

# **Collaborative and Innovative Heritage Impact Assessment for Highway 407 East Project:**

## **Archaeology, Built Heritage and Cultural Heritage Landscapes**

Ontario Association for  
Impact Assessment OAIA

Ottawa - October 2014



## **Session Overview**

- 1. Highway 407 East Project  
Introduction: Collaboration and Innovation**
- 2. Archaeological Heritage Management**
- 3. Built Heritage, Cultural Heritage Landscape and  
Architectural Salvage**
- 4. Questions / Discussion / Shared Experiences**

## Highway 407 East Timelines

New 4 to 6 lane main highway & links to be completed by **2020**

### 407 E Phase 1: 22 km through Pickering, Whitby, Oshawa

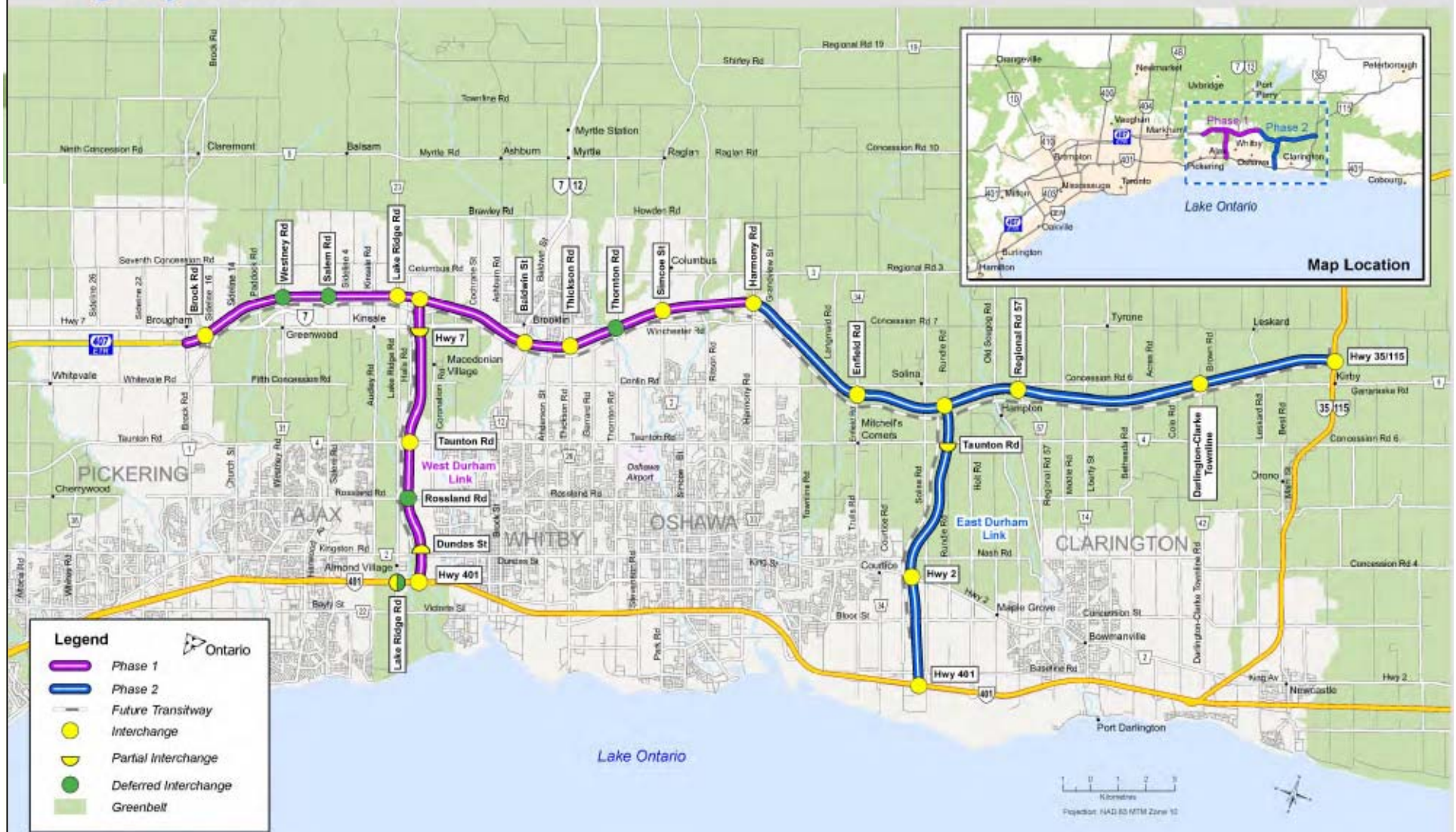
- **By late 2015** - \* currently under construction section from Brock Road to Harmony Road plus a 10 km north-south West Durham Link connecting to Highway 401

### 407 E Phase 2: 23 km through Clarington

- **By 2017** - section from Harmony Road to East Durham Link
- **By 2020** - last section from East Durham Link to Highway 35/115



# Highway 407 East



This map should not be relied on as a precise indicator of routes or locations, nor as a guide to navigation. The Ontario Ministry of Transportation (MTO) disclaims any liability in any way for the use of, or reliance upon, this map or any information on this map.

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## Heritage and Archaeological Resources in the 407 East Corridor: Pickering, Whitby, Oshawa, Clarington



## Built Heritage Properties & Cultural Heritage Landscapes

### Phase 1 – Pickering, Whitby, Oshawa:

42 Individual Heritage Properties  
including one (1) Heritage Act municipally designated property

31 Cultural Heritage Landscape Units

### Phase 2 – Clarington:

23 Individual Heritage Properties  
including three (3) Heritage Act municipally designated properties

39 Cultural Heritage Landscape Units



## **Environmental Assessment Act and Heritage Act**

### **Ontario EA Act:**

- **Identification of Resources – Cultural, Social, Natural, etc.**
- **Scoping and Project Alternatives**
- **Impact Assessments**
- **Impact Mitigation**

### **Ontario Heritage Act:**

- **Standards and Guidelines (S&Gs) for Conservation of Provincial Properties**
- **Identification and Evaluation of Cultural Heritage Resources**
- **Heritage Impact Assessment (HIAs)**
- **Archaeological Assessment Quality Control**
- **Strategic Conservation Plans**

## Impact Mitigation for Cultural Heritage - Highway 407E

### Built Heritage & Cultural Heritage Landscapes

- Cultural Heritage Evaluation Reports (CHERs)
- Heritage Documentation Reports
- Avoidance of Significant Heritage Sites
- Heritage Materials Salvage Strategies
- Heritage Building Relocation Initiatives
- Commemoration



### Archaeological Resources

- Archaeological Assessments
- Archaeological Excavations
- Avoidance of Significant Archaeological Sites
- Commemoration



# Cultural Heritage Evaluation (CHERs) and Salvage Reports

Heritage significance evaluation, photo documentation, salvage recommendations:

**Example: 980 Winchester Road West Whitby**



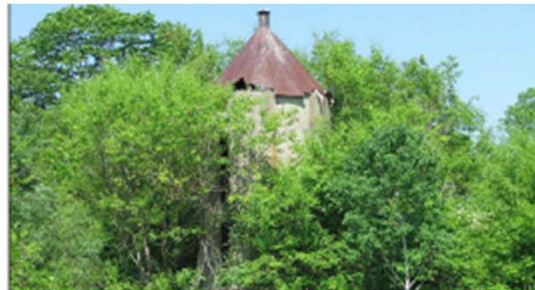
# Cultural Heritage Landscape Documentation Report

Documentation of features within a defined cultural heritage landscape unit

**Example: CHL Unit CM-19- Roadscape Ritson Road North Oshawa**



172. A hydro transmission corridor crosses Ritson Road North in the south part of Concession 6.



174. A concrete silo with a conical metal roof remains on the property; the barn has been removed.



Cadastral Landowner's Map of the Township of Whitby (1917).



Aerial photograph (1944).



173. A former farm complex at No. 2940 Ritson Road features a well-designed, two-storey stone residence with Italianate detailing.



175. Possible mill ruins are located on the Oshawa Creek at the south end of the property at No. 3015 Ritson Road North.



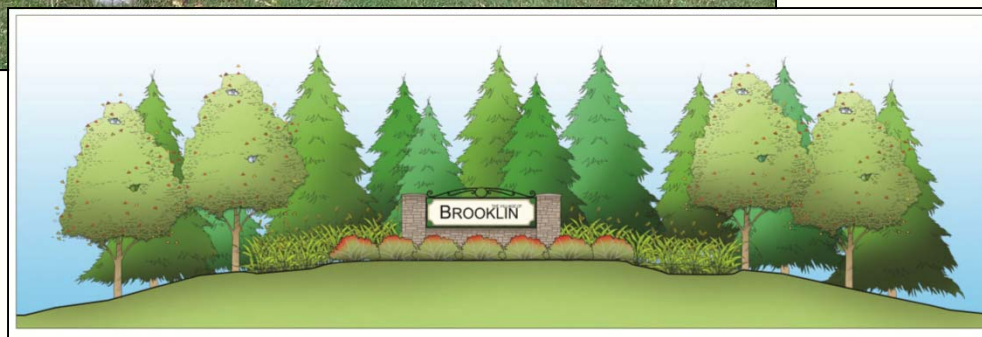
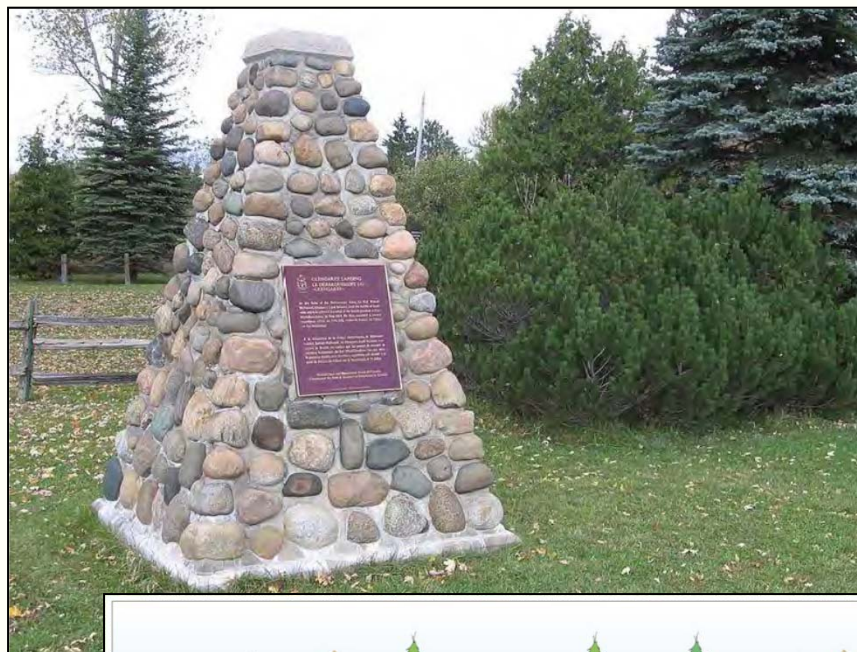
National Topographic Series, Oshawa 30 SE 16 (1973).



Ontario Base Map (2003).





[illegible]

## Design Concepts - Commemoration

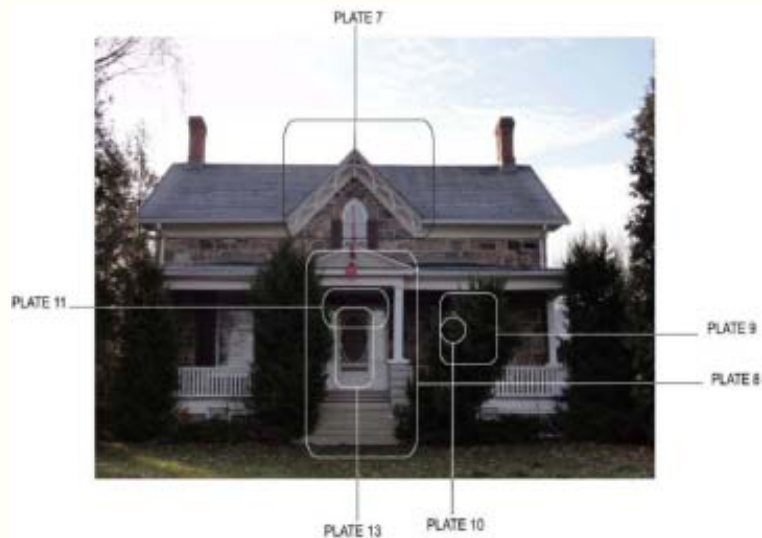


Embossment of wheat sheaf and grindstone mill images  
on Baldwin Street Bridge – Role of Local Agriculture



## Proposed MTO Relocation of Heritage Building

- MTO is investigating the feasibility of relocating a significant designated heritage building onto MTO adjacent remnant lands in Clarington
- Future disposition of property with heritage conditions
- Long term conservation plan for entire functional heritage building



## **Collaboration: Cultural Heritage Resources**

### **Built and Landscape Heritage Sites**

- Qualified Heritage Specialist Consultants
- Municipal Staff
- Municipal Politicians
- Municipal Heritage Committees
- Heritage Property Owners
- Local Heritage Organizations i.e. museums, historical associations, etc.

### **Archaeological Sites**

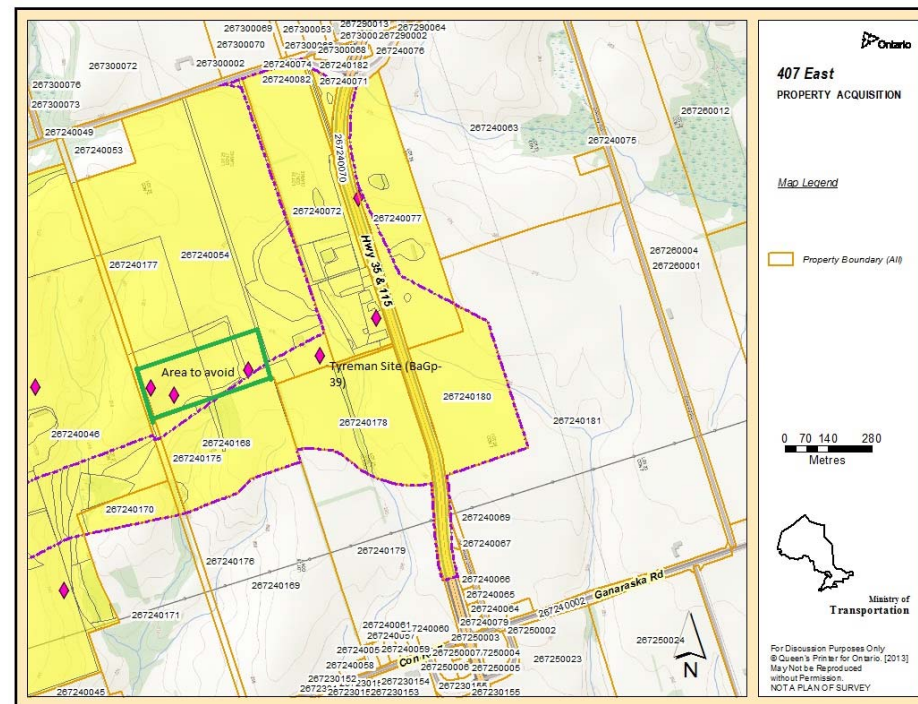
- Licensed Archaeological Consultants
- Municipality
- First Nations



## 407E GIS

- The GIS developed for the project has cross cut disciplinary boundaries and involved input from MTO and various consultants
- The GIS serves as a valuable tool for property management and the conservation of archaeological sites, built environment assets and cultural heritage landscape units

- The GIS identifies areas of identified concern / interest and overlays them over top of areas to be developed





- This GIS allows activities such as the demolition of buildings and construction of structures and sections of roads to be conducted in a manner that is sensitive to the cultural and natural heritage of the corridor



## Archaeology on the 407E

- Archaeological investigations roughly parallel the process followed for CHERs and Salvage Reports, insofar as the investigations seek to mitigate impacts to sites and document their presence and nature



## Legislative framework for Archaeology

- Archaeological work is conducted in accordance with the Ontario Heritage Act, triggered in this case by the Environmental Assessment process
- Archaeologists are licensed by the MTCS, which reviews reports for compliance according to the *Standards and Guidelines for Consultant Archaeologists* (2011)

## Standards and Guidelines

- This document and associated technical bulletins guides terrestrial archaeological work in the province (except on Federal Lands)
- The S&G effectively structures how fieldwork is conducted, along with MTO EA documents



## Stages of Investigation

Archaeological work is done in four stages

- Stg 1- Background study: This determines the potential for archaeological resources and is primarily “desk based”
- Stg 2- Property Assessment: This determines if archaeological resources are indeed present by walking ploughed fields or test pitting
- Stg 3- Site Specific Investigation: determines the extent and general characteristics of a site / artifacts and a site’s heritage value

- Stage 4- Mitigation of Development Impacts. 2 Primary strategies employed for stg 4
  - Avoidance is the preferred option if possible
  - If it is not then proper excavation according to the S&G



- This process has been collaborative throughout, with the consultants, MTCS and MTO working together to manage and mitigate impacts
- Work and reporting has proceeded in a dynamic fashion to meet both construction schedules and conform to MTCS S&G and compliance requirements

# Aboriginal Consultation

- Consultation with Aboriginal Groups was a priority defined as part of the development process
- From a heritage perspective this consultation consisted of heritage site management strategies, commemoration of heritage and discussions of First Nations involvement in the archaeological process





- In the case of archaeological sites of particular commemorative / heritage significance, Stage 4 archaeological mitigation strategies have involved collaboration to ensure that the sites are not further impacted by development