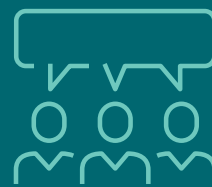
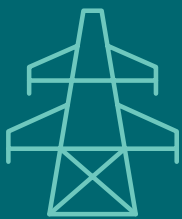
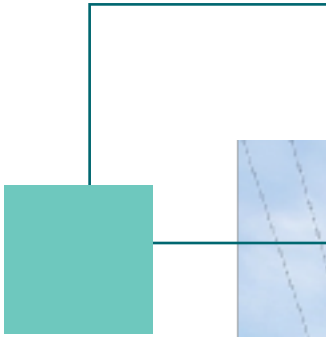




Etobicoke Greenway Transmission Line Project Class Environmental Assessment Richview TS x Manby TS Line Rebuild Project

Draft Environmental Study Report



March 30, 2023

Etobicoke Greenway Transmission Line Project Class Environmental Assessment

Richview TS x Manby TS Line Rebuild Project

Draft Environmental Study Report

March 30, 2023

Prepared by:

Hydro One Networks Inc.

Environmental Services

483 Bay Street, North Tower, 14th Floor

Toronto, ON M5G 2P5

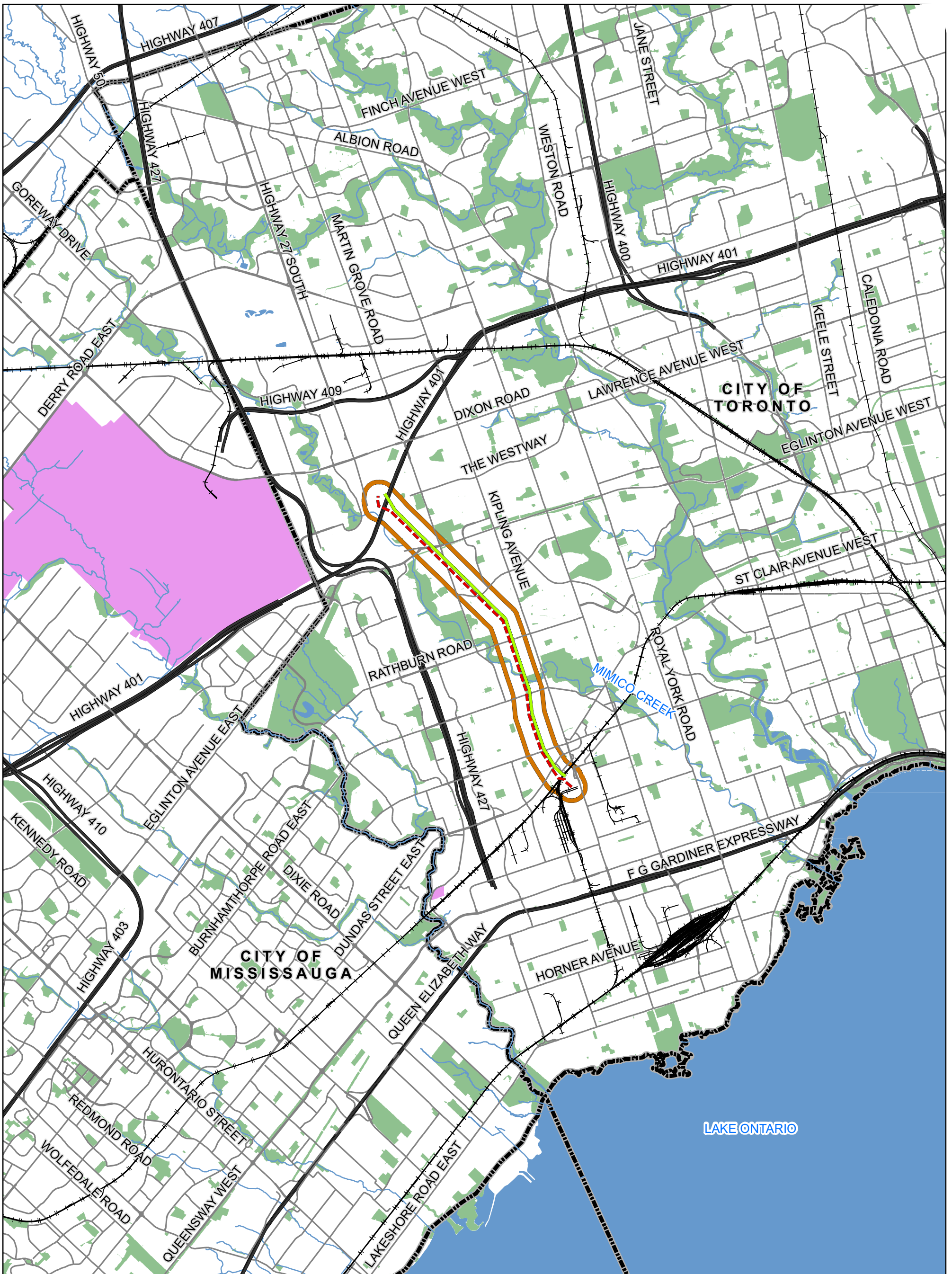
Executive Summary

Hydro One Networks Inc. (Hydro One) has prepared this Environmental Study Report (ESR) for the proposed rebuild of the existing non-energized double-circuit 115 kilovolt (kV) transmission line into a double-circuit energized 230 kV transmission line (“the Project”). This 6.5-kilometre (km) line is located on the east side of an existing hydro corridor that extends between Richview Transformer Station (TS), near Highway 401 and Highway 27 to Manby TS, near Kipling Avenue and Dundas Street West in the City of Toronto as shown in **Figure E-1-1**.

The proposed Etobicoke Greenway Project also known as the Richview TS x Manby TS Line Rebuild Project, will involve dismantling and removal of the existing transmission structures, conductor and associated components and equipment along this stretch of the non-energized transmission line and the construction of new towers generally within a few metres of existing locations. This project was identified in the Toronto Integrated Regional Resource Plan Addendum published in 2019 (IRRP), led by the Independent Electricity System Operator (IESO), to help meet the rapidly growing electricity demands of homes, businesses, and public transit initiatives in the City of Toronto. The recommendation was restated in the IRRP Addendum published in 2021.

The proposed Project is subject to the Class Environmental Assessment for Minor Transmission Facilities (Hydro One, 2022), an approved planning process under the *Environmental Assessment Act* (EAA) designed for proponents to characterize the existing environment, assess potential environmental effects and mitigation, identify and evaluate alternatives, conduct consultation, and document study findings. The draft ESR was prepared in accordance with the requirements of the EAA and describes the Class Environmental Assessment (Class EA) process undertaken for the proposed Project.

At the outset of the Class EA, a study area was defined based on technical specifications and system requirements, along with considerations of the potential for environmental effects. The Class EA process included an assessment of the existing natural environmental and socioeconomic features within the study area. This characterization of the existing environment was based on literature reviews, reports and technical memos commissioned by Hydro One, online databases, mapping, consultation, and field surveys. No route alternatives were considered for this Project as they were previously assessed by the IESO within the IRRP.



HYDRO ONE NETWORKS INC.
ETOBICOKE GREENWAY

- Existing Energized 230 kV Transmission Lines
- Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line

- Project Study Area (250m)
- Airport Boundary
- Municipal Boundary
- Highway

- Major Road
- Railway
- Watercourse
- Waterbody
- City Park

PROJECT LOCATION

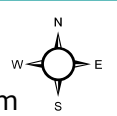
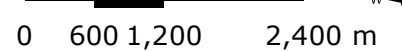
FIGURE E-1-1



MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR, HYDRO ONE NETWORKS,
CITY OF TORONTO

MAP CREATED BY: -ZJB
MAP CHECKED BY: -LM
MAP PROJECTION: NAD 1983 CSRS UTM Zone 17N

SCALE 1:65,000



PROJECT: 18-7554 STATUS: DRAFT DATE: 2023-03-15

The Notice of Commencement for the project was released in June 2022. Prior to this time Hydro One met and notified Indigenous Communities and key stakeholders such as Ministry of Energy, Northern Development and Mines (MENDM) (now Ministry of Energy), elected officials, Toronto and Region Conservation Authority (TRCA) and others, to discuss the project. Throughout 2022 and 2023, municipal, provincial, and federal government officials and agencies, Indigenous Communities, potentially affected and interested persons, and interest groups were consulted. This involved project notifications, communications and engagements resulting in issues identification and resolution efforts. The consultation process included the development of a project website; two rounds of community open houses (in-person and virtual); corridor walks; design workshops; meetings with Indigenous Communities, government officials, potentially affected and interested persons; extensive correspondence between Rights-holder, stakeholders (such as the TRCA and City of Toronto) and dedicated Community Relations and Indigenous Relations representatives.

Potential environmental effects resulting from the proposed Project have been identified and avoidance and/or mitigation measures have been proposed accordingly. Based on information collected to date, as noted in the sections below, no significant net adverse environmental effects were identified.

Hydro One has committed to reimagine the corridor to give back to the surrounding community. The proposed project provides a unique opportunity to reconceptualize how the corridor will be used once the construction of the towers and transmission lines is complete. Hydro One has been working with community members to create a shared vision for a publicly accessible space within the transmission corridor known as the Etobicoke Greenway.

This draft ESR was made available for a 45-day review period, from March 30, 2023 to May 15, 2023. The draft ESR was available electronically on Hydro One's website at www.hydroone.com/Etobicoke and on USB drive at the Eatonville Public Library located at 430 Burnhamthorpe Road, Etobicoke.

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List of Acronyms and Abbreviations

AAQC	Ambient Air Quality Criteria
ANSI	Area of Natural and Scientific Interest
ASI	Archaeological Services Inc
CAAQS	Canadian Ambient Air Quality Criteria
CDM	Conservation and Demand Management
CEA	Cumulative Effects Assessment
Class EA	Class Environmental Assessment
cm	Centimetres
CO	Carbon Monoxide
COH	Community Open House
CP	Canadian Pacific
CPTED	Crime Prevention Through Environmental Design
EAA	Environmental Assessment Act
EAB	Environmental Assessment Branch
ECCC	Environment and Climate Change Canada
ELC	Ecological Land Classification
EMF	Electric and Magnetic Fields
EPA	Environmental Protection Act
EPC	Engineering, Procurement and Construction
ESA	Endangered Species Act
ESC	Erosion and Sediment Control
ESR	Environmental Study Report
GHG	Greenhouse Gas
GPS	Global Positioning System
GTA	Greater Toronto Area
Hydro One	Hydro One Networks Inc.
HVA	Highly Vulnerable Aquifers
IESO	Independent Electricity System Operator

Etobicoke Greenway Transmission Line Class Environmental Assessment
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IO	Infrastructure Ontario
IRRP	Integrated Regional Resource Plan
km	Kilometres
km ²	Square Kilometres
kV	Kilovolt
LID	Low Impact Development
LIO	Land Information Ontario
LRT	Light Rail Transit
m	Metre
m ³	Cubic Metres
mm	Millimetres
MBCA	Migratory Birds Convention Act, 1994
mbgs	Metres Below Ground Surface
MECP	Ministry of the Environment, Conservation and Parks
MENDM	Ministry of Energy, Northern Development and Mines
MCM	Ministry of Citizenship and Multiculturalism
MNR	Ministry of Natural Resources
MNRF	Ministry of Natural Resources and Forestry
MOE	Ministry of Energy
MPP	Member of Provincial Parliament
m/s	metres per second
MTO	Ministry of Transportation
NAPS	National Air Pollution Surveillance
NHIC	Natural Heritage Information Centre
NO ₂	Nitrogen dioxide
O. Reg.	Ontario Regulation
OEB	Ontario Energy Board
PM	Particulate Matter
PPS	Provincial Policy Statement
PSW	Provincially Significant Wetlands

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RIP	Regional Infrastructure Plan
ROW	Right-of-way
SAC	Spills Action Centre
SAR	Species at Risk
SARO	Species at Risk in Ontario
SO ₂	Sulphur dioxide
SPA	Source Protection Area
SPM	Suspended Particle Matter
SWH	Significant Wildlife Habitat
TC	Transport Canada
TCDSB	Toronto Catholic District School Board
TDSB	Toronto District School Board
TRCA	Toronto and Region Conservation Authority
TS	Transformer Station
TTC	Toronto Transit Commission
VOH	Virtual Open House

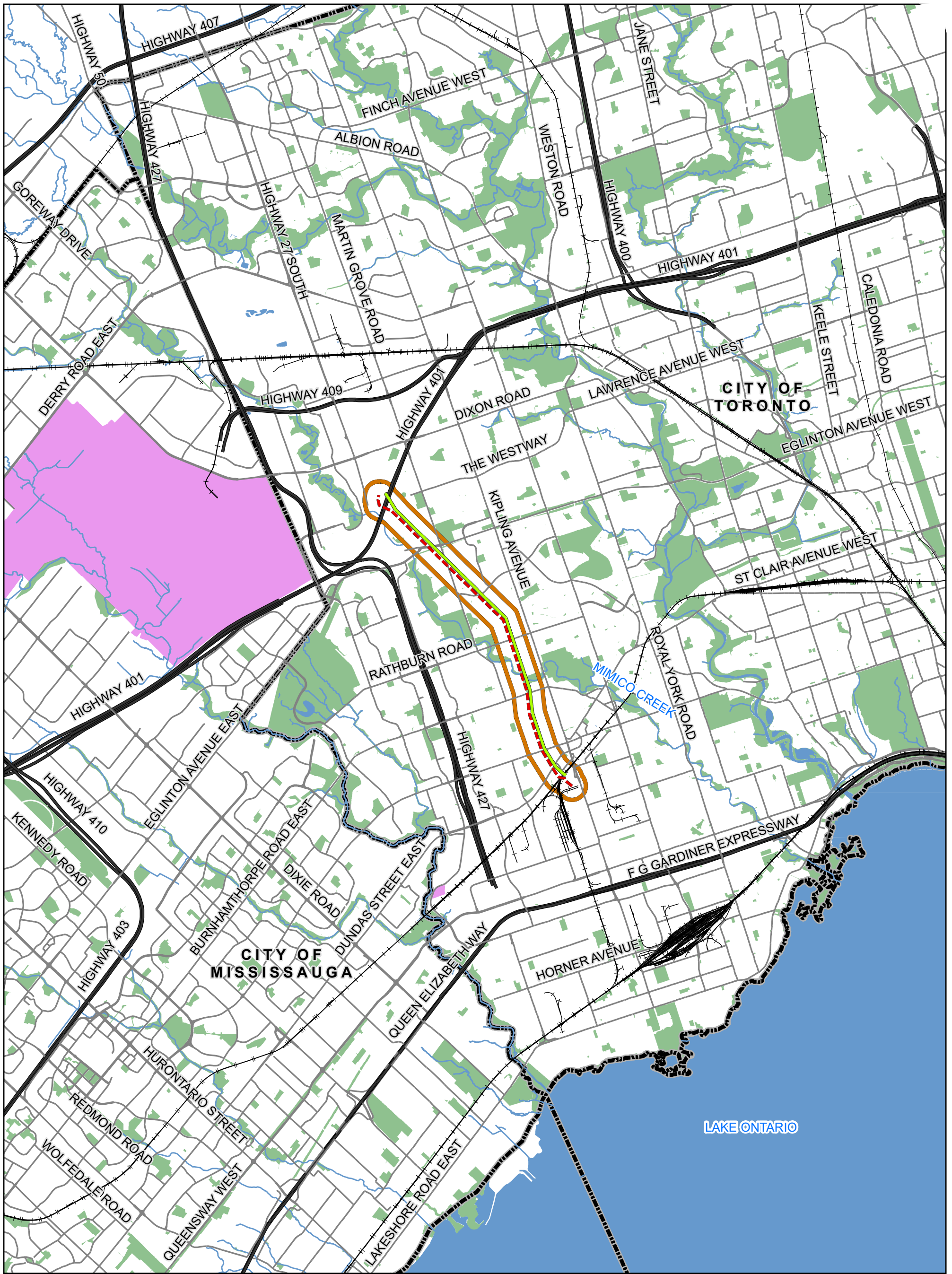
1 Introduction

Hydro One Networks Inc. (Hydro One) is planning to rebuild the existing non-energized double-circuit 115 kilovolt (kV) transmission line (circuits K9S/K10SB) to a double-circuit 230 kV transmission line between Richview Transformer Station (TS), near Highway 401 and Highway 27 to Manby TS, near Kipling Avenue and Dundas Street West in the City of Toronto. The project location is noted in **Figure 1-1** below.

The proposed Etobicoke Greenway Transmission Line Project (“the Project”), also known as the Richview TS x Manby TS Line Rebuild Project, is subject to the Class Environmental Assessment (Class EA) for Minor Transmission Facilities (Hydro One, 2022), an approved planning process under the Ontario *Environmental Assessment Act* (EAA). The Class EA was developed as a streamlined process to ensure that routinely undertaken minor transmission projects that have a predictable range of effects are planned and carried out in an environmentally acceptable manner. The proposed Project is also subject to the Leave to Construct approval under Section 92 of the *Ontario Energy Board Act, 1998*.

Prior to initiating this Class EA, Ontario’s Independent Electricity System Operator (IESO) prepared an Integrated Regional Resource Plan (IRRP) Addendum for the Central Toronto Area in 2021. This plan establishes the need for additional transmission capacity in the Richview TS to Manby TS transmission corridor. Information from the IRRP is summarized in this Environmental Study Report (ESR).

A Class EA has been carried out to assess the potential environmental effects of the proposed Project. This ESR has been prepared in accordance with the requirements of the EAA.



HYDRO ONE NETWORKS INC.
ETOBICOKE GREENWAY

- Existing Energized 230 kV Transmission Lines
- Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line
- Project Study Area (250m)
- Airport Boundary
- Municipal Boundary
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- Railway
- Watercourse
- Waterbody
- City Park

PROJECT LOCATION

FIGURE 1-1

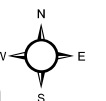


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MAP CHECKED BY: -LM
MAP PROJECTION: NAD 1983 CSRS UTM Zone 17N

SCALE 1:65,000

0 600 1,200 2,400 m



PROJECT: 18-7554 STATUS: DRAFT DATE: 2023-02-23

1.1 Need for the Undertaking

The Etobicoke Greenway transmission corridor, also identified as the Richview TS x Manby TS Line Rebuild Project, is the main supply path for a significant portion of the Central Toronto Area, including downtown Toronto, and portions of Mississauga, and Oakville (IESO, 2021). During peak demand periods, the existing four 230 kV circuits from the Richview TS to the Manby TS have been operating at near capacity (IESO, 2021).

In recent years, the Central Toronto Area has experienced extensive redevelopment, which has resulted in growth in electricity demand. This growth is placing pressure on the existing electricity system currently serving the area. In addition, the City of Toronto anticipates that this area will continue to experience substantial population and economic growth.

The 2015 IRRP indicated that the demand growth in Central Toronto Area is forecasted to exceed the transmission line capacity limits of the 230 kV Richview TS to Manby TS corridor (IESO, 2015). In addition to providing alternatives (see **Section 1.3**), the 2015 IRRP made two recommendations specific to the Richview to Manby transmission corridor. These include:

- Implement area-specific conservation options to defer the need for capacity relief requirements; and,
- Proceed with a detailed investigation of the infrastructure alternatives to address the need.

In 2017, an Addendum to the Central Toronto Area IRRP was released to reflect new information about proposed transit electrification projects which would affect the timing around transmission reinforcement needs (IESO, 2017). The 2017 Addendum recommended that either the Richview to Manby corridor will need to be upgraded or the areas served by the Manby TS will require a new supply path (IESO, 2017).

In 2019, the IESO released an updated IRRP for Central Toronto Area, which reassessed and reaffirmed the need to upgrade the existing non-energized double-circuit 115 kV transmission line between Richview TS and Manby TS to a double-circuit 230 kV transmission line. In 2021, the IRRP has since been updated to apply the recommendation noted in the 2019 IRRP to reinforce the Richview x Manby transmission corridor to meet a near-term supply capacity need. The main changes involved: updating the Conservation and Demand Management (CDM) Achievable Potential Study, the release of the 2021-2024 CDM Framework and an up-to-date demand forecast in the area (IESO, 2021). The updated assessment confirmed what was noted in the 2019 IRRP; the existing idle double circuit 115 kV line will need to be upgraded to 230 kV. This

upgrade remains the most feasible and cost-effective solution to address the capacity needs (IESO 2021).

1.2 Description of the Undertaking

The proposed Project will involve reinforcing transmission capacity by removing the existing non-energized double-circuit 115 kV transmission line from Richview TS to Manby TS and replacing it with a new 230 kV double-circuit line within the approximately 6.5 km long existing corridor. The reinforcement consists of two phases including the line rebuild and the reconfiguration of circuits within the terminating stations.

1.2.1 Phase One

Phase one will involve rebuilding the existing non-energized 115 kV overhead line on the transmission corridor between Richview TS and Manby TS to 230 kV. The new line will operate on the east side in parallel with the existing four 230 kV circuits from Richview TS to Manby TS which are in the centre and west sides of the transmission corridor. Initially, the new line will be reconfigured to create two “super circuits”, which will allow for the two additional circuits to supply Manby TS. It will also avoid the need to build new terminations, including new breakers at Manby TS (IESO, 2021).

1.2.2 Phase Two

Phase two will be coordinated with the proposed future Manby TS end of life refurbishment project. The new circuits will be separately terminated on the Manby 230 kV bus. At Richview TS they will connect to existing 230 kV circuits between Claireville TS and Richview TS, thereby unbundling the two super circuits (IESO, 2021).

Detailed design of the proposed project will be completed following filing the final ESR. Upon successful completion of the Class EA and the Ontario Energy Board (OEB) Section 92 processes, construction may commence as early as late 2023 and be completed by 2026.

1.3 Alternatives to the Undertaking

The Class EA process requires the identification and evaluation of reasonable alternatives. Alternatives must be reasonable from a technical, economic, and environmental perspectives. Two distinct types of alternatives are typically considered in EA processes:

- “Alternatives to” the undertaking are functionally different approaches to addressing the need for the undertaking; and,
- “Alternative methods” consider different ways of carrying out the undertaking.

Given the complexities associated with defining new routes in urban areas, the “alternatives to” focused on ways to enhance the capacity of existing transmission corridors. Alternatives were initially introduced in the 2015 IRRP, which identified the following alternative ways to meet the need, or “alternatives to”, for consideration:

- Building two new transmission circuits between Richview TS and Manby TS;
- Upgrading the existing Richview to Manby 230 kV circuits with new conductors;
- Installation of 70% series compensation;
- Conservation;
- Distributed generation; and,
- Maintain status quo (Do Nothing Alternative).

As a result of the pressing need to provide capacity relief to the existing Etobicoke Greenway transmission lines, the Maintain Status Quo (Do Nothing Alternative) was identified as not feasible and was removed from further consideration. In addition, the installation of 70% series compensation was deemed not technically feasible (IESO, 2015).

In 2016, Hydro One prepared the Metro Toronto Regional Infrastructure Plan (RIP). Building off the alternatives identified in the 2015 IRRP, the RIP considered the following five alternatives:

- **Alternative 1: Upgrade four existing 230 kV Richview TS x Manby TS circuits** – This alternative would use a re-conductor with higher capacity on existing towers;
- **Alternative 2: Rebuild existing 115 kV Richview TS x Manby TS line** – This alternative would rebuild the existing non-energized 115 kV double-circuit line as a 230 kV double-circuit line. The new line would share the existing terminations at Richview TS and Manby TS;
- **Alternative 3: Build two new 230 kV Richview TS x Manby TS circuits** – Like Alternative 2, Alternative 3 would rebuild the existing non-energized 115 kV double-circuit transmission line as a 230 kV double-circuit transmission line. However, this alternative would require new terminations at Richview TS and Manby TS;
- **Alternative 4: Extend the Cooksville TS x Oakville TS line to Trafalgar TS** – This alternative would increase the supply capacity and reliability to the Southwest Greater Toronto Area (GTA), alleviating the pressure on the Richview to Manby corridor. However, this

alternative would have the highest cost, posing a risk to project completion before transit electrification initiatives are anticipated to be in service; and,

- **Alternative 5: Conservation Demand Management and Distributed Generation** – As noted in **Section 1.1**, conservation and demand management initiatives will not effectively defer the need date for the transmission corridor due to anticipated size of the additional load from the Metrolinx Mimico TPS (RIP, 2016). This was reinforced in IRRP Addendum – 2017 Update.

As a result of the risk to project completion and the inability to defer the need date, the RIP (2016) recommended that Alternatives 4 and 5 not be considered further and that Hydro One proceed with the development of the first three alternatives listed above.

An analysis of the technical feasibility of these remaining three alternatives related to reinforcing transmission capacity in the existing corridor is provided in **Table 1-1**.

Table 1-1: Analysis of Technical Feasibility

Option	Description	Technical Feasibility
Alternative 1: Upgrade four existing 230 kV Richview TS x Manby TS circuits.	<ul style="list-style-type: none"> • Increase conductor size of existing four 230 kV circuits between Richview TS and Manby TS. • Will require a 230 kV bypass circuit to be built for the construction where existing non-energized 115 kV line is located. • Additional capacity is much less than adding new circuits. 	<ul style="list-style-type: none"> • Not technically feasible due to outage requirements. • Bypass required.
Alternative 2: Rebuild existing double circuit 115 kV line at 230 kV.	<ul style="list-style-type: none"> • Rebuild existing 115 kV as 230 kV line with lattice or monopole structures. 	<ul style="list-style-type: none"> • Feasible. • No bypass required.
Alternative 3: Build two new 230 kV Richview TS x Manby TS circuits.	<ul style="list-style-type: none"> • Need to build a bypass circuit where existing 115 kV line is located. • Very high towers – need to increase the size of existing lattice towers. 	<ul style="list-style-type: none"> • Not technically feasible due to outage requirements. • Bypass required.

As noted in the table above, it was determined that Alternatives 1 and 3 were not technically feasible due to outage requirements. Alternative 2 is therefore the preferred alternative to address

the need for additional transmission capacity between the Richview TS and Manby TS. This conclusion was supported in the 2019 and 2021 IRRP.

The “Alternative Methods” to implement the rebuilding of the existing non-energized double-circuit 115 kV transmission line to a double-circuit 230 kV transmission line is further discussed in [Appendix A1](#).

1.4 Approval Process and Regulatory Requirements

This section outlines the approval process required under the Class EA process as well as other regulatory requirements.

1.4.1 Class Environmental Assessment Process

This draft ESR has been prepared in accordance with the Class EA for Minor Transmission Facilities (Hydro One, 2022), an approved planning process under the EAA. This Class EA applies to Category B transmission projects/undertakings that are not associated with generation and provides a process to follow to meet the requirements of the EAA. Category B is composed by those projects that have potential environmental effects that can likely be mitigated (listed in Section 4 of O. Reg. 116/01). The Class EA for Minor Transmission Facilities is a streamlined planning process ensuring that applicable projects are planned and carried out in a manner that is efficient and environmentally acceptable.

The Class EA process classifies projects into four categories:

- Emergency situations where immediate action is required;
- Projects eligible for exemption subject to an Archaeological Screening Process such as, temporary transmission lines or refurbishments with not change in voltage;
- Projects eligible for exemption subject to the Class EA Screening Process where 16 screening criteria must be satisfied to determine if the project has suitable technical parameters and environmental situations to allow it to be screened from further assessment; and,
- Projects subject to the Full Class EA.

Given that the Etobicoke Greenway involves an increase in voltage to allow for construction Hydro One completed the Full Class EA process.

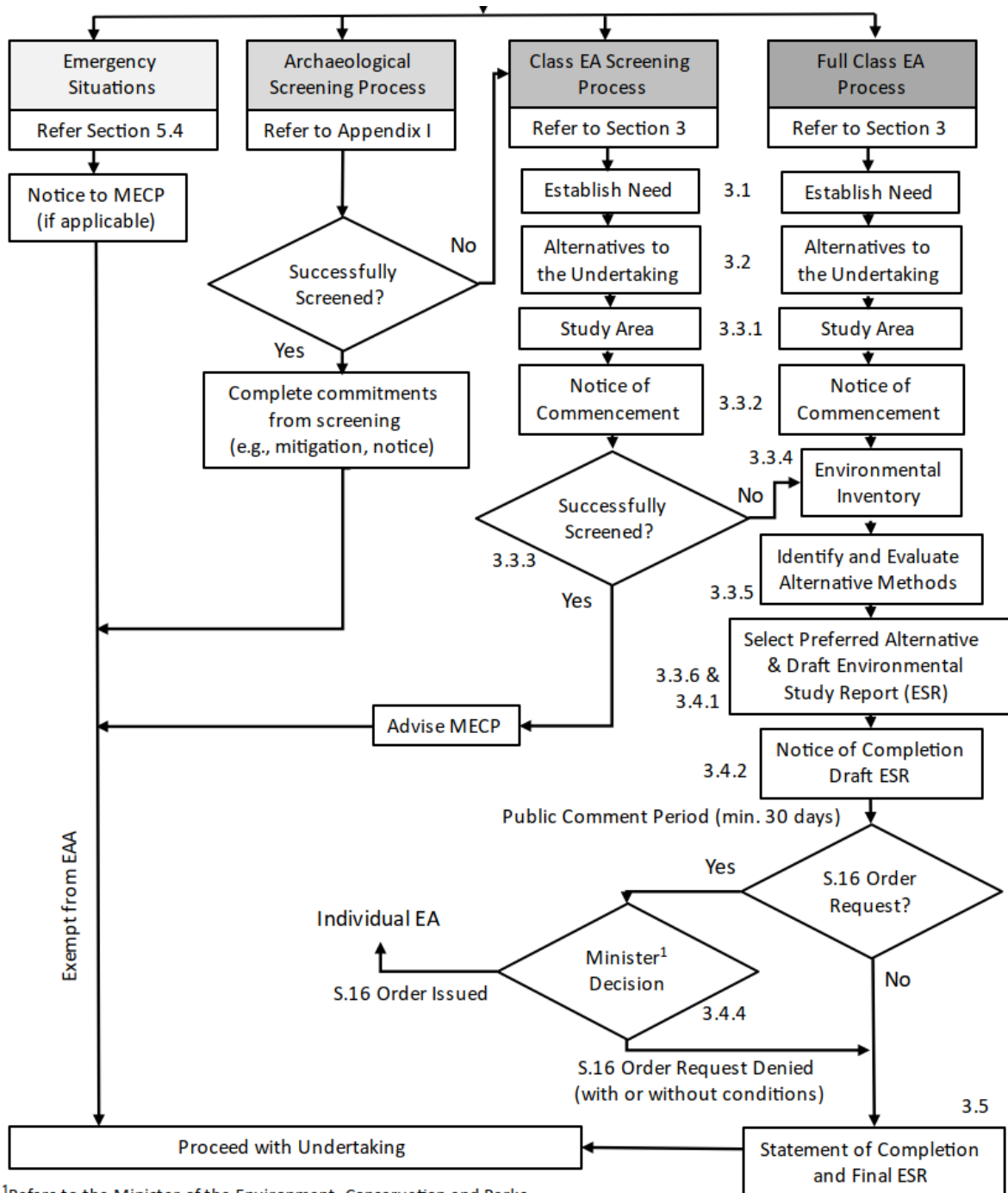
The components of the Full Class EA process that must be followed for this project include:

Etobicoke Greenway Transmission Line Class Environmental Assessment
Richview TS x Manby TS Line Rebuild Project
Draft Environmental Study Report

- Establish need;
- Identify and evaluate “alternatives to” the undertaking;
- Define study area;
- Issue initial Notice of Commencement;
- Conduct an environmental inventory;
- Identify and evaluate alternative methods (if applicable);
- Select a preferred alternative and prepare a draft ESR;
- Issue final notification and the draft ESR for public review and comment;
- File final ESR and Class EA Statement of Completion with the Ministry of Environment, Conservation and Parks (MECP) and proceed with the undertaking;
- Conduct consultation throughout the process; and,
- Effects monitoring.

The Class EA process is illustrated in **Figure 1-2**.

Figure 1-2: Class Environmental Assessment Process



¹Refers to the Minister of the Environment, Conservation and Parks

This figure is to be considered in conjunction with applicable sections of the Class EA for MTF

With the completion of the draft ESR, Hydro One has issued a notification to Indigenous Communities, federal, provincial, and municipal government officials and agencies, potentially affected and interested persons, and interest groups. The draft ESR will be made available for public review and comment for a period of 45 calendar days, from March 30, 2023 until May 15, 2023 at 4:30 p.m. Hydro One will make best efforts to respond and resolve issues raised by concerned parties during the review period. Any issues and their respective resolutions will be documented and summarized in the final ESR.

If a concern cannot be resolved by the proponent, the concerned party (requester) may request that the Minister or delegate grant a Section 16 Order request to elevate the status of the project. Section 16 Orders can only be made on the grounds that the order may prevent, mitigate, or remedy adverse impacts on Constitutionally protected Aboriginal or treaty rights.

Once the review period of the draft ESR is complete, comments received during the review period will be incorporated into the final ESR. A copy of the final ESR will be placed on the Hydro One project website at www.hydroone.com/Etobicoke and provided to the Environmental Assessment Branch (EAB) and the appropriate Regional EA Coordinator at the MECP for filing. Once the final ESR and the Class EA Statement of Completion have been filed with the MECP, the proposed Project will be considered approved and may proceed as outlined in the final ESR.

1.4.2 Other Permits, Licenses and Approvals

In addition to meeting EAA requirements, there are several necessary permits, licenses and approvals that may be required under federal and/or provincial legislation. These additional requirements are presented in **Table 1-2**. Hydro One will contact the appropriate regulatory agencies to ensure that the proposed Project meets all regulatory requirements prior to construction.

The proposed Project does not trigger a federal EA under the federal *Impact Assessment Act*.

As stated in Section 62.(1) of the *Planning Act* (R.S.O. 1990, c. P.13), "An undertaking of Hydro One Inc. that has been approved under the EAA is not subject to this *Act*." Hydro One has been working with the City of Toronto during the Class EA process and will continue to consult with City staff as needed during detailed design and construction of the Project.

Table 1-2: Potentially Required Permits, Licenses and Approvals

Permit, License, or Approval	Primary Agency	Description
Leave to Construct under Section 92 of the Ontario Energy Board (OEB) Act	OEB	Required for the construction of the proposed reinforcement of the Richview TS to Manby TS.
Aeronautical Assessment	NAVCanada, Transport Canada	Aeronautical assessment of obstacles within 6 km of an airport.
Building and Land Use Permit	Ministry of Transportation (MTO)	Required to place, erect, or alter any transmission line within 400m of any limit of a controlled access highway.
Encroachment Permit	MTO	Required for the installation or works, upon, under or within the limits of a provincial highway right-of-way (ROW) placed by someone other than MTO
Archaeological Acceptance Letters	Ministry of Culture and Multiculturalism (MCM)	May require Acceptance Letters prior to undertaking new ground disturbance in areas with archaeological potential
Noise Exemption	City of Toronto	May be required if the operation of construction equipment extends beyond the permitted hours.
Street Occupation Permit	City of Toronto	Required for temporarily occupying any portion of the public ROW.
Permit Application under the Tree Protection By-law	City of Toronto	Not required
Permit Application under the Ravine and Natural Features Protection By-law	City of Toronto	Not required

Etobicoke Greenway Transmission Line Class Environmental Assessment
 Richview TS x Manby TS Line Rebuild Project
 Draft Environmental Study Report

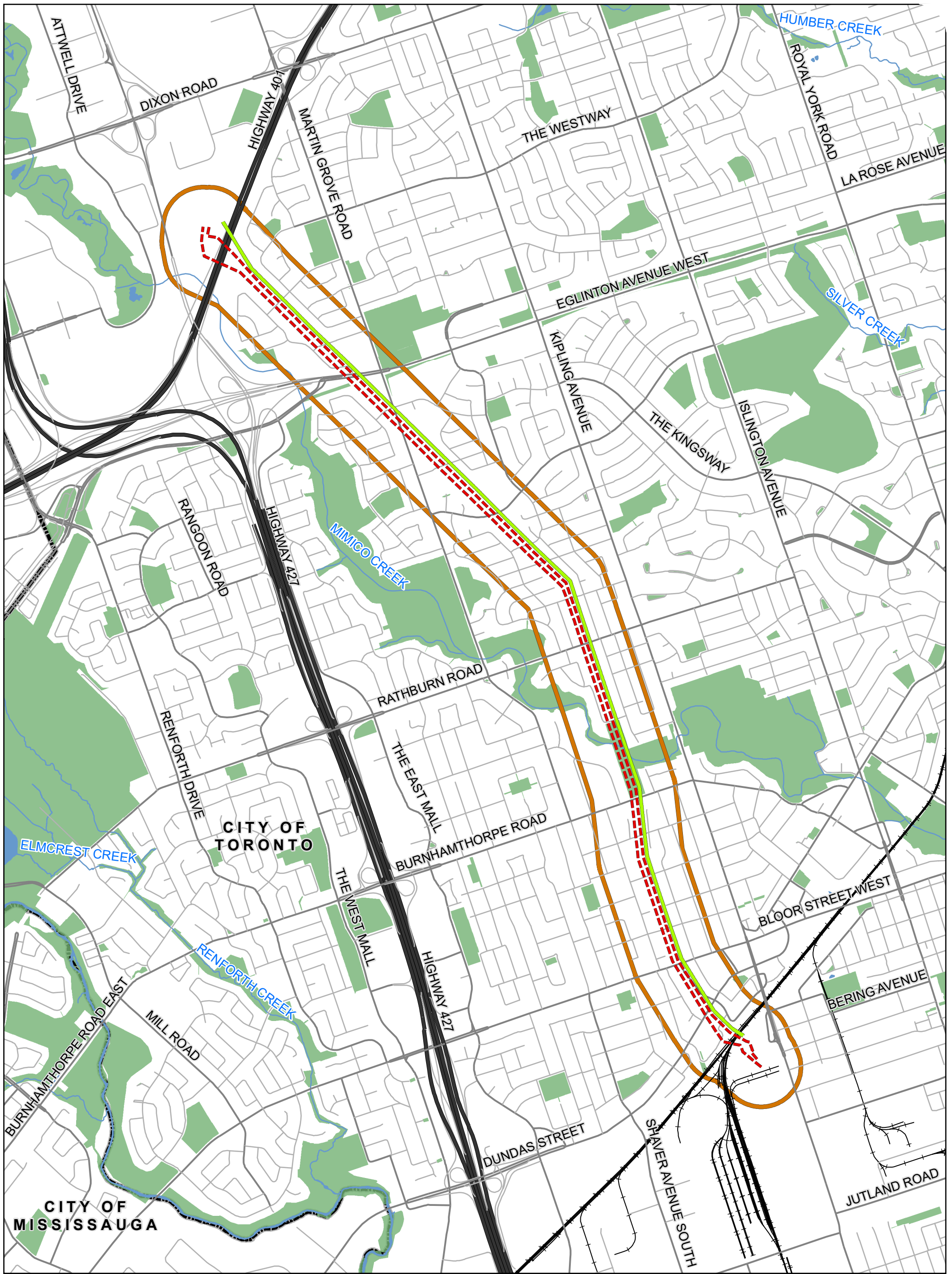
Permit, License, or Approval	Primary Agency	Description
Development Interference with Wetland and Alterations to Shorelines and Watercourses	TRCA	Permit required for construction within the TRCA regulated area.
Safe Harbours Agreement – under the Endangered Species Act (ESA)	MECP	Potential for providing habitat for species at risk

If other permits are identified as required, Hydro One and/or the Engineering, Procurement and Construction (EPC) will work with the regulator to ensure compliance.

2 Study Area

A project study area was delineated to encompass the area of potential project effects. The study area includes the proposed length of the existing Hydro One transmission line from the Richview TS to the Manby TS and the area within a 250 metre (m) buffer on both sides of the proposed double-circuit 230 kV transmission line. (see **Figure 2-1**).

The purpose of the study area was to determine an area that would encompass the future asset location, associated ROW and adjacent lands such that technical studies and field investigations for the purposes of documenting baseline existing conditions could be appropriately scoped and planned.



HYDRO ONE NETWORKS INC.
ETOBICOKE GREENWAY

- Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line
- - - Existing Energized 230 kV Transmission Lines
- Project Study Area (250m)

- Municipal Boundary
- Highway
- Major Road
- Minor Road
- Railway
- Watercourse
- Waterbody
- City Park

STUDY AREA
FIGURE 2-1

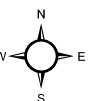


MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR, HYDRO ONE NETWORKS,
CITY OF TORONTO

MAP CREATED BY: -ZJB
MAP CHECKED BY: -LM
MAP PROJECTION: NAD 1983 CSRS UTM Zone 17N

SCALE 1:22,500

0 200 400 800 m



PROJECT: 18-7554 STATUS: DRAFT DATE: 2023-03-15

3 Consultation

Consultation is an important part of the Class EA process as it provides those who may be potentially affected by or interested in the proposed Project, with opportunities to contribute to the planning process. It also allows the proponent to gather information and knowledge related to the social, cultural, economic, and environmental concerns that are of direct relevance to the proposed Project.

This section of the ESR outlines the consultation Hydro One carried out with Indigenous Communities, federal, provincial and municipal government representatives and agencies, potentially affected and interested persons, businesses, and interest groups.

The key principles that have guided Hydro One's approach to encourage two-way communication and consultation for this proposed Project include the following:

- Early, ongoing, and timely communications and consultation;
- Clear project information;
- An open, transparent, and flexible consultation process;
- Respectful dialogue with Indigenous Communities, elected officials, and project stakeholders;
- Clear communication and consultation with elected officials, to ensure they have copies of all public-facing materials before they are distributed to their constituents;
- The provision of ongoing online and in-person opportunities for interested parties to learn about and provide meaningful input on the proposed undertaking; and,
- Full and fair consideration and documentation of all input received during the consultation process and incorporation of such input, where feasible, into project decision-making.

To facilitate comprehensive and transparent communication and consultation, an integrated multi-channel communication program was implemented, consisting of:

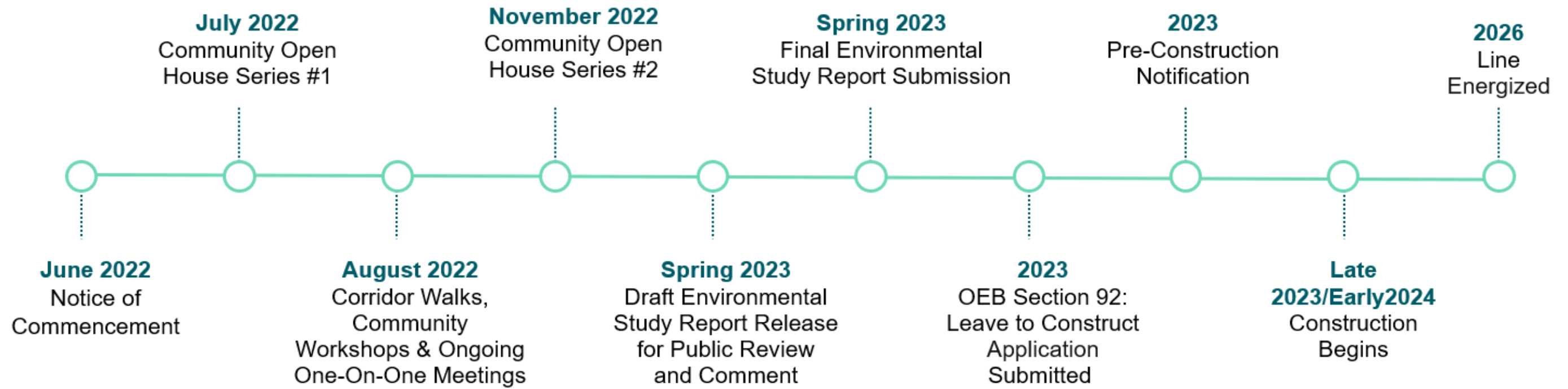
- Notification letters, postcard, corridor signs, and newspaper advertisements to announce and provide updates on the Project. Notices were sent via Canada Post admail campaigns to target all available postal routes within the study area;
- Meetings and discussions with municipal and provincial elected officials;
- In-person and Virtual Community Open Houses, which provided opportunities for interested parties to learn more about the Project, and pose questions to the Hydro One project team;

- Community Walks and Workshops, which provided opportunities to understand community priorities for Reimagining the Corridor once the project will be completed, and provide high level details about the proposed Project and respond to questions;
- Meetings, with property owners who expressed specific interests or concerns;
- Door to door outreach, which provided opportunities to share proposed Project details, listen to input and respond to questions;
- Meetings with Indigenous Communities;
- Meetings with key stakeholders, and interest groups (e.g., schools and school boards);
- Establishment of a project contact list, through which interested parties received project updates via email;
- Dedicated Community Relations representatives and email address to respond to questions and collect input;
- Proactive responses to stakeholder comments and concerns by Hydro One Community Relations representatives; and,
- Establishment and maintenance of a project website www.HydroOne.com/Etobicoke to facilitate the sharing of project information.

The consultation activities that took place for this proposed Project are described in the sections below. Copies of consultation materials are included in the appendices as referenced in the report sections below.

A summary of input received from all interested parties is included within each section, and a summary is provided in **Table 3-3**. The input was considered by the project team and incorporated into the proposed Project, where appropriate.

Figure 3-1: Consultation Timeline



3.1 Notice of Commencement

The Notice of Commencement, introducing the Project, providing details on the need, opportunity to reimagine the corridor, description, study areas, and associated regulatory processes was published in the Etobicoke Guardian on Thursday, June 23, 2022. The Notice of Commencement included Hydro One's contact details for community members to provide comments or ask questions. The Notice of Commencement referred to the Project website and solicited questions and comments to be provided to Hydro One. Copies of the Notice of Commencement were distributed as follows:

- Hydro One sent a project initiation letter by email to Alderville First Nation, Curve Lake First Nation, Hiawatha First Nation, Huron-Wendat First Nation, Mississaugas of the Credit First Nation, and Mississaugas of Scugog Island First Nation communities on June 7, 2022;
- Beginning June 27, 2022, the Notice of Commencement was sent via email to elected officials, government agencies and officials, interest groups, businesses, utilities, community associations, the Toronto District School Board (TDSB) and the Toronto Catholic District School Board (TCDSB);
- The Notice of Commencement was distributed to homes and businesses within the study area as airmail by Canada Post during the week of June 20, 2022; and,
- Signs were posted in the corridor with Notice of Commencement details during the week of June 20, 2022.

Refer to **Appendix A1** for the Notice of Commencement.

3.2 Community Open House #1

The first series of Community Open Houses (COH) were held on July 6, 2022, July 14, 2022, and July 21, 2022. The first two events were held in person and the third was held virtually. The invitation to all three community events was included in the Notice of Commencement and distributed as noted in the section above. Participants were encouraged to provide feedback and ask questions to the team.

Table 3-1: COH #1 – July 2022

Date and Time	Location	Number of Attendees
COH #1 July 6, 2022 6:00 p.m. to 8:00 p.m.	St. Andrew’s Presbyterian Church Islington 3819 Bloor Street West	Approximately 40
COH #2 July 14, 2022 6:00 p.m. to 8:00 p.m.	Martin Grove Baptist Church 35 Hedges Boulevard	Approximately 30
VOH #1 July 21, 2022 7:00 p.m. to 8:00 p.m.	Online Presentation and Live Discussion	Approximately 1138

Topics shared during the first series of COH included:

- Project need;
- Class EA process;
- What’s involved in rebuilding and energizing the line, including vegetation requirements;
- Hydro One’s commitment to reimagine the corridor; and,
- Next steps.

Hydro One’s subject experts attending the COHs included representatives from forestry, community relations, environment, real estate, project delivery, and engineering.

For the in-person COHs, Hydro One displayed information panels, and maps were available for residents to identify their home in relation to the project and view preliminary proposed tower locations. Staff were available to listen to feedback, input, collect input and respond to questions. During both in-person sessions comment forms were provided to attendees.

Refer to **Appendix B2** for the comment form template distributed during COH #1. Refer to **Appendix B3** for the information panels used for COH #1 and the VOH presentation.

During the virtual open house (VOH), Hydro One walked through a presentation which was followed by a live question and answer period with the Project team. Listeners were able to submit their questions online or dial in to join a live queue. Hydro One responded to a mix of online and live questions. If listeners where unable to ask their live questions, they were encouraged to contact Hydro One’s Community Relations Team. Questions asked outside of the VOH were addressed by the Community Relations team in a timely manner.

The VOH included a panel of Hydro One and IESO representatives and a moderator.

3.2.1 Summary of Input

During the in-person and virtual meetings the community shared feedback and asked questions. The following themes are reflective of input provided and questions asked during the COHs:

- What the work will look like;
- What changes adjacent residents would see, including location of towers, temporary roads, wires, and tree removals;
- Potential health concerns from re-building the line;
- Considerations being given to burying the line;
- Inconsistency regarding ROW maintenance (grass cutting, garbage removal etc.);
- What the approach to reimagine the corridor entails;
- How community feedback will be incorporated for re-imagining the corridor; and,
- Impacts to residents during and after construction.

The subjects discussed at the in-person COH events were classified into five main categories:

- Category 1: Current activities in corridor;
- Category 2: Reimagining the corridor;
- Category 3: Construction;
- Category 4: Engineering; and,
- Category 5: Health and Safety.

Refer to **Appendix B4** for the COH #1 Summary Memo where the detailed comments are noted and classified accordingly.

During both in-person sessions comment forms were provided to the attendees. Out of the eleven comments forms that were completed, nine noted the open house was helpful, two participants noted the open house was “somewhat” helpful, one participant did not respond to this question. Seven of the comment forms provided comments and questions based on the information shared – questions and comments were like those raised during the live discussions.

A total of 61 questions were asked during the VOH. The following themes were found among the questions asked:

- Construction impacts including noise, scope of vegetation work, potential power interruptions requirements, traffic impacts, construction methods, tower location and design, and potential visual changes;
- Project need and options considered, including burying the line;
- Environmental assessment process;
- Health and safety in the corridor once the line is re-built; and,
- Participants shared potential amenities for consideration as part of re-imagining the corridor:
 - Trail for walkers and cyclists to connect to the transit system;
 - Off leash area for dogs;
 - Mowed areas to be used for casual sports and activities;
 - Allotment gardens;
 - Compost and garbage bins;
 - Lighting through the corridor; and,
 - Pollinator gardens.

All community members that requested additional information have been added to the main contact list, and additional information has been shared via e-mail and phone calls. It was also encouraged that participants that have further questions can get in contact with the Project Team directly, at community.relations@hydroone.com or 1-877-345-6799.

3.3 Community Walks and Reimagining the Corridor Design Workshop

Hydro One issued a notice inviting residents, interest groups, elected officials, and Indigenous Communities to attend the community walks and design workshops. The Notice was distributed as follows:

- Beginning August 4, 2022, a notice was sent via email to Indigenous Communities, elected officials, government agencies and officials, interest groups, businesses, utilities, community associations and school boards;
- On August 10, 2022, a notice was sent via email to those on the project contact list; and,
- An invite was distributed to homes and businesses within the study area as targeted admail by Canada Post during the week of August 3, 2022.

The five community walks and two design workshops were held to collect input regarding re-imagining the corridor, share high level details about the proposed Project and respond to questions. Two community walks were held on August 15, 2022, and three community walks

were held on August 17, 2022. As a follow-up to the community walks, two reimagining the corridor workshops were held to introduce the participants to the project’s design principles and technical parameters. Attendees were invited to participate in a facilitated design exercise that focused on the reimagining piece of the project. Through this exercise attendees were able to provide their feedback on two main components: path location and amenities throughout the proposed corridor layout.

Table 3-2: Community Walks and Reimagining the Corridor Design Workshop

Event Date	Location	Number of Attendees
Community Walks August 15, 2022	Walk #1 (from Dundas Street to Mattice Avenue) 6:00 to 7:00 PM Walk #2 (from Mattice Avenue to Echo Valley Park) 7:00 to 8:00 PM	Approximately 25 to 30
Community Walks August 17, 2022	Walk #3 (from Echo Valley Park to North Heights Road) 6:00 to 7:00 PM Walk #4 (from North Heights Road to Eglinton Ave) 7:00 to 8:00 PM Walk #5 (from Eglinton Road to Highway 401) 6:00 to 7:00 PM	Approximately 25 to 30
Reimagining the Corridor Design Workshop August 29, 2022	St. Andrew’s Presbyterian Church Islington 3819 Bloor Street West Session One: 2:00 p.m. to 4:00 PM Session Two: 6:00 p.m. to 8:00 PM	Approximately 27

Refer to **Appendix B5** for the Notice of Community Walks and Workshop and **Appendix B7** for the comment forms.

3.3.1 Summary of Input

Input received during the community walks and design workshops was used to inform the proposed Project and it further guided the creation of a shared vision for how the transmission corridor could be used once the Project has been completed.

Throughout the community walks residents shared the different activities currently conducted in the corridor. Some of which included walking, dog walking, gardening, bird watching, among others. In addition to this, participants provided suggestions on how the corridor could be reimagined as a publicly accessible space and what their preferences were. Some individuals shared their support for the corridor to become open to the public and supported the idea of a path. Others did not share this opinion and shared their concerns with this approach.

During the corridor design workshops, participants had the chance to provide their suggestions by discussing ideas with the project team and drawing on figures. Residents shared their desire to have the path set back from backyards to provide more privacy and the overall opinion agreed with siting the path within the centre of the corridor where possible. In addition to these suggestions, attendees recommended:

- Pollinator gardens;
- Benches;
- Garbage cans; and,
- Dog friendly areas.

Participants asked questions about the design principles and technical parameters to the design team and had informative conversations about the proposed path.

Summaries of the community walks and design workshops can be found in **Appendix B7**.

3.4 Community Open House #2

Hydro One issued a notice inviting residents, interest groups, elected officials, and Indigenous Communities to attend the second round of Community Open Houses. Copies of the notice were distributed as follows:

- In September 2022, a postcard was distributed to homes and businesses within the study area to encourage participation in the Etobicoke Greenway Project;
- On November 4, 2022, a notice for COH#2 was sent via email those on the project contact list;

- An invite was distributed to homes and businesses within the study area as admail by Canada Post during the week of November 1, 2022;
- An ad was posted in the Etobicoke Guardian on Thursday November 3, 2022; and,
- Signs were posted in the corridor.

The second series of meetings were held on November 16, 2022, and November 17, 2022. A virtual room was also launched on November 16, 2022. These events and virtual room were scheduled to provide stakeholders with an opportunity to receive an update on the project, including the Class EA process, proposed line design, construction activities, potential project impacts, and proposed mitigations. The preliminary concept of the shared vision for Reimagining the Corridor once the project has been completed was also provided.

Table 3-3: COH #2 – November 2022

Date and Time	Location	Number of Attendees
November 16, 2022 1:00 p.m. to 3:00 p.m.	St. Andrew’s Presbyterian Church Islington 3819 Bloor Street West	Approximately 25
November 17, 2022 5:30 p.m. to 7:30 p.m.	St. Andrew’s Presbyterian Church Islington 3819 Bloor Street West	Approximately 27
Available starting November 16, 2022	Virtual Room	Approximately 116

Please refer to **Appendix B8** for the September 2022 postcard and the COH#2 invitation.

Topics shared during the second series of COHs included:

- What’s involved in rebuilding and energizing the transmission line;
- Feedback and input heard to date;
- Class EA process;
- Hydro One’s commitment to reimagine the corridor; and,
- Next steps.

Hydro One’s subject experts attending the COHs included representatives from forestry, community relations, environment, real estate, project delivery, and engineering.

For the in-person COHs, Hydro One displayed information panels, and maps were available for residents to identify their home in relation to the project and view updated proposed tower locations. The project team was available to listen to feedback, collect input, and respond to

questions. The virtual room included the panels and map shared during the in-person open houses into a virtual format that was accessible on demand. The virtual room also included contact details for the project team.

Please refer to **Appendix B9** for the COH#2 information panels and the content for the virtual room, and to **Appendix B10** for the comment form template.

3.4.1 Summary Input

Overall, during the in-person meetings the community shared feedback and asked questions about the subjects noted below:

- What the work will look like, including impacts during and after construction;
- What changes adjacent residents would see, including location of towers, temporary roads, wires, and tree removals;
- Approaches to minimizing project impacts, including vegetation preservation;
- Potential health concerns from re-building the line;
- Inconsistency regarding ROW maintenance (grass cutting, garbage removal etc.); and,
- Amenities proposed for Reimagining the Corridor.

During both in-person sessions comment forms were provided to the attendees for completion. All seven comment forms that were completed noted that the open house was helpful. Five comments forms noted that they felt that Hydro One had considered feedback shared as part of the project planning, one did not agree with this statement, and one answered "unknown". All comments forms provided comments on the following design elements:

- Paths;
- Naturalized meadows;
- Meadow rooms and buffers; and,
- Pollinators.

All community members that requested additional information have been added to the main contact list, and additional information has been shared via e-mail and phone calls. It was also encouraged that participants that have further questions can get in contact with the project team directly, at community.relations@hydroone.com or 1-877-345-6799.

Refer to **Appendix B11** for the summary of COH #2.

3.5 Indigenous Communities

Consultation with Indigenous Communities is an important part of the engagement requirements of the Class EA process. In addition, there exists the Crown's Duty to Consult requirements per Section 35 of the Constitution Act (1982), which, while separate, may be discharged (partially or fully) concurrent with the Class EA process. With respect to the latter, Hydro One contacted the Ministry of Energy, Northern Development and Mines (MENDM) on December 20, 2019, to understand if the Crown's Duty to Consult was triggered by the Project, and if so which Indigenous Communities needed to be consulted and if they would be delegating procedural aspects of the consultation to Hydro One. In the correspondence, Hydro One provided a description of the characteristics, general location, and scope of the proposed Project.

On May 25, 2020, the MENDM confirmed the Duty to Consult. The letter provided specific delegation of procedural aspects of the Crown's Duty to Consult to Hydro One, and advised that the following communities were to be included in the consultation process (see **Appendix C1** for the Hydro One inquiry letter to the Crown and the Crown Duty to Consult delegation letter):

- Alderville First Nation;
- Curve Lake First Nation;
- Hiawatha First Nation;
- Mississaugas of the Credit First Nation;
- Mississaugas of Scugog Island First Nation; and,
- Huron-Wendat Nation.

In 2022 Hydro One reconfirmed with MENDM that the list of Indigenous Communities remained unchanged. A formal Notice of Commencement was sent to all Indigenous Communities noted above on June 7, 2022. It noted that the Project was identified by the IESO to help meet growing electricity needs in Toronto and that Hydro One was initiating a Class EA for the Project. Hydro One invited the Indigenous Communities to the first public community open house and offered to host an open house within their communities at their request. Hydro One also requested feedback and participation in Reimagining the Corridor activities.

The Williams Treaties First Nations who received the Notice of Commencement referred the consultation to Mississaugas of the Credit First Nation.

Hydro One is committed to developing and maintaining respectful and positive relationships with Indigenous Communities across Ontario. Hydro One approached Indigenous Communities with transparency and respect during the consultation process. The process included:

- Email notifications and provision of information to provide updates throughout the entire lifecycle of a Project;
- Offers by the Hydro One project team to meet with the community to present the proposed Project and to address their issues or concerns, and to provide feedback into the planning of the Project;
- Invite Indigenous Communities to public community open houses while also offering to host open houses within their community;
- Meetings and discussions with Indigenous leadership and First Nation representatives;
- Dedicated Indigenous Relations team and email inbox;
- Establishment and maintenance of a project website and interactive project map, allowing for the sharing of project information and updates (<https://www.greenwayvirtualroom.com>);
- Offers to Indigenous Communities to participate with monitors during archaeology and natural heritage field studies; and,
- Capacity funding.

Ongoing correspondence and records of engagement with Mississaugas of the Credit First Nation and Huron-Wendat Nation are included in the Record of Consultation (**Appendix C2**).

3.6 Federal Government and Agencies

As part of the consultation program for the Project, the following federal government agencies were contacted during the Class EA Process:

- Transport Canada (TC); and,
- Navigation Canada.

No concerns were raised by the federal agencies. Correspondence with Federal Government and Agencies is included in the Record of Consultation (**Appendix C3**).

3.7 Provincial Government and Agencies

As part of the consultation program for the Project, the following provincial government representatives and agencies were contacted during the Class EA Process:

- Legislative Assembly of Ontario, Member of Provincial Parliament (MPP) for Etobicoke North;
- Legislative Assembly of Ontario, MPP for Etobicoke Centre;

- Legislative Assembly of Ontario, MPP for Etobicoke-Lakeshore;
- Ministry of Energy (MOE) (Formerly Ministry of Energy, Northern Development and Mines (MENDM));
- Ministry of the Environment, Conservation and Parks (MECP);
- Ministry of Transportation (MTO);
- Infrastructure Ontario (IO); and,
- Toronto and Region Conservation Authority (TRCA).

Correspondence with Provincial Government and Agencies is included in the Record of Consultation (**Appendix C4**).

3.7.1 MPP for Etobicoke North

Hydro One had regular touchpoints with Premier Ford's staff by way of email and meetings to share updates on the Class EA process and notices regarding the above-mentioned engagement opportunities. On March 3, 2022, Hydro One and Premier Ford's Queen's Park staff had a virtual meeting to introduce the project, including sharing details regarding outreach approach and next steps, listen to feedback and answer questions. On March 31, 2022, Hydro One and Premier Ford's constituency staff had a virtual meeting to introduce the project, including sharing details regarding outreach approach and next steps, listen to feedback and answer questions. On June 17, 2022, Hydro One and Premier Ford's constituency staff had a second virtual meeting in advance of issuing the Notice of Commencement to provide an update on the project and share next steps. On June 23, 2022, Hydro One emailed Premier Ford's constituency staff the Notice of Commencement. On August 10, 2022, Hydro One emailed Premier Ford's constituency staff to provide an update on the July Open Houses and feedback heard to date; and shared an invitation to participate in the upcoming Community Walks and Community Workshops. On August 15, 2022, Premier Ford's constituency staff participated in Community Walk #1 and #2. On September 14, 2022, Hydro One emailed Premier Ford's constituency staff to provide a copy of a letter that would be delivered to residents. On November 8, 2022, Hydro One emailed Premier Ford's constituency staff to schedule a virtual briefing in advance of the second round of Community Open Houses to share an update on the project, present a preliminary concept of the shared vision for Reimagining the Corridor, respond to questions, and listen to feedback. On December 6, 2022, Hydro One emailed Premier Ford's constituency staff to provide an update on the November Open Houses, share feedback heard to date, and provide details about the virtual open house.

3.7.2 MPP for Etobicoke Centre

Hydro One had regular touchpoints with MPP Kinga Surma by way of email and meetings to share updates on the Class EA process and notices regarding the above-mentioned engagement opportunities. On April 4, 2022, Hydro One and MPP Surma's staff had a virtual meeting to introduce the project, including sharing details regarding outreach approach and next steps, listen to feedback, and answer questions. On June 16, 2022, Hydro One and MPP Surma's staff had a second virtual meeting in advance of issuing the Notice of Commencement to provide an update on the project and share next steps. On July 7, 2022, Hydro One and MPP Surma's staff had a corridor meeting to review proposed work in the corridor and respond to questions. On June 23, 2022, Hydro One emailed MPP Surma the Notice of Commencement. On August 17, 2022, MPP Surma participated in Community Walk #4. On September 14, 2022, Hydro One emailed MPP Surma to provide a copy of a letter that would be delivered to residents. On November 8, 2022, Hydro One emailed MPP Surma to schedule a virtual briefing in advance of the second round of Community Open Houses to share an update on the project, present a preliminary concept of the shared vision for Reimagining the Corridor, respond to questions, and listen to feedback. On December 6, 2022, Hydro One emailed MPP Surma to provide an update on the November Open Houses, share feedback heard to date, and provide details about the virtual open house.

3.7.3 MPP for Etobicoke-Lakeshore

Hydro One had regular touchpoints with MPP Christine Hogarth by way of email and meetings to share updates on the Class EA process and notices regarding the above-mentioned engagement opportunities. On June 16, 2022, Hydro One and MPP Hogarth's staff had a meeting to share project details, listen to feedback and answer questions. On June 23, 2022, Hydro One emailed MPP Hogarth the Notice of Commencement. On August 10, 2022, Hydro One emailed MPP Hogarth to provide an update on the July Open Houses, feedback heard to date, and shared an invitation to participate in the upcoming Community Walks and Community Workshops. On August 15, 2022, a staff member of MPP Hogarth participated in Community Walk #2. On September 14, 2022, Hydro One emailed MPP Hogarth to provide a copy of a letter that would be delivered to residents in other MPP electoral districts. Hydro One noted that they provided the letter to continue transparent communication. On November 8, 2022, Hydro One emailed MPP Hogarth to schedule a virtual briefing in advance of the second round of Community Open Houses to share an update on the project, present a preliminary concept of the shared vision for Reimagining the Corridor, respond to questions, and listen to feedback. On December 6, 2022,

Hydro One emailed MPP Howarth to provide an update on the November Open Houses, share feedback heard to date, and provide details about the virtual open house.

3.7.4 Ministry of Energy (MOE) (Formerly Ministry of Energy Northern Development and Mines (MENDM))

On December 20, 2019, Hydro One emailed the MENDM to reconfirm the duty to consult determination and delegation for Indigenous Communities identified in March 2017. As discussed in **Section 3.6**, on May 25, 2020, MENDM confirmed the list of Indigenous Communities to be included in the consultation process for the proposed Project and formally delegated the procedural aspects of consultation to Hydro One, with respect to any regulated requirements for the Project. MENDM directed Hydro One to notify these communities, provide project information and opportunities for input, and maintain a record of interactions with the communities. Additionally, MENDM requested that they be kept up to date on the consultations. On February 10, 2022, and February 23, 2022, Hydro One and MENDM had meetings to discuss the Project. No comments or concerns were raised by MENDM.

3.7.5 Ministry of the Environment, Conservation and Parks (MECP)

Hydro One provided MECP updates by way of email on the Class EA process and notices regarding the above-mentioned engagement opportunities. No comments or concerns were raised by MECP.

3.7.6 Ministry of Transportation (MTO)

Hydro One provided project information with MTO by way of email updates on the Class EA process. Questions about other projects in the area and encroachment permits were discussed.

3.7.7 Infrastructure Ontario (IO)

Hydro One shared notices via email for the above-mentioned engagement opportunities with IO. On January 28, 2020, Hydro One and IO had a meeting to introduce the Class EA project and future collaboration relationships. On January 24, 2023, Hydro One had a meeting with IO to discuss consultation activities, partnerships, and licensing agreements. Additional project information was provided and no concerns were raised by IO. Regular touchpoints prior to public events were also held with IO to address concerns and provide information.

3.7.8 Toronto and Region Conservation Authority (TRCA)

Hydro One shared notices via email for the above-mentioned engagement opportunities with TRCA. On April 22, 2022, Hydro One met with TRCA to introduce the Project and in June 2022 a follow up meeting was had, pre COH. On July 4, 2022, Hydro One emailed TRCA to provide Project information to be shared on their social media platforms. On July 5, 2022, Hydro One emailed TRCA to ask if they require any additional information about the Project. On July 6, 2022, TRCA emailed Hydro One to state that they will follow up with Toronto Hydro. On July 16, 2022, Hydro One and TRCA had a site visit to view the Project's site and have a better understanding of the study area. Concerns in regards to maintenance and environmental observations were discussed. On July 18, 2022, TRCA provided a list of recommended restoration activities for the Project. Hydro One acknowledged the list of restoration activities and stated that they will review. On July 21, 2022, Hydro One emailed TRCA regarding geotechnical work within the corridor north of Eglinton Avenue to ask if there are specific requirements or permitting issues within the regulated areas. On July 28, 2022, TRCA emailed Hydro One to acknowledge receipt of the Geotechnical Specification report and request more information on the borehole investigations. On August 17, 2022, Hydro One and TRCA had a follow up meeting to discuss possible partnerships, permitting, and mutual interests for the Project. On August 19, 2022, TRCA emailed Hydro One regarding the planned borehole investigations and provided information on permits and Standard Best Practices Form. On August 29, 2022, TRCA emailed Hydro One to provide them with a document that identified standard best practices for the project in response to Hydro One's screening request for the borehole investigations near Haliburton Avenue. On September 16, 2022, Hydro One hosted a meeting for the TRCA and The Meadoway Project was discussed. Lessons learned and from this project were noted, as well as potential applications to the Etobicoke Greenway Transmission Line project. On September 21, 2022, TRCA emailed Hydro One to provide background research information related to The Meadoway seed mixes and monitoring reports. On October 4 to 6, 2022 TRCA staff and Hydro One staff assessed the corridor for Restoration Opportunity Planning. On October 11, 2022, TRCA emailed Hydro One to note that they had completed their site walk to identify restoration opportunities and are starting to map what they found. TRCA requested available information to assist with their preliminary mapping. On November 2, 2022, Hydro One and TRCA met up to continue discussing potential partnership opportunities and permitting of the Project. On December 8, 2022, Hydro One and TRCA met up to discuss overall agreement for restoration projects that can be used throughout TRCA jurisdiction. On December 13, 2022, TRCA emailed Hydro One in follow up to their meeting to discuss partnership opportunities and potential agreement scenarios. No further comments or concerns were raised by the TRCA.

3.8 Municipal Government and Agencies

As part of the consultation program for the Project, Hydro One had several touchpoints with the City of Toronto staff and elected officials.

Consultation with Municipal Government and Agencies is included in the Record of Consultation **Appendix C5**. Consultation with Elected Officials is included in the Record of Consultation **Appendix C6**.

3.8.1 City of Toronto

Hydro One shared notices via email for the above-mentioned engagement opportunities with City of Toronto. On July 25, 2022, Hydro One introduced the Project to the City of Toronto at an initial meeting. On September 29, 2022, Hydro One hosted a meeting with City of Toronto to provide an overview of the Reimagining the Corridor component of the Project. On November 10, 2022, Hydro One hosted a meeting for the City of Toronto to continue discussing the Reimagining the Corridor component of the Project as well as the November COHs.

3.8.2 Michael Ford, City of Toronto - Etobicoke North Ward 1 Councillor (Former)

Hydro One had regular touchpoints with the Ward 1 Councillor by way of email and meetings to share updates on the Class EA process and notices regarding the above-mentioned engagement opportunities. On April 1, 2022, Hydro One and Ward 1 Councillor staff had a virtual meeting to introduce the project, sharing details regarding outreach approach and next steps, listen to feedback, and answer questions. The Ward 1 Councillor staff shared positive feedback regarding public outreach and secondary uses of the hydro corridor. Engagement occurred until the Provincial June 2022 election.

3.8.3 Rose Milczyn, City of Toronto – Etobicoke North Ward 1 Councillor (Interim)

Hydro One had regular touchpoints with the interim Ward 1 Councillor by way of email and meetings to share updates on the Class EA process and notices regarding the above-mentioned engagement opportunities. On June 20, 2022, Hydro One emailed the Ward 1 Councillor to provide an update on the Project, and shared the Notice of Commencement. On August 10, 2022, Hydro One emailed the Ward 1 Councillor to provide information on the Community Walks and Community Workshops. On August 19, 2022, Hydro One emailed the City of Toronto Ward 1 Etobicoke North Interim Councillor to provide an update on the Community Walks and feedback heard to date, share a reminder invitation to participate in the upcoming

Community Workshops, and offer a briefing. On September 9, 2022, Hydro One had a meeting with the Ward 1 Councillor to provide a Project overview. The Councillor noted support for Hydro One's approach to outreach on encroachments. Hydro One noted its commitment to keep the Councillor up to date as the Project progresses. On September 14, 2022, Hydro One emailed the Ward 1 Councillor to provide a copy of a notice that would be provided to residents. Engagement occurred until the Municipal election on October 24, 2022. No further comments or concerns were raised by the Ward 1 Councillor.

3.8.4 Vincent Crisanti, City of Toronto – Etobicoke North Ward 1 Councillor

Hydro One emailed the notices for all community engagement activities to the newly elected at the time, Ward 1 Councillor. On October 31, 2022, Hydro One emailed the Ward 1 Councillor to schedule a virtual briefing in advance of the Community Open House, to discuss the Project and provide an opportunity for feedback. On December 7, 2022, Hydro One had a meeting with the Ward 1 Councillor to provide a Project overview.

No comments or concerns were raised by the Ward 1 Councillor.

3.8.5 Stephen Holyday, City of Toronto – Etobicoke Centre Ward 2 Councillor

Hydro One had regular touchpoints with the Ward 2 Councillor by way of email and meetings. During these, Hydro One shared updates on the Class EA process and notices regarding the above-mentioned engagement opportunities. On March 31, 2022, Hydro One and the Ward 2 Councillor had a virtual meeting to introduce the project, share details regarding outreach approach and next steps, listen to feedback, and answer questions. On June 14, 2022, Hydro One and the Ward 2 Councillor had a second virtual meeting in advance of issuing the Notice of Commencement to provide an update on the project and share next steps. On June 23, 2022, Hydro One emailed the Ward 2 Councillor the Notice of Commencement. On June 29, 2022, Hydro One and the Ward 2 Councillor had a corridor meeting to review proposed work in the corridor and respond to questions. On August 10, 2022, Hydro One emailed the Ward 2 Councillor to provide an update on the July Open Houses and feedback heard to date and to share an invitation to participate in the upcoming Community Walks and Community Workshops. On August 15, On August 17, 2022, the Ward 2 Councillor participated in Community Walk #3. On September 2, 2022, Hydro One had a phone call with the Ward 2 Councillor to provide an update on the workshops, the meeting with residents on August 24, and the next steps with regards to a letter that will be delivered to residents. On September 14, 2022, Hydro One emailed the Ward 2 Councillor to provide a copy of the letter that would be delivered to

residents. On November 1, 2022, Hydro One emailed the Ward 2 Councillor to schedule a virtual briefing in advance of the second round of Community Open Houses to share an update on the project, and to present a preliminary concept of the shared vision for Reimagining the Corridor to be enjoyed by the community once the project has been completed. On November 8, 2022, Hydro One had a virtual meeting with the Ward 2 Councillor to share the previously mentioned information, respond to questions, and listen to feedback. On December 5, 2022, Hydro One emailed the Ward 2 Councillor to provide an update on the November Open Houses, share feedback heard to date, and provide details about the virtual room.

3.8.6 Mark Grimes, City of Toronto – Etobicoke-Lakeshore Ward 3 Councillor (Former)

Hydro One had regular touchpoints with the Ward 3 Councillor by way of email and meetings to share updates on the Class EA process and notices regarding the above-mentioned engagement opportunities. On April 5, 2022, Hydro One and the Ward 3 Councillor had a virtual meeting to introduce the project, share details regarding outreach approach and next steps, listen to feedback, and answer questions. On June 14, 2022, Hydro One and the Ward 3 Councillor had a second virtual meeting in advance of issuing the Notice of Commencement to provide an update on the project and share next steps. On June 20, 2022, Hydro One emailed Ward 3 Councillor the Notice of Commencement. On August 10, 2022, Hydro One emailed the Ward 3 Councillor's staff to provide information regarding the Community Walks and Community Workshops. On August 19, 2022, Hydro One emailed the Ward 3 Councillor's staff to provide details on the feedback received during the Community Walks and the Community Workshop. Engagement occurred until the Municipal election on October 24, 2022. No comments or concerns were raised by the Ward 3 Councillor.

3.8.7 Amber Morley, City of Toronto-Etobicoke-Lakeshore Ward 3 Councillor

Hydro One had regular touchpoints with the newly elected, at the time, Ward 3 Councillor by way of email and meetings to share updates on the Class EA process and notices regarding the above-mentioned engagement opportunities. On November 17, 2022, Hydro One had a meeting with the Ward 3 Councillor to provide an update on the project and the Class EA process, present the preliminary concept for reimagining the corridor, understand feedback, and respond to questions. No comments or concerns were raised by the Ward 3 Councillor.

3.9 Interested Groups, Businesses, School and Boards

Consultation opportunities were provided to potentially affected and interested groups, businesses, school boards and utilities throughout the Class EA process.

As part of the consultation program, approximately 19 potentially affected interest groups (e.g., schools and school boards), and businesses, were contacted during the Class EA process. A complete list of the interest groups is provided below.

- Etobicoke Climate Action;
- Glen Agar Residents Association;
- Islington Golf Club;
- Islington Ratepayers and Residents Association;
- John G. Althouse Middle School;
- Martingrove Baptist Church;
- Martingrove Collegiate Institute;
- Olivet School;
- Our Lady of Peace Catholic School;
- Parkfield Junior School;
- Princess Margaret Junior School;
- South Eaton Residents Association;
- St. Gregory Catholic School;
- Thorncrest Village;
- Toronto District School Board (TDSB);
- Toronto Catholic District School Board (TCDSB);
- Toronto Hydro Electric System Ltd.;
- Village of Islington; and,
- Wedgewood Junior School.

Hydro One emailed the notices for all community engagement activities and offered meetings to potentially affected and interested groups, businesses, school boards and Utilities. On November 29, 2022, Hydro One had a meeting with Our Lady Peace Catholic School and on December 8, 2022, Hydro One had a meeting with the TDSB to share project details, collect input and respond to questions about the proposed Project.

Consultation with interested groups, businesses and school board is included in the Record of Consultation **Appendix C7**.

3.10 Property Owners/Residents/General Members of the Public

Property owners, residents, and general members of the public within the study area were provided project notifications by means of email, Canada Post admail, hand delivered notices, advertisements in local newspapers, door knocking, corridor signs, radio, social media, and the Project website. Four admail campaigns with over 10,000 recipients in each campaign were delivered throughout the Class EA process. Hydro One also received feedback and comments by phone and email to their Community Relations team.

Hydro One organized several engagements with individual property owners and interested or potentially affected members of the public (open houses and independent). This included the following:

- Community Open House #1 was held on July 6, 2022, with landowners and stakeholders in attendance;
- Community Open House #2 was held on July 14, 2022, with landowners and stakeholders in attendance;
- A meeting was held on July 18, 2022, with two landowners regarding project need, anticipated work required, vegetation requirements, and health and safety in the corridor;
- A Virtual Information Session was held on July 21, 2022, with landowner's and stakeholders in attendance;
- Two Community Walks were held on August 15, 2022. Community Walk #1 was held, from Dundas Street to Mattice Avenue, and Community Walk #2 was held from Mattice Avenue to Echo Valley Park;
- Three Community Walks were held on August 17, 2023. Community Walk #3 was held from Echo Valley Park to North Heights Road, Community Walk #4 was held from North Heights Road to Eglinton Road, and Community Walk #5 was held from Eglinton Road to Highway 401;
- Two meetings were held on August 24, 2022, with 27 landowners to answer questions relating to health concerns for re-energizing the transmission line, burying the lines, and project impacts;
- Two meetings were held on August 26, 2022, with two landowners regarding existing flooding;
- Two Reimagining the Corridor Workshops were held on August 29, 2022, at St. Andrew's Presbyterian Church Islington. Reimagining the Corridor Workshop #1 was held

from 2:00 to 4:00 PM, and Reimagining the Corridor Workshop #2 was held from 6:00 to 8:00 PM;

- A meeting was held on September 16, 2022, with a landowner to answer questions related to tower placement, flooding, power line proximity, impacts to wildlife, property value, community outreach, and vegetation work;
- Door-knocked to 17 properties on September 15 and September 17, 2022, to share a letter identifying objects or structures located in the corridor, and shared high-level project details. Had face-to-face conversation with 12 property owners;
- A meeting was held on October 4, 2022, with a landowner regarding project impacts;
- A meeting was held on October 8, 2022, with landowners regarding Project impacts;
- A meeting was held on October 27, 2022, with a landowner regarding project impacts;
- A meeting was held on November 2, 2022, with a landowner regarding project impacts;
- Six meetings were held on November 15, 2022, with six landowners regarding project impacts, including vegetation preservation;
- A Virtual Room was available starting November 16, 2022, for landowners and stakeholders to access;
- Community Open House #2 was held on November 17, 2022, with landowners and stakeholders in attendance;
- A meeting was held on November 17, 2022, with a landowner regarding project impacts, including vegetation preservation;
- Five meetings were held on November 22, 2022, with eight landowners regarding project impacts, including tower locations and vegetation presentation;
- A meeting was held on November 25, 2022, with a landowner to answer questions regarding construction impacts; and,
- Door knocked to 100 properties on November 22 and November 25, 2022, to share project details, listen to input and respond to questions. Had 51 face to face interactions and left a notice with the remaining 49 properties.

Consultation with members of the public is included in the Record of Consultation **Appendix C8**.

3.11 Summary of Stakeholder Comments and Concerns

Table 3-4 provides a consolidated summary of the frequent comments and concerns raised from the interested parties throughout the Class EA consultation process.

3.1 Notification and Draft ESR Review Period

Hydro One will provide a 45-day review period, from March 30, 2023, to May 15, 2023, to allow sufficient time for review and comment on the draft ESR. Comments regarding the draft ESR are submitted to:

Adam Haulena, Environmental Planner, Hydro One Networks Inc.
483 Bay Street, North Tower,
14th Floor, Toronto, Ontario N5G 2P5
Phone: 1-877-345-6799 (community relations hotline)
Email: Community.Relations@HydroOne.com

The draft ESR will also be available electronically on Hydro One's website at www.HydroOne.com/Etobicoke. Copies of the draft ESR are also available at the following locations:

Toronto Public Library
430 Burnhamthorpe Road
Etobicoke, Ontario M9B 2B1
Phone: (416) 394 5270

To help aid those without access to a computer, limited physical copies will be made available upon request.

Table 3-4: Summary of Frequent Stakeholder Comments and Concerns

Theme	Question/Comment	Response
Project Need/Information	What is the need for the new line?	According to the IESO electricity demand in west and central Toronto is expected to rise significantly and add additional pressure to the electricity system. This project was identified in the Toronto IRRP, led by the IESO with input from Toronto Hydro and Hydro One, to support economic growth, transit initiatives and electrification. To support this thriving growth and development of west and central Toronto, Hydro One is proposing to rebuild and energize a transmission line that is currently not energized, between the Richview and Manby Transmission Stations in Etobicoke.
Project Need/Information	What is the cost of the Project?	While we are still in the early stages of this project, we know that every dollar we spend comes from our hard-working customers and we are committed to reducing costs as we become the most efficient utility. The preliminary cost of the Project is estimated to be \$25 to \$30 million; however, a final estimate will be provided before Hydro One seeks approval from OEB. The Ontario Energy Board protects the interests of consumers as it relates to prices and the adequacy, reliability and quality of electricity service and will review the prudence and need of the project prior to any increase in rates taking effect.
Project Need/Information	What kind of work is involved for the project?	Hydro One is proposing to rebuild and energize the line by removing towers and wires on the east side of the corridor, installing new towers and wires that can carry a voltage of 230 kV, and connecting the new line to Richview and Manby TS, which will require minimal work within the stations. To support these activities, our team will prepare the area for construction and the future energizing of the line by trimming, or removing vegetation, installing temporary access roads in certain key areas, and installing construction equipment pads near tower bases and to support the stringing of wires.
Project Need/Information	What are the timelines for this project?	In June 2022, Hydro One initiated the Class EA process to re-build the line. Throughout 2022 and 2023 Hydro One hosted a series of community engagement opportunities to provide more details about this important work, listen to community feedback and answer questions. Following completion of the Class EA, approval from the OEB under Section 92 (Leave to Construct) of the <i>Ontario Energy Board Act</i> will be required. Construction is anticipated to be begin in 2024 and be completed in 2026.
Project Need/Information	What does 'reimagining the corridor' mean?	As a key part of the Class EA, we are committed to working closely with the community to create a shared vision for how the hydro corridor could be used once the project has been completed.
Project Need/Information	Where is the project located?	This 6.5 km line is located on the east side of an existing hydro corridor that extends between the Richview and Manby Transformer Stations in Etobicoke.

Theme	Question/Comment	Response
Class Environmental Assessment and Consultation	What is the Class EA process that is supporting the Project?	Planning will follow the "Class EA for Minor Transmission Facilities" (Class EA, 2022), in accordance with the Ontario EAA. This planning process applies to transmission infrastructure projects that are carried out routinely and have predictable environmental effects that can be readily managed.
Class Environmental Assessment and Consultation	How will members of the public be engaged and consulted?	Feedback from residents, interest groups, elected officials, and Indigenous Communities will be used to inform all aspects of the Class EA, the project, and how we create a vision for the corridor. Hydro One provided invitations to member so of the public for Community Walks, Community Workshops, In-Person, and Virtual Community Open Houses to allow for feedback and discussions with the project team. Additionally, engagement was received through Hydro One's website, through email and phone calls.
Health and Safety	Concerns about EMF.	<p>Hydro One has a dedicated team that regularly monitors global studies around electric and magnetic fields (EMF) and ensures that our infrastructure is built and maintained following best practices and industry standards. We look to Health Canada, the World Health Organization, and the International Commission on Non-Ionizing Radiation Protection, for guidance on EMF and our approach.</p> <p>Based on global studies which have and continue to be regularly monitored, Health Canada and the World Health Organization indicate that members of the public do not need to take precautions to protect from fields produced by extremely low frequencies such as transmission lines.</p> <p>Hydro One has completed modeling which confirmed that once the line is energized the fields produced will remain within a safe level.</p>
Project Design	Where will the new towers be placed and what will they look like?	<p>To support a new line that can carry a 230 kV voltage, the new towers will be:</p> <ul style="list-style-type: none"> • Generally constructed within a few metres of existing locations; <ul style="list-style-type: none"> ○ Slightly taller or similar in height to those on the west side of the corridor. The new towers generally, range in height from 135 ft to 180 ft to support the new 230 kV wires and conductors; and, • Generally similar in design and footprint to the lattice structures on the west side of the corridor. <p>We heard that preserving vegetation was a top community priority. We are proposing to install two 160 ft and two 180 ft towers in and near Echo Valley Park to help preserve more dense vegetation and mature trees.</p>

Theme	Question/Comment	Response
Project Design	Will the lines be buried?	Burying the line on the east side of the corridor in parallel to the two existing energized overhead lines presents challenges from a technical, environmental, and cost perspective. Burying this line is not technically feasible as underground cable properties differ from overhead lines, resulting in the flow of power being unequally distributed between the lines. This could result in the underground facilities becoming overloaded and is therefore inadequate to meet the reliable supply need. Burying all three of the lines would be highly disruptive to the environment, community, and existing infrastructure in the area, and comes at a higher cost. Burying all the existing overhead infrastructure could cost hundreds of millions. Given this, re-building the existing line on the east side with lattice steel towers is the recommended solution to help meet the City of Toronto's energy needs.
Project Design	Will members of the public have access to the hydro corridor?	As part of the mitigation process, Hydro One is proposing reimagining the corridor which involves opening the corridor to the public via a path. A preliminary 10% design of the trail and its location has been presented to the public and is available online at www.hydroone.com/Etobicoke
Project Design	Can the 'no trespassing' signs be removed so the public can access the hydro corridor?	Property ownership of hydro corridors can vary, and typically hydro corridors that are managed by Hydro One are setup to provide a safe and reliable supply of electricity to the City of Toronto. On some corridors Hydro One has granted secondary land use agreements for municipalities or conservation authorities to build and maintain trail systems, such as the Finch Hydro Corridor. For the most part, corridors that don't have secondary land use agreements will have no trespassing signs as the corridors are considered private property.
Project Design	Recommend the addition of a 'dog area' in the hydro corridor	Design team in charge of the reimagining piece took note of the recommendation and will considered it during the preliminary design process.
Project Design	Recommend the addition of a community garden to be used as a noise buffer.	Design team in charge of the reimagining piece noted community gardens are not an amenity Hydro One can impose as they require additional support from the City.
Project Design	Recommend the addition of lighting in the hydro corridor for pedestrians walking	Hydro One confirmed they will not be providing lighting as part of the reimagining piece of the proposed project.
Property	I am concerned about privacy in the corridor, and my safety since you will invite more people to the area. What measures are you taking to help with this?	The path proposed has been located towards the middle of the corridor wherever possible. We have located "meadow rooms" and level mown fields, which may invite more activities such as sports and dog walking, and meadow and pollinator buffers to make sure people stay away from the edges of the corridor. Having more eyes on public spaces is widely considered to improve safety levels, which is a core principle of Crime Prevention Through Environmental Design (CPTED).

Theme	Question/Comment	Response
Property	Will there be impacts to my property value?	This transmission corridor has been in operation for several decades, and the physical presence of the corridor within the community will largely remain the same post-construction as will its influence on property values in the area.
Property	How will flooding concerns on private property be handled?	To prevent stormwater surface runoff from entering onto neighbouring properties with identified drainage concerns, one or more Low Impact Development (LID) stormwater management practices shall be implemented to the identified locations on the Hydro One corridor. Each strategy will depend on the existing grade elevations along the property, soil type, and the location and capacity of the nearest municipal storm sewer components. Further refinement of water management will occur during the detailed engineering phase of the project.
Effects to Natural Environment	Will the line have any impacts to animals and/or their habitat?	Within the Class EA, effects to natural environment and wildlife habitats were considered in the evaluation. This included the identification of environmental effects and potential mitigation measures (refer to Section 6) before the Project advances to detailed design and construction.
Effects to Natural Environment	What mitigation activities will be used?	<ul style="list-style-type: none"> • Utilizing several unique measures to help preserve trees and vegetation; • Developing a shared vision to reimagine the corridor; • Planning enhanced corridor restoration in regulated areas; • Applying erosion and sediment controls, where required; • Employing dust control measures during construction; • Installing measures to help divert stormwater run-off, where applicable; and, • Completed health and safety modelling. <p>Section 6 has further information about proposed mitigation measures.</p>
Effects to Natural Environment	How are you preserving vegetation?	<p>We've heard from the community regarding the importance of preserving trees and our team has worked hard to identify opportunities to preserve trees where possible. Our team will:</p> <ul style="list-style-type: none"> • Use unique construction methods, including aerial methods, to preserve vegetation in between towers; • Use shorter arms on the towers to preserve vegetation, where possible, on the edge of the corridor; • Install four taller towers to preserve dense vegetation and mature trees in and near Echo Valley Park; • Strategically place temporary access roads to limit vegetation removal; and, • Return frequently once the line is energized to assess and maintain trees and other vegetation that can grow or fall into the power lines.

Theme	Question/Comment	Response
Effects to the Natural Environment	What will the vegetation work look like?	<p>To prepare for construction and energizing the line, vegetation trimming, and removal will be completed in three stages:</p> <ul style="list-style-type: none"> • Stage 1: Preparing for construction – Remove vegetation at and near tower bases and construction areas; • Stage 2: Stringing the line – Selectively trim and in limited instances remove vegetation under and near the power lines; and, • Stage 3: Energizing the line – Selectively trim and in limited instances remove vegetation on the edge of the corridor. <p>Once the line is energized, crews will return annually to perform routine maintenance to ensure trees and vegetation remain within a safe distance from the power lines.</p>
Effects to the Natural Environment	How are you mitigating impacts in Echo Valley?	<p>Hydro One always strives to avoid and mitigate effects to the natural environment and to restore areas that are temporarily affected during construction. We recognize Echo Valley is a regulated area and an important green space for the community. We are looking for opportunities to preserve vegetation and minimize the removal of trees wherever possible by looking at alternative construction approaches and staging the timing of work required. Avoiding this ecologically sensitive area has also been taken into consideration for proposed tower placement, and throughout the project, Hydro One will work closely with TRCA on mitigation and restoration measures in the regulated area in Echo Valley.</p>
Construction	Will work require outages?	No power outages to residents will be required to safely re-build the line.
Construction	Will construction impact traffic?	A traffic plan will be developed for construction impacts and details will be provided closer to the construction date.
Construction	What kind of access road will be built to build the towers?	Temporary access roads will be installed in certain sections to provide safe access to tower bases and the delivery of equipment and personnel for construction work. The temporary access roads will be made of gravel. Once the work has been completed, our crews will remove the access roads and restore these areas to existing corridor conditions.
Construction	Will there be ground disturbance and will it impact my property?	To remove the existing towers and wires on the east side of the corridor our team will need to setup construction areas at tower bases and in six areas in the corridor to support the removal and re-stringing of the wires (referred to as a stringing pad areas). This type of work is expected to produce no vibration and ground disturbance will generally be within the footprint of the new towers.

4 Environmental Inventory

The following sections summarize the environmental baseline conditions in the study area.

In accordance with Section 3.3.4 of the Class EA for Minor Transmission Facilities document (Hydro One, 2022), information for the below factors was collected for the purposes of defining existing conditions:

- Agricultural resources;
- Forestry resources;
- Cultural heritage resources (i.e., built heritage resources, cultural heritage landscapes and archeological resources);
- Land Use and Communities; Visual and aesthetic resources.
- Visual and aesthetic resources.
- Recreational resources;
- Mineral resources; and,
- Natural environment resources (e.g., air, land, water, wildlife, and wildlife habitat).

The social, cultural, economic, and environmental concerns baseline conditions within the study area are described in the following subsections. Information used to describe the study area is based on secondary source information and natural environment field work.

4.1 Agricultural Resources

This study area does not include any agricultural resources.

4.2 Forestry Resources

This study area does not include any forestry resources. Please note that this refers to forestry resources as commercial goods.

4.3 Cultural Heritage Resources

Cultural heritage resources include built heritage resources, cultural heritage landscapes, and archaeological sites with cultural heritage value or interest for the contributions they make to the understanding of the history of a place, event, or a people (MHSTCI, 2006). Criteria for determining the significance of these resources are established by the Province of Ontario. The

City of Toronto and the Ministry of Citizenship and Multiculturalism (MCM) maintain an index of these locations for their preservation and the planning of future development in Ontario's communities. The *Planning Act* (1990) and associated Provincial Policy Statement (PPS) 2020 provide the legislative imperative for heritage conservation in land use planning.

4.3.1 Archaeology

In 2004, the City of Toronto completed a Master Plan of Archaeological Resources for the City. The goal of this work was to identify registered and unregistered archaeological sites in the City, document an overview of the settlement history, develop a high-level model to determine archaeological potential, and, provide recommendations related to the preparation of archaeological guidelines for the City. This work identified areas of archaeological potential within the City.

Hydro One retained Archaeological Services Inc. (ASI) to conduct a Stage 1 and Stage 2 Archaeological Assessment of the study area.

The following recommendations were made:

- Specific sections of the study area exhibit archaeological potential. These lands require Stage 2 archaeological assessment by test pit survey at five metre intervals, if impacted by project designs, prior to any proposed construction activities;
- The remainder of the study area does not retain archaeological potential on account of deep and extensive land disturbance, low and wet conditions, and slopes in excess of 20 degrees or having been previously assessed. These lands do not require further archaeological assessment; and,
- Should the proposed work extend beyond the current study area, further Stage 1 archaeological assessment should be conducted to determine the archaeological potential of the surrounding lands.

Please refer to **Appendix D1** for the Archeological Stage 1 Report. As of Winter 2022, a partial Stage 2 assessment of the areas of archaeological potential identified in the Stage 1 report had been completed. No archaeological resources have been discovered during this process.

4.3.2 Cultural Heritage

Cultural heritage is important within the City of Toronto and its preservation is embedded in Section 3.1.6 of the City's Official Plan 2022. The Official Plan puts in place policies to identify,

evaluate, and preserve the City's cultural heritage. The City of Toronto maintains a Heritage Register of all heritage resources in the City categorized as:

- Designated property – heritage resources designated under Part IV of the *Heritage Act*;
- Listed property – heritage resources not listed but believed to be of cultural value or interest; and
- Heritage Conservation District – an area representing a larger group of heritage properties.

With the use of the Heritage Register, three addresses within the study area were identified as listed properties – 289, 261 and 215 Burnhamthorpe. This information was used to address the MCM's criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes: A Checklist for the Non-Specialist. Through this checklist, it was determined that there are no properties within the study area considered to be of cultural heritage value. A copy of this checklist is provided in **Appendix D2**. It is also noted that during consultation, members of the community identified an area on the corridor where a nut farm used to be located. No further information about this farm was available.

4.4 Land Use and Communities

The study area is located entirely within the urban area of the City of Toronto. Information on the population, community characteristics and planning policies related to this area are noted in the subsections below.

4.4.1 Communities and Growth

According to a census completed by Statistics Canada in 2021 the City of Toronto is host to 1,160,892 occupied private dwellings and approximately 2.79 million people, making it the most populous city in Canada. The City covers a land area of 631.10 km² with a population density of 4,427.8 people per km² in comparison to the provincial average of 15.9 people per km² (Statistics Canada, 2022).

The study area is located in a well-developed residential and commercial area on the west side of Toronto, in the former City of Etobicoke. The Etobicoke area has a land base of approximately 123.9 km², a population of approximately 345,000 and it is considered one of the areas of lower population density in Toronto (GTA Homes, 2018). The proposed Project overlaps with three large municipal electoral subdivisions in the Etobicoke area (City of Toronto, 2018). These include:

- Ward 1, Etobicoke North – A small portion of the study area from Eglinton Avenue West to the Richview TS just north of Highway 401 is within this ward;
- Ward 2, Etobicoke Centre – This ward represents the majority of the study area; and
- Ward 3, Etobicoke-Lakeshore – The southern portion of the study area from Bloor Street to south of the Manby TS.

The table below provides details about the demographics and socio-economic background of each ward in the study area.

Table 4-1: City of Toronto Ward profiles (Statistics Canada, 2022)

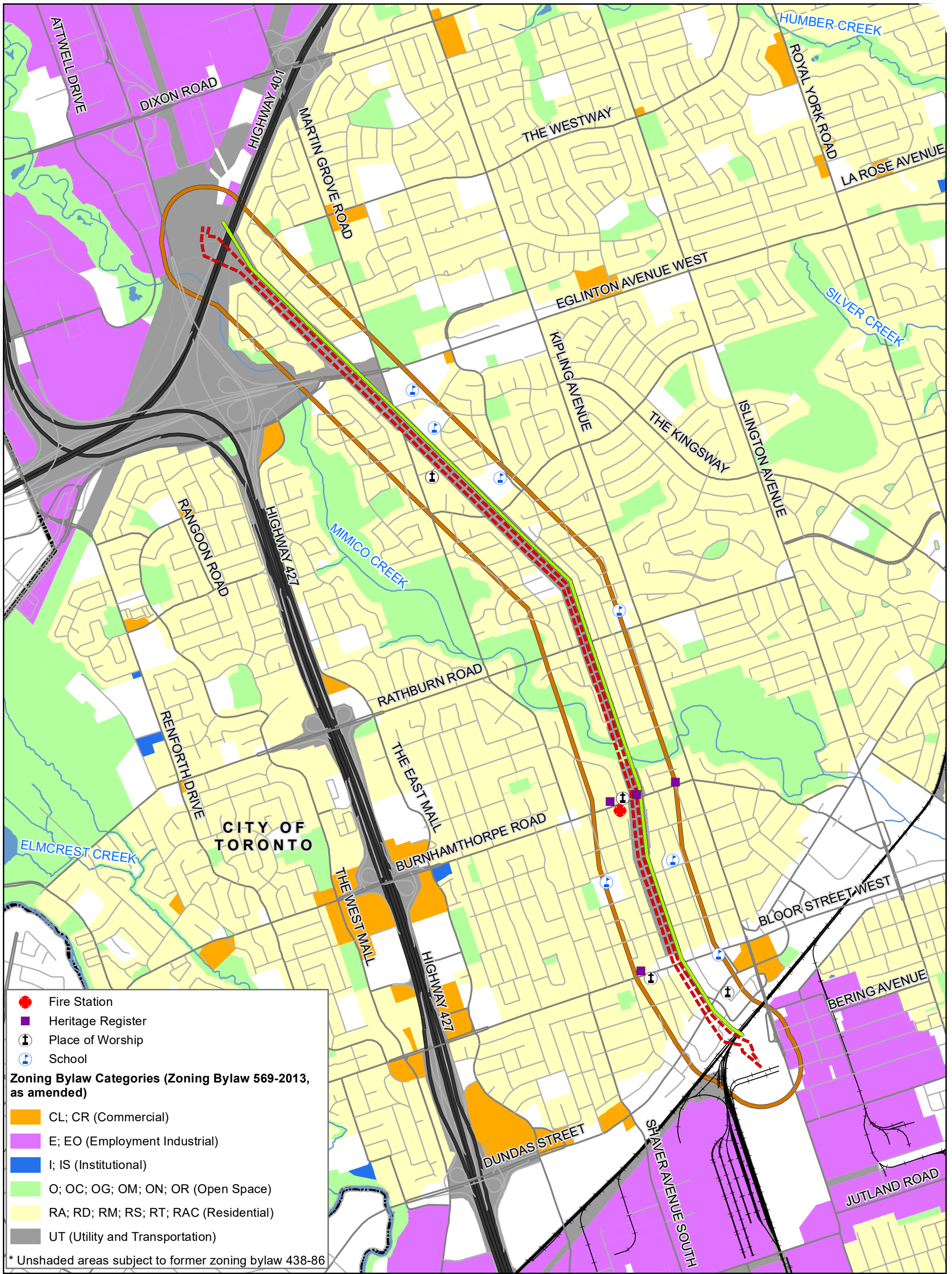
Ward	Ward Population	Median Age	Number of Households	Median Household Income (2020)
Ward 1 – Etobicoke North	116,003	38.0	38,220	\$82,000
Ward 2 – Etobicoke Centre	118,483	45.6	45,250	\$101,000
Ward 3 – Etobicoke – Lakeshore	141,751	40.8	65,580	\$90,000

The proposed Project is situated within a residential area which includes large parks. At the north and south ends of the study area are commercial and industrial areas. Within the study area there are several institutional buildings such as schools and places of worship, some of which back onto the electricity corridor.

Table 4.2 identifies the schools and institutional buildings within the study area. **Figure 4-1** shows the project location and surrounding land uses.

Table 4-2: School and Institutional Buildings within the Study Area

Schools	Other Institutional Buildings
<ul style="list-style-type: none"> • Our Lady of Peace Catholic School • Martin Grove Collegiate Institute • Princess Margaret Junior School • John G Althouse Middle School • Wedgewood Junior School • St. Gregory Elementary School • Olivet Elementary School 	<ul style="list-style-type: none"> • City of Toronto Fire Station 445 • Martin Grove Baptist Church • St. Timothy Presbyterian Church • St. Andrews Presbyterian Church • Our Lady of Peace Church • Olivet Christian Church



● Fire Station
■ Heritage Register
⚓ Place of Worship
⚙ School

Zoning Bylaw Categories (Zoning Bylaw 569-2013, as amended)

- CL; CR (Commercial)
- E; EO (Employment Industrial)
- I; IS (Institutional)
- O; OC; OG; OM; ON; OR (Open Space)
- RA; RD; RM; RS; RT; RAC (Residential)
- UT (Utility and Transportation)

* Unshaded areas subject to former zoning bylaw 438-86

HYDRO ONE NETWORKS INC.
 ETOBICOKE GREENWAY

- Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line
- Existing Energized 230 kV Transmission Lines
- Project Study Area (250m)
- Municipal Boundary
- Highway
- Major Road
- Minor Road
- Railway
- Watercourse
- Waterbody

LAND USE AND COMMUNITIES
 FIGURE 4-1



MAP DRAWING INFORMATION:
 DATA PROVIDED BY MNR, HYDRO ONE NETWORKS, CITY OF TORONTO

MAP CREATED BY: -ZJB
 MAP CHECKED BY: -LM
 MAP PROJECTION: NAD 1983 CSRS UTM Zone 17N

SCALE 1:22,500

0 200 400 800 m

PROJECT: 18-7554 STATUS: DRAFT DATE: 2023-03-17

4.4.2 Provincial Planning Policy

The Provincial Policy Statement (PPS) is issued under Section 3 of the *Planning Act* and came into effect on May 1, 2020. Section 3 of the *Planning Act* states that decisions affecting planning matters “shall be consistent with” the PPS. The consistency of the proposed Project (defined as “infrastructure” in the PPS) with the relevant Infrastructure and Public Service Facilities policies included in Section 1.6.8 of the PPS is summarized as follows:

- Planning and protecting corridors and ROWs for infrastructure to meet current and projected needs;
- Preserving and reusing abandoned corridors for purposes that maintain the corridor’s integrity and continuous linear characteristics wherever feasible; and
- Co-locating linear infrastructure is promoted where appropriate.

Section 1.6.8.6 of the PPS requires that when planning for corridors and ROWs for significant electricity transmission and infrastructure facilities, consider the significant resources protected by Section 2 of the PPS, Wise Use and Management of Resources. Effects to significant resources, as identified by Section 2 of the PPS, outside of the study area are not anticipated.

A Place to Grow (2019), the Province’s plan to manage growth in the Greater Golden Horseshoe, identifies a number of urban growth centres with the City of Toronto and estimates a 2041 population of 3,400,000. This continued population growth reinforces the importance of providing reliable electricity supply to the City.

Land use and development within the study area is also guided by the PPS 2020, the City of Toronto’s Official Plan (Consolidated in March 2022), and the City of Toronto’s Comprehensive Zoning By-law 569-2013 (2015). The PPS provides the Province’s policy direction on land use planning to promote the following: community well-being, a prosperous economy, a healthy sustainable environment through efficient management of land and development, the protection of natural resources, and appropriate employment and residential infrastructure. The City of Toronto’s Official Plan and other planning documents are required to comply with the PPS.

4.4.3 City of Toronto Official Plan (2022)

The City of Toronto Official Plan was amended in March 2022. In this Official Plan, the Etobicoke Greenway hydro corridor is identified as a utility corridor. The proposed Project does not conflict with the City of Toronto’s Official Plan, which designates utility corridors as a land use to preserve for the dual purpose of current and future energy production and for a variety of public uses.

These land uses include parks, pedestrian and bike trails, storm water management ponds and public transit facilities (Toronto Official Plan 2022).

The following outlines the City of Toronto's land use designations within the study area based on the Official Plan Map 18 – Land Use Plan.

- **Employment Area** – Lands north of Highway 401 where Richview TS is located and south of the rail tracks where Manby TS is located are designated in the Official Plan as Employment Areas. There is a small area south of Bloor St. West, by the Six Point interchange, designated as commercial. Employment Areas are considered areas designated for growth. The Toronto Official Plan recognizes these areas as “hothouses” for business and enterprise. These areas are to maintain a certain degree of flexibility and any activity that inhibits its economic functions will not be permitted.
- **Utility Corridor** – Highway 401 at the north of the study area, the hydro corridor, and the rail line at the south of the study area are designated as Utility Corridors. Utility Corridors are identified in the Official Plan as areas that are primarily used for the movement and transmission of energy, information, people, and goods. The proposed Project is consistent with the Official Plan, which encourages preservation and use of currently existing infrastructure.
 - It is noted that Section 4.4 of the City of Toronto Official Plan (2022) permits public utilities, including the electrical power utility. Section 4.4 states the following policies for utility corridors
 - “1.) Utility Corridors are hydro and rail corridors primarily used for the movement and transmission of energy, information, people, and goods.*
 - 2.) Hydro corridors are used primarily for the transmission of energy. They may also be used for secondary purposes such as parks, pedestrian and bicycle trails, agriculture, parking lots, open storage, essential public services, stormwater management ponds, public transit facilities and garden centres with temporary buildings. ”*
- **Neighborhoods and Apartment Neighborhoods** – The lands on either side of the hydro corridor are primarily designated as Neighborhoods with some Apartment Neighborhoods along Eglinton Avenue. These designations cover the east and west sides of the corridor from south of Highway 401 to Bloor Street West. Toronto's neighborhood land classification system identifies these areas as land developed for residential uses such as detached and semi-detached houses, lower scale buildings, parks, schools, small stores, and local intuitions. The Official Plan states that development in these areas must

generally fit the areas existing physical character (Official Plan – Section 4.1, 2022). A very small segment of the study area is designated as Residential Apartment. According to the Official Plan, these areas are generally stable areas that are not anticipated to see significant growth. This designation includes apartment buildings, parks, and local institutions (Official Plan – Section 4.2, 2022).

- **Parks/Open Space/Natural Areas** – The Official Plan states that Parks and Open Space areas are the land masses that consist of valleys, watercourses and ravines, portions of the waterfront golf courses, and cemeteries that make up the green space network of Toronto. They also contain many of the City’s natural habitat areas, recreation trails, and storm water management facilities. The key natural area that bisects the electricity corridor is Mimico Creek, which crosses the corridor north of Burnhamthorpe Road.

As it pertains to this proposed Project, subsection 2, in Section 4.3 of the Official Plan states:

“Development is generally prohibited within Parks and Open Space Areas except for recreational and cultural facilities, conservation projects, cemetery facilities, public transit and essential public works and utilities where supported by appropriate assessment. Hydro uses will have primacy of use on those lands identified as hydro corridors on Maps 13-23” (Official Plan – Section 4.3 2022).

- **Mixed Use Area** – A small portion at the south end of the study area along Dundas Street is designated as a Mixed-Use Area. According to Section 4.5 of the Official Plan, Mixed Use areas achieve a multitude of planning objectives by combining an array of residential uses, offices, retail and service institutions, entertainment, recreation and cultural activities and parks and open spaces (Official Plan – Section 4.5, 2022).

The Official Plan sets out a municipality’s general policies, and the zoning by-law sets these plans into action, on an administrative level. The land uses within the study area are regulated by the City of Toronto Comprehensive Zoning By-law 569-2013 (2022). The by-law permits uses associated with the utility corridors. This zone includes public utilities, transportation uses, horticultural, and outdoor recreational uses.

4.4.4 Transportation

The study area crosses the Macdonald-Cartier Freeway (Highway 401) to the south of the Richview TS. Highway 401 is a provincially controlled highway under the authority of MTO. The highway serves as the major non-toll passage of east-west transportation for the Province of

Ontario. The electricity corridor also intersects the following arterial roads: Burnhamthorpe Road, Eglinton Avenue West, Martin Grove Road, Rathburn Road, Bloor Street West, Kipling Avenue, and Dundas Street West (City of Toronto, 2022).

The south end of the electricity corridor and Manby TS is located next to the Kipling GO station, which is operated by Metrolinx and services the Milton line rail corridor in the GTA. Adjacent to the Kipling GO station is the Kipling transit station serviced and operated by the Toronto Transit Commission (TTC). There are approximately 25 bus routes and the Bloor-Danforth subway line that service this station. In addition, there are several TTC routes that cross the corridor. These include:

- TTC 32 Eglinton Avenue West Eastbound and Westbound;
- TTC 46 Martin Grove Northbound and Southbound;
- TTC 48 Rathburn Eastbound and Westbound;
- TTC 50 Burnhamthorpe Eastbound and Westbound; and,
- TTC 49 Bloor Street West Eastbound and Westbound (TTC, 2019).

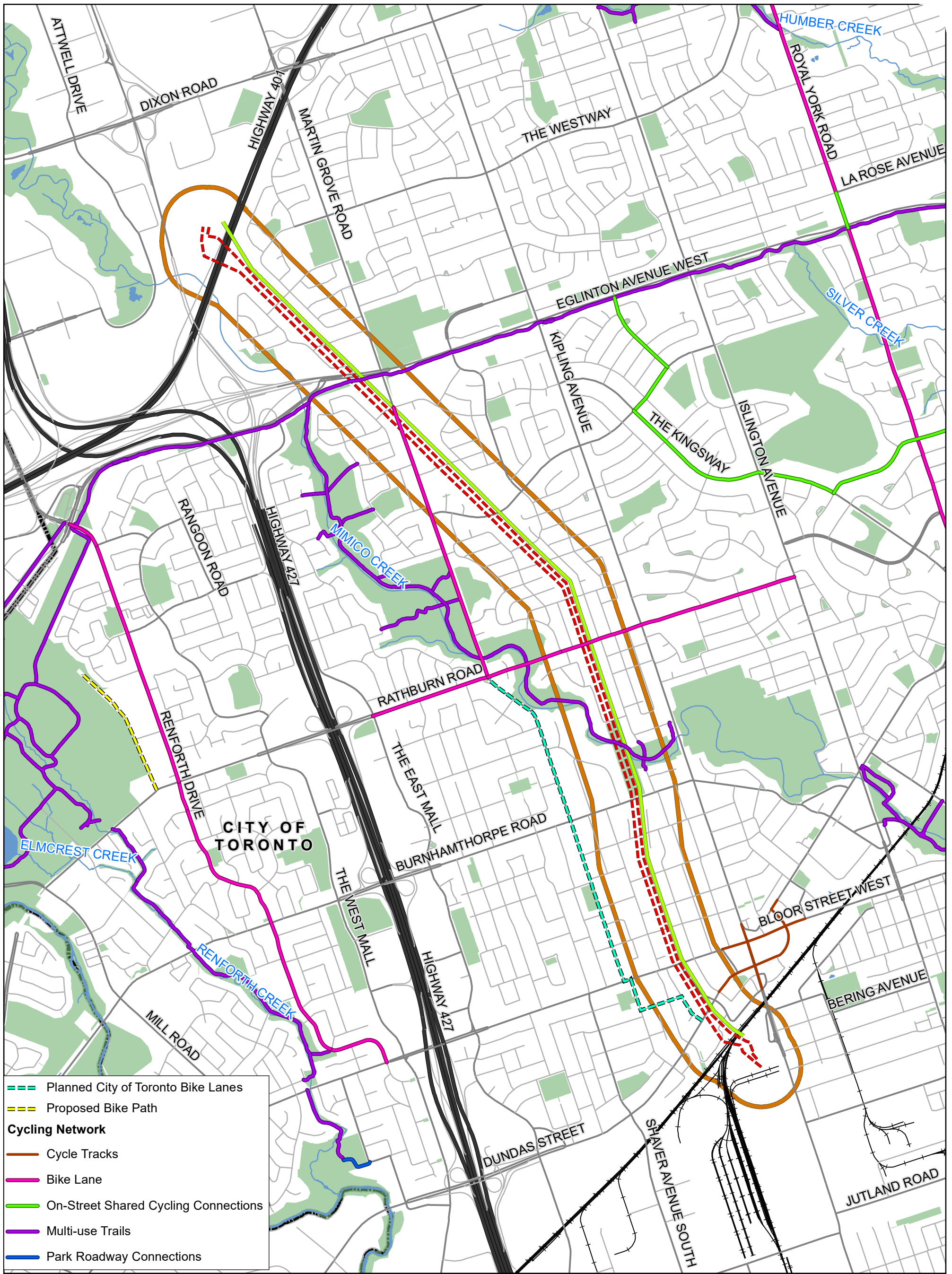
Due to location of the above routes, there are a significant number of bus stops within the study area. These are largely confined to areas near major roads such as Eglinton Avenue West, Martin Grove Road, Rathburn Road, Burnhamthorpe Road, and Bloor Street West. The bus stops that intersect the corridor, include:

- Martin Grove Road at Nottinghill Gate South Side;
- Martin Grove at Winterton Drive;
- Rathburn Road at Llyod Manor Road West Side;
- Bloor Street West at Auckland Road;
- Auckland Road at Bloor Street West South Side; and,
- Auckland Road North of Dundas Street West.

The City of Toronto has an extensive cycling network with several cycling routes crossing the study area (City of Toronto, 2020), as noted below and shown in **Figure 4-2**.

- **The Eglinton West Trail** – A Major Multi-Use Trail that runs parallel to Eglinton Avenue West. This trail starts near the Eglinton Flats and continues past Centennial Park; it crosses the Richview TS to Manby TS corridor, just south of Eglinton Avenue West.
- **The West Deane Trail** – A Major Multi-Use Trail that runs southeast. This trail starts near Eglinton Avenue West to the west of Martin Grove Road and crosses the Richview TS to Manby TS corridor south of Rathburn Road which terminates near Kipling Avenue.

- **Bloor Street West Cycle Track** – The cycle track starts near Jopling Avenue and runs west to the Toronto Police Service 22 Division.
- **Dunbloor/Dundas Street West Cycle Track** – The cycle track starts at Dundas Street West and terminates at Jopling Avenue.
- **Kipling Avenue Cycle Track** – The cycle track starts near Mervyn Avenue and runs south terminating near South Albans Road.
- **Winterton Drive Contraflow Bike lanes** – Contraflow Bike Lanes enable cyclists to travel in two directions on a one-way street. At Martin Grove Road, Winterton Drive intersects with the Richview TS to Manby TS corridor. Winterton Drive's Contraflow Bike Lanes further connect to existing cycling networks in the area.
- **Martin Grove Road Bike Lanes** – There are bike lanes along Martin Grove Road heading south from Winterton Drive, where Martin Grove crosses the corridor, to Rathburn Road.
- **Princess Margaret Boulevard Contraflow Bike Lanes** – There are also contraflow bike lanes on Princess Margaret Boulevard, which crosses the corridor.
- **Rathburn Road Bike Lanes** – There are bike lanes along Rathburn Road, starting from the East Mall to Islington Avenue.



HYDRO ONE NETWORKS INC.
ETOBICOKE GREENWAY

CYCLING NETWORK PLAN CITY OF TORONTO

FIGURE 4-2

- Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line
- - - Existing Energized 230 kV Transmission Lines
- Project Study Area (250m)

- Municipal Boundary
- Highway
- Major Road
- Minor Road
- +— Railway
- Watercourse
- Waterbody
- City Park

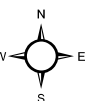


MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR, HYDRO ONE NETWORKS,
CITY OF TORONTO

MAP CREATED BY: -ZJB
MAP CHECKED BY: -LM
MAP PROJECTION: NAD 1983 CSRS UTM Zone 17N

SCALE 1:22,500

0 200 400 800 m



PROJECT: 18-7554 STATUS: DRAFT DATE: 2023-03-17

4.4.5 Other Key Recent and Future Projects

There are a few other large projects recently implemented or being planned in the vicinity of the proposed Project described below:

- **The Six Points Interchange** – The Six Points Interchange, which refers to the convergence of Dundas Street West, Kipling Avenue, and Bloor Street West is a reconfiguration intended to support the development of a vibrant, mixed-use, transit-oriented area, with a focus on complete streets, cycling facilities, improved pedestrian connections, and a new street network. Construction for the preferred interchange reconfiguration started in 2017 and was finalized in November 2021. There is ongoing development around this area.
- **Kipling Station** – Kipling Station is currently being transformed into a new transit hub. Located southwest of the Six Points Interchange, the new Kipling Station will connect the TTC, MiWay, GO Bus, and GO Train systems. By connecting and integrating these transit systems, the station aims to support future growth and development in Toronto’s west end. Prominent features of this project include the renovation of the existing GO station, new underground tunnels to improve access between the bus terminal and TTC station, and a pedestrian bridge over the train tracks. The Kipling Transit Hub was anticipated to be substantially complete by late 2020 and is now fully finalized and in use (Metrolinx, 2020a).
- **Eglinton Crosstown West Extension** – The proposed Eglinton Crosstown West Extension will extend the currently under-construction Eglinton Crosstown Light Rail Transit (LRT) from Mount Denis Station to Renforth Drive. Operating mainly underground, this extension will enhance connections and increase accessibility to rapid transit in Etobicoke and Mississauga. With a proposed stop at Martin Grove Avenue and Eglinton Avenue West, the Eglinton Crosstown West Extension would intersect the study area underground. The station entrance location is proposed for the northeast corner of the intersection. Together Metrolinx and Infrastructure Ontario estimate that this project will be completed by 2031 (Metrolinx, 2020b).
- **Cycling Infrastructure** – There are several planned transformations to cycling infrastructure, including both renewal and reconstruction (City of Toronto, 2019). These planned cycling infrastructure projects are important as they form part of a network. See **Figure 4-2** above. These planned projects include:
 - New planned cycling infrastructure on Martin Grove Road from Rathburn Road to Dundas Street West;

- Proposed bike path west of Renforth Dr., bordering the east side of Centennial Park; and,
- Renewal of cycling infrastructure on Rathburn Road east of Martin Grove Road.
- **Trails** – The TRCA's *Trail Strategy for the Greater Toronto Area* (2019), outlines how it intends to expand greenways with the goal of building a Greater Toronto Region Trail Network. Part of this plan includes the extension of the existing West Deane Trail south to Bloor Street. This trail currently runs parallel to the corridor until it crosses the corridor near the Islington Golf Course.

4.4.6 Real Estate

Due to the proximity to residential properties, real estate matters and potential encroachments are being assessed through property surveys, land agents and other methods. Discussions regarding land use are ongoing and will continue with affected individuals through the lifecycle of the Project to address safety, technical and operational requirements.

4.5 Visual and Aesthetic Resources

The landscape of the study area is predominantly suburban with single family dwellings. Most of the dwellings are 1 or 2 storeys in height. As the area is well established, most properties have mature trees overtopping the dwellings. The dense urban forest canopy within the project study area provides visual screening and visual interest in the suburban landscape.

Within the corridor the view is generally open and towers are visible, particularly in areas with limited vegetation. Views are also apparent from the roadways that intersect the corridor. The park system and riparian area along Mimico Creek acts as an urban canopy and provides natural scenery to the surrounding areas as well as screening the view of the transmission towers from some locations within and adjacent to the corridor. The terminus areas around Richview TS and Manby TS are within commercial-industrial areas. These areas are more open with little to no vegetation, however, are generally intensively developed, which can result in the towers being less noticeable.

The transmission towers have greater visibility the closer one gets to the towers. Residences immediately adjacent to the corridor will be able to see individual towers within their direct line of sight. This view may be screened by local plantings.

Beyond the immediate vicinity the view of the transmission towers is location dependant. From street level within adjacent residential neighbourhoods the viewsheds in many areas is reduced

because of the urban forest canopy. Views of the towers are reduced significantly or completely screened at further distances because of the dense tree canopy. The effect is reduced during winter months when the leaves have fallen, but the branching and structure of the trees also provide some view mitigation.

Within the study area, there are areas with high density residential buildings, mainly along major corridors and adjacent to transit hubs. These buildings are vantage points within the landscape as they tower over their surrounding elements and residents within these buildings likely have a view of the transmission corridor.

Please refer to **Appendix D3** for the Visual Impact Assessment.

4.6 Recreational Resources

Recreation features and their approximate location within the study area are outlined below.

- **Echo Valley Park** – (adjacent and within the corridor) – This 9.1-hectare park is a naturalized ravine through which Mimico Creek flows. According to the City of Toronto's Parks and Recreation website, this park has two walking trails and three bike trails that connect it to neighborhood streets.
- **Hampshire Heights Park** – This park is approximately 60 m west of the corridor. It is a 7.8-hectare wooded ravine park near Martin Grove Road to the south of Rathburn Road. The park follows Mimico Creek, south from Rathburn Road to where it flows into Echo Valley Park. The Mimico Creek Trail runs along the east bank of the creek connecting this park to Ravenscrest Park to the north, and Echo Valley Park to the south.
- **Ravenscrest Park** – This park is approximately 175 m west of corridor and contains picnic areas and trails.
- **Willow Ridge Park** – This neighbourhood park is tucked into a corner beside an apartment building near Eglinton Avenue West and Martin Grove Road. It is approximately 195 m west of the corridor and includes a children's play structure and open green space.

4.7 Mineral Resources

There are no mining resources in the study area.

4.8 Natural Environment Resources

Natural environment features including air, land, water, wildlife, and wildlife habitat resources and features were factors considered within the study area.

This section addresses physical and biological features in the study area including baseline information for the following:

- Physical environment;
- Atmospheric environment;
- Surface and groundwater resources;
- Designated or special natural areas; and,
- Natural heritage features.

4.8.1 Physical Environment

The City of Toronto covers an area of approximately 630 km² and is surrounded by Lake Ontario to the south; Steeles Avenue to the north; Etobicoke Creek, Eglinton Avenue, and Highway 427 to the west; and, the Rouge River and the Scarborough Townline to the east.

The general Toronto area is transected by natural features such as the Etobicoke Creek and Humber River in the west, and the Don River and Rouge River to the east. All these rivers flow southward to Lake Ontario.

The majority of the study area is the hydro corridor. Surrounding the corridor in most areas is typical single-family residential areas with more industrial areas at the terminus points. Study area lands outside of the hydro corridor include a mix of buildings, private yards, open space, and impermeable roadways. Mimico Creek and the associated valley lands cross the corridor between Rivercove Drive and Burnhamthorpe Road.

The study area lies within the Great Lakes-St Lawrence Lowlands in the subregion of the West Lowlands (Natural Resources Canada, 2019). These are plain-like areas that were affected by the Pleistocene glaciations and are therefore covered by surficial deposits and other features associated with the ice sheets (Natural Resources Canada, 2019).

The soil stratigraphy generally consists of topsoil fill to approximate depths of 0.1 to 0.3 metres below ground surface (mbgs), underlain by sand and gravel fill material to approximate depths of 0.7 to 2.4mbgs. The fill is underlain by silty sand and sandy silt.

The existing physiography, topography and geology is expected to remain as is following the construction of the proposed Project. Therefore, no net effects on the physical environment have been identified for the proposed Project.

4.8.2 Atmospheric Environment

4.8.2.1 Climate

The City of Toronto is located within the Central and Eastern Ontario climactic region and experiences humid continental climate conditions with influence from the Lake Ontario (Environment and Climate Change Canada [ECCC], 2017a). ECCC meteorological temperature and precipitation data has been taken from the Toronto Buttonville Airport (Climate Identifier [ID] 615HMAK). Temperature and precipitation data presented in this section is based on the available 2004 to 2014 Climate Normal data (ECCC, 2018a).

The climate normal mean annual temperature at the Buttonville Airport station is 15.0°C. The climate normal daily average temperature varies between -5.8°C (January) and 21.2°C (July). Extreme climate normal temperatures range from -35.2 to 37.8°C. The climate normal frost-free period is from May 5 to October 10 (157 days).

Precipitation is distributed throughout all four seasons, with snowfall typical from November to April, and rain from May to October. Climate normal days with precipitation is 156 days per year.

The climate normal total annual precipitation is 852.6 mm, where 142.6 mm typically falls as snowfall and 717.9 mm as rainfall. Extreme daily rainfall depths range from 80.6 mm (September) to 30.6 mm (December) are climate normal. Extreme snow depths range from zero to 70 centimetres (cm) (November).

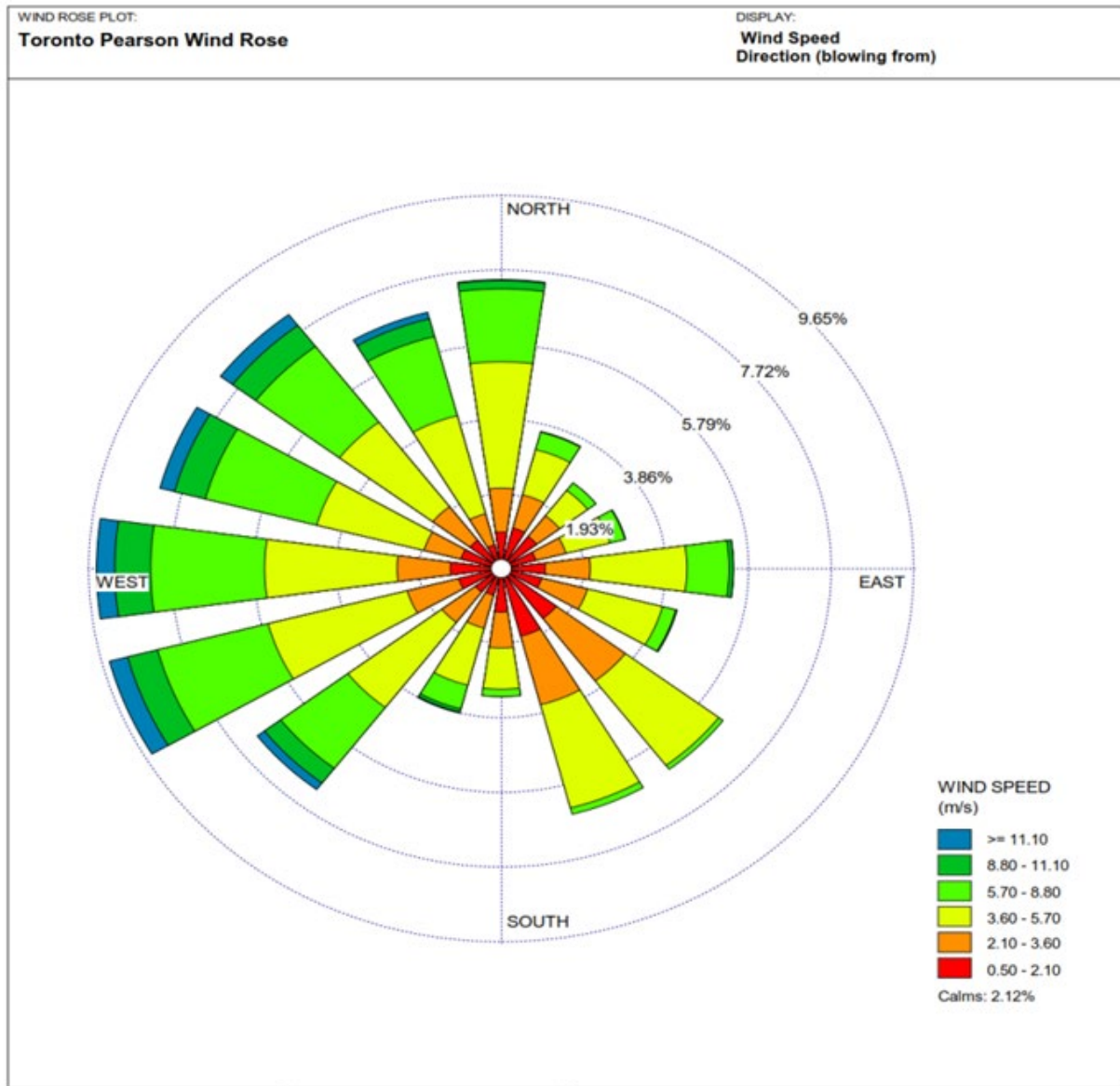
The closest ECCC meteorological station with sufficient wind data is the Toronto Lester B Pearson International Airport ([WMO ID] 71624). The following wind rose, presented in **Figure 4-3**, represents four consecutive years of data, January 1, 2013, to December 31, 2017, at the ECCC climate station (Toronto Pearson, ID 71624). At this location, winds are primarily blowing from the northwest and south with an average wind speed of 4.59 metres per second (m/s).

4.8.2.2 Climate Change

Climate Change is defined as “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods” (United Nations Framework Convention on Climate Change, 1992). The City of Toronto is trying to actively reduce impact on the climate through its ambitious climate action strategy. In July of 2017, Transform TO laid out a set of long-term, low-carbon goals and strategies to reduce local greenhouse gas emissions. Achieving the targets will require transformational changes in how the people of Toronto will work, build and commute (City of Toronto, 2020d).

Hydro One has governing policies and principles around Climate Change and Sustainability initiatives. As a transmission and distribution company, Hydro One is uniquely positioned to facilitate the transition towards a low-carbon economy. Hydro One has committed to reach net-zero greenhouse gas (GHG) emissions by 2050, with a goal to achieve 30% GHG emission reductions by 2030. Hydro One has developed workplans and budgets plans to reduce the major sources of carbon emissions by 2030.

Figure 4-3: Wind Speed – Toronto Pearson Airport



Hydro One has also committed to switching all of the company's vehicles from light-duty gasoline-powered vehicles (sedans and SUVs) to electric vehicles and hybrids by 2030, targeting 50% converted by 2025.

4.8.2.3 Air Quality

In Ontario, regional air quality is monitored through a network of air quality monitoring stations operated by the MECP and the ECCC National Air Pollution Surveillance (NAPS) program. The nearest station, located approximately three kilometres southeast of the study area, is operated by ECCC (NAPS Station ID 60435 – Etobicoke South-2).

Background air quality levels for nitrogen dioxide (NO₂) and Particulate Matter (PM)_{2.5} are based on monitored air quality measurements from this station for the year 2016. The Toronto West NAPS Station (Station ID 60430) is located approximately 4 km northeast of the study area and monitors sulphur dioxide (SO₂) and carbon monoxide (CO), in addition to NO₂ and PM_{2.5}. The MECP provided measurement data for the Toronto West Station. The hourly monitoring data was analyzed to describe background air quality. For Etobicoke South-2 station only summarized air quality data was provided by ECCC and is presented in this report. Air monitoring data from these stations represents the combined contribution of emissions from nearby sources, as well as the effect of emissions transported into the region.

Background air quality was compared against provincial criteria and federal standards and objectives where provincial criteria are not available. The MECP's Ontario Ambient Air Quality Criteria (AAQC) and the Canadian Ambient Air Quality Standards (CAAQS) were used, as shown in **Table 4-3**.

Table 4-3 presents the background air quality values for the available monitoring data. The 90th percentile of the monitoring data was used to represent background air quality for parameters with one-hour, eight-hour and 24-hour averaging periods. Annual background values are based on the average of the available hourly data. As presented in **Table 4-3**, all monitored values are below their respective regulatory criteria.

Table 4-3: Criteria Air Contaminant Monitored Data in 2016

Monitoring Station	Criteria Air Contaminant	Averaging Period	Applicable Criteria	90th Percentile of Monitored Data ($\mu\text{g}/\text{m}^3$)	Criteria ($\mu\text{g}/\text{m}^3$)	Percentage of Regulatory Criteria
Toronto West	CO	1-Hour	Ontario AAQC	450	36,200	1.2%
		8-Hour	Ontario AAQC	375	15,700	2.4%
	SO ₂	1-Hour	CAAQS	3	170 ¹	1.8%
		24-Hour	Ontario AAQC	3	275	1.1%
		Annual	CAAQS	2	10 ²	18.3%
	NO ₂	1-Hour	Ontario AAQC	64	400	15.9%
		24-Hour	Ontario AAQC	49	200	24.6%
	PM _{2.5}	24-Hour	CAAQS	12	27 ³	44.4%
Annual		CAAQS	7	8.8 ⁴	79.5%	
Etobicoke South	NO ₂	1-Hour	Ontario AAQC	62	400	15.4%
		24-Hour	Ontario AAQC	51	200	25.6%
	Suspended Particulate Matter (SPM) ⁵	24-Hour	Ontario AAQC	43	120	35.8%
	PM ₁₀ ⁶	24-Hour	Ontario AAQC	24	50	48%
	PM _{2.5}	24-Hour	CAAQS	13	27 ⁷	48.1%
		Annual	CAAQS	8	8.8 ⁸	90.9%

¹ SO₂ one-hour and annual values are compared to 2025 criteria;

² SO₂ one-hour and annual values are compared to 2025 criteria;

³ PM_{2.5} 24-hour and annual values are compared to 2020 criteria.

⁴ PM_{2.5} 24-hour and annual values are compared to 2020 criteria.

⁵ PM₁₀ and SPM data were not available. Background concentrations were estimated by applying a PM_{2.5}/PM₁₀ ratio of 0.54 and a PM_{2.5}/TSP ratio of 0.3 (Lall et al., 2004);

⁶ PM₁₀ and SPM data were not available. Background concentrations were estimated by applying a PM_{2.5}/PM₁₀ ratio of 0.54 and a PM_{2.5}/TSP ratio of 0.3 (Lall et al., 2004);

⁷ PM_{2.5} 24-hour and annual values are compared to 2020 criteria.

⁸ PM_{2.5} 24-hour and annual values are compared to 2020 criteria.

4.8.2.4 Noise and Vibration

Existing land uses within the study area are primarily the existing transmission corridor. Adjacent lands to the corridor are mostly residential, with some commercial/industrial and transportation. These adjacent land uses may include noise sensitive receptors.

The City of Toronto's Municipal Code Chapter 591, Article 1, defines a Point of Reception (receptor) as "*any point on the premises of a person where sound or vibration originating from other than those premises is received.*" The Ontario MECP publication NPC-300 "*Environmental Noise Guideline – Stationary and Transportation Sources – Approval and Planning*" defines noise sensitive receptors to have the following land uses:

- Permanent, seasonal, or rental residences;
- Hotels, motels, and campgrounds;
- Schools, universities, libraries, and daycare centres;
- Hospitals and clinics, nursing/retirement homes; and,
- Churches and places of worship.

Ambient noise conditions within the study area are generally expected to be dominated by transportation related activities, including road/highway and rail traffic as well as aircraft noise from the nearby Toronto Pearson International Airport.

- **Richview TS Area** – Richview TS is in close proximity to Highway 401 and less than 2 km from the runway at Toronto Pearson International Airport. Other nearby roads that would influence the ambient noise levels for receptors near the Richview TS are Highway 27 and Dixon Road. The nearest sensitive receptors to the Richview TS are the residential dwellings south of the TS on the south/southeast side of Highway 401. The section of Highway 401 within the study area consists of 12 lanes, with posted speed limit of 100 km/h. The aircraft flyovers to/from the airport are frequent, but not continuous, and at times can dominate the noise environment over the road traffic noise. As such, the noise environment for the receptors in the vicinity of the Richview TS and those at the north end of the transmission corridor is dominated by Highway 401 on a continuous basis, and by aircraft flyover on an intermittent basis. A noise barrier wall along Highway 401 provides some noise attenuation from the highway. Although there are commercial/industrial activities in the area, it is not expected that the noise generated by those activities would be more prominent than the Highway 401 and aircraft noise. Depending on proximity to Highway 401, the ambient noise levels at the nearby receptors can range between the

low 60s dBA to high 70s dBA (Hourly sound level equivalent). Intermittent aircraft flyover noise could result in higher noise levels, but for short durations.

- **Transmission Corridor Area** – Residential areas border the corridor and continuously extend in both directions from the corridor. These areas include receptors such as residential dwellings, places of worship and schools. Given the residential character these areas are expected to have lower ambient noise levels. It is expected that the influence of aircraft flyover noise would be highest at the northern sections of the corridor and would lessen southward, due to increased distance. Similarly, noise from surface transportation sources (e.g., Highway 401 and 427) would diminish for receptors further to the south, along the corridor. Other major roads such as Eglinton Avenue, Rathburn Road, Burnhamthorpe Road and Bloor Street West can influence the ambient noise level at nearby receptors. However, the traffic noise impacts are considered to be dominant mainly during daytime and evening hours and more localized to receptors in proximity to these roads.
- **Manby TS Area** – The nearest noise-sensitive receptors to Manby TS are the residential high-rises to the north of the TS. The ambient noise environment at the receptors in the vicinity of the Manby TS is expected to be influenced by surface transportation sources (i.e., road and rail). The nearby roads that are expected to impact the receptor noise environment include Kipling Avenue and Dundas Street West. The nearby rail corridor consists of 6 rail tracks, serving both passenger and freight trains. There are numerous commercial/industrial establishments along Kipling Avenue, including Canadian Pacific (CP) Rail's intermodal terminal, which can also influence receptors' ambient noise environment.

Potential sources of ground vibration within the study area include rail traffic and industrial activities in the vicinity of the Manby TS. The nearby receptors for Manby TS are residential high-rises which are at least 30 m from the nearest tracks. Generally, ground born vibration is not considered to be a concern for high-rises at such setback distances.

4.8.3 Surface Water Resources

Surface water features crossing the corridor include Mimico Creek and an unnamed drain just north of Eglinton Avenue West. With regards to Mimico Creek, non-point sources of contamination from urbanization are still considered to be the largest contributor to surface water quality (TRCA Mimico Creek Report Card, 2018). Based on the TRCA 2018 Report Card, Mimico Creek is seeing some improvements in overall surface water quality. The report card notes that

concentrations of phosphorous and *E.coli* bacteria were measured at three stations in the watershed. As with other urban watercourses levels of chloride greater than recommended guidelines continue to exist due to road salt (TRCA Mimico Creek Report Card, 2018).

4.8.4 Groundwater Resources

The study area falls within the 77 km² Mimico Creek Watershed. This watershed, often described in conjunction with its neighbouring Etobicoke Creek Watershed, is highly urbanized with a low proportion of natural cover. There are three principal aquifer systems in these two watersheds: the Scarborough Aquifer Complex, Thorncliffe Aquifer Complex and the Oak Ridges Aquifer Complex. Groundwater flow is primarily from northeast to southeast. The Mimico Creek and Etobicoke Creek groundwater recharge is less than 100 mm/year across these watersheds, due to the predominantly low permeability silt, clay, and silt till soils, except for the Brampton Esker area of the Etobicoke Creek watershed (Highway 410 between Mayfield Road and Queen Street) where estimated recharge is close to 380 mm/year and the remnant Lake Iroquois shoreline in Mimico Creek watershed with recharge rates up to about 340 mm/year. (Dundas Street and Islington Avenue area) (TRCA Mimico Creek Report Card, 2018).

Groundwater discharge to Mimico creek occurs spans from Eglinton Avenue south to Dundas Street (Thorncliffe Aquifer) and in the vicinity of Bloor Street (Scarborough Aquifer).

There are no groundwater monitoring wells located in the Mimico Creek watershed and the TRCA Mimico Creek Report Card for 2018 indicates that the concentrations of nitrite in individual wells surrounding the neighbouring Etobicoke Creek were better than the drinking water guidelines (TRCA Mimico Creek Report Card, 2018).

4.8.4.1 Municipal Water Supply

The City of Toronto's drinkable water comes from Lake Ontario. All residences and businesses in the study area receive their water via the municipal water system. Water is drawn from up to 5 km from shore with intake pipes connecting to one of four of Toronto's water treatment plants. South Etobicoke receives its water from the R.L. Clark Water Treatment Plant.

The plant was opened on November 22, 1968, and is located in Toronto's South Etobicoke. Originally called the Westerly Plant, was later renamed after Ross Leopold Clark, Commissioner of Works for Metropolitan Toronto from 1956 to 1979. The plant produces approximately 30% of Toronto's drinking water and can produce 615 million litres daily.

The wastewater treatment plant closest to the study area is Humber Wastewater Treatment Plant. Located at 130 The Queensway, Etobicoke, it is the second largest treatment plant in Toronto near the mouth of the Humber River with a capacity of 473,000 cubic metres (m³) per day and serves a population of nearly 680,000 (City of Toronto, 2018).

4.8.4.2 Source Water Protection

The study area is located within the Toronto and Region Source Protection Area (SPA) (CTC Source Protection Region, 2015). The lands located with the study area are identified as Highly Vulnerable Aquifers (HVA). An HVA is susceptible to contamination due to its location near the ground's surface or land in which the type of materials in the ground are highly permeable. HVAs are easily changed or affected by contamination from both human activities and natural processes.

The study area is not located within any Wellhead Protection Areas, Intake Protection Zones, Quantity Wellhead Protection Areas, or Significant Groundwater Recharge Areas.

4.8.5 Natural Heritage Features

Natural heritage features and areas are defined in the PPS (2020) as "*significant wetlands, significant coastal wetlands and other coastal wetlands in Ecoregions 5E, 6E and 7E, fish habitat, significant woodlands and significant valleylands in Ecoregions 6E and 7E, habitat of endangered species and threatened species, significant wildlife habitat, and significant areas of natural and scientific interest*". In accordance with the above definition, key natural heritage features are considered below.

Background information on natural heritage features with the study area was collected from the following sources:

- Provincial SAR, including known ranges;
- Federal SAR;
- Natural Heritage Information Centre (NHIC) SAR occurrences and critical habitat mapping;
- Ontario Breeding Birds Atlas (Cadman et al., 2007);
- Atlas of the Mammals of Ontario (Dobbyn, 1994);
- Bat Conservation International range maps (Bat Conservation International, 2023);
- Ontario's Reptile and Amphibian Atlas (Ontario Nature, 2023);
- eBird species maps (2023);

- iNaturalist species maps (2023);
- City of Toronto Official Plan (2015; 2022);
- TRCA Regulation Limit (2021);
- Aerial imagery; and,
- Land Information Ontario (LIO) Mapping.

In addition to the background information review, Hydro One's environmental consultant, Dillon Consulting, conducted field surveys of the transmission line ROW and adjacent lands from Richview TS to Manby TS. Field surveys were conducted from May 31, 2018, to August 9, 2018. Field surveys included the following:

- Ecological Land Classification (ELC);
- Vegetation Surveys;
- Tree Inventory;
- Butternut Health Assessment;
- Aquatic Assessment;
- Breeding Bird Surveys;
- Species at Risk Habitat Assessment;
- Wildlife Habitat Assessment; and,
- Incidental Wildlife Observations.

4.8.5.1 Vegetation Communities

Vegetation communities were classified in accordance with ELC for southern Ontario (Lee et al., 1998; Lee, 2008). ELC communities were mapped based on aerial photographs and existing information, as well as verified in the field where access was possible.

Vegetation has been cleared in the ROW to accommodate the construction and operation of transmission lines and structures. The present vegetation is comprised of successional communities with pioneer species. A plant species list is included in **Appendix E1**, which includes provincial and federal status, native or non-native species identification, Coefficient of Conservation and Coefficient of Wetness. Butternut (*Juglans cinerea*) is an endangered species that was observed, which is discussed further below.

The following ELC communities were identified in the study area during the field surveys and are identified in **Figure 4-4** to **Figure 4-8**:

- **Buckthorn Deciduous Shrub Thicket (THDM2-6)** – This community is present in the study area in areas south of Highway 401, north of Eglinton Avenue West, and south of Dundas Street West;
- **Deciduous Thicket (THD)** – This community is present in the southern portion of the study area, south of Dundas Street West;
- **Fencerow (TAGM5)** – This community is present throughout the study area;
- **Dry-Fresh Deciduous Woodland (WODM4)** – This community is present in the study area north of Eglinton Avenue West. Dominant species in this community include Trembling Aspen (*Populus tremuloides*), White Spruce (*Picea glauca*), Red Oak (*Quercus rubra*) and Staghorn Sumac (*Rhus hirta*);
- **Dry-Fresh Mixed Meadow (MEMM3)** – This community is present in the study area, adjacent to Highway 401, to the north and south. Dominant species in this community include Goldenrod species, Grass species, Canada Thistle (*Cirsium arvense*) and Teasel species;
- **Fresh-Moist Black Walnut Lowland Deciduous Forest (FODM7-4)** – This community is present in the study area surrounding the Mimico Creek crossing area. Dominant species in this community include Black Walnut (*Juglans nigra*), Black Locust (*Robinia pseudoacacia*), Common Buckthorn (*Rhamnus cathartica*) and Garlic Mustard (*Alliaria petiolata*);
- **Greenlands (CGL)** – Greenlands of City parks exist throughout the study area;
- **Power Generation (CVI_4)** – Transformer stations exist in the north (Richview Transformer Station) and south (Manby Transformer Station) of the study area;
- **Transportation and Utilities (CVI)** – The majority of the study area is considered Transportation and Utilities within the hydro corridor ROW;
- **Business Sector (CVC_1)** – Business Sector areas exist throughout the study area;
- **Transportation (CVI_1)** – Transportation area exists as a parking lot in the southern portion of the study area; and,
- **Residential (CVR)** – Residential areas exist adjacent to the hydro corridor ROW.

Non-Native and Invasive Species

Vegetation communities have been disturbed for anthropogenic reasons and contain a large non-native component, with generally high invasive rankings. Communities in the ROW are predominantly meadows which, due to regular maintenance, have large numbers of non-native species. There were some patches of Garlic Mustard (*Alliaria petiolata*) located within the groundcover and other non-native species (i.e., Common Buckthorn (*Rhamnus cathartica*),

Tartarian Honeysuckle (*Lonicera tatarica*) and Russian Olive (*Elaeagnus angustifolia*) in the understory of the forests adjacent to Mimico Creek. Common Buckthorn and Russian Olive were also a large component of the thicket community on the northwest extent of the project adjacent to Highway 401. There were only a few mature Ash trees observed, most of which were in poor condition and declining suggesting that it is likely that Emerald Ash Borer (*Agrilus planipennis*) are in the area.

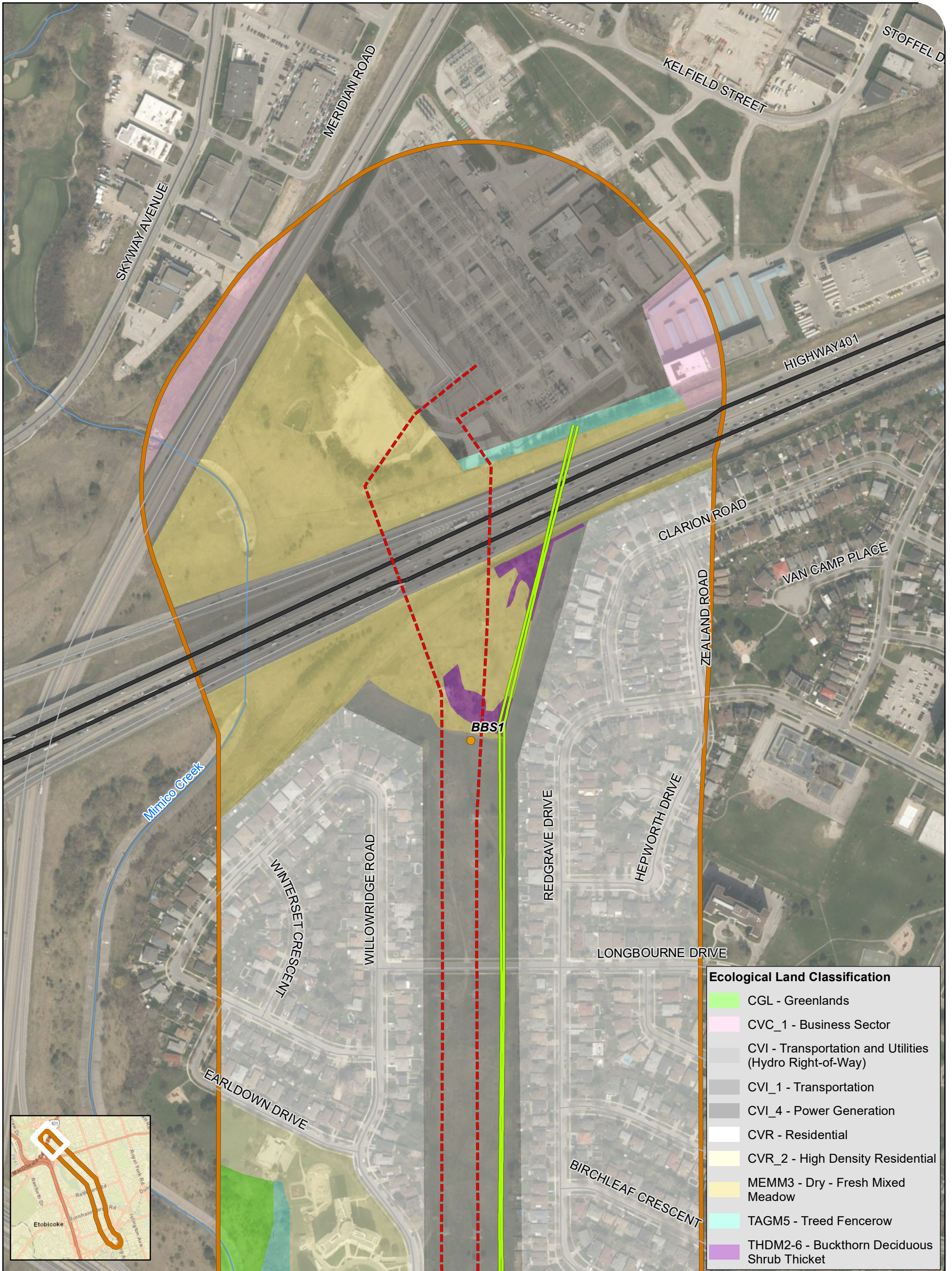
Wetlands

An unevaluated wetland was identified west of the study area during the background review. No wetlands were observed within the study area during the field surveys.

Woodlands

Woodlands were identified in the study area during field surveys. The woodlands are located around the Mimico Creek crossing area within the ROW, as well as north of Eglinton Avenue West. The woodlands consist of Fresh-Moist Black Walnut Lowland Deciduous Forest (FODM7-4) and Dry-Fresh Deciduous Woodland (WODM4), respectively.

Significant woodlands are woodlands that are ecologically, functionally and/or economically important based on one or more features, such as species composition, stand age, contribution to the broader landscape, site quality, or past management history (MNR, 2010). The designation of significant woodlands is deferred to local planning authorities. General guidelines for determining significance of a woodland area are also included in the Natural Heritage Reference Manual if the local planning authorities have not provided criteria for significance (MNR, 2010). The City of Toronto Official Plan (2015; 2022) identifies the area around the Mimico Creek crossing within the study area as Natural Heritage System (Map 9) but does not define significant woodlands. As such according to the Natural Heritage Reference Manual (MNR, 2010), the forest around the Mimico Creek crossing within the study area is considered significant woodland.



Ecological Land Classification	
	CGL - Greenlands
	CVC_1 - Business Sector
	CVI - Transportation and Utilities (Hydro Right-of-Way)
	CVI_1 - Transportation
	CVI_4 - Power Generation
	CVR - Residential
	CVR_2 - High Density Residential
	MEMM3 - Dry - Fresh Mixed Meadow
	TAGM5 - Treed Fencerow
	THDM2-6 - Buckthorn Deciduous Shrub Thicket

HYDRO ONE NETWORKS INC.
ETOBICOKE GREENWAY

- Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line
- Existing Energized 230 kV Transmission Lines
- Project Study Area (250m)

- Breeding Bird Survey Location
- Watercourse

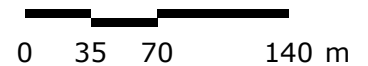
ECOLOGICAL LAND CLASSIFICATION

FIGURE 4-4

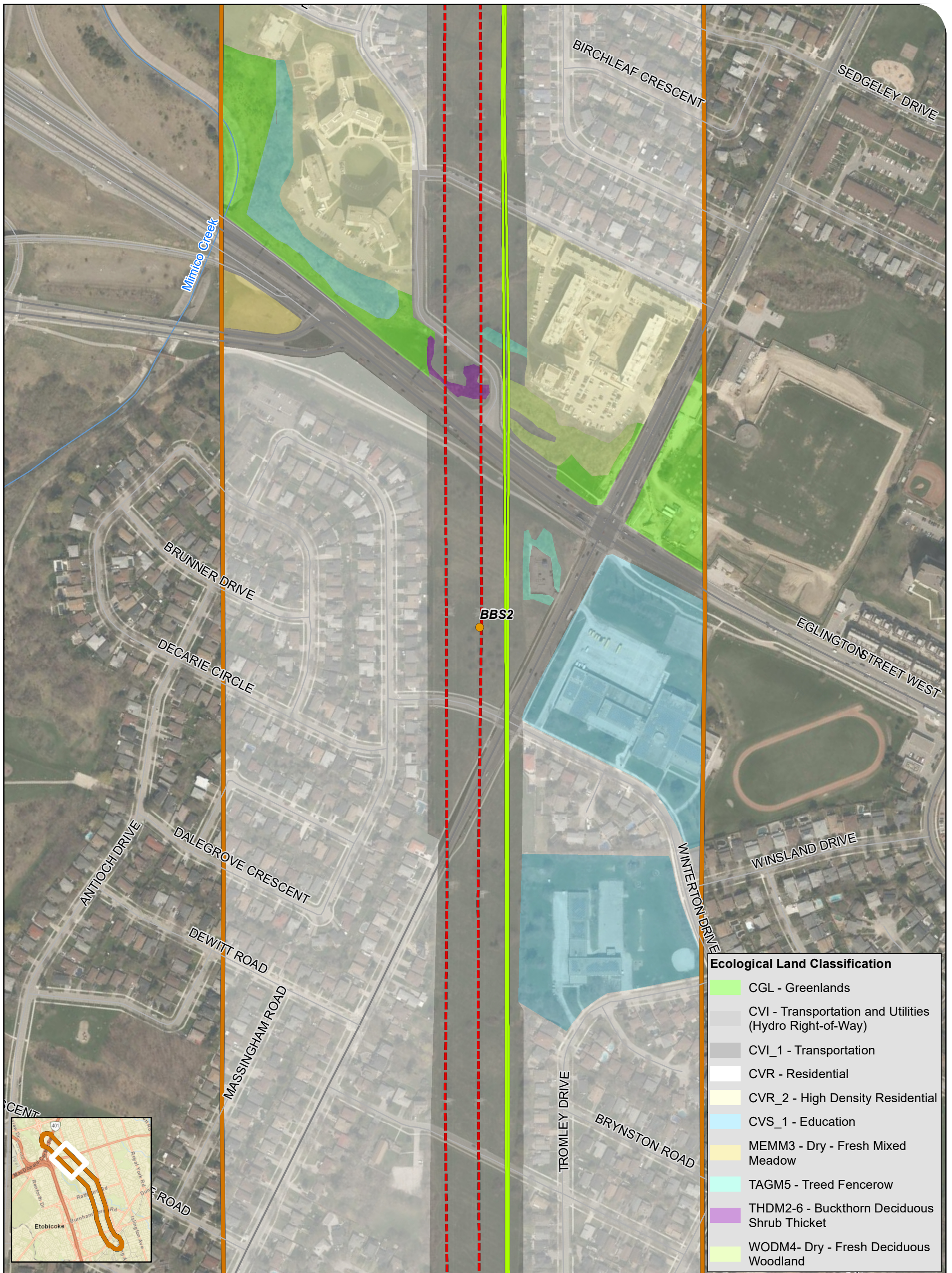


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Ecological Land Classification

	CGL - Greenlands
	CVI - Transportation and Utilities (Hydro Right-of-Way)
	CVI_1 - Transportation
	CVR - Residential
	CVR_2 - High Density Residential
	CVS_1 - Education
	MEMM3 - Dry - Fresh Mixed Meadow
	TAGM5 - Treed Fencerow
	THDM2-6 - Buckthorn Deciduous Shrub Thicket
	WODM4- Dry - Fresh Deciduous Woodland

HYDRO ONE NETWORKS INC.
ETOBICOKE GREENWAY

- Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line
- Existing Energized 230 kV Transmission Lines
- Project Study Area (250m)
- Breeding Bird Survey Location
- Watercourse

ECOLOGICAL LAND CLASSIFICATION

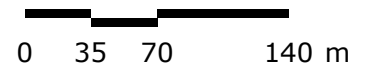
FIGURE 4-5



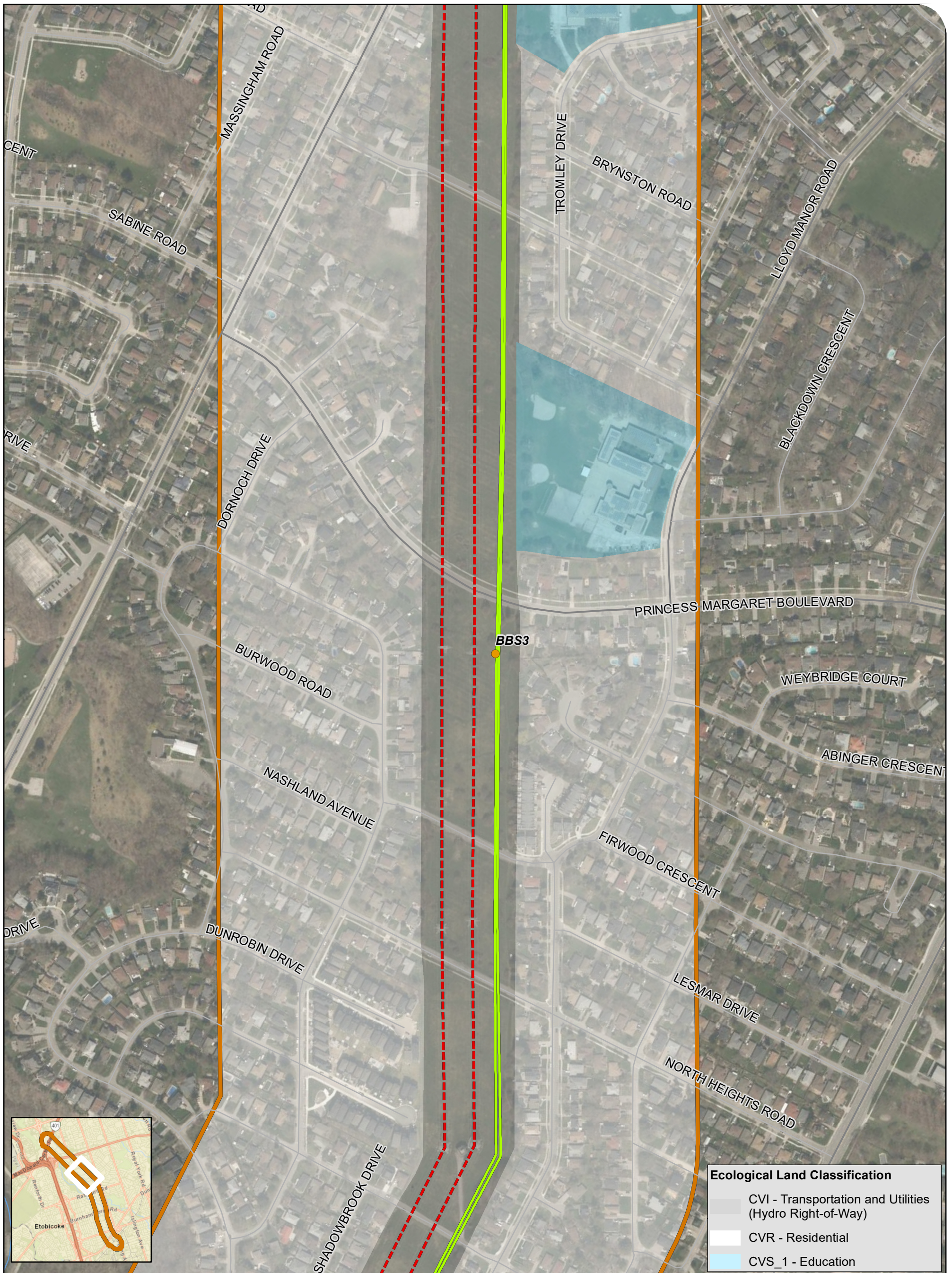
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HYDRO ONE NETWORKS INC.
ETOBICOKE GREENWAY

- Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line
- Existing Energized 230 kV Transmission Lines
- Project Study Area (250m)
- Breeding Bird Survey Location
- Watercourse

ECOLOGICAL LAND CLASSIFICATION
FIGURE 4-6

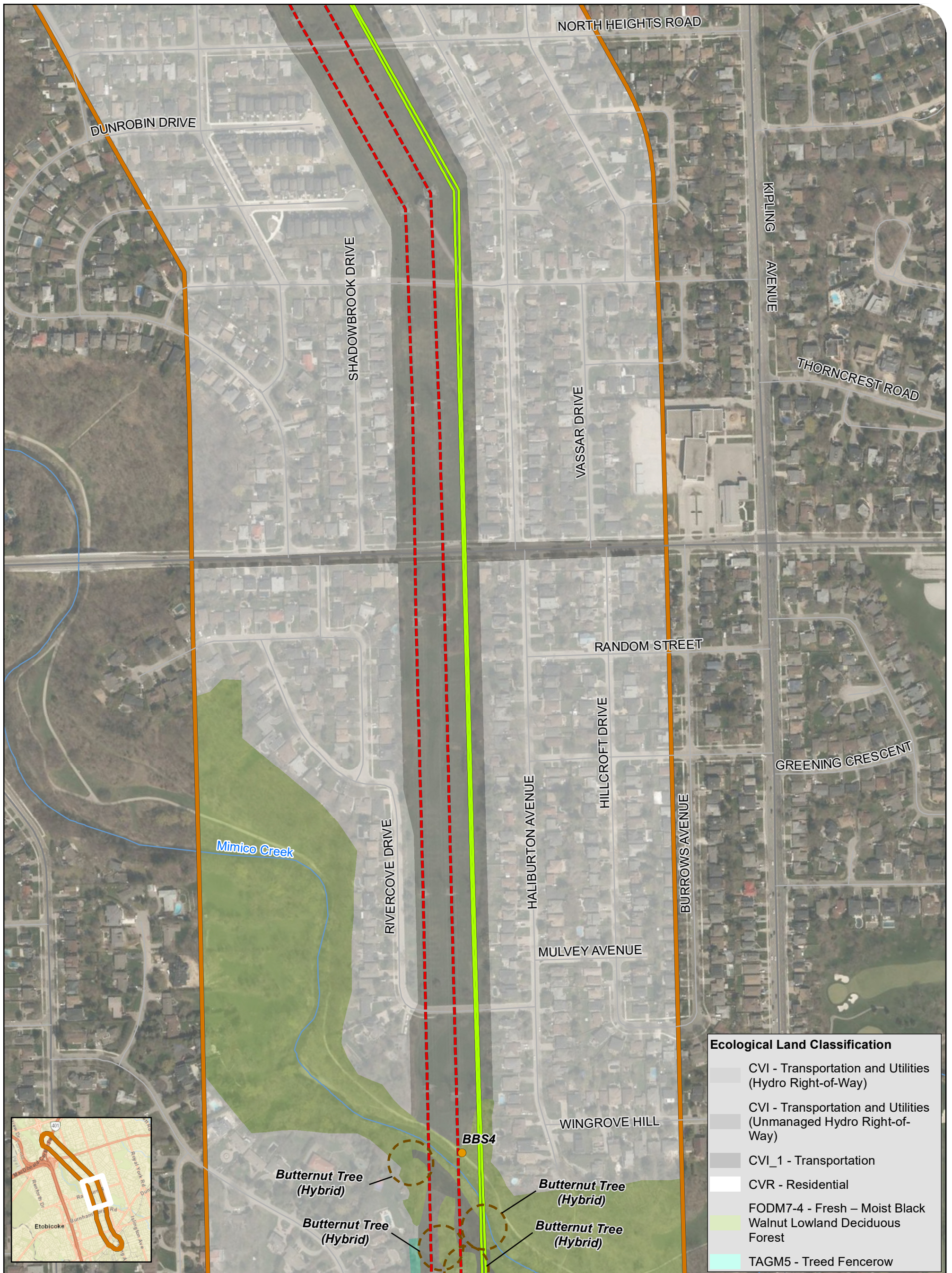


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0 35 70 140 m






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HYDRO ONE NETWORKS INC.
ETOBICOKE GREENWAY

-  Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line
-  Existing Energized 230 kV Transmission Lines
-  Project Study Area (250m)

-  Breeding Bird Survey Location
-  Butternut Tree
-  Watercourse

ECOLOGICAL LAND CLASSIFICATION

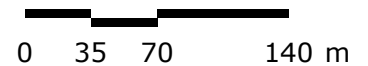
FIGURE 4-7



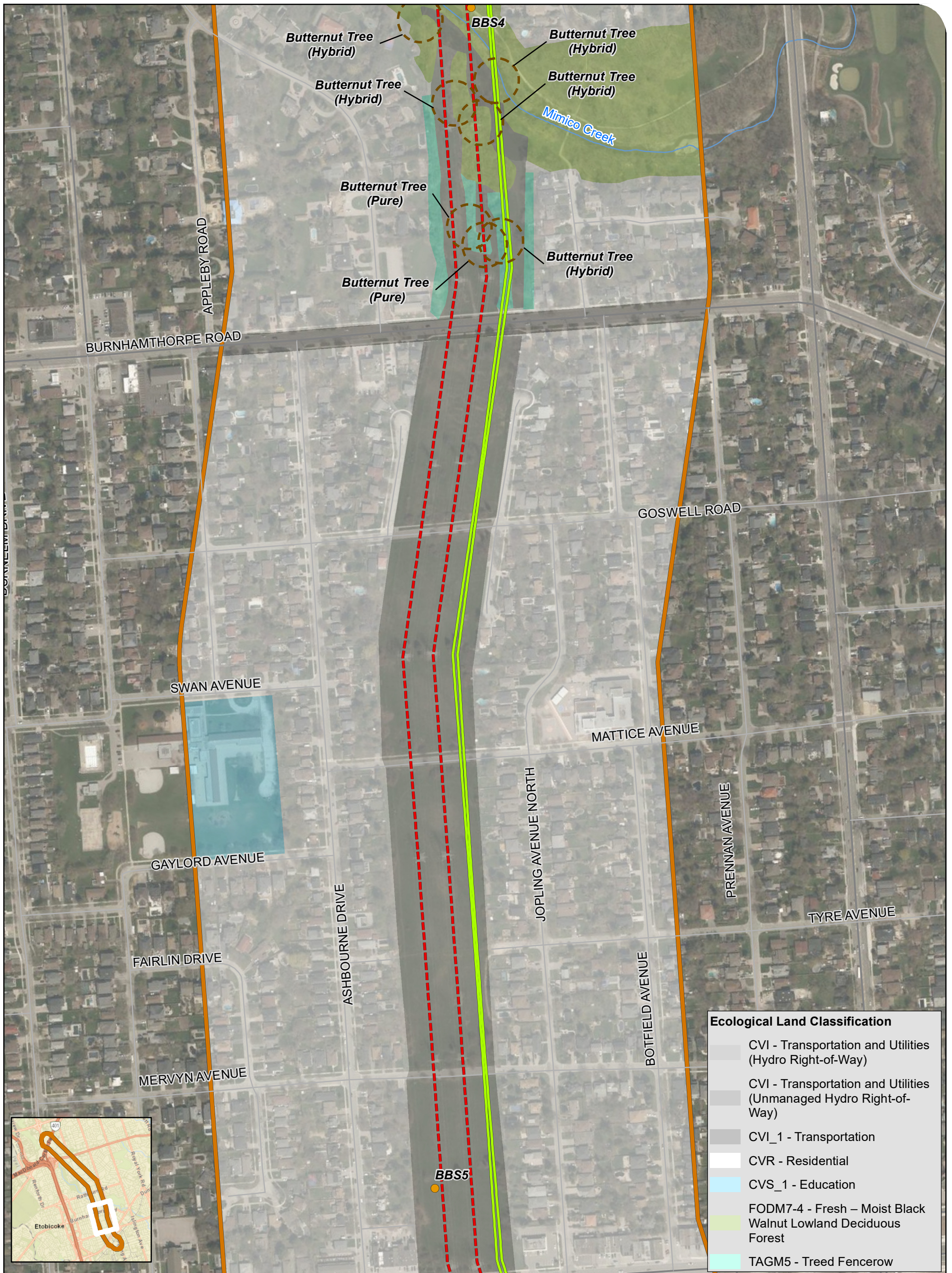
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PROJECT: 18-7554 STATUS: DRAFT DATE: 2023-03-23



Ecological Land Classification	
	CVI - Transportation and Utilities (Hydro Right-of-Way)
	CVI - Transportation and Utilities (Unmanaged Hydro Right-of-Way)
	CVI_1 - Transportation
	CVR - Residential
	CVS_1 - Education
	FODM7-4 - Fresh – Moist Black Walnut Lowland Deciduous Forest
	TAGM5 - Treed Fencerow

HYDRO ONE NETWORKS INC.
ETOBICOKE GREENWAY

- Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line
- Existing Energized 230 kV Transmission Lines
- Project Study Area (250m)

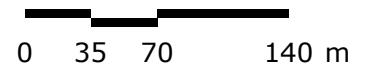
- Breeding Bird Survey Location
- Butternut Tree
- Watercourse

ECOLOGICAL LAND CLASSIFICATION
FIGURE 4-8

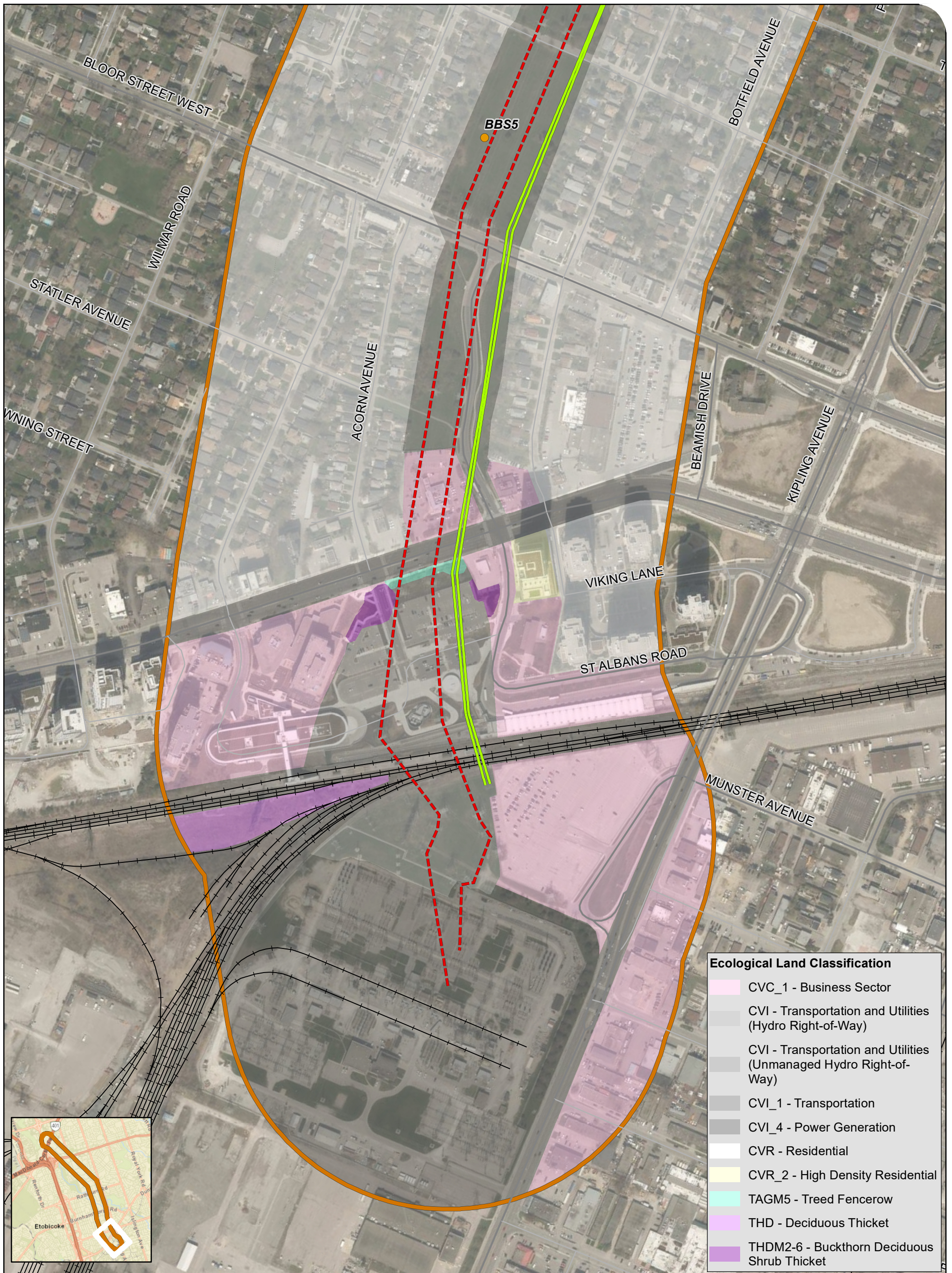


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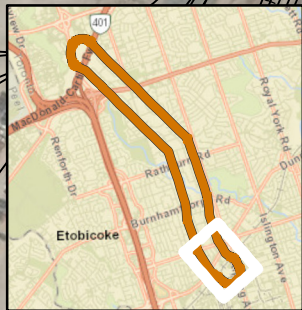
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PROJECT: 18-7554 STATUS: DRAFT DATE: 2023-03-23



Ecological Land Classification	
	CVC_1 - Business Sector
	CVI - Transportation and Utilities (Hydro Right-of-Way)
	CVI - Transportation and Utilities (Unmanaged Hydro Right-of-Way)
	CVI_1 - Transportation
	CVI_4 - Power Generation
	CVR - Residential
	CVR_2 - High Density Residential
	TAGM5 - Treed Fencerow
	THD - Deciduous Thicket
	THDM2-6 - Buckthorn Deciduous Shrub Thicket



HYDRO ONE NETWORKS INC.
ETOBICOKE GREENWAY

- Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line
- Existing Energized 230 kV Transmission Lines
- Project Study Area (250m)

- Breeding Bird Survey Location
- Railway

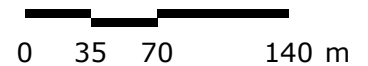
ECOLOGICAL LAND CLASSIFICATION

FIGURE 4-9



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PROJECT: 18-7554 STATUS: DRAFT DATE: 2023-03-23

Valleylands

Valleylands are natural areas that occur in a valley or other landform depression in which water flows or stands for part of the year (PPS, 2020). Significant valleylands are valleylands that are “*ecologically important in terms of features, functions, representation or amount, and contributing to the quality and diversity of an identifiable geographic area or natural heritage system*” (MNR, 2010). Valleylands were not identified in the study area. Mimico Creek and the unnamed drain do not have distinct valleylands associated with them; they flow through the ROW with a bank height of up to 2.2 m high (Mimico Creek).

Areas of Natural and Scientific Interest

Areas of natural and scientific interest (ANSI) are designated by the Ministry of Natural Resources and Forestry (MNR) based on the presence of unique natural landscapes or existing features that meet specific criteria as having life or earth science values related to protection, scientific study, or education. No ANSIs were identified within the study area.

Tree Inventory

A tree inventory was also completed within the study area in 2018 (see **Appendix E2**). Hydro One updated the forestry data based on field work conducted during the summer of 2022. It is noted that Hydro One conducts maintenance in all its corridors and some tree removals may have taken place since the 2018 inventory was completed, or differences in classification of vegetation for maintenance and operational purposes may cause specific vegetation assessments to vary.

Aquatic Habitat

Mimico Creek flows east across the hydro corridor ROW and contains sand dominated substrate that included dispersed boulders, cobble, gravel, and silt substrate. The riparian zone consisted of steep erodible banks that are approximately 2.2 m high. The north bank is wooded, up to a recreational trail and then becomes a maintained lawn. The south bank habitat is unmaintained hydro corridor ROW for the first 1.5 m with sparse riparian trees and then a maintained lawn beyond. Pondweed (*Potamogeton sp.*) and a rush species (*Scirpus sp.*) were observed within Mimico Creek. No fish were observed during the aquatic assessment.

TRCA conducted a systematic assessment of fish habitat within the entirety of the Mimico Creek watershed. The following are the results of this study:

“Lake-based diversity is evident in lower reaches of Mimico Creek with the collection of the following species in and around the mouth (below the first barrier): alewife, American eel (*Anguilla rostrata*), black crappie (*Pomoxis nigromaculatus*), brown bullhead, emerald shiner, freshwater drum (*Aplodinotus grunniens*), gizzard shad (*Dorosoma cepedianum*), lake chub, northern pike (*Esox lucius*), smallmouth bass (*Micropterus dolomieu*), spottail shiner, tessellated darter, trout-perch (*Percopsis omiscomaycus*) and white perch (*Morone americana*). Within the lower half of Mimico Creek, rainbow trout and brown trout (stocked in neighbouring watersheds) have been collected upstream of the first couple of barriers as have migratory white sucker and common shiner. This is evidence that these structures are passable if seasonal water levels are high enough. The further upstream reaches contain native species including: blacknose dace, bluntnose minnow, creek chub, fathead minnow, Johnny darter, largemouth bass, longnose dace, pumpkinseed, rock bass, and common shiner. Invasive species in the system include, goldfish (*Carassius auratus*), round goby (*Neogobius melanostomus*) and common carp. The upper subwatershed and headwaters are populated by the same suite of non-jumping, generalist species and in lower reaches, the only addition is brook stickleback (*Culaea inconstans*) indicative of ponded and temporary waters. Abundance as well as diversity is very low. Species that represented more specialized habitat and/or greater sensitivity have not been collected in the Mimico for many decades (e.g., sand shiner (*Notropis stramineus*) and blackchin shiner (*Notropis heterodon*)” (TRCA 2016).

An unnamed drain located south of Richgrove Drive and north of Willowridge Road was identified and assessed. The drain flows southwest across the hydro corridor ROW and originates from a culvert under an apartment complex to the northeast. It flows under Willowridge Road and through review of aerial imagery, appears to outlet into the channelized section of Mimico Creek, further downstream to the west. The substrate consisted of mostly silt with areas of built-up muck and sparse cobble, gravel, and sand. The drain has been channelized and low flow was observed. Common Reed (*Phragmites australis*) and cattails (*Typha sp.*) were present, growing out of the drain. The riparian area had dense sections of trees/shrubs around the culverts but is manicured lawn throughout the rest of the ROW. No fish were observed during the aquatic assessment.

Wildlife and Wildlife Habitats

Breeding bird surveys were carried out on June 21, 2018 and July 5, 2018. All birds seen or heard during field surveys were recorded. The survey was carried in accordance with the Ontario Breeding Birds Atlas protocol (Cadman et al., 2007) and consisted of ten-minute Point Counts. A

list of birds heard and/or observed is shown in **Appendix E3**, along with their breeding evidence and provincial and federal status. Barn Swallow (*Hirundo rustica*) is a threatened species observed during breeding bird surveys, which is discussed further below.

Species at Risk

The *Endangered Species Act, 2007* (ESA) prohibits the killing, harming, or harassing of species identified as 'endangered' or 'threatened' in the schedules to the Act. General habitat protection is provided by the ESA to all threatened and endangered species. Subsection 10(1)(a) of the ESA states that "No person shall damage or destroy the habitat of a species that is listed on the [Species at Risk in Ontario] SARO List as an endangered or threatened species". Species-specific habitat protection is only afforded to those species for which a habitat regulation has been prepared and passed into law under the ESA.

Based on information retrieved from the NHIC database, the MNRF, and from field surveys, **Appendix E4** provides a list of SAR that have been identified as having the potential to occur in the study area.

The following SAR have potential (or confirmed) habitat within the study area:

- Chimney Swift (*Chaetura pelagica*) is listed as threatened provincially. Chimney Swift was observed incidentally on May 31, 2018, as two flyovers, one over the meadow habitat in the north end of the study area and one over the hydro corridor ROW near the south end of the study area;
- SAR bats, listed as endangered provincially, have the potential to occur within the deciduous forest in the study area; and,
- Butternut is listed as endangered provincially. Seven Butternut or Butternut hybrid trees were observed in the Mimico Creek crossing area within the study area. Two of the seven Butternut were identified to be hybrid specimens based on a field-verification exercise in which scoring is assigned based on various leaves/bark/nut/twig traits. These two specimens scored 4 or greater indicating a hybrid specimen (BN002, BN004). The other specimens scored less than 3 which would generally indicate pure Butternut though due to the age of some specimens (saplings) and location in a highly urban area, the remaining Butternut had samples taken for molecular testing. Three of the other Butternut had hybridity detected through lab analysis, while only two Butternut were determined to be pure specimens through the lab analysis (BN001, BN006). The five hybrids (either in the field-verified or lab tested) have no protection under the ESA. The two pure Butternut

specimens were further assessed for health to see which category would apply. The two specimens had limited or no evidence of the Butternut Canker fungus (*Sirococcus clavigignenti-juglandacearum*) along with full crowns which led to each being designated as Category 2 (retainable) and therefore would require registration under O. Reg. 830/21 of the ESA if these specimens are to be impacted by the activity. The general locations of the Butternut trees are shown on **Figure 4-4** to **Figure 4-8**.

Significant Wildlife Habitat

The presence of significant wildlife habitat (SWH) was assessed according to the Significant Wildlife Habitat Technical Guide (MNR, 2000) and the Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E (MNRF, 2015). Habitat types considered include seasonal concentration areas of animals; rare vegetation communities or specialized habitat for wildlife; habitat for species of conservation concern; and animal movement corridors.

Seasonal Concentration Areas of Animals

Seasonal concentration areas of animals are considered to be areas where large numbers of a species gather together at one time of the year, or where several species congregate on an annual basis, such as: deer yards; amphibian breeding ponds; snake and bat hibernacula; waterfowl staging and moulting areas; raptor nesting habitat; bird nesting colonies; shorebird staging areas; and, passerine migration concentration areas. The deciduous forest around Mimico Creek provides candidate bat maternity colonies. The deciduous forest also provides candidate migratory landbird stopover areas during the spring and fall migration seasons.

Rare Vegetation Communities or Specialized Habitat for Wildlife

Rare vegetation communities are vegetation communities that are considered rare in the province. Generally, communities assigned a provincial conservation rank of S1 to S3 (extremely rare to rare-uncommon) by the NHIC could qualify. The Fresh-Moist Black Walnut Lowland Deciduous Forest (FODM7-4) is identified as a rare vegetation community. This community is located around the Mimico Creek crossing area within the study area. All other natural vegetation communities within the study area are ranked S4 or S5, or common and widespread provincially.

Specialized habitat for wildlife is habitat that provides a critical resource for a group of wildlife. Examples include waterfowl nesting areas, turtle nesting areas and raptor nesting habitat. No specialized habitats for wildlife were identified within the study area.

Habitat for Species of Conservation Concern

The Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E (MNRF, 2015) defines five habitats of species of conservation concern that may be considered significant wildlife habitat:

- Marsh bird breeding habitat;
- Open country bird breeding habitat;
- Shrub/early successional bird breeding habitat;
- Terrestrial crayfish habitat; and,
- Special concern and rare wildlife species habitat.

No habitat for species of conservation concern were identified within the study area.

Animal Movement Corridors

The Significant Wildlife Habitat Technical Guide (MNR, 2000) defines animal movement corridors as elongated, naturally vegetated parts of the landscape used by animals to move from one habitat to another. To qualify as significant wildlife habitat, these corridors need to be a critical link between habitats that are regularly used by wildlife.

The ROW functions as a corridor for animal movement and linkage between natural heritage features (e.g., wetlands or woodlots) on either side of the ROW. It provides the opportunity for wildlife to move freely along or across the ROW and the vegetation provides shelter, protection from predation and food sources. The ROW is in the urban area of the City of Toronto and provides linkage and corridor, mainly between smaller natural environment features; however, the ROW is intersected by numerous major roads with extensive traffic, such as Highway 401, Eglinton Avenue West, Rathburn Road, Burnhamthorpe Road, Bloor Street West and Dundas Street West.

5 Project Description

The proposed Project is similar to many other projects completed by Hydro One. Based on the need identified by the IESO on the electrical load forecast for the Toronto area, the IESO requested Hydro One to construct a new 230 kV double circuit transmission line between the Manby TS and Richview TS within Etobicoke. The purpose of the 230 kV double circuit transmission line is to meet increasing electricity demand in and around the City of Toronto.

Refer to **Figure 5-1** for an example of typical transmission structures (i.e., towers) proposed for the Project. The structures shown in these figures are considered preliminary illustrative examples as they subject to the continuation of engineering and design work. The tower height, arm length and other features will differ from location to location depending on engineering constraints.

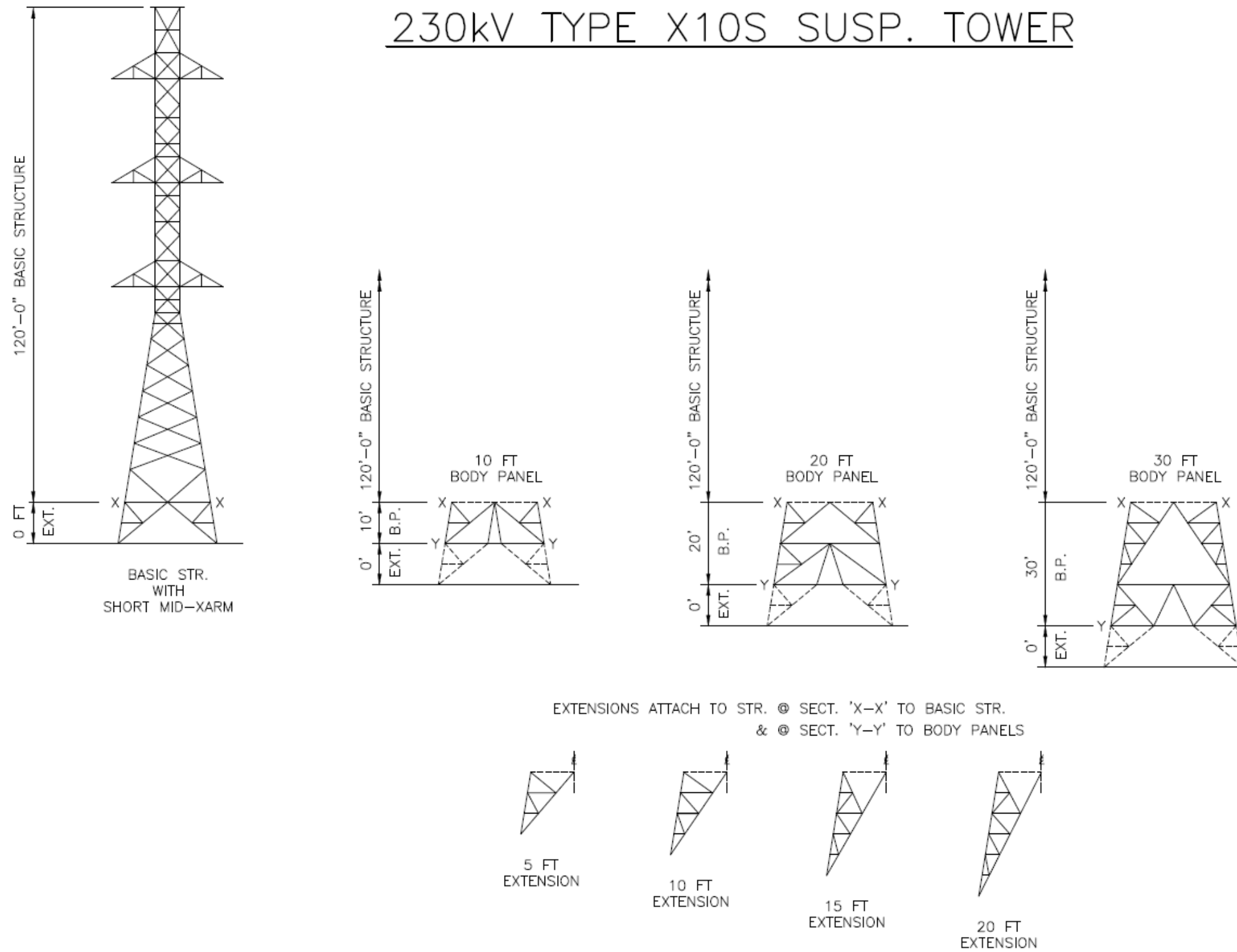
The project will repurpose approximately 6.5 km of an existing non-energized 115 kV transmission line corridor between the same two terminus locations, the Project will involve dismantling and removal of the existing transmission structures, conductor and associated components and equipment along this stretch of the non-energized transmission line.

5.1 Design Phase

Following completion of the Class EA process, detailed engineering and design for the proposed Project will be undertaken. The final design plans will be based on necessary surveys, including a geotechnical survey, and consultation with stakeholders. During the design phase, additional studies, and surveys (e.g., Stage 2 Archaeological Assessment, geotechnical investigations) will be conducted as required. Concurrent with finalization of the design, required permits, licences and approvals will be obtained. Hydro One will also finalize restoration plans in consultation with appropriate stakeholders and the local communities, as necessary.

Hydro One recognizes that a changing climate is likely to result in an increase of unusual weather patterns and severe weather events, which could potentially damage or adversely affect infrastructure and other public facilities. Hydro One is confident that the facilities being planned for this project have been engineered to adequately withstand the effects of climate change throughout the duration of their planned lifespan.

Figure 5-1: 230 kV Type X10S Suspension Tower



5.2 Construction Phase

Construction activities will be guided by Hydro One standards and guidelines as well as project-specific documents; these are to be adhered to by all construction personnel including contractors and sub-contractors. In addition, project-specific Environmental Specifications will be prepared, outlining specific requirements to be followed for the proposed Project.

Prior to construction, a detailed construction plan will be developed. Construction activities will be restricted to designated work areas and protective barriers, such as fencing, will be erected to protect surroundings from construction related effects.

Throughout the construction period, an Environmental Specialist will be available to address unforeseen environmental effects and mitigation requirements. The Environmental Specialist will monitor activities to ensure conformance with the requirements set out in the Environmental Specification.

Should any archaeological finds be uncovered during construction, work will stop immediately pending assessment by the Project archaeologist and further consultation with the MCM– Heritage Program Unit, as well as the appropriate Indigenous Communities.

Upon completion of construction, clean up and restoration (e.g., seeding, plantings) of areas disturbed by construction will be carried out as required. Documents covering ongoing commitments, including monitoring and notification requirements will be prepared, and operation and maintenance staff will be briefed, as necessary.

Construction of the new 230 kV transmission line will involve the following activities:

- Site preparation including clearing, demolition, and removal of existing structures (including dismantling and removal of existing non-energized transmission line structures, conductors, and associated equipment) as required, and grading;
- Installation of temporary access roads and work areas;
- Installation of foundations at the new structure locations;
- Assembly and construction of the transmission structures;
- Stringing new transmission conductors (wires) on the structures and installation of associated equipment; and,
- Clean up and site restoration.

Temporary facilities for the purpose of the proposed Project may include equipment staging areas and temporary stockpile areas, temporary rider poles or similar protective measures required during conductor stringing, and temporary structures near the transmission stations. Temporary facilities will be required prior to, and during, the construction period. The location of the temporary facilities will be determined by the project team and their contractor(s) during detail design/construction planning.

5.3 Maintenance, Operation and Retirement Phases

The proposed Project is planned to be in service by 2026. The new transmission line would undergo regular maintenance in adherence to Hydro One’s maintenance standards and regulatory requirements to maintain a safe and reliable electricity transmission system.

When transmission facilities become obsolete or unserviceable and/or deemed to be at end-of-life, the equipment is retired from service. Transmission facilities that are retired from service are often left in place (idle) for potential future use. The facilities may eventually be removed and the site made suitable for other purposes. The foundations are typically cut back to 1.0 mbgs when transmission structures are removed.

If a station site is suspected to be environmentally contaminated, the decommissioning of facilities will follow the guidance provided by O. Reg. 153/04 of the Environmental Protection Act (EPA).

5.4 Project Schedule

The anticipated schedule for the proposed Project activities is provide below in **Table 5-1**. This schedule shows key steps remaining in the Class EA process and subsequent anticipated timing of the start of construction.

Table 5-1: Project Schedule

Activity	Period
Draft ESR released for 45-day public review and comment period	March 30, 2023
Comment integration and response	From May 15, 2023
Filing of final ESR and Class EA Statement of Completion with the MECP	May/June 2023
Submission of Section 92 application to the Ontario Energy Board	Summer 2023

Etobicoke Greenway Transmission Line Class Environmental Assessment

Richview TS x Manby TS Line Rebuild Project

Draft Environmental Study Report

Activity	Period
Ontario Energy Board Section 92 Approval	Winter 2023
Construction Start	Late 2023/Early 2024
Planned in-service date	Spring 2026

6 Potential Environmental Effects and Mitigation Measures

This section describes the potential environmental effects and mitigation measures associated with both the short-term (construction) and long-term (operation/maintenance) activities of the proposed Project. The assessment of potential environmental effects of the Project considers the baseline information collected on the study area's environmental features presented in **Section 4**.

The potential environmental effects resulting from the construction and operation/maintenance of the proposed Project are similar to other projects undertaken by Hydro One and are well understood by the project team. Hydro One has a strong track record of environmental compliance and stewardship and is committed to the completion of comprehensive environmental and social analysis and mitigation of potential effects.

The selection of mitigation measures is based on the following seven guiding principles:

- Avoidance of sensitive areas, where practical;
- Avoidance of watercourse crossings, where feasible, by use of an existing nearby crossing, access to structures from either side of the watercourse, or use of off-corridor access;
- Appropriate timing of construction activities, where feasible, to avoid sensitive time periods, such as fish spawning and egg incubation periods, or migratory bird nesting periods;
- Proactive communication with area residents, property owners and businesses on the proposed Project timelines and construction areas;
- Proactive communication with Indigenous Communities, government agencies, stakeholders, and interest groups regarding the proposed Project;
- Implementation of conventional, proven mitigation measures during construction consistent with the criteria set out in Appendix E of the Class EA (Hydro One, 2022), and in accordance with applicable legislative requirements; and,
- Development of environmental enhancement or compensation measures to offset the unavoidable effects of construction and operation where such effects exist and where practical.

Based on the Project design and implementation of the proposed mitigation measures, no "significant" adverse net effects (e.g., effects following the implementation of mitigation) are anticipated. The following subsections detail the effects assessment and identify avoidance, mitigation and/or compensation commitments required for the proposed project.

6.1 Agriculture

As indicated in **Section 4.1**, there is no potential for the proposed Project to affect agricultural resources; therefore, no potential effects have been identified for the proposed Project.

6.2 Forestry Resources

As indicated in **Section 4.2**, there is no potential for the proposed Project to affect forestry resources; therefore, no potential effects have been identified for the proposed Project.

6.3 Cultural Heritage Resources

6.3.1 Archaeological Resources

As noted in **Section 4.3.1**, a Stage 1 Archaeology Assessment was completed by ASI (2020). The Stage 1 Archaeological Assessment determined that the study area contains lands with potential to support archaeological resources. A Stage 2 Archaeological Assessment is required for all lands exhibiting archaeological potential that have not been previously assessed. Prior to construction, a Stage 2 Archaeological Assessment will be completed within the identified areas of archaeological potential in the transmission line corridor in accordance with MCM requirements. Hydro One will invite interested Indigenous Communities to provide monitors on-site and review reports. Copies of all Archaeological Assessment reports will be filed for acceptance with MCM prior to construction.

In the event that any artifacts or remains are discovered, all Indigenous Communities that have an interest in the Project and/or location will be immediately contacted so that, if resources or remains are Indigenous in origin, protocols for handling such resources can be established immediately with the Indigenous Nation prior to disturbance or removal of such from the property.

Please refer to **Appendix D1** for the Archeological Stage 1 report.

6.3.2 Cultural Heritage Resources

As stated in **Section 4.3.2**, there are three addresses within the study area that were identified as listed properties – 289, 261 and 215 Burnhamthorpe Road. These are listed under the City's Heritage Register, but have not been designated as heritage. Therefore, construction and operation of the transmission line will not impact any designated cultural heritage resources. Please refer to **Appendix D2** for the Cultural Heritage Resource checklist.

6.4 Land Use and Communities

As indicated in **Section 4.4**, the study area is an urban area with primarily residential uses surrounding the corridor along with institutional, commercial, and industrial uses in some locations.

Construction activities have the potential to create temporary, localized effects in terms of air quality and noise that could be experienced by residents, business owners, and employees in the immediate vicinity of the project. In addition, the project will result in a series of towers that are higher than the current non-energized towers resulting in a change in view.

6.4.1 Local Residents and Businesses

Construction will occur strictly within the corridor and along access points to the corridor. No Project activities are required in lands designated as existing employment areas, neighborhoods, and apartment neighborhoods, parks/open space, and mixed-use areas throughout the hydro corridor study area. Tree removal and the construction of new towers, which includes the creation of access roads and construction laydown areas, does have the potential for disruption to the informal access to and use of the corridor by local residents. Ongoing operation of the transmission line may include periodic maintenance of transmission assets, the corridor and tree trimming or removal.

To minimize disruptions and/or impacts on the local community, contact will be maintained with commercial, agency and residential property owners during and prior to construction. Business access will be maintained at all times during construction, and in instances where access cannot be maintained, arrangements will be made for alternate access prior to construction activities starting and appropriate road signage will be provided. Construction will be within the hydro corridor and access to construction areas will be carefully designed to avoid and minimize adverse effects. Advanced notice will be provided to nearby residences, landowners, and commercial operations, the MTO, TTC, and emergency response services outlining the location of entry/exit points for the construction site, the schedule for construction work, and information on construction related traffic in those areas. Road signage will also be created and installed to reflect this information.

While temporary construction nuisance effects may be experienced the proposed Project is not anticipated to have a long-term net effect on residents and businesses in the area.

6.4.2 Stormwater Management Strategies Along Corridor

To prevent stormwater surface runoff from entering onto neighbouring properties, one or more LID stormwater management practices may be implemented along the Hydro One corridor. Each strategy will depend on an assessment of the drainage conditions, the existing grade elevations along the property, soil type, and the location and capacity of the nearest municipal storm sewer components.

General drainage strategies that could be employed include constructing a shallow berm along the locations identified as higher flood risk, to divert the surface stormwater. A secondary LID stormwater management practice will be implemented that may include installing underground infiltration trenches, soakaway pits, infiltrations chambers, or a combination of these along the outside of the property fence line identified within the Hydro One corridor. The function of the LID is to collect the diverted surface stormwater runoff from the new shallow berm into the native soil or municipal storm sewer. Next steps of the design phase include collecting appropriate data such as topographic survey and City of Toronto storm sewer engineering drawings. More information regarding LID practices can be found on the TRCA website found here:

<https://trca.ca/conservation/restoration/low-impact-development/>

With the implementation of the mitigation measures described above, will assist in managing stormwater and and no long-term negative net effects are anticipated.

6.4.3 Construction Health and Safety

Safety is of the utmost importance at Hydro One both at the workplace and for the public. Construction sites pose a potential safety hazard to the public and workers, if not properly controlled. Hydro One mitigates safety hazards by implementing safety measures in accordance with its corporate policy and Ministry of Labour requirements during construction. This includes ensuring that the proposed Project is executed in accordance with all applicable codes and regulations.

To minimize the effects of construction on public safety, a wide range of safety measures will be implemented, as appropriate. They may include the following:

- Adding signage; fencing and locking construction laydown areas;
- Installing additional lighting in construction laydown and equipment storage areas; carefully selecting construction laydown areas;
- Providing advance notice to nearby residences;

- Holding a pre-construction Open House to inform the public, residents and businesses of proposed Project activities and schedules prior to construction; and,
- Providing alternate road and/or pedestrian access, where necessary.

With the implementation of the above mitigation measures a safe work environment will be maintained and no negative net effects are anticipated.

6.4.4 Electric and Magnetic Fields (EMF)

Electric and magnetic fields (EMF) are physical and invisible fields produced by electrically charged objects, such as electrical equipment, power cords, and wires that carry electricity.

Hydro One is committed to maintaining safe EMF exposure levels for all of their assets and facilities. Potential EMF levels are taken into consideration during the design of any new assets. This commitment ensures that Hydro One employees maintaining assets and facilities, as well as members of the public in the vicinity of these assets and facilities are not exposed to elevated EMF levels.

Hydro One looks to the scientific expertise of organizations such as Health Canada and the World Health Organization to assess the scientific studies and provide advice and guidance. Health Canada monitors scientific research on EMF and human health as part of its mission to help Canadians maintain and improve their health. Health Canada's conclusion about EMF is that there is no conclusive evidence of any harm caused by exposures at levels found in Canadian homes and schools, including those located just outside the boundaries of power line corridors.

Hydro One has completed modeling which confirmed that once the line is energized the fields produced will remain within a safe level identified by these health agencies.

6.4.5 Grounding and Electrification

Grounding and electrification of the transmission line in operation will be assessed based on Hydro One and regulatory safety standards and guidelines. Grounding concerns and mitigations will be identified as part of the detailed engineering phase of the Project.

Grounding assessments will identify any potential concerns with adjacent land uses and standard design, engineering and technical controls will be employed. With appropriate controls, no significant effects are predicted.

6.4.6 Mud and Construction Debris

Construction activities may result in the accumulation of mud and construction debris on, and adjacent to, local roads in construction areas. These effects have the potential to migrate to areas outside of the construction zone.

Construction will be completed with general clean site policies enforced requiring pick-up and disposal of refuse and construction waste on a regular basis. Mud related to construction activities will be removed from local roads and access roads as necessary throughout construction. Mud mats will be installed (as needed) as a mechanism to reduce the transport of debris off-site. Vehicles and equipment will be washed and maintained at work areas as necessary. Formal cleanup and site restoration (e.g., restoration planting and seeding) will further minimize this potential effect as construction progresses and is completed.

Hydro One maintains a waste management network for construction waste, debris, and other by-products of construction. Debris and waste will be disposed of in accordance with local regulations.

With the implementation of the mitigation measures described above, mud and construction debris generated by the proposed Project is not anticipated to have a long-term net effect.

6.4.7 Transportation

Effective transportation infrastructure is an integral component to effectively move within the City.

Construction activities have potential to cause temporary disruption to Provincial highway traffic and to local traffic on municipal roads during construction phases of the proposed Project. Specifically, stringing of conductors across road and highways may require temporary road closures, rolling closures and/or detours. Hydro One will work with MTO to develop a traffic mitigation plan to obtain relevant approvals and address potential impacts to provincial highways during construction and stringing of the conductors.

The presence of heavy equipment may also increase traffic and loads which may result in localized wear and tear on lower order roadways. Effects to road and highway traffic and roadways are expected to be minimal and temporary in nature.

Temporary effects to roads and traffic are largely unavoidable. The following will be put in place to mitigate potential road and traffic impacts from construction activities:

- Hydro One will work with the City of Toronto to address concerns with roads and traffic. Hydro One will complete a pre- and post-construction road survey to document impacts to local roads caused by heavy equipment and increased construction traffic during construction activities. Damage caused as a direct result of construction activities associated with the Project will be repaired upon completion of construction activities;
- Where required, a Traffic Control Plan will be developed and shared with local municipalities, as necessary;
- Construction haul routes and schedules will be shared with City staff in advance of construction, as necessary;
- Construction traffic will access the construction area from the existing road network at specified construction access/egress locations;
- Common parking areas will be established for construction crews;
- To the extent practical, to avoid road closures and other disruptions during stringing, conductor stringing will utilize rider poles, boom-tipped riders, or other protective measures;
- If temporary road or highway closures (e.g., rolling closures) are required during stringing or other construction activities, the construction contractor will coordinate closely with the appropriate road authority to ensure that proper notice is provided and that required signage and traffic controls are utilized, and that the duration of any temporary closures will be minimized to the extent practical;
- Local advertisements and/or notices will be issued and road signage will be erected to provide notification/pre-construction information to area residents on timelines and construction routes, and potential detours, if required; and,
- Traffic control officers or flag persons will be assigned to assist with construction entry/exit, as necessary.

With the implementation of the mitigation measures described above, the proposed Project is not anticipated to have a long-term net effect on local roads and traffic.

6.4.8 Transit

No impacts to existing transit services are anticipated. Depending on the timing of construction, there is some potential that it could correspond with construction on Eglinton Avenue for the Eglinton Crosstown West Extension. At times, there may be portions of existing transit station parking near Kipling Station that may be temporarily suspended during construction activities. Hydro One will engage with transit authorities such as Metrolinx and TTC into the detailed design

and construction phases of the proposed Project to provide project information and notices about potential impacts to transit infrastructure.

6.4.9 Noise and Vibration

Construction and maintenance activities have the potential to affect ambient noise levels. These effects, in turn, may create temporary nuisance or disturbance effects for residents, land users and wildlife.

All work is expected to be completed using common transmission line construction methods. Tower construction will use caissons, helical piles and micro piles which will reduce the construction noise. Noise associated with construction would most likely be a result of activities such as general site grading, foundations work, and construction traffic. Each of the activities require the use of various pieces of heavy equipment, such as bulldozers, front-end loaders, small trucks, backhoes, bobcats, dump trucks, compactors, concrete trucks, and/or cranes. The movement of delivery and worker vehicles will also add to the noise levels during the construction period.

It is not anticipated that construction would result in any vibration beyond the limited vibration that might be associated with the typical construction equipment noted above. If any vibration occurs, it is expected to occur only during specific activities, and be limited to the immediate vicinity of the construction work area.

Noise effects are anticipated to be short-term, temporary, and transient during the construction period. Indirect noise disturbance effects on wildlife during construction can include temporary declines in habitat occupancy, as well as changes to mobility and feeding habitat patterns. Equipment and machinery used on site will be maintained in good working condition. Construction activities will conform to City of Toronto noise control by-laws (Toronto Municipal Code Ch 591, Noise). The by-law provides a breakdown of noise regulations by the type of noise. The Project would fall under *591-2.3. Construction* which states:

"No person shall emit or cause or permit the emission of sound resulting from any operation of construction equipment or any construction that is clearly audible at a point of reception:

- (1) from 7 p.m. to 7 a.m. the next day, except until 9 a.m. on Saturdays; and,*
- (2) all day on Sundays and statutory holidays."*

Noise by-law exemptions will be sought if work is required outside of the hours specified in the by-laws (e.g., overnight).

Noise sources from maintenance activities after construction would be variable, are expected to be limited to a short duration, and would occur periodically over the life of the proposed Project. With exception of periodic maintenance activities (e.g., inspection from ground-based vehicles and vegetation maintenance), no additional noise or vibration sources are expected during maintenance and operation of the proposed Project. Therefore, no additional mitigation is required during the maintenance and operation of the proposed project.

With the implementation of the mitigation measures described above, noise sources and vibration levels generated by the proposed Project are not anticipated to have a long-term net effect.

6.4.10 Real Estate

Property notifications regarding real estate concerns have been submitted to individual residents. These real estate matters will be further refined throughout the overall Project lifecycle to ensure the safe and reliable construction, operation, and maintenance of the transmission line. Hydro One will conduct discussions with residents to identify potential issues and resolutions in situations where there is potential encroachments on the corridor. This proactive approach to maintain the safety and reliability of the transmission corridor will result in no significant net effects.

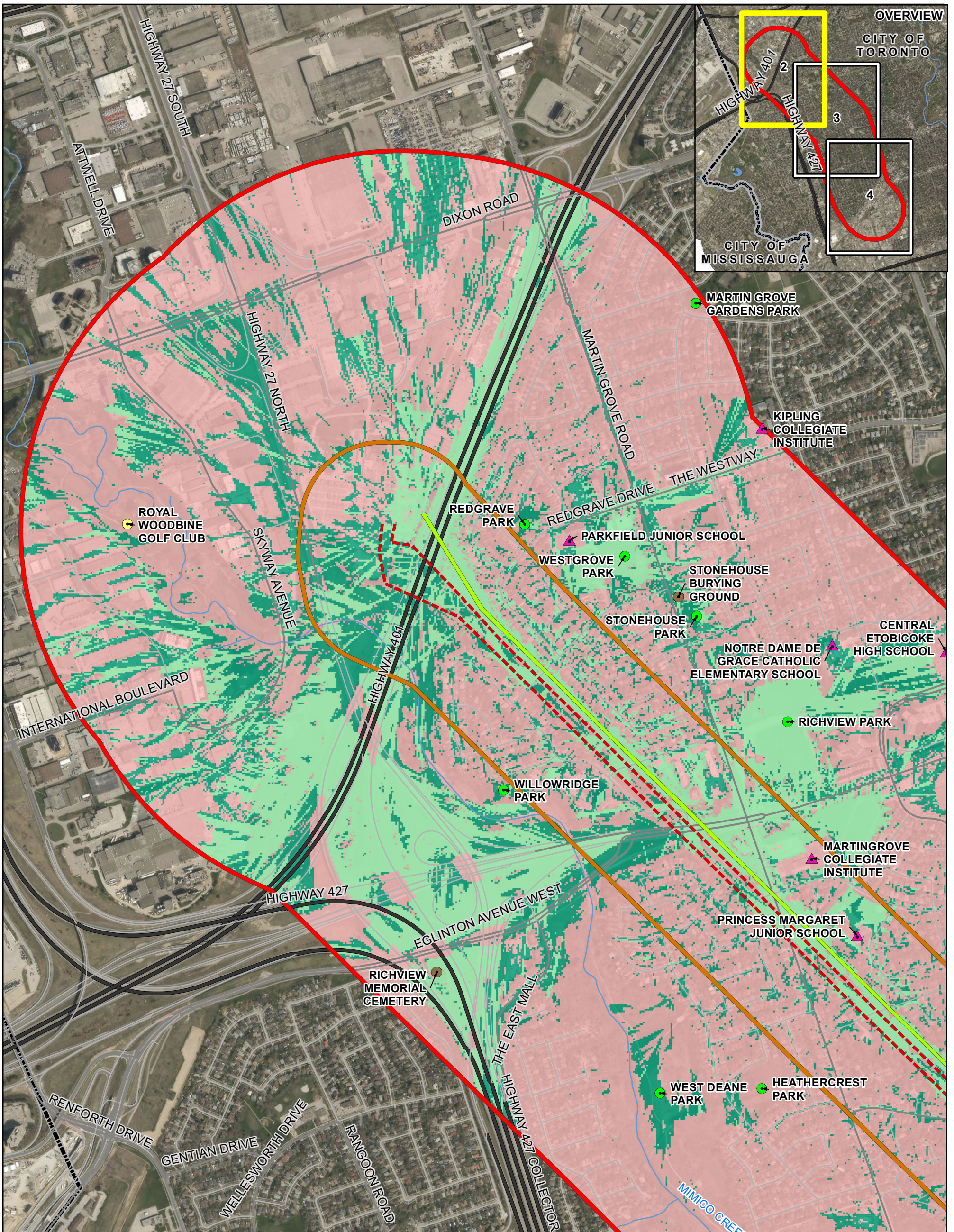
6.5 Visual and Aesthetic Resources

The potential effects of the Project on the visual environment are assessed by generating visibility mapping to identify areas of land that have views within a 1 km visual study area. This approach uses GIS 3D analysis (ArcGIS Spatial Analyst) to build a viewshed of the proposed Project, considering tower locations and a 3D model that represents surface features that may obstruct the visibility of the Project, such as buildings and tree canopies.

The results of the analysis yield a precise dataset, which is utilized to establish the visual context of the study area and identify any potential visual changes caused by the Project. These findings are presented as visibility maps shown in **Figure 6-1 to Figure 6-3**. These figures show an increase in visibility from the proposed towers to the surrounding areas. The increased visibility shown on the maps is measured by calculating the difference between the existing 115 kV transmission line and the new 230 kV transmission line based on an average observer height of 1.5 m. The proposed towers are set to the most recent digital surface and terrain data (LiDAR) from the Government of Ontario (2015) which enables accurate measurement of surface features

that may block or obstruct visibility of the towers, such as tree canopy and high-rise buildings. It is important to note that some areas may have been built up since the capture of that data.

Visibility of the new 230 kV transmission line is greater because of the increased tower heights. New towers generally range from 135 to 160 feet, with two towers up to 180 feet to preserve dense mature vegetation.



HYDRO ONE NETWORKS INC.
ETOBICOKE GREENWAY
 Visual Impact Assessment

- Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line
- Existing Energized 230 kV Transmission Lines
- Project Study Area (250 m)

- Potential Sensitive Receptors**
- Cemetery
 - Golf Club
 - Park
 - School

- Visibility Current 115 kV Transmission Line
- Visibility New 230 kV Transmission Line
- No Visibility
- Base Data**
- Highway
- Major Road
- Local Road
- Watercourse

VISIBILITY MAPPING
 FIGURE 6-1

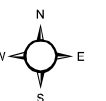


MAP DRAWING INFORMATION:
 DATA PROVIDED BY MNR, HYDRO ONE NETWORKS,
 CITY OF TORONTO

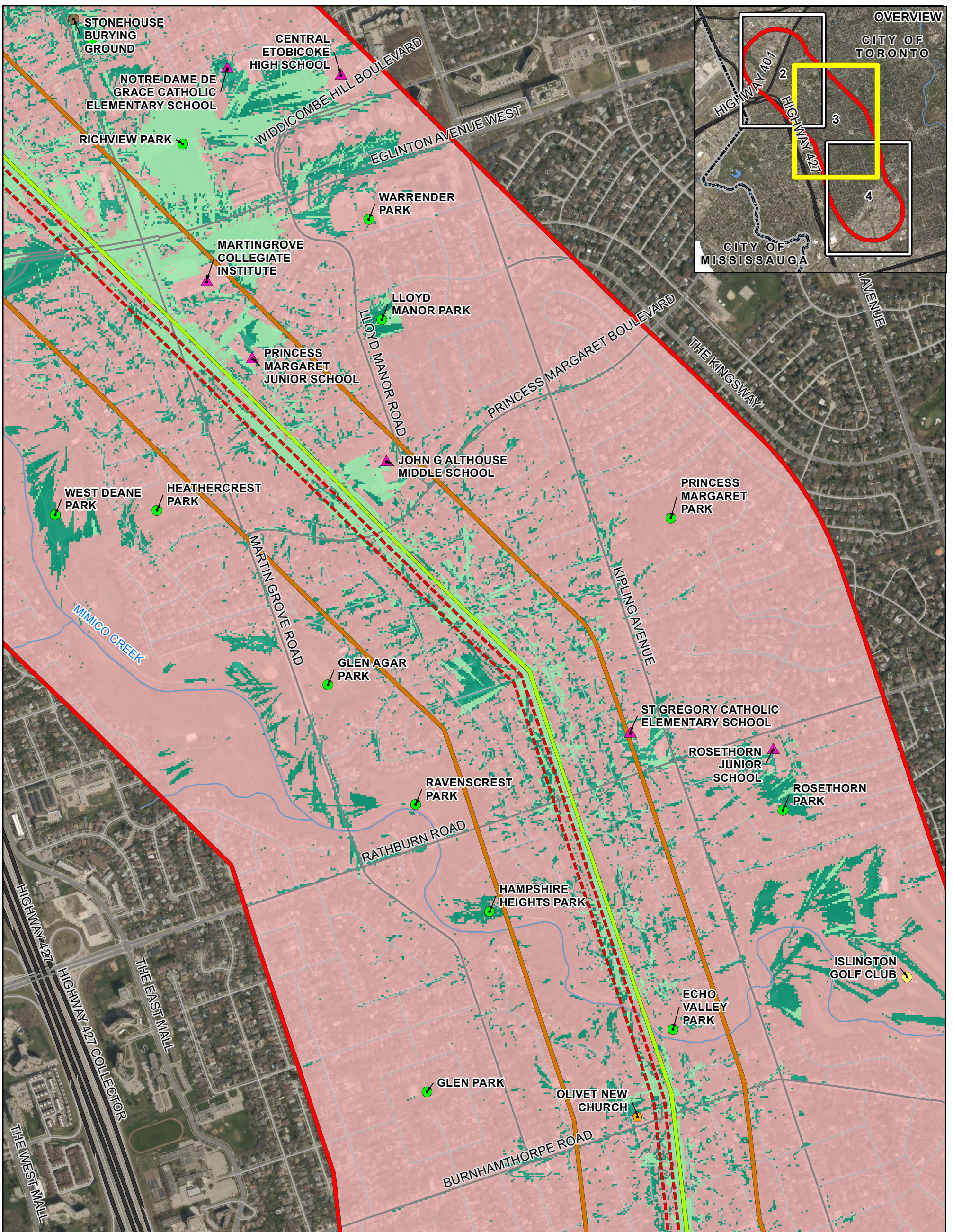
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 MAP CHECKED BY: -
 MAP PROJECTION: NAD 1983 CSRS UTM Zone 17N

SCALE 1:11,000

0 100 200 400 m



PROJECT: 18-7554 STATUS: DRAFT DATE: 2023-03-17



HYDRO ONE NETWORKS INC.
ETOBICOKE GREENWAY
 Visual Impact Assessment

- Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line
- Existing Energized 230 kV Transmission Lines
- Project Study Area (250 m)

- Potential Sensitive Receptors**
- Cemetery
 - Golf Club
 - Park
 - Place of Worship

- Base Data**
- School
 - Visibility Current 115 kV Transmission Line
 - Visibility New 230 kV Transmission Line
 - No Visibility
 - Highway
 - Major Road
 - Local Road
 - Watercourse

VISIBILITY MAPPING
 FIGURE 6-2

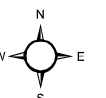


MAP DRAWING INFORMATION:
 DATA PROVIDED BY MNR, HYDRO ONE NETWORKS,
 CITY OF TORONTO

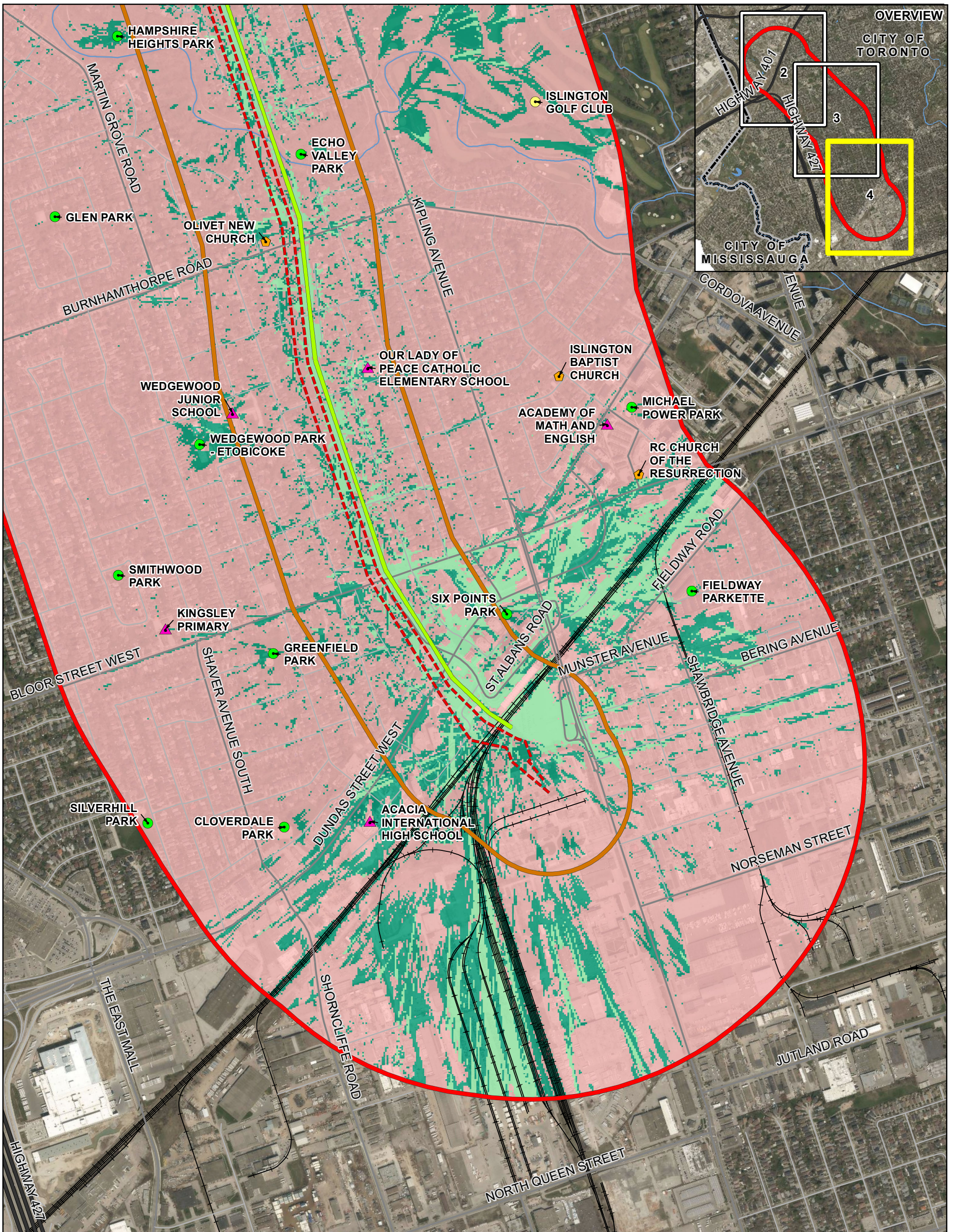
MAP CREATED BY: PAR
 MAP CHECKED BY: -
 MAP PROJECTION: NAD 1983 CSRS UTM Zone 17N

SCALE 1:11,000

0 100 200 400 m



PROJECT: 18-7554 STATUS: DRAFT DATE: 2023-03-17



HYDRO ONE NETWORKS INC.
ETOBICOKE GREENWAY
 Visual Impact Assessment

- Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line
- Existing Energized 230 kV Transmission Lines
- Project Study Area (250 m)

- Visual Study Area (1 km)
- Potential Sensitive Receptors**
- Golf Club
- Park
- Place of Worshp
- School

- Visibility Current 115 kV Transmission Line
- Visibility New 230 kv Transmission Line
- No Visibility
- Base Data**
- Highway
- Major Road
- Local Road
- Railway
- Watercourse

VISIBILITY MAPPING

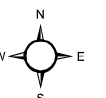
FIGURE 6-3



MAP DRAWING INFORMATION:
 DATA PROVIDED BY MNR, HYDRO ONE NETWORKS,
 CITY OF TORONTO

MAP CREATED BY: PAR
 MAP CHECKED BY: -
 MAP PROJECTION: NAD 1983 CSRS UTM Zone 17N

SCALE 1:11,000



PROJECT: 18-7554 STATUS: DRAFT DATE: 2023-03-17

The greatest visual impact can be seen in areas with less obstruction to the human view, including open areas such as larger roadway openings, commercial-industrial areas and open parks. This includes areas around Manby TS and Richview TS, areas around institutions (e.g., Martingrove Collegiate Institute, Princess Margaret Junior High and John G Althouse Middle School) which have open fields adjacent to the transmission corridor, and around the Eglington Avenue West and Martin Grove Road intersection. For residential areas immediately adjacent to the corridor and for those using the corridor, visibility impact will also increase because of the greater tower heights.

The proposed existing towers will also be larger at the base and in some locations the construction of these towers will result in the removal of existing vegetation within the transmission corridor that previously offered the viewer mitigation at a street level. Residents adjacent to the corridor and those moving within the corridor or along intersecting roads will notice the change in the tower heights demonstrated by these simulations.

While the larger towers will be noticeable for some, they are consistent with the existing use of the corridor. The urban tree canopy will minimize the view of the new towers and the naturalized meadows and pollinator plantings will add visual interest within the corridor. No significant net effects are predicted.

6.6 Mineral Resources

6.6.1 Aggregate Extraction

As discussed in **Section 4.5**, there are no areas within the study area used for the extraction of aggregate; therefore, no potential effects have been identified for the proposed Project.

6.7 Natural Environment Resources

6.7.1 Physical Environment

The existing physical environment is expected to remain as is following the construction of the proposed Project. Therefore, no net effects on the physical environment have been identified for the proposed Project.

6.7.1.1 Physiography and Geology

The existing physiography, topography, and geology is expected to remain as is following the construction of the proposed Project. Therefore, no net effects on the physical environment have been identified for the proposed Project.

6.7.1.2 Spills

During construction and maintenance activities, there is the possibility of spills from the unintentional release of oils and fuels from construction/maintenance vehicles and equipment. There are several mitigation measures to reduce the risk of spills and to minimize the effect in the unlikely event that a spill occurs.

Spill cleanup equipment will be maintained and readily accessible during construction and maintenance activities. Refueling of vehicles and equipment will be completed in designated locations, a minimum of 30 m away from sensitive receptors (e.g., watercourses) while utilizing emergency spill trays. In the event refueling is required outside of designated areas, additional containment or other mitigation and spill prevention measures will be utilized. Fuelling operations will require the operator to always visually observe the fuelling process.

The following are additional mitigation measures that will be put in place as required:

- Areas impacted by a spill will be secured, and unauthorized personnel will be kept out of the affected area until further assessment and/or clean-up is conducted;
- Clean-up and the disposal of contaminated materials will be managed in accordance with provincial regulations and guidelines;
- Fuels, chemicals, lubricants, or other deleterious substances will be stored on level ground in properly contained storage areas; and,
- Only approved aboveground petroleum storage tanks will be used during the construction phase of the Project and will be stored in designated fuelling areas with additional temporary containment measures.

Should a spill occur, the MECP Spills Action Centre (SAC) will be notified of all reportable spills and containment and remediation should occur as soon as possible.

6.7.1.3 Waste Generation

Construction waste will be generated by the proposed Project and will need to be disposed of. The most significant waste produced will be from the decommissioning of existing towers, lines,

and associated components. Other waste produced during the construction period may include non-hazardous wastes (e.g., packaging, spent lubricating cartridges, coffee cups, and hazardous wastes such as pneumatic oils from hydraulic systems, gasoline, and other lubricants/oils). Hydro One maintains a waste management program and disposal sites to assist with the proper disposal of construction wastes. In the case of the use of a contractor, a waste management plan will be set in place following the practices below. If not, Hydro One will follow its own management procedures.

Hazardous waste (solid and liquid) will be transported by MECP licensed waste haulers to MECP registered disposal sites. Good management practices are recommended to prevent spills and contamination during construction as referenced above. Any temporary waste on-site should include the use of secured containers in designated sites away from sensitive areas and removed from the site on an ongoing basis. With respect to concrete wash water, all water from concrete chute washing activities will be contained in leak proof containers or in an approved settling pond off site. Waste produced will be minimized, segregated, and recycled where possible, and testing, handling, storage, transport, and disposal of waste will be completed in accordance with all applicable legislation.

With the implementation of the mitigation measures described above, waste generated by the proposed Project is not anticipated to have a long-term net effect.

6.7.1.4 Excess Materials Management

Project activities have the potential to produce excess materials during construction and maintenance phases. Excess materials can include topsoil and subsoil from excavation or stripping activities. All efforts will be made to reuse soils on-site where practical and feasible; however, excess materials that cannot be managed on-site will be handled in accordance with O. Reg. 406/19.

Soil testing to meet the requirements of O. Reg. 406/19 will be completed, if necessary, during geotechnical investigations prior to or during construction. Any excess soil required to leave the site will be taken to an approved facility licensed to accept excess soil based on its characterization or another off-site location that can demonstrate beneficial reuse. With the implementation of the mitigation measures described above, excess material generated by the proposed Project is not anticipated to have a long-term net effect.

6.7.2 Atmospheric Environment

6.7.2.1 Climate Change

It is important to note that the proposed Project is not a power generation project and its operation would not emit greenhouse gases. However, there would be temporary emission of fossil fuels from the vehicles and equipment used during construction and maintenance activities associated with the proposed Project. Idling of construction vehicles and equipment will be kept to a minimum and Global Positioning System (GPS) or other navigational tools will be utilized to optimize routing to reduce fossil fuel emissions. The emissions directly related to the construction and maintenance of this project would be minimal.

As noted previously, Hydro One has governing policies and principles around Climate Change and Sustainability initiatives and is committed to reaching net-zero GHG emissions by 2050, with a goal to achieve 30% GHG emission reductions by 2030. Hydro One has established plans and mitigation targets to reduce the most significant emission sources and achieve annual emission reduction targets. In support of this goal, workplans, budgets and targets to reduce emissions for the major sources of carbon emissions by 2030 have been developed. This includes switching all of the company's vehicles from light-duty gasoline-powered vehicles (sedans and SUVs) to electric vehicles and hybrids by 2030, targeting 50% converted by 2025.

Hydro One recognizes that a changing climate is likely to result in an increase of unusual weather patterns and severe weather events, which could potentially damage or adversely affect infrastructure and other public facilities. The infrastructure being planned for this proposed Project will be engineered to adequately withstand the effects of climate change. The proposed Project is not anticipated to have a long-term net effect on climate change.

6.7.2.2 Air Quality

Construction activities have the potential to create temporary, localized effects on air quality in the immediate vicinity of the proposed Project. Emissions from construction activities are primarily comprised of fugitive dust and combustion products from the movement and operation of construction equipment and vehicles. These emissions, in turn, may create a temporary nuisance or disturbance effect for residents and land users during the construction phase.

During construction, equipment and machinery will be maintained in good working condition to minimize excessive exhaust. Idling of construction vehicles and equipment will be kept to a minimum and GPSs will be installed in vehicles to optimize routing to reduce fossil fuel emissions.

Additional mitigation measures to reduce nuisance effects of dust and air emissions during construction include the following:

- Vehicles will not exceed posted speed limits;
- Vehicular traffic will be minimized in areas of exposed soils;
- Excavation and other construction activities that have the potential to release airborne particulates will be avoided during windy and prolonged dry periods, to the extent practical;
- If excavation or other construction activities with a potential to release airborne particulates must occur during windy conditions, dust controls will be utilized;
- Effective dust suppression techniques, such as on-site watering, will be implemented as necessary. Non-chloride dust suppressants will be used;
- Loose construction materials with the potential to release airborne particulates during transport, installation, or removal will be covered or contained; and,
- Disturbed areas will be restored as soon as practical to minimize duration of soil exposure.

Significant emissions from maintenance activities during operation will be variable, are expected to be short-term in duration, and would occur periodically over the life of the proposed Project. Nuisance effects posed by these temporary activities are expected to be negligible and would not result in noticeable or long-term changes to local air quality. With the implementation of the mitigation measures described above, the proposed Project is not anticipated to have a long-term net effect on air quality.

6.7.3 Surface Water Resources

The existing surface water resources within the study area, Mimico Creek, and the unnamed drain just north of Eglinton Avenue West, will not be greatly affected during construction or maintenance activities. The potential effects of the proposed Project on the quality or quantity of surface water within these features is not a major concern as the proposed towers are not located in proximity to the watercourses. However, there is the potential for minor effects on the quality and quantity of these two surface water features due to site preparation, earthworks, discharge of construction water, and operation of vehicles and equipment.

6.7.3.1 Potential Effects on Surface Water Quantity

Project activities during the construction phase that have the potential to influence surface water quantity conditions in the unnamed drain north of Eglinton Avenue West and Mimico Creek include:

- Site preparation for the new transmission towers, construction of temporary access roads, and temporary laydown areas; and,
- Construction adjacent to the watercourses.

Site preparation, including activities such as removal of vegetation, locates/daylighting of potential existing buried utilities, and construction of temporary access roads would be required in support of transmission tower installation. Vegetation removals during construction have the potential to result in a temporary increase in overland flows. Similarly, vehicle and construction equipment have the potential to create temporary rutting in soils which have the potential to result in localized ponding and/or channelization leading to additional erosion of soils.

To avoid or minimize the potential adverse effects related to vegetation removals and soil rutting on surface water quantity, the following mitigation measures would be implemented:

- Where practical, activities with potential to cause rutting, ponding/channelization or erosion will be planned during stable, frozen and/or dry ground conditions;
- Erosion and Sediment Control (ESC) measures (e.g., erosion blankets/coir mats, silt socks) will be utilized, where necessary;
- Constructed access roads will be monitored to ensure there is no surface ponding to minimize rutting and pooling of water;
- Vegetation removals will be minimized to the extent practical. Compatible vegetation will be retained within riparian areas adjacent to watercourses where safe to do so;
- Machine clearing and grubbing will be restricted near sensitive environmental areas; hand clearing will be required within watercourse banks/riparian areas or in wetlands;
- Where erosion is a concern, exposed soils will be re-vegetated as soon as practical or have other erosion or sedimentation measures applied as necessary;
- Work will be staged to minimize the extent of exposed and disturbed areas at any given time;
- Topsoil will be stockpiled in designated areas away from water features and will utilize containment measures such as erosion and sediment control as appropriate;
- Disturbed areas will be stabilized and restored as soon as practical;
- Equipment operation adjacent to water features will be minimized, where possible;

- Works adjacent or around water feature banks will be conducted during appropriate conditions and times of the year (e.g., dry, or frozen conditions), to the extent practical; and,
- TRCA will be consulted (specifically for ESC measures within regulated areas) during detailed design.

6.7.3.2 Potential Effects on Surface Water Quality

Project construction activities within TRCA regulated lands has the potential to influence surface water quality conditions in nearby aquatic features (e.g., municipal drains, watercourses). This could include the potential for spills and/or organic and sediment loading to the two watercourses identified in the corridor, the discharge of construction water, the use of herbicides, if required, and the potential for water temperature increases in instances where vegetation removal is required adjacent to watercourses.

The following additional mitigation, beyond that noted in sections above, will be implemented to avoid and minimize impacts on surface water quality in TRCA regulated areas:

- Design of the transmission line will avoid or minimize the extent to which transmission towers are located within regulated areas, to the extent practical;
- If necessary, a Permit for Development, Interference with Wetlands and Alternation to Shorelines and Watercourses will be obtained through the TRCA prior to construction;
- Construction work (e.g., tower construction, temporary construction access) within regulated areas will be conducted during stable (frozen/dry) ground conditions, to the extent practical or isolated with appropriate ESC measures and other environmental mitigation measures;
- If herbicides are required they will be used away from surface water; and,
- Construction activities near sensitive features or areas may be suspended during extreme wet weather events.

With the implementation of the mitigation measures described above, and the limited duration of the construction works, site preparation and earthwork activities are not anticipated to have long-term net effects on surface water quality conditions.

6.7.4 Source Water Protection

The proposed Project study area does not fall within a source water protection area. No anticipated long-term net effects on source water areas are anticipated by the proposed Project.

6.7.5 Groundwater Resources

During construction, the potential effects of the proposed Project on groundwater include changes in water quality due to disturbance of pre-existing soil contamination, changes to existing groundwater quality or quantity due to excavation and potential construction dewatering, and changes in groundwater flow regime due to the installation of foundations for transmission line towers. It is not expected that there would be any effects on groundwater during the maintenance and operation phase.

6.7.5.1 Potential Effects on Groundwater Quality

Contaminated soil and groundwater containment and disposal measures would be implemented according to the pertinent regulations, as required.

No changes in groundwater quality are expected from the construction of the proposed Project. However, if changes were to occur, it is anticipated that groundwater quality would return to baseline conditions following the implementation of mitigation measures outlined above. No anticipated long-term net effects on groundwater quality are anticipated by the proposed Project.

6.7.5.2 Potential Effects on Groundwater Quantity

Groundwater base flow (quantity) is seasonally important to nearby waterbodies and natural environment features, including vegetation, fish, and aquatic habitat. Changes in groundwater due to project activities during construction could also affect the amount of groundwater discharged to nearby watercourses and natural environmental features (e.g., vegetation, fish habitat, wetlands).

The effects on groundwater quantity associated with construction of transmission towers are anticipated to be local to the hole or excavation. Foundation excavations would be backfilled in a timely manner. As such, it is predicted that there would be limited to no temporal effects on groundwater levels and quantity because of construction activities.

Effects on groundwater due to dewatering, should it be required, would be ephemeral and have a zone of influence measured in the range of several tens of metres. This effect would be limited to the construction phase only. Should dewatering be required, mitigation will include:

- Discharge of construction water will follow permits and/or approvals from MECP and the City of Toronto as required;
- A construction water management plan will be developed and implemented; and,

- Where practical, opportunities to maximize retention time and reduce surface flow velocities related to discharge will be executed.

Construction is not anticipated to have long-term net effects on ground water quantity.

6.7.6 Natural Heritage Features

As mentioned previously in **Section 4.8.5**, most of the study area consists of successional communities where vegetation has been historically and presently cleared in the ROW. However, the study area also contains significant woodland, wildlife, and SAR habitat, as well as potential fish habitat.

Construction associated with the proposed Project may induce both temporary and permanent disturbance to natural heritage features. Temporary disturbance includes work operations that physically, or visually disrupt wildlife during active construction.

6.7.6.1 Vegetation Removal

To prepare for construction and energization of the line, vegetation trimming, and removal will be required. Hydro One has undertaken significant efforts to reduce vegetation removal where possible by utilizing several unique measures throughout each stage of the work:

- Building taller towers to preserve dense and mature vegetation in and near Echo Valley Park;
- Using narrower arms for the new towers;
- Completing annual assessments of tree health, growth, and maintenance as required;
- Using aerial construction methods, and strategically placing temporary access roads to avoid vegetation; and,
- Installing temporary wood poles near dense vegetation to support installing the new wires.

Application of herbicides to control noxious weeds in some areas may be utilized as part of an integrated vegetation management program. Should herbicides be employed the applicators shall follow all regulatory requirements to mitigate impacts to adjacent areas and sensitive receptors. Effects from vegetation removal include reduction in the number of urban trees and the associated habitat, and change in views for some residents.

Figure 6-4 to **Figure** shows the areas where tree removal/trimming will be required for the proposed Project.

Construction activities would be restricted to designated work areas. Prior to construction, a detailed construction plan would be developed and the City of Toronto and the TRCA would be consulted for work in municipal and regulated areas.

Temporary construction access (e.g., access mats or geotextile and gravel) and temporary laydown areas will be removed upon completion of construction. These areas will be restored post-construction.

In addition to mitigation noted above, the following are mitigation measures to reduce the proposed projects impact on vegetation:

- Minimize the extent of vegetation clearing required for the Project by employing innovative engineering and forestry solutions;
- Tree removals and other vegetation clearing will be completed outside of the migratory bird breeding season (i.e., April 1 through August 31) and the bat active season (i.e., April 1 through September 30), where practical; and,
- Where vegetation clearing is required during the breeding bird or bat season, nest searches or bat surveys will be conducted by a qualified person in accordance with applicable provincial and federal requirements.

Although vegetation will be removed, given the efforts to minimize the extent of vegetation removal and the mitigation noted, the proposed Project is not anticipated to have a long-term net effect on the natural habitat in the corridor.



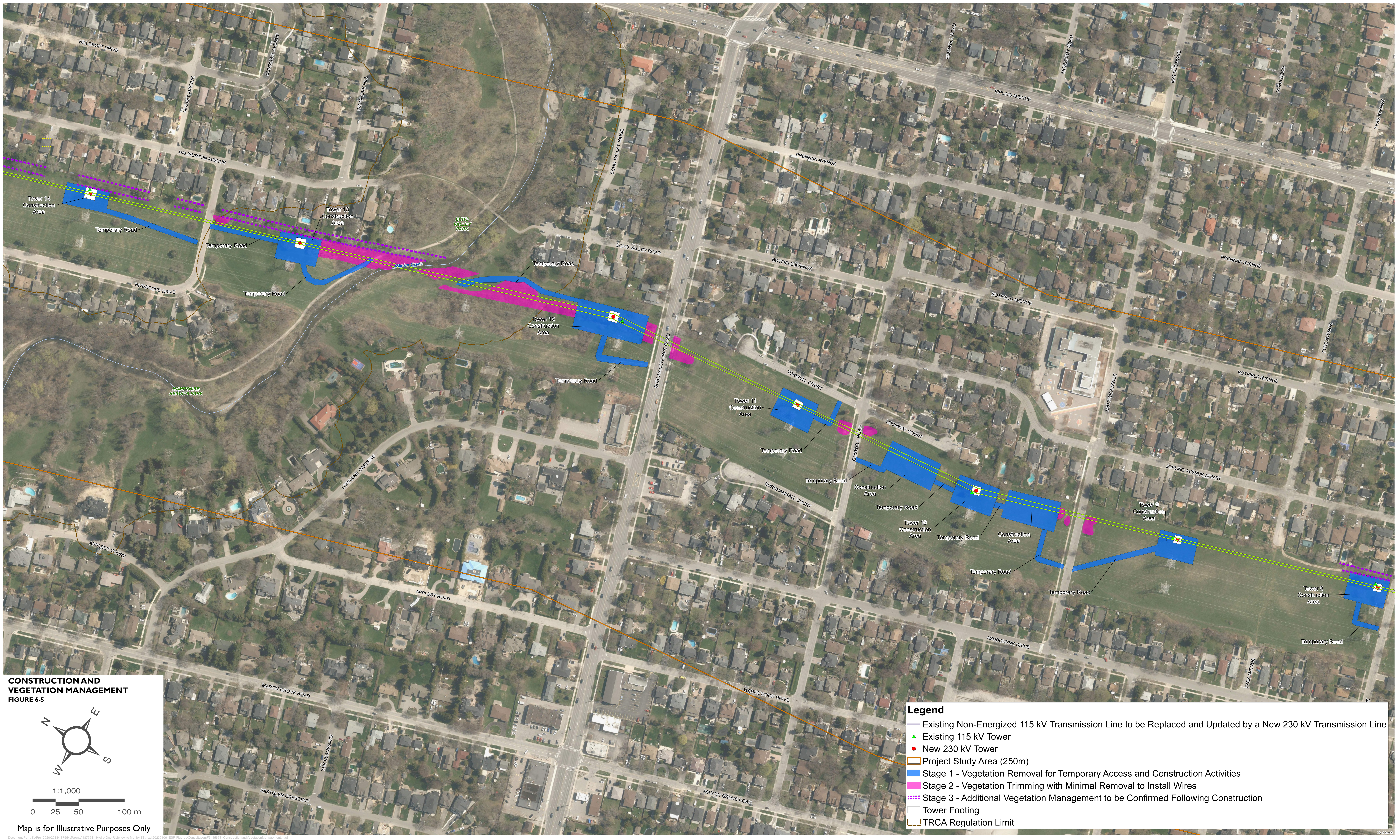
CONSTRUCTION AND VEGETATION MANAGEMENT
FIGURE 6-4

1:1,000

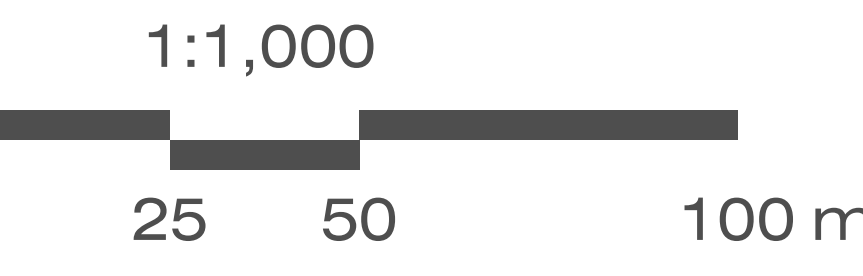
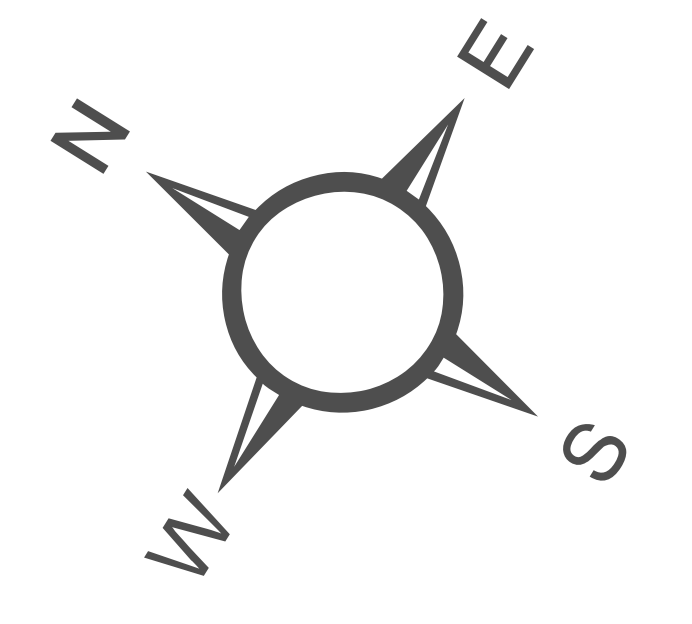
Map is for Illustrative Purposes Only

Legend

- Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line
- ▲ Existing 115 kV Tower
- New 230 kV Tower
- Project Study Area (250m)
- Stage 1 - Vegetation Removal for Temporary Access and Construction Activities
- Stage 2 - Vegetation Trimming with Minimal Removal to Install Wires
- Stage 3 - Additional Vegetation Management to be Confirmed Following Construction
- Tower Footing
- Own Track



CONSTRUCTION AND VEGETATION MANAGEMENT
FIGURE 6-5

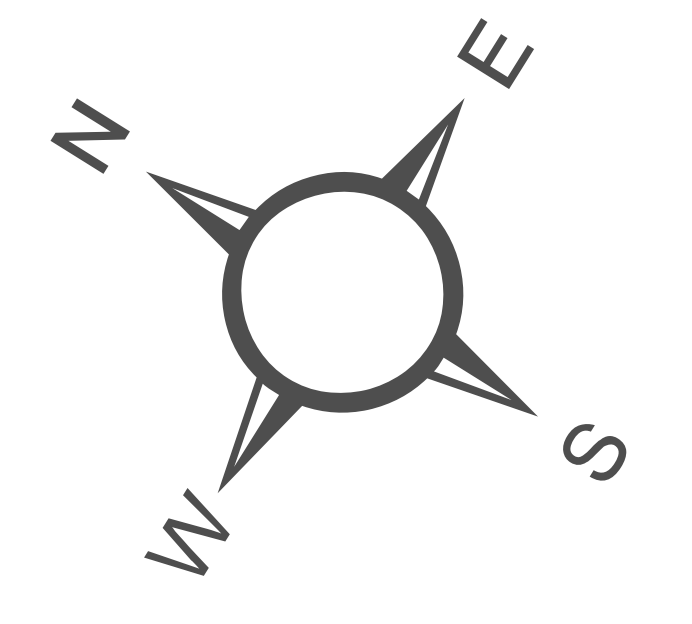


Map is for Illustrative Purposes Only

- Legend**
- Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line
 - ▲ Existing 115 kV Tower
 - New 230 kV Tower
 - Project Study Area (250m)
 - Stage 1 - Vegetation Removal for Temporary Access and Construction Activities
 - Stage 2 - Vegetation Trimming with Minimal Removal to Install Wires
 - Stage 3 - Additional Vegetation Management to be Confirmed Following Construction
 - Tower Footing
 - TRCA Regulation Limit



CONSTRUCTION AND VEGETATION MANAGEMENT
FIGURE 6-6



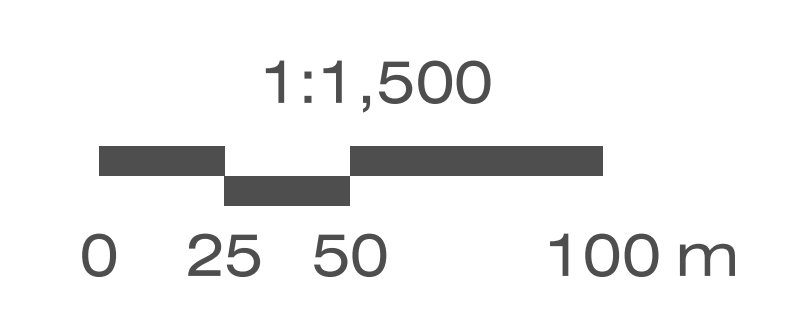
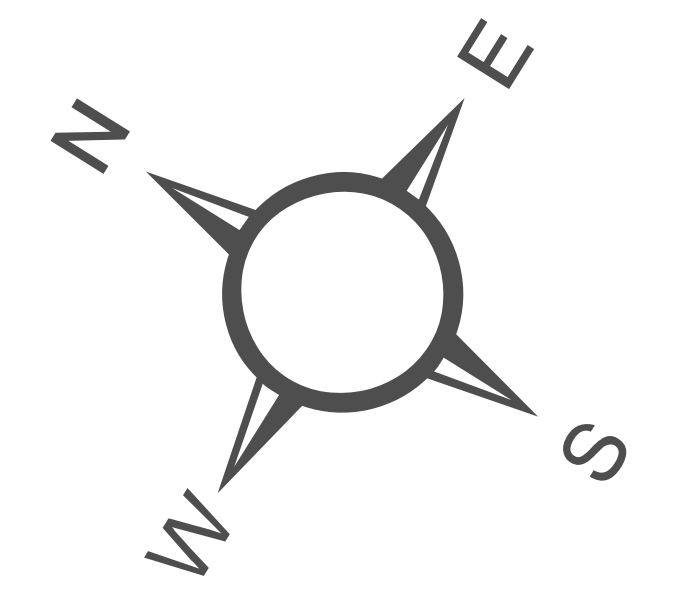
1:1,250
 0 25 50 100 m

Map is for Illustrative Purposes Only

- Legend**
- Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line
 - ▲ Existing 115 kV Tower
 - New 230 kV Tower
 - Project Study Area (250m)
 - Stage 1 - Vegetation Removal for Temporary Access and Construction Activities
 - Stage 2 - Vegetation Trimming with Minimal Removal to Install Wires
 - Stage 3 - Additional Vegetation Management to be Confirmed Following Construction
 - Tower Footing
 - TRCA Regulation Limit

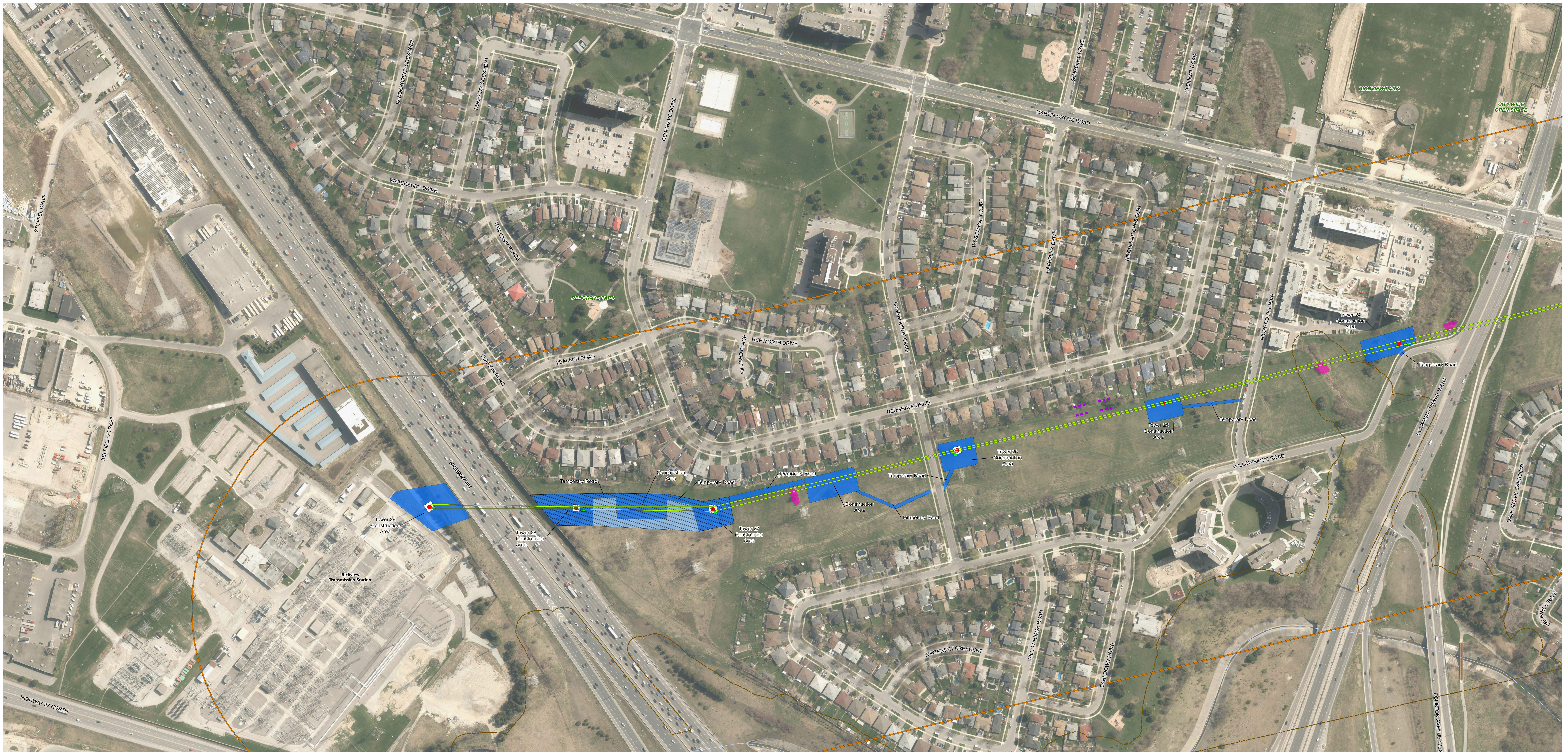


CONSTRUCTION AND VEGETATION MANAGEMENT
FIGURE 6-7

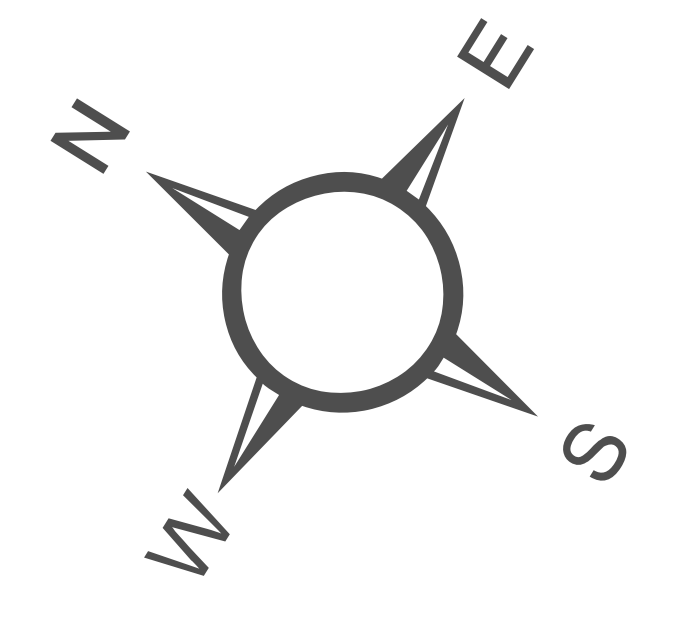


Map is for Illustrative Purposes Only

- Legend**
- Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line
 - Existing 115 kV Tower
 - New 230 kV Tower
 - Project Study Area (250m)
 - Stage 1 - Vegetation Removal for Temporary Access and Construction Activities
 - Stage 2 - Vegetation Trimming with Minimal Removal to Install Wires
 - Stage 3 - Additional Vegetation Management to be Confirmed Following Construction
 - Tower Footing
 - TRCA Regulation Limit



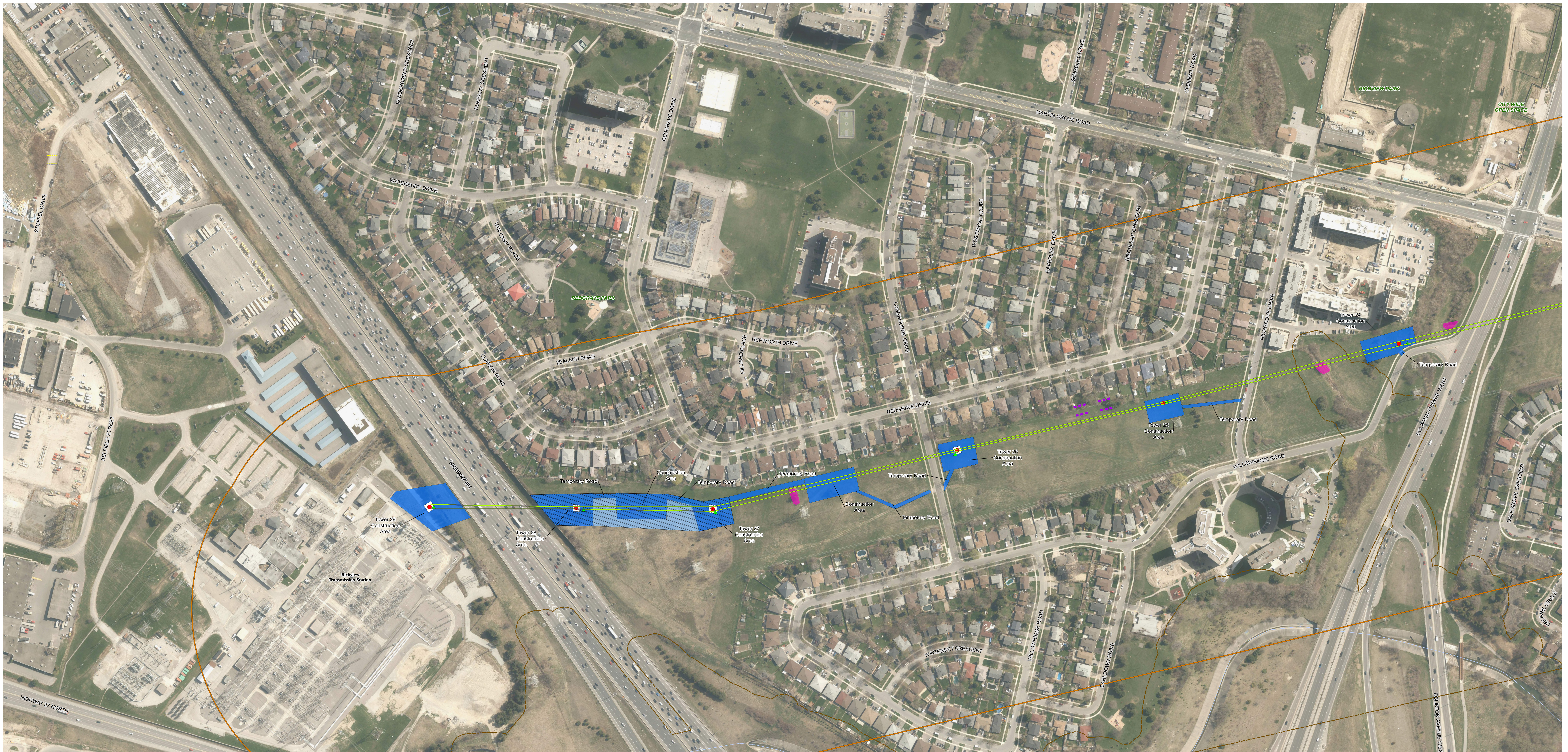
CONSTRUCTION AND VEGETATION MANAGEMENT
FIGURE 6-8



1:1,250
 0 25 50 100 m

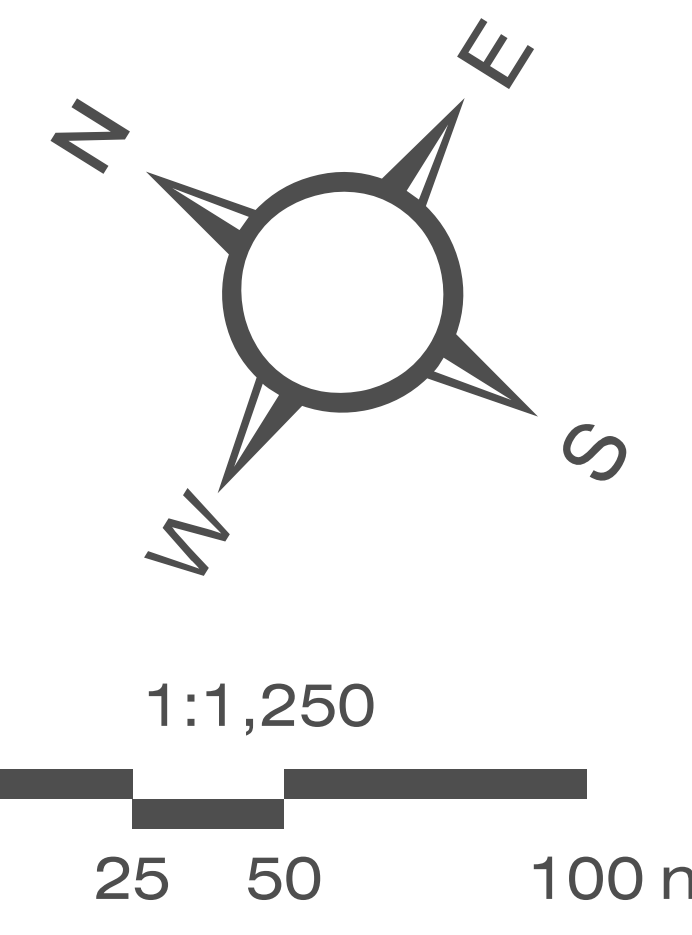
Map is for Illustrative Purposes Only

- Legend**
- Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line
 - ▲ Existing 115 kV Tower
 - New 230 kV Tower
 - Project Study Area (250m)
 - Stage 1 - Vegetation Removal for Temporary Access and Construction Activities
 - Stage 2 - Vegetation Trimming with Minimal Removal to Install Wires
 - Stage 3 - Additional Vegetation Management to be Confirmed Following Construction
 - Additional Stage 1 Removals
 - Area Proposed for Pollinator Planting
 - Tower Footing
 - TRCA Regulation Limit



CONSTRUCTION AND VEGETATION MANAGEMENT
FIGURE 6-8

Map is for Illustrative Purposes Only



- Legend**
- Existing Non-Energized 115 kV Transmission Line to be Replaced and Updated by a New 230 kV Transmission Line
 - ▲ Existing 115 kV Tower
 - New 230 kV Tower
 - Project Study Area (250m)
 - Stage 1 - Vegetation Removal for Temporary Access and Construction Activities
 - Stage 2 - Vegetation Trimming with Minimal Removal to Install Wires
 - Stage 3 - Additional Vegetation Management to be Confirmed Following Construction
 - Additional Stage 1 Removals
 - Area Proposed for Pollinator Planting
 - Tower Footing
 - TRCA Regulation Limit

6.7.6.2 Conservation Areas

There are no Conservation Areas located within the study area; therefore, no effects on Conservation Areas because of the proposed Project are anticipated.

6.7.6.3 Areas of Natural and Scientific Interest

There are no ANSI's located within the study area; therefore, no effects on ANSIs because of the proposed Project are anticipated.

6.7.6.4 Valleylands

There are no valleylands located study area; therefore, no effects on valleylands because of the proposed Project are anticipated.

6.7.6.5 Significant Woodlands

Significant woodland occurs around Mimico Creek within the study area, based on criteria in the Natural Heritage Reference Manual (MNR, 2010). Significant woodland was avoided to the extent possible in project planning to minimize adverse effects.

Vegetation clearing will be required for the portion of the significant woodland where the new transmission line will be located to ensure the safe and reliable operation of the transmission line. These removals will be limited to the extent practical and will represent a minimal loss of vegetation on the landscape. Hydro One has made design modifications, construction modifications and maintenance modifications to limit the impact to the vegetation community within and adjacent to the corridor. Hydro One will work with authorities to assess potential restoration opportunities as part of regulatory requirements. This initiative will be conducted after completion of the Class EA and OEB Leave-to-Construct processes.

Woodlands play an important role with Indigenous communities as they support elements required for continued practice of Indigenous culture and rights (e.g., hunting, trapping, plant harvesting, ceremony). Changes in habitat composition has the potential to result in changes in habitat quality for some flora and fauna, while removal of vegetation has the potential to result in a decline in species occupancy. Hydro One has engaged with Indigenous communities providing information about potential impacts of the project.

The mitigation noted above, together with the mitigation noted under **Section 6.7.6.1** will result in no anticipated long-term net effect to significant woodland.

6.7.6.6 Wetlands

No Provincially Significant Wetlands (PSW) were identified within the study area in current land use planning documents and LIO data. An unevaluated wetland was identified in the west of the study area during the background review; however, this is located outside of the hydro corridor and no wetlands were observed within the study area during the field surveys. Therefore, no effects on wetlands because of the proposed Project are anticipated.

6.7.6.7 Fish and Aquatic Habitat

The proposed Project crosses one watercourse (Mimico Creek) and one unnamed drain. Although no fish were observed during the field surveys, both aquatic features have the potential to provide fish habitat.

Transmission towers will be located to avoid impacts to fish and aquatic habitat and the towers in the vicinity of Mimico Creek are located and sized to minimize the need to remove trees near the watercourse. While the removal of trees within riparian areas will be minimal the loss of potential cover and shade may result in changes in water temperature, thereby affecting fish and aquatic habitat. In instances where trees within riparian areas require removal, their root structures will remain intact (i.e., grubbing will not be conducted within riparian areas) as a mechanism to maintain their current soil stabilization characteristics.

Other potential disturbances to fish and aquatic habitat resulting from construction activities near water would be minimized through the development of an ESC plan, which would include mitigation measures such as retaining stream bank vegetation (where practical) and storing materials away from water features. In addition, no refueling or vehicles and/or equipment would be permitted near a watercourse to prevent potential spills (e.g., fuel, oil, lubricant) from entering aquatic features. A permit from TRCA will be obtained for work within their regulated area as required and restoration of vegetation communities within riparian areas will be explored with TRCA.

Locating transmission towers to avoid impacts to fish and aquatic habitat, and avoiding or minimizing the potential for short-term effects on fish and aquatic habitat through the application of mitigation measures results in a proposed Project that is not anticipated to have a long-term net effect on fish and aquatic habitat.

6.7.6.8 Species at Risk

As noted in **Section 4.8.5**, species designated as either endangered or threatened under the ESA are provided species and habitat protection. Generally, impacts to SAR habitat will be avoided during detailed design, where possible. In addition, construction personnel will be aware of the potential presence of, and able to identify, SAR with the potential to occur within work areas.

The proposed Project was assessed as having the potential to provide habitat for Barn Swallow, Chimney Swift, SAR bats and Butternut. Habitat removal during the migratory bird breeding season (April 1 to August 31) and the bat active period (April 1 to September 30) would be avoided to the extent feasible. With respect to birds, a non-intrusive nest survey would be undertaken by a qualified individual if habitat removal is required during the April 1 to August 31 period. In the event the proposed Project is determined to impact Barn Swallow habitat, the activity is eligible for registration under O. Reg. 830/21. In the event the proposed Project is determined to impact Chimney Swift habitat, the activity is eligible for registration under O. Reg. 242/08.

With respect to bats, habitat with the potential to support SAR bats will be assessed for presence of habitat trees (snags, cavity trees) during detailed design. In the event potential SAR bat habitat requires removal in support of the proposed Project, bat acoustic surveys will be completed during the month of June in accordance with agency approved protocols to determine SAR bat use (or lack thereof). Where acoustic surveys confirm SAR bat habitat use, the MECP will be consulted regarding permitting/approvals next steps under the ESA.

There were two Butternut identified as pure specimens in the study area (BN001, BN006). These species are not anticipated to be impacted by the Project and a suitable buffer is recommended around these trees. A buffer of 6 m around BN001 and 18 m around BN006 is proposed according to their size and in accordance with the O. Reg. 830/21.

Construction personnel or environmental monitors will be aware of the potential for and be able to identify SAR within the general work areas. Should SAR be encountered during construction, activities will be stopped until it has been determined that harm will not occur. The required activities will be assessed to determine whether the work/schedule can be modified, or mitigation measures employed, to avoid potential effects on SAR and their habitat.

Following the implementation of mitigation, the proposed Project is not anticipated to have a long-term net effect on SAR.

6.7.6.9 Wildlife and Significant Habitat

Most wildlife species that have the potential to occur within the Project work areas are habituated to human activities and are mobile. For the most part, sensitive resident animals can relocate temporarily to nearby habitats through flight or via existing corridors (e.g., fencerows, watercourse riparian areas) to seek shelter as a mechanism to avoid noise and disturbance associated with construction activities and return after construction completion.

Based on the results of the background review, ELC mapping, and results of the 2018 field surveys, the following confirmed and candidate SWH types were identified within the study area for the proposed Project:

- Candidate SWH for Bat Maternity Colonies;
- Candidate SWH for Migratory Landbird Stopover Areas;
- Confirmed rare vegetation community (Fresh-Moist Black Walnut Lowland Deciduous Forest (FODM7-4)); and,
- Candidate SWH for animal movement corridors.

During project construction activities, the following will be taken into consideration as a mechanism to avoid and/or mitigate impacts to wildlife habitat:

- Tree/vegetation clearing will be avoided during the breeding bird season. The *Migratory Birds Convention Act, 1994* (MBCA) prohibits the disturbance, destruction, or removal of a nest, egg, or nest shelter of a migratory bird;
- To avoid contravention of the MBCA, vegetation removal should not be conducted during the migratory bird breeding season from April 1 to August 31, where feasible. While Barn Swallow and Chimney Swift were observed within the study area during field surveys, breeding behaviour and nesting habitat was not observed and there will be no buildings (their typical nesting habitat) impacted as part of this Project;
- Tree/vegetation clearing will be avoided during bat active periods, where possible. To avoid impacts to SAR bats, tree removals should take place during the non-active bat period (October 1 to March 31). Trees that may be impacted by removal activities should be evaluated for their potential to provide suitable bat maternity roost habitat. Should SAR bat habitat be confirmed in association with the transmission ROW, the MECP should be consulted to determine if the mitigation measures are sufficient to avoid contravention under the ESA;
- General avoidance of wildlife habitats, where practical;
- Retention of natural vegetation, where possible; and,

- Use of native plant species where seeding or planting is completed.

Construction disturbance would be sufficiently local and transitory that little displacement of wildlife is anticipated. Therefore, the effect of the proposed Project on wildlife will be minimal. Following the implementation of appropriate mitigation, the proposed Project is not anticipated to have a long-term net effect on wildlife habitat.

6.7.6.10 Invasive Species

There is potential for the proposed Project to facilitate the spread of non-native or invasive species that may occur within or adjacent to work areas during the construction phase. Construction staff will be educated on the identification of invasive species and the importance of avoiding their spread to new areas. Additional measures that would be undertaken to reduce the spread of invasive species include:

- Utilizing native plant species during construction restoration;
- Abiding by the *Invasive Species Act* regulations;
- Proper handling, containment, and disposal of invasive plant material, where required;
- Inspecting and cleaning equipment and vehicles as necessary to reduce potential for spreading invasive species propagules; and,
- Where necessary, the application of herbicides to eliminate invasive species.

Following the implementation of appropriate mitigation, the proposed Project is not anticipated to have a long-term net effect on invasive species.

6.8 Technical Considerations

6.8.1 Infrastructure Crossings

Construction of the proposed Project will require crossings of Highway 401, and city roads including Eglinton Avenue, Martingrove Avenue, Rathburn Road, Burnhamthorpe Road and Bloor Street West as well as several local roads. Permanent or long-term impacts to existing linear infrastructure are not anticipated. Rider poles, boom-tipped riders or similar protection will be utilized during conductor stringing. Disruption to traffic on roads and Highway 401 during construction is anticipated to be temporary and short in duration. Use of temporary or rolling closures of roads may be required to facilitate stringing activities. Work within MTOs highway ROW or permit control area (within 400 m of Highway 401) will require an Encroachment Permit and/or Land Use Permit as well as consultation with MTO during detailed design. Hydro One will

obtain all necessary Encroachment Permits and Land Use Permits from MTO prior to the start of construction.

6.9 Summary of Potential Environmental Effects, Mitigation Measures, and Net Effects

Given the design of the Project to minimize vegetation removal and the limited construction duration, it is anticipated that potential effects can be avoided or mitigated through the application of the measures described above. No significant net effects are predicted for the natural environment or socioeconomic environment related to the proposed Project.

Table 6-1 provides a summary of potential effects, the associated mitigation, and the net effects identified for the proposed Project, during the construction and operation and maintenance phases.

Table 6-1: Summary of Potential Effects, Mitigation Measures and Net Effects

Environmental Concern	Project Phase & Potential Effects	Mitigation Measures	Net Effects
Land Use and Communities: Residents and Businesses	Construction: Potential for activities to disrupt residences and businesses adjacent to the corridor.	The following additional mitigation is recommended to address these potential effects: <ul style="list-style-type: none"> • Contact will be maintained with residents, agencies, and business owners regarding work schedule and other items of interest. • Access to businesses will be maintained during construction to the extent feasible. If existing access cannot be maintained, arrangements will be made for alternate access, including public signage as required. • Construction will be within the Hydro One corridor and access to construction areas will be designed to avoid damage and disturbance to adjacent properties, structures, and operations. • Advanced notice will be provided to nearby residences, landowners, commercial operations, MTO, TTC and emergency response services. • Road signage will be installed as required. 	No significant net effects are predicted.
Land Use and Communities: Stormwater Management Strategies	Operation: Potential for corridor runoff to enter neighbouring properties	The following mitigation is recommended to address these potential effects: <ul style="list-style-type: none"> • Assessment of drainage solutions based on identified, site specific concerns. • Installation of a secondary LID stormwater management practice where appropriate. 	No significant net effects are predicted.
Land Use and Communities: Construction Health and Safety	Construction: Construction sites pose a potential safety hazard to the public and workers	The following mitigation is recommended to address these potential effects: <ul style="list-style-type: none"> • Executing construction in accordance with all applicable codes and regulations and with the Hydro One corporate policy. • Safety measures will be implemented, such as signage, fencing and locking of construction laydown areas, installing lighting if needed, providing advanced notice to residents, and holding a pre-construction Open House. 	No significant net effects are predicted.
Land Use and Communities: Real Estate	Construction, Operation & Maintenance: Potential for real estate issues between the Hydro One corridor and adjacent residents.	The following mitigation is recommended to address these potential effects: <ul style="list-style-type: none"> • One on one discussions with residents to identify potential issues and resolutions. • Clear and consistent communication. • Proactive approach to maintain the safety and reliability of the transmission corridor. 	No significant net effects are predicted.

Environmental Concern	Project Phase & Potential Effects	Mitigation Measures	Net Effects
Land Use and Communities: Mud and Construction Debris	Construction & Maintenance: Potential for tracking of mud and migration of construction debris to areas outside of the construction zone.	The following mitigation is recommended to address these potential effects: <ul style="list-style-type: none"> • General clean site policies will be implemented requiring pick-up and disposal of refuse and construction waste on a regular basis. • Mud related to construction activities will be remove from local roads and access roads as needed. • Mud mats will be installed (on an as need basis) as a mechanism to reduce the transport of mud. • Vehicles/equipment will be washed and maintained at work areas as necessary. • Formal cleanup and site restoration will minimize the potential for mud as construction is completed. • Waste materials will be disposed of in accordance with local regulations. 	No significant net effects are predicted.
Land Use and Communities: Electric and Magnetic Fields (EMF)	Operation: Potential exposure to increased EMF once the transmission line is energized.	The following mitigation is recommended to address these potential effects: <ul style="list-style-type: none"> • The proposed Project will be designed and operated in accordance with appropriate regulatory requirements. 	No significant net effects are predicted. Health Canada does not consider that any precautionary measures are needed regarding daily exposures to EMFs at extremely low frequencies. There is no conclusive evidence of any harm caused by exposures at levels found in Canadian homes and schools, including those located just outside the boundaries of power line corridors.
Land Use and Communities: Grounding and Electrification	Operation: Potential increase to grounding risks	The following mitigation is recommended to address these potential effects: <ul style="list-style-type: none"> • Grounding assessments will be conducted to understand grounding and circuit fault concerns for adjacent land uses. 	Grounding assessments will identify any potential concerns with adjacent land uses and standard design, engineering and technical controls will be employed. With appropriate controls, no significant effects are predicted.

Environmental Concern	Project Phase & Potential Effects	Mitigation Measures	Net Effects
<p>Land Use and Communities: Local Roads, Traffic, and Transit</p>	<p>Construction: Potential for increased traffic, including heavy equipment, on local and regional roads. In addition, stringing of conductors across highways and roadways may require temporary road closures and detours. There may be portions of the existing Kipling Station parking that could be temporarily suspended during construction.</p>	<p>The following mitigation is recommended to address these potential effects:</p> <ul style="list-style-type: none"> • The City of Toronto will be notified of works and a pre and post-construction road survey will be completed to document impacts to local roads caused by heavy equipment and increased construction traffic during construction activities. • Damage to local and regional roads as a direct result of construction activities associated with the proposed Project will be repaired. • Where required, a Traffic Control Plan will be developed and shared with local municipalities, as necessary. • Construction haul routes and schedule will be shared with local municipalities in advance of construction, as necessary. • Construction traffic will access the construction area from the existing road network at specified construction access/egress locations. • Common parking areas will be established for construction crews. • Conductor stringing will utilize rider poles, boom-tipped riders, or other protective measures in an effort to avoid road closures and other disruptions during stringing, to the extent practical. • If temporary road or highway closures (e.g., rolling closures) are required during stringing or other construction activities, the construction contractor will coordinate closely with the appropriate road authority to ensure that proper notice is provided and that required signage and traffic controls are utilized. The duration of any temporary closures will be minimized to the extent practical. • Notifications to local residents will be issued and road signage will be erected providing notification and/or pre-construction information to area residents on timelines and construction routes, and potential detours, if required. • Traffic control officers or flag persons will be assigned to assist with construction entry/exit, as necessary. • Hydro one will engage with transit authorities such as Metrolinx and TTC during detailed design and construction to minimize the potential for impact to transit. 	<p>No significant net effects are predicted.</p>
<p>Land Use and Communities: Noise & Vibration</p>	<p>Construction & Maintenance: Potential disturbance because of noise.</p>	<p>The following additional mitigation is recommended to address these potential effects:</p> <ul style="list-style-type: none"> • Construction will be completed in accordance with local noise control by-laws (<i>Toronto Municipal Code, Chapter 591, Noise</i>) or applicable exemptions. A mix of caisson, helical piles and micropiles will be used for tower foundations minimizing vibration and noise during construction. 	<p>No significant net effects are predicted.</p>
<p>Visual and Aesthetics: Change in View</p>	<p>Operation: The new towers will be taller and there is potential for impact on views. The footprint of the new towers will be larger in certain areas.</p>	<p>The following additional mitigation is recommended to address these potential effects:</p> <ul style="list-style-type: none"> • Proposed towers will be located in close proximity to the existing unutilized towers. • Proposed towers and line will be located in an existing Hydro One corridor, paralleling two existing powered lines. 	<p>While the larger towers will be noticeable for some, they are consistent with the existing use of the corridor. The urban tree canopy will minimize the view of the new towers and the naturalized meadows and pollinator plantings will add visual interest within the corridor. No significant net effects are predicted.</p>

Environmental Concern	Project Phase & Potential Effects	Mitigation Measures	Net Effects
<p>Natural Environment Resources - Physical Environment: Spills</p>	<p>Construction & Maintenance: Potential inadvertent release of deleterious substances including oil, gasoline, or other liquids.</p>	<p>The following mitigation is recommended to address these potential effects:</p> <ul style="list-style-type: none"> • Spill cleanup equipment will be always maintained and be readily accessible during construction and maintenance activities. • Refueling of vehicles and equipment will be completed in a designated location located a minimum of 30 m away from sensitive receptors. • Fuelling of vehicles/equipment will occur utilizing an emergency spill tray to capture any accidental release of fluids. • Fuelling operations will require the operator to visually observe the fuelling process 100% of the time. • If refuelling must occur outside of designated areas, additional containment or other mitigation and spill prevention measures will be utilized. • Areas impacted by a spill will be secured, and unauthorized personnel will be kept out of the affected area until further assessment and/or clean-up is conducted. • Clean-up and the disposal of contaminated materials will be managed in accordance with provincial regulations and guidelines. • Fuels, chemicals, lubricants, or other deleterious substances will be stored on level ground in properly contained storage areas. • Only approved aboveground petroleum storage tanks will be used during the construction phase of the Project and will be stored in designated fuelling areas and with additional temporary containment measures. • The MECP SAC will be notified of all reportable spills. 	<p>No significant net effects are predicted.</p>
<p>Natural Environment Resources - Physical Environment: Waste Generation</p>	<p>Construction & Maintenance: Solid and/or liquid waste will be generated.</p>	<p>The following mitigation is recommended to address these potential effects:</p> <ul style="list-style-type: none"> • Waste produced will be minimized, segregated and recycled where possible. • Hazardous waste (solid and liquid) will be transported by MECP licensed waste haulers to MECP registered disposal sites. • Any temporary waste on-site will use secured containers in designated sites away from sensitive areas and removed on an ongoing basis. • Concrete wash water will be contained in leak proof containers or in an approved settling pond. • All testing, handling, storage, transport, and disposal of waste will be completed in accordance with all applicable legislation. 	<p>No significant net effects are predicted.</p>
<p>Natural Environment Resources - Physical Environment: Excess Materials Management</p>	<p>Construction & Maintenance: Excess materials including topsoil and subsoil, may be produced during site excavations.</p>	<p>The following mitigation is recommended to address these potential effects:</p> <ul style="list-style-type: none"> • All excess materials will be tested, if necessary, and managed in accordance with O. Reg. 406/19. All efforts will be made to manage soils on-site. • Soil testing to meet the requirements of O. Reg. 406/19, will be completed, if necessary, during geotechnical investigations and prior to or during construction. • Any excess soil required to leave the site will be taken to an approved facility licensed to accept the soil based on its characterization. 	<p>No significant net effects are predicted.</p>

Environmental Concern	Project Phase & Potential Effects	Mitigation Measures	Net Effects
<p>Natural Environment Resources – Atmospheric Environment: Climate Change</p>	<p>Construction & Maintenance: Emissions will be generated from vehicles and equipment.</p>	<p>In addition to the applicable mitigation outlined above, the following additional mitigation is recommended to address these potential effects:</p> <ul style="list-style-type: none"> • Equipment will be properly serviced and maintained. • Idling of construction vehicles and equipment will be kept to a minimum and GPS or other navigation tools will be used in vehicles to optimize routing. • The transmission line will be designed to adequately withstand the effects of climate change. • While not specific to the Project, Hydro One is committed to reduce working to reach net-zero GHG emissions by 2050, with a goal to achieve 30% GHG emission reductions by 2030. 	<p>No significant net effects are predicted.</p>
<p>Natural Environment Resources - Atmospheric Environment: Air Quality</p>	<p>Construction & Maintenance: Potential for fugitive dust and impacts to air quality from vehicle emissions.</p>	<p>In addition to the applicable mitigation outlined above, the following additional mitigation is recommended to address these potential effects:</p> <ul style="list-style-type: none"> • Vehicles will not exceed posted speed limits. • Vehicular traffic will be minimized in areas of exposed soils. • Avoid excavation and other construction activities that have the potential to release airborne particulates during excessively windy and prolonged dry periods, to the extent practical. • If excavation or other construction activities with a potential to release airborne particulates must occur during windy conditions, dust controls will be utilized. • Cover or otherwise contain loose construction materials with the potential to release airborne particulates during transport, installation, or removal. • Disturbed areas will be restored as soon as practical to minimize duration of soil exposure. • Effective dust suppression techniques, such as on-site watering, will be implemented as necessary. Non-chloride dust suppressants will be used. 	<p>No significant net effects are predicted.</p>

Environmental Concern	Project Phase & Potential Effects	Mitigation Measures	Net Effects
<p>Natural Environment Resources - Surface Water Resources: Surface Water Quantity</p>	<p>Construction & Maintenance: Potential for vegetation removal and vehicles/equipment to result in additional erosion of soils and sedimentation.</p>	<p>The following mitigation is recommended to address these potential effects:</p> <ul style="list-style-type: none"> • Where practical, activities with potential to cause rutting, ponding/channelization or erosion will be planned during stable, frozen and/or dry ground conditions. • Erosion and Sediment Control (ESC) measures (e.g., erosion blankets/coir mats, silt socks) will be utilized, where necessary and will be regularly inspected, including after significant rainfall. • Constructed access roads will be monitored to ensure there is no surface ponding to minimize rutting and pooling of water. • Vegetation removals will be minimized to the extent practical. Compatible vegetation will be retained within riparian areas adjacent to watercourses where safe to do so. • Machine clearing and grubbing will be restricted near sensitive environmental areas; hand clearing will be required within watercourse banks/riparian areas. • Where erosion is of a concern, exposed soils in previously vegetated areas will be re-vegetated as practical or have other erosion or sedimentation measures applied as necessary. • Work will be staged to minimize the extent of exposed and disturbed areas at any given time. • Topsoil will be stockpiled in designated areas away from water features and will utilize containment measures such as erosion and sediment control as appropriate. • Disturbed areas will be stabilized and restored as soon as practical. • Equipment operation adjacent to water features will be minimized, where possible. • Works adjacent or around water feature banks will be conducted during appropriate conditions and times of the year (e.g., dry, or frozen conditions), to the extent practical. • TRCA will be consulted (specifically for ESC measures within regulated areas) during detailed design. 	<p>No significant net effects are predicted.</p>
<p>Natural Environment Resources - Surface Water Resources: Surface Water Quality</p>	<p>Construction: Potential for infrastructure (towers, watercourse crossings) to be located within TRCA regulated lands.</p>	<p>In addition to mitigation in above sections, the following mitigation is recommended to address these potential effects:</p> <ul style="list-style-type: none"> • Design of the transmission line will avoid or minimize the extent to which transmission towers are located within regulated areas, to the extent practical. • If necessary, a Permit for Development, Interference with Wetlands and Alternation to Shorelines and Watercourses will be obtained through the TRCA prior to construction. • Construction work (e.g., tower construction, temporary construction access) within regulated areas will be conducted during stable (frozen/dry) ground conditions, to the extent practical or isolated with appropriate ESC measures and other environmental mitigation measures. • If herbicides are required they will be used away from surface water. • Construction activities near sensitive features or areas may be suspended during extreme wet weather events. 	<p>No significant net effects are predicted.</p>
<p>Natural Environment Resources - Groundwater Resources: Groundwater Quality</p>	<p>Construction: Disturbance of contaminated soil has the potential to contribute to groundwater contamination.</p>	<p>Refer to the mitigation recommended for Spills and Excess Materials Management under Physical Environment.</p>	<p>No significant net effects are predicted.</p>

Environmental Concern	Project Phase & Potential Effects	Mitigation Measures	Net Effects
<p>Natural Environment Resources – Groundwater: Groundwater Quantity</p>	<p>Construction: Dewatering activities/removal of groundwater have the potential to result in temporary lowering of aquifers.</p>	<p>The following mitigation is recommended to address these potential effects:</p> <ul style="list-style-type: none"> • Construction water will be discharged in compliance with permits and/or approvals from MECP and City of Toronto if required. • A construction water management plan will be developed prior to construction and implemented appropriately (e.g., passing discharge water through a filter bag or drum before discharge to the environment to capture sediment and slow down the water velocity), as required. • Where practical, opportunities to maximize retention times and reduce surface flow velocities will be executed. 	<p>No significant net effects are predicted.</p>
<p>Natural Environment Resources - Natural Heritage Features: Vegetation and Significant Woodlands</p>	<p>Construction & Maintenance: Removal of trees to construct and operate new line</p>	<p>The following mitigation is recommended to address these potential effects:</p> <ul style="list-style-type: none"> • Hydro One has located the new towers to minimize vegetation removal requirements. • Construction activities and vegetation removals will be restricted to designated work areas. • A detailed construction plan will be developed and the City of Toronto and TRCA will be consulted for work in municipal and regulated areas. • Construction access and laydown areas will be restored post construction. • Strategically place temporary access roads to avoid vegetation. • Minimize the extent of vegetation clearing required for the Project by employing aerial construction methods. • Use of towers with narrower arms to avoid obstruction with existing vegetation. • Build taller towers to preserve dense and mature vegetation in and new Echo Valley Park. • Use temporary wooden poles near dense vegetation to support installing new wires. • Complete annual assessment of tree health and growth, and maintain as required. • Tree removals and other vegetation clearing will be completed outside of the migratory bird breeding season (i.e., April 1 through August 31) and the bat active season (i.e., April 1 through September 30), where practical. • Where vegetation clearing is required during the breeding bird or bat season, nest searches or bat surveys will be conducted by a qualified person in accordance with applicable provincial and federal requirements. • Work with authorities to assess SAR as part of regulatory requirements. 	<p>Although vegetation will be removed, given the efforts to minimize the extent of vegetation removal and the mitigation noted, the proposed Project is not anticipated to have a long-term net effect on the natural habitat in the corridor.</p>
<p>Natural Environment Resources - Natural Heritage Features: Fish and Fish Habitat</p>	<p>Construction & Maintenance: Potential disturbance to fish habitat because of vegetation loss, soil erosion, sedimentation, etc.</p>	<p>Refer to mitigation recommended for Spills under Physical Environment. Additional mitigation includes:</p> <ul style="list-style-type: none"> • Tower locations, and construction areas and access roads have been designed to avoid proximity to watercourses. • In instances where tree removal in riparian areas is required, keep root structures intact to maintain soil stabilization. • Maintain streambank vegetation where possible. • Store materials and refuel equipment away from water. • Work will be conducted in accordance with a permit TRCA when working within their regulated area. 	<p>No significant net effects are predicted.</p>

Environmental Concern	Project Phase & Potential Effects	Mitigation Measures	Net Effects
<p>Natural Environment Resources - Natural Heritage Features: Species at Risk (SAR)</p>	<p>Construction & Maintenance: Potential disturbance or loss of SAR and/or SAR habitat.</p>	<p>The following mitigation is recommended to address these potential effects:</p> <ul style="list-style-type: none"> • Impacts to potential SAR habitat will be avoided, where possible. In the event impacts cannot be avoided, MECP will be consulted regarding permitting/approval requirements under the ESA during detailed design. • Vegetation removal will be avoided during the migratory bird breeding season (April 1 to August 31) and the bat active period (April 1 to September 30). • A non-intrusive nest survey would be undertaken by a qualified individual if bird habitat is removed between April 1 and August 31. • Habitat with the potential to support SAR bats will be assess for presence of habitat trees during detailed design. • If potential SAR bat habitat requires removal, bat acoustic surveys will be completed during the month of June in accordance with agency approved protocol. • Appropriate buffers will be placed around Butternut trees. • Construction personnel or environmental monitors will be aware of the potential for and able to identify SAR within the general work areas. • Should SAR be encountered during construction activities, activities will be stopped until it has been determined that harm will not occur. The required activities will be assessed to determine whether the work/schedule can be modified, or mitigation measures employed, to avoid potential effects on SAR and their habitat. • If a SAR is harmed or killed because of work activities, the MECP will be notified and the relevant work activities will cease within the immediate area until the species has been removed by personnel authorized to handle SAR. • SAR observed during construction activities will be reported to the MECP. 	<p>No significant net effects are predicted.</p>
<p>Natural Environment Resources - Natural Heritage Features: Wildlife Habitat</p>	<p>Construction & Operation: Potential disturbance or loss of wildlife habitat.</p>	<p>Refer to mitigation recommended for Vegetation and Significant Woodland and SAR. Additional mitigation includes:</p> <ul style="list-style-type: none"> • Use of native plants for seeding or planting post construction. • Visual assessment of potential habitat (e.g., woodpiles) before disturbance. 	<p>No significant net effects are predicted.</p>
<p>Natural Environment Resources - Natural Heritage Features: Invasive Species</p>	<p>Construction: Potential for inadvertent spread of invasive species during the construction phase.</p>	<p>The following mitigation is recommended to address these potential effects:</p> <ul style="list-style-type: none"> • Construction crews will be educated on the identification of invasive species and importance of avoiding inadvertent spread. • Utilizing native plant species during construction restoration. • Abiding by the <i>Invasive Species Act</i> regulations. • Proper handling, containment, and disposal of invasive plant material, where required. • Inspecting and cleaning equipment and vehicles as necessary to reduce potential for spreading invasive species propagules. • Where necessary, the application of herbicides to eliminate invasive species. 	<p>No significant net effects are predicted.</p>

Environmental Concern	Project Phase & Potential Effects	Mitigation Measures	Net Effects
<p>Technical Considerations: Infrastructure Crossings</p>	<p>All Phases: Permanent overhead crossing of Highway 401, other roadways.</p>	<p>Refer to mitigation recommended for Local Roads & Traffic under Land Use Communities. Additional mitigation includes:</p> <ul style="list-style-type: none"> • Temporary or rolling closure of roads may be required to facilitate stringing, and duration of any temporary closures will be minimized to the extent practical. • Work within 400 m of Highway 401 or permit control area will require an Encroachment Permit and/or Land Use Permit as well as consultation with MTO during detailed design. Hydro One will obtain all necessary Encroachment Permits and Land Use Permits from MTO prior to the start of construction. 	<p>No significant net effects are predicted.</p>

6.10 Consideration of Cumulative Effects

The Class EA requires consideration of cumulative effects specifically noting *“The assessment will include the proposed undertaking and any other proposed undertakings in the immediate project area where documentation is available (e.g., other environmental assessments)”*. For this project, the cumulative effects assessment (CEA) involved the consideration of project effects combined with effects from other proposed undertakings in the immediate project area (overlapping the study area) where documentation was publicly available. To extend a CEA beyond the immediate project area (i.e., to assess trajectories of change over time on a broader regional basis) is outside the scope of the Class EA and Hydro One’s ability to influence, control, or reasonably predict.

6.10.1 Known Projects and Cumulative Effects

Table 6-2 identifies known projects that overlap with the local study area and assesses their potential for interaction with the Etobicoke Greenway Transmission Line project. Overlapping projects have been categorized into the following three tiers:

- Projects with completed and publicly available impact assessments or environmental assessments.
- Known current, and future Hydro One projects where the environmental assessment (including selection of a preferred alternative) is not yet completed but where, as owners of transmission line infrastructure, Hydro One has a reasonable understanding of what future potential effects may be.
- Other future projects where proponents have not yet started or completed an environmental assessment, or other planning study, such that insufficient information is publicly available to meaningfully assess interactions with the Project. It is noted that for these future projects, this Class EA and CEA will be available for consideration to their benefit, including the potential to assess cumulative effects of the Project combined with those future projects.

Table 6-2: Projects Included in the Cumulative Effects Assessment

Project Name	Proponent	Interaction with Etobicoke Greenway Transmission Line Project
Tier 1 Projects: Effects Assessment Documentation Publicly Available		
Eglinton Crosstown West Extension	Metrolinx	The proposed extension is near the study area.
New Planned Cycling Infrastructure	City of Toronto	This planned infrastructure is in proximity to the corridor.
Tier 2 Projects: Hydro One Planned Future Undertakings with Owner Predicted High-Level Effect Knowledge		
Richview x Trafalgar	Hydro One	Project extending from Richview TS in the north to Trafalgar.
Islington TS and Line	Hydro One	Project to connect customer to the east.
Tier 3 Projects: Future Projects in Area Effects are not yet known		
Ongoing residential and commercial development	Various	The construction of future condos, or commercial development may occur in proximity to the study area.
Dundas BRT	Metrolinx	The Dundas BRT project is currently underway in Mississauga. The timing of its connection to Kipling Station is uncertain.

The potential cumulative effects for the project were assessed by considering potential effects from other undertakings that interact and overlap with the Project study area. Potential effects were determined based on publicly available information and/or anticipated potential project effects from projects being planned nearby.

The CEA determined that the mitigation measures outlined for the Project, summarized in **Table 6-1**, provide adequate project specific mitigation and that there are no areas of environmental concern that will result in a significant cumulative effect. In the event some or all the projects identified proceed concurrently, temporary construction-related effects can be further coordinated for mitigation with project proponents.

7 The Etobicoke Greenway Trail

Hydro One has been working with the community to develop the Etobicoke Greenway trail and associated amenities. Hydro One sees the opportunity to use the Project to provide safe public access to the hydro corridor. Reimagining the corridor as an open greenspace and public path has the potential to complement the City of Toronto's network of existing and planned multi-use and dedicated cycling paths and green spaces. The corridor is located just north of a rapidly densifying area along Dundas Street West, and a dense residential neighborhood on Eglinton Avenue West, with mostly single-family residential homes in between. This section of Hydro One's transmission corridor, referred to as the Etobicoke Greenway, passes through two TRCA regulated areas, which offers the opportunity to increase biodiversity and meadow habitat near Mimico Creek and at the north end near Willowridge Park. Protecting the ecologically sensitive area at Mimico Creek in Echo Valley Park and Willowridge Park will be taken into consideration and inform the design of the Etobicoke Greenway. Hydro One is working closely with TRCA to mitigate environmental impacts, identify restoration priorities in Mimico Creek, and advance the design concept.

Through open houses, community walks, and workshops (summarized in **Section 3**), Hydro One gained an understanding that the corridor is currently used by the community for walking, running, dog walking, birdwatching, and recreational enjoyment. The community expressed a strong interest in making the corridor publicly accessible with support for a design that included a trail, open space, and other amenities. Key considerations from the community included locating the trail in the center of the corridor away from adjacent properties, placing amenities near roads, planting pollinators for property privacy, and ensuring garbage pick-up and long-term maintenance.

The proposed five major design features of the Etobicoke Greenway include a multi-use path, meadows, pollinator gardens, mowed areas, and amenities such as seating and signage. These design features align with the primary features favoured by the public and comply with Hydro One's Secondary Land Use Requirements. Construction of the Greenway may involve some vegetation removal and temporary impacts to the use of the corridor similar to the construction of the new transmission line. All relevant construction mitigation noted for the proposed rebuild Project will also be implemented for the Greenway. Operation and maintenance will include periodic maintenance of the paths, meadows, and pollinator gardens, as well as scheduled mowing.

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Overall, the implementation of the Etobicoke Greenway Trail and amenities is anticipated to have a positive net effect for the community. Further information and detailed graphics on what is proposed for the Etobicoke Greenway trail can be found in **Appendix F1**.

8 Effects Monitoring

The purpose of effects monitoring is to confirm the extent of the proposed Project's environmental effects by comparing the actual effects with the predicted effects, to verify the effectiveness of mitigation measures, and to determine whether additional measures are warranted. Monitoring also confirms that the commitments, conditions of approval, where applicable, and compliance with other environmental legislation are met. An Environmental Specialist will be assigned to the Project for the duration of construction to monitor construction activities and provide guidance on needed field changes.

A project-specific Environmental Management Plan will be prepared following the completion of the Class EA process and before start of construction. The Environmental Management Plan will:

- Summarize legislative requirements;
- Summarize environmental commitments set out in the final ESR, and terms and conditions of approval, if any;
- Ensure the documentation of pre-construction site conditions, where necessary;
- Provide specific directions to construction personnel on the implementation of environmental mitigation measures, response plans, and other information (e.g., identification of Species at Risk);
- Ensure that supporting protection plans have been implemented during construction;
- Describe the environmental monitoring process and frequency to be undertaken during construction;
- Outline steps to be taken when documenting monitoring and identify procedures for follow-up actions, as required; and,
- Provide specific directions on the post-construction restoration of work areas and access locations.

At the end of construction, an as-constructed plan will be prepared to guide ongoing operation and maintenance activities. The plan will document "as constructed" conditions as well as ongoing monitoring requirements, if required.

9 Conclusion

Hydro One is seeking approval under the EAA to rebuild the existing non-energized double-circuit 115 kV (circuits K9S/K10SB) transmission line to a double-circuit 230 kV transmission line between Richview TS, near Highway 401 and Highway 27 to Manby TS, near Kipling Avenue and Dundas Street West in the City of Toronto based on direction provided by IESO in 2019. The new 230 kV transmission line will be approximately 6.5 km in length and will connect the Richview TS to the Manby TS.

The proposed Project will involve reinforcing transmission capacity by removing the existing non-energized double-circuit 115 kV transmission line from Richview TS to Manby TS and replacing it with a new 230 kV double-circuit line within the approximately 6.5 km long existing corridor.

In successive updates to the IRRP, IESO has noted the need to upgrade this transmission line to meet demand and has indicated that this upgrade remains the most feasible and cost-effective solution to the address capacity needs (IESO 2021).

Following the IESO reconfirmation of the need of the in 2021, Hydro One conducted a preliminary assessment to identify viable Alternatives for the undertaking for the new 230 kV transmission line. As a result of this exercise, it was decided that the existing non-energized double-circuit 115 kV (circuits K9S/K10SB) transmission line would be rebuilt to accommodate the energy demand.

Since the Notice of Commencement in June 2022, municipal, provincial, and federal government officials, staff and agencies, Indigenous Communities, potentially affected and interested persons, and interest groups were consulted. A total of four in-person community open houses, five corridor walks, two design workshops, one virtual room and one virtual meeting for the public, agencies, Indigenous Communities, and stakeholders were held to share project details, answer questions, and listen to feedback. Additionally, the proposed project introduced the reimagining of the corridor as a publicly accessible path.

Feedback received from the various public engagement activities was used to complete the Class EA and the Etobicoke Greenway Trail.

Potential short- and long-term environmental effects were identified for the proposed Project and corresponding mitigation measures were developed to address these effects. Based on

information collected, project design and implementation of the proposed mitigation measures, no significant net adverse environmental effects are expected.

The draft ESR was made available for public review and comment for 45 days (extended from the typical 30-day review period), from March 30, 2023 to May 15, 2023, at 4:30 PM. Hydro One will make best efforts to respond and resolve issues raised by concerned parties during this review period. Comments received during this period, and Hydro One's responses, will be documented in the final ESR.

Upon filing of the final ESR with the MECP, the Class EA process for the Etobicoke Greenway Transmission Line Project will be complete and the proposed Project will be implemented in full compliance with the requirements of the Class EA process as outlined in the final ESR. Hydro One will obtain the necessary environmental approvals and permits required for the proposed project prior to construction.

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