

QEW Credit River Bridge EA



Archaeology

WHAT IS ARCHAEOLOGY?

Archaeology is the study of humanity's history through the examination of physical remains of past activities.

WHAT IS AN ARCHAEOLOGICAL SITE?

Under the Ontario Heritage Act an archaeological site is defined as any property that contains an artifact or any other physical evidence of past human use or activity that is of cultural heritage value or interest. Archaeological sites relate to both the pre-contact and post-contact periods (i.e., before and after European contact). It is illegal to knowingly alter or damage an archaeological site.



MTO Excavation - Myrtle, Ontario

Under these Acts, it is the Ministry of Transportation's (MTO) responsibility to plan and build highways with minimal impact to the environment and heritage resources.



Blacksmith floor - Myrtle, Ontario

ARCHAEOLOGY AND THE MINISTRY OF TRANSPORTATION

In Ontario, heritage and archaeological resources are protected by a number of pieces of legislation. Most important amongst these are the:

- Ontario Heritage Act
- Planning Act; and
- Environmental Assessment Act.

The Ontario Heritage Act and Planning Act require the MTO to undertake an archaeological assessment of any lands to be disturbed through development activities. The Ministry of Culture governs MTO's archaeology process and reporting. MTO must comply with their regulations as stipulated in the Ontario Heritage Act. For example, individuals engaged in archaeological work must be licensed through the Ministry of Culture.

Avoidance of archaeological sites is always preferred where possible. By completing the assessment early in the process, the MTO can make well-informed decisions on site impacts and options for avoidance or mitigation of impacts to sites.

HOW IS AN ARCHAEOLOGICAL ASSESSMENT DONE?

For highway planning and construction, and all development-related activities, archaeological assessment is carried out in four stages.

- **Stage 1** - Background Research: In this phase, information is collected that will allow for a meaningful evaluation of the potential for encountering archaeological sites within a given property or properties. Information includes previously identified sites, vegetation cover and history, drainage patterns, and similar data. It is generally recognized that proximity to a water source is the primary

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factor when considering archaeological potential because it was the most critical consideration in the location of past settlements.

- **Stage 2** - Property Assessment: In this phase, testing is carried out on the lands potentially affected by the project. There are two methods of testing:
 - 1) Pedestrian Survey
 - 2) Test Pitting - Pedestrian surveys are done on open lands that have been plowed, allowed to weather and then examined at five- to ten-metre intervals. Test pitting involves the excavation of small test holes every five to ten metres in areas with forest cover, scrub growth, or with open areas that would be adversely affected by plowing - such as lawns. If no sites are encountered, the property is considered free of archaeological concerns.
- **Stage 3** - Site Specific Assessment: If archaeological sites are encountered during a Stage 2 Property Assessment, they will usually undergo Stage 3 testing. A limited number of one-metre by one-metre units are excavated across the site area to establish the site's integrity and obtain information on it's cultural affiliation, age and possible significance.
- **Stage 4** - Site Excavation: When a site is determined to have particular value or significance, and it cannot be avoided in the construction process, full excavation of the site will be conducted. This ensures proper recovery and recording of all details of the site's character, layout, cultural affiliation, age and function.



Stage 4 Excavation



Ceramic Vessel from Stage 4 Excavation

FOR FURTHER INFORMATION CONTACT

QEW Credit River Bridge EA Project Team
 c/o McCormick Rankin
 2655 North Sheridan Way
 Mississauga, Ontario
 L5K 2P8
 Email: project-team@qewcreditriverea.ca