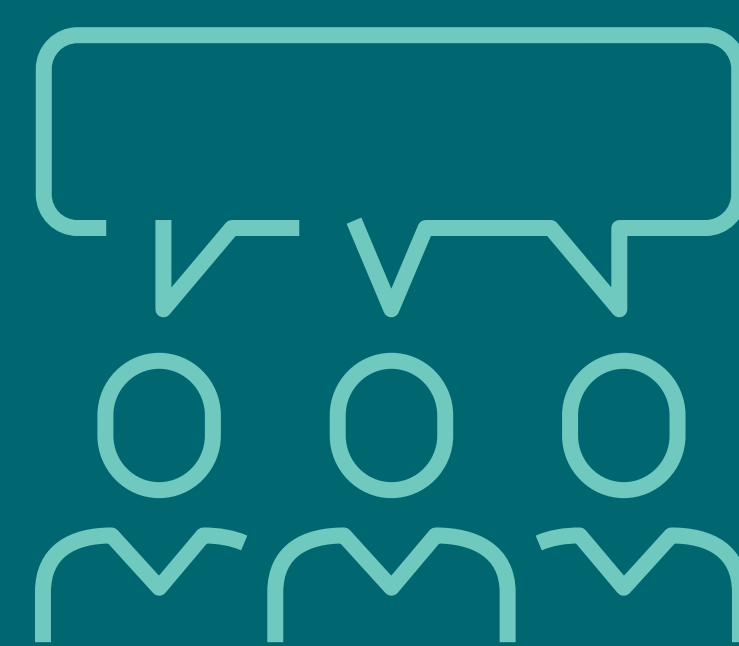
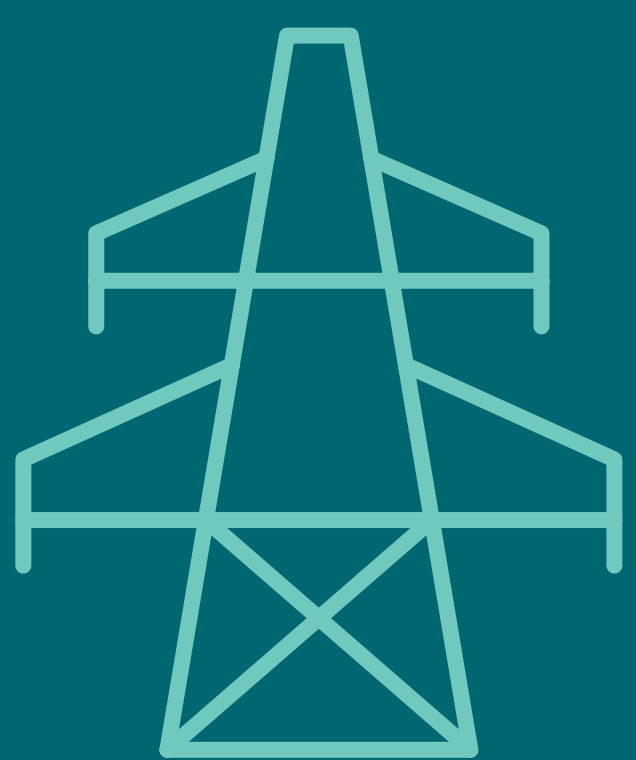


# Welcome

## Longwood to Lakeshore project

### Community open house #3



# Purpose of today's community open house

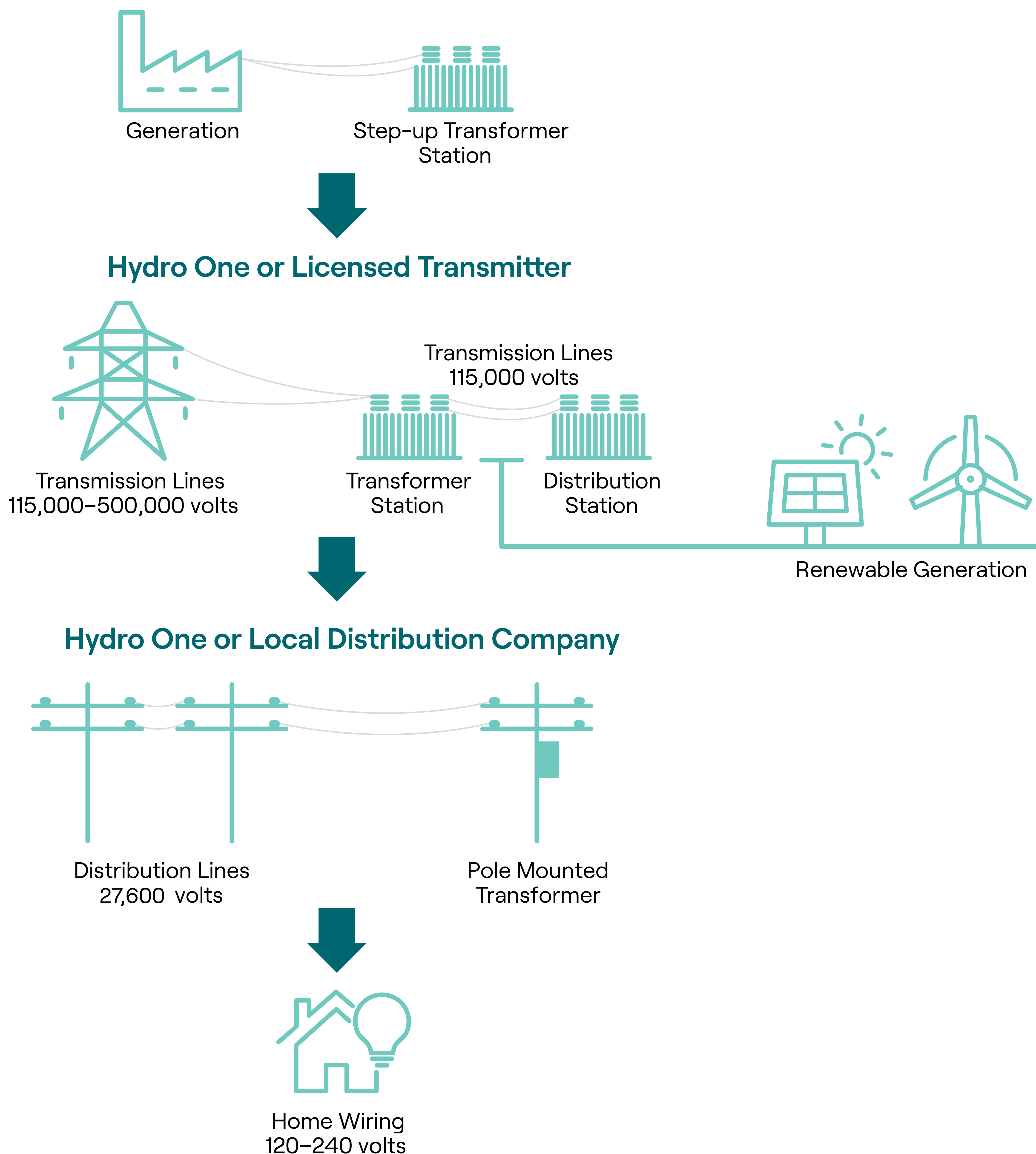
- Explain the need for the project
- Outline the Environmental Assessment (EA) process
- Update on recent studies
- Share highlights of what we heard through engagement
- Explain recent refinements to the routes
- Review sample evaluation criteria
- Share the anticipated project timeline
- Answer questions and gather your feedback

# Hydro One's role in the system

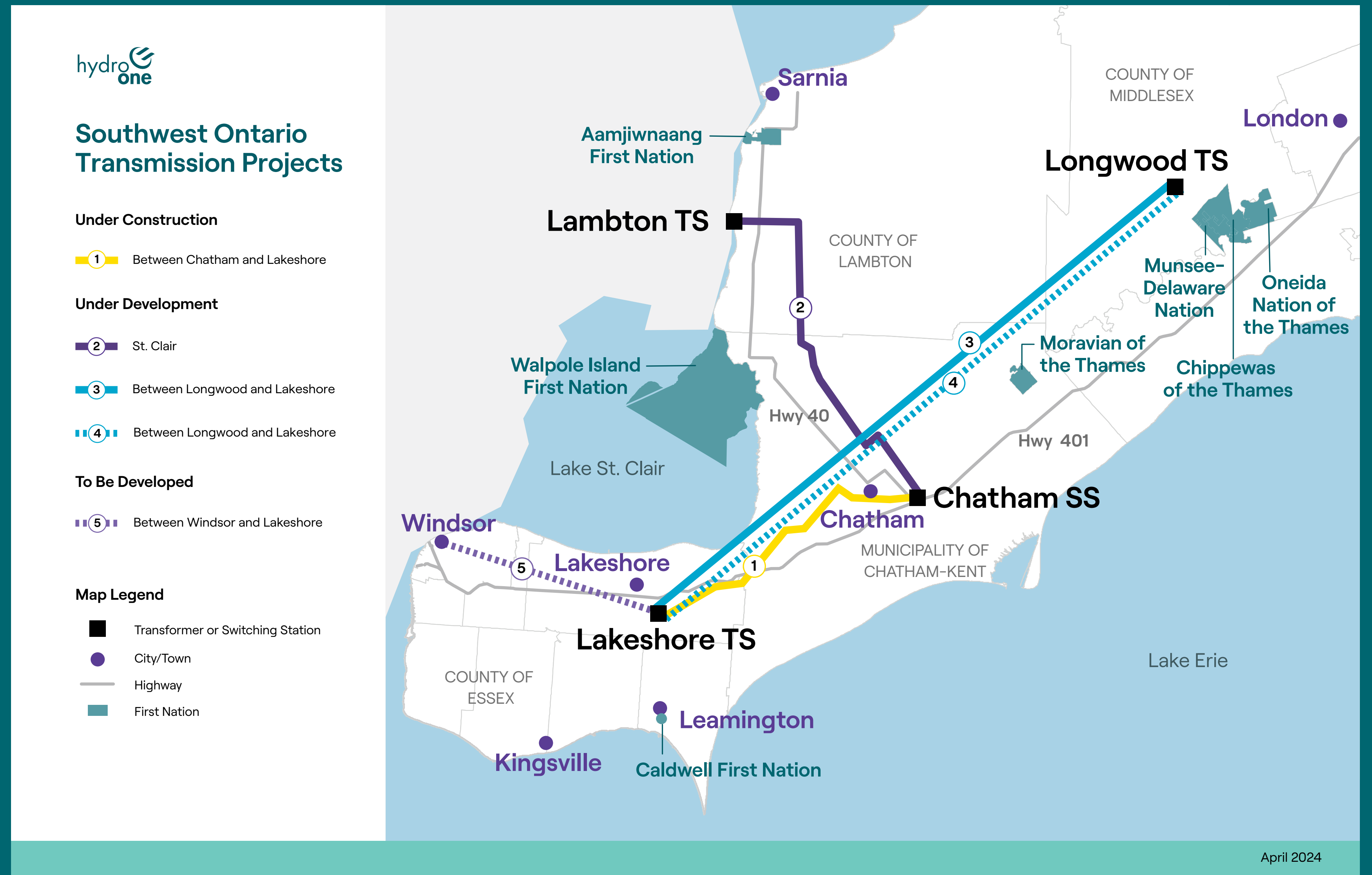


Across the province, Hydro One builds, owns, operates and maintains the electricity transmission and distribution network that brings power to homes and businesses.

## Ontario Power Generation and Private Generation Companies







# Electricity needs in southwest Ontario

In southwest Ontario, electricity demand is anticipated to quadruple by 2035 according to the Independent Electricity System Operator (IESO). To meet this demand, a network of electricity infrastructure projects have been identified. This includes three projects already underway:

- **Chatham to Lakeshore Line:** Under construction, expected to be in service by the end of 2024
- **St. Clair Transmission Line:** Environmental Study Report submitted
- **Longwood to Lakeshore Project:** Environmental Assessment underway

This network of projects will provide many regional benefits including improved resiliency and reliability, economic growth and investments, and support for local food supply and security.



# A Class Environmental Assessment

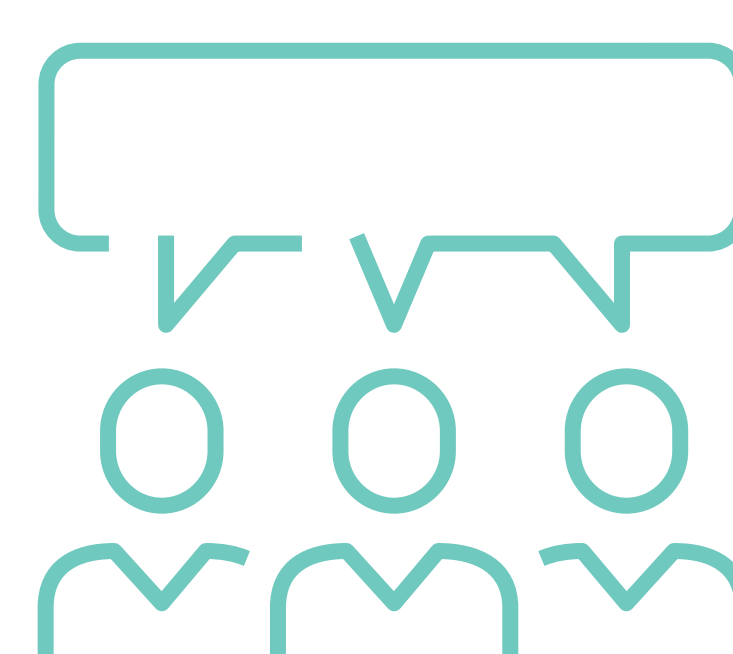
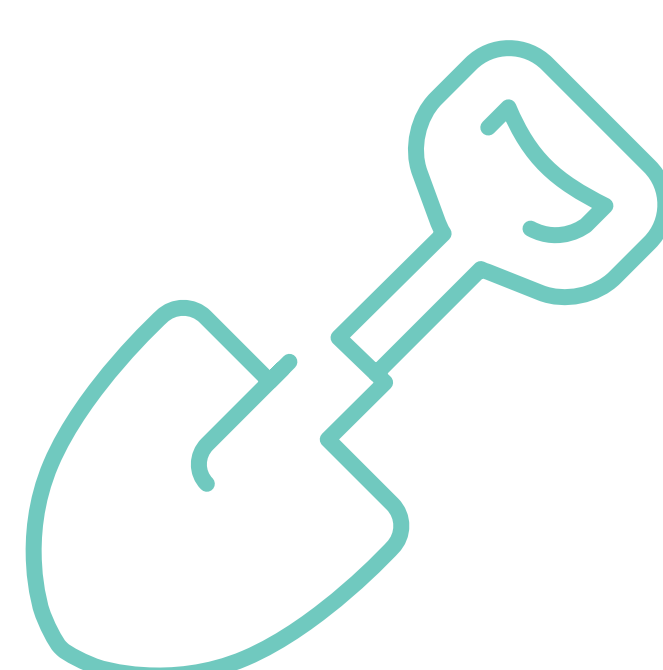
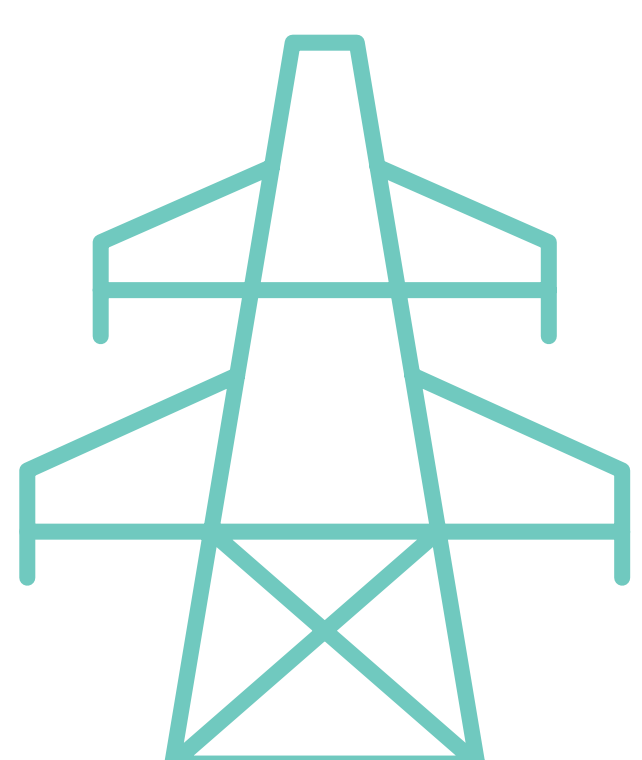


Ongoing Engagement

## Steps of a Class EA

- Engage with Indigenous communities, the public, municipalities, interest groups and government agencies
- Collect environmental information
- Identify and evaluate route alternatives
- Select a preferred route
- Identify potential environmental effects and mitigation measures
- Prepare a draft Environmental Study Report (ESR) that will be made available for a 30-day public review and comment period
- Submit the Final ESR

For more information, see [HydroOne.com/ClassEA](https://hydroone.com/classEA)





# Examples of studies

Examples of field studies and data collected as input to the evaluation of the alternative routes include:



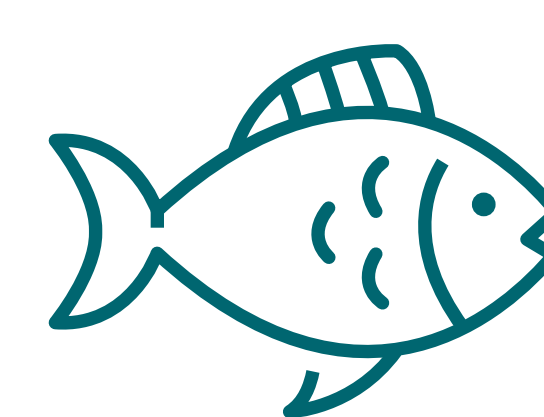
## Wildlife and wildlife habitat

Fall and spring diurnal migration surveys, breeding bird survey, amphibian count call survey, and incidental wildlife observations.



## Species at risk (SAR)

Botanical SAR, aquatic SAR, SAR birds, SAR snakes, Butternut surveys and health assessments, SAR bats.



## Aquatic assessments

Characterize fish and fish habitat potentially affected by the project. Completed from May to July including eDNA sampling program.





# What we heard through engagement



Impacts to farmland during construction as well as operation

Endangered species

Property values

Generational farms



Electric and magnetic fields (EMF)



Wetland habitats

Stray voltage and impacts to livestock



Tower design



Fair compensation for land rights

Challenges farming around towers

Amount of power the project will supply

Loss of agricultural land



Reuse abandoned ROW



Environmental protections



Need for the project



Protect drainage infrastructure

Setback requirements

Aerial crop spraying

Woodlot preservation

Protection of hunting lands

Flood plains

Paralleling existing lines





# Routes we are studying

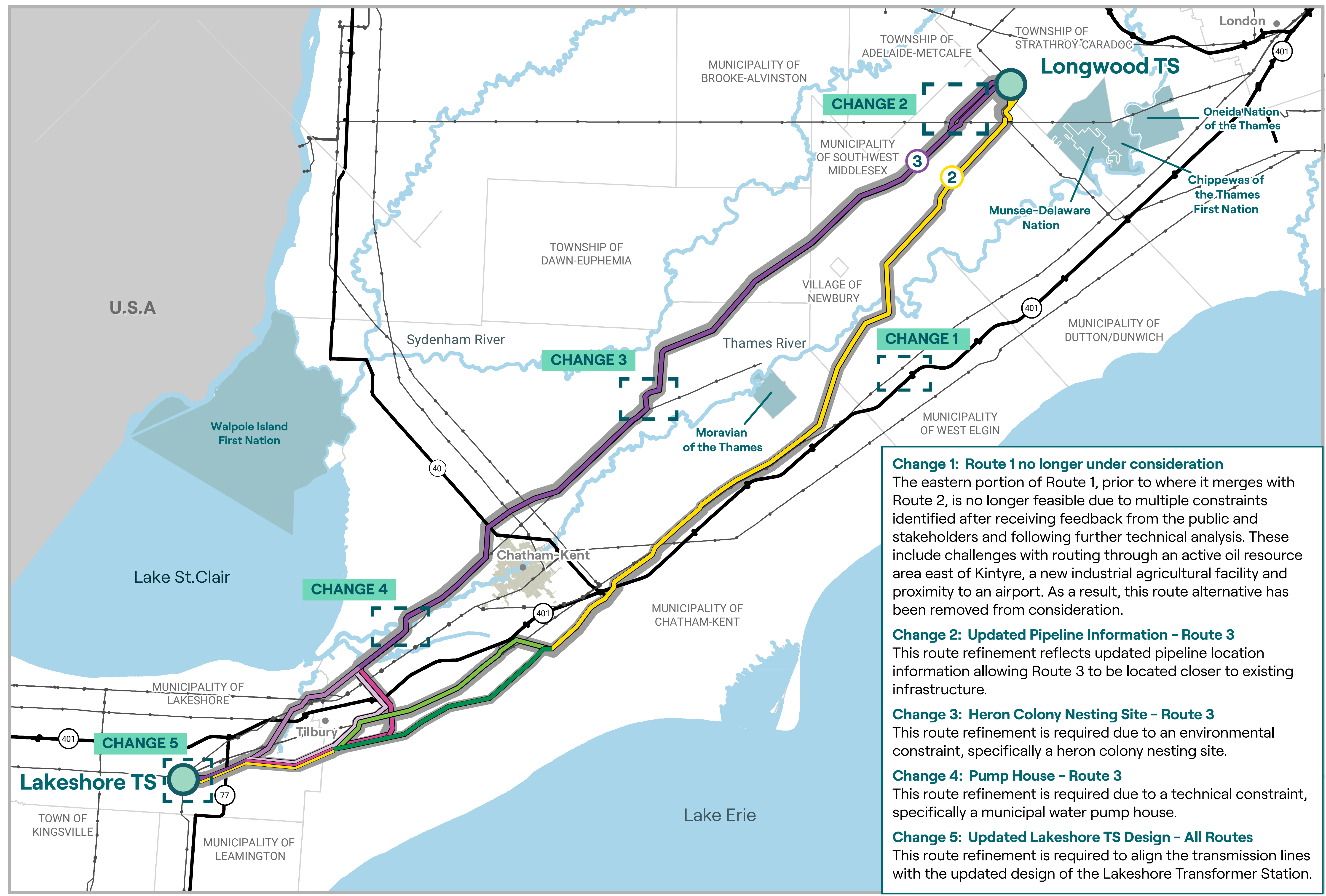
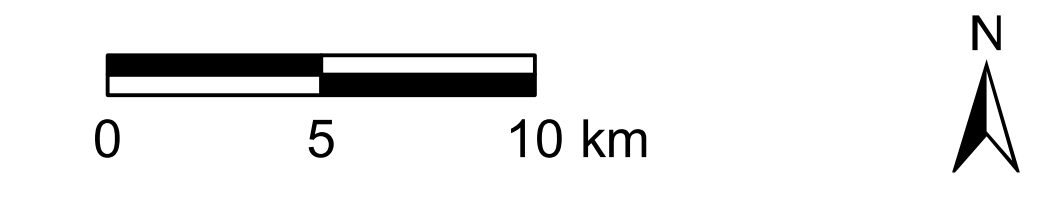


## Longwood to Lakeshore project

### Map Legend

- Transformer Station (TS)
- Route 2 (A/B Core Alignment)
  - Route 2A
  - Route 2B
- Route 3 (A/B/C Core Alignment)
  - Route 3A
  - Route 3B
  - Route 3C
- All Routes (2A/2B/3A/3B/3C)
- Local Study Area (500 m buffer on either side of the route alternatives)
- Existing Transmission Line
- Highway
- Municipal Boundary
- Waterbody
- First Nation
- Built Up Area

Note: With the exception of a section of Route 3 near Longwood TS, each route represents two transmission lines with parallel alignments. Each line has an assumed 60m right of way, pending detailed engineering.



- Change 1: Route 1 no longer under consideration**  
The eastern portion of Route 1, prior to where it merges with Route 2, is no longer feasible due to multiple constraints identified after receiving feedback from the public and stakeholders and following further technical analysis. These include challenges with routing through an active oil resource area east of Kintyre, a new industrial agricultural facility and proximity to an airport. As a result, this route alternative has been removed from consideration.
- Change 2: Updated Pipeline Information - Route 3**  
This route refinement reflects updated pipeline location information allowing Route 3 to be located closer to existing infrastructure.
- Change 3: Heron Colony Nesting Site - Route 3**  
This route refinement is required due to an environmental constraint, specifically a heron colony nesting site.
- Change 4: Pump House - Route 3**  
This route refinement is required due to a technical constraint, specifically a municipal water pump house.
- Change 5: Updated Lakeshore TS Design - All Routes**  
This route refinement is required to align the transmission lines with the updated design of the Lakeshore Transformer Station.

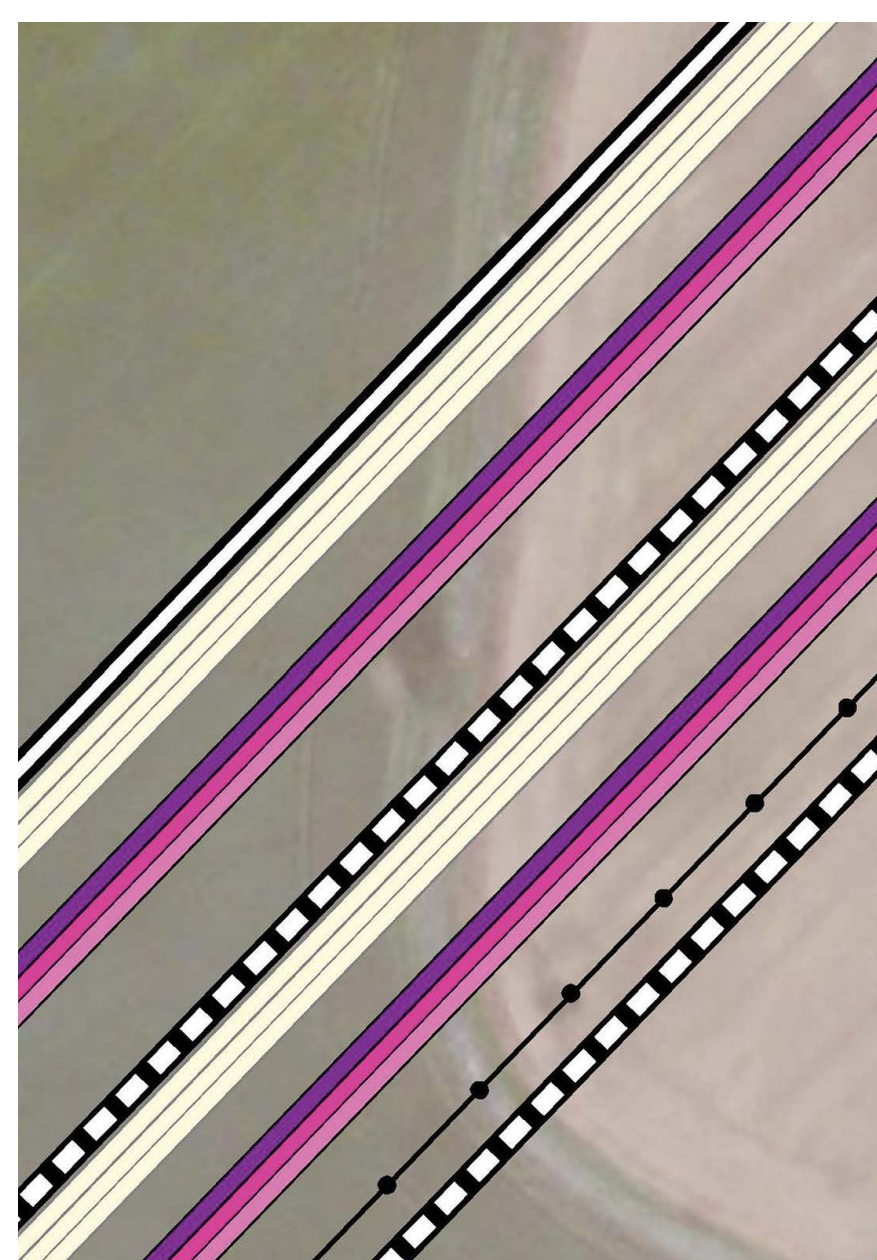
**Note:** Please visit our online interactive map for a more detailed view and to provide your feedback: [HydroOne.com/Longwood-to-Lakeshore](https://HydroOne.com/Longwood-to-Lakeshore).



# Route refinements



Route 1 has been removed from consideration due to several constraints in its eastern section prior to where it joins Route 2, which make it technically unfeasible.



Refinements were made where we confirmed we are able to reuse, rather than just parallel, a right-of-way that is idle (or will be at time of construction) and minimize the additional new land required.

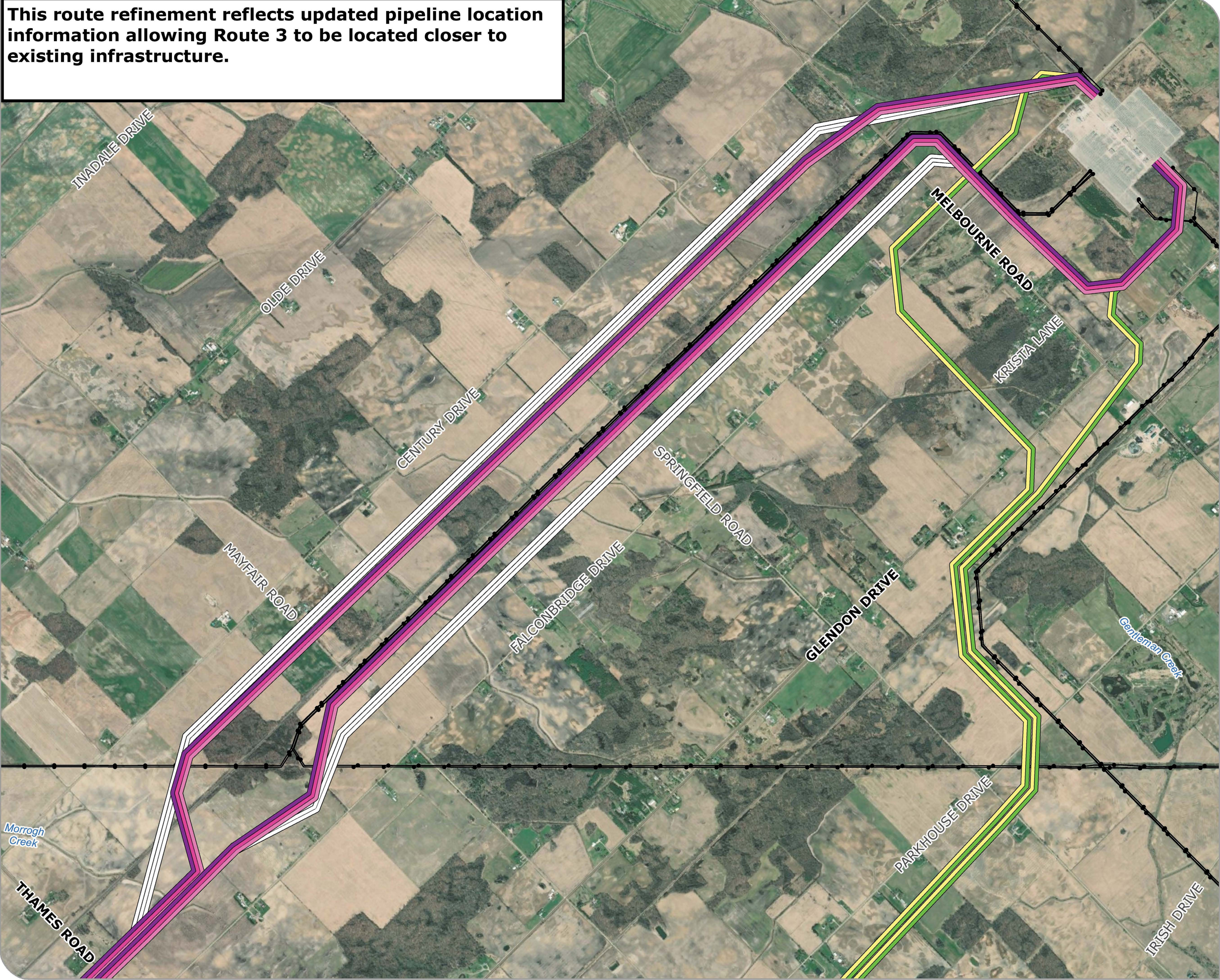


Refinements were made to address requirements for minimum separation distances between towers and drainage infrastructure and watercourses. Although we are still in preliminary design and do not have final tower locations, we do know the location of angle structures and can identify locations where there is a long stretch of line paralleling a watercourse/drain where a tower will be required.



# Route refinements

This route refinement reflects updated pipeline location information allowing Route 3 to be located closer to existing infrastructure.



FILE LOCATION: K:\2022\225006\Product\Client\Property\_Maps\LandownerContext\_RouteChanges\_UpdatedPipeline.mxd

## LONGWOOD TO LAKESHORE TRANSMISSION LINE

### UPDATED PIPELINE INFORMATION - ROUTE 3

- Proposed Route Centreline 2A
- Proposed Route Centreline 2B
- Proposed Route Centreline 3A
- Proposed Route Centreline 3B
- Proposed Route Centreline 3C
- Previous Alignments
- Existing Transmission Line

Sketch plan only.  
Subject to final engineering and survey.  
Hydro One Right-of-Way for one 500 kV transmission line is estimated to be 60m (or 197 ft)

SCALE 1:24,000

0 200 400 m

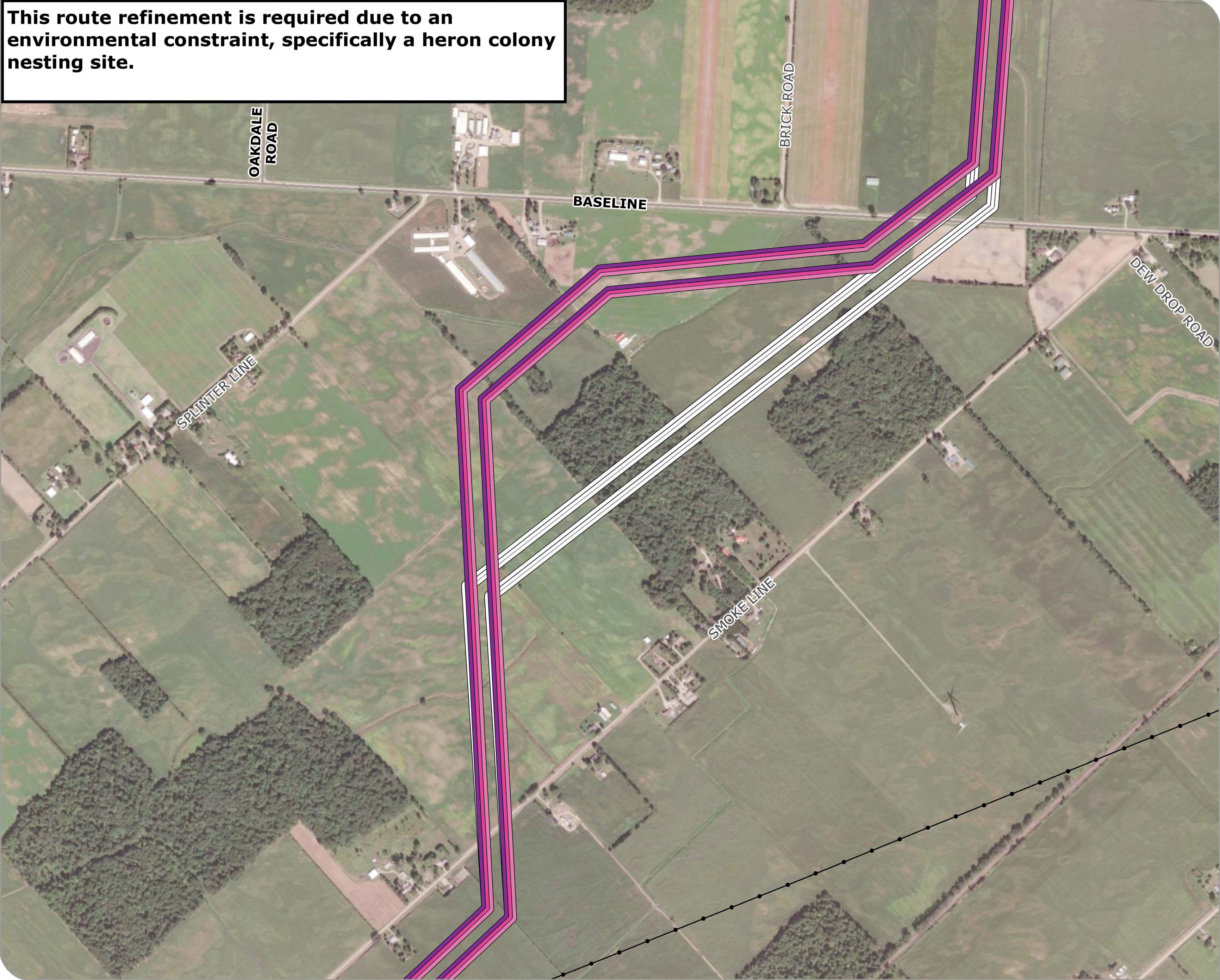
NAP DRAWING INFORMATION:  
DATA PROVIDED BY: HNSF LTD, Hydro One Networks Inc., Imagery by ESRI  
Basemaps

NAP PROJECTION: NAD 1983 CSRS UTM Zone 17N  
PROJECT NAME: Longwood to Lakeshore Transmission Line



PROJECT: 22-5006  
STATUS: FINAL  
DATE: 2024-10-09

This route refinement is required due to an environmental constraint, specifically a heron colony nesting site.



FILE LOCATION: K:\2022\225006\Product\Client\Property\_Maps\LandownerContext\_RouteChanges\_HeronColony.mxd

## LONGWOOD TO LAKESHORE TRANSMISSION LINE

### HERON COLONY NESTING SITE - ROUTE 3

- Proposed Route Centreline 3A
- Proposed Route Centreline 3B
- Proposed Route Centreline 3C
- Previous Alignments
- Existing Distribution Line (28kV)

Sketch plan only.  
Subject to final engineering and survey.  
Hydro One Right-of-Way for one 500 kV transmission line is estimated to be 60m (or 197 ft)

SCALE 1:10,000

0 200 400 m

NAP DRAWING INFORMATION:  
DATA PROVIDED BY: HNSF LTD, Hydro One Networks Inc., Imagery by ESRI  
Basemaps

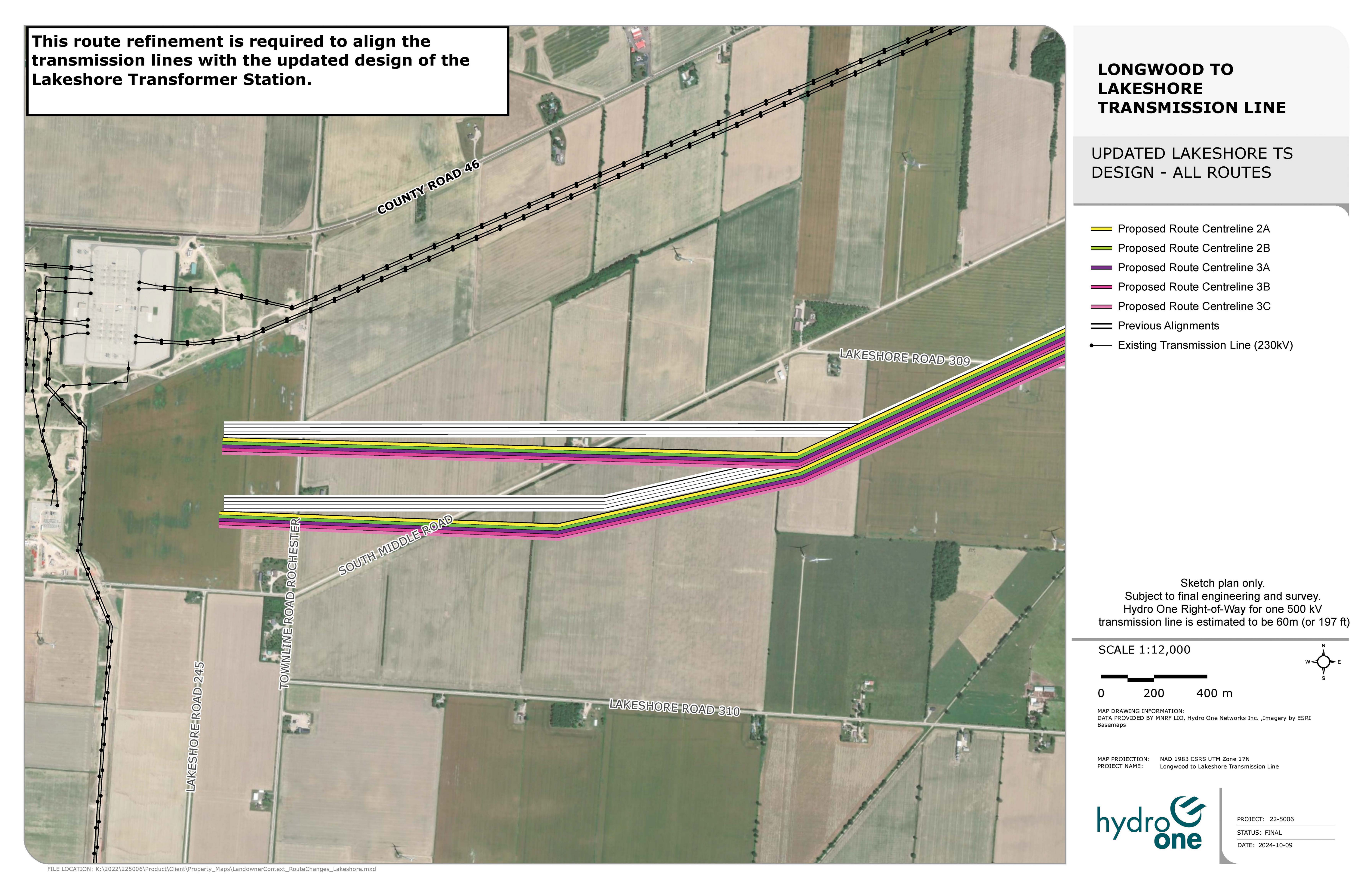
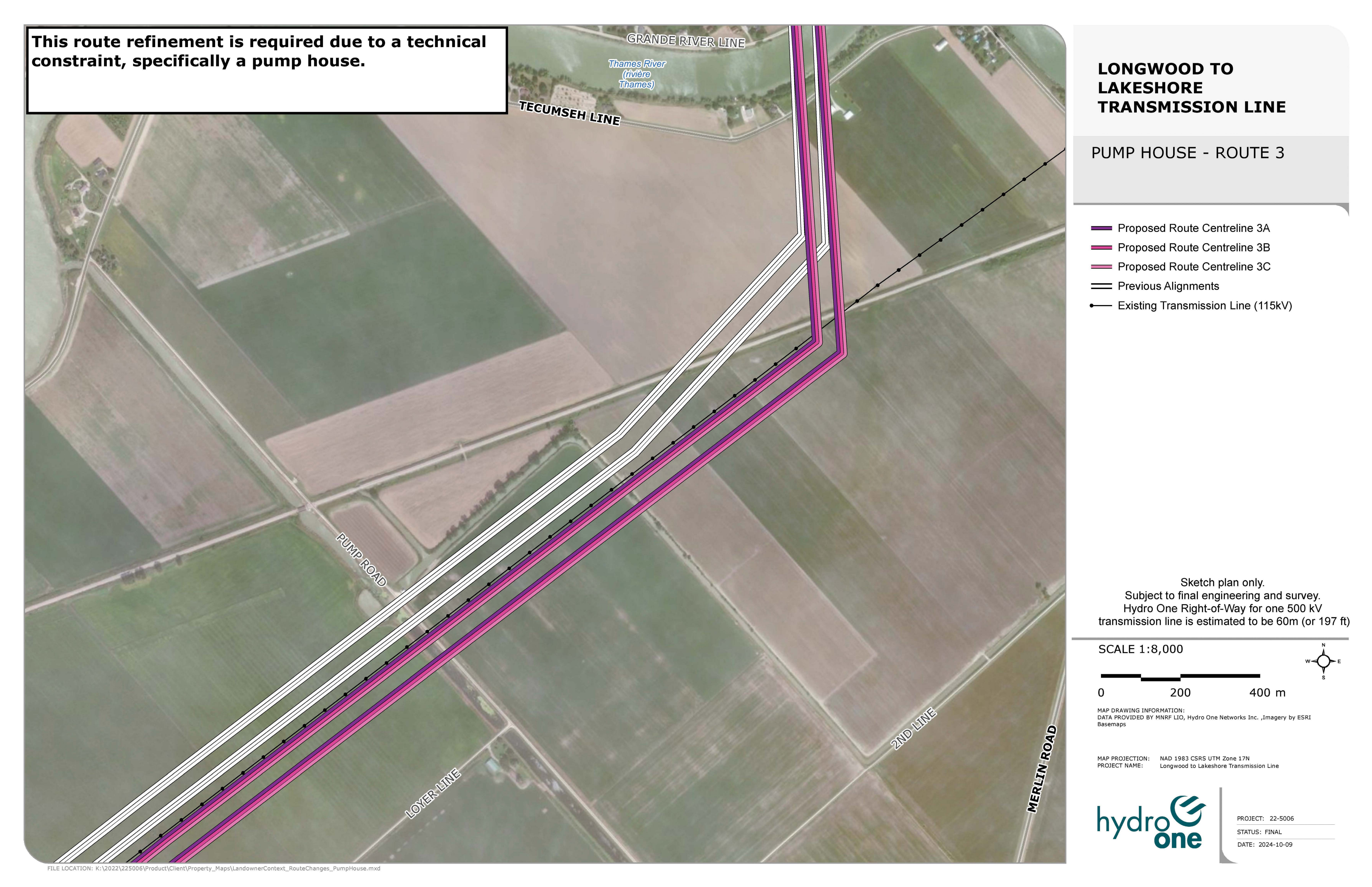
NAP PROJECTION: NAD 1983 CSRS UTM Zone 17N  
PROJECT NAME: Longwood to Lakeshore Transmission Line



PROJECT: 22-5006  
STATUS: FINAL  
DATE: 2024-10-09



# Route refinements





# Example evaluation criteria

The preferred route will be selected based on an evaluation process that balances project specific criteria in four categories.

| Category  | Examples   |
|---|--|
| <br><br>Socio-Economic Environment | <ul style="list-style-type: none"> <li>• Agricultural resources and operations</li> <li>• Residential properties</li> <li>• Business, recreational and other land uses</li> <li>• Impacts on areas of cultural heritage value</li> </ul>   |
| <br>Natural Environment  | <ul style="list-style-type: none"> <li>• Wildlife habitat</li> <li>• Species at Risk</li> <li>• Wetlands, vegetation, natural hazards and floodplain areas</li> </ul>  |
| <br>Technical and Cost   | <ul style="list-style-type: none"> <li>• Line length and angles</li> <li>• Crossing of existing infrastructure</li> <li>• Real estate and land rights considerations</li> <li>• Construction complexity</li> </ul>   |
| <br>Indigenous Culture, Values and Land use  | <ul style="list-style-type: none"> <li>• Areas that support hunting, trapping and/or harvesting grounds</li> <li>• Areas that support fish bearing waters with identified or inferred habitat of game species</li> <li>• Effects to rare, undisturbed native habitats or ecosystems</li> </ul> |





# Working with property owners

- Hydro One will work closely with property owners throughout the project.
- Thank you to the property owners who allowed us access for non-intrusive field studies on properties with environmental areas of interest.
- In early 2025, upon selection of the preferred route, our dedicated real estate representatives will work one-on-one with property owners along the route to discuss next steps.
- Land acquisition principles tailored to the project will be applied in a fair, open, consistent and transparent manner to guide these discussions.



# Anticipated project schedule



Ongoing Engagement

## 2023

Initial open houses, data collection and development of route alternatives

## March - April 2024

Notice of Commencement of Class EA, release of route alternatives and open houses

## 2024

Consultation and data collection in support of EA

## Early- to mid-2025

Selection of preferred route

## Mid-2025

Release the draft Environmental Study Report (ESR) for review and comment

## Late 2025

Submit Final ESR and complete the Class EA process

## 2025 - 2026

Completion of detailed design and other permits and approvals from the Ontario Energy Board (Section 92)

## 2027

Start of construction on Line 1

## 2030

Line 1 in-service

Line 2 construction and in-service date will be determined upon further planning by the IESO

\*Timelines are subject to change

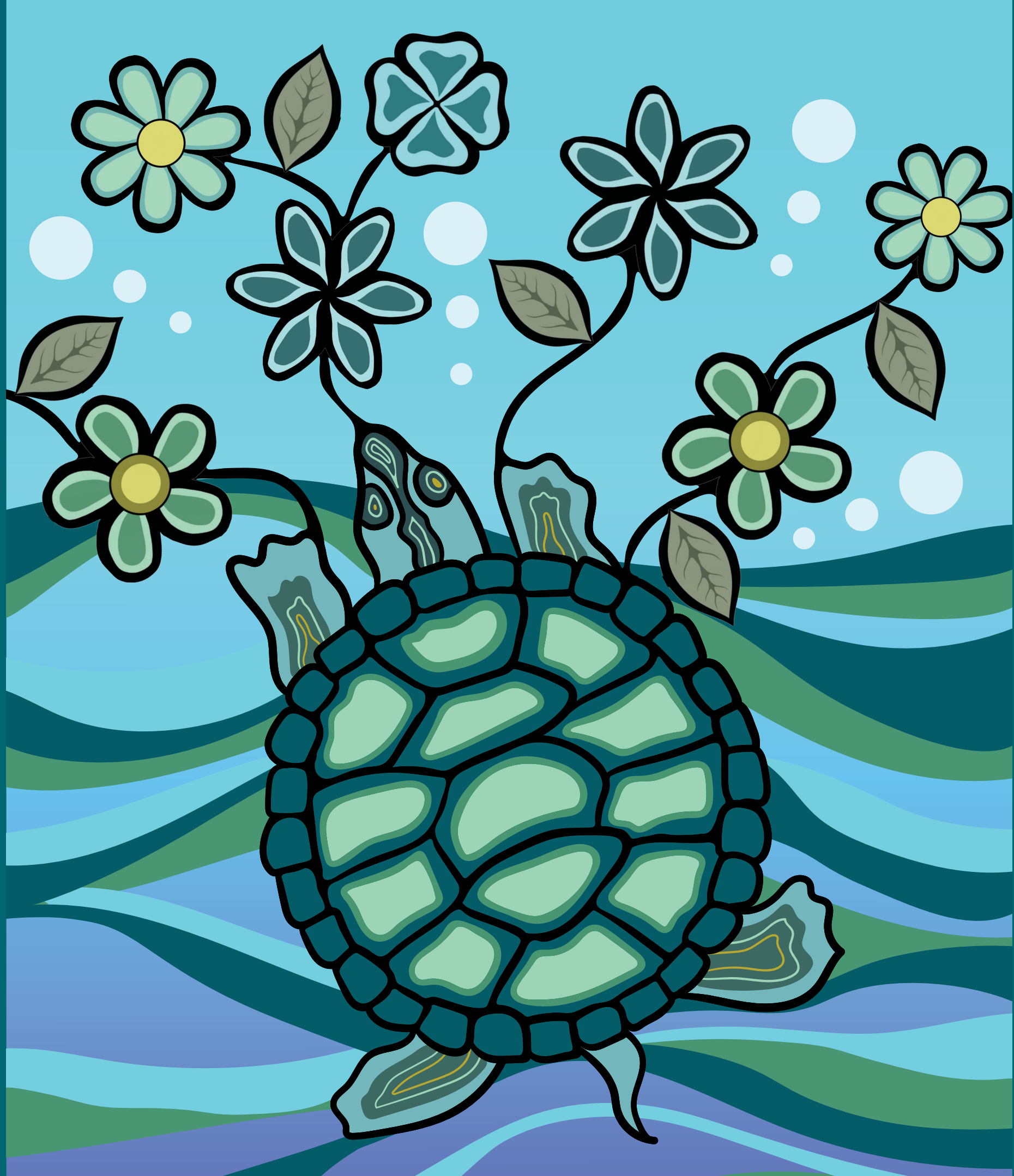
\*\*Leave to Construct under Section 92 of the Ontario Energy Board Act is a regulatory process to obtain approval from the Ontario Energy Board to build and operate a transmission line.



# Our commitment to you

- Hydro One is proud to have been trusted with energizing communities across the region for more than 100 years.
- Thank you to everyone who has provided comments and welcomed our team to your property. We rely on early, meaningful and open engagement to help shape project planning and are committed to listening as we expand our electrical infrastructure.
- We will continue to keep communities, residents and members of the public involved in our planning and project activities. We encourage you to sign up for our project contact list at [HydroOne.com/Longwood-to-Lakeshore](https://HydroOne.com/Longwood-to-Lakeshore)





# Working with Indigenous communities

We consult in a meaningful way that is **guided by Indigenous communities**.

We look to include Indigenous perspectives in the Environmental Assessment through:

- Natural Environment Surveys
- Archaeological Surveys
- Land Use Studies
- Open Houses
- Recurring meetings with Hydro One project teams
- Field Program participation





# Thank you

Your input is important to us. Please share your comments with our team so that we can incorporate them as part of the ongoing environmental assessment.



**1.877.345.6799**



**Community.Relations@HydroOne.com**

For the most up-to-date project information, visit our project website:



**HydroOne.com/Longwood-to-Lakeshore**

