



1.0 REPORT COVER PAGE

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Stage 1-2 Archaeological Assessment of

Part of Lots 47, 48 & 49 Concession 12

(Formerly Township of Nottawasaga),

Town of Collingwood, County of Simcoe

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2.0 EXECUTIVE SUMMARY

This report describes the results of the 2010 Stage 1-2 Archaeological Assessment of Part of Lots 47, 48 & 49 Concession 12, (Formerly Township of Nottawasaga), Town of Collingwood, County of Simcoe, 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 Draft Plan of Subdivision, Zoning By-law Amendment and Official Plan Amendment application submissions. All work was conducted in conformity with Ontario Ministry of Culture (MCL) draft Standards and Guidelines for Consultant Archaeologists (MCL 2009), the Ontario Heritage Act (RSO 1990), and the Ontario Heritage Amendment Act (SO 2005).

The Ministry of Culture (now the Ministry of Tourism and Culture) has released two versions of the Draft Standards and Guidelines for Consultant Archaeologists (MCL 2006 & 2009). Neither version of this document has been officially adopted for use by the province of Ontario as a requirement for licensed archaeologists under the Ontario Heritage Act (RSO 1990) and the Ontario Heritage Amendment Act (SO 2005). The 2009 version of the document is currently undergoing further revision with an anticipated final document coming into effect in 2010. Although there is no current requirement to adhere to the Draft Standards and Guidelines for Consultant Archaeologists (MCL 2009), the conduct of archaeological investigations undertaken for this project meets or exceeds the proposed requirements. The Ontario Ministry of Tourism and Culture (MTC) is currently enforcing the 1993 Archaeological Technical Assessment Guidelines (MCzCR 1993).

AMICK Consultants Limited was engaged by the proponent to undertake a Stage 1-2 Archaeological Assessment of the study area and was granted permission to carry out archaeological fieldwork on April 15, 2010. Those portions of the property which did not consist of previous disturbance or existing structures were subject to reconnaissance, photographic documentation and physical assessment on April 7, 2010 and November 22, 2010, consisting of high-intensity test pit survey at an interval of five metres between individual test pits and high intensity pedestrian survey at an interval of five metres between individual transects. 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 the Ontario Ministry of Tourism and Culture (MTC) on behalf of the government and citizens of Ontario.

As a result of the physical assessment of the property conducted on May 6, 2010 and November 22, 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.

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4.0 PROJECT PERSONNEL

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5. PROJECT BACKGROUND

5.1 Development Context

This report describes the results of the 2010 Stage 1-2 Archaeological Assessment of Part of Lots 47, 48 & 49 Concession 12, (Formerly Township of Nottawasaga), Town of Collingwood, County of Simcoe, 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 Draft Plan of Subdivision, Zoning By-law Amendment and Official Plan Amendment application submissions. All work was conducted in conformity with Ontario Ministry of Culture (MCL) draft Standards and Guidelines for Consultant Archaeologists (MCL 2009), the Ontario Heritage Act (RSO 1990), and the Ontario Heritage Amendment Act (SO 2005).



Figure 1 Location of the Subject Property

The Ministry of Culture (now the Ministry of Tourism and Culture) has released two versions of the Draft Standards and Guidelines for Consultant Archaeologists (MCL 2006 & 2009). Neither version of this document has been officially adopted for use by the province of Ontario as a requirement for licensed archaeologists under the Ontario Heritage Act (RSO 1990) and the Ontario Heritage Amendment Act (SO 2005). The 2009 version of the document is currently undergoing further revision with an anticipated final document coming into effect in 2010. Although there is no current requirement to adhere to the Draft Standards and Guidelines for Consultant Archaeologists (MCL 2009), the conduct of archaeological investigations undertaken for this project meets or exceeds the proposed requirements. The

Ontario Ministry of Tourism and Culture (MTC) is currently enforcing the 1993 Archaeological Technical Assessment Guidelines (MCzCR 1993). The City of Toronto is enforcing the 2009 Draft Standards and Guidelines for Consultant Archaeologists (MCL 2009)

The 2009 Draft Standards and Guidelines for Consultant Archaeologists summarizes the conduct of Stage 1 Background Studies as follows:

“The consultant archaeologist reviews the geographic, land use, and historical information for the project (all lands that are part of the development proposal) and the relevant surrounding area through a background study. Where necessary, this may be supplemented by a property inspection.”

(MCL 2009: iii)

Stage 1 Background Studies are further described in a number of government documents released over a number of years that this stage of archaeological research has been done.

“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.”

(MCzCR 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 April 7, 2010. 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 the Ontario Ministry of Tourism and Culture (MTC) on behalf of the government and citizens of Ontario.

The objectives of a Stage 1 Background Study are detailed in the 2009 draft Standards and Guidelines for Consultant Archaeologists:

- 1) *“To provide information about the property’s geography, history, previous archaeological fieldwork and current land condition;*
- 2) *To evaluate in detail the property’s archaeological potential which will support recommendations for Stage 2 survey for all or parts of the property;*
- 3) *To recommend appropriate strategies for Stage 2 survey.”*

(MCL 2009: 1)

5.2 Historical Context

5.2.1 Registered Archaeological Sites

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 Programs and Services Branch, Culture Services Unit, MTC and the corporate research library of AMICK Consultants Limited.

The Archaeological Sites Database indicates that there are no previously documented sites within 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 MTC. 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.

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 MTC. As a result it was determined that one (1) archaeological site relating directly to First Nations habitation/activity had been formally documented within the immediate vicinity of the subject property. This site is briefly described below:

Table 1 First Nation Sites within 2km

Site Name	Borden #	Site Type	Cultural Affiliation
Gary Reid	BcHb-4	Campsite	Odawa?

It should be noted that the lack of First Nations archaeological sites within the immediate vicinity of the study area does not indicate that such sites were not or are not situated within the general area. The general lack of documented First Nations archaeological sites most likely reflects a lack of systematic archaeological investigation within close proximity to the study area.

Table 2 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.
	Late	Lamoka	2500-1700 B.C.	Ground stone tools appear.
		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.

Euro-Canadian Archaeological Sites

A summary of registered and/or known archaeological sites within a two (2) kilometre radius of the study area was gathered from the Archaeological Sites Database, administered by MTC. As a result it was determined that three (3) archaeological sites relating directly to Euro-Canadian habitation/activity had been formally documented within the immediate vicinity of the study area. The sites are briefly described below:

Table 3 Euro-Canadian Sites within 2km

Site Name	Borden #	Site Type	Cultural Affiliation
Cunningham	BcHb-51	Homestead	Euro-Canadian
Kells	BcHb-52	Homestead	Euro-Canadian
*	BcHb-5	Homestead	Historic

It should be noted that the low number of early Euro-Canadian archaeological sites within the immediate vicinity of the study area does not indicate that such sites were not or are not situated within the area or that remnants of any such sites have not survived urbanization. The general lack of documented early Euro-Canadian sites most likely reflects a lack of systematic archaeological investigation in close proximity to the study area.

5.2.2 General Historical Outline

In the seventeenth century Simcoe County was home to the Huron. With the arrival of French priests and Jesuits, missions were established near Georgian Bay. After the destruction of the missions by the Iroquois and the British, the area was occupied by Algonquin speaking peoples. After the war of 1812, the government began to invest in the military defences of Upper Canada, through the extension of Simcoe's Yonge St from Lake Simcoe to Penetanguishene on Georgian Bay (Garbutt, Mary).

Shortly after the survey of Nottawasaga Township in 1832, settlers began to slowly take up land within its borders (Hunter, Andrew). Nottawasaga Township was incorporated in 1851 and was amalgamated into Clearview Township on January 1, 1994 (wapedia.mobi/en/)

Originally called Hen and Chickens Harbour and was renamed to Collingwood in 1854. The town of Collingwood was incorporated in 1858 and was named after Admiral Collingwood, Lord Nelson's second in command during the battle of Trafalgar. Collingwood started with the construction of a saw and flour mill on the bay (town.collingwood.on.ca). The first Canadian Railway was completed in 1853 which allowed for easier traveling between Toronto and Collingwood and resulted in Collingwood becoming the rail head of Ontario. The Ship Yards originally known as Collingwood Dry Dock Shipbuilding and Foundry Company Limited as the trans-shipment point for goods sent out to Western Canada (collingwoodnow.com). Collingwood's growth has depended largely on the industrial industry. Collingwood has grown significantly over the years and has expanded into

neighbouring townships such as Clearview and Sunnidale township (formerly Nottawasaga Township).

5.2.3 Historic Maps

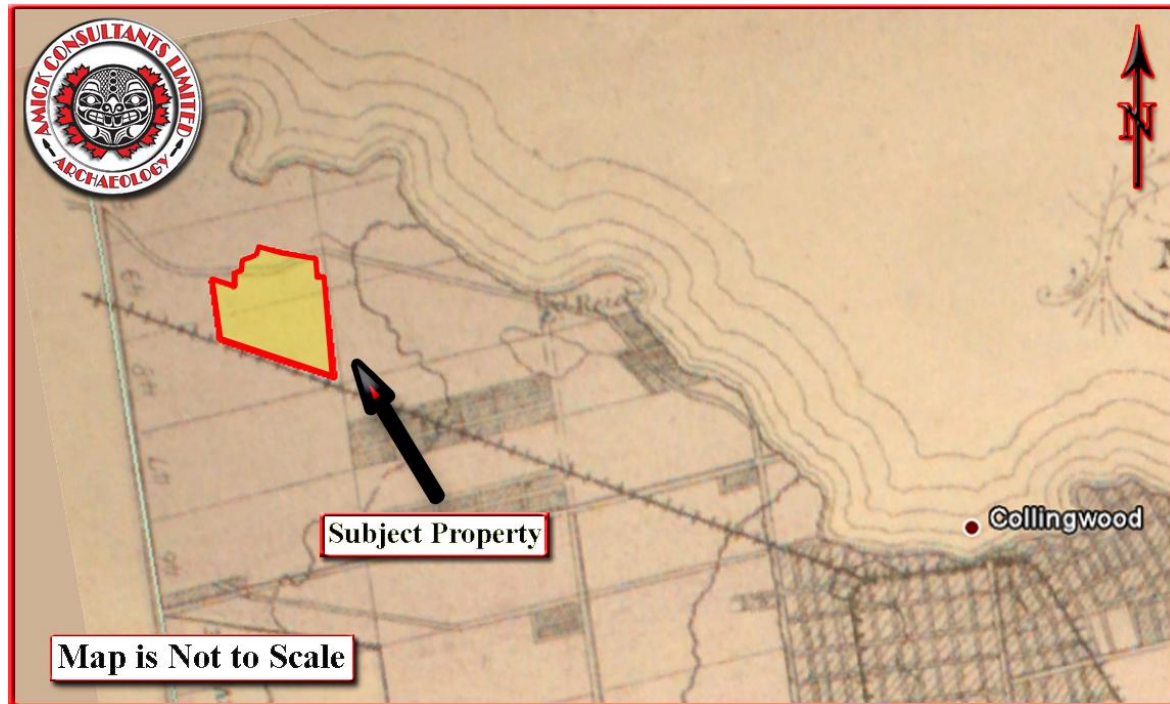


Figure 2 Segment of a map of Nottawasaga Township 1881(from H. Belden & Co. 1881)

This map illustrates the location of the study area and environs as of 1881. The study area is not shown to belong to any specific owner; no structures are shown within the study area. However it appears that a road went through the north end of the property running east to west.

5.2.4 Summary

The data provided from the Ministry of Tourism and Culture indicates a lack of formally registered archaeological sites in the vicinity. This is most likely a reflection of a lack of systematic archaeological research in the past, particularly as the study area and the surrounding landscape has remained rural in character without much land use change since archaeological assessments were component studies of either planning applications or environmental assessments.

The brief overview of documentary evidence readily available indicates that the study area is situated within an area that was close to the historic transportation routes and in an area well populated during the nineteenth century and as such has a high potential for sites relating to

early Euro-Canadian settlement in the region. Background research indicates the property has high potential for significant archaeological resources of Native origins.

5.3 Archaeological Context

5.3.1 Location



Figure 3 Location of the Study Area

This report describes the results of the 2010 Stage 1-2 Archaeological Assessment of Part of Lots 47, 48 & 49 Concession 12, (Formerly Township of Nottawasaga), Town of Collingwood, County of Simcoe, 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 Draft Plan of Subdivision, Zoning By-law Amendment and Official Plan Amendment application submissions. All work was conducted in conformity with Ontario Ministry of Culture (MCL) draft Standards and Guidelines for Consultant Archaeologists (MCL 2009), the Ontario Heritage Act (RSO 1990), and the Ontario Heritage Amendment Act (SO 2005).

AMICK Consultants Limited was engaged by the proponent to undertake a Stage 1-2 Archaeological Assessment of the study area and was granted permission to carry out archaeological fieldwork on April 7, 2010. Those portions of the property which did not consist of previous disturbance and existing structures were subject to reconnaissance, photographic documentation and physical assessment May 6, 2010 and November 22, 2010, consisting of high-intensity test pit survey at an interval of five metres between individual

test pits and high intensity pedestrian survey at an interval of five metres between individual transects. 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 the Ontario Ministry of Tourism and Culture (MTC) on behalf of the government and citizens of Ontario.

The location of the study area is illustrated in Figure 3 above. Approximately 48.96 hectare in size, the subject property is bounded on the north by Highway 26 proposed residential development on the east by woodlot and existing residential development, on the south by the Georgian Trail and on the west by an existing residential subdivision. The nearest major intersection at Highway 26 and Osler Bluff Road, approximately 1.18km metres northwest of the study area. An aerial photograph of the study area is included within this report as Figure 4 and a plan of the study area is included within this report as Figure 5.

5.3.2 Physiographic Region

The study area is situated within the Simcoe Lowlands physiographic region. In particular, the property lies within that portion of the Simcoe Lowlands known as the Nottawasaga Basin. The Nottawasaga Basin is characterized by clayish and pebbly heavy textured soils offering poor drainage and poor support for agricultural usage (Chapman and Putnam 1984: 178-180).

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 metres of a primary water source (lakeshore, river, large creek, etc.), undisturbed land within 300 metres of a secondary water source (stream, spring, marsh, swamp, etc.), as well as undisturbed land within 300 metres 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). 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.

The study area is located approximately 33 metres west of Silver Creek, which is a source of potable water. The study area is located approximately 788 metres south of Georgian Bay, which is a source of both potable water and a navigable waterway. The study area was beneath the surface of the ancient glacial lake of Lake Algonquin.

5.4 Current 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. Where there is reason to believe that deeply buried archaeological deposits may have been capped by subsequent landscape modification activities, alternative assessment strategies may be necessary.

Figure 4 shows the current property conditions and assessment methodologies together with field reconnaissance photograph locations superimposed over an aerial photograph. Field reconnaissance photographs are included at the end of this report.

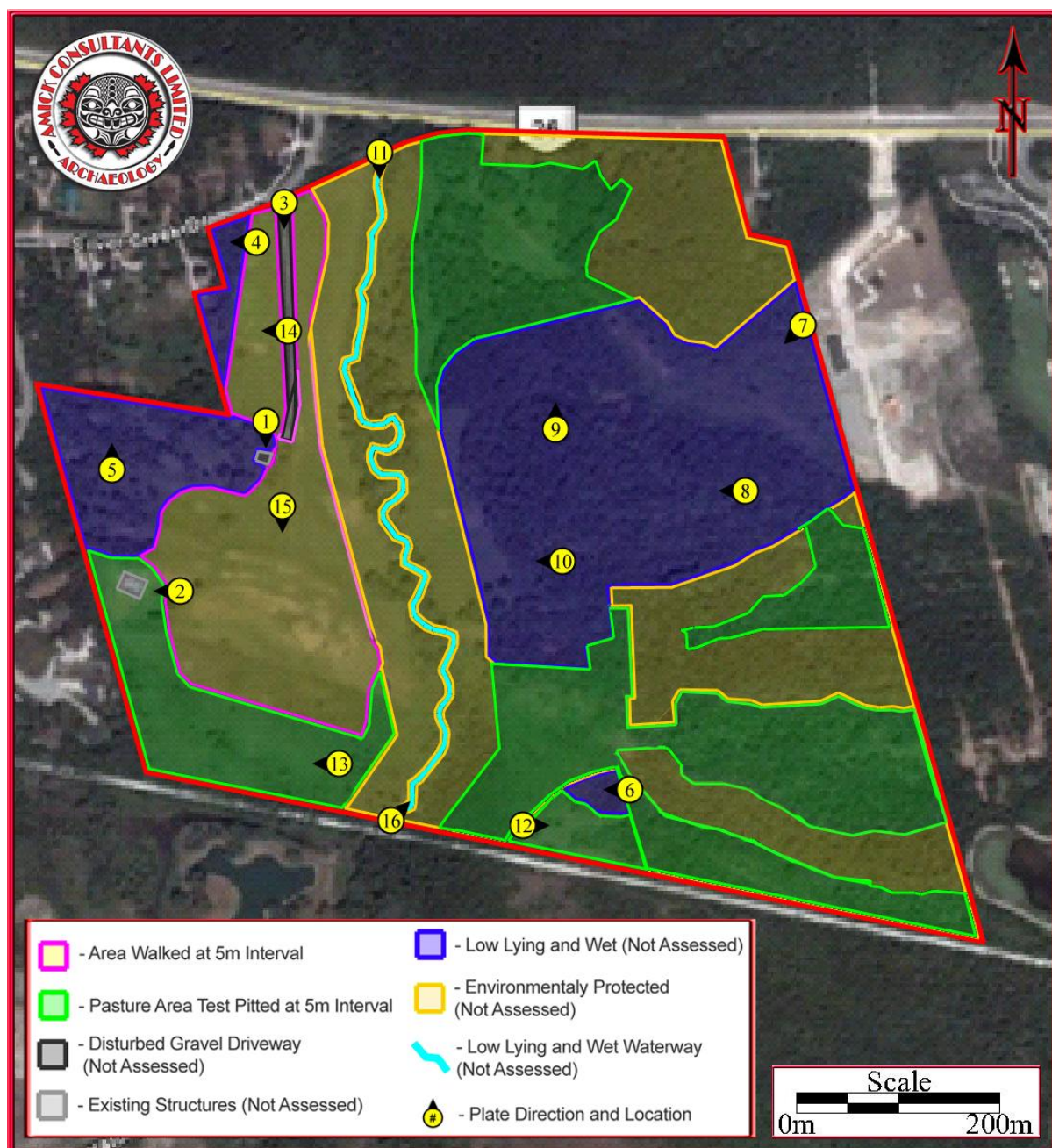


Figure 4 Aerial Photo of the Subject Property

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 (e.g. 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.

The study area consists of a house and a barn complex. Due to the presence of the structures the areas beneath them cannot be assessed using traditional methodologies for archaeological assessments.

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 study area does contain a previous disturbance. A gravel driveway is in the northwest of the study area. This previous landscape alteration minimizes the potential to find archaeological resources. In addition, this area cannot be assessed using conventional assessment methodologies. This area was not subject to physical assessment.

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 study area contains low lying and wet areas. There are several low-lying and wet areas. A large low-lying and wet area is located in the centre of the study area and continues to the northeast boundary. The residence is surrounded by a low-lying and wet area and in the northwest corner as well. There is a low lying and wet area in the western edge of the study area and the study area is crossed by Silver Creek in the environmentally protected area. The southern portion of the study area also contains a low lying and wet area.

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 study area does not contain any areas of 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 study area does contain areas of woodlot.

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 these lands regularly moves the soil around, which brings covered artifacts to the surface, easily identifiable during visual inspection. Furthermore, by allowing the ploughed area to weather sufficiently through rainfall washing soil off any artifacts, the visibility of artifacts at the surface of recently worked field areas increases significantly. Pedestrian survey of ploughed agricultural lands is the preferred method of physical assessment because of the greater potential for finding evidence of archaeological resources if present.

The study area contains ploughable lands. The open lands in the western end of the study area were ploughed and well weathered at the time of assessment.

5.4.7 Lawn, Pasture, Meadow

Landscape features consisting of former agricultural land covered in low growth, such as lawns, pastures, meadows, shrubbery, and immature trees. These are areas that may be too small to plough, such as yard areas surrounding existing structures, margins of road allowances, and land-locked open areas that are technically workable by a plough but inaccessible to agricultural machinery. These areas may also include open area within urban contexts that do not allow agricultural tillage within municipal or city limits or the use of urban roadways by agricultural machinery. These areas are required to be assessed using test pit survey methodology.

The study area contains an area of lawn or pasture. These areas were characterized by large rocks in the soil and were not able to be ploughed. One area was in the western end along the south and west and the other was in the southern edge.

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 property reconnaissance and assessment were completed in ideal conditions under sunny skies on May 6, 2010. The temperature at the time of the reconnaissance and assessment was 15°C. The second property reconnaissance and assessment were completed in under cloudy skies on November 22, 2010. The temperature at the time of the reconnaissance and assessment was 13°C. The locations from which photographs were taken and the directions toward which the camera was aimed for each photograph are illustrated in Figures 4 & 5 of this report. Upon completion of the field reconnaissance of the subject property, it was determined that select areas would require Stage 2 archaeological assessment consisting of test pit survey methodology.

6.1 Photo Reconnaissance

A detailed examination and photo documentation was carried out on the study area in order to document the existing conditions of the subject property to facilitate Stage 2 assessment. All areas of the subject property were visually inspected and photographed. The locations from which photographs were taken and the directions toward which the camera was aimed for each photograph are illustrated in Figures 4 & 5 of this report.

6.2 Test Pitting

In accordance with the draft Standards and Guidelines for Consultant Archaeologists, test pit survey is required to be 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 building footprints and areas that are low-lying and wet were not subject to Stage 2 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)

6.3 Pedestrian Survey

In accordance with the draft Standards and Guidelines for Consultant Archaeologists, pedestrian survey is required to be undertaken for all portions of the study area that are ploughable. This is the preferred method to utilize while conducting an assessment.

“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.

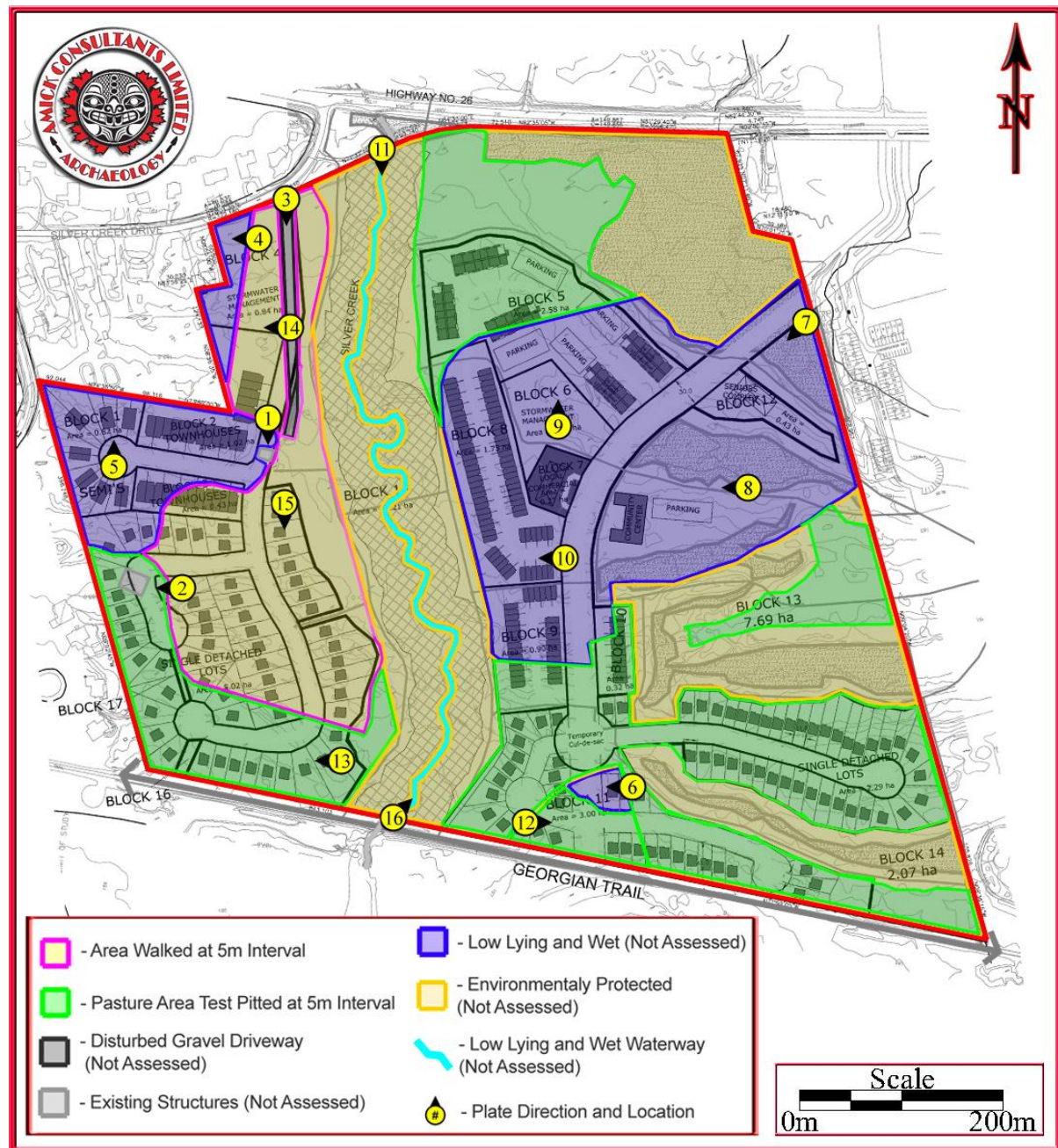
4. Ensure that ploughing is deep enough to provide total topsoil exposure, but not deeper than previous ploughing.”

(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*

The conduct of the Stage 1-2 Archaeological Assessment of the subject property was completed in accordance with the above noted standards on May 6, 2010 and November 22, 2010. The temperature was around 15°C on May 6, 2010 while the temperature on November 22 was 13°C.



7.0 ANALYSIS AND CONCLUSIONS

AMICK Consultants Limited was engaged by the proponent to undertake a Stage 1-2 Archaeological Assessment of the study area and was granted permission to carry out archaeological fieldwork on April 7, 2010. Those portions of the property which did not consist of previous disturbance and existing structures were subject to reconnaissance, photographic documentation and physical assessment May 6, 2010 and November 22, 2010, consisting of high-intensity test pit survey at an interval of five metres between individual test pits and high intensity pedestrian survey at an interval of five metres between individual transects. 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 the Ontario Ministry of Tourism and Culture (MTC) on behalf of the government and citizens of Ontario.

7.1 Stage 1 Analysis and Conclusions

Section 7.7.3 of the draft Standards and Guidelines for Consultant Archaeologists (MCL 2009: 76) outlines the requirements of the Analysis and Conclusions component of a Stage 1 Background Study.

- 1) *“Identify and describe areas of archaeological potential within the project area.*
- 2) *Identify and describe areas that have been subject to extensive and deep land alterations. Describe the nature of alterations (e.g., development or other activity) that have severely damaged the integrity of archaeological resources and have removed archaeological potential.”*

7.1.1 Characteristics Indicating Archaeological Potential

Section 1.3.1 of the draft Standards and Guidelines for Consultant Archaeologists specifies the property characteristics which indicate archaeological potential (MCL 2009: 5-6). Factors which indicate archaeological potential are features of the local landscape and environment which may have attracted people to either occupy the land or to conduct activities within the subject property. One or more of these characteristics found to apply to a study area would necessitate a Stage 2 Property Assessment to determine if archaeological resources are present. These characteristics are listed below together with considerations derived from the conduct of this study.

- 1) Previously Identified Archaeological Sites

Previously documented archaeological sites related to First Nations activity and occupation, have been documented in the vicinity of the study area. Previously documented archaeological sites related to Euro-Canadian activity and occupation, have been documented in the vicinity of the study area (see Table 2).

2) Primary Water Sources

Primary water sources are described as including lakes, rivers streams and creeks. Close proximity to primary water sources (300 metres) indicates that people had access to readily available sources of potable water and routes of waterborne trade and communication should the study area have been used or occupied in the past.

There are 2 primary water sources within 300m of the study area. The study area is located approximately 33 metres west of Silver Creek, which is a source of potable water. The study area is located approximately 788 metres south of Georgian Bay, which is a source of both portable and navigatable waterways.

3) Secondary Water Sources

Secondary water sources are described as including intermittent streams and creeks, springs, marshes, and swamps. Close proximity (300 metres) to secondary water sources indicates that people had access to readily available sources of potable water, at least on a seasonal basis, and in some cases seasonal access to routes of waterborne trade and communication should the study area have been used or occupied in the past.

There are no secondary water sources within 300m of the study area.

4) Features Indicating Past Water Sources

Features indicating past water resources are described as including glacial lake shorelines indicated by the presence of raised sand or gravel beach ridges, relic river or stream channels indicated by clear dip or swale in the topography, shorelines of drained lakes or marshes, and cobble beaches. Close proximity (300 metres) to features indicating past water sources indicates that people had access to readily available sources of potable water, at least on a seasonal basis, and in some cases seasonal access to routes of waterborne trade and communication should the study area have been used or occupied in the past.

The study area was beneath the surface of the ancient glacial lake of Lake Algonquin.

5) Elevated Topography

Features of elevated topography which indicate archaeological potential include eskers, drumlins, large knolls, and plateaux.

There are no identified features of elevated topography within the study area.

6) Pockets of Well-drained Sandy Soil

Pockets of sandy soil are considered to be especially important near areas of heavy soil or rocky ground.

The soil throughout the study area consists of loam.

7) Distinctive Land Formations

These are landscape features that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases. There may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings.

There are no identified distinctive land formations within the study area.

8) Resource Areas

Resource areas that indicate archaeological potential include food or medicinal plants (e.g., migratory routes, spawning areas, and prairie), scarce raw materials (e.g., quartz, copper, ochre or outcrops of chert) and resources of importance to early Euro-Canadian industry (e.g., logging, prospecting, and mining).

There are no identified resource areas within the study area.

9) Areas of Early Euro-Canadian Settlement

These include places of early military or pioneer settlement (e.g., pioneer homesteads, isolated cabins, and farmstead complexes), early wharf or dock complexes, pioneer churches and early cemeteries. There may be commemorative markers of their history, such as local, provincial, or federal monuments or heritage parks.

This part of Ontario did not begin to see much settlement until 1850 and is not particularly early for the province or region.

10) Early Historical Transportation Routes

This includes evidence of trails, passes, roads, railways, portage routes.

The study area is situated on an early settlement road and also has an early settlement road running east to west directly through the study area in north, both roads appear on the Historic Atlas Map of 1881. The study area is adjacent to the CP Railway.

11) Heritage Property

Property listed on a municipal register or designated under the *Ontario Heritage Act* or is a federal, provincial or municipal historic landmark or site.

There are no listed or designated heritage buildings or properties which form a part of the study area.

12) Documented Historical or Archaeological Sites

This includes property that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations. These are properties which have not necessarily been formally recognized or for which there is additional evidence identifying possible archaeological resources associated with historic properties in addition to the rationale for formal recognition.

There are no documented heritage features or archaeological sites within the study area.

7.1.2 Characteristics Indicating Removal of Archaeological Potential

Section 1.3.2 of the draft Standards and Guidelines for Consultant Archaeologists specifies the property characteristics which indicate no archaeological potential or for which archaeological potential has been removed (MCL 2009: 6). These characteristics are listed below together with considerations derived from the conduct of this study.

The introduction of Section 1.3.2 (MCL 2009: 6) notes that “*Archaeological potential has been removed if the entire property or parts of it have been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources, including:*”

1) Quarrying

There is no evidence to suggest that quarrying operations were ever carried out within the study area.

2) Major Landscaping Involving Grading Below Topsoil

Unless there is evidence to suggest the presence of buried archaeological deposits, such deeply disturbed areas are considered to have lost their archaeological potential. Properties which do not have a long history of Euro-Canadian occupation can have archaeological potential removed through extensive landscape alterations which penetrate below the topsoil layer. This is because most archaeological sites originate at grade with relatively shallow associated excavations into the soil. First Nations sites and early historic sites are vulnerable to extensive damage and complete removal due to landscape modification activities. In urban contexts where a lengthy history of occupation has occurred, properties may have deeply buried archaeological deposits covered over and sealed through redevelopment activities which do not include the deep excavation of the entire property for subsequent uses. Buildings are often erected directly over older foundations preserving archaeological deposits associated with the earlier occupation.

There is no evidence to suggest that major landscape alterations involving excavation below topsoil were ever carried out within the study area.

3) Building Footprints

Typically, the construction of buildings involves the deep excavation of foundations, footings and cellars which often obliterate archaeological deposits situated close to the surface.

The study area contains of a house, garage and barn. Due to the presence of the structures the areas beneath them cannot be assessed using traditional methodologies for archaeological assessments.

4) Sewage and Infrastructure Development

Installation of sewer lines and other below ground services associated with infrastructure development often involves deep excavation which can remove archaeological potential.

Although the existing structure is presumed to have underground services they are not likely of a size that would remove archaeological potential.

“Archaeological potential is not removed in urban or brownfield properties that have documented potential for deeply buried intact archaeological resources beneath land alterations.”

(MCL 2009: 6)

Table 4 below summarizes the evaluation criteria of the Ministry of Tourism and Culture together with the results of the Stage 1 Background Study for the proposed undertaking. Based on the criteria, the property is deemed to have archaeological potential on the basis of the presence of access to water and the location of early historic settlement roads adjacent to the study area.

Table 4 Evaluation of Archaeological Potential

FEATURE OF ARCHAEOLOGICAL POTENTIAL		YES	NO	N/A	COMMENT
1	Known archaeological sites within 300m	y			If Yes, potential determined
PHYSICAL FEATURES					
2	Is there water on or near the property?	Y			If Yes, what kind of water?
2a	Primary water source within 300 m. (lakeshore, river, large creek, etc.)	Y			If Yes, potential determined
2b	Secondary water source within 300 m. (stream, spring, marsh, swamp, etc.)		N		If Yes, potential determined
2c	Past water source within 300 m. (beach ridge, river bed, relic creek, etc.)	Y			If Yes, potential determined
3	Elevated topography (knolls, drumlins, eskers, plateaus, etc.)		N		If Yes, and Yes for any of 4-9, potential determined
4	Pockets of sandy soil in a clay or rocky area		N		If Yes and Yes for any of 3, 5-9, potential determined
5	Distinctive land formations (mounds, caverns, waterfalls, peninsulas, etc.)		N		If Yes and Yes for any of 3-4, 6-9, potential determined
HISTORIC/PREHISTORIC USE FEATURES					
6	Associated with food or scarce resource harvest areas (traditional fishing locations, agricultural/berry extraction areas, etc.)		N		If Yes, and Yes for any of 3-5, 7-9, potential determined.
7	Indications of early Euro-Canadian settlement (monuments, cemeteries, structures, etc.)		N		if Yes, and Yes for any of 3-6, 8-9, potential determined
8	Associated with historic Transportation route (historic road, trail, portage, rail corridors, etc.)	Y			If Yes, and Yes for any 3-7 or 9, potential determined
9	Contains property designated and/or listed under the Ontario Heritage Act (municipal heritage committee, municipal register, etc.)		N		If Yes and, Yes to any of 3-8, potential determined
APPLICATION-SPECIFIC INFORMATION					
10	Local knowledge (local heritage organizations, First Nations, etc.)		N		If Yes, potential determined
11	Recent disturbance not including agricultural cultivation (post-1960-confirmed extensive and intensive including industrial sites, aggregate areas, etc.)		N		If Yes, no potential

If **YES** to any of 1, 2a-c, or 10 Archaeological Potential is **confirmed**

If **YES** to 2 or more of 3-9, Archaeological Potential is **confirmed**

If **YES** to 11 or No to 1-10 Low Archaeological Potential is **confirmed**

7.2 Stage 2 Analysis and Recommendations

Section 7.8.3 of the draft Standards and Guidelines for Consultant Archaeologists (MCL 2009: 80) outlines the requirements of the Analysis and Conclusions component of a Stage 2 Physical Assessment.

1. Summarize all finding from the Stage 2 survey, or state that no archaeological sites were identified.
2. For each archaeological site, provide the following analysis and conclusions:
 - a. A preliminary determination, to the degree possible, of the age and cultural affiliation of any archaeological sites identified.
 - b. A comparison against the criteria in Section 2: Stage 2: Property Assessment to determine whether further assessment is required
 - c. A preliminary determination regarding whether any archaeological sites identified in Stage 2 show evidence of a high level cultural heritage value or interest and will thus require Stage 4 mitigation.

No archaeological sites or resources were found during the Stage 2 survey of the study area.

8.0 RECOMMENDATIONS

8.1 Stage 1 Recommendations

Under Section 7.7.4 of the draft Standards and Guidelines for Consultant Archaeologists (MCL 2009:77) the recommendations to be made as a result of a Stage 1 Background Study are described.

- 1) *“Make recommendations regarding the potential for the property, as follows:*
 - a. if some or all of the property has archaeological potential, identify areas recommended for further assessment (Stage 2) and areas not recommended for further assessment. Any exemptions from further assessment must be consistent with the archaeological fieldwork standards and guidelines.*
 - b. if no part of the property has archaeological potential, recommend that the property does not require further archaeological assessment.*
- 2) *Recommend appropriate Stage 2 assessment strategies.”*

The study area has been identified as an area of archaeological potential.

- 1) Within the study area the land consists of mostly ploughable lands and overgrown meadows. Within the areas proposed for development there is a gravel driveway in the northwest of the study area. There are several low-lying and wet areas. A large low-lying and wet area is located in the centre of the study area and continues to the northeast boundary. The residence is surrounded by a low-lying and wet area and in

the northwest corner as well. There is a low lying and wet area in the western edge of the study area and the study area is crossed by Silver Creek in the environmentally protected area. The southern portion of the study area also contains a low lying and wet area. The open lands in the western end of the study area were ploughed and well weathered at the time of assessment. There are areas of lawn or pasture. These areas were characterized by large rocks in the soil and were not able to be ploughed. One area was in the western end along the south and west and the other was in the southern edge. An existing structure is also located in the northwest and is surrounded by low-lying and wet lands. The study area also consists of Silver Creek, which flows through the property from north to south. The areas not consisting of previous disturbances or low-lying and wet were determined to have high potential and Stage 2 assessment was therefore conducted using the pedestrian and test pit survey methodology. All portions of the property that could be ploughed were ploughed in advance of the assessment and were well weathered. The pedestrian survey was completed on all ploughed lands at an interval of 5 metres in between individual transects. Any areas that could not be ploughed were subject to assessment using the test pit methodology. Test pits were dug at a fixed interval of 5 metres across the surface area. Test pits are to measure roughly 30 centimeters in diameter and were dug at least 5 centimeters into the subsoil beneath the topsoil layer where not refused by shallow depths to bedrock. All excavated earth was screened through 6 mm wire mesh to ensure that any artifacts contained within the soil matrix are recovered.

8.2 Stage 2 Recommendations

Under Section 7.8.4 of the draft Standards and Guidelines for Consultant Archaeologists (MCL 2009:80) the recommendations to be made as a result of a Stage 2 Physical Assessment are described.

1. *For each archaeological site, provide the following:*
 - a. *Borden number or other identifying number*
 - b. *Whether or not it is recommended for Stage 3 assessment*
 - c. *Where relevant, appropriate Stage 3 assessment strategies (see Section 3: Stage 3 Site-Specific Assessment).*
2. *If deeply buried archaeological sites with a sufficient level of cultural heritage value or interest are identified, recommend Stage 4 mitigation of impacts and appropriate Stage 4 strategies (see Section 4: Stage 4: Overview of Options for Mitigation of Development Impacts). (Stage 3 is not required.)*
3. *If the survey did not identify archaeological sites requiring further assessment or mitigation of impacts, recommend no further archaeological assessment of the property be required.*

As a result of the physical assessment of the property, 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.

9. 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.

10. 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

1990 The Heritage Act (RSO 1990). Queen's Printer, Toronto.

H. Belden & Co.

1881 "*Simcoe County Supplement*". The Illustrated Atlas of the Dominion of Canada. H. Belden & Co., Toronto.

2005 Ontario Heritage Amendment Act, SO 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.

wapedia.mobi

2010 Clearview, Ontario, URL: [http://wapedia.mobi/en/Duntroon, Ontario](http://wapedia.mobi/en/Duntroon,_Ontario), as of May 12, 2010. Creative Commons Attribution/Share-Alike License.

Town.collingwood.on.ca

2010 A Short History of Collingwood, URL: <http://www.town.collingwood.on.ca/node/230>, as of May 12, 2010. Town of Collingwood, Collingwood

Hunter, Andrew

2010 The History of Simcoe County, URL: <http://www.waynecook.com/zclearview.html>, as of May 12, 2010. First published in 1909 and reproduced in 1948 by the Simcoe County Historical Society, Barrie.

Garbutt, Mary

2010 About Simcoe County, URL: http://www.simcoebugs.com/About/ab_simcoe.htm,
as of May 12, 2010. Simcoe County Branch - Ontario Genealogical Society, Barrie.

Collingwoodnow.com

2010 The History of Collingwood, URL:
http://www.collingwoodnow.com/directories/cwood_info/history.htm, as of May
12, 2010. Collingwood Now & NorteShore Internet Technologies, Collingwood

11. STUDY AREA RECONNAISSANCE PHOTOS



Plate 1 House facing South



**Plate 2 Barn and Test Pitted Area around
Barn facing West**



Plate 3 Gravel Drive facing South



Plate 4 Low Lying and Wet facing West



Plate 5 Low Lying and Wet facing North



Plate 6 Low Lying and Wet facing West



Plate 7 Low Lying and Wet facing Southwest



Plate 8 Low Lying and Wet facing West



Plate 9 Low Lying and Wet facing North



Plate 10 Low Lying and Wet facing West



Plate 11 Silver Creek facing South



Plate 12 Test Pitted Pasture facing East



Plate 13 Test Pitted Pasture facing West



Plate 14 Pedestrian Conditions facing West



Plate 15 Pedestrian Conditions facing South



Plate 16 Silver Creek facing Northeast