Arva Pumping Station to Huron Street Water Transmission Main Environmental Impact Study

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Arva Pumping Station to Huron Street Water Transmission Main

- City requires access to existing transmission mains for on-going monitoring, maintenance, repairs and to expand service as needed.
- Preferred short-term solution identified within the Municipal Class EA Master Plan Project File – Schedule B
- Alternative 2 – Maintain Easements as is (minimum 15m or 50’)

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Study Area and Surrounding Landscape

- 8km of water transmission main from Arva Reservoir and Pump Station to Huron Street plus 120m

- Land use comprised predominately of agricultural lands, residential and commercial development & green space.

- Natural heritage features include:
  - Thames River (North Branch)
  - Medway Creek
  - Arva Moraine PSW
  - North Branch Park
  - Huron Street Woods
  - Significant Valleylands
  - Gibbons Wetland ESA

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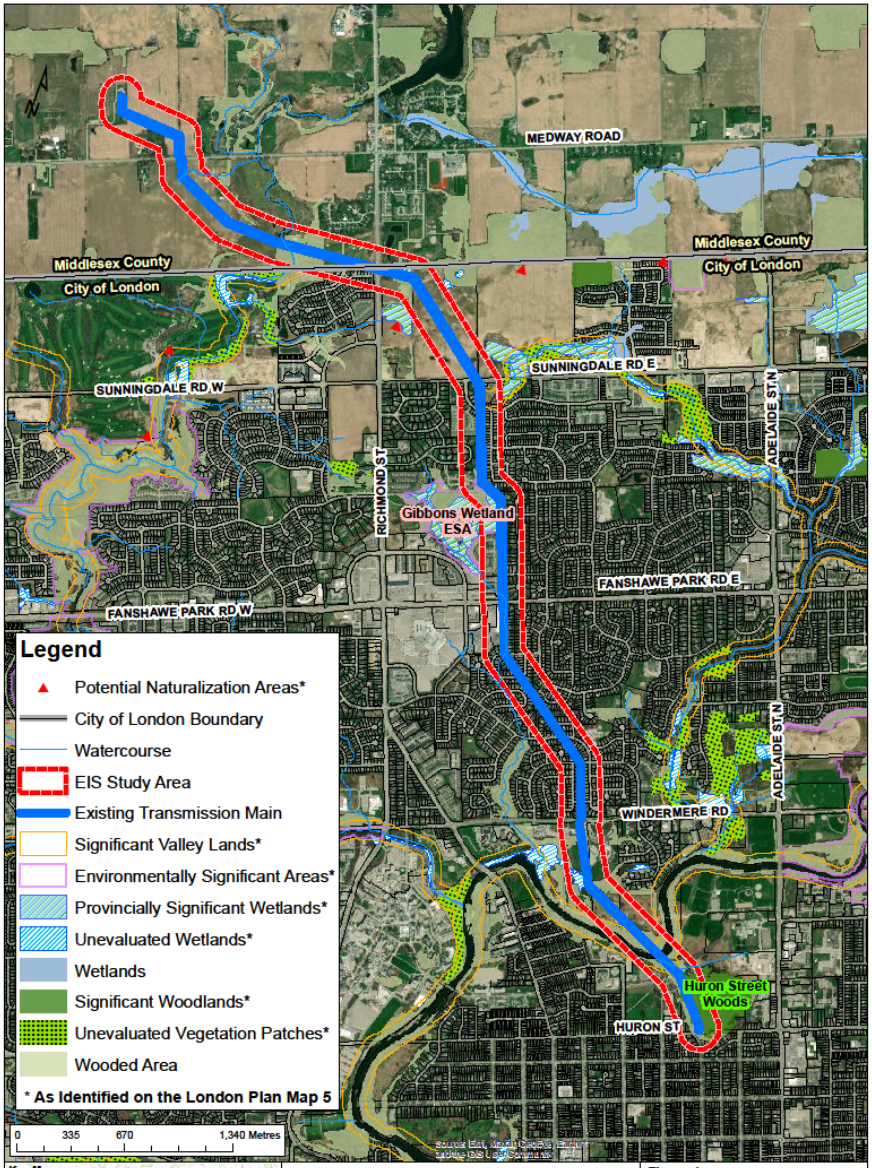

City of London Environmental Impact Study: Arva Pumping Station to Huron Street Water Transmission Main Municipal Class Environmental Assessment Master Plan

Figure 1: Study Area and Surrounding Land Use

Date:	PN:	Datum: NAD83 UTM17
March 2021	60619503	Source: City of London

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Existing Natural Heritage

Aquatic Features

- North Thames River
- North Thames River Tributary
- Masonville Creek
- Medway Creek
- Unnamed Municipal Drain 1

Terrestrial Features

- Cultural meadows
- Cultural woodlands
- Shallow and meadow marshes
- Swamp thickets
- Deciduous swamp
- Deciduous forests
- Cultural Plantation

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Natural Heritage Features

- Arva Moraine Wetland Complex (PSW)
- Unevaluated Wetlands
- Gibbons Wetland ESA (including portions of Arva Moraine Wetland Complex).
- Significant Woodlands (Huron Street Woods Park)
- Candidate and Confirmed SAR. Confirmed within Study Area include butternut, barn swallow, red mulberry, Black Redhorse (THR), Silver Shiner (THR) and Wavy-rayed Lampmussel (THR)

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Proposed Activities

- Inspection and maintenance of valves and chambers
- Soil sampling and testing of ground near transmission mains, including coring into ground, sample collection and lab testing
- Test pits to inspect the surface of the transmission main by excavating to the transmission main and inspecting the surface of the concrete pipe for signs of pitting, cracking or damage
- Electromagnetic tools to inspect the inside of the main for damage while the line is in service
- Repair of joints

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Potential Impacts

– Impacts to natural heritage features and their functions are anticipated to be isolated

– Impacts to Natural Heritage Features include:

- Removal of vegetation within marginal cultural communities and isolated Natural Heritage features
- Damage to adjacent vegetation during construction
- Erosion and sedimentation
- Impacts to local wildlife including potential for incidental take and harm (i.e., vehicle mortality) during construction

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Environmental Management Recommendations

- Consultation with UTRCA where works are required within the Regulated Lands
- Limit removals through avoidance.
- Avoidance of sensitive timing windows; breeding bird (April 1 to August 31) and bat roosting (April 1 to September 31) & turtle overwintering (October to April).
- Pre-clearance surveys in advance of construction activities.
- ESC Plan and Construction Mitigation and Monitoring Plan (SAR Handling Protocol, Invasive Plant Management Plan, Clean Equipment Protocol for Industry).

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Environmental Management Recommendations Cont.

- Obtain Licence to Collect Fish and/or Wildlife Collectors Authorization were required
- Environmental monitoring to be implemented for sensitive features
- Activities below high-water mark require submission of Request for Review to DFO
- Maintenance and/or repair activities considered Health and Safety projects under the ESA. Activities affecting SAR/SAR habitat to be registered with MECP
- Consideration for restoration of disturbed areas where feasible

Conclusions

Impacts to natural heritage features can be avoided or significantly reduced through the implementation of environmental management recommendations

Questions?

Thank You!

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