



Niagara Region

Niagara Escarpment Crossing
Comprehensive Environmental
Assessment
Proposed Terms of Reference

Appendix E
Archaeological Work Plan

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Prepared by:



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1 Introduction

This document outlines the proposed work plan that will be carried out during the Niagara Escarpment Crossing Environmental Assessment (EA) to generate a more detailed description and understanding of the environment from an archaeological perspective. Further, this document describes how that information will be used to assess the effects of the alternatives and proposed project on the environment through evaluation criteria and indicators. This work plan forms **Appendix E** to the proposed Niagara Escarpment Crossing Comprehensive EA Terms of Reference (ToR) and should be read in conjunction with it.

The ToR presently provides a preliminary description of the environment to gain a general understanding of the potential effects that should be examined in the Niagara Escarpment Crossing EA based on the range of alternatives to the project currently anticipated. This description reflects all components included within the Ontario *Environmental Assessment Act* (EA Act) definition of the environment: natural, social, built, economic, and cultural.

Several investigative studies are proposed as part of the Niagara Escarpment Crossing EA to expand on this preliminary description, including, but not limited to the following:

- Air Quality
- Agricultural
- Archaeology
- Built Heritage and Cultural Heritage Landscapes
- Contaminated Property
- Groundwater
- Land Use
- Natural Heritage
- Noise and Vibration
- Surface Water
- Visual Impact

The details associated with the archaeological investigation are provided in this document while details of the other investigative studies are provided as separate work plans. In addition to the investigative studies, the proposed ToR includes three other work plans: Traffic, Operations and Safety, Transportation Planning and Engineering, and Financial all of which are included as separate appendices.

2 Establishment of Existing Archaeological Conditions

2.1 Confirmation of the Preliminary Study Area

The preliminary study area provided in the ToR will be utilized as a starting point for establishing existing and future environmental conditions (**Figure 2-1**). This preliminary study area will be finalized during preparation of the Niagara Escarpment Crossing EA when more detailed information has been obtained, the alternatives to the project have been confirmed, and the potential environmental effects are better understood.

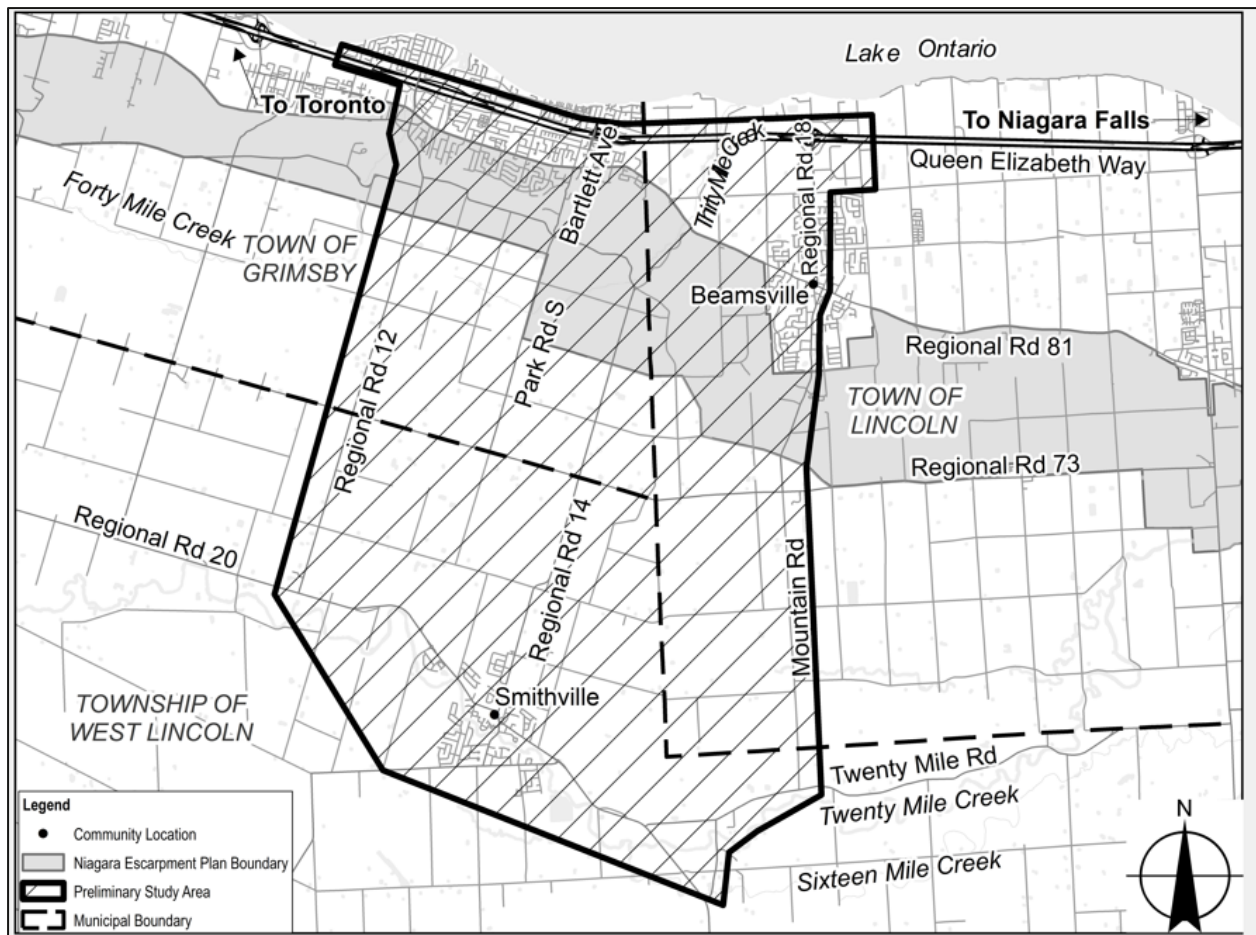


Figure 2-1: Preliminary Study Area

2.2 Review of Available Existing Information Sources

Available existing sources of information will be collected and reviewed to determine existing and future environmental conditions, including any data gaps that need to be addressed through subsequent work (e.g., field investigations, modeling, etc.). With this in mind, a Stage 1 Archaeological Assessment (AA) will be completed in compliance with Ministry of Citizenship and Multiculturalism's (MCM's) Standards and Guidelines for Consultant Archaeologists (2011) and all relevant bulletins to define the archaeological potential within the final study area.

This will be completed as a desktop study without any field investigations by collecting and reviewing available existing sources of information (e.g., nearby registered archaeological sites and previously completed assessments, land use history, and landscape features (both natural and modern)) to confirm and define the potential for archaeological resources to be present associated with nineteenth century and earlier occupations of Indigenous and non-Indigenous origin.

The objectives of a Stage 1 AA are as follows:

1. To provide information about the study area's geography, history, previous archaeological fieldwork and current land condition.
2. To evaluate in detail the study area's archaeological potential which will support recommendations for a Stage 2 AA for all or parts of the study area, if warranted.
3. To recommend appropriate strategies for a Stage 2 AA.

Presently, the list of existing information sources that will be collected and reviewed as part to the proposed archaeological work plan includes, but may not be limited to, the following:

- Niagara Region Archaeological Management Plan;
- Niagara Region Database – historical mapping and aerial imagery;
- MCM Archaeological Sites Database;
- MCM Archaeological Reports Database;
- Parks Canada Directory of Federal Heritage Designations;
- Canada's Historic Places;
- Niagara Escarpment Commission (NEC);
- Niagara Escarpment Plan (NEP);

- The Great Niagara Escarpment Indigenous Cultural Map;
- Ontario Heritage Trust (OHT) Conservation Easement Properties;
- OHT Plaque Database;
- Bereavement Authority of Ontario Public Register;
- Ontario Ancestors: Niagara Peninsula Branch Cemetery Map of Niagara;
- Ontario Genealogical Society;
- Grimsby List of Designated Heritage Properties, Buildings, Landmarks, and Structures;
- Grimsby Municipal Heritage Register;
- Grimsby's Special Places: Significant Cultural Heritage Landscapes in the Town of Grimsby;
- Designated Heritage Properties in Lincoln (designating by-laws);
- Township of West Lincoln Municipal Heritage Register; and,
- Cultural Heritage Report: Existing Conditions – Smithville Master Community Plan and Municipal Class Environmental Assessment.

It should be noted that the listed municipal heritage registers are likely to undergo significant change until January 2027 because of recent amendments to the *Ontario Heritage Act (OHA)* and Bill 200. These changes may include significant numbers of newly designated properties and heritage conservation districts as well as the eventual removal of properties listed before January 2023 (if not designated by January 2027).

The Niagara Official Plan policy 7.11.1.3 states that the Region will consider the consultation protocols of the First Nations that have traditional territory in the area when engaging on planning matters or public works projects. It is noted that Six Nations of the Grand River, the Haudenosaunee Confederacy Chiefs Council as represented by the Haudenosaunee Development Institute, and the Mississaugas of the Credit First Nation are considered likely to be interested in reviewing all archaeological assessment reports prior to submission to the MCM and are likely to be interested in participating in any Stage 2 archaeological fieldwork. Costs for engagement will be paid directly by the Region.

Documentation

The results of reviewing available existing information sources will be documented in a Stage 1 AA Report (Baseline Conditions Report). The Stage 1 AA Report will include details regarding known archaeological resources and mapping indicating areas of archaeological potential.

3 Assessment of the Alternatives

3.1 Alternatives To the Project

Following confirmation of the preliminary list of alternatives to the project, they will be assessed and comparatively evaluated leading to a recommended alternative(s) to the project. The recommended alternative(s) will be presented to review agencies, Indigenous Communities, and the public for a defined period to receive comments, following which a preferred alternative(s) will be identified. The assessment of the alternatives to the project (through the application of evaluation criteria) will be based on available existing information sources contained in the Baseline Conditions Reports.

3.1.1 Preliminary Criteria and Indicators

The preliminary evaluation criteria and indicators that will be used for assessing the alternatives to the project from an archaeological perspective include, but may not be limited to, those set out in **Table 3-1**. The preliminary evaluation criteria and indicators will be finalized based on comments received during the Niagara Escarpment Crossing EA and documented in the EA Report.

Table 3-1: Preliminary Criteria and Indicators for Assessing the Alternatives To the Project

Category	Criterion	Indicator
Cultural Environment	- Effect on archaeological resources	- Number of previously identified archaeological sites impacted
Cultural Environment	- Effect on areas of archaeological potential	- Area (ha) of archaeological potential impacted (i.e., lands with potential for the presence of significant archaeological resources)
Cultural Environment	- Effect on registered cemetery properties	- Number and extent of registered cemeteries impacted

3.2 Alternative Methods of Carrying Out the Project

Following the identification of the preferred alternative(s) to the project, alternative methods of carrying out the project will be generated, possibly screened, assessed, and comparatively evaluated leading to a recommended method(s). The recommended method(s) will be presented to review agencies, Indigenous communities, and the public for a defined period to receive comments, following which a preferred method(s) will be identified.

The generation and possible screening of the alternative methods will be based on available existing information sources contained in the Baseline Conditions Reports. The assessment of the alternative methods of carrying out the project (through the application of evaluation criteria) will be based more on the information provided through subsequent work (e.g., field investigations, modelling, etc.) contained in the Baseline Conditions Reports, as appropriate.

3.2.1 Preliminary Criteria and Indicators

The preliminary evaluation criteria and indicators that will be used for assessing the alternative methods of carrying out the project from an archaeological perspective include, but may not be limited to, those set out in **Table 3-2**. The preliminary evaluation criteria and indicators will be finalized based on comments received during the Niagara Escarpment Crossing EA and documented in the EA Report.

Table 3-2: Preliminary Criteria and Indicators for Assessing the Alternative Methods of Carrying Out the Project

Category	Criterion	Indicator
Cultural Environment	- Effect on archaeological resources	- Number of previously identified archaeological sites impacted
Cultural Environment	- Effect on areas of archaeological potential	- Area (ha) of archaeological potential impacted (i.e., lands with potential for the presence of significant archaeological resources)
Cultural Environment	- Effect on registered cemeteries	- Number and extent of registered cemeteries impacted

4 Impact Assessment of the Proposed Project

Once selected, the preferred method(s) of carrying out the project (i.e., proposed project) will be further developed at a preliminary design level of detail so that the potential environmental effects can be identified with more certainty, more site-specific impact management measures (i.e., mitigation by avoidance or excavation) can be developed for application, net environmental effects can be identified with more certainty, appropriate monitoring requirements can be clearly defined, and specific approval/permitting requirements for constructing the proposed project can be identified.

In concert with preparing the preliminary design level of detail, it may be necessary to undertake additional work (e.g., field investigations, modeling, etc.) at the impact assessment stage of the Niagara Escarpment Crossing EA. The additional work proposed as part of the Archaeological Work Plan could include the following subject to preparation of the EA:

- A Stage 2 archaeological survey of those lands where there is archaeological potential within the proposed limits of impact associated with the proposed project.

As part of the Stage 2 archaeological survey, the Indigenous Communities being consulted as part of the Niagara Escarpment Crossing EA will be invited to participate in monitoring the fieldwork (i.e., Mississaugas of the Credit First Nation, Six Nations of the Grand River, Haudenosaunee Confederacy Chiefs Council represented by the Haudenosaunee Development Institute and Métis Nation of Ontario). Niagara Region will re-imburse the Indigenous Communities for their participation in accordance with the existing Field Liaison Agreement in place.

Documentation

The results of the impact assessment including any additional work such as the Stage 2 archaeological survey will be documented in a Stage 2 AA Report (Impact Assessment Report). In addition, the Report will include detailed recommendations for any further archaeological assessments that may be required (Stage 3 AA/Cemetery Investigations/Stage 4 AA).

5 Documentation

The results of implementing this archaeological work plan will be documented in two reports during the Niagara Escarpment Crossing EA:

- **Stage 1 AA Report** (i.e., Baseline Conditions Report) – will document the results of collecting and reviewing available existing sources of information.
- **Stage 2 AA Report** (i.e., Impact Assessment Report) - will document the results of the Stage 2 archaeological survey associated with the proposed project.

Upon completion, each draft report will be made available to the Indigenous Communities being consulted as part of the Niagara Escarpment Crossing EA for their review and comment (i.e., Mississaugas of the Credit First Nation, Six Nations of the Grand River, Haudenosaunee Confederacy Chiefs Council represented by the Haudenosaunee Development Institute and Métis Nation of Ontario). The draft reports will be updated based on comments received for submission to MCM for review and entry into their Archaeological Reports Database. Copies of the final reports will also be provided to the Niagara Region Growth Strategy and Economic Development Department to update the repository of archaeological assessment reports, and to update the archaeological potential mapping in the Niagara Official Plan.

The Stage 1 AA Report and Stage 2 AA Report will be either a reference or supporting document to the submitted EA Report. The EA Report will be based on and reflect the information contained in the two reports.