WELCOME

City of London: Arva Pumping Station to Huron Street Water Transmission Main

Municipal Class Environmental Assessment Master Plan Town Hall

We will begin shortly. This is a webinar platform, which allows you to see and hear the presenters, but we cannot see or hear you.

For your convenience, you will find a Q&A window on the screen where you can type in a question at any time. We will address questions at the end of the presentation.

June 25,2020

Housekeeping

- Speaker video will be turned off for the majority of the presentation
- Attendees will be muted; please participate through the Q&A window
- If you have any technological issues, please also use the Q&A window
- All materials and a survey will be sent out to attendees following the meeting
- Town Hall is being recorded

Town Hall Agenda

7:00 – 8:30 pm

1. Introductions and Purpose
2. Presentation
3. Questions and Answers (use the Q&A window to type in a question)

Project Team Introductions

Stephen Romano
City of London
Water Engineering Project Manager

John Haasen
AECOM
Senior Vice President, Project Manager and Town Hall Presenter

Karl Grueneis
AECOM
Environmental Assessment Planning Lead

Paul Adams
AECOM
Environmental Assessment Planner

Bander Abou Taka
AECOM
Project Engineer

Jake Helm
City of London
Water Engineering Technologist

City of London Introduction

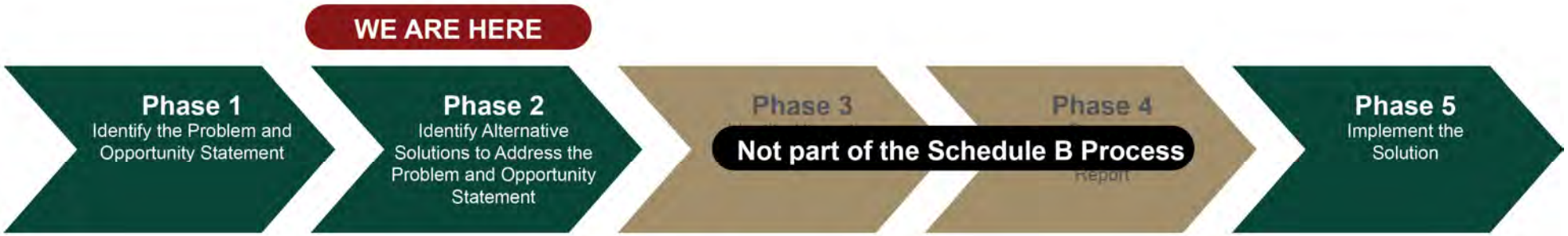
- Importance of this Project;
- Consultation during COVID-19;
- Being proactive in maintaining and continuously monitoring the transmission main condition and performance; and
- This meeting is a special meeting for the property owners who have transmission main easements on their property. The City of London (“the City”) recognizes the sensitivities due to the potential impacts to property owners and undertaking additional outreach.

Town Hall Purpose

1. Introduce the Project;
2. Provide an overview of the Municipal Class Environmental Assessment (MCEA) process;
3. Highlight the importance of the Arva Pumping Station to Huron Street Transmission Main;
4. Describe the Problem and Opportunity Statement;
5. Describe the existing transmission main easement including:
   a) The City's ability to access the easement for maintenance and repairs;
   b) The property owners' easement responsibilities and expectations;
6. Present the alternative short and long term solutions being considered; and
7. Meet the project team and get your feedback.

Municipal Class Environmental Assessment (MCEA) Process

- All municipalities in Ontario are required by the provisions of the *Environmental Assessment Act* (EAA) to follow the MCEA process.
- This project is following the MCEA Master Plan Schedule B MCEA process.
- Schedule B projects must follow Phases 1 and 2 of the MCEA process.
- At the end of the EA process, a Master Plan Project File will be prepared for public review and comment.



Project Background

The City is supplied with water from two lake-based sources:

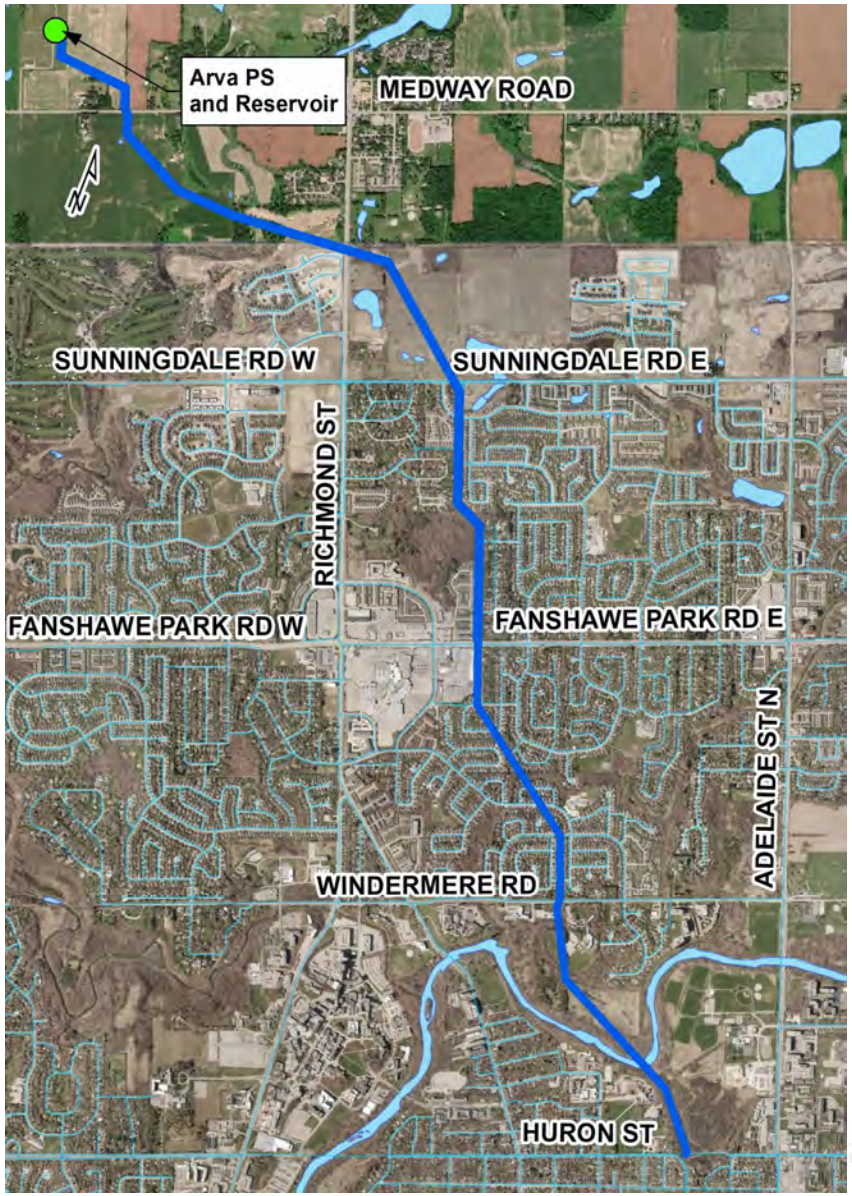
80% from Lake Huron - Lake Huron Water Supply System (LHWSS)

20% from Lake Erie - Elgin Area Water Supply System (EAWSS)

The Arva Pumping Station (PS) to Huron Street Transmission Main is the main ‘artery’ for water supply from the LHWSS.

Project Background

- The existing transmission main runs from the Arva PS and reservoir to Huron Street.
- This transmission main is the main ‘artery’ for water supply from the LHWSS.



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Project Background

- The LHWSS Transmission Main has been partially twinned from the South Huron Water Treatment Plant (WTP), located north of Grand Bend to the City Arva PS.
- The City twinned its transmission main southerly from the Arva PS to Fanshawe Park Road in 1984.
- The transmission main twinning (side by side pipe or new pipe on alternate routes) allows the LHWSS and the City to provide redundancy and capacity in addition to improved maintenance and operations.

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Project Background

- The section of transmission main between Fanshawe Park Road East and Windermere Road was originally built in green field areas in 1966.
- Over time land development occurred with agreements and legal easements put in place for access and maintenance to the transmission main which is now surrounded on both sides by residential development (parts of the transmission main are in rear and/or side yards).

Project Background

- The transmission main between Windermere Road and Huron Street had some pipe sections proactively repaired and replaced recently. It was difficult to access the pipe for the replaced pipe sections because of the narrow easement.
- This led to a review of the entire transmission main easement which found several areas difficult to access along the easement. This means it will be difficult to repair or replace pipe sections in the future if needed.
- Some pipe sections were proactively replaced based on the results of active and continuous pipe monitoring implemented by the City along the entire transmission main.

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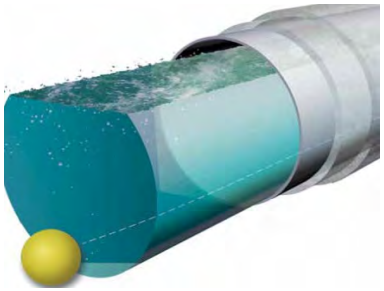
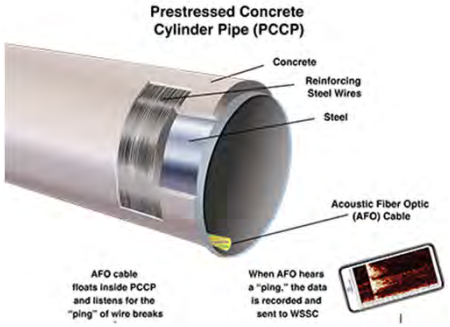
What is a Transmission Main Pipe and How is it Monitored?

- Concrete pipe with a steel cylinder inside surrounded by more concrete
- Steel wires are inside the concrete providing greater strength
- It is approximately 4' deep (to the top of the pipe)
- 3 types of monitoring technologies from Pure Technologies being used:
    1. Smart Ball
    2. Fiber Optic Acoustic Monitoring
    3. Pipe Diver

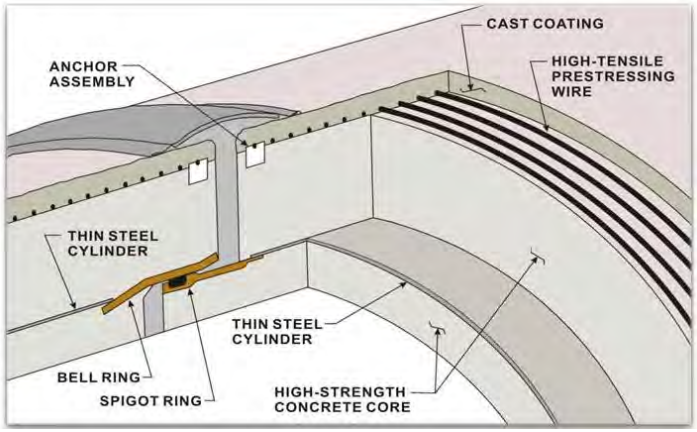
Smart Ball



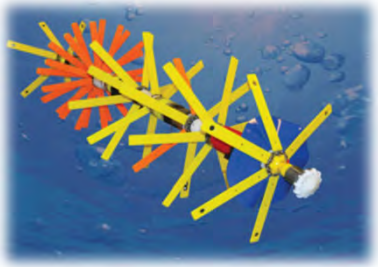
Fiber Optic Acoustic Monitoring



Cross section of a Typical Concrete Transmission Main.



Pipe Diver



Problem and Opportunity Statement

The Problem and Opportunity Statement is the principal starting point of a MCEA and becomes the central theme and integrating element of the project. It also assists in setting the scope of the project.

Problem:

- The City receives approximately 80% of its water supply from the LHWSS, making the transmission mains that transport this water critical and important assets.
- The transmission main from the Arva PS and Reservoir to Huron Street was constructed in 1966 and ranges in condition, having fair and good sections.
- Several portions of pipe south of Windemere Road and north of the Thames River were proactively replaced in 2017. The existing easement (50’ wide) was not adequate to allow for replacement by traditional means.
- Portions of the transmission main run through the backyards of residences where easements are in place (mostly 50’ wide).
- **Access to repair the watermain via these easements could be difficult, especially if there are obstacles such as decks, sheds, trees, etc. on top of the easement.**

Problem and Opportunity Statement

Opportunity – The MCEA process provides the City the opportunity to:

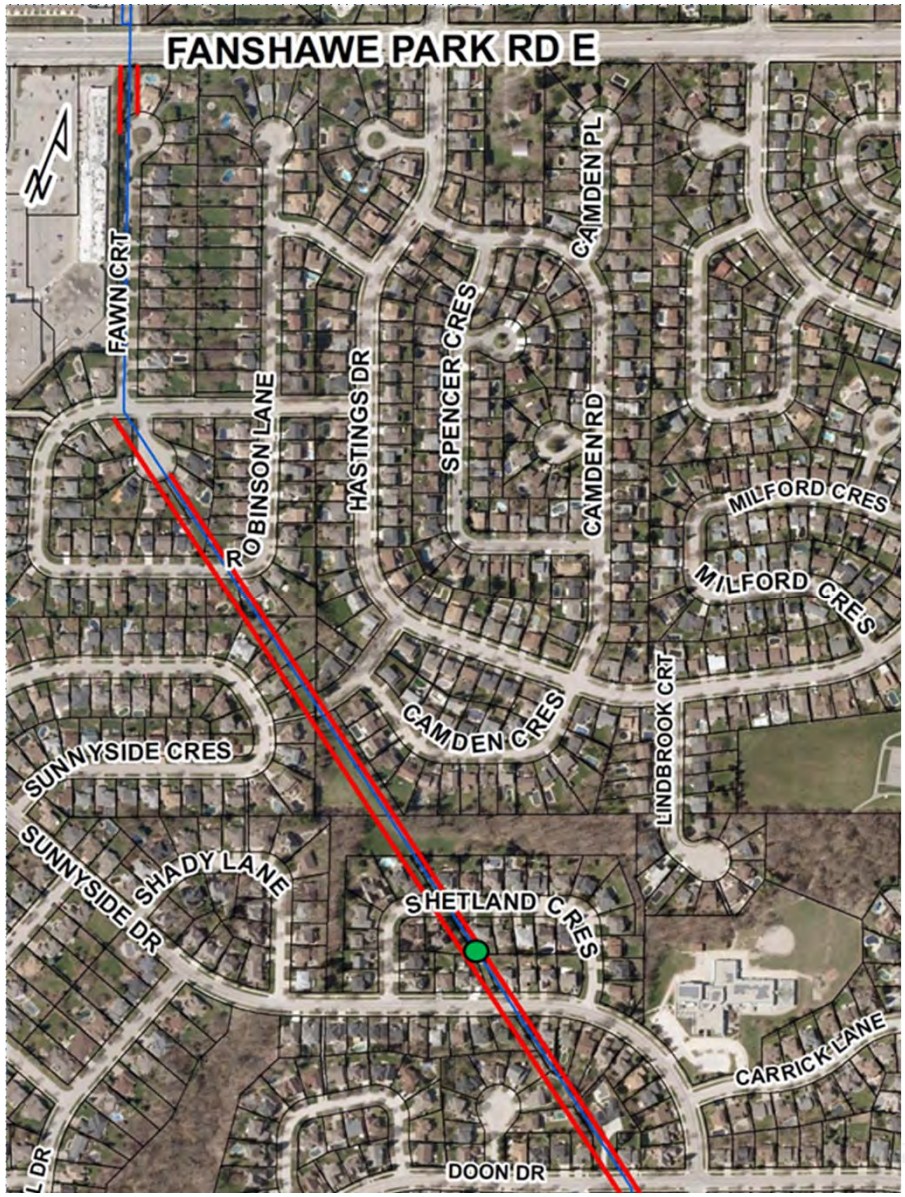
- Develop a **short-term strategy and solution** that assesses the existing easements in place to ensure maintenance and repairs can be undertaken as needed;
- Consider the possibility of increasing the easement width to allow for easier access or maintaining them at the current width and enforcing the City's rights to access if maintenance and/or repairs are required;
- Look at twinning the watermain (**long-term strategy and solution**) in other locations (mainly Richmond Street or Adelaide Street) to provide a redundancy of supply (when growth is triggered) and easier maintenance access; and
- Explore the possibility of decommissioning and abandoning the existing transmission main once it has reached its service life.

Why this MCEA and Why Now?

- The City is taking a proactive approach to ensure it can efficiently maintain and repair its infrastructure.
- The study will identify a full range of alternatives and design options and look at easement access in the short-term for repairs and twinning and/or replacement in existing and/or new locations in the long-term.
- The study will ensure that there are short and long-term plans to manage the City's transmission main assets to continue to deliver water supply to its current and future customers.
- The study focus will also look at the best way to meet maintenance and operations objectives, and pipe repair or replacement from a long-term cost impact and operations perspective.
- The MCEA process allows for engagement of the public in the planning and decision making process of the aforementioned items.

Existing Easements

- Existing easement is 50’ (**Red Line**) wide from Fanshawe Park Road to approximately 150m North of Windemere Road and then is reduced to 25’ (**Yellow Line**) wide to Windemere Rd.
- Green dots (●) represent valve chambers
- Easements shown are based on older drawings and are accurate to about +/-2m



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Existing Easements

As owner of the easement the City is permitted to:

- Access the easement to lay, install, construct, reconstruct, operate, maintain, inspect, and repair the watermain including all accessories and equipment necessary.
- Ensure the easement is kept clear of brush, trees, and other obstructions.
- Enter upon the easement at all times (including contracted workers), with machinery and vehicles (if necessary), for the purposes of repair and maintenance.
- Erect gates to allow for access, if it is considered necessary.

Property owners along the easement:

- Have the right to fully use and enjoy the lands as long as there is no drilling, excavating or the building of structures in the easement without consent from the City of London.

Short Term Easement Alternatives

1

Alternative 1: Do Nothing*

- Maintain the status quo. No improvements are planned or made.
- Continue proactive monitoring, maintenance/repair of the entire Transmission Main.

*A Note About the Do Nothing Alternative

- Consideration of Do Nothing is required as part of the MCEA process.
- Do Nothing means no improvements or changes would be undertaken to address current and future requirements.
- Do Nothing represents what would likely occur if none of the alternative solutions were implemented.
- Does not address the Problem and Opportunity Statement.

Short Term Easement Alternatives

2

Alternative 2: Maintain Easements as is – 50’ Wide

- Ensure access is maintained for maintenance and repairs (no structures or obstructions are on the easement).
- No widening of the easement.

Short Term Easement Alternatives

3

Alternative 3: Potentially Widen the Existing Easement to Greater than 50’ (if possible)

- Widen the easement to allow for easier maintenance and repair access using conventional construction methods.
- The width of the widening is subject to proximity of structures and clear space availability.

Long Term Transmission Main Twinning Alternatives

1

Alternative 1: Do Nothing

- Maintain the status quo.
- No improvements are planned or made.

Long Term Transmission Main Twinning Alternatives

2

Alternative 2: Twin the Transmission Main Along Adelaide Street with a connection to the existing main at either:

a) Medway Road; or

b) Sunningdale Road; or

c) Fanshawe Park Road; and on

d) Regent Street

Long Term Transmission Main Twinning Alternatives

3A

Alternative 3A: Twin the Transmission Main Along Richmond Street directly to Huron Street, with a connection to the existing main at either:

a) Medway Road; and on

b) Richmond Street (North of Sunningdale); or

c) Fanshawe Park Road

Long Term Transmission Main Twinning Alternatives

3B

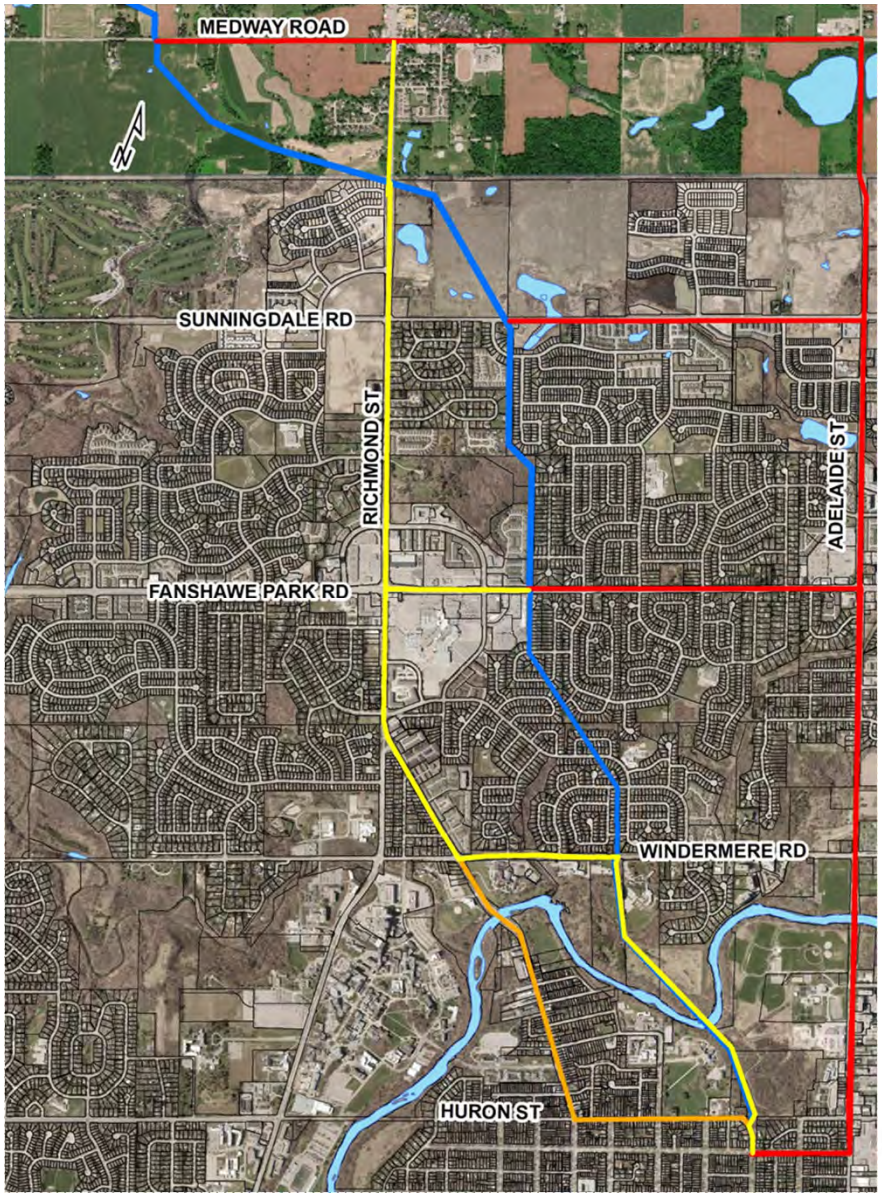
Alternative 3B: Twin the Transmission Main Along Richmond to Huron Street via the existing easement between Windemere Road and Huron Street, with a connection to the existing main at either:

a) Windemere Road; or

b) Huron Street

Long Term Transmission Main Twinning Alternatives

- Once the transmission main is twinned and the end of service life for the existing transmission main has been reached it may be possible to decommission the existing main in place.



Legend

- Existing Transmission Main
- Alternative 2: Adelaide Street Twinning Routes
- Alternative 3A: Richmond Street Twinning Routes
- Alternative 3B: Richmond Street Twinning Routes

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Next Steps

- Comments received from this Town Hall will be collected, reviewed and considered by the project team and become part of the public record.
- Short and long-term alternatives will be evaluated, public input will be considered during the evaluation.
- A public meeting (virtual) will be held (Oct/Nov 2020) to present the background data collected (e.g., ecology, water modelling, archaeology); the results of the evaluation and the preliminary recommended short and long-term strategies will be presented to the public.
- Public input from the fall 2020 meeting will be considered when finalizing the evaluation.
- An EA Master Plan report will be prepared and made available for public review online for 30 days.
- If no issues are raised within the 30-day review period, the City can proceed to detailed design, approvals and construction.
- Detailed design would be completed, and construction can begin for any short-term measures.

For More Information

Ask a Question Today

- Use the **Q&A window** - type in your question and hit send. Our speakers will be answering questions in a few minutes.

Visit the Project Website

- https://www.london.ca/residents/Environment/EAs/Pages/Arva-Pumping-Station-to-Huron-Street-Water-Transmission-Main-Municipal-Class-Environmental-Assessment-Master-Plan.aspx

Contact the Project Team

- Contact us with additional comments or questions at any time.

We appreciate the time you have taken to learn more about the project and value your input to this study and encourage you to stay connected.

Stephen Romano, P.Eng
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London ON, N6A 6K2
Tel: 519-963-5889
Email: john.haasen@aecom.com

Adams, Paul (London ON)

From: Romano, Stephen <sromano@london.ca>
Sent: Tuesday, June 16, 2020 8:10 AM
To: Sandy Levin
Cc: Haasen, John
Subject: [EXTERNAL] RE: Arva PS to Huron Street Transmission Main - Notice of Study Commencement

Hi Sandy,
Thanks for reaching out. We will ensure that Nature London remains on the contact list and the concerns discussed below are considered as the evaluation process continues.
Regards,

Stephen Romano, M.Eng, P.Eng
Environmental Services Engineer
Water Engineering Division
City of London

From: Sandy Levin [mailto:s.levin@bell.net]
Sent: Monday, June 15, 2020 1:14 PM
To: Romano, Stephen <sromano@london.ca>; john.haasen <john.haasen@aecom.com>
Subject: [EXTERNAL] Arva PS to Huron Street Transmission Main - Notice of Study Commencement

Nature London would appreciate remaining on the contact list for this project. You may use this e-mail address for electronic communications. Our concerns related to potential impacts on the Gibbons Wetland north of Fanshawe, east of Richmond, Huron Woods which is a Significant Woodland, and any potential "rework" to the restoration work to be done after the completed construction of the pedestrian/bike pathway and bridges over the Thames (the water line route was used for construction access south of Windemere, north of the River).

Thanks in advance.

Sandy Levin, chair

Conservation Action Committee

Nature London

Adams, Paul (London ON)

From: Romano, Stephen <sromano@london.ca>
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