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TOWN OF HALTON HILLS
PLANNING DEPARTMENT

JUL 06 2010

May 18, 2010

To: Matthews Planning & Management Ltd.

Please find enclosed in this envelope two (2) copies of the following final report, for your firm.

**Stage 1-2 Archaeological Assessment of Draft Plan of Subdivision, Part of Lot 21
Concession 9 (Geographic Township of Esquesing), Town of Halton Hills Regional
Municipality of Halton. (our file #29335-P)**

Also, we would like to assure you that three (3) copies of the final report stated above have been submitted to The Ontario Ministry of Culture for review and archival purposes.

Please submit the following documentation directly to the review officer at the Ministry of Culture to help expedite the review process. Thank-you in advance

- Full size draft plan or official plan or survey
- Municipal file number and contact info
- Conditions of draft plan or development (if available)

Please send directly to the following review officer:

Katherine Cappella
Archaeology Review Officer - Culture Programs Unit, Programs and Services Branch
Ontario Ministry of Culture, 400 University Avenue, 4th Floor, Toronto, ON M7A 2R9
Tel: 416-314-7143 Fax: 416-314-7175 email: katherine.cappella@ontario.ca

If you have any questions please feel free to contact me.

Thank you for choosing AMICK Consultants Limited as your cultural resource management consultant. We look forward to the opportunity to work with your corporation again.

Sincerely,

Melissa Milne,
Business Manager
AMICK Consultants Limited

AMICK Consultants Limited – Lakelands District Office

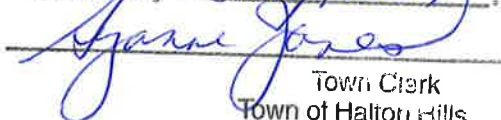
380 Talbot Street, P.O. Box 29, Port McNicoll, Ontario L0K 1R0

Tel: (705) 534-1546 Fax (705) 534-7855

www.amick.ca

Certified a true copy

this 15th day of July, 2017.


Town Clerk
Town of Halton Hills



18 May 2010

TOWN OF HALTON HILLS
PLANNING DEPARTMENT

JUL 06 2010

**Administrative Coordinator
Culture Programs Unit
Programs and Services Branch
Ontario Ministry of Culture
400 University Avenue, 4th Floor
Toronto, ON M7A 2R9**

RE: PROJECT REPORT COVER LETTER

Please find enclosed the project report package for the project detailed below. This package consists of three components in accordance with the 2009 Draft Standards and Guidelines for Consultant Archaeologists:

- 1) Project Report Cover Letter (this document)
- 2) Three (3) copies of the Project Report (enclosed)
- 3) Three (3) copies of Supplementary Documentation (not applicable to this project)

Licensee Information:

Licensee: Michael B. Henry CD BA
Archaeology Licence: P058
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380 Talbot Street, P.O. Box 29
Port McNicoll, ON L0K 1R0
Phone: (705) 534-1546 Fax: (705) 534-7855
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Project Information:

MCL Project Number: P058-460-2009 & P058-558-2010
Investigation Type: Stage 1-2 Archaeological Assessment
Project Name: Draft Plan of Subdivision – Glen Williams Eden Oak
Project Location: Part of Lot 21 Concession 9
(Geographic Township of Esquesing),
Town of Halton Hills, Regional Municipality of Halton

Proponent Information:

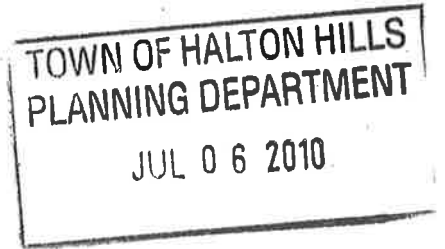
Project Proponent: Matthews Planning & Management Ltd.
Designated Contact: Mr. David Matthews
Contact Information: 1470 Hurontario Street
Mississauga, ON L5G 3H4
Phone: (905) 274-1047 Fax (905) 274-1337

Approval Authority Information:

Project Designation Number: N/A
Approval Authority:
Designated Contact:
Contact Information:

Reporting Information:

Site Record/Update Forms: N/A
Related Reports: N/A
Company: N/A
MCL Project Number: N/A
Outstanding Final Reports: N/A
Date of Report Filing: 18 May 2010





TOWN OF HALTON HILLS
PLANNING DEPARTMENT

JUL 06 2010

1.0 REPORT COVER PAGE

Licensee: Michael B. Henry CD BA
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MCL Project Number: P058-460-2009 & P058-558-2010
Corporate Project Number: 29335-P
Project Description: Stage 1-2 Archaeological Assessment
Of Draft Plan of Subdivision,
Part of Lot 21 Concession 9
(Geographic Township of Esquesing),
Town of Halton Hills, Regional Municipality of Halton

Date of Report Filing: 22 April 2010

Site Record/Update Forms: N/A

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2.0 EXECUTIVE SUMMARY

This report describes the results of the 2010 Stage 1-2 Archaeological Assessment Part of Lot 21 Concession 9 (Geographic Township of Esquesing), Town of Halton Hills, Regional Municipality of Halton, conducted by AMICK Consultants Limited. This study was conducted under Archaeological Consulting License #P058 issued to Michael Henry by the Minister of Culture for the Province of Ontario. This assessment was undertaken in order to address conditions of development approval. All work was conducted in conformity with Ontario Ministry of Culture (MCL) draft Standards and Guidelines for Consultant Archaeologists (MCL 2009) and the Ontario Heritage Act (RSO 2005).

AMICK Consultants Limited was engaged by the proponent to undertake a Stage 1-2 Archaeological Assessment of the subject property and was granted permission to carry out archaeological fieldwork on March 21, 2009. The physical assessment of the subject property was completed on March 18, 2010 and April 14, 2010, consisting of high-intensity pedestrian survey at an interval of five metres between individual transects and high-intensity test pit survey at an interval of five metres between individual test pits. All records, documentation, field notes, photographs and artifacts (as applicable) related to the conduct and findings of these investigations are held at the Lakelands District corporate offices of AMICK Consultants Limited until such time that they can be transferred to an agency or institution approved by MCL on behalf of the government and citizens of Ontario.

As a result of the physical assessment of the property conducted on March 18, 2010 and April 14, 2010 no archaeological resources were encountered. Consequently, it is recommended that the proposed development be considered cleared of any further requirement for archaeological fieldwork. Any current or future condition of development respecting archaeological resources should be considered as addressed.

3.0 TABLE OF CONTENTS

1.0	Report Cover Page	1
2.0	Executive Summary	2
3.0	Table of Contents	3
4.0	Project Personnel	4
5.0	Project Background	5
5.1	Development Context	5
5.2	Historical Context	7
5.2.1	Registered First Nations Archaeological Sites	9
5.2.2	Registered Euro-Canadian Archaeological Sites	9
5.2.3	Historic Maps	10
5.2.4	Summary	11
5.3	Archaeological Context	11
5.3.1	Location and Current Conditions	11
5.3.2	Physiographic Region	12
5.3.3	Surface Water	12
5.4	Current Property Conditions Context	13
5.4.1	Buildings and Structural Footprints	13
5.4.2	Disturbance	13
5.4.3	Low-Lying and Wet Areas	14
5.4.4	Steep Slope	14
5.4.5	Wooded Areas	14
5.4.6	Ploughable Agricultural Lands	14
5.4.7	Lawn, Pasture, Meadow	15
6.0	Field Methods	15
7.0	Record of Finds	20
8.0	Analysis and Conclusions	20
9.0	Recommendations	20
10.0	Advice on Compliance with Legislation	21
11.0	Bibliography and Sources	22
12.0	Stage 1-2 Photos	23

LIST OF TABLES

Table 1	Cultural Chronology of South-Central Ontario	8
Table 2	Native Sites within 2km	9
Table 3	Euro-Canadian Sites within 2km	10

LIST OF FIGURES

Figure 1	Location of the Subject Property	5
Figure 2	Segment of Historic Atlas Map (1878)	10
Figure 3	Location of the Subject Property	12
Figure 4	Aerial Photo of the Subject Property	18
Figure 5	Plan of the Subject Property	19

LIST OF PLATES

Plate 1	Pedestrian Conditions facing Southeast	23
Plate 2	Pedestrian Conditions facing South	23
Plate 3	Pedestrian Conditions facing West	23
Plate 4	Pedestrian Conditions facing North	23
Plate 5	Test pitted Laneway Area facing Northeast	23
Plate 6	Test Pitted Lawn Area in West Corner facing West	23
Plate 7	Low Lying and Wet facing East	24

4.0 PROJECT PERSONNEL

Consulting Archaeologist

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Project Archaeologists

Jason Wootton-Radko (MCL Research Licence #R137)

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Photography

Jason Wootton-Radko

5. PROJECT BACKGROUND

5.1 Development Context

This report describes the results of the 2010 Stage 1-2 Archaeological Assessment of Draft Plan of Subdivision, Part of Lot 21 Concession 9 (Geographic Township of Esquesing), Town of Halton Hills Regional Municipality of Halton, conducted by AMICK Consultants Limited. This study was conducted under Archaeological Consulting License #P058 issued to Michael Henry by the Minister of Tourism and Culture for the Province of Ontario. This assessment was undertaken in order to address conditions of development approval. All work was conducted in conformity with Ontario Ministry of Culture (MCL) draft Standards and Guidelines for Consultant Archaeologists (MCL 2009) and the Ontario Heritage Act (RSO 2005).

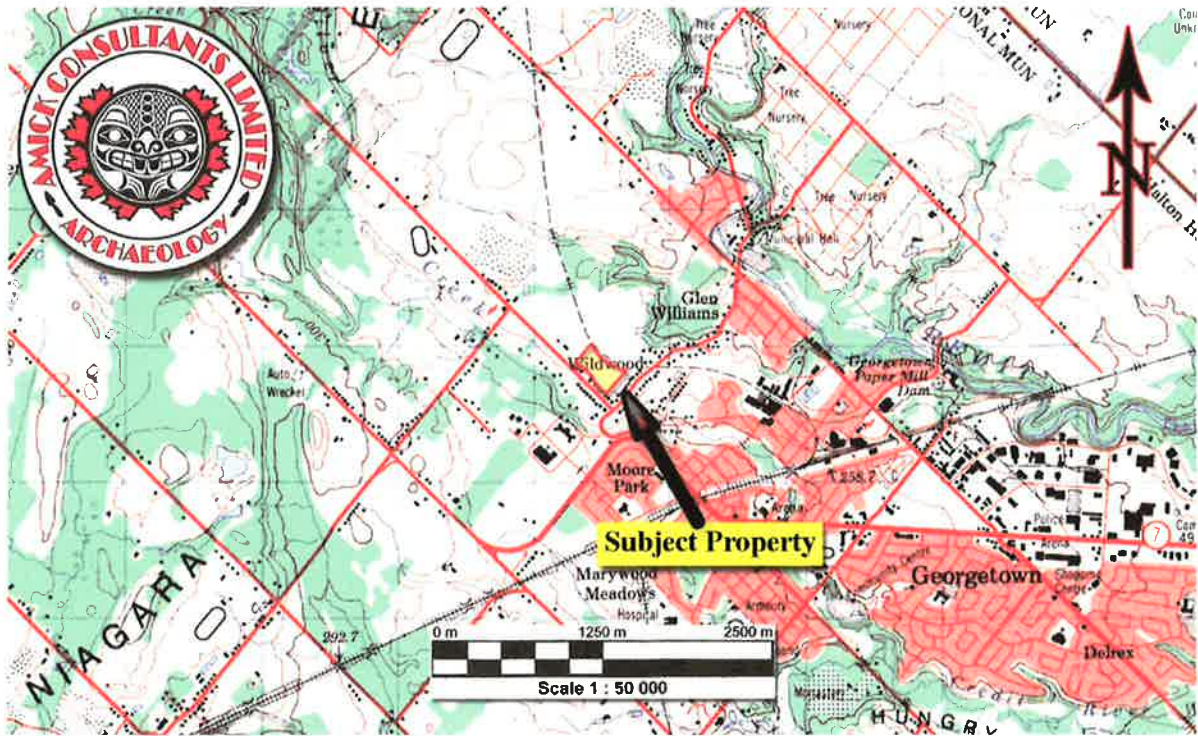


Figure 1 Location of the Subject Property

"A Stage 1 background study provides the consulting archaeologist and Ministry report reviewer with information about the known and potential cultural heritage resources within a particular study area, prior to the start of the field assessment."

(OMCzCR 1993)

The evaluation of potential for heritage resources is further elaborated Section 5.3 of the Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments (1992) prepared by the Ontario Ministry of Culture and Communications (MCC) and the Ontario Ministry of Environment (MOE):

“Generally, lands affected by project development should be classified by the proponent as having high, medium or low potential for the discovery of heritage resources. Since heritage resources are not uniformly distributed across the landscape, not all project areas will exhibit the same likelihood of finding heritage resources. Potential is based on the following geographical and historical factors which may have influenced previous use and settlement of an area:

- *Distance from historic transportation routes.*
- *Distance from sources of water (rivers, lakes, streams, creeks, springs, marshes, swamps, relict creek beds).*
- *Ability of the terrain to accommodate human settlement. This includes topography, soils and access to plant, animal and mineral resources.*
- *Documentation of existing heritage resource sites in the affected area and region. Known resources in the affected area, such as architectural features, cultural landscapes or registered archaeological sites, can be evaluated for possible heritage significance by using the evaluation criteria outlined in Section 5.5 of this guideline.*
- *Historical context of the region encompassing the affected area.*
- *Description of previous land uses of the affected area, including nature and extent of previous development disturbances.”*

(MCC & MOE 1992: 6)

The evaluation of potential does not indicate that sites are present within areas affected by proposed development. Evaluation of potential considers the possibility for as yet undocumented sites to be found in areas that have not been subject to systematic archaeological investigation in the past. Potential for archaeological resources is used to determine if physical assessment of a property or portions of a property is required.

“Archaeological resources not previously documented may also be present in the affected area. If the alternative areas being considered, or the preferred alternative selected, exhibit either high or medium potential for the discovery of archaeological remains an archaeological assessment will be required.” (MCC & MOE 1992: 6-7)

“When potential is confirmed for any of the property, the archaeological assessment requirement will apply to the entire parcel of land (excluding any extensively disturbed areas or specific areas determined to be of low potential by the consultant archaeologist)”

(MCL 2005: 15)

AMICK Consultants Limited was engaged by the proponent to undertake a Stage 1-2 Archaeological Assessment of the subject property and was granted permission to carry out archaeological fieldwork on March 23, 2009. The subject property was physically assessed on March 18, 2010 and April 14, 2010, consisting of high-intensity pedestrian survey at an interval of five metres between individual transects and high-intensity test pit survey at an interval of five metres between individual test pits. All records, documentation, field notes, photographs and artifacts (as applicable) related to the conduct and findings of these

investigations are held at the Lakelands District corporate offices of AMICK Consultants Limited until such time that they can be transferred to an agency or institution approved by MTC on behalf of the government and citizens of Ontario.

5.2 Historical Context

As part of the present study, background research was conducted in order to determine if any archaeological resources had been formerly documented within or in close proximity to the subject property and if these same resources might be subject to impacts from the proposed undertaking. This data was also collected in order to assist in the assessment of the archaeological potential of the subject property and in order to establish the significance of any resources which might be encountered during the conduct of the present study. The requisite data was collected from the Culture Services Unit of the Programs and Services Branch, Ontario Ministry of Culture (MTC) and the corporate research library of AMICK Consultants Limited.

The Archaeological Sites Database indicates that there are no previously documented sites within the limits of the subject property. However, it must be noted that this is based on the assumption of the accuracy of information compiled from numerous researchers using different methodologies over many years. AMICK Consultants Limited assumes no responsibility for the accuracy of site descriptions, interpretations such as cultural affiliation, or location information derived from the Archaeological Sites Database administered by the Ontario Ministry of Culture. It must also be noted that the lack of formerly documented sites does not indicate that there are no sites present, as the documentation of any archaeological site is contingent upon prior research having been conducted on the subject property.

TABLE 1 Cultural Chronology for South-Central Ontario

Period	Group	Date Range	Traits	
Palaeo-Indian	Fluted Point	9500-8500 B.C.	Big game hunters.	
	Hi-Lo	8500-7500 B.C.	Small nomadic groups.	
Archaic	Early	8000-6000 B.C.	Hunter-gatherers.	
	Middle	Laurentian	6000-200 B.C.	Territorial divisions arise.
		Lamoka	2500-1700 B.C.	Ground stone tools appear.
	Late	Broadpoint	1800-1400 B.C.	
		Crawford Knoll	1500-500 B.C.	
		Glacial Kame	c.a. 1000 B.C.	Elaborate burial practices.
Woodland	Early	Meadowood	1000-400 B.C.	Introduction of pottery.
		Red Ochre	1000-500 B.C.	
	Middle	Point Peninsula	400 B.C.-500 A.D.	Long distance trade.
		Princess Point	500-800 A.D.	Horticulture.
	Late	Pickering	800-1300 A.D.	Villages and agriculture.
		Uren	1300-1350 A.D.	Larger villages.
		Middleport	1300-1400 A.D.	
		Huron	1400-1650 A.D.	Warfare
Historic	Early	Odawa, Ojibwa	1700-1875 A.D.	Social displacement.
	Late	Euro-Canadian	1785 A.D.+	European settlement.

5.2.1 Registered First Nations Archaeological Sites

A summary of registered and/or known archaeological sites within a 2-kilometre radius of the subject property was gathered from the Archaeological Sites Database, administered by the Ontario Ministry of Tourism and Culture. As a result it was determined that five (5) archaeological site relating directly to First Nations habitation/activity had been formally documented within the immediate vicinity of the subject property. These sites are briefly described below:

Table 2 Registered First Nations Sites within 2km

Site Name	Borden #	Site Type	Cultural Affiliation
Augustus	AjGx-62	Campsite	Late Archaic
Trafalgar Country	AjGx-63	Findspot	Early Archaic
	AjGx-83	Findspot	Early Archaic
Glen Williams Ossuary	AkGx-4	Burial, Ossuary, Village	Neutral, Late Woodland
	AjGx-15	Undetermined	Undetermined

Water is arguably the single most important resource necessary for any extended human occupation or settlement, and proximity to water can be regarded as the primary indicator of archaeological site potential. Accordingly, distance from water is one of the most commonly used variables for predictive modeling of archaeological site location, particularly when considering cultural or temporal contexts during which well technology was not employed. This method of potential modelling is therefore of primary importance in establishing potential for archaeological resources of First Nations origins.

The subject property is approximately 281m northeast of an unnamed creek and is a source of potable water. The subject property is 1,271m west of the Credit River and is a potable water and a navigable waterway by canoe. The MCL's draft Standards and Guidelines for Consultant Archaeologists stipulates that undisturbed land within 300 m of a primary water source (lakeshore, river, large creek, etc.), undisturbed land within 300 m of a secondary water source (stream, spring, marsh, swamp, etc.), as well as undisturbed land within 300 m of an ancient water source (as indicated by remnant beaches, shorecliffs, terraces, abandoned river channel features, etc.), are considered to have archaeological potential (MCL 2009: 5). Accordingly the subject property is considered to have high potential for archaeological resources related to First Nations activity, land use, or occupation related to the 11,000 year history of human occupation in the area.

5.2.2 Registered Euro-Canadian Archaeological Sites

A summary of registered and/or known archaeological sites within a 2-kilometre radius of the subject property was gathered from the Archaeological Sites Database, administered by

the Ontario Ministry of Tourism and Culture. As a result it was determined that one (1) archaeological site relating directly to Euro-Canadian habitation/activity had been formally documented within the immediate vicinity of the subject property. This site is briefly described below:

Table 3 Registered Euro-Canadian Sites within 2km

Site Name	Borden #	Site Type	Cultural Affiliation
Wesleyan Meeting House	AjGx-67	Cemetery/ Meeting House	Euro-Canadian

5.2.3 Historic Maps

The Illustrated Historical Atlas of the County of Halton, Ont. (1877) indicates that a structure was located within this Part of Lot 21, Concession 9 (Geographic Township of Esquesing) by that date. The railway shown on the historic atlas as crossing the subject property is no longer present, although a former rail bed does form the northeastern boundary of the property. It is most likely that the location on the historic atlas is reasonably correct and at some point after 1877 the railway was diverted around the town. Although often inaccurate, in this instance, the roadways shown on the historic atlas match up very closely with those that still exist making it unlikely that they would have seriously misplaced where the railway crossed them.

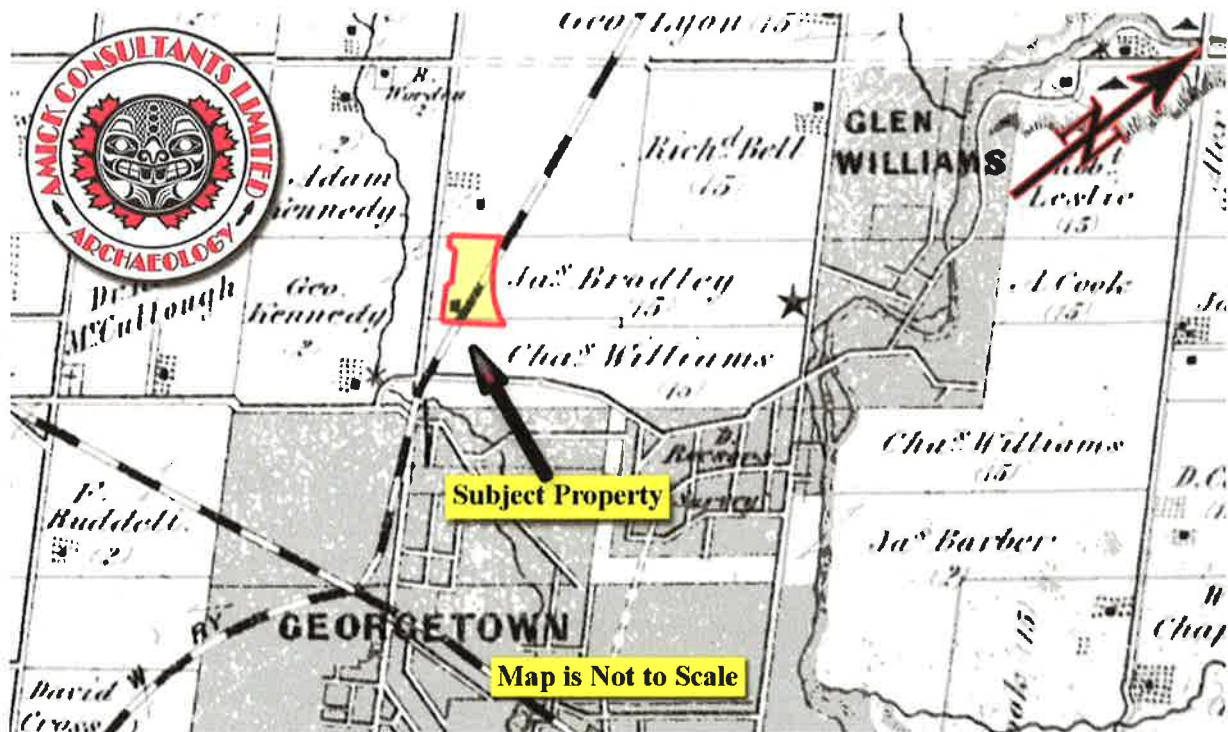


Figure 2 Segment of Historic Atlas Map for the Township of Esquesing (1878)

5.2.4 Summary

Background research indicates the property has high potential for significant archaeological resources of Native origins. Background research suggests a high potential for archaeological resources of Euro-Canadian origins. High potential does not indicate that there are necessarily archaeological deposits present, but that environmental and historical factors suggest that there may be undocumented archaeological sites within lands which have not been subject to systematic archaeological research in the past. A determination of high potential for archaeological resources to be situated within any portion of a property under consideration associated with any period or culture necessitates that a Stage 2 Archaeological Assessment is necessary and that the assessment be conducted using high intensity physical survey methodology to maximize the likelihood that physical evidence of any such remains that may be present will be documented.

5.3 Archaeological Context

5.3.1 Location and Current Conditions

This report describes the results of the 2010 Stage 1-2 Archaeological Assessment of Part of Lot 21 Concession 9 (Geographic Township of Esquesing), Town of Halton Hills, Regional Municipality of Halton, conducted by AMICK Consultants Limited on behalf of Matthews Planning & Management as illustrated in Figure 3.

Approximately 6.9 hectare in size, the subject property is bounded on the north, east and south by existing residential development and on the west by agricultural lands. The northeast edge of the property is also defined by a former rail right-of-way as shown on Figure 3 below. The rail bed has been completely removed. The nearest major intersection is Wildwood Road and Oak Drive roughly 221m east of the subject property.

An aerial photograph of the subject property is included within this report as Figure 3 and a plan of the subject property is included within this report as Figure 4. The subject property is irregular in shape and approximately 6.9 hectare in size. The subject property consists of mostly of agricultural lands with a grass covered laneway lined with rocks dividing two agricultural fields and a very small area of former pasture in the west corner. A very low-lying and wet area is located within the unploughed former pasture (see Figures 3 & 4).

AMICK Consultants Limited was engaged by the proponent to undertake this research on March 23, 2009. Permission was granted by the proponent to enter the property, to take photographs and notes on the current property conditions, to conduct appropriate testing of the subject property for physical evidence of archaeological deposits, and to remove any archaeological finds encountered for the purposes of completing this study. All records, documentation, field notes, photographs and artifacts (if found) related to the conduct and findings of these investigations are held at the Lakelands District corporate offices of AMICK Consultants Limited until such time that they can be transferred to an agency or institution approved by the Ministry of Culture on behalf of the government and citizens of Ontario.

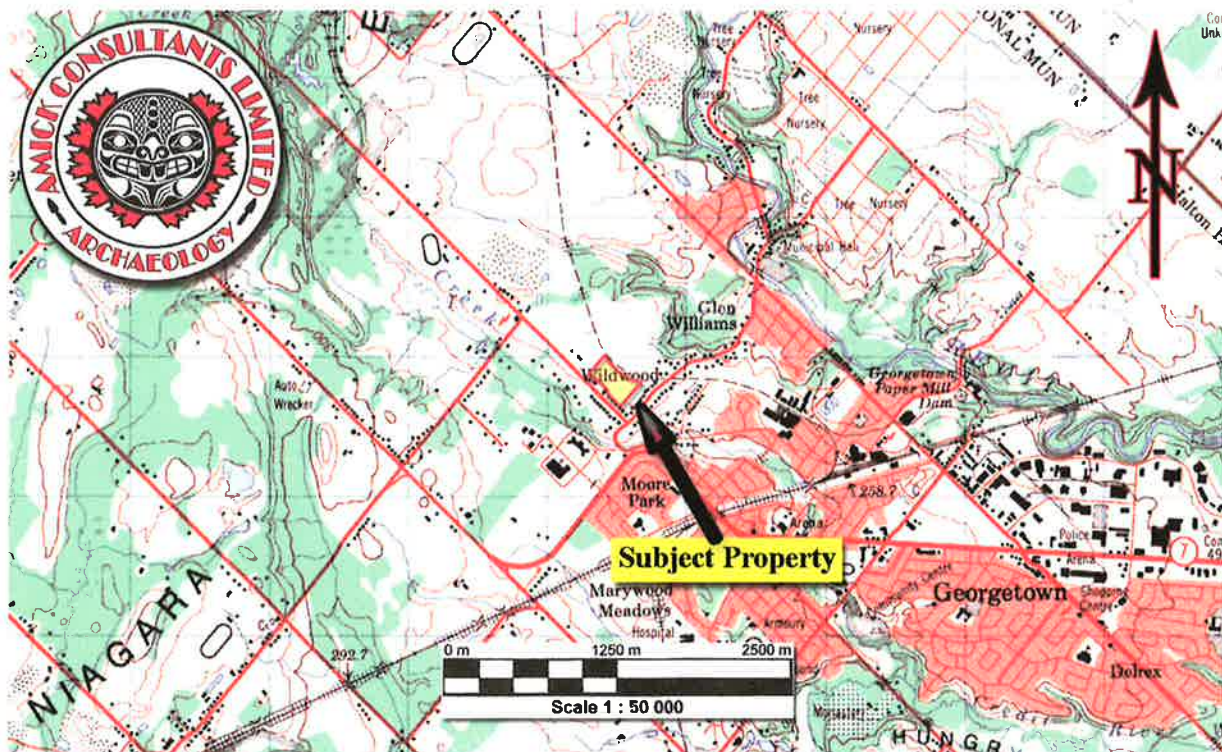


Figure 3 Location of the Subject Property

5.3.2 Physiographic Region

The subject property is situated within the Niagara Escarpment physiographic region. The Niagara Escarpment extends from the Niagara River to the northern tip of the Bruce Peninsula, and continuing through the Manitoulin Islands. It is characterised by vertical cliffs along the brow often mostly outlining the edge of the dolostone of the Lockport and Amabel Formations while the slopes below are carved in red shale. From the Dundas Valley northward to Forks of the Credit the brow of the escarpment increases in elevation from 800 feet to about 1,450 feet a.s.l. in a distance of 50 miles. In this section, also, the escarpment is cut by numerous creeks. (Chapman and Putnam 1984: 114-121).

5.3.3 Surface Water

Sources of potable water, access to waterborne transportation routes, and resources associated with watersheds are each considered, both individually and collectively to be the highest criteria for determination of the potential of any location to support extended human activity, land use, or occupation. Accordingly, proximity to water is regarded as the primary indicator of archaeological site potential. The MCL's draft Standards and Guidelines for Consultant Archaeologists stipulates that undisturbed land within 300 m of a primary water source (lakeshore, river, large creek, etc.), undisturbed land within 300 m of a secondary water source (stream, spring, marsh, swamp, etc.), as well as undisturbed land within 300 m

of an ancient water source (as indicated by remnant beaches, shorecliffs, terraces, abandoned river channel features, etc.), are considered to have archaeological potential (MCL 2009: 5).

The subject property is approximately 281m northeast of a tributary creek of the Credit River. This waterway would have served as a source of potable water in the past. Therefore, depending on the degree of previous land disturbances, it may be concluded that there is potential for the recovery of Aboriginal archaeological remains within the subject property.

5.4 Current Property Conditions Context

Current characteristics encountered within an archaeological research study area determine if physical assessment of specific portions of the study area will be necessary and in what manner the physical assessment should be conducted. Conventional assessment methodology includes pedestrian survey on ploughable lands and test pit methodology within areas that cannot be ploughed. For the purpose of determining where physical assessment is necessary and practical, general categories of current landscape conditions have been established as archaeological conventions. These include:

5.4.1 Buildings and Structural Footprints

A building, in archaeological terms, is a structure that exists currently or has existed in the past in a given location. The footprint of a building is the area of the building formed by the perimeter of the foundation. Although the interior area of building foundations would often be subject to physical assessment when the foundation may represent a potentially significant historic archaeological site, the footprints of existing structures are not typically assessed. Existing structures commonly encountered during archaeological assessments are often residential-associated buildings (houses, garages, sheds), and/or component buildings of farm complexes (barns, silos, greenhouses). In many cases, even though the disturbance to the land may be relatively shallow and archaeological resources may be situated below the disturbed layer (eg. a concrete garage pad), there is no practical means of assessing the area beneath the disturbed layer. However, if there were evidence to suggest that there are likely archaeological resources situated beneath the disturbance, alternative methodologies may be recommended to study such areas following completion of conventional archaeological assessment or based upon evidence gathered during background research.

The subject property contains no existing structures.

5.4.2 Disturbance

Areas that have been subjected to extensive and deep land alteration that has severely damaged the integrity of archaeological resources are known as land disturbances. Examples of land disturbances are areas of “past quarrying, major landscaping, recent built and industrial uses, sewage and infrastructure development, etc.” (MCL 2005: 15). Additional built features which fall into this category include driveways, walkways and trails composed of either gravel or asphalt or concrete; in-ground pools; and wells or cisterns. Utility lines

are conduits which provide services such as water, natural gas, hydro, communications, sewage, and others. Areas containing below ground utilities are considered areas of disturbance, and are excluded from Stage 2 Physical Assessment. Disturbed areas are excluded from Stage 2 Physical Assessment due to no or low archaeological potential or because they are not assessable using conventional methodology.

The subject property does not contain any disturbed areas.

5.4.3 Low-Lying and Wet Areas

Landscape features which are covered by permanently wet areas, such as marshes, swamps, or bodies of water like streams or lakes, are known as low-lying and wet areas. Low-lying and wet areas are excluded from Stage 2 Physical Assessment due to inaccessibility.

The subject property contains a very small low-lying and wet area within the northwest corner of the property.

5.4.4 Steep Slope

Landscape which slopes at a greater than (>) 20 degree change in elevation, is known as steep slope. Areas of steep slope are considered uninhabitable, and are excluded from Stage 2 Physical Assessment.

The subject property does not contain any steep slope.

5.4.5 Wooded Areas

Areas of the property which cannot be ploughed, such as natural forest or woodlot, are known as wooded areas. These wooded areas qualify for Stage 2 Physical Assessment, and are required to be assessed using test pit survey methodology.

The subject property does not contain any wooded areas.

5.4.6 Ploughable Agricultural Lands

Areas of current or former agricultural lands which have been ploughed in the past are considered ploughable agricultural lands. Ploughing turns soil over and exposes artifacts at the surface in the location of archaeological sites. Weathering through rainfall or melting of snow washes adherent soil from artifacts making archaeological deposits easily identifiable during visual inspection. Pedestrian survey of ploughed agricultural lands is the preferred method of physical assessment because of the much higher likelihood for finding evidence of archaeological resources if present.

The subject property contains mostly ploughable lands. This portion of the subject property was assessed using the pedestrian survey methodology at a high intensity survey interval of 5 metres between individual transects.

5.4.7 Lawn, Pasture, Meadow

Land covered in low growth, such as lawns, pastures, meadows, shrubbery, and immature trees. These are areas that may be considered too small to warrant ploughing, (i.e. less than one hectare in area), such as yard areas surrounding existing structures; areas containing buried services within plough depth; and land-locked open areas that are technically workable by a plough but inaccessible to agricultural machinery. These areas may also include open areas within urban contexts that do not permit agricultural tillage within urban density settlement areas or the use of urban roadways by agricultural machinery. These areas must be assessed using test pit survey methodology.

The subject property contains a small grass covered laneway that divides the two agricultural fields. This area was a former laneway that had once been fenced on either side. Also large stones had been placed along this fence line likely as a method of clearing the adjacent fields. The presence of both the large rocks and the remains of the steel fence posts made this area unploughable. This portion of the subject property was assessed using the test pit methodology at a high intensity survey interval of 5 metres between individual test pits.

The subject property contains a small area of unploughable pasture and low-lying and wet area in the northwest corner behind an existing residence and separated from the ploughed portion by an existing fence. Given the adjacent residential yard areas, the presence of a fence separating this area from the balance of the property, and the low-lying and wet nature of the ground in a significant portion of this area, it was deemed to not be feasible or viable to plough this portion of the subject property. This portion of the subject property was assessed using the test pit methodology at a high intensity survey interval of 5 metres between individual test pits.

6. FIELD METHODS

This report confirms that the entirety of the subject property was subject to visual inspection, and that the fieldwork was conducted according to the archaeological fieldwork standards and guidelines, including weather and lighting conditions. The physical assessment was completed in ideal conditions under sunny skies on March 18, 2010 and April 14, 2010. The temperature at the time was 18°C and 15°C respectively. The locations from which photographs were taken and the directions toward which the camera was aimed for each photograph are illustrated in Figures 3 & 4 of this report.

In accordance with the draft Standards and Guidelines for Consultant Archaeologists, test pit survey was undertaken for those portions of the subject property where deep prior disturbance had not occurred prior to assessment or which were accessible to survey. The pedestrian survey was undertaken for those portions of the subject property that were formerly used as agricultural lands. The subject property was assessed using the pedestrian and test pit survey methodology.

Pedestrian Survey

“1. Land to be surveyed must be recently ploughed. Use of chisel ploughs is not acceptable. In heavy clay soils ensure furrows are disked after ploughing to break them up further.

2. Land to be surveyed must be weathered by one heavy rainfall or several light rains to improve visibility of archaeological resources.

3. At least 80 % of the ploughed ground surface must be visible. If surface visibility is below 80% (e.g. due to crop stubble, weeds, young crop growth), ensure the land is re-ploughed before surveying.

4. Ensure that ploughing is deep enough to provide total topsoil exposure, but not deeper than previous ploughing.”

(MCL 2009: 11)

The requirements to be followed in the conduct of a pedestrian survey are specified below:

- 1. Space survey transects at maximum intervals of 5 m (20 survey transects per hectare). Compensating for poor ground visibility by reducing survey intervals is not acceptable*

(MCL 2009: 12)

Test Pit Survey

“1. Test pit survey only on terrain where ploughing is not possible or viable, such as:

a. wooded areas

b. pasture with high rock content

c. abandoned farmland with heavy brush and weed growth

d. orchards and vineyards that cannot be strip-ploughed (planted in rows 5 m apart or less), gardens, parkland or lawns, any of which will remain in use for several years after the survey

e. very small properties (one hectare or less)

f. narrow (10 m or less) linear survey corridors (e.g., water or gas pipelines, road widening). This includes situations where there are planned impacts 10 m or less beyond the previously impacted limits on both sides of an existing linear corridor (e.g., two linear survey corridors on either side of an existing roadway). Where at the time of fieldwork the lands within the linear corridor meet the standards as stated under the above section on pedestrian survey land preparation, pedestrian survey must be carried out.

2. Do not use test pit survey on actively or recently cultivated agricultural land.”

(MCL 2009: 12)

The requirements to be followed in the conduct of test pit survey area specified below:

- 1. Space test pits at maximum intervals of 5 m (400 test pits per hectare) in areas less than 300 m from any feature of archaeological potential.*

- 2. Space test pits at maximum intervals of 10 m (100 test pits per hectare) in areas more than 300 m from any feature of archaeological potential.*
- 3. Test pit to within 1 m of built structures (both intact and ruins), or until test pits show evidence of recent ground disturbance.*
- 4. Ensure that test pits are at least 30 cm in diameter.*
- 5. Excavate each test pit, by hand, into the first 5 cm of subsoil and examine the pit for stratigraphy, cultural features, or evidence of fill.*
- 6. Screen soil through mesh no greater than 6 mm*
- 7. Backfill all test pits unless instructed not to by the landowner.*

(MCL 2009: 12)

The conduct of the Stage 2 Archaeological Assessment of the subject property was completed in accordance with the above noted standards on March 18, 2010 and April 14, 2010. The temperature at the time was 18°C and 15°C respectively. The work was completed under sunny skies.



Figure 4 Aerial Photo of the Subject Property

7. RECORD OF FINDS

This section of the report provides a complete overview of archaeological resources documented within the subject property. This information is provided for the purposes to plan how to address archaeological concerns under legislated land use planning and development processes.

8. ANALYSIS AND CONCLUSIONS

As a result of the Stage 1-2 Archaeological Assessment of the subject property, no evidence of potentially significant archaeological resources were encountered. Consequently, it has been determined that there are no land use planning concerns associated with archaeological resources for the proposed undertaking.

9. RECOMMENDATIONS

It is recommended that the proposed development be considered cleared of any further requirement for archaeological fieldwork. Any current or future condition of development respecting archaeological resources should be considered as addressed.

It must be noted at this time that no archaeological survey, regardless of its intensity, can entirely negate the possibility of deeply buried cultural material, notably human interments.

10. ADVICE ON COMPLIANCE WITH LEGISLATION

While not part of the archaeological record, this report must include the following standard advisory statements for the benefit of the proponent and the approval authority in the land use planning and development process:

1. 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 proceed before receiving confirmation that the Ministry of Culture has entered the report into the provincial register of reports.
2. 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.
3. Any person discovering human remains must immediately notify the police or coroner and the Registrar of Cemeteries, Ministry of Government Services.

11. BIBLIOGRAPHY AND SOURCES

Chapman, L.J. & D.F. Putnam

1984 The Physiography of Southern Ontario (Third Edition). Ontario Geological Survey, Special Report #2. Ontario Ministry of Natural Resources, Toronto.

Government of Ontario

2005 The Heritage Act (RSO 2005). Queen's Printer, Toronto.

Ontario Ministry of Citizenship, Culture and Recreation (OMCzCR)

1993 Archaeological Assessment Technical Guidelines, Stages 1-3 and Reporting Format. OMCzCR, Cultural Programs Branch, Archaeology and Heritage Planning, Toronto.

Ontario Ministry of Culture (MCL)

2005 Conserving a Future for Our Past: Archaeology, Land Use Planning & Development in Ontario (An Educational Primer and Comprehensive Guide for Non-Specialists). Heritage & Libraries Branch, Heritage Operations Unit, Toronto.

2006 Standards and Guidelines for Consultant Archaeologists (draft). Heritage & Libraries Branch, Heritage Operations Unit, Toronto.

2009 Standards and Guidelines for Consultant Archaeologists (draft). Heritage & Libraries Branch, Heritage Operations Unit, Toronto.

Walker & Miles

1877 Illustrated Historical Atlas of the County of Halton, Ont. Walker & Miles, Toronto.

12. STAGE 1-2 PHOTOS



Plate 1 Pedestrian Conditions facing Southeast



Plate 2 Pedestrian Conditions facing South



Plate 3 Pedestrian Conditions facing West



Plate 4 Pedestrian Conditions facing North



Plate 5 Test pitted Laneway Area facing Northeast



Plate 6 Test Pitted Lawn Area in West Corner facing East



**Plate 7 Low Lying and Wet facing
Southeast**