

Ministry of Tourism, Culture and Sport

Archaeology Programs Unit
Programs and Services Branch
Culture Division
401 Bay Street, Suite 1700
Toronto ON M7A 0A7
Tél.: (416) 314-2120
Email: Andrea.Williams@ontario.ca

Ministère du Tourisme, de la Culture et du Sport

Unité des programmes d'archéologie
Direction des programmes et des services
Division de culture
401, rue Bay, bureau 1700
Toronto ON M7A 0A7
Tél. : (416) 314-2120
Email: Andrea.Williams@ontario.ca



Jun 21, 2019

Paul Ritchie (P392)
Stantec Consulting
300W - 675 Cochrane Markham ON L3R 0B8

**RE: Review and Entry into the Ontario Public Register of Archaeological Reports:
Archaeological Assessment Report Entitled, "Stage 1 Archaeological Assessment:
Proposed Natural Gas Pipelines to Serve Southern Bruce", Dated Jan 14, 2019,
Filed with MTCS Toronto Office on Jan 28, 2019, MTCS Project Information Form
Number P392-0189-2016, MTCS File Number 0010930**

Dear Mr. Ritchie:

This office has reviewed the above-mentioned report, which has been submitted to this ministry as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18.¹ This review has been carried out in order to determine whether the licensed professional consultant archaeologist has met the terms and conditions of their licence, that the licensee assessed the property and documented archaeological resources using a process that accords with the 2011 *Standards and Guidelines for Consultant Archaeologists* set by the ministry, and that the archaeological fieldwork and report recommendations are consistent with the conservation, protection and preservation of the cultural heritage of Ontario.

The report documents the assessment of the study area as depicted in Figures 5-0 to 5-78 of the above titled report and recommends the following:

Based on the discussion in Section 3.0, portions of the study area meet the criteria for archaeological potential according to Section 1.3 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011c). These lands require further Stage 2 property assessment by test-pit survey at five metre intervals, in accordance with the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011c), Section 2.1.2.

The objective of the Stage 2 archaeological assessment will be to document any archaeological resources within the portions of the study area still retaining archaeological potential and to determine whether these archaeological resources require further assessment. It is anticipated that the Stage 2 archaeological assessment will be limited to only the areas subject to construction disturbance.

The MTCS standards require that each test pit be approximately 30 centimetres in diameter, excavated to at least five centimetres in to subsoil, and have all soil screened through six millimetre hardware cloth to facilitate the recovery of any cultural material that may be present. Prior to backfilling, each test pit will be examined for stratigraphy, cultural features, or evidence of fill.

Where study areas exist as narrow linear corridors (10 metres or less), it is acceptable to conduct Stage 2 property assessment by test-pit survey at five metre intervals unless the area is suitably prepared for pedestrian survey already, as outlined in Section 2.1.2 Standard 1f of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011c). In order to conduct pedestrian survey at five metre intervals, according to Section 2.1.1 of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011c), ploughing must be deep enough to provide total topsoil exposure, but not deeper than previous ploughing, and must provide at least 80% ground surface visibility.

If the archaeological field team determines any lands to be low and wet, steeply sloped, or disturbed during the Stage 2 field work, those areas will not require survey, but will be photographically documented in accordance with Section 2.1 of the MTCS' 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011c).

Parts of the study area are considered to possess potential for deeply-buried archaeological potential. If the preferred design impacts soils warranting concern, this deep potential should be assessed as per Section 2.1.7 of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011c):

In parts of the study area which possess documented sand dunes, property assessment should be conducted by test-pit survey at five metre intervals. Test-pits should be 30 cm in diameter and hand excavated and the material screened through six millimetre mesh until a depth at which hand-excavation is no longer feasible within a 30 cm diameter test-pit. Where sand dune deposits continue to a depth not feasible to be hand excavated within a 30 cm diameter testpit, these parts should be assessed by hand excavation of 50 centimetre by 50 centimetre square test-units at 20 metre intervals with all material screened through six millimetre mesh. This methodology is recommended based on consultation with Dr. William Fitzgerald on behalf of the SON and has been previously employed by other archaeologists working in similar environments along the Lake Huron shore (cf. TMHC 2015). Where sand dune deposits continue to a depth not feasible to be hand excavated by the latter methodology, excavation should then continue by most effective methodology given specific site conditions, in accordance with Section 2.1.7 of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011c). A geoarchaeologist, geomorphologist, or pedologist should be consulted to examine documented soil profiles and provide technical advice.

In parts of the study area which possess documented alluvial deposits (OGS 2010), property assessment should be conducted by test-pit survey at five metre intervals. Test-pits should be hand excavated and screened through six-millimetre mesh. Following this, under the observation of a licensed archaeologist, test trenches should be mechanically excavated using a smooth bucket into the underlying B horizon to expose any prospectively buried IIA horizon. Test trenches should be excavated at 10 metre intervals and aligned perpendicular to the alignment of watercourse channel. Any exposed buried IIA horizons should then be subjected to handexcavated test-pit survey at five metre intervals and screened through eight-millimeter mesh. This methodology should be repeated until sterile C horizon is exposed (consult Tables 19, 24, and 25 for typical soil profiles). A geoarchaeologist, geomorphologist, or pedologist should be consulted to examine documented soil profiles and provide technical advice.

In the parts of the study area along Concession 18 which are considered to possess potential for archaeological resources to be buried beneath the road surface, property assessment should be conducted by test-pit survey at five metre intervals to assess if any intact A horizon exists beneath the minimally improved road bed. Test-pits should be excavated until a depth of a minimum of five centimetres into B horizon or until C horizon is encountered (consult Tables 25 and 30 for typical soil profiles). If hand-excavation is not feasible, excavation should continue by most effective methodology given specific site conditions, in accordance with Section 2.1.7 of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011c).

Several historic cemeteries are documented within the study area. Cemetery lands should be avoided from any proposed impacts by the project. Lands adjacent to the extant boundaries of historic cemeteries require

Stage 3 Cemetery Investigations (following any requisite Stage 2 property assessment) to confirm the extent of burials to exist within that boundary, in accordance with O.Reg 30/11: General (Government of Ontario 2011b) of the Funeral, Burial and Cremation Services Act (Government of Ontario 2002) and the prescriptions of the MTCS. Under the observation of a licensed archaeologist, the topsoil should be mechanically excavated using a smooth bucket to expose the underlying B horizon (for Verdun Methodist Cemetery: consult Table 18 (G Horizon); for Kincardine Cemetery: consult Table 25; for Evangelical United Brethren Cemetery: consult Tables 26 and 29 (G Horizon); and, for Shiloh Community Cemetery: consult Table 19). The exposed B horizon should then be examined to confirm the absence of any exposed human remains or grave shafts. In the event that human remains are identified, the police or coroner should be contacted to determine if they are forensic remains, as outlined in the Advice on Compliance with Legislation (Section 5.0). Once that determination has been made and any forensic concern has been cleared, excavation should proceed as stated above until a 10 metre buffer of sterile B horizon has been exposed outward around the extent of the identified remains. The remains should then be covered in geotextile, shallowly buried with a layer of fine white sand, and then completely reburied with topsoil. The Cemeteries Registrar should be contacted and the site protected from any proposed impacts until a decision is made regarding their mitigation, either by protection and avoidance or disinterment and reburial.

The majority of the study area is documented to have been subject to previous disturbance or to possess steeply sloping or low and wet. These lands are considered to not possess archaeological potential and therefore do not require further archaeological assessment.

The MTCS is asked to review the results presented and to accept this report into the Ontario Public Register of Archaeological Reports. Additional archaeological assessment is still required and so the archaeological sites recommended for further archaeological fieldwork remain subject to Section 48(1) of the Ontario Heritage Act (Government of Ontario 1990c) and may not be altered, or have artifacts removed, except by a person holding an archaeological license.

Based on the information contained in the report, the ministry is satisfied that the fieldwork and reporting for the archaeological assessment are consistent with the ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* and the terms and conditions for archaeological licences. This report has been entered into the Ontario Public Register of Archaeological Reports. Please note that the ministry makes no representation or warranty as to the completeness, accuracy or quality of reports in the register.

Should you require any further information regarding this matter, please feel free to contact me.

Sincerely,

Andrea Williams
Archaeology Review Officer

cc. Archaeology Licensing Officer
Andres Zumbado,EPCOR Utilities Inc.
Andres Zumbado,EPCOR Utilities Inc.

¹ In no way will the ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report(s) or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.