

# GO Rail Network Electrification Transit Project Assessment Process

## *Study Summary: Archaeological Assessment (Appendix D)*

### Scope of the Study

The scope of the GO Rail Network Electrification Transit Project Assessment Process (TPAP) involves electrification of the following GO Transit rail corridors:

1. Union Station Rail Corridor – From UP Express Union Station to Don Yard Layover
2. Lakeshore West Corridor – From just west of Bathurst St (Mile 1.20) to Burlington
3. Kitchener Corridor – From UP Express Spur (at Highway 427) to Bramalea
4. Barrie Corridor – From Parkdale Junction (off Kitchener Corridor) to Allandale GO Station
5. Stouffville Corridor – From Scarborough Junction (off Lakeshore East Corridor) to Lincolnville GO Station
6. Lakeshore East Corridor – From Don Yard Layover to Oshawa GO Station

The Study Area encompasses the GO Transit rail corridors outlined above including the defined vegetation removal zone (i.e., an area extending 7m from the outermost electrified tracks on each side of the corridor), proposed locations for the Tap and Traction Power Facilities, and electrical feeder routes.

The Archaeological Assessment Report for the GO Rail Network Electrification is composed of two parts: i) Archaeological Baseline Conditions Report and ii) Stage 1 Archaeological Assessment Report.

### Approach/Methodology

Background research was conducted to describe the geography, land use history, previous archaeological fieldwork, and current conditions of the land:

- MTCS's Ontario Archaeological Sites Database for registered archaeological sites within a 1 km radius of study area.
- Previously completed archaeological assessments and archives and files within 50 m of the study area limits.

A Stage 1 Archaeological Assessment Study was completed for the entire GO Rail Network Electrification Study Area to determine archaeological potential. Stage 1 Archaeological Assessments involve visual inspection only and do not include excavation or collection of archaeological resources. The following table outlines the results of the Stage 1 Archaeological Assessment study including recommendations for further study where applicable.

Following the Stage 1 work, Stage 2 Archaeological Assessments will be undertaken as part of the TPAP where possible and where Permission to Enter (PTE) access is granted. The results of the Stage 1 assessment and next steps are also summarized in the table below.

## Stage 1 Archaeological Assessment Results

Rail Corridor	Project Component	Archaeological Potential	Recommendation of Stage 1's	Next Steps
<b>Union Station Rail Corridor</b>	Rail Corridor/Vegetation Removal Zone from UP Express Union Station to Don Yard Layover	Yes (Possible Deeply Buried Wharf/Cribbing)	No further assessment recommended: Stage 2 archaeological assessment or archaeological monitoring not practical nor likely informative	N/A
<b>Lakeshore West</b>	Burlington Traction Power Substation (TPS) and Tap Location	Yes (partial area)	Stage 2 Test Pit Survey to be completed during TPAP if PTE can be obtained	Stage 2 Assessment to be completed as part of TPAP, where possible/Permission to Enter (PTE) access is granted
	Mimico Switching Station (SWS)	No	No further assessment recommended.	N/A
	Mimico (Canpa) 25 kV Feeder Route	No	No further assessment recommended.	N/A
	Mimico TPS/Tap Location	Yes	Stage 2 Test Pit Survey to be completed during TPAP if PTE can be obtained	Stage 2 Assessment to be completed as part of TPAP, where possible/PTE access is granted
	Oakville SWS	No	No further assessment recommended.	N/A
	Rail Corridor/Vegetation Removal Zone	No	No further assessment recommended:	N/A
<b>Kitchener</b>	Bramalea Paralleling Station (PS)	Not Determined	Stage 2 Test Pit Survey	Stage 2 Assessment to be completed as part of TPAP, where possible/PTE access is granted
	Bramalea 25 kV Feeder Route	No	No further assessment recommended	N/A
	Rail Corridor/Vegetation Removal	No	No further assessment recommended	N/A
<b>Barrie</b>	Allandale TPS	No	No further assessment recommended	N/A
	Allandale Tap Location	Yes	Stage 2 Test Pit Survey	Stage 2 Assessment to be completed as part of TPAP, where possible/PTE access is granted
	Allandale 25 kV Feeder Route	No	No further assessment recommended:	N/A
	Newmarket SWS	Yes (partial area)	Stage 2 Test Pit Survey	Stage 2 Assessment to be completed as part of TPAP, where possible/PTE access is granted

Rail Corridor	Project Component	Archaeological Potential	Recommendation of Stage 1's	Next Steps
	Gilford PS	Yes	Stage 2 Pedestrian and Test Pit Survey	Stage 2 Assessment to be completed as part of TPAP, where possible/PTE access is granted
	Maple PS	Stage 2 Archaeological Assessment previously completed.	No archaeological resources were uncovered; no further archaeological assessment recommended.	N/A
	Rail Corridor/Vegetation Removal	Yes (West of Minet's Pt Road in the City of Barrie)	Stage 2 Test Pit Survey at location West of Minet's Pt Road	Stage 2 Assessment to be completed as part of TPAP, where possible/PTE access is granted
<b>Stouffville</b>	Scarborough TPS and Tap Location	Yes	Stage 2 Test Pit Survey	Stage 2 Assessment to be completed as part of TPAP, where possible/PTE access is granted
	Scarborough 25 kV Feeder Route	No	No further assessment recommended	N/A
	Unionville PS	Yes (partial area)	Stage 2 Pedestrian and Test Pit Survey	Stage 2 Assessment to be completed as part of TPAP, where possible/PTE access is granted
	Lincolnville PS	Yes	Stage 2 TP Survey	Stage 2 Assessment to be completed as part of TPAP, where possible/PTE access is granted
	Rail Corridor/Vegetation Removal	No	No further assessment recommended	N/A
<b>Lakeshore East</b>	ERMF TPS and Tap Location	No	No further assessment recommended	N/A
	Scarborough SWS	No	No further assessment recommended	N/A
	Durham SWS	Yes (partial area)	Stage 2 Test Pit Survey	Stage 2 Assessment to be completed as part of TPAP, where possible/PTE access is granted
		No (partial area)	No further assessment recommended	
	Don Yard PS	N/A - Previously assessed/ does not retain archaeological potential	N/A - Previously assessed/ does not retain archaeological potential	N/A
	Rail Corridor/Vegetation Removal	No	No further assessment recommended.	N/A

**For additional more detailed information, please refer to the Stage 1 Archaeological Assessment Report (which is organized by rail corridor for easy reference) contained in Appendix D.**

## **Mitigation Recommendations**

In addition to the Stage 2, 3 & 4 Archaeological Assessment work discussed below, the following mitigation measures will be implemented and adhered to during future design/construction phases of the electrification project:

- Should previously unknown or unassessed deeply buried archaeological resources be uncovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the Ontario Heritage Act. The proponent or person discovering archaeological resources must cease alteration of the site immediately and engage a licensed archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the Ontario Heritage Act. Any person discovering human remains must immediately notify the police or coroner and the Registrar of Cemeteries, Ministry of Government Services.

## **Next Steps/Future Work**

Should changes to the project design include lands that extend beyond the limits of the corridor Overhead Contact System (OCS) Impact/Vegetation Removal Zone and/or associated power supply and traction facilities as defined in the Stage 1 Archeological Assessment Report, then further Stage 1 Archaeological Assessment studies must be conducted to determine the archaeological potential of the affected lands.

As recommended in the Stage 1 Archaeological Assessment, Stage 2 Archaeological Assessments will be completed as part of the TPAP where possible and where PTE access has been granted. Based on the results of the Stage 2 Archaeological Assessments, further Stage 3 Archaeological Assessment and/or Stage 4 mitigation will be conducted, as required, on any newly-discovered Indigenous or Euro-Canadian site determined to have Cultural Heritage Value or Interest (CHVI) that will be impacted by construction associated with the OCS along the rail corridors, tap locations, and/or traction power facility sites.