

## Report to Civic Works Committee

**To:** Chair and Members  
Civic Works Committee

**From:** Kelly Scherr, P. Eng., MBA, FEC  
Deputy City Manager, Environment & Infrastructure

**Subject:** Adelaide Street North Improvements  
Environmental Study Report, Notice of Completion

**Date:** July 18, 2023

## Recommendation

That, on the recommendation of the Deputy City Manager, Environment & Infrastructure, the following actions **BE TAKEN** with respect to the Adelaide Street North Municipal Class Schedule C Environmental Assessment:

- a) The Adelaide Street North Environmental Assessment Study **BE ACCEPTED**;
- b) A Notice of Study Completion for the Project **BE FILED** with the Municipal Clerk; and,
- c) The Environmental Study Report **BE PLACED** on the public record for a 30-day review period.

## Executive Summary

### Purpose

This report provides an overview of the Municipal Class Environmental Assessment (EA) study for the Adelaide Street North improvements and seeks approval to finalize the study and post it for the 30-day public review period. The study identifies improvements to the Adelaide Street corridor from Fanshawe Park Road East to 350m north of Sunningdale Road East, including Sunningdale Road East from Blackwater Road to the entrance of the Stoney Creek Community Centre. Near-term improvements are planned at the intersection of Adelaide Street North and Sunningdale Road East as part of the Sunningdale Road corridor improvements. The timing of the remainder of the Adelaide Street improvements identified in this environmental assessment are subject to the Mobility Master Plan.

### Context

The City of London strives to provide sustainable transportation infrastructure and accommodation for all modes of transportation and users of all ages and abilities.

Adelaide Street North is characterized as an urban corridor with one lane of traffic in each direction, sidewalks on both sides, and a combination of on-road bicycle lanes and cycle tracks along portions of the corridor. The London Plan and the City's Complete Streets Design Manual designates Adelaide Street North and Sunningdale Road East as Civic Boulevards, which are intended to accommodate "multi-modal travel, with a priority on pedestrian, cycling and transit movements".

The need for the Adelaide Street North improvements project was identified in the 2019 Development Charges Background Study and affirmed in the 2021 Development Charges Background Study Update. The 2016 Cycling Master Plan recognizes the presence of existing facilities, and the Cycling Plan notes that "facility types will require

future site-specific assessment and investigation through future EAs and / or detailed design assignments”.

The Adelaide Street North Improvements Environmental Assessment Study was initiated to fulfill the City’s obligations as the proponent under the Ontario Environmental Assessment Act. The study reviewed the alternative transportation design solutions along the Adelaide Street North corridor to identify traffic operations, active transportation, and transit improvements in accordance with the City’s Transportation Master Plan and Complete Streets Design Manual. Alternative designs were also evaluated along Sunningdale Road East from Blackwater Road to the Stoney Creek Community Centre. The study also assessed improvements to the Powell Drain culvert, investigated elements including reconfiguration of the inlet, integration of the two outlet systems, downstream erosion control infrastructure, and incorporation of natural channel design elements as appropriate.

The EA study area is in the north area of the City of London, as shown in Figure 1. The Adelaide Street North corridor limits extend approximately 1.75 km from north to south and is within a predominantly residential area. The study area north of Sunningdale Road East is currently agricultural uses but is planned to be developed with low and medium density residential communities, further increasing traffic volumes in the area. There is a significant natural environment area located adjacent to the Powell Drain, the major watercourse in the study area.

In 2021, an initial review of current major transportation projects was undertaken in the context of the City’s Climate Emergency Action Plan using the Climate Emergency Screening Tool for Transportation projects. Based on the outcomes of review, Council directed that the corridor widening of Adelaide Street North be suspended and the Environmental Assessment be completed to inform intersection improvements near the Sunningdale Road East intersection which are planned in the near-term. The remainder of the corridor assessment and timing of future improvements are to be assessed under the ongoing Mobility Master Plan and future Development Charges Study. As finalization of the EA study was put on hold awaiting the outcomes of the climate emergency screening, additional consultation will be planned early in the design phase after the project construction timing is determined.

The completion and approval of this Environment Assessment Study does not commit the City to completing all recommended improvements. The final scope and timing of improvements will be considered as part the Mobility Master Plan, future budget processes and Development Charge Studies.

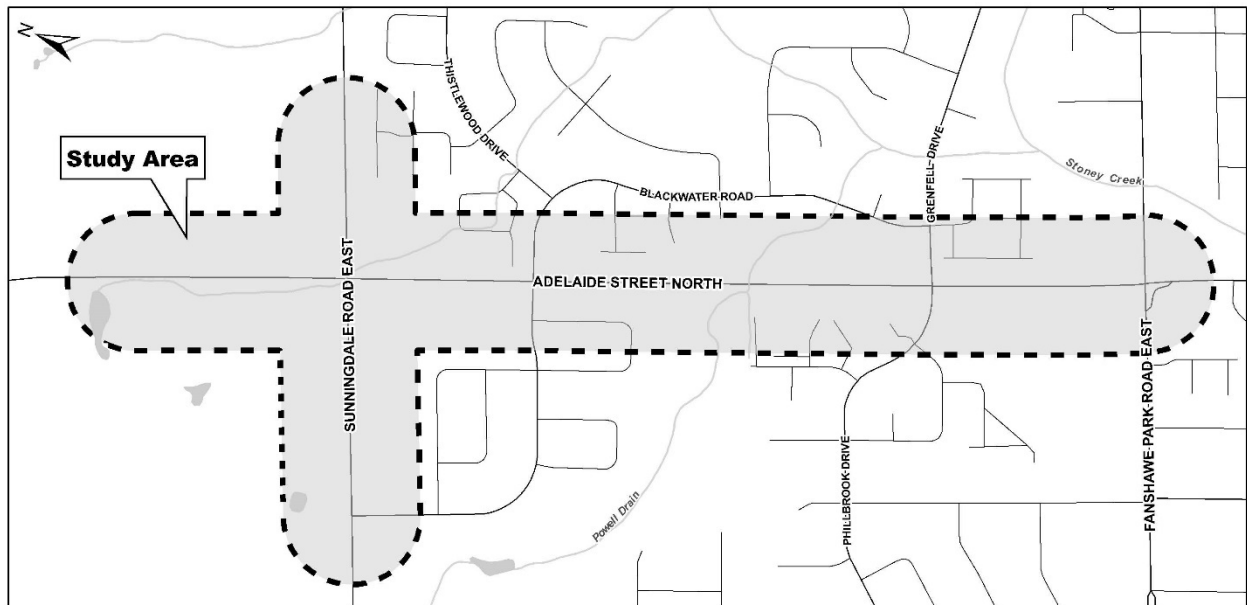


Figure 1: EA Study Area

## Linkage to the Corporate Strategic Plan

Municipal Council’s new Strategic Plan identifies “Mobility and Transportation” as a strategic area of focus. This report supports the Strategic Plan by identifying the building of infrastructure that provides safe, integrated, connected, reliable and efficient transportation choices.

## Analysis

### 1.0 Background Information

#### 1.1 Previous Reports Related to this Matter

- Civic Works Committee – May 29, 2012 – Sunningdale Road Improvements Environmental Study Report Project Number: TS1496
- Civic Works Committee – June 19, 2012 – London 2030 Transportation Master Plan
- Civic Works Committee – September 7, 2016 – London ON Bikes Cycling Master Plan
- Civic Works Committee – May 15, 2018 – Adelaide Street North Environmental Assessment Fanshawe Park Road East to Sunningdale Road East – Appointment of Consulting Engineer
- Strategic Priorities and Policy Committee – May 6, 2019 – Approval of 2019 Development Charges By-Law and DC Background Study
- Civic Works Committee – August 31, 2021 – Outcome of Climate Lens Screening Applied to Major Transportation Projects

### 2.0 Discussion and Considerations

#### 2.1 Study Description

The Adelaide Street North Improvements EA was carried out in accordance with Schedule C of the Municipal Class Environmental Assessment (Class EA) requirements. The Class EA process is approved under the Ontario Environmental Assessment Act and outlines the process whereby municipalities can comply with the requirements of the Act.

The Class EA study has satisfied the requirements of the Ontario Environmental Assessment Act by providing a comprehensive, environmentally sound planning process with public participation. The Environmental Study Report documents the process followed to determine the recommended undertaking and the environmentally significant aspects of the planning, design, and construction of the proposed improvements. It describes the problem being addressed, the existing social, natural and cultural environmental considerations, the planning and design alternatives that were considered, and a description of the recommended alternative.

The study area is focused on the Adelaide Street North corridor from Fanshawe Park Road East to 350m north of Sunningdale Road East. The study area also includes Sunningdale Road East from Blackwater Road to the Stoney Creek Community Centre entrance.

## **2.2 Problem and Opportunity Statement**

Phase I of the Municipal Class EA (MCEA) process involved the identification of the problem and opportunity statement. Based on the review of existing conditions, servicing studies, planning documents, preliminary traffic studies and collision data, the following summarizes the problems and opportunities within the study area:

### Problem

Based on the recommendations of the City of London's Smart Moves Transportation Master Plan and confirmed through a corridor traffic analysis undertaken as part of the study, Adelaide Street North from Fanshawe Park Road East to Sunningdale Road East, has been identified as requiring improvements to address future traffic operational deficiencies based on planned growth in the area.

### Opportunity

In addition to addressing future traffic operational deficiencies, there is also an opportunity to improve the corridor to meet the City's Complete Streets requirements which includes incorporating transit, active transportation, and safety initiatives.

## **2.3 Alternative Solutions**

Phase II of the MCEA process includes an inventory of the existing socio-economic, cultural and natural environments, and technical considerations to identify alternative solutions to address the problem/opportunity statement. The following seven alternative solutions were developed for the Adelaide Street North improvements:

1. Do Nothing – Maintain the existing conditions on Adelaide Street North.
2. Limit Development – Restrict development in the surrounding area to projects already underway in order to limit growth.
3. Incorporate Travel Demand Management (TDM) Measures – Introduce TDM measures to reduce or redistribute the travel demand (e.g., carpooling, workplace changes, pricing, etc.).
4. Improve Alternative Routes – Undertake improvements (capacity or operational) on adjacent roads where justified (e.g., Highbury Avenue, Richmond Street).
5. Operational and/or Intersection Improvements – Improve existing intersection operations and undertake roadway geometric improvements (roundabouts, traffic signals, through lanes, turn lanes, etc.).
6. Provide Additional Travel Lanes – Widen Adelaide Street North with additional lanes to increase traffic capacity and accommodate future growth.

7. Accommodate Other Modes - Improve existing facilities to encourage active transportation (walking, cycling, etc.) and improve Adelaide Street North/Sunningdale Road East to accommodate existing transit services.

A broad range of evaluation criteria were developed, representing the environment as defined in the Ontario Environmental Assessment Act. These criteria were categorized along five main groups: Transportation/Technical, Cultural, Socio-Economic, Natural, and Cost. Through the evaluation of the above listed alternatives, a combination of Alternatives 3 and 5-7 were recommended to be carried forward to Phase III of the EA Study.

## **2.4 Design Alternatives**

Phase III of the MCEA process involved the development and evaluation of alternative design concepts. The main outcome in this phase of the study was developing corridor cross-sections, intersection improvements, and review of the recommendations for the Sunningdale Road East intersection as previously evaluated in the Sunningdale Road Improvements Municipal Class EA (AECOM, 2013). Identification of the land requirements for the design alternatives was a key consideration when selecting the intersections and corridor improvement options; and determining appropriate mitigation measures such as minimizing socio-economic, cultural and environmental impacts.

### **Adelaide Street North Corridor**

Based on the recommended combination of alternatives to provide additional lanes, accommodate all travel modes, improve operations and intersections, and incorporate Transportation Demand Management (TDM) measures, three alternative design concepts were considered for the Adelaide Street North corridor. Each concept featured two lanes of traffic in each direction, cycle tracks and sidewalks on each side, centre medians and dedicated turning lanes. The three concepts varied in terms of the extent of the widening either from the centreline to the west, or to the east.

#### **Option 1: Widen Symmetrically from the Centreline**

- This option generally widens Adelaide Street North from the centreline of the roadway (even widening on both the west and east side).
- Maximizes boulevard space on both sides of the road. Accommodates improvements to active transportation facilities and improves connectivity.
- Least impact to terrestrial environment, widening would be in areas previously disturbed. Least impact to aquatic environment.
- Minimal property impacts. Will allow for greatest buffer from residences on both sides. Minimal changes to long term noise levels.

#### **Option 2: Widen to the East**

- This option generally widens Adelaide Street North to the east side, while mostly maintaining the west side.
- No anticipated impacts to archaeological or cultural heritage resources.
- Limits boulevard space on east side. Increased run-off from road widening and impacts to the existing Powell Drain Culvert. Impacts to terrestrial environment, street trees.
- Encroachment onto properties in the east. Road will be in close proximity to residences on east side, significant noise impacts for those homes.

### **Option 3: Widen to the West**

- This option generally widens Adelaide Street North to the west side, while mostly maintaining the east side.
- Accommodates improvements to active transportation facilities and improvements connectivity. Meets traffic capacity needs on Adelaide Street. No archaeological/cultural heritage impacts.
- Impacts to terrestrial environment and wetland at the west side of the Powell Drain.
- Limits boulevard space on west side. Encroachment onto properties in the west, road in close proximity to residences on the west. Increase in noise impacts.

### **Adelaide Street North and Sunningdale Road East Intersection**

Two alternative design concepts were considered for the Adelaide Street North/Sunningdale Road East intersection; a roundabout and a signalized intersection.

#### **Option 1: Roundabout**

- Roundabouts provide overall benefits to safety, traffic operations and the environment. The design of roundabouts reduces vehicle entry speeds and the number of potential conflict points. As compared to signalized intersections, roundabouts provide for more free flow movements resulting in reduced fuel consumption and less emissions.
- In order to accommodate the projected growth of traffic at this intersection, three entry and circulatory lanes are required within the roundabout based on traffic modelling. This increases the size of the roundabout and accordingly increases property requirements and impacts adjacent land use.
- Due to the significant property requirements, a roundabout is not being recommended at this location.

#### **Option 2: Signalized Intersection**

- There is adequate space within the existing right of way to accommodate through and turning lanes at the intersection to meet projected traffic volumes and provide acceptable traffic operations based on modelled growth in this area. No additional property will be required at the intersection to accommodate a signalized intersection.
- As compared to roundabouts, signalized intersections do experience greater vehicle entry speeds and present several potential conflict points. Vehicle idling during a stop cycle or waiting to turn increases fuel consumption and emissions. Opportunities through signal timing to mitigate these issues will be considered during the design phase.

### **2.5 Powell Drain Culvert Crossing**

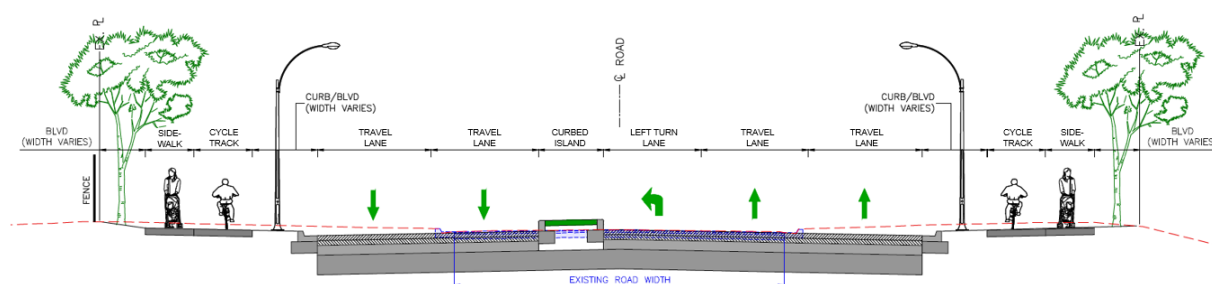
Based on the preliminary preferred design concept for the widening of Adelaide Street North, a short extension of the Powell Drain culvert crossing may be required to the east to accommodate the grading limits. However, the use of a headwall at the existing outlet to accommodate the grade changes may mitigate the need for an extension. The extension of the Powell drain culvert to the east will need to be further explored during detailed design and through consultation with the Upper Thames River Conservation Authority. Preliminary recommendations are provided in the Geotechnical Investigation

Report for an extension of the culvert and installation of a headwall. Further subsurface information may be required to confirm the preferred construction method at the culvert crossing.

In addition, a wildlife culvert is proposed on the north side of the Powell Drain crossing at Adelaide Street North that can help mitigate the potential flooding at low-frequent storm events if needed. This wildlife culvert is proposed to enhance the animal passage across Adelaide Street North along the Powell Drain.

## 2.6 Recommended Alternative

Based on the evaluation completed it was determined that for the Adelaide Street North corridor Option 1, widening from the centreline (west and east side) will have the least overall impacts within the technical, natural environment, cultural/socio-economic environment, and costs parameters. Widening solely to the east or west sides with Options 2 and 3 would have significant property and environmental impacts. This alternative was developed to meet both technical requirements of the study and planning objectives established in the London Plan (Official Plan), 2030 Smart Moves Transportation Master Plan, City of London Cycling Master Plan (London ON Bikes), Complete Streets Design Manual and the Sunningdale Road East EA. The recommended corridor improvements and the implementation timing will be subject to further assessment as part of the ongoing Mobility Master Plan and future Development Charges Study. The key features of the typical cross section are shown in Figure 2 below.



*Figure 2: Adelaide Street North Typical Cross Section*

Based on the evaluation completed which considered the various trade-offs between a roundabout and a signalized intersection, a signalized intersection is recommended at the intersection of Adelaide Street North and Sunningdale Road East. A signalized intersection at this location will not require additional property and will be able to accommodate the anticipated growth in traffic. The design of the signalized intersection will consider accessibility and active travel modes.

The EA also identifies minor improvements to the Adelaide Street North/Fanshawe Park Road intersection for future consideration, noting that there is no planned project currently identified at this intersection.

The City's Complete Streets Design Manual requirements were considered when selecting the recommended alternative. The potential impacts to natural, socio-economic, cultural features, and costs were minimized. The recommended alternative was selected, developed, and refined through consultation with agencies, interested parties, First Nations, and the public.

The Transportation Planning and Design Climate Emergency Screening Tool (CEST) was applied to the Adelaide Street North Improvements project during the Environmental Assessment (EA). Assessment of climate change mitigation and adaptation issues material to the project determined that the implementation phasing of the EA recommendations should be reviewed with prioritization of the Sunningdale

Road East intersection to address short term safety and operational issues in coordination with Sunningdale Road corridor improvements. The remainder of the corridor improvements will be deferred and will be considered as part of the ongoing Mobility Master Plan. Further assessment of either potential mitigation and/or adaptation issues should also be undertaken during detail design.

The preferred EA alternative focuses on the improvements to operations of the transit corridor, mobility, and access for major destinations while also examining the provision of connectivity to major active transportation corridors. It is expected that the proposed improvements have a potential to:

- Manage congestion by providing feasible alternatives to single-occupant vehicle trips by providing increased capacity via safe and accessible infrastructure for active modes of transportation;
- Provide cycling infrastructure that increases connectivity within the cycling network and is considered safe to use for cyclists of all ages and abilities;
- Improve pedestrian safety, connectivity, and provide accessibility by introducing wider separated sidewalks;
- Help make transit more efficient by improving operations of the intersections;
- Help to improve the movement of people and goods within London by improving operations of the intersections;
- Implement strategies to minimize the need for the removal of mature and healthy trees;
- Improve quality of the stormwater by providing quality treatment measures;
- Incorporate additional risk management measures to improve resilience to water course flooding or intense rainfall by integrating low-impact development stormwater control measures into the design and minimizing the increase in impervious surfaces.

The preferred design concepts/improvements are shown on the preliminary design plans included as part of the Environmental Study Report (ESR). The draft ESR is available on the project webpage: [london.ca/adelaide-street-north-EA](http://london.ca/adelaide-street-north-EA).

### **3.0 Financial Impact/Considerations**

#### **3.1 Preliminary Cost Estimates**

Preliminary cost estimates were developed for the recommended design concept considering work on both Adelaide Street North and Sunningdale Road East. The cost estimate breaks down the project into various parameters such as roadways, underground infrastructure, and traffic signals. The preliminary capital cost of implementation is estimated to be approximately \$11.2M for Adelaide Street North and almost \$5.3M for Sunningdale Road East with a 20% contingency applied, however the final cost estimate will be further refined during detailed design. Preliminary cost estimates for Adelaide Street North and Sunningdale Road East are shown in Table 1 and Table 2 below.

The complete cost of the project will be considered as part of the multi-year budget and the future Development Charges Study processes.



Table 1: Construction Cost Estimate for Adelaide Street North Improvements

<b>Project Component</b>	<b>Estimated Cost (\$ 2023 Dollars)</b>
Roadworks	4,757,500
Storm Sewers & Appurtenances	838,000
Watermain & Appurtenances	23,000
Traffic Signals and Illumination	1,230,000
Miscellaneous	410,000
Utility Relocations (10%)	725,850
Property Acquisition	285,000
<b>Subtotal</b>	<b>8,269,350</b>
Contingency (20%)	1,653,870
Engineering & Consulting (15%)	1,240,402
<b>Total</b>	<b>11,165,000</b>

Table 2: Construction Cost Estimate for Sunningdale Road East and Adelaide Street North Intersection Improvements

<b>Project Component</b>	<b>Estimated Cost (\$ 2023 Dollars)</b>
Roadworks	1,489,400
Storm Sewers & Appurtenances	657,700
Sanitary Sewers & Appurtenances	92,200
Watermain & Appurtenances	655,000
Traffic Signals and Illumination	410,000
Miscellaneous	260,000
Utility Relocations (10%)	356,430
<b>Subtotal</b>	<b>3,920,730</b>
Contingency (20%)	784,146
Engineering & Consulting (15%)	588,109
<b>Total</b>	<b>5,295,000</b>

## 4.0 Key Issues and Considerations

### 4.1 Property Impacts

Minimizing property requirements was a key criterion in the identification and evaluation of the alternative solutions by the project team.

Property acquisition is anticipated throughout the study area corridor to accommodate the proposed roadway and active transportation improvements. As part of this EA study, it was identified that the City will require frontages from the properties in the following locations:

- 614 Fanshawe Park Road East
- 1570 Adelaide Street North
- 1786 Adelaide Street North

The proposed new right-of-way limits were presented to the public during PIC #2 and are provided in the draft Environmental Study Report. The final right-of-way and the limits of property acquisition and dedication will be confirmed during the detailed design phase.

## 4.2 Access Management

In addition to the property parcels required, there are commercial, institutional and development properties along the corridor where access will be changing to right-in, right-out only movements due to the installation of centre medians.

- Median extension at Sunningdale and Adelaide Street intersection – property southwest of the intersection affected;
- Median extension at Fanshawe Park Road and Adelaide Street intersection – properties to the west, southeast of the intersection affected;
- Installation of centre medians on Sunningdale Road as part of road widening – midblock property affected;
- Installation of centre medians on Adelaide Street as part of road widening – future development southeast of the Adelaide/Sunningdale intersection affected.

As part of the consultation process for this study, the property owners fronting these locations were contacted and information regarding these changes was provided. Additional consultation will occur during the design phase.

## 4.3 Public and Agency Consultation

Consultation efforts were key to ensuring the successful completion of the Class EA process. Significant insight to the study area was gained through consulting and engaging residents and businesses, interested groups, and technical agencies who all have a unique understanding of the study area. Engaging early in the process also helped by initiating discussions earlier rather than later, when decisions may be more difficult to change and accommodate various interests. The input received throughout the duration of the study assisted the project team in developing and refining the study recommendations. For Schedule “C” Class EA studies, three mandatory points of consultation are required. For this study, the key contacts included Indigenous communities, Imperial Oil, utilities, residents, other agencies, and those who may be affected by the project.

A Notice of Study Commencement was issued in August 2018. The study team received correspondence from the public and agencies indicating their interest in the study and requesting to be kept informed.

The first public meeting was hosted at the Stoney Creek Branch of the London Public Library on November 14, 2018 and the second public meeting was hosted at A.B. Lucas Secondary School in the same format on June 5, 2019. Both public meetings served as an opportunity for the public to review the project information, ask questions, and provide input to the members of the study team.

Twelve Indigenous Communities and associations were notified of the study commencement and PICs via individualized emails and were provided with opportunities to provide input and identify any issues or concerns: Aamjiwnaang First Nation, Anishinabek Nation, Association of Iroquois and Allied Indians, Bkejwanong Territory (Walpole Island), Caldwell First Nation, Kettle and Stony Point First Nation, Chippewas of the Thames First Nation, Munsee-Delaware Nation, Delaware Nation at Moraviantown, Métis Nation of Ontario, Oneida Nation of the Thames, and Southern First Nations Secretariat. No project issues or concerns were identified by the Indigenous Communities.

The project information was also presented to the following City of London Advisory Committees for feedback: Cycling Advisory Committee, Transportation Advisory

Committee, Environmental Ecological Planning Advisory Committee, and the London Advisory Committee on Heritage during the 2018 to 2019 period.

During the upcoming 30-day public review, the Environmental Study Report (ESR) will be made available on the City of London website, at the City Hall, and at the closest public library to the study area. As per Ministry of the Environment, Conservation and Parks' (MECP) request, the draft ESR has been submitted for their technical review and is also available on the City's website: [london.ca/adelaide-street-north-EA](https://london.ca/adelaide-street-north-EA). The Environmental Study Report Executive Summary is attached as Appendix A.

There will be an opportunity to request a higher level of study (i.e., requiring an individual EA or imposing conditions on the project) through a Section 16 order request to the Minister of Environment, Conservation and Parks on the grounds that the order may prevent, mitigate or remedy adverse impacts on the existing Aboriginal and treaty rights. Requests that are not made on these grounds will not be considered by the Minister.

#### **4.4 Implementation**

In 2021, a review of several major transportation projects was undertaken with consideration to the City's Climate Emergency Action Plan using the Climate Emergency Screening Tool for Transportation projects. Based on the outcomes of this review, Council directed that the corridor widening of Adelaide Street North be suspended and requested that the Environmental Assessment be completed to inform intersection improvements at the Adelaide Street North and Sunningdale Road East intersection which are planned in the near-term. The remainder of the corridor assessment and timing of future improvements are to be assessed under the ongoing Mobility Master Plan and future Development Charges Study.

The updated project cost estimate and associated construction timing of the Sunningdale Road intersection improvement will also need to be reviewed along with other priorities as part of the upcoming 2024-2027 Multi-Year Budget and future Development Charges Background Study processes. The construction timing is also subject to completion of property acquisition, utility relocations, detailed engineering as well as securing required approvals. Coordination with adjacent City projects, property owners, and regulatory agencies is also a consideration planned early in the design process, providing opportunities for further consultation and to assist in finalizing the construction timing.

The completion and approval of this Environment Assessment Study does not commit the City to completing all recommended improvements. The final scope and timing of improvements will be considered as part the Mobility Master Plan, future budget processes and Development Charge studies.

## **Conclusion**

Improvements to Adelaide Street North have been identified to accommodate all modes of transportation and users of all ages and abilities (pedestrians, cyclists, transit vehicles and motorists), improve the operation and accessibility of the intersections, reduce congestion during peak times, and provide active transportation connections to the existing facilities. A Municipal Class Environmental Assessment (EA) study was undertaken to confirm the preferred long-term solution in accordance with Schedule C of the Municipal Class Environmental Assessment process. The draft ESR has been uploaded to the project webpage and will be reviewed by the MECP prior to posting for the final public review.

This project has been reviewed with the Transportation Planning and Design Climate Lens Process's Climate Emergency Screening Tool. As the result of this review, a phased approach to project implementation was recommended to prioritize the short-term intersection improvements and allow the Mobility Master Plan to reassess the need for widening of the Adelaide Street North corridor in the future.

Alternative solutions and design concepts were developed to address the problems and opportunities. The recommended alternative for Adelaide Street North will increase the capacity and operational improvements at Sunningdale Road and Fanshawe Park Road intersections, provide two travel lanes in each direction with turning lanes at intersections, extend the dedicated cycle tracks in each direction, add new sidewalks and medians. The preferred alternative is expected to include the complete street elements that will promote active transportation and transit use while managing congestion and improving safety. The new infrastructure will also be designed to provide improved resiliency over the existing conditions.

The EA identifies an updated project cost estimate which considers recent, extraordinary construction cost escalation and includes underground servicing and new design standards.

Consultation was a key component of this study. The Class EA was prepared with input from Indigenous Communities, the public, advisory committees, agencies, utilities, and property owners in proximity to the study.

Pending Council approval, a Notice of Study Completion will be filed, and the ESR will be placed on public record for a 30-day review period. Stakeholders and the public are encouraged to provide input and comments regarding the study during this time. Accommodation will be made for those requiring hard copy review. Requests for a higher level of study or conditions may be submitted to the MECP based on impacts to constitutionally protected Aboriginal and treaty rights.

**Prepared by:** Garfield Dales, P. Eng, Division Manager, Transportation Planning and Design

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

**Recommended by:** Kelly Scherr, P. Eng., MBA, FEC, Deputy City Manager, Environment and Infrastructure

Attachment: Appendix A – Environmental Study Report Executive Summary

cc: Integrated Transportation Community Advisory Committee

**APPENDIX A:  
ENVIRONMENTAL STUDY REPORT  
EXECUTIVE SUMMARY**

**Adelaide Street North Municipal Class  
Environmental Assessment Study**

## Executive Summary

The City of London Transportation Master Plan (TMP) identified the improvements to Adelaide Street North and Sunningdale Road East (west of Adelaide Street North) corridors including new active transportation facilities and increasing the number of travel lanes from two to four. Based on the City's 2019 Development Charges Background Study and 2021 Development Charges Background Study Update, the widening of Adelaide Street North is expected to commence in 2029 and the widening of Sunningdale Road East in 2025 (from Adelaide to Bluebell). Accordingly, the City of London undertook a "Schedule C" Municipal Class Environment Assessment (Class EA) in order to address capacity and operational improvements on Adelaide Street North and to gain the required environmental assessment approval as a necessary first step towards implementation. The Schedule 'C' Class EA for this project completes Phases 1 to 4 to identify the problem or opportunity, identify alternative solutions, examine alternative design concepts for implementing the preferred solution and the preparation of an Environmental Study Report (ESR). An Environmental Study Report was previously prepared for Sunningdale Road East in May 2013.

In order to determine the need and extent of the capacity and operational improvements required for the Adelaide Street North corridor, a transportation and traffic analysis study was undertaken to assess current and future traffic demands. Under the existing (2018) traffic conditions, the section of Adelaide Street North, between Phillbrook Drive / Grenfell Drive & The Home Depot Plaza Entrance, is over capacity for the southbound direction during the AM peak hour. During the PM peak hour, this section is over capacity in the northbound direction. Respectively, some sections along Adelaide Street North are approaching capacity in the southbound direction during the AM peak hour and northbound traffic during the PM peak hour. Based on the future (2029 and 2039) traffic analysis completed, results indicate that additional through lanes are required for the Adelaide Street North corridor in order to accommodate future traffic demands.

Based on the existing planning policies applicable to the corridor and the transportation and traffic assessment completed, the following Problem Statement was developed for this study:

*Based on the recommendations of the City of London's Smart Moves Transportation Master Plan and confirmed through a corridor traffic analysis undertaken as part of the study, Adelaide Street North, from Fanshawe Park Road East to Sunningdale Road East, has been identified as requiring improvements to address future traffic operational deficiencies.*

*In addition to addressing future traffic operational deficiencies, there is also an opportunity to improve the roadway to meet the City's Complete Streets standards which includes incorporating transit, active transportation, and safety initiatives.*

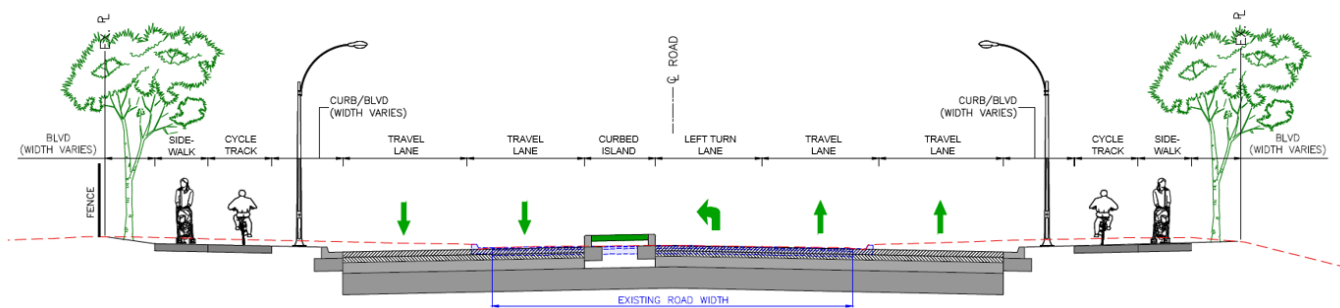
Adelaide Street North is characterized as an urban road with one lane of traffic in each direction, sidewalks on both sides, and a combination of on-road bicycle lanes and cycle tracks along portions of the corridor. The City's London Plan and Complete Streets Design Manual designates Adelaide Street North and Sunningdale Road East as Civic Boulevards, which are intended to accommodate "multi-modal travel, with a priority on pedestrian, cycling and transit movements".

Land use along Adelaide Street North includes a combination of low, medium and higher density residential uses, retail areas, a retirement residence and place of worship. North of Sunningdale Road East are primarily agricultural uses, though this area has been designated as Neighbourhoods and there are current plans for subdivision development. The City of London's Official Plan designates the land types adjacent to the Adelaide Street North study area as Neighbourhoods, Shopping Areas, Green Space and Main

Street. Several background reports were completed during the EA process including Archaeological, Cultural Heritage, Noise and Geotechnical assessments. A scoped Environmental Impact Study (EIS) was also completed to document existing natural heritage features within the study area in accordance with the City of London Official Plan (OP) and Environmental Management Guidelines.

A total of seven alternative planning solutions were considered for Adelaide Street North and carried through an evaluation process. Through the evaluation of the alternative solutions for Adelaide Street North, a combined approach was carried forward to address the problem statement. This included using Transportation Demand Management (TDM) measures, operational and intersection improvements, additional lanes, and accommodating other modes of travel.

Based on the preferred solution, three (3) alternative design concepts were considered for the Adelaide Street North corridor. Recommendations for Sunningdale Road East were mostly unchanged from the previous Sunningdale Road East Environmental Assessment Study. Each concept for the Adelaide Street North corridor featured two lanes of traffic in each direction, cycle tracks and sidewalks on each side, centre medians and dedicated turning lanes. The 3 concepts varied in terms of the extent of the widening either from centreline, to the west, or to the east. Based on the evaluation completed it was determined that widening Adelaide Street North from the centreline (west and east side) will have the least overall impacts within the technical, natural environment, cultural/socio-economic environment and costs parameters. The typical cross section developed for Adelaide Street North includes 2 through lanes, 2 curb lanes, a centre median, cycle tracks and sidewalks with varying boulevard width. The key features of the typical cross section developed for Adelaide Street North is shown below. Lane widths will be confirmed and finalized during the detailed design stage based on the City’s design standards and guidelines.



In addition to formal study notices, the project benefited from regular correspondence with interested parties and two (2) Public Information Centres (PICs). The first PIC was held on November 14, 2018 at the Stoney Creek Branch of the London Public Library. The first PIC was held to present and obtain feedback on the EA planning process being followed; study background, existing conditions, and key issues and constraints; and alternative and recommended solutions. Approximately 55 people attended. The second PIC was held on Wednesday, June 5<sup>th</sup>, 2019 from 5:00pm to 7:00pm at A.B. Lucas Secondary School. The purpose of the second PIC was to present and obtain feedback on the alternative design concepts and evaluation criteria, the preliminary preferred alternative design concept and potential impacts and mitigation measures. A total of 28 participants attended.