

APPENDIX E

STAGE 1 ARCHAEOLOGICAL REPORT

Stage 1 Archaeological Assessment

**Oakville Transit Garage Environmental Assessment,
Regional Municipality of Halton, Ontario**

Submitted to

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EXECUTIVE SUMMARY

Archaeological Services Inc. (ASI) was contracted by IBI Group, Hamilton, on behalf the Town of Oakville, to conduct a Stage 1 archaeological assessment as part the Oakville Transit Garage Environmental Assessment, in the Town of Oakville, Regional Municipality of Halton, Ontario. The study area consists of a transit garage development at 430 Wyecroft Rd, where the existing building is to be demolished and a new transit maintenance facility will be constructed.

The Stage 1 archaeological assessment determined that no archaeological sites have been registered within 2 km of the study area. A review of the general physiography of the study area suggested that it has low potential for the identification of Aboriginal archaeological sites. However, local nineteenth century land use suggested that the study area has potential for the identification of Euro-Canadian archaeological sites.

The field review determined that although portions of the study area have been previously disturbed by past construction activities or are low and wet, there are several areas that remain undisturbed and contain archaeological potential.

In light of these results, the following recommendation is made:

1. A Stage 2 archaeological assessment should be conducted on lands determined to have archaeological potential, if the proposed project is to impact these lands. This work will be done in accordance with the MCL's draft *Standards and Guidelines for Consultant Archaeologists* (MCL 2006), in order to identify any archaeological remains that may be present.



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1.0 INTRODUCTION

Archaeological Services Inc. (ASI) was contracted by IBI Group, Hamilton, on behalf the Town of Oakville, to conduct a Stage 1 archaeological assessment as part the Oakville Transit Garage Environmental Assessment, in the Town of Oakville, Regional Municipality of Halton, Ontario (Figure 1). The study area consists of a transit garage development at 430 Wycroft Rd, where the existing building is to be demolished and a new transit maintenance facility will be constructed.

Authorization to carry out the activities necessary for the completion of the Stage 1 assessment was granted to ASI by IBI Group on March 3, 2009.

This report presents the results of the Stage 1 background research and field review, and makes one recommendation.

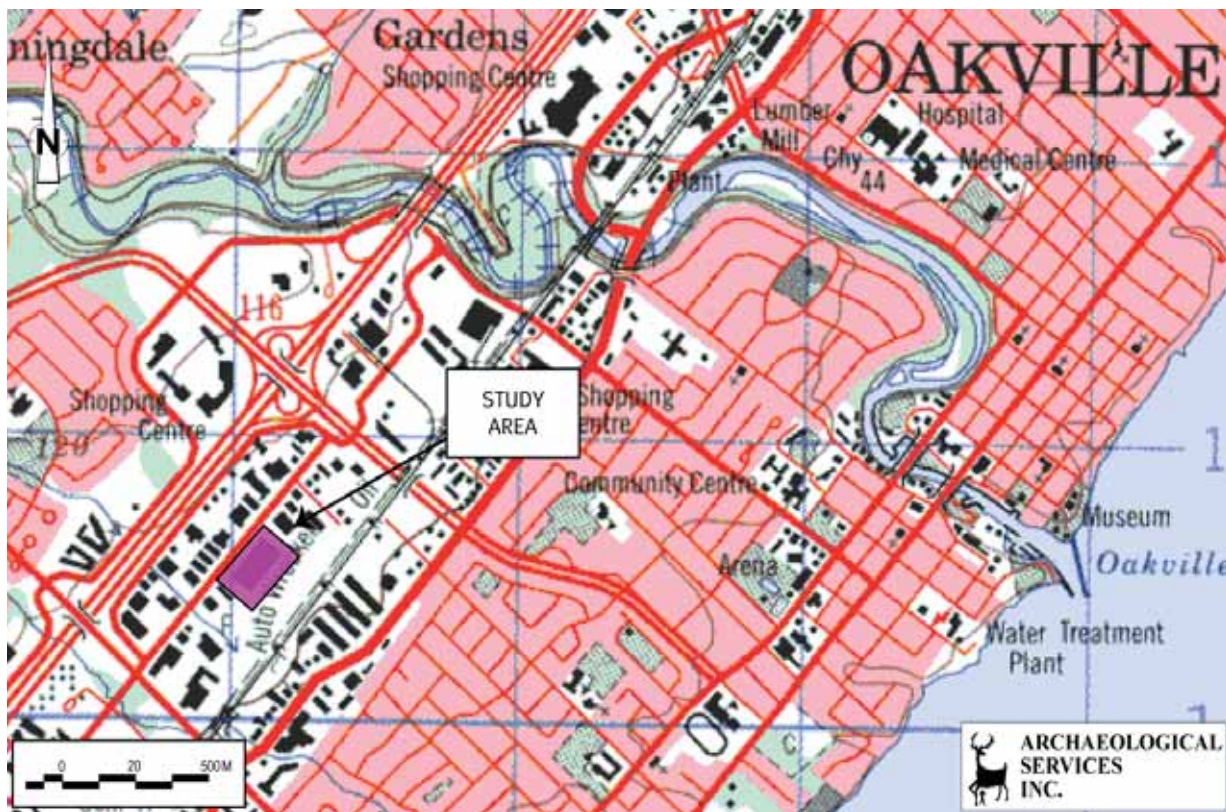


Figure 1: Location of the study area [NTS Sheet 30 M/05 (Hamilton-Burlington)].

2.0 BACKGROUND RESEARCH

The Stage 1 archaeological assessment of the study area was conducted in accordance with the *Ontario Heritage Act* (2005) and the Ontario Ministry of Culture's (MCL) draft *Standards and Guidelines for Consultant Archaeologists* (2006). A Stage 1 archaeological assessment involves research to describe the known and potential archaeological resources within the vicinity of a study area. Such an

assessment incorporates a review of previous archaeological research, physiography, and land use history. Background research was completed to identify any archaeological sites in the study area and to assess their archaeological potential.

2.1 Previous Archaeological Research

In order that an inventory of archaeological resources could be compiled for the study area, three sources of information were consulted: the site record forms for registered sites housed at the MCL; published and unpublished documentary sources; and the files of ASI.

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (OASD) maintained by the MCL. This database contains archaeological sites registered within the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude and longitude. A Borden block is approximately 13 km east to west, and approximately 18.5 km north to south. Each Borden block is referenced by a four-letter designator, and sites within a block are numbered sequentially as they are found. The study area under review is located in Borden block *AiGw*.

According to the OASD (email communication, Robert von Bitter, MCL Data Coordinator, April 7, 2009), no archaeological sites have been registered within 2 km of the study area.

ASI completed an Archaeological Master Plan of the Region of Halton (ASI 1998). It should be noted that the dearth of registered archaeological sites in the vicinity of the study area is most likely related to the development of the area prior to the instigation of systematic archaeological assessments under provincial legislation. Accordingly, the absence of registered archaeological sites should not be taken as an indicator of any lack of Aboriginal or early Euro-Canadian land use or occupation (ASI 1998).

2.2 Physiography and Assessment of Aboriginal Archaeological Potential

The study area is situated within the Iroquois Plain physiographic region of southern Ontario (Chapman and Putnam 1984: 190-196). The Iroquois Plain comprises lacustrine deposits along the western end of Lake Ontario that were created by glacial Lake Iroquois. In most areas, the old shoreline is clearly visible. The plain extends from the Niagara River to the Trent River, a length of 300 km, varying from a few hundred metres to thirteen kilometres in width. Across the Regional Municipality of Halton, the Iroquois Plain has a very constant pattern with the old shoreline marked by bluffs or gravel bars. The land is generally level and the coarse sandy soil is often poorly drained. The soils of the general study area consist of clay loams derived from the underlying Ordovician red shale of the Queenston Formation.

This narrow strip is the most densely inhabited area because of its proximity to Lake Ontario and its climatic influences, as well as its favourable soil conditions.

Based on information gathered from the Archaeological Master Plan of the Region of Halton (ASI 1998), the study area is situated within an area of poorly drained soil, consisting of Orthic Humic Gleysols, and they comprise about 10% of the Region. Gleysolic soils are poorly drained mineral soils



that are saturated with water and are under reducing conditions, due to lack of aeration, for some or all of the year.

Potable water is the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in south central Ontario after the Pleistocene era, proximity to water can be regarded as a useful index for the evaluation of archaeological site potential. Indeed, distance from water has been one of the most commonly used variables for predictive modeling of site location. Before recorded history, Toronto was a junction point of land and water routes, with trails running northward from the shoreline along river routes.

The MCL's draft *Standards and Guidelines for Consultant Archaeologists* (2006: Unit 1c 5–7, 10) stipulates that undisturbed land within 300 metres of a primary water source (lakes, rivers, streams, creeks, etc.), undisturbed land within 200 metres of a secondary water source (intermittent streams and creeks, springs, marshes, swamps, etc.), as well as undisturbed land within 300 metres of an ancient water source (as indicated by remnant beaches, shore cliffs, terraces, abandoned river channel features, etc.), are considered to have archaeological potential.

Therefore, depending on the degree of previous land disturbance, it may be concluded that there is low potential for the recovery of Aboriginal remains within the study area.

2.3 Assessment of Euro-Canadian Archaeological Potential

The 1877 Illustrated Historical Atlas of the County of Halton, Ontario was reviewed to determine the potential for the presence of historical archaeological remains within the study corridor during the nineteenth century (Figure 2).

The study area is located on part of Lot 19, Concession 3 South of Dundas Street (SDS), former Township of South Trafalgar, County of Halton. Historic mapping from 1877 indicates that the owner/occupant of Lot 19 at the time was W. J. Carter, a farmer who settled in the area in 1834 (Pope 1877). According to the Atlas, there were no buildings within the study area.

The study area was probably farmed until at least the mid 20th century, and possibly until the 1960s. Prior to 1962, the study area was located within the boundaries of the Township of South Trafalgar. In 1962, it became part of its present jurisdiction when the Township of South Trafalgar, Village of Bronte and Town of Oakville amalgamated and formed the Town of Oakville. An early 1960s aerial photograph viewed at the Oakville Archives (Photo Box 5, No. 1408 and No. 1384) indicates that the area between the Queen Elizabeth Way and the railroad line, east of Fourth Line, was in a period of transition with a combination of agricultural fields and a few industrial buildings located along a partially built Wycroft Road.

While it is unknown when exactly the structure on the study area was built, it likely dates to the mid 1960s when the development of this part of Oakville began.



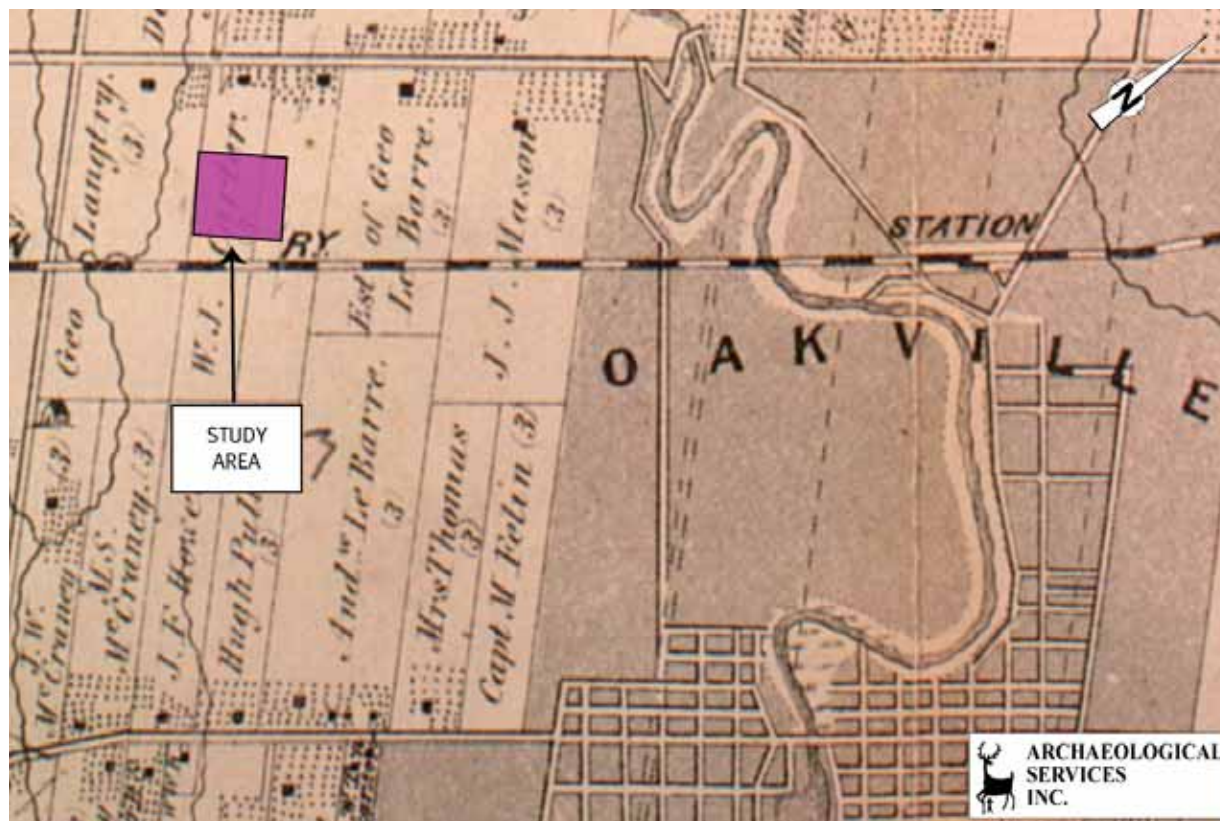


Figure 2: The study area overlaid on the map of Trafalgar Township in 1877 *Illustrated Historical Atlas of County of Halton*.

For the Euro-Canadian period, the majority of early nineteenth century farmsteads (i.e., those which are arguably the most potentially significant resources and whose locations are rarely recorded on nineteenth century maps) are likely to be captured by the basic proximity to the water model outlined in Section 2.2, since these occupations were subject to similar environmental constraints. An added factor, however, is the development of the network of concession roads and railroads through the course of the nineteenth century. These transportation routes frequently influenced the siting of farmsteads and businesses. Accordingly, undisturbed lands within 100 metres of an early settlement road are also considered to have potential for the presence of Euro-Canadian archaeological sites.

Therefore, depending on the degree of previous land disturbance, it may be concluded that there is potential for the recovery of historic cultural material within the study corridor.

3.0 FIELD REVIEW

A field review of the study area was conducted by Mr. Peter Carruthers (P163), ASI, on March 30, 2009, in order to confirm the assessment of archaeological site potential and to determine the degree to which development and landscape alterations may have affected that potential. Weather conditions during the field assessment were overcast and 0°C, with good visibility. Field observations have been compiled onto a map of the study area (Figure 3). Associated photography can be found in Section 6.0.

As mentioned in Section 1.0, the study area is located at 430 Wycroft Road. Currently, the study area consists of an industrial building, with two entrances off Wycroft Road. Previous construction activities have disturbed approximately two-thirds of the study area (Plates 1-2, 4-7, 9, and 12). Due to the extent of previous disturbance, these areas do not exhibit archaeological site potential. No further archaeological assessment is required on these lands (Figure 3 area marked in yellow).

The land along the south and north-eastern boundaries of the study area can be characterized as being low and wet (Plates 4, 7, 11-12, and 4). A small drainage ditch is also located in the north corner of the study area, adjacent to the entranceway (Plate 3). These portions of the study area do not have archaeological potential, and no further archaeological assessment is therefore required (Figure 3, areas marked in blue).

The eastern corner of the property has remained relatively undisturbed, and exhibits archaeological site potential. In general, the land rises up from the drainage ditch and crosses level terrain (Plates 7-11, and 13). Should the proposed project encroach upon undisturbed land with archaeological potential, a Stage 2 assessment should be conducted (Figure 3, areas marked in green).

4.0 CONCLUSIONS AND RECOMMENDATIONS

The Stage 1 archaeological assessment was conducted as part of the Oakville Transit Garage Class Environmental Assessment, in the Town of Oakville, Ontario. The assessment determined that no archaeological sites have been registered within 2 km of the study area. A review of the general physiography of the study area suggested that it has low potential for the identification of Aboriginal archaeological sites. However, local nineteenth century land use suggested that the study area has potential for the identification of Euro-Canadian archaeological sites.

The field review determined that although significant portions of the study area have been previously disturbed by past construction activities or are low and wet, there are several areas that remain undisturbed and contain archaeological potential.

In light of these results, the following recommendation is made:

1. A Stage 2 archaeological assessment should be conducted on lands determined to have archaeological potential (Figure 3, areas marked in green), if the proposed project is to impact these lands. This work will be done in accordance with the MCL's draft *Standards and Guidelines for Consultant Archaeologists* (MCL 2006), in order to identify any archaeological remains that may be present.

The following Ministry of Culture conditions also apply:

- This report is filed with the Minister of Culture in compliance with sec. 65 (1) of the Ontario Heritage Act. The ministry reviews reports to ensure that the licensee has met the terms and conditions of the licence and archaeological resources have been identified and documented according to the standards and guidelines set by the ministry, ensuring the conservation, protection and preservation of the heritage of Ontario. It is recommended that development not







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 DRAWN BY: CL
 DATE: April 2009
 ASI PROJECT NO.: 08EA-55

BASE: Provided by IBI Group

Archaeological Potential
 No Potential: low & wet
 No Potential: disturbed
 Photo Location & Direction

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Figure 3: Oakville Transit Garage EA - Results of the Stage 1 Archaeological Assessment.

proceed before receiving confirmation that the Ministry of Culture has entered the report into the provincial register of reports.

- Should previously unknown or unassessed deeply buried archaeological resources be uncovered during development, they may be a new archaeological site and therefore subject to Section 48 (1) of the Ontario Heritage Act. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed archaeologist to carry out archaeological fieldwork, in compliance with sec. 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.

The documentation and artifacts related to the archaeological assessment of this project will be curated by Archaeological Services Inc. until such a time that arrangements for their ultimate transfer to Her Majesty the Queen in right of Ontario, or other public institution, can be made to the satisfaction of the project owner, the Ontario Ministry of Culture, and any other legitimate interest groups.

5.0 REFERENCES CITED

Archaeological Services Inc. (ASI)

- 1998 *The Master Plan of Archaeological Resources of the Regional Municipality of Halton.*
Report on file with the Regional Municipality of Halton.

Chapman, L. J. and F. Putnam

- 1984 *The Physiography of Southern Ontario.* Ontario Geological Survey, Special Volume 2.
Ontario Ministry of Natural Resources, Toronto.

Ministry of Culture.

- 2005 *Ontario Heritage Act.*
- 2006 *Standards and Guidelines for Consultant Archaeologists* (final draft, September 2006).
Cultural Programs Branch, Ontario Ministry of Culture, Toronto.

Pope, J. H.

- 1877 *Illustrated Historical Atlas of the County of Halton, Ontario.* Toronto: Walker and Miles.



6.0 PHOTOGRAPHY



Plate 1: View northeast along front of property. Area has been graded and landscaped and has no potential.



Plate 2: View southeast across entranceway and graded lawn toward industrial building. Area is all disturbed and has no potential.



Plate 3: View southwest along front of property with drainage ditch across landscaped lawn. Area has no potential.



Plate 4: View southeast along entranceway. Land on left is low and wet. Land on right is graded and landscaped. Area has no potential.



Plate 5: View east-southeast across paved area. No potential in foreground.



Plate 6: View south-southeast across paved area. Area has no potential.





Plate 7: View southwest along drainage area (low and wet) between paved surface (no potential) and grassy area (with potential).



Plate 8: View southeast along tree/fence line across lawn. Archaeological potential is present throughout grassy and wooded areas.



Plate 9: View northwest from high ground with potential toward paved roadway. No potential from roadway to Wycroft Rd.



Plate 10: View south-southwest along edge of roadway at back portion of property. Land on right adjacent to paved roadway has been graded. Potential exists on level ground in foreground.



Plate 11: View southeast along property boundary. Ditch on left has no potential (low and wet), potential exists on level ground.



Plate 12: View northeast from back of graded and filled area at back of property toward wet area in distance.





Plate 13: View south-southwest along side of tennis court toward higher ground with potential.



Plate 14: View north-northeast along drainage ditch. Area has no potential due to low and wet conditions.



Ministry of Culture

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July 23, 2009

Mr. Robert Pihl
Archaeological Assessments Inc.
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M5S 2P9

RE: Review and Acceptance into the Provincial Register of Reports: Archaeological Assessment Report Entitled, "Stage 1 Archaeological Assessment, Oakville Transit Garage Environmental Assessment, Regional Municipality of Halton, Ontario" Dated April 2009 and Received by the MCL Toronto Office on June 15, 2009, ASI Corporate File Number 09EA-055, MCL Project Information Form Number P057-520-2009, MCL RIMS Number 24EA018.

Dear Mr. Phil:

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. This review is to ensure that the licensed professional consultant archaeologist has met the terms and conditions of their archaeological licence, that archaeological sites have been identified and documented according to the 1993 technical guidelines set by the ministry and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario.

As the result of our review, this Ministry accepts the above titled report into the Provincial registry of archaeological reports. The report indicates that areas within the subject property (as depicted in green on Figure 3 of the above titled report) have archaeological potential and, consequently, should be subject to a Stage 2 archaeological assessment. This ministry concurs with this recommendation.

Should you require any further information regarding this matter, please do not hesitate to contact Katherine Cappella, Archaeology Review Officer, Central West Region, at (416) 314-7143 or katherine.cappella@ontario.ca

Sincerely,



Abbey Flower
A/Archaeology Review Officer

cc. Archaeological Licensing Office
Andreas Houlios, IBI Group
Saher Fazilat, Project Manager, New Construction, Town of Oakville
Barb Koopmans, Manager, Current Planning and urban Design, South Oakville