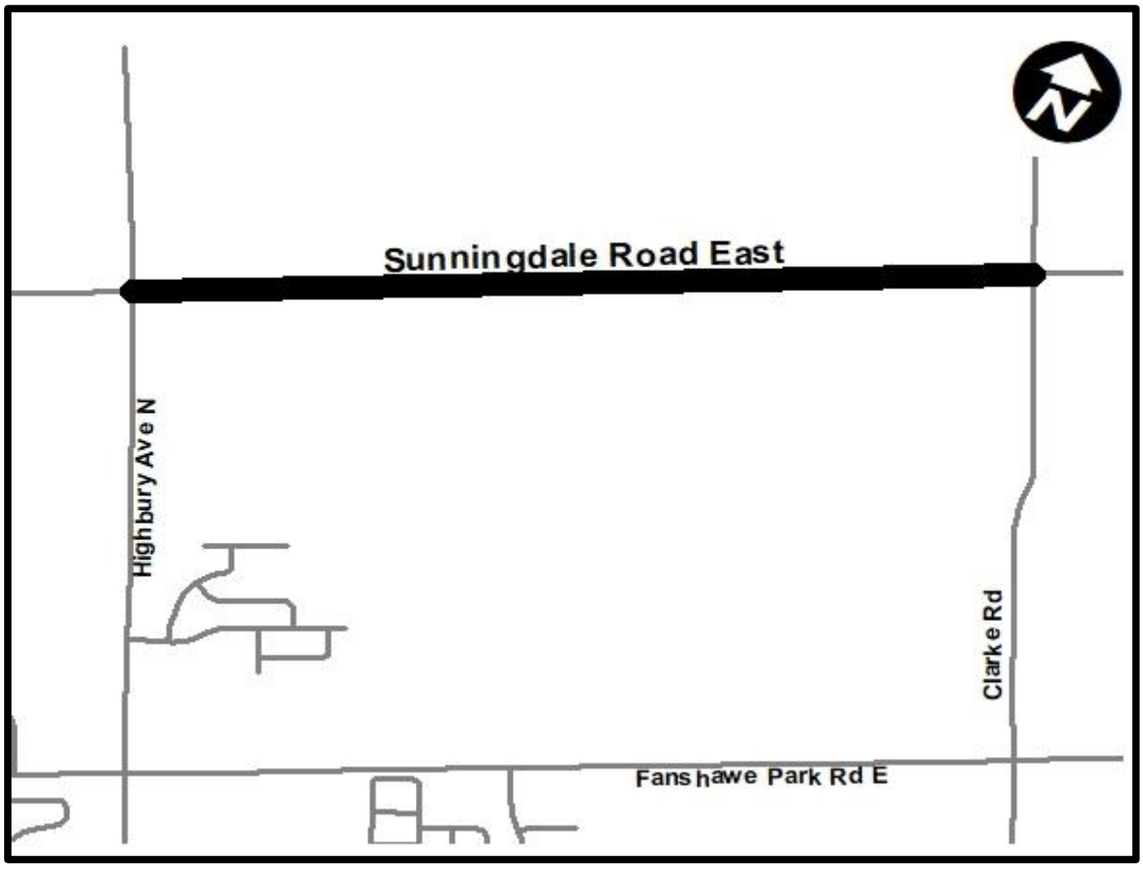
**Section A – Oxford Street West-1**



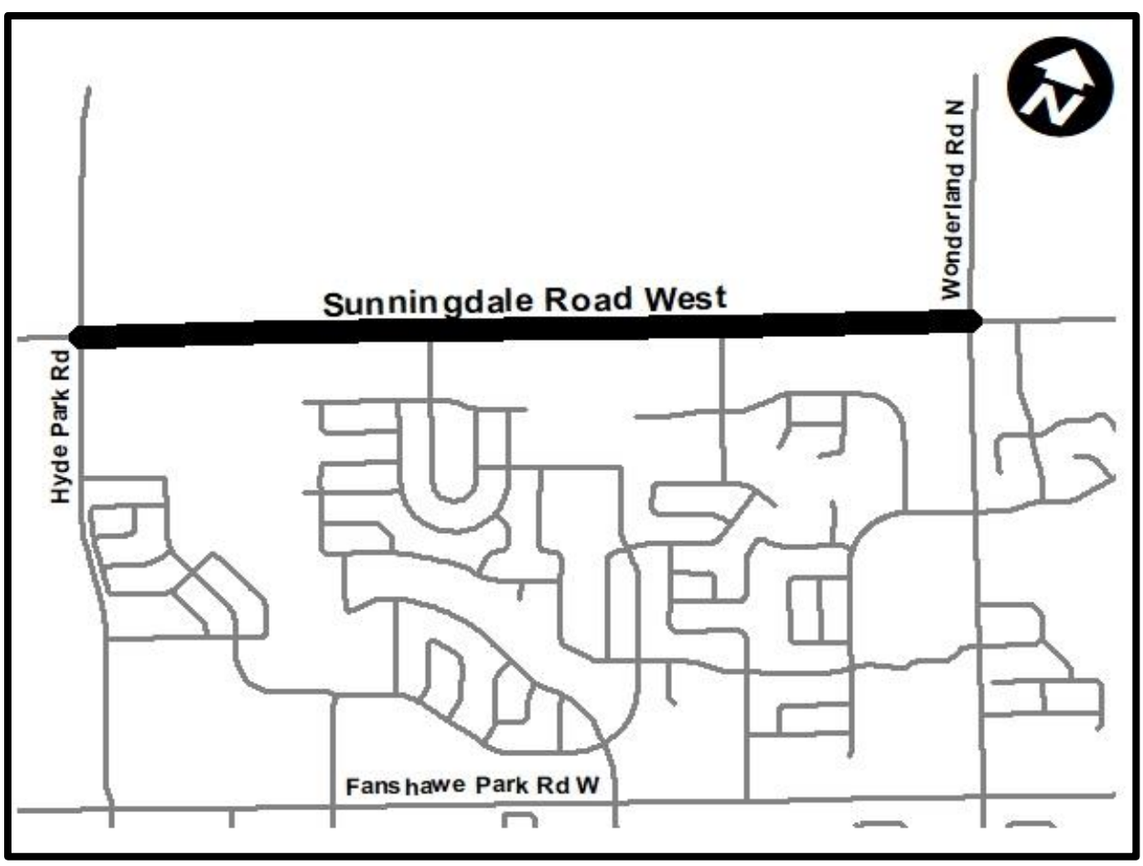

**Section B – Oxford Street West-2**



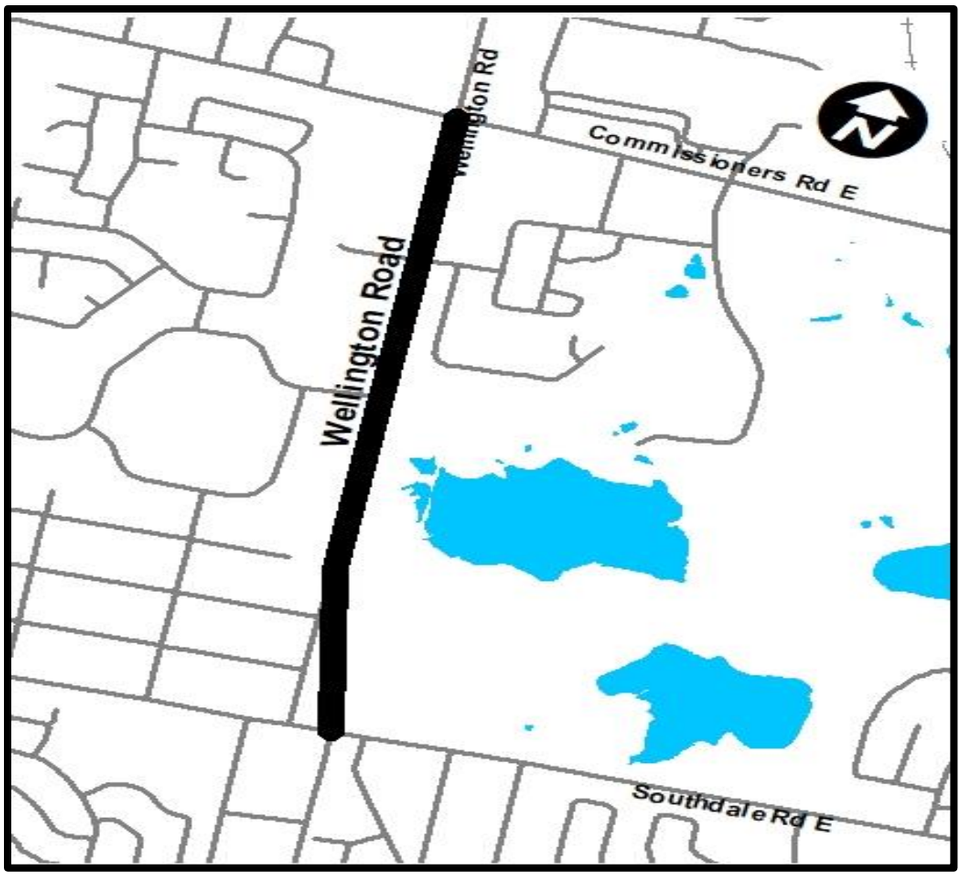
**Section C – Sunningdale Road East**



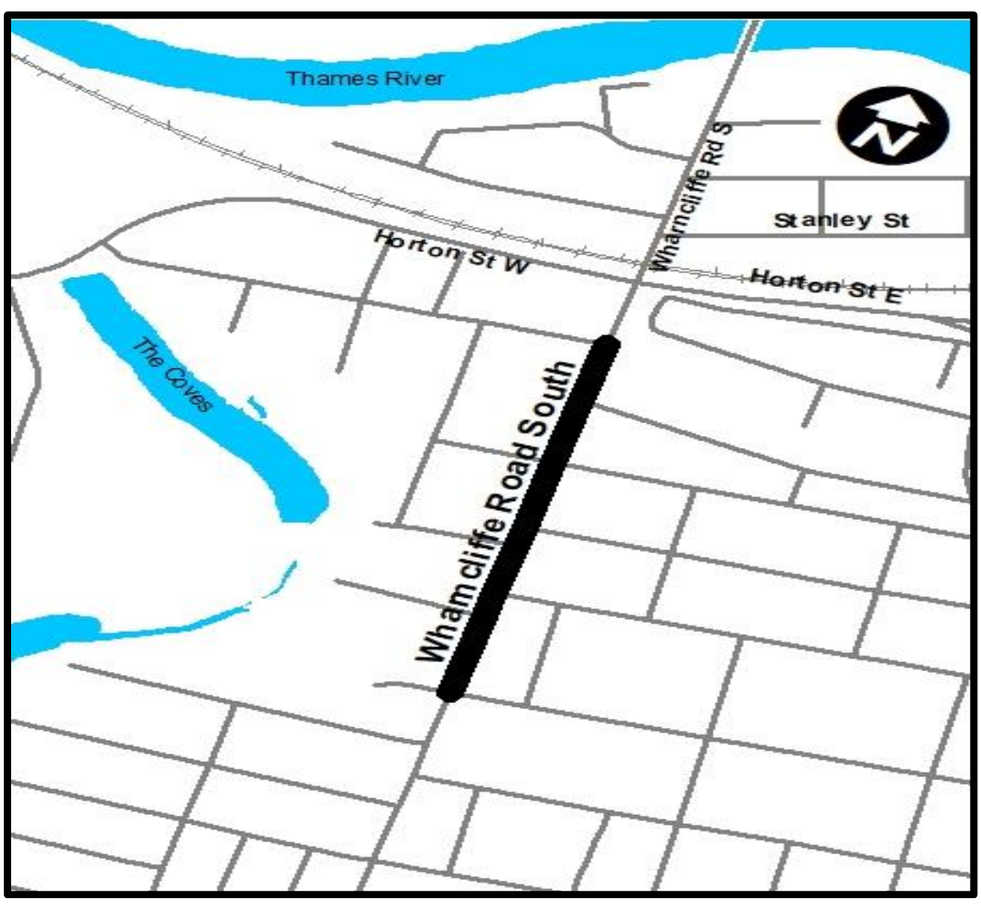

**Section D – Sunningdale Road West**



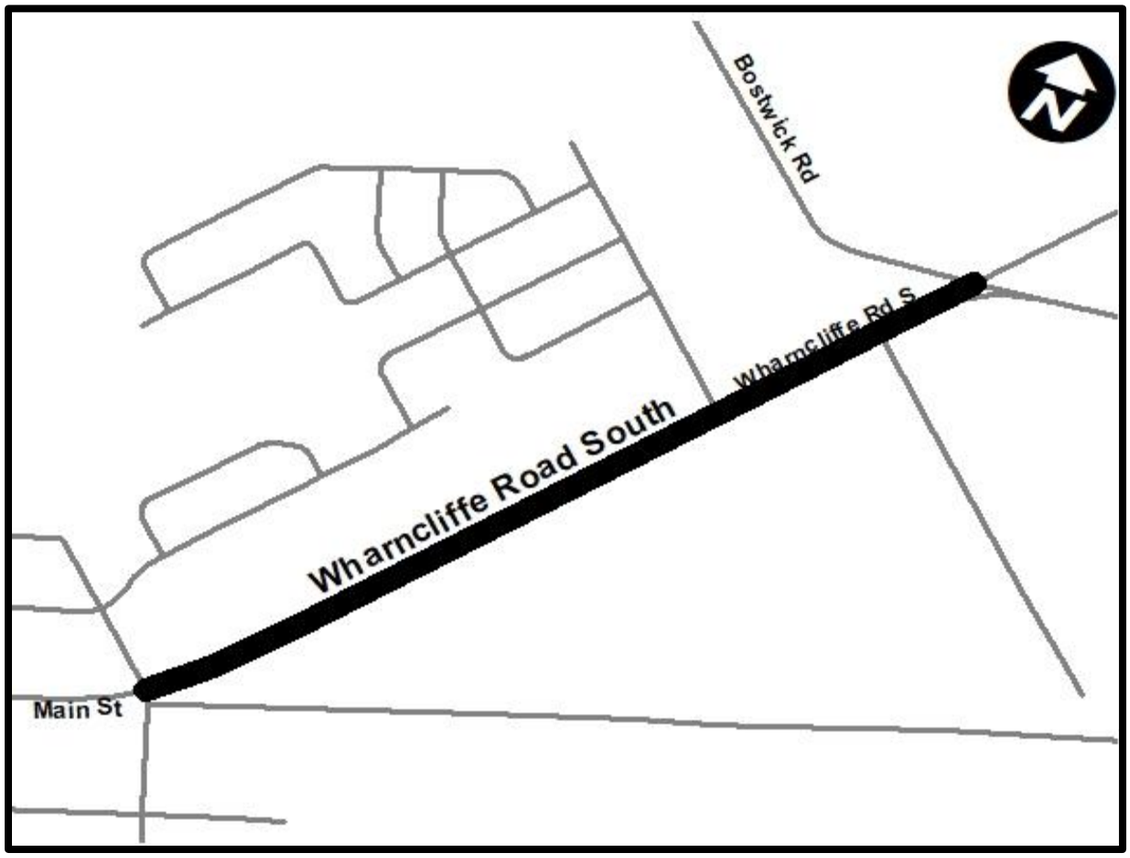
**Section E – Wellington Road (southbound lanes only)**




**Section F – Wharncliffe Road South-1**



**Section G – Wharncliffe Road South-2**



| | |
|---|---|
| **TO:** | **CHAIR AND MEMBERS<br>CIVIC WORKS COMMITTEE<br>MEETING ON MARCH 18, 2019** |
| **FROM:** | **KELLY SCHERR, P.ENG., MBA, FEC<br>MANAGING DIRECTOR ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER** |
| **SUBJECT:** | **APPOINTMENT OF CONSULTING ENGINEER<br>FOR THE DETAILED DESIGN & TENDERING OF THE<br>CHURCHILL AVENUE INFRASTRUCTURE RENEWAL PROJECT** |

## RECOMMENDATION

That on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the appointment of a Consulting Engineer for the Churchill Avenue Reconstruction Project:

(a) Dillon Consulting Limited **BE APPOINTED** Consulting Engineers for the detailed design and tendering for the project at an upset amount of $453,200.00 (excluding HST) in accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy;

(b) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached hereto as Appendix 'A';

(c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;

(d) the approvals given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract with the Consultant for the work; and

(e) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

## PREVIOUS REPORTS PERTINENT TO THIS MATTER

Civic Works Committee, July 17, 2017 – Appointment of Consulting Engineers Infrastructure Renewal Program 2017 – 2019: Recommendation b) (ix).

## 2015-19 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus area of Building a Sustainable City: 1B – Manage and improve our wastewater infrastructure and services.

## BACKGROUND

**Purpose**

The purpose of this report is to seek approval to award Dillon Consulting a contract for engineering consulting services for the design and tendering of municipal services replacements and upgrades for:

- Churchill Avenue – Vancouver Street to Edmonton Street;
- Winnipeg Boulevard – Wavell Street to Churchill Avenue, and;
- Wavell Street – Vancouver Street to Winnipeg Boulevard.

**Context**

The East Lions Community Centre is being constructed at 1731 Churchill Avenue in the east half of the East Lions Park. Municipal infrastructure, especially storm sewers, in the general area are significantly undersized for current design standards and conditions. Planning for service improvements have been underway since mid-2017.

This infrastructure replacement project has been advanced at this time to complement the construction of the new community centre.

## DISCUSSION

**Project Description**

In March 2018, Dillon Consulting completed the Wavell Servicing Study which primarily focused on developing a comprehensive strategy for a level of service improvement with regards to stormwater management infrastructure within the area bounded by Dundas Street to the north, Wavell Street to the south, Clarke Road to the east and Kiwanis Park to the west. This area is commonly referred to as “Pottersburg”. The study also included a review and assessment of the existing water distribution system and sanitary collection system.

The underground infrastructure in Pottersburg was originally constructed in the 1940s – 1950s as residential development progressed. Many of the side streets were constructed as rural cross sections with twin 200mm storm sewers running the length of the street; ultimately joining up with larger trunk sewers downstream. These existing sewers no longer provide a consistent level of service expected in 2019. Surface ponding has become increasingly problematic in many areas.

These streets have additional infrastructure components such as asphalt, aging sanitary sewers and watermain that are in poor condition and, as such, are in need of replacement.

While the work on Churchill Avenue, Winnipeg Boulevard, and Wavell Street was not originally planned for this year, it has been decided to move the needed work forward in order to be completed in a similar timeframe as the construction of the East Lions Community Centre.

The total cost for this project is anticipated to be in the order of $5-6 Millon. This project is anticipated to be constructed in 2020, pending future budget approval. In addition, the timing of Calgary Street from Dundas Street to Churchill Avenue has been rescheduled in the capital plan to 2021 subject to Council approval of the multiyear budget.

**Consultant Selection**

Dillon Consulting was selected to undertake the initial infrastructure assessment and improvement planning for this area after a competitive consultant procurement process (see Previous Reports Pertinent to this Matter) in accordance with Section 15.2 (e) of the Procurement of Goods and Services Policy. Due to the consultant’s knowledge and positive performance on the project, Dillon was invited to submit a proposal to carry out the detailed design for the Churchill Avenue infrastructure renewal project. Dillon submitted a proposal which included an upset limit of $453,200.00. This proposal contains a 10% contingency. Staff have reviewed the fee submission in detail considering 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 is consistent with other infrastructure renewal program assignments of this scope and nature. The continued use of Dillon on this project is of financial advantage to the City because Dillon has specific knowledge of the project and has undertaken work for which duplication would be required if another firm were to be

selected. It is recommended that Dillon continue on with the infrastructure renewal detailed design and tendering in accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy.

Subject to successful completion of the design and tendering phase of this project, Dillon Consulting will be considered for the construction administration stage. Future approval to proceed with subsequent phases of engineering services for this project will be subject to satisfying all financial, reporting and other conditions contained within the Procurement of Goods and Services Policy.

There are no anticipated additional operating costs to the Environmental and Engineering Services budget with approval of this engineering agreement. As the design progresses, additional future operating costs for the roadway, sewers and watermain will be assessed.

## CONCLUSIONS

Based on Section 15.2 (g) of the City's Procurement of Goods and Services Policy, it is recommended that Dillon Consulting be awarded the consulting assignment for the detailed design and tendering of the Churchill Avenue Infrastructure Renewal Project, in the amount of $453,200.00 (excluding HST). Dillon Consulting has shown a good understanding of the project and has the technical expertise to complete the assignment. The proposal represents good value for the City. Construction is tentatively scheduled for 2020. As a result, it is necessary to commence the design and approvals phase of this project immediately.

| **PREPARED BY:** | **CONCURRED BY:** |
|---|---|
| | |
| **TOM COPELAND, P. ENG.**<br>**DIVISION MANAGER**<br>**WASTEWATER & DRAINAGE ENGINEERING** | **SCOTT MATHERS, P.ENG.**<br>**DIRECTOR, WATER AND WASTEWATER** |

| **RECOMMENDED BY:** |
|---|
| |
| **KELLY SCHERR, P.ENG., MBA, FEC**<br>**MANAGING DIRECTOR**<br>**ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER** |

Attach: Appendix 'A' – Sources of Financing
Appendix 'B' – Area Plan

cc: Mr. Jason Johnson, P.Eng., Dillon Consulting Limited

**APPENDIX 'A'**

**#19028**

Chair and Members
Civic Works Committee

March 18, 2019
(Appoint Consulting Engineer)

**RE: Detailed Design & Tendering of the Churchill Avenue Infrastructure Replacement Project (Subledger WS19C009)**
**Capital Project ES241418 - Sewer Infrastructure Lifecycle Renewal**
**Capital Project EW376519 - Water Infrastructure Lifecycle Renewal**
**Dillon Consulting Limited - $453,200.00 (excluding H.S.T.)**

**FINANCE & CORPORATE SERVICES REPORT ON THE SOURCE OF FINANCING:**

Finance & Corporate Services confirms that the cost of this project can be accommodated within the financing available for it in the Capital Works Budget and that, subject to the adoption of the recommendations of the Managing Director, Environmental and Engineering Services and City Engineer, the detailed source of financing for this project is:

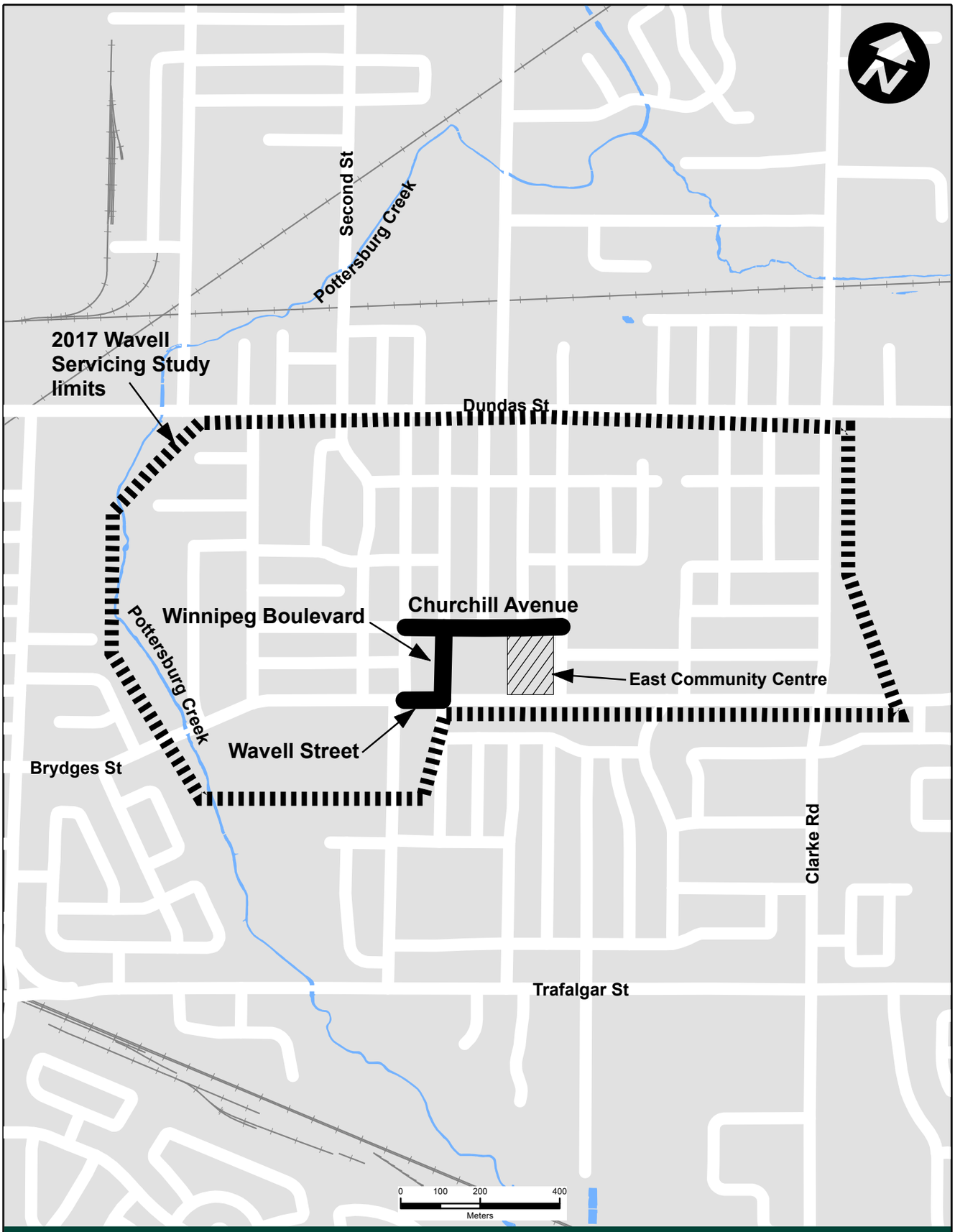
| **ESTIMATED EXPENDITURES** | **Approved Budget** | **Committed To Date** | **This Submission** | | **Balance for Future Work** |
|---|---|---|---|---|---|
| **ES241418-Sewer Infra. Lifecycle Renewal** | | | | | |
| Engineering | $1,939,666 | $1,139,666 | $230,588 | | $569,412 |
| Engineering (Utilities) | 8,420 | 8,420 | | | 0 |
| Land Purchase | 44,767 | 44,767 | | | 0 |
| Construction | 12,484,427 | 12,405,752 | | | 78,675 |
| Construction (PDC Portion) | 192,000 | 192,000 | | | 0 |
| Construction (Bell Contributions) | 1,023,538 | 1,023,538 | | | 0 |
| City Related Expenses | 114,848 | 109,915 | | | 4,933 |
| | **15,807,666** | **14,924,058** | **230,588** | | **653,020** |
| **EW376519-Water Infra. Lifecycle Renewal** | | | | | |
| Engineering | 1,500,000 | | 230,588 | | 1,269,412 |
| Construction | 8,000,000 | | | | 8,000,000 |
| | **9,500,000** | **0** | **230,588** | | **9,269,412** |
| **NET ESTIMATED EXPENDITURES** | **$25,307,666** | **$14,924,058** | **$461,176** | **1)** | **$9,922,432** |
| **SOURCE OF FINANCING:** | | | | | |
| **ES241418-Sewer Infra. Lifecycle Renewal** | | | | | |
| Capital Sewer Rates | $7,093,000 | $7,093,000 | | | $0 |
| Drawdown from Sewage Works Reserve Fund | 2,990,708 | 2,107,100 | 230,588 | | 653,020 |
| Federal Gas Tax | 4,500,000 | 4,500,000 | | | 0 |
| Cash Recovery from Property Owners | 192,000 | 192,000 | | | 0 |
| (PDC Portion) | | | | | 0 |
| Other Contributions (Utilities) | 1,031,958 | 1,031,958 | | | 0 |
| | **15,807,666** | **14,924,058** | **230,588** | | **653,020** |
| **EW376519-Water Infra. Lifecycle Renewal** | | | | | |
| Capital Water Rates | 7,692,100 | | 230,588 | | 7,461,512 |
| Drawdown from Capital Water Reserve Fund | 1,246,900 | | | | 1,246,900 |
| Federal Gas Tax | 561,000 | | | | 561,000 |
| | **9,500,000** | **0** | **230,588** | | **9,269,412** |
| **TOTAL FINANCING** | **$25,307,666** | **$14,924,058** | **$461,176** | | **$9,922,432** |

| | **Financial Note:** | **ES241418** | **EW376519** | **TOTAL** |
|---|---|---|---|---|
| 1) | Contract Price | $226,600 | $226,600 | $453,200 |
| | Add: HST @13% | 29,458 | 29,458 | 58,916 |
| | Total Contract Price Including Taxes | 256,058 | 256,058 | 512,116 |
| | Less: HST Rebate | 25,470 | 25,470 | 50,940 |
| | Net Contract Price | **$230,588** | **$230,588** | **$461,176** |

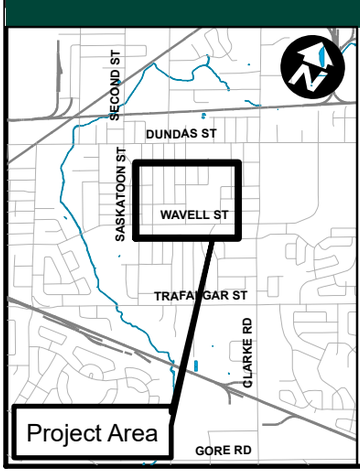
JG

Jason Davies
Manager of Financial Planning & Policy

## APPENDIX 'B'




## LOCATION MAP




**Churchill Avenue Infrastructure Replacement Project**

Churchill Avenue – Vancouver Street to Edmonton Street
Winnipeg Boulevard – Wavell Street to Churchill Avenue
Wavell Street – Vancouver Street to Winnipeg Boulevard

Map Produced by the Wastewater & Drainage Engineering Division

February 14 2019 JB

London CANADA

300 Dufferin Avenue,
PO Box 5035
London, Ontario
N6A 4L9
www.London.ca

| | |
|---|---|
| **TO:** | **CHAIR AND MEMBERS<br>CIVIC WORKS COMMITTEE<br>MEETING ON MARCH 18, 2019** |
| **FROM:** | **KELLY SCHERR, P.ENG., MBA, FEC<br>MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER** |
| **SUBJECT:** | **HIGHBURY AVENUE NOISE STUDY AND REVIEW OF LOCAL IMPROVEMENT NOISE BARRIER POLICIES AND PROCEDURES** |

## RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, the following actions with respect to the Highbury Avenue Noise Study be taken:

(a) the Environmental and Engineering Services Administrative Practices and Procedures for Noise Attenuation Barriers (Local Improvements) **BE AMENDED** based on the recommendations presented herein;

(b) the Local Improvement process changes **BE COMMUNICATED** to property owners previously contacted; and

(c) no further action **BE TAKEN** with regards to noise attenuation west of Highbury Avenue South unless a valid noise wall petition is received from property owners.

## PREVIOUS REPORTS PERTINENT TO THIS MATTER

- Environment and Transportation Committee - September 26, 2005 - Local Improvement Policy Amendment and Irving Place / Highbury Avenue Noise Wall
- Environment and Transportation Committee - April 03, 2006 - 2006 Highbury Avenue Noise Attenuation Barrier Irving Place
- Built and Natural Environment Committee - March 28, 2011 - Veterans Memorial Parkway and Highbury Avenue Noise Study
- Built and Natural Environment Committee - May 16, 2011 - Public Participation Meeting - Veterans Memorial Parkway and Highbury Avenue Noise Study
- Civic Works Committee, January 6, 2014 - Veterans Memorial Parkway Noise Attenuation Wall
- Civic Works Committee - November 21, 2017 - Hydro One Grant for Tree Planting
- Civic Works Committee, September 25, 2018 - Road Traffic Noise Impact Study - Highbury Avenue From Bradley Avenue to the Thames River

## BACKGROUND

### Purpose

The council resolution passed on October 2, 2018 directed Civic Administration to "undertake a review of comparator municipal noise abatement local improvement procedures to inform a potential update to the City of London administrative practices and procedures." This report serves to provide Committee and Council with a review of the City's current noise barrier local improvement policies and procedures, and to provide background on provincial regulations and local improvement procedures for other Ontario municipalities. Based on the findings from this review, recommendations are made to amend current City procedures to provide more clarity for local improvement noise barriers and to modify the cost sharing ratio with benefitting property owners.

### Context

In June 2018, a road traffic noise impact study was initiated with noise monitoring near the west side residential properties along Highbury Avenue South between Bradley Avenue and the Thames River. The City retained Valcoustics, a specialist noise consultant, to conduct the study. The results of the study concluded that properties with rear-frontage facing Highbury (along the west side between Bradley and Commissioners) are experiencing elevated noise levels in their Outdoor Living Areas (OLA) and would benefit from attenuation. In the event of a project, the suggested noise mitigation measure was a 2.5 metre high noise barrier wall situated along the rear-yard property lines. The noise wall was projected to provide at least $5\ dBA$ of attenuation for the OLA, which would reduce noise levels to meet minimum provincial requirements.

A council resolution passed on October 2, 2018 directed Civic Administration "to communicate the process being undertaken with all potential impacted property owners and to survey them regarding our local improvement process as well as the suggested barrier proposed by staff." A letter was circulated to affected property owners (i.e. those who could potentially benefit from the installation of a noise wall), which included the study results and outlined the City's local improvement process. The letter concluded with a request for feedback from property owners on the study results, the potential noise barrier and the local improvement process.

## DISCUSSION

**<u>London's Noise Barrier Policies and Procedures</u>**

The City has several sources of information for noise abatement measures including The London Plan, Design Specifications and Requirements Manual, and the Administrative Practices and Procedures. In particular, Administrative Practices and Procedures criteria pertaining to "retrofit" (local improvement) scenarios, identifies abatement on roads where adjacent residential development exists and where a road is not being widened.

<u>EES Procedures for Retrofit (Local Improvement) Noise Barriers</u>

The Noise Attenuation Barriers administrative procedure for "retrofit" scenarios specifies that retrofit noise barriers will be considered when the following criteria is met:

- *Adjacent to arterial roadways whose present traffic volume exceeds 10,000 vehicles per day;*

- *On a total block basis;*
- *On receipt of a sufficiently signed petition in conformity with the provisions of the Municipal Act.*

The *Street Services Implementation and Financing* procedure further identifies the cost sharing ratio for “retrofit” noise barrier construction as being two thirds property owner cost and one third City cost. Construction of a noise barrier includes engineering, and all other costs normally associated with these programs (e.g. tree clearing, grading or changes to drainage, etc.).

<u>The London Plan</u>
*The London Plan* provides additional noise wall guidance. Clause 241 states that noise walls in association with road widenings are to be avoided where possible. Clause 1768 also encourages new development patterns to minimize noise walls and Clause 1769 refers to the canyon effect created by noise walls. The Plan states that where such walls are necessary, innovative design techniques will be used relating to the materials, texture, colour, lighting, variability and overall design composition to mitigate impacts on the pedestrian environment and streetscape. Clause 1767 refers to provincial and agency input to determine attenuation measures in the absence of a City guideline. Current developments are typically configured to minimize rear yard exposure from arterial roads. However where outdoor living areas are exposed, developers are obliged to construct noise attenuation measures within private property.

<u>Design Specifications and Requirements Manual</u>
The *Design Specifications and Requirements Manual* provides design guidance for noise walls. The manual states that noise attenuation measures can be building setbacks, building orientation, earthen berms, noise walls, or any combination necessary to achieve an acceptable noise level, based on Ministry of Environment, Conservation and Parks (MECP) criteria.

**<u>Provincial Policies for Noise Barrier Installations</u>**

Noise mitigation policies vary between provincial authorities depending on the circumstances. The Ontario Ministry of Transportation (MTO) Environmental Guide for Noise establishes the criteria for provincial highway widenings and retrofit situations, whereas the criteria specified by Ministry of Environment, Conservation and Parks (MECP) Environmental Noise Guideline - Stationary and Transportation Sources – Approval and Planning (NPC-300) generally takes precedent for planning and approval of developments.

For local improvement noise barrier installations, MTO’s Retrofit Policy should be considered for guidance because it deals with existing developed lands adjacent to existing freeways. Table 1 below summarizes the key information relating to sound level thresholds and the recommended mitigation efforts. It should be noted that all mitigation recommendations are subject to further review of technical, economical and administrative feasibility. In addition, any noise mitigation efforts considered should provide a minimum of $5\ dBA$ of attenuation to be considered effective.

**Table 1: A summary of sound level thresholds and recommended mitigation efforts based on MECP/MTO criteria.**

| | Situation | Sound Level | Mitigation |
|---|---|---|---|
| **MTO** | Existing Noise Sensitive Area (NSA) adjacent to existing freeways | $60\ dBA < L_{eq(24hr)}$ | Consider retrofit noise control measures if noise levels in NSAs can be reduced by at least $5\ dBA$ averaged in the first row. |
| **MTO** | Construction of new or expansion of existing roadways | $L_{eq(24hr)} < 65\ dBA$ AND $< 5\ dBA$ change to overall noise level | No mitigation effort required. |
| | | $65\ dBA \leq L_{eq(24hr)}$ OR $\geq 5\ dBA$ change to overall noise level | Investigate and introduce noise control measures within ROW. |
| **MECP** | New development where Outdoor Living Areas (OLA) will be adjacent to arterial roadways | $L_{eq(16hr)} \leq 55\ dBA$ | No mitigation effort required. |
| | | $55\ dBA < L_{eq(16hr)} \leq 60\ dBA$ | Noise control measures may be applied to reduce the sound to $55\ dBA$. |
| | | $60\ dBA < L_{eq(16hr)}$ | Noise control measures should be implemented to reduce the level to $55\ dBA$. |

**<u>Review of Other Ontario Municipalities' Local Improvement Practices</u>**

In December 2018, fifteen municipalities across Ontario were contacted to discuss their approach to local improvement noise barriers. In total, nine responses were received. Of the respondents, four municipalities indicated they had noise policies that specifically addressed noise barriers for local improvements. The following is a summary of the relevant information gathered from this review.

<u>Sound Level Criteria</u>

When assessing a site being considered for noise attenuation, most municipalities specify the MECP criteria as their sound level thresholds for noise studies.

<u>Types of Noise Barriers</u>

MECP defines an 'acoustic barrier' as having a minimum surface density (face weight) of 20 kg/m$^2$. This can mean a wall, berm, wall/berm combination or similar structure that is high enough to break the line-of-sight between the noise source and the noise receptor (Outdoor Living Area of a Noise Sensitive Area), and structurally sound without cracks or surface gaps.

In keeping with MECP criteria for an appropriate acoustic barrier, municipalities generally prefer to use a wall for noise attenuation. Other municipalities are less likely to approve berms and berm/wall combinations. Some respondents indicated that they would consider approving a berm or berm/wall combination on a case-by-case basis.

<u>Noise Wall Materials</u>

There are several materials that can satisfy the MECP surface density requirement for a noise wall. Common materials for noise walls include, but are not limited to wood, concrete, brick/masonry, steel and vinyl. The most popular wall types preferred by the municipalities surveyed was found to be concrete. MTO's Designated Source Material Index does include a few concrete suppliers for absorptive and reflective walls.

Wooden noise walls exist in the City on private properties. While wooden walls can provide the density requirements, they require more maintenance by the owner and provide a much shorter service life. As a result, the City and the other municipalities survey do not install wood walls in right-of-way in preference of more durable products for long term use and to minimize future operating costs.

Ownership and Maintenance

All municipalities with noise barrier policies require that local improvement noise barrier installations are constructed on municipal ROW where possible, or on private property with an easement. The municipality is the owner of the noise barrier and they are responsible for all maintenance after installation.

Minimum Participation
While not a requirement for all municipalities, some respondents stated a minimum number of dwellings and a minimum length of wall that would be required for a local improvement noise barrier to be considered.

Cost Sharing Ratios
Most municipalities have identified their cost sharing ratio with adjacent property owners is a 50/50 split for all construction costs associated with a local improvement noise barrier cost including related engineering.

Frequency of Local Improvement Noise Barrier Installations
Based on responses from the other municipalities, there has been approximately only one noise barrier project constructed within the past 10-years that would qualify as a local improvement installation within these four municipalities. Municipalities often receive requests for noise attenuation, but there is rarely a local improvement noise barrier which proceeds to construction.

Table 2 below summarizes London's current local improvement noise barrier procedures and compares them to other municipalities and the provincial retrofit criteria. IN general, London's procedures align with other municipalities with the exception of the cost sharing ratio. However, the administrative practices and procedures do not stipulate typical practices.

**Table 2: Summary of existing local improvement criteria for London, other Ontario municipalities and provincial authorities.**

| Criteria | London (Current) | Provincial Retrofit | Other Ontario Municipalities |
|---|---|---|---|
| **Sound Level** | MECP / MTO | MTO Retrofit | MECP / MTO |
| **Noise Barrier Type** | Not specified but typically wall | MECP | Noise Wall |
| **Noise Wall Materials** | Not specified but typically concrete | MECP | Wood or Concrete |
| **Ownership** | Not specified | Road Authority | Municipality |
| **Minimum Participation** | Total Block | N/A | Min. Length and Min. Number |
| **Cost Sharing Ratio** | $^{2}/_{3}$ Landowner $^{1}/_{3}$ City | N/A | 50% Landowner 50% Municipality |

**Highbury Noise Study, Possible Noise Wall, and Local Improvement Process**

A letter was sent to residents along Highbury Avenue South (see Appendix) pertaining to details of the road traffic noise impact study, and it requested feedback from property owners on the study results, noise barrier and the local improvement process for noise barriers. As a result, a significant amount of feedback was received from affected property owners.

Noise Issue

The majority of responses received indicated a strong opposition to the suggested noise wall. Many respondents indicated that the noise wall was unnecessary. There were some respondents that recognized a noise issue for the area, but were not in favour of the proposed noise wall.

A common response from property owners was that a noise wall is unnecessary, and noise is not an issue. Several respondents noted the expressway (Highbury Avenue) was established when they moved in, and they were aware of potential road traffic noise from the start, but it hasn't been a concern.

Some respondents noted concerns with road traffic noise at night (i.e. unable to open bedroom windows due to noise). It should be noted that retrofit noise mitigation measures along a roadway are intended to provide attenuation to the Outdoor Living Area (i.e. patio area) and not intended to provide attenuation within a dwelling given there may be private property or building limitations.

Property Owner Share of a Local Improvement Noise Wall

The letter included a preliminary estimated cost for a typical property owner's share of the local improvement noise wall. Based on past installations, a typical 15 metre (50 feet) wide lot with a per metre cost of $1,200 for a 2.5 metre tall concrete noise wall, a property owners share would be $12,000 (two thirds), with the City's share being $6,000 (one third).

The majority of responses received from property owners identified their share of the cost was too high. The cost alone was a major deterrent for many property owners to even consider a local improvement noise wall. Some respondents noted the City should consider a more favourable cost sharing ratio, while many indicated the costs of a noise wall should be borne completely by the City.

Concerns that the City was proposing to initiate the Local Improvement process were received. Upon receipt of this concern, it was clarified that the distribution letter was only for information sharing and consultation. Local Improvement processes in London are only commenced upon receipt of a petition initiated by property owners.

Suggested Alternatives

Some respondents who opposed the proposed noise wall along the rear-yard line recognized a need for attenuation for the area and proposed alternatives. Suggestions for mitigation included replanting trees/foliage along the Highbury/Hydro One corridor, installing a berm, or placing the a noise wall completely on City property adjacent to Highbury.

Alternate mitigation strategies such as those suggested were reviewed/discussed during the road traffic noise impact study with the consultant. It was determined that a noise wall along the rear-yard property line of the residential dwellings would provide the most effective and cost-effective attenuation for the residential OLA while having the least land use impact considering the limitations imposed by the Hydro One corridor.

Technical Issues
Through additional investigation and homeowner feedback, some technical issues were identified that would limit the scope of the potential noise wall. The property owners along Milan place have an existing easement for a sanitary sewer in their rear yard. Access to maintenance holes are required to be maintained, and since an effective noise wall cannot have any gaps, a wall cannot be adequately installed in this location. Thus for technical reasons, a noise attenuation wall cannot be considered for Milan Place.

Quality of Living
Many property owners expressed their enjoyment of the green space behind their homes. The land between Highbury Avenue and the residential dwellings on the west side of the road are separated by an approximately 90 metre (300 feet) wide Hydro One corridor. Several residents expressed that the current corridor is visually appealing and property owners do not want to replace this view with a large concrete wall. Residents also noted that most properties have a gate in their existing rear yard fence so that they may access the corridor for recreational purposes (e.g. dog walking, cross-country skiing, etc.). The installation of a 2.5 metre tall concrete wall would completely block access to this communal green space.

**Proposed Changes to London's Local Improvement Noise Barrier Procedures**
Based on a review of the City's current procedures, provincial requirements, other municipal practices and feedback received from property owners, the following are proposed changes to the City procedures for local improvement noise barriers.

Sound Level
Adjust EES Administrative Practices and Procedures to identify a minimum noise level to focus consideration to areas of need considering The London Plan policies which is discouraging noise walls. The use of the MTO Retrofit noise criteria is most relevant to Local Improvement scenarios.

Noise Barrier Type
In keeping with the spirit of The London Plan, the City should be open to the three main types of noise abatement barriers: walls, berms and berm/wall combinations. Noting, however, that each option presents its own challenges. Significant use of noise walls create unappealing walled cites. While berms can be more visually appealing, they have a significant space requirement and the potential to cause drainage issues associated with the change in site grading.

Materials
It is recommended the City procedures be more descriptive with respect to noise wall materials. In adhering to MECP's requirements, the acoustic barrier surface density should be noted as a requirement. This follows typical City practices. The City has traditionally used products on the Provincial Designated Sources of Materials (DSM) Index to ensure quality and durability. DSM specified walls have established quality control, known durability and lower ongoing operating costs. As other products become available on the market, staff will monitor the performance of these and evaluate their inclusion as an accepted product to achieve value for money.

Ownership and Maintenance
Clarify through EES Administrative Practices and Procedures that local improvement noise walls must be installed on municipal ROW or on private property (easement) enabling the City to have access for future maintenance.

Cost Sharing Ratios

The benefits of noise walls lie solely with the adjacent property owner. However, considering historical circumstances around which retrofit scenarios occur, it is recommended to adjust the EES Administrative Practices and Procedures to specify a more equitable cost sharing ratio: using a 50/50 split similar to other municipalities in Ontario.

## CONCLUSION

### Local Improvement Process

A review of London's existing local improvement policies and procedures was undertaken in consideration of provincial policies, local improvement procedures for other Ontario municipalities and feedback received from local property owners. The findings of this review concluded that some minor changes to EES Procedures for Retrofit Noise Barriers would provide additional guidance for future local improvement noise barrier studies, present definitive options for mitigation, and present London property owners with a more equitable share of construction costs associated with local improvement noise barriers. A summary of the proposed changes is presented below in table 3.

**Table 3: Summary of proposed changes to EES Administrative Practices and Procedures for Noise Attenuation Barriers (Local Improvements)**

| Criteria | London (Current) | London (Proposed Changes) |
|---|---|---|
| **Sound Level** | MECP / MTO | MTO Retrofit |
| **Noise Barrier Type** | Not specified | Noise Wall, Berm, or Berm/Wall Combo |
| **Noise Wall Materials** | Not specified | Designated Sources of Materials List |
| **Ownership** | Not specified | Municipality (ROW or easement) |
| **Minimum Participation** | Total block | Total block |
| **Cost Sharing Ratio** | $^{2}/_{3}$ Landowner<br>$^{1}/_{3}$ City | 50% Landowner<br>50% Municipality |

### Highbury Avenue

The results of the 2018 road traffic noise impact study for the residential properties west of the Highbury Avenue South corridor (between Bradley Avenue and the Thames River) assessed a potential local improvement noise wall for properties situated between Bradley and Commissioners. Feedback received from the affected property owners identified a number of concerns. Based on the feedback received, it is recommended to update property owners on revisions to the local improvement process and undertake no further action regarding noise attenuation in the area unless a local improvement is initiated by the property owners.

The local improvement process is designed to provide property owners some control of the process - a property owner petition is required to initiate a local improvement. In the future, should a local improvement noise wall be requested by the community, the proposed changes to London's local improvement procedures can assist with lessening the costs to affected property owners.

**Acknowledgements**

This report was prepared with the assistance of Matt Davenport, EIT, Engineer in Training and Karl Grabowski, P.Eng., Transportation Design Engineer of the Transportation Planning and Design Division.

| **SUBMITTED BY:** | **RECOMMENDED BY:** |
|---|---|
| | |
| **DOUG MACRAE, P.ENG., MPA**<br>**DIRECTOR, ROADS AND TRANSPORTATION** | **KELLY SCHERR, P.ENG., MBA, FEC**<br>**MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER** |

KPG/md

Attachments: Appendix A - Letter to residents (January 2, 2019)

# Appendix A

Letter to the residents (January 2, 2019)

**The Corporation of the City of London**
300 Dufferin Avenue
P.O. Box 5035
London ON N6A 4L9

January 02, 2019

Dear Property Owner:

**Re: Highbury Avenue South Traffic Noise Study**
**Bradley Avenue to the Thames River**

After receiving several concerns from residents noting elevated noise levels along the Highbury Avenue South corridor, the City retained a specialist noise consultant to study the noise levels being encountered within the residential properties which back onto the roadway.

As you may recall in 2017, Hydro One undertook maintenance operations within their corridor, which cleared the underbrush and trees between the rear yards and Highbury Avenue South. This corridor is 90 to 100 metres (295 to 330 feet) wide. The removal of this material improved the sightline to the freeway and possibly the travel of noise towards the residential properties.

The consultant completed the noise monitoring in June of 2018. The results were communicated in a report to the Civic Works Committee on September 25, 2018. The report is available on www.london.ca by typing “meetings” in the search bar. Following the Ontario Ministry of Transportation (MTO) Guideline, noise attenuation may be considered at the following locations:

- Milan Place
- Banbury Crescent
- Sundridge Crescent
- Sundridge Court
- Lysanda Avenue
- Lysanda Court
- 720 Deveron Crescent
- 730 Deveron Crescent

Please see the attached maps for more information. The recommended noise attenuation in these locations is a 2.5 metre high barrier (noise wall) along the rear property line (i.e. only for properties with rear yards adjacent to Hydro One / Highbury Avenue South corridor).

Noise wall installation along Highbury Avenue South is subject to the City of London’s Local Improvement Procedures. This process is subject to provincial regulations and City procedures and requires community support and participation. Information regarding actions that trigger a local improvement and the Local Improvement Process have been attached for reference.

Noise walls are also installed during road widenings adjacent to existing rear yards when the project increases traffic noise by bringing the traffic noise source closer to the property line. However, the City of London is not planning to widen Highbury Avenue South within the next 20-years.

Under the Municipal Act, the City of London can undertake work (i.e. install a noise wall) on private property as a local improvement. The City’s Local Improvement Procedures stipulates a cost sharing for the construction of noise walls on private property: 2/3

property owner and 1/3 City cost. Costs per property would be determined based on the width of the property to receive the improvement.

Noise walls placed by the City under capital projects are of a cementitious composition for long-term durability and reliability. Wooden noise walls are sometimes constructed in developments on private property; these have a shorter service life and higher maintenance costs. The design of the wall would include engineering analysis to confirm the soil conditions and grading necessary to provide the full benefit.

For example, based on an average property width of 15 metres (50 feet) adjacent to Hydro One / Highbury Avenue South and a typical construction cost per metre for a sound absorbent wall (2.5 metres in height) of $1,200, the following table presents the cost sharing between the City and property owner of a lot of that width:

| | **Total Cost** | **City of London Share (1/3)** | **Property Owner Share (2/3)** |
|---|---|---|---|
| Noise Wall Construction Cost ($/m) | $1,200 | $400 | $800 |
| Rear Yard Length (m) | 15 | | |
| **Total Estimated Cost** | **$18,000** | **$6,000** | **$12,000** |

In general, under a local improvement, the cost for an average property owner would be in the range of $12,000 (+HST).

The above estimate is assuming free access to the rear yards to construct the noise wall as would be available with a road widening project. Unfortunately, the Hydro One corridor exists between Highbury Avenue South and the rear yards on the west side of the roadway. This corridor presents a challenge to gain access for engineering design, construction and future maintenance. Therefore, the installation of a noise wall would be subject to the approval of Hydro One. If acceptable to Hydro One, there may be agreements and additional associated cost to proceed for surveys, design and construction of an access roadway.

A review of the noise wall local improvement process is underway. The City is interested in hearing your thoughts about this study, the local improvement process and the potential noise wall for your property.

For questions, comments and concerns, please contact the undersigned at 519.661.2489 x5232 or email mdavenport@london.ca.

Yours truly,

**Matt Davenport, EIT**
Engineer in Training
Transportation Planning and Design
Office: 519.661.2489 x5232 Fax: 519.661.4734

Attachments: Potential Locations for Noise Wall (map)
Local Improvement Triggers
Local Improvement Process Diagram

cc: Clr. Steven Hillier, Doug MacRae, Karl Grabowski

# Potential Locations for Noise Wall

Banbury Crescent, Sundridge Crescent, Sundridge Court, Lysanda Avenue, Lysanda Court, 720 Deveron Crescent, 730 Deveron Crescent

Milan Place

# Local Improvement Triggers

**Trigger 1: Minister of Health or Municipal Board of Health Initiated Local Improvement**
At any time, a local improvement can be initiated by the Minister of Health or Municipal Board of Health (Health Unit). The most likely reason a Health Unit would require a local improvement is a wide-scale failed sanitary septic system or unsafe drinking well water. As with all local improvements the majority of the costs for the improvement would be borne by the benefiting property owner. A Health Unit initiated local improvement is relatively uncommon.

**Trigger 2: Property Owner Initiated Local Improvement**
Property owners can successfully initiate a local improvement if two-thirds of the owners, representing a minimum of one-half of the assessed property value, petition in favour of undertaking the work.

If a municipality receives a sufficient petition against undertaking the work as a local improvement, or in other words the local improvement petition fails, the regulation states that the municipality shall not undertake the work as a local improvement within two years after receiving the petition.

**Trigger 3: Council Initiation of a Local Improvement**
City Council can successfully initiate a local improvement, unless it receives a petition against undertaking the local improvement, signed by at least a majority of the owners, representing at least one-half of the value of the lots, within 30 days after notice is given to the public. A City led initiative has a lower approval threshold (one-half versus two-thirds) when compared to property owner initiated local improvements. Section 15 of the Council Policy Manual outlines the City's policies related to local improvements. The policy was last updated at the September 18, 2017 Strategic Priorities and Policy Committee meeting.

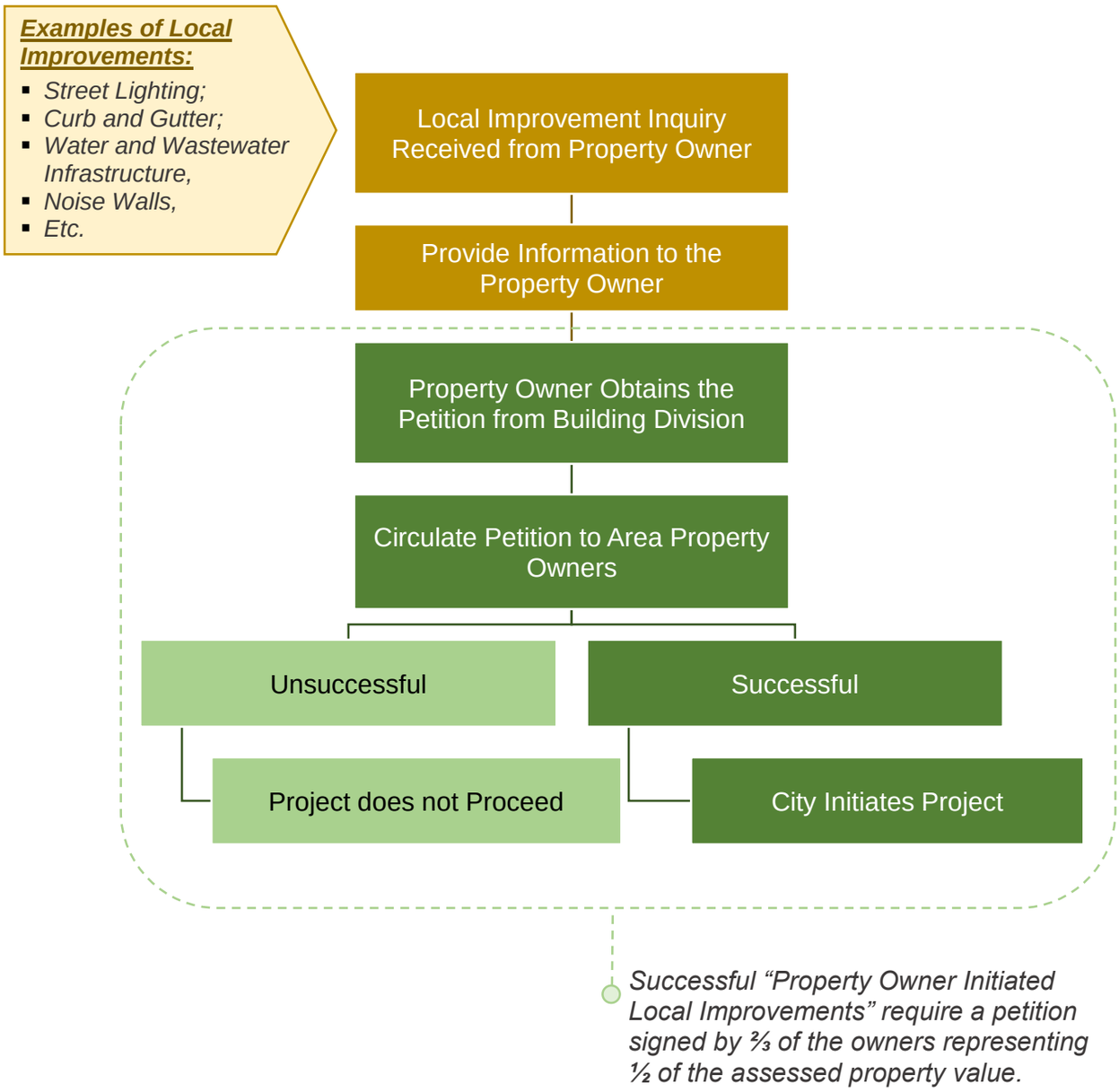
**Trigger 4: Approval from the Ontario Municipal Board**
At any time, a local improvement can be initiated based on an approval from the Ontario Municipal Board. Local improvements would be considered by the Ontario Municipal Board in instances when a petition of property owners or an initiative of City Council has failed.

In making a decision the board member considers:

1) Whether the project is needed in the public interest;
2) Whether the process under which the local improvement is approved is fair and properly carried out by the municipality; and
3) Whether the amounts assigned to the affected property owners are derived from a fair and established methodology.

Ontario Municipal Board initiated local improvements are uncommon.

# Local Improvement Process Diagram



# Petition to the City Of London Council and Civic Works Committee

January 17, 2019

**Petition against:** The recommended Highbury Avenue south noise attenuation wall.
**Reasons:** High cost per household, unknown additional associated costs of the project, attenuation wall is ineffective and unnecessary as per public interests, location not on private property with out compensation, not to be done as a Local Improvement.
**Considerations:** To have an open discussion with the affected local residents
**Petition lead:** Steve Cabral, 124 Sunridge Crescent, [redacted]
We the undersigned concerned citizens are petitioning against the proposed attenuation wall on the west side of Highbury Ave., South. for the reasons above.

| | |
|---|---|
| **TO:** | **CHAIR AND MEMBERS<br>CIVIC WORKS COMMITTEE<br>MEETING OF MARCH 18, 2019** |
| **FROM:** | **KELLY SCHERR, P.ENG., MBA, FEC<br>MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER** |
| **SUBJECT:** | **PROPOSED WATER BY-LAW (W-8) AND WASTEWATER & STORMWATER BY-LAW (WM-28) AMENDMENTS** |

## RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the Water By-law (W-8) and the Wastewater & Stormwater By-law (WM-28):

(a) the proposed by-law amendment attached hereto as Appendix 'B' **BE INTRODUCED** at the Municipal Council Meeting on March 26, 2019 to amend the existing Water By-law (W-8) "Regulation of Water Supply in the City of London";

(b) the proposed by-law amendment attached hereto as Appendix 'C' **BE INTRODUCED** at the Municipal Council Meeting on March 26, 2019 to amend the existing Wastewater & Stormwater By-law (WM-28) "Regulation of Wastewater and Stormwater Drainage Systems in the City of London"; and

(c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this proposed by-law amendment.

## PREVIOUS REPORTS PERTINENT TO THIS MATTER

- Water Meter Location Options for Residential Customers, September 7, 2016, Civic Works Committee
- Water Efficiency Program Update - Proposed Water By-Law Revisions, April 8, 2015, Civic Works Committee
- Update on New Funding Model and By-law For Water, Wastewater and Stormwater Services, April 8, 2013, Civic Works Committee
- New "Value Based" Funding Model for Water and Wastewater Services, October 22, 2012, Civic Works Committee

## 2015-2019 STRATEGIC PLAN

The 2015-2019 Strategic Plan under Building a Sustainable City identifies Robust Infrastructure, more specifically to this report; 1B – Manage and improve our water, wastewater and stormwater infrastructure and services.

## BACKGROUND

**Purpose**

The purpose of this report is to seek Council approval for a number of changes to the Water By-Law (W-8) as well as a minor change to the Wastewater & Stormwater By-Law (WM-28).

**Context**

The Water By-law (W-8) and Wastewater & Stormwater By-law (WM-28) are important City by-laws that have been enacted to help protect both the consumers of water in London and the natural environment. These by-laws are regularly reviewed and updated when necessary. This report has been prepared to address several minor by-law updates as well as a number of recent business practice changes.

## DISCUSSION

The following sections provide high-level background on the proposed changes to Water By-law (W-8) and Wastewater & Stormwater By-law (WM-28). Appendix 'A' contains rationale for each specific by-law change. The actual proposed text changes of W-8 and WM-28 are contained in Appendix 'B' and Appendix 'C', respectively.

**Remedy for Fire Fighting Water (W-8)**

This proposed change will ensure that when a customer's water is being used to put out a fire that they won't be billed for the extra water used. Depending on their layout, some properties could have a fire hydrant or sprinkler system downstream of their water meter. This change is important from an equity perspective since single family homes are not billed for their firefighting water (on-street hydrants) and the City allows dedicated fire services for larger properties to be unmetered.

**External Use of Water (W-8)**

Currently customers can only use water outside every other day during the week in the summer months. This change would lift this restriction but would leave in place the ability of the City Engineer or designate to administratively impose outdoor water use restrictions if necessary to respond to an emergency.

The restrictions, in the current form, were implemented in the mid-1980s in order to reduce strain on the water distribution system during peak times of water use. The restrictions were not intended to enforce conservation on their own and were instead intended to spread out consumption over a longer period of time.

The proposed changes to the by-law recognize that external watering has significantly decreased in recent decades and the consumption spikes observed in the 1980s are no longer a concern for London's water distribution system. Due to this change in behaviour, the outdoor water restrictions can be inactivated at this time with the restrictions maintained as a tool which can be re-activated at the discretion of the City Engineer.

In the April 8, 2015 CWC report, staff made some recommendations for consultation with various groups before changing this restriction. Some of those recommendations were applicable if staff were proposing strengthening or increasing enforcement of the restriction. Since the current proposal is to simply lift the regular restrictions for technical and operational reasons it is recommended that the public participation meeting that is accompanying this report serve as the public consultation for this change.

**Meter Installation Options (W-8)**

This change would introduce several alternatives to our standard water meter installation. Water metering technology has changed over time and now most of the City has been converted to a radio frequency (drive by) meter read system. This change is intended to address the very small number of customers who have expressed concerns with the radio transmitter.

**Miscellaneous Charges (W-8)**

Several changes to the "Miscellaneous Charges" schedule of the by-law are being

recommended in order to align several fees with the actual cost of providing the service. There are eleven proposed changes with the fees being reduced in three instances and increasing in four. One fee is proposed to be removed due to a change in technology. Another fee is proposed to be updated to reflect London Hydro's handling of certificates. New fees/conditions were also added to move the charge for valve rod purchases to the Water fees by-law and to reflect the new meter installation options.

**Frontage Charges (W-8 and WM-28)**

A change to the "Frontage Charges" section in by-laws W-8 and WM-28 is proposed to broaden the opportunity for an exemptions from frontage charges. This change would ensure that a property owner requiring a new water or sewer connection would pay either a frontage charge or development charge and not both charges.

**Minor Adjustments for Clarity**

The proposed changes to the by-law not mentioned above are minor adjustments in wording to increase the clarity of the by-law but do not represent a change to business practices. These changes would clarify:

- Wording related to residential water meter reading and billing;
- Approval requirements for temporary connection to a fire hydrant;
- Credits or charges applied when a billing error is found;
- Responsibility for repairs to damaged hydrants on private property;
- The intention of the deposit required for water meter accuracy testing; and
- That arrears certificate charges for water are set by and payable to London Hydro.

## CONCLUSIONS

It is recommended that the attached by-law amendments, Appendix 'B', be authorized and executed for the Regulation of Water Supply in the City of London. It is also recommended that the attached by-law amendment, Appendix 'C', be authorized for the Regulation of Wastewater and Stormwater Drainage Systems in the City of London.

**Acknowledgements**
This report was prepared within the Water Engineering Division by Michelle Morris, EIT, and reviewed by Daniel Hsia, Water Demand Manager, Scott Koshowski, Water Operations Engineer, and Kevin Graham, Environmental Services Engineer.

| PREPARED BY: | PREPARED BY: |
|---|---|
| | |
| **AARON ROZENTALS, P. ENG.**<br>**DIVISION MANAGER**<br>**WATER ENGINEERING** | **TOM COPELAND, P. ENG.**<br>**DIVISION MANAGER**<br>**WASTEWATER AND DRAINAGE ENGINEERING** |
| **REVIEWED & CONCURRED BY:** | **RECOMMENDED BY:** |
| | |
| **SCOTT MATHERS, P. ENG.**<br>**DIRECTOR, WATER AND WASTEWATER WATER ENGINEERING** | **KELLY SCHERR, P.ENG., MBA, FEC**<br>**MANAGING DIRECTOR**<br>**ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER** |

Attach: Appendix A: Specific Proposed Amendments with Rationale
Appendix B: Water By-law Amendments (W-8)
Appendix C: Wastewater & Stormwater By-law Amendments (WM-28)

cc: John Simon, Division Manager, Water Operations
Scott Koshowski, Water Operations Engineer
Stephen Irwin, Water Meter Supervisor
Daniel Hsia, Water Demand Manager
Kevin Graham, Environmental Services Engineer
Michelle Morris, EIT

## APPENDIX A

## SPECIFIC PROPOSED AMENDMENTS WITH RATIONALE
## WATER BY-LAW (W-8) AND WASTEWATER & STORMWATER BY-LAW (WM-28)

1. Water By-law: Definitions (Part 1)
   The proposed update includes a definition for the “Residential” property classification for clarity.

2. Water By-law: Meter Reading and Billing (section 3.3)
   The proposed updates clarify the wording regarding bill delivery and consumption estimates.

3. Water By-law: Meter Reading and Billing - drive-by Meter Reading Route (section 3.4)
   The proposed update removes redundant wording regarding water meter installation options.

4. Water By-law: Frontage Charge (section 3.14.2)
   The proposed update is being made to provide clarity and consistency with the Wastewater and Stormwater By-law (WM-28) and the Development Charges By-law regarding frontage charge exemptions. There is also a change to broaden the exemptions to frontage charges when a property is developing to align with the Development Charges By-law.

5. Water By-law: Temporary Water Supply – No Connection to a Fire Hydrant Without Consent (section 3.16)
   The proposed update clarifies the approval requirements associated with connecting to a fire hydrant for temporary water supply.

6. Water By-law: Retroactive Credits or Charges for Billing Errors (section 3.19)
   The existing by-law only notes a refund should a billing error occur but is silent on the charges that may be incurred due to a billing error. The new wording is to clearly explain that there can be credits or charges applied when a billing error is found.

7. Water By-law: Responsibility for Hydrant Damage Repair – Private Property (section 6.17)
   This new section provides clarity regarding the responsibilities of the City and the responsibilities of the property owner for repairs to a damaged hydrant on private property.

8. Water By-law: Fire Fighting Water Through Meter – Remedy (section 7.2)
   This new section provides a prescriptive remedy for billing charges that are incurred as a result of water being used for firefighting after passing through a City supplied water meter.

9. Water By-law: Meter Installation Options (sections 7.11 and 7.12)
   These new sections incorporate recent business practice advances in water metering options. The new water meter installation options include: radio device wired to the outside of the house, touch pad wired to the outside of the house, and meter pit installation. The by-law also outlines eligibility for Customer Assistance programs.

10. Water By-law: Water Testing for Customer – Deposit – Conditions (section 7.18)
    The proposed update clarifies the intention of the deposit that is required for water meter accuracy testing.

11. Water By-law: Use of Water Externally (Part 9)
The proposed change maintains the summer outdoor water use restrictions as a prescribed tool that is inactive until such time that it is implemented at the discretion of The Engineer.
The outdoor water use restrictions, in the current form, were implemented in the mid-1980s in order to reduce strain on the water distribution system during peak times of water use. The water use peaks, which reached an all-time high during the summers of the 1980s, were attributed to societal behaviours where many consumers in London watered their lawns at the same time. This behaviour resulted in significant consumption spikes and the spikes were further exacerbated by the hot and dry summer of 1988. The external watering and significant consumption spikes resulted in a break on the Huron Water Supply transmission main in the summer of 1988. As an effort to distribute the consumption more evenly and reduce the consumption spikes, the current outdoor water use restrictions were implemented.

The proposed changes to the by-law recognize that external watering has significantly decreased in recent decades and the consumption spikes observed in the 1980s are no longer a concern for London's water distribution system. Due to this change in behaviour, the outdoor water restrictions can be inactivated at this time with the restrictions maintained as a prescribed tool which can be re-activated at the discretion of The Engineer.

12. Water By-law: Miscellaneous Charges, schedule 'A' (section 3.3)
The summary of the changes to miscellaneous charges are as follows:

1. The Smart Card (per card purchase cost) for bulk water usage is proposed to be removed due to a recent change in technology that makes this fee unnecessary.
2. Charges for inspecting waterworks installations and disconnections after hours are to be changed from $126.09 per hour (January 1, 2019) to $130.00 per hour (March 26, 2019), which is reflective of actual cost of dispatch and service
3. Arrears certificate charges for water are currently $50.00 per property; however they are to be changed to "as set by, payable to, and directed to London Hydro" as all of the arrears certificates for water are processed by London Hydro on the City's behalf. London Hydro's expenses for processing the arrears certificates may vary depending on their system and resources, which is outside of the City's processes.
4. Charges to disconnect and reconnect a water meter at a customer's request for 16 mm and 19 mm water meters is to be changed from $207.95 (January 1, 2019) to $130.00 (March 26, 2019), and for 25 mm or larger water meters from $353.94 (January 1, 2019) to $260.00 (March 26, 2019), which is reflective of actual cost of the service.
5. Charges to install a water meter and remote read-out unit at customer request for a 16 mm and 19 mm water meter is to be changed from $318.59 (January 1, 2019) to $300.00 (March 26, 2019), and for 25 mm or larger water meters from $318.59 (January 1, 2019) to time and material costs (March 26, 2019), which is reflective of actual cost of service.
6. The Repair Damaged Water Meter Charge for 16 mm and 19 mm water meters is to be changed from $219.00 (January 1, 2019) to $230.00 (March 26, 2019), which is reflective of the actual cost of repair.
7. Charges for having a meter checked for accuracy (at customer's request and found to be accurate) is to be changed for 16 mm and 19 mm water meters from $163.68 (January 1, 2019) to $265 (March 26, 2019), and for 25 mm and larger water meters from $221.21 (January 1, 2019) to $395.00 (March 26, 2019), which is reflective of actual cost of service.
8. Charges for the purchase of Valve Rod extensions by contractors is added to this by-law. These charges were previously removed from the Miscellaneous Fees & Charges by-law.
9. Illegal hydrant connection offence charges are to be changed from $650.31 per

offence (January 1, 2019) to $750.00 per offence (March 26, 2019), in order to cover the full cost of investigating the illegal connection and remedial works required as a result of the illegal connection.

10. The temporary hydrant connection charges are currently $240.62 for hydrant connection, $45.53/week for occupancy, $1,040.51 for minimum charge, and $3.48/m$^3$ for additional consumption (January 1, 2019). These are to be changed to $220.00 for hydrant connection, $40.00/week for occupancy, $975.00 for minimum charge, and $3.25 m$^3$ for additional consumption (March 26, 2019) to better reflect the costs of these activities.
11. The charges for the new Water Meter Installation Options (by application) are to be added to the miscellaneous charges table.

13. <u>Wastewater & Stormwater By-law: Frontage charge exemptions (section 6.3)</u>
The proposed update is being made to provide clarity and consistency with the Water By-law. There is also a change to broaden the exemptions to frontage charges when a property is developing to align with the Development Charges By-law.

**APPENDIX B**

**BY-LAW TO AMEND THE WATER BY-LAW (W-8)**

Bill No.

By-law No. W-8

A by-law to amend By-law W-8 entitled, "Regulation of Water Supply in the City of London."

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

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

AND WHEREAS it is deemed expedient to amend By-law No. W-8 being the Regulation of Water Supply in the City of London By-law;

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

**1. <u>Definitions</u>**

Part 1 of By-law W-8 is hereby amended by **adding** the following:

**"Residential"** means a single detached residence, semi-detached, and/or individually metered townhome unit, including homes with an accessory apartment or home occupation which is not served by a separate Meter.

**2. <u>Meter reading and billing</u>**

Section 3.3 of By-law W-8 is hereby amended by **deleting** the existing Sections 3.3 and **replacing** it with a new Section 3.3, as follows:

"**3.3 Meter reading and billing**
Water meters may be read and accounts rendered monthly, bi-monthly or on any other basis at the discretion of the City. The bill shall be deemed to be served upon the customer if it is delivered or sent by mail to the Premises supplied, or if notice of bill availability is delivered electronically where the customer has elected for an electronic means of contact. The City, in its sole discretion, shall collect customer water consumption data with a drive-by Meter reading system on a route by route basis.

3.3.1 If a meter fails to register or a read is not collected for any other reason, the customer shall be charged on the basis of a reasonable estimate as determined by the City of London derived from previous consumption at the property where available. At the time when a meter read is collected, the account will be adjusted based on the actual metered consumption during the estimated period.

**3. <u>Meter reading and billing - drive-by Meter reading route</u>**

Section 3.4 of By-law W-8 is hereby amended by **deleting** the existing Section 3.4, as follows:

"**3.4 Meter reading and billing – drive-by Meter reading route**
The City, in its sole discretion, may measure water usage with drive-by Meter reading system on a route by route basis. Customers may request that an encoder Meter be installed with an external Remote Read-Out Unit. Customer's that request an encoder

Meter be installed shall pay the applicable charge as indicated in Section 3.3 of attached Schedule "A"."

**4. Frontage charge**

Section 3.14.2 of By-law W-8 is hereby amended by **deleting** the existing Section 3.14.2 and **replacing** it with the new Section 3.14.2, as follows:

**"3.14.2 Frontage charge**

(1) A frontage charge shall be payable as set out in Section 3.3 of attached Schedule "A" when a Service Stub is connected to the Water Distribution System.

(2) Subsection 3.14.2(1) does not apply when a connection is made to a Main and that connection:

(a) has been financed under the provisions of a local improvement;

(b) is the subject of an area rate or special local municipality levy by-law;

(c) is made to a Main financed under the Development Charges By-law and a Water Distribution Development Charge has been paid;

(d) is made to land that includes a building for which a Water Distribution Development Charge has been paid, or;

(e) is made to land which was already legally connected to the Main and the connection is being replaced due to condition and/or size."

**5. Temporary Water supply – no connections to a fire hydrant without consent**

Section 3.16 of By-law W-8 is hereby amended by **deleting** the existing Section 3.16, and **replacing** it with a new Section 3.16, as follows:

**"3.16 Temporary Water supply – no connections to a fire hydrant without consent**
No person shall connect to a fire hydrant without the written consent of the Engineer. After receiving consent, that person shall pay the charges as indicated in Section 3.3 of attached Schedule "A". A deposit, equal to the Water Consumption Minimum Charge plus the Hydrant Connection/Disconnection fee, must be paid prior to the connection being made. Where a person has been connected to a fire hydrant without consent, the City will invoice that person the Illegal Connection Charge, as indicated in Section 3.3 of attached Schedule "A"."

**6. Retroactive credits or charges for billing errors**

Section 3.19 of By-law W-8 is hereby amended by **deleting** the existing Section 3.19 and **replacing** it with a new Section 3.19, as follows:

"**3.19 Retroactive credits or charges for billing errors**
If a billing error is made, the account may be retroactively recalculated for a period not exceeding two (2) years from the date of detection with resulting credits or charges being applied to the account."

**7. Responsibility for hydrant damage repair – private property**

Part 6 of By-law W-8 is hereby amended by **adding** the following section 6.17, as follows, and re-numbering the subsequent sections:

**"6.17 Responsibility for Hydrant Damage Repair – Private property**

Hydrants located on private property that sustain damage shall be repaired within seven (7) days. Responsibility for repairs is as follows:

a) Damage above the break-away flange shall be repaired by the City of London, or by persons authorized by the City, at the expense of the City;
b) Damage below the break-away flange, including the barrel, shall be repaired by the Owner, at the expense of the Owner."

**8. Fire Fighting Water Through Meter - Remedy**

Part 7 of By-law W-8 is hereby amended by **adding** the following section 7.2, as follows, and re-numbering the subsequent sections:

**"7.2 Fire Fighting Water Through Meter – Remedy**
Firefighting Water that passes through a Meter supplied by the City for a legitimate and verifiable fire incident, to the satisfaction of the Engineer, and exceeds three times the average consumption through the Meter, will be eligible for a billing adjustment. Billing charges will be based on the average consumption through the Meter, as determined by the Engineer."

**9. Meter Installation Options**

Part 7 of By-law W-8 is hereby amended by **adding** the following sections, 7.11 and 7.12, as follows, and re-numbering the subsequent sections:

**"7.11 Meter Installation Options**
All water meters and radio read devices are to be installed, as per the City's specifications, inside the premises that it is servicing. If an Owner wishes to alter this standard installation practice, the Owner shall complete an application form and agree to pay all associated costs with the selected option as per Section 3.3 of attached Schedule "A", for as long as that option is in use. If the application is approved, the selected alternative option will be scheduled for installation. Owners are entitled to revert back to standard meter installations, meter reading and billing, at any time, but will be subject to all associated costs as per Section 3.3 of attached Schedule "A", as required to undertake that request. Water meters in conjunction with the radio device assist with early detection and notification of potential high consumption associated with leaks. Therefore, any property that does not have a Radio Device attached to the meter or wired outside, will not be eligible to participate in Customer Assistance programs.

**7.12 Meter Installation Options – Alternatives from standard installation**
The following water meter installation options are available, by application:

a) Radio Device Wired to Outside of House – if an application is approved, all water meters are to be installed, as per the City's specifications, inside the premises that it is servicing. If an Owner wishes to have the remote read out device (radio device) wired remotely from the water meter to the external portion of the premises, in most cases the hydroelectric stack, the Owner is responsible for obtaining the wire from the City and pre-installing it from the hydroelectric stack to the internal water meter location. The radio device will then be installed onto the premises existing hydroelectric stack by City staff.

b) Touch Pad Wired to Outside of House – if an application is approved, all water meters are to be installed, as per the City's standard design, inside the premises that it is servicing. If an Owner wishes to have a remote read out device (touch pad) wired remotely from the water meter to the external portion of the premises, in most cases the hydroelectric stack, the Owner is responsible for obtaining the wire from the City and pre-installing it from the hydroelectric stack to the internal water meter location. The touch pad device will then be installed onto the premises existing hydroelectric stack by City staff. Owners opting for this alternative shall be made aware that the City of London will attempt a meter reading only once per annum, and that the water and sanitary charges will be on the basis of a reasonable estimate as determined by the City of London derived from previous consumption at the

property. At the time when a meter read is collected, the account will be adjusted based on the actual metered consumption during the estimated period. Owners opting for this alternative installation practice will not be eligible to participate in Customer Assistance programs.

c) Meter Pit Installation – if an application is approved, all water meter pits are to be installed, as per the City's standard design, by the City of London, or its authorized contractor, at the City's sole discretion. The meter pit will be fitted with a water meter and remote read out device (radio device). Meter pits will be installed on the public side of the property line, in the current location of the water service to the premises, and will also include a standard curb stop. The City will not be responsible for final restoration work, including, but not limited to, topsoil, grass, sod, asphalt, or concrete. The City will perform rough restoration to surface, to the extent possible, such that the Owner can complete final restoration at their expense. The Owner will become responsible for all water consumption from the point of the meter pit.

**10. <u>Water testing for customer – deposit – conditions</u>**

Section 7.18 of By-law W-8 is hereby amended by **deleting** "the existing Section 7.18, and **replacing** it with a new Section 7.18, as follows:

"**7.18 Meter testing for customer - deposit – conditions**

Any Customer may, upon written application to the Engineer, have the water meter checked for accuracy. Every such application shall be accompanied by a deposit equal to the fee for checking the meter for accuracy as set out in Section 3.3 of <u>attached</u> Schedule "A". If the Meter is found to register correctly, slow or not to exceed three per cent (3%) in favour of the City when tested in accordance with *Section 4.2.8 of ANSI/AWWA C700 and AWWA Manual M6, Water Meters – Selection, Installation, Testing, and Maintenance*, the Customer's deposit shall be forfeited towards the cost of the test. Any additional expense of removing and testing of the Meter will be paid for in full by the Customer. If the Meter is found, when tested to register in excess of three per cent (3%), a refund will be made to the Customer equal to such excess percentage of the amount of the account for the period of four (4) months prior to such testing of the Meter, plus the Customer's deposit for the test."

**11. <u>Regulations – Use of Water Externally</u>**

Section 9.1 of By-law W-8 is hereby amended by **deleting** the existing Section 9.1 and **replacing** it with a new Section 9.1, as follows:

"**9.1 Regulations - Use of Water Externally**
For the purpose of limiting the consumption of Water as necessary:

(a) The Engineer is authorized to implement at any time any regulation which The Engineer, at The Engineer's discretion, considers advisable to limit the External Use of Water and this authority includes the right to ban completely the External Use of Water.

(b) Notice of the implementation of a Water use regulation by The Engineer and the effective date thereof shall be given immediately in a manner determined by The Engineer.

(c) Upon the announcement of the implementation of a Water use regulation by The Engineer, no person shall use Water except in accordance with the provisions of such regulation."

**12. <u>Miscellaneous Charges</u>**

Schedule "A", Section 3.3, of By-law W-8 is hereby amended by **deleting** the existing Section 3.3 and **replacing** it with a new Section 3.3, as follows:

**“3.3 Miscellaneous Charges**

Miscellaneous charges shall be as noted in the table below.

| **Service or Activity** | **January 1, 2017 Charge** | **January 1, 2018 Charge** | **January 1, 2019 Charge** | **March 26, 2019 Charge** |
|---|---|---|---|---|
| Change of occupancy/ Account set-up/ Security deposit | As set by London Hydro | As set by London Hydro | As set by London Hydro | As set by London Hydro |
| Late payment | As set by London Hydro | As set by London Hydro | As set by London Hydro | As set by London Hydro |
| NSF cheques | As set by London Hydro | As set by London Hydro | As set by London Hydro | As set by London Hydro |
| Collection charges | As set by London Hydro | As set by London Hydro | As set by London Hydro | As set by London Hydro |
| Bulk Water User charges<br>Cost of Water per 1,000 litres | $3.54 | 3.65 | $3.76 | $3.76 |
| Inspecting Waterworks installations/disconnections after hours (3 hour minimum charge) | $118.85 per hour | $122.42 per hour | $126.09 per hour | $130.00 per hour |
| Disconnection of Water Service<br>During regular hours<br>After regular hours | $35.00<br>$185.00 | $35.00<br>$185.00 | $35.00<br>$185.00 | $35.00<br>$185.00 |
| Arrears Certificate charges (non-payment/arrears) | $50.00 per property | $50.00 per property | $50.00 per property | As set by, payable to, and directed to London Hydro |
| Disconnect and Reconnect Meter at customer request<br>16 and 19 mm<br>25 mm and larger | $196.01<br>$333.62 | $201.89<br>$343.63 | $207.95<br>$353.94 | $130.00<br>$260.00 |
| Install Water Meter and Remote Read-Out Unit at customer request<br>16 and 19 mm<br>25 mm and larger | $300.30 | $309.31 | $318.59 | $300.00<br>Time and material |
| Repair damaged Water Meter<br>16 and 19 mm<br>25 mm and larger | $206.43<br>Time and Material | $212.62<br>Time and Material | $219.00<br>Time and Material | $230.00<br>Time and Material |
| Meter checked for accuracy (at customer’s request and found to be accurate)<br>16 and 19 mm<br>25 mm and larger | $154.28<br>$208.51 | $158.91<br>$214.77 | $163.68<br>$221.21 | $265.00<br>$395.00 |
| Builder and Developer Frontage Charges:<br>(based on actual frontage which directly abuts City right-of-way)<br>Residential (maximum 50 metres)<br>Commercial, Institutional and Industrial | $215.49 per metre<br>$229.19 per metre | $221.95 per metre<br>$236.07 per metre | $228.61 per metre<br>$243.15 per metre | $228.61 per metre<br>$243.15 per metre |

| | | | | |
|---|---|---|---|---|
| Valve Rod Extensions (by length): | | | | |
| 2 Foot | | | | $65.97 |
| 2 ½ Foot | | | | $67.23 |
| 3 Foot | | | | $68.47 |
| 3 ½ Foot | | | | $69.73 |
| 4 Foot | | | | $70.98 |
| 4 ½ Foot | | | | $72.24 |
| 5 Foot | | | | $73.49 |
| 5 ½ Foot | | | | $74.75 |
| 6 Foot | | | | $75.99 |
| 6 ½ Foot | | | | $77.25 |
| 7 Foot | | | | $78.50 |
| 7 ½ Foot | | | | $79.76 |
| 8 Foot | | | | $81.01 |
| 9 Foot | | | | $83.51 |
| 10 Foot | | | | $86.02 |
| Illegal Hydrant Connection | $612.98 /offence + water Consumption | $631.37 /offence + water Consumption | $650.31 /offence + water Consumption | $750.00 /offence + water Consumption |
| Temporary Hydrant Connection | | | | |
| Hydrant connection /disconnection | $226.81 | $233.61 | $240.62 | $220.00 |
| Hydrant occupancy | $42.91 /week | $44.20 /week | $45.53 /week | $40.00 /week |
| Water consumption | | | | |
| Minimum charge (up to 300 $m^3$) | $980.78 | $1,010.20 | $1,040.51 | $975.00 |
| All additional consumption | $3.28/$m^3$ | $3.38 /$m^3$ | $3.48/$m^3$ | $3.25/$m^3$ |
| Water Meter Installation Options (by application): | | | | |
| Radio Device Wired to Outside of House (see application for details) | | | | No Charge |
| Touch Pad Wired Outside of House (see application for details) | | | | Is not eligible for Customer Assistance Programs (see application for details) |
| Meter Pit Installation | | | | Time and Material ($2,500.00 deposit required, see application for details) |

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

PASSED in Open Council on March 26, 2019.

Ed Holder
Mayor

Catharine Saunders
City Clerk

First Reading – March 26, 2019
Second Reading – March 26, 2019
Third Reading – March 26, 2019

**APPENDIX C**

**BY-LAW TO AMEND THE WASTEWATER & STORMWATER BY-LAW (WM-28)**

Bill No.

By-law No. WM-28

A by-law to amend By-law WM-28 entitled, "Regulation of Wastewater and Stormwater Drainage Systems in the City of London"

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

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

AND WHEREAS it is deemed expedient to amend By-law No. WM-28 being the Regulation of Wastewater and Stormwater Drainage Systems in the City of London By-law;

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

**1. <u>Frontage Charge Exemptions</u>**

Section 6.3 of By-law WM-28 is hereby amended by **deleting** the existing Section 6.3 and **replacing** it with a new Section 6.3 as follows:

"6.3 Frontage Charge – exemptions
Subsection 6.2 does not apply when a connection is made to a Sewer and that connection:

(a) has been financed under the provisions of a local improvement;

(b) is the subject of an area rate or special local municipality levy by-law;

(c) is made to land that includes a building for which a Sanitary Sewer Development Charge has been paid;

(d) services land within a registered plan of subdivision, provided the Sewer has been constructed pursuant to the registered subdivision agreement, or;

(e) is made to land which was already legally connected to the Main and the connection is being replaced due to condition and/or size."

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

PASSED in Open Council on July 17, 2018.

Ed Holder
Mayor

Catharine Saunders
City Clerk

First Reading – July 17, 2018
Second Reading – July 17, 2018
Third Reading – July 17, 2018

**APPENDIX B**

**BY-LAW TO AMEND THE WATER BY-LAW (W-8)**

Bill No.

By-law No. W-8

A by-law to amend By-law W-8 entitled, "Regulation of Water Supply in the City of London."

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

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

AND WHEREAS it is deemed expedient to amend By-law No. W-8 being the Regulation of Water Supply in the City of London By-law;

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

**1.** Part 1 of By-law W-8 is hereby amended by **adding** the following:

**"Residential"** means a single detached residence, semi-detached, and/or individually metered townhome unit, including homes with an accessory apartment or home occupation which is not served by a separate Meter.

**2.** Section 3.3 of By-law W-8 is hereby amended by **deleting** the existing Sections 3.3 and **replacing** it with a new Section 3.3, as follows:

"**3.3 Meter reading and billing**
Water meters may be read and accounts rendered monthly, bi-monthly or on any other basis at the discretion of the City. The bill shall be deemed to be served upon the customer if it is delivered or sent by mail to the Premises supplied, or if notice of bill availability is delivered electronically where the customer has elected for an electronic means of contact. The City, in its sole discretion, shall collect customer water consumption data with a drive-by Meter reading system on a route by route basis.

3.3.1 If a meter fails to register or a read is not collected for any other reason, the customer shall be charged on the basis of a reasonable estimate as determined by the City of London derived from previous consumption at the property where available. At the time when a meter read is collected, the account will be adjusted based on the actual metered consumption during the estimated period.

**3.** Section 3.4 of By-law W-8 is hereby amended by deleting the existing Section 3.4, as follows:

"**3.4 Meter reading and billing – drive-by Meter reading route**
The City, in its sole discretion, may measure water usage with drive-by Meter reading system on a route by route basis. Customers may request that an encoder Meter be installed with an external Remote Read-Out Unit. Customer's that request an encoder Meter be installed shall pay the applicable charge as indicated in Section 3.3 of attached Schedule "A"."

**4.** Section 3.14.2 of By-law W-8 is hereby amended by deleting the existing Section 3.14.2 and replacing it with the new Section 3.14.2, as follows:

**"3.14.2 Frontage charge**

(1) A frontage charge shall be payable as set out in Section 3.3 of attached Schedule "A" when a Service Stub is connected to the Water Distribution System.

(2) Subsection 3.14.2(1) does not apply when a connection is made to a Main and that connection:

(a) has been financed under the provisions of a local improvement;

(b) is the subject of an area rate or special local municipality levy by-law;

(c) is made to a Main financed under the Development Charges By-law and a Water Distribution Development Charge has been paid;

(d) is made to land that includes a building for which a Water Distribution Development Charge has been paid, or;

(e) is made to land which was already legally connected to the Main and the connection is being replaced due to condition and/or size."

**5.** Section 3.16 of By-law W-8 is hereby amended by deleting the existing Section 3.16, and replacing it with a new Section 3.16, as follows:

**"3.16 Temporary Water supply – no connections to a fire hydrant without consent**
No person shall connect to a fire hydrant without the written consent of the Engineer. After receiving consent, that person shall pay the charges as indicated in Section 3.3 of attached Schedule "A". A deposit, equal to the Water Consumption Minimum Charge plus the Hydrant Connection/Disconnection fee, must be paid prior to the connection being made. Where a person has been connected to a fire hydrant without consent, the City will invoice that person the Illegal Connection Charge, as indicated in Section 3.3 of attached Schedule "A"."

**6.** Section 3.19 of By-law W-8 is hereby amended by deleting the existing Section 3.19 and replacing it with a new Section 3.19, as follows:

"**3.19 Retroactive credits or charges for billing errors**
If a billing error is made, the account may be retroactively recalculated for a period not exceeding two (2) years from the date of detection with resulting credits or charges being applied to the account."

**7.** Part 6 of By-law W-8 is hereby amended by deleting the existing Section 6.17 through 6.18 and replacing it with a new Section 6.17 through 6.19, as follows:

**"6.17 Responsibility for Hydrant Damage Repair – Private property**
Hydrants located on private property that sustain damage shall be repaired within seven (7) days. Responsibility for repairs is as follows:

a) Damage above the break-away flange shall be repaired by the City of London, or by persons authorized by the City, at the expense of the City;
b) Damage below the break-away flange, including the barrel, shall be repaired by the Owner, at the expense of the Owner.

**6.18 Renewal of Service Stubs - City – Owner**
The City shall renew Service Stubs on public property at its expense and to its specifications when:

a) Service Stub is deemed by the Engineer to be beyond repair;
b) the existing Service Stub is substantially composed of lead provided the Owner has completed replacement of the Service Extension before the City replaces the Service Stub. The replacement Service Stub shall conform to the specifications of

the City. Replacement Service Stub shall be the same size as existing or the minimum size for that area of the City.

**6.19 Access - removal - inspection - fittings**
Where a Customer discontinues the use of a Water Service, or the Engineer lawfully refuses to continue to supply Water to the Premises, the Engineer may, at all reasonable times, enter the Premises in or upon which the Customer was supplied with the Water service, for the purpose of disconnecting the supply of Water or of making an inspection from time to time to determine whether the Water service has been or is being unlawfully used or for the purpose of removing therefrom any fittings, machines, apparatus, Meters, pipes or other things being the property of the City in or upon the Premises, and may remove the same therefrom, doing no unnecessary damage."

**8.** Part 7 of By-law W-8 is hereby amended by deleting the existing Section 7.2 through 7.19 and replacing it with a new Section 7.2 through 7.22, as follows:

**"7.2 Fire Fighting Water Through Meter – Remedy**
Firefighting Water that passes through a Meter supplied by the City for a legitimate and verifiable fire incident, to the satisfaction of the Engineer, and exceeds three times the average consumption through the Meter, will be eligible for a billing adjustment. Billing charges will be based on the average consumption through the Meter, as determined by the Engineer.

**7.3 Supply - installation - ownership - replacement**
The Owner shall pay the Water Related Service charges as indicated in Section 3 of attached Schedule "A", before the City will supply the owner with a Meter and Remote Read-Out Unit and the Meter and Remote Read-Out Unit shall be installed prior to occupancy of the Premises. The Meter and Remote Read-Out Unit shall remain the exclusive property of the City and may be removed at the Engineer's discretion, upon the same being replaced by another Meter and Remote Read-Out Unit, or for any reason which the Engineer may, in their discretion, deem sufficient.

**7.4 Installation - maintenance - repair - access**
The Engineer may shut off or restrict the supply of Water to any Premises if the Engineer requires access to the Premises to inspect, install, repair, replace, or alter the Meter and the Remote Read-Out Unit. The Engineer shall have free access, at all reasonable times, and upon notice given as set out in section 7.4 of this by-law, to all parts of every Premises to which any Water is supplied for the purpose of inspecting, installing, repairing, replacing or altering the Meter and/or Remote Read-Out Unit, within or without the Premises, or for placing Meters upon any Water Service Pipe within or without the Premises as the Engineer considers expedient.

**7.5 Notice required - access**
Before shutting off or restricting the supply of Water, the Engineer shall,

(a) by personal service or by registered mail, serve the Owner, Customer and Occupants of the Premises as shown on the last returned assessment roll of the municipality with a notice of the date upon which the City intends to shut off or restrict the supply of Water if access to the Premises is not obtained before that date;
(b) securely attach a copy of the notice described in clause (a) to the Premises in a conspicuous place.

**7.6 No shut off - reasonable effort - gain access**
The Engineer shall not shut off or restrict the supply of Water unless it has made reasonable efforts to gain access to the Premises and has been unable to gain access within fourteen (14) days after the later of,

(a) the day the last notice under part (a) of section 7.4 of this by-law was personally served;
(b) the day the last notice under part (a) of section 7.4 of this by-law was mailed; and

(c) the day a copy of the notice was attached under part (b) of section 7.4 of this by-law.

**7.7 Restoration of Water supply - as soon as practicable**
If the Engineer has shut off or restricted the supply of Water under section 7.3 of this bylaw, the Engineer shall restore the supply of Water as soon as practicable after obtaining access to the Premises.

**7.8 Charges - Owner or Customer to pay**
All charges for any of the work and services mentioned in sections 7.3 and 7.6 of this by-law will be determined by the Engineer as indicated in Section 3.3 of attached Schedule "A" and shall be paid in full by the Owner or the Customer, as the case may.

**7.9 Every Premises Metered - Engineer's discretion**
Every separate Premises to which Water is being supplied shall be furnished with a separate Meter, supplied by the City except where non-compliance is acceptable to the Engineer. Additional Meters, supplied by the City, may only be installed at the discretion of the Engineer.

**7.10 Installation to City Specifications**
All Meters, supplied by the City, shall be installed in accordance with the City's Standard Contract Documents.

**7.11 Meter Installation Options**
All water meters and radio read devices are to be installed, as per the City's specifications, inside the premises that it is servicing. If an Owner wishes to alter this standard installation practice, the Owner shall complete an application form and agree to pay all associated costs with the selected option as per Section 3.3 of attached Schedule "A", for as long as that option is in use. If the application is approved, the selected alternative option will be scheduled for installation. Owners are entitled to revert back to standard meter installations, meter reading and billing, at any time, but will be subject to all associated costs as per Section 3.3 of attached Schedule "A", as required to undertake that request. Water meters in conjunction with the radio device assist with early detection and notification of potential high consumption associated with leaks. Therefore, any property that does not have a Radio Device attached to the meter or wired outside, will not be eligible to participate in Customer Assistance programs.

**7.12 Meter Installation Options – Alternatives from standard installation**
The following water meter installation options are available, by application:

a) Radio Device Wired to Outside of House – if an application is approved, all water meters are to be installed, as per the City's specifications, inside the premises that it is servicing. If an Owner wishes to have the remote read out device (radio device) wired remotely from the water meter to the external portion of the premises, in most cases the hydroelectric stack, the Owner is responsible for obtaining the wire from the City and pre-installing it from the hydroelectric stack to the internal water meter location. The radio device will then be installed onto the premises existing hydroelectric stack by City staff.

b) Touch Pad Wired to Outside of House – if an application is approved, all water meters are to be installed, as per the City's standard design, inside the premises that it is servicing. If an Owner wishes to have a remote read out device (touch pad) wired remotely from the water meter to the external portion of the premises, in most cases the hydroelectric stack, the Owner is responsible for obtaining the wire from the City and pre-installing it from the hydroelectric stack to the internal water meter location. The touch pad device will then be installed onto the premises existing hydroelectric stack by City staff. Owners opting for this alternative shall be made aware that the City of London will attempt a meter reading only once per annum, and that the water and sanitary charges will be on the basis of a reasonable estimate as determined by the City of London derived from previous consumption at the property. At the time when a meter read is collected, the account will be adjusted

based on the actual metered consumption during the estimated period. Owners opting for this alternative installation practice will not be eligible to participate in Customer Assistance programs.

c) Meter Pit Installation – if an application is approved, all water meter pits are to be installed, as per the City's standard design, by the City of London, or its authorized contractor, at the City's sole discretion. The meter pit will be fitted with a water meter and remote read out device (radio device). Meter pits will be installed on the public side of the property line, in the current location of the water service to the premises, and will also include a standard curb stop. The City will not be responsible for final restoration work, including, but not limited to, topsoil, grass, sod, asphalt, or concrete. The City will perform rough restoration to surface, to the extent possible, such that the Owner can complete final restoration at their expense. The Owner will become responsible for all water consumption from the point of the meter pit."

**7.13 Meter location - Engineer to consent to change**
Once installed in accordance with the City's Standard Contract Documents, the location of a Meter shall not be changed by any person except with the written consent of the Engineer.

**7.14 Private Meters - Owner responsible**
The City will not supply, install, inspect or read private meters, nor will the City bill consumption based on private meters. Water supply pipes to private meters must be connected to the Owner's Plumbing System downstream the City's Meter.

**7.15 Reading Meter - access**
The Engineer shall be allowed access to the Premises and be provided free and clear access to the Meter where Water is being supplied at all reasonable times for the purpose of reading, at the discretion of the Engineer. Where such access to the Premises and/or free and clear access to a Meter is not provided by the Customer within fourteen (14) days upon written notification by the City, as set out in Section 7.4 and 7.5 of this by-law, the Engineer may shut off or restrict the supply of Water to the Premises until such time as free and clear access to the Meter is provided.

**7.16 Valve maintenance - responsibility of Owner**
The Owner shall supply and install the inlet valve to the Meter where the Meter and the Service Extension is 25 mm or larger. The Owner shall be responsible for maintaining in good working order, the inlet valve to the Meter if the Meter and the Service Extension is 25 mm or larger, as well as the outlet and by-pass valves for all Meters, and shall ensure that such valving is accessible.

**7.17 Leaks must be reported**
Any leaks that may develop at the Meter or its couplings must be reported immediately to the City. The City is not liable for damages caused by such leaks.

**7.18 Interference with Meter not permitted**
No person, except the Engineer, shall be permitted to open, or in any way whatsoever to tamper with any Meter, or with the seals placed thereon, or do any manner of thing which may interfere with the proper registration of the quantity of Water passing through such Meter, and should any person change, tamper with or otherwise interfere, in any way whatsoever, with any Meter placed in any Premises, the Engineer may forthwith, without any notice, shut off the Water from such Premises, and the Water shall not be again turned on to such Premises without the express consent of the Engineer.

**7.19 Owner responsible to repair piping**
If, in the opinion of the Engineer, the condition of the Service Extension and/or valves and of the Plumbing System on such piping is such that the Meter cannot be safely removed for the purpose of testing, replacing, repairing or testing in place without fear of damage to Premises, the Engineer may require the Owner or Customer to make such repairs as may be deemed necessary to facilitate the removal or testing of the Meter. If, upon notification, the Owner does not comply with the Engineer's request, then the

Water supply to the Premises may be turned off at the shut-off valve during removal, replacement, repair and testing of the Meter and the City shall not be held responsible for any damages to the Owner's Premises arising from such work.

**7.20 Non-functioning Meter - amount of Water estimated**
If, for any reason a Meter shall be found to not be working properly, then the amount of Water Usage Charge shall be estimated based on the average reading for the previous months, when the Meter was working properly, or, if unavailable or proven inaccurate, the amount of Water Usage Charge shall be estimated on a daily average when the Meter is working properly, and the Water Usage Charge for the period during which the Meter was not working properly shall be based thereon.

**7.21 Meter testing for Customer - deposit - conditions**
Any Customer may, upon written application to the Engineer, have the water meter checked for accuracy. Every such application shall be accompanied by a deposit equal to the fee for checking the meter for accuracy as set out in Section 3.3 of attached Schedule "A". If the Meter is found to register correctly, slow or not to exceed three per cent (3%) in favour of the City when tested in accordance with *Section 4.2.8 of ANSI/AWWA C700 and AWWA Manual M6, Water Meters – Selection, Installation, Testing, and Maintenance*, the Customer's deposit shall be forfeited towards the cost of the test. Any additional expense of removing and testing of the Meter will be paid for in full by the Customer. If the Meter is found, when tested to register in excess of three per cent (3%), a refund will be made to the Customer equal to such excess percentage of the amount of the account for the period of four (4) months prior to such testing of the Meter, plus the Customer's deposit for the test.

**7.22 Meter reading supersedes Remote Read-Out Unit reading**
Where the Meter equipped with a Remote Read-Out Unit of any type and a discrepancy occurs between the reading at the register of the Meter itself and the reading on the Remote Read-Out Unit, the City will consider the reading at the Meter to be correct, and will adjust and correct the Customer's account accordingly."

**9.** Section 9.1 of By-law W-8 is hereby amended by deleting the existing Section 9.1 and replacing it with a new Section 9.1, as follows:

"**9.1 Regulations - Use of Water Externally**
For the purpose of limiting the consumption of Water as necessary:

(a) The Engineer is authorized to implement at any time any regulation which The Engineer, at The Engineer's discretion, considers advisable to limit the External Use of Water and this authority includes the right to ban completely the External Use of Water.

(b) Notice of the implementation of a Water use regulation by The Engineer and the effective date thereof shall be given immediately in a manner determined by The Engineer.

(c) Upon the announcement of the implementation of a Water use regulation by The Engineer, no person shall use Water except in accordance with the provisions of such regulation."

**10.** Schedule "A", Section 3.3, of By-law W-8 is hereby amended by deleting the existing Section 3.3 and replacing it with a new Section 3.3, as follows:

**"3.3 Miscellaneous Charges**
Miscellaneous charges shall be as noted in the table below.

| Service or Activity | January 1, 2017 Charge | January 1, 2018 Charge | January 1, 2019 Charge | March 26, 2019 Charge |
|---|---|---|---|---|
| Change of occupancy/ Account set-up/ Security deposit | As set by London Hydro | As set by London Hydro | As set by London Hydro | As set by London Hydro |
| Late payment | As set by London Hydro | As set by London Hydro | As set by London Hydro | As set by London Hydro |
| NSF cheques | As set by London Hydro | As set by London Hydro | As set by London Hydro | As set by London Hydro |
| Collection charges | As set by London Hydro | As set by London Hydro | As set by London Hydro | As set by London Hydro |
| Bulk Water User charges<br>Cost of Water per 1,000 litres | $3.54 | 3.65 | $3.76 | $3.76 |
| Inspecting Waterworks installations/disconnections after hours (3 hour minimum charge) | $118.85 per hour | $122.42 per hour | $126.09 per hour | $130.00 per hour |
| Disconnection of Water Service<br>During regular hours<br>After regular hours | $35.00<br>$185.00 | $35.00<br>$185.00 | $35.00<br>$185.00 | $35.00<br>$185.00 |
| Arrears Certificate charges (non-payment/arrears) | $50.00 per property | $50.00 per property | $50.00 per property | As set by, payable to, and directed to London Hydro |
| Disconnect and Reconnect Meter at customer request<br>16 and 19 mm<br>25 mm and larger | $196.01<br>$333.62 | $201.89<br>$343.63 | $207.95<br>$353.94 | $130.00<br>$260.00 |
| Install Water Meter and Remote Read-Out Unit at customer request<br>16 and 19 mm<br>25 mm and larger | $300.30 | $309.31 | $318.59 | $300.00<br>Time and material |
| Repair damaged Water Meter<br>16 and 19 mm<br>25 mm and larger | $206.43<br>Time and Material | $212.62<br>Time and Material | $219.00<br>Time and Material | $230.00<br>Time and Material |
| Meter checked for accuracy (at customer's request and found to be accurate)<br>16 and 19 mm<br>25 mm and larger | $154.28<br>$208.51 | $158.91<br>$214.77 | $163.68<br>$221.21 | $265.00<br>$395.00 |
| Builder and Developer Frontage Charges:<br>(based on actual frontage which directly abuts City right-of-way)<br>Residential (maximum 50 metres)<br>Commercial, Institutional and Industrial | $215.49 per metre<br>$229.19 per metre | $221.95 per metre<br>$236.07 per metre | $228.61 per metre<br>$243.15 per metre | $228.61 per metre<br>$243.15 per metre |
| Valve Rod Extensions (by length): | | | | |

| | | | | |
|---|---|---|---|---|
| 2 Foot<br>2 ½ Foot<br>3 Foot<br>3 ½ Foot<br>4 Foot<br>4 ½ Foot<br>5 Foot<br>5 ½ Foot<br>6 Foot<br>6 ½ Foot<br>7 Foot<br>7 ½ Foot<br>8 Foot<br>9 Foot<br>10 Foot | | | | $65.97<br>$67.23<br>$68.47<br>$69.73<br>$70.98<br>$72.24<br>$73.49<br>$74.75<br>$75.99<br>$77.25<br>$78.50<br>$79.76<br>$81.01<br>$83.51<br>$86.02 |
| Illegal Hydrant Connection | $612.98 /offence + water Consumption | $631.37 /offence + water Consumption | $650.31 /offence + water Consumption | $750.00 /offence + water Consumption |
| Temporary Hydrant Connection | | | | |
| Hydrant connection /disconnection | $226.81 | $233.61 | $240.62 | $220.00 |
| Hydrant occupancy | $42.91 /week | $44.20 /week | $45.53 /week | $40.00 /week |
| Water consumption | | | | |
| Minimum charge (up to 300 $m^3$) | $980.78 | $1,010.20 | $1,040.51 | $975.00 |
| All additional consumption | $3.28/$m^3$ | $3.38 /$m^3$ | $3.48/$m^3$ | $3.25/$m^3$ |
| Water Meter Installation Options (by application): | | | | |
| Radio Device Wired to Outside of House (see application for details) | | | | No Charge |
| Touch Pad Wired Outside of House (see application for details) | | | | Is not eligible for Customer Assistance Programs (see application for details) |
| Meter Pit Installation | | | | Time and Material ($2,500.00 deposit required, see application for details) |

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

PASSED in Open Council on March 26, 2019.

Ed Holder
Mayor

Catharine Saunders
City Clerk

First Reading – March 26, 2019
Second Reading – March 26, 2019
Third Reading – March 26, 2019

February 13, 2019

Chair and Members of the
Civic Works Committee:

Re: Stopping and Parking in Dedicated Bicycle Lanes

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Concerns have been brought to our attention that vehicles from time to time stop and/or park in dedicated bicycle lanes which is disruptive and can be unsafe for the user of the bicycle lanes. In support of the initiative to encourage individuals to use bicycles as a means of recreation and transportation, we believe that stopping and/or parking on designated bicycle lanes should be prohibited.

We are therefore seeking support of the following recommendation:

> "That the Civic Administration BE DIRECTED to bring forward necessary amendments to the Traffic and Parking By-law PS-113, as amended, that would result in the prohibition of stopping and parking of vehicles in designated bicycle lanes where an official "No Stopping Zone" sign has been erected and is on display."

Respectfully submitted,

Elizabeth Peloza,
Councillor, Ward 12

Shawn Lewis,
Councillor, Ward 2

**DEFERRED MATTERS**

**CIVIC WORKS COMMITTEE**
**(as of March 11, 2019)**

| Item No. | File No. | Subject | Request Date | Requested/ Expected Reply Date | Person Responsible | Status |
|---|---|---|---|---|---|---|
| 1. | 75. | **Options for Increased Recycling in the Downtown Core**<br>That, on the recommendation of the Director, Environment, Fleet and Solid Waste, the following actions be taken with respect to the options for increased recycling in the Downtown core:<br>b) the Civic Administration BE DIRECTED to report back to the Civic Works Committee in May 2017 with respect to:<br>i) the outcome of the discussions with Downtown London, the London Downtown Business Association and the Old East Village Business Improvement Area;<br>ii) potential funding opportunities as part of upcoming provincial legislation and regulations, service fees, direct business contributions, that could be used to lower recycling program costs in the Downtown core;<br>iii) the future role of municipal governments with respect to recycling services in Downtown and Business Areas; and,<br>iv) the recommended approach for increasing recycling in the Downtown area. | Dec 12/16 | 1st Quarter 2019 | K. Scherr<br>J. Stanford | |
| 2. | 76. | **Rapid Transit Corridor Traffic Flow**<br>That the Civic Administration BE DIRECTED to report back on the feasibility of implementing specific pick-up and drop-off times for services, such as deliveries and curbside pick-up of recycling and waste collection to local businesses in the downtown area and in particular, along the proposed rapid transit corridors. | Dec 12/16 | 2nd Quarter 2019 | K. Scherr<br>J. Ramsay | |

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|---|---|---|---|---|---|---|
| 3. | 78. | **Garbage and Recycling Collection and Next Steps**<br>That, on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, with the support of the Director, Environment, Fleet and Solid Waste, the following actions be taken with respect to the garbage and recycling collection and next steps:<br>b) the Civic Administration BE DIRECTED to report back to Civic Works Committee by December 2017 with:<br>~~i) a Business Case including a detailed feasibility study of options and potential next steps to change the City's fleet of garbage packers from diesel to compressed natural gas (CNG); and,~~<br>ii) an Options Report for the introduction of a semi or fully automated garbage collection system including considerations for customers and operational impacts. | Jan 10/17 | 2nd Quarter 2019 | K. Scherr<br>J. Stanford | 2nd Quarter 2019 |
| 4. | 91. | **Warranted Sidewalk Program**<br>That the following actions be taken with respect to the Warranted Sidewalk Program:<br>~~a) the Managing Director, Environmental and Engineering Services and City Engineer BE REQUESTED to develop an improved community engagement strategy with respect to Warranted Sidewalk Program; and,~~<br>b) the Managing Director, Environmental and Engineering Services and City Engineer, BE REQUESTED to report back to the Civic Works Committee with respect to the potential future provision of additional sidewalk installation options on the east side of Regal Drive in the Hillcrest Public School area; it being noted that currently planned work would not be impeded by the potential additional work;<br>it being further noted that the Civic Works Committee received a delegation and communication dated September 22, 2017 from L. and F. Conley and the attached presentation from the Division Manager, Transportation Planning and Design, with respect to this matter. | Sept 26/17 | 2nd Quarter 2019 | D. MacRae | |
| 5. | 93. | **Public Notification Policy for Construction Projects**<br>That the Civic Administration BE DIRECTED to amend the "Public Notification Policy for Construction Projects" to provide for a notification process that would ensure that property owners would be given at least one week's written notice of the City of London's intent to undertake maintenance activities on the City boulevard adjacent to their property; it being noted that a communication from Councillor V. Ridley was received with respect to this matter. | Nov 21/17 | 3rd Quarter 2019 | U. DeCandido | |

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|---|---|---|---|---|---|---|
| 6. | 94. | **Report on Private Works Impacting the Transportation Network**<br><br>b) report back to the Civic Works Committee, by the end of March 2018, on:<br><br>i) ways to improve communication with affected business, organizations and residents about the timing, duration and impacts of permits for approved works, including unexpected developments;<br><br>ii) ways to improve the scheduling and coordination of private and public projects affecting roadways and sidewalks that carry significant pedestrian, cyclist, transit and auto traffic;<br><br>iii) resources required to implement these improvements; and<br><br>any other improvements identified through the review<br>iv) resources required to implement these improvements; and | Dec 4/17 | 3rd Quarter 2018 | G. Kotsifas | George to provide new date |
| 7. | 99. | **Pedestrian Sidewalk – Pack Road and Colonel Talbot Road**<br><br>That the communication from J. Burns related to a request for a pedestrian crosswalk at the intersection of Pack Road and Colonel Talbot Road BE REFERRED to the Division Manager, Transportation Planning and Design for review and consultation with Mr. Burns as well as a report back to the appropriate standing committee related to this matter. | Feb. 6, 2018 | 2nd Quarter 2019 | D. MacRae<br>S. Maguire | |
| 8. | 104 | **Toilets are Not Garbage Cans**<br><br>That the Civic Administration BE REQUESTED to undertake the following with respect to the "Toilets Are Not Garbage Cans" public awareness sticker initiative, coordinated by B. Orr, Sewer Outreach and Control Inspector | June 19, 2018 | 1st Quarter 2019 | S. Mathers | |
| 9. | 105 | **Environmental Assessment**<br><br>That the Managing Director, Environmental and Engineering Services & City Engineer BE REQUESTED to report on the outstanding items that are not addressed during the Environmental Assessment response be followed up through the detailed design phase in its report to the Civic Works Committee. | July 25, 2018 | 2nd Quarter 2019 | S. Mathers<br>P. Yeoman | |