

# Stage 1 & 2 Archaeological Assessment

**Proposed Development** 

15374 Woodbine Avenue, Part of Lots 21 & 22, Concession 3, Township of Whitchurch, Town of Whitchurch-Stouffville, Regional Municipality of York, Ontario

Original Report

Prepared for:

Ontario Ministry of Heritage, Sport, Tourism and Culture Industries

Prepared by:

Hamilton, ON L8T 2R4

Archaeological Licensee: Matthew Muttart, M. A., P1208 **Archaeological Consultants Canada** 785 Mohawk Road East

PIF# P1208-0139-2022 (Stage 1) PIF# P1208-0150-2022 (Stage 2) Project No. 257-01-22 & 263-02-22 14 November 2022

#### **EXECUTIVE SUMMARY**

Archaeological Consultants Canada ("ACC") was contracted by the Proponent to conduct a Stage 1 & 2 archaeological assessment ahead of the future development of 15374 Woodbine Avenue, in the Town of Whitchurch-Stouffville, Ontario. The assessment was requested by the city under the Planning *Act*, *R.S.O.* 1990. The study area measures 33.51 ha and is located on Part of Lots 21 and 22, Concession 3, Town of Whitchurch-Stouffville, Regional Municipality of York, Ontario (Figure 1).

The Stage 1 & 2 assessment was conducted under Professional Archaeological License P1208, held by Matthew Muttart, who also field directed the project. The Ontario Ministry of Heritage, Sport, Tourism and Culture Industries ("MHSTCI") assigned Project Information Numbers ("PIF") P1208-0139 (Stage 1) and P1208-0150-2022 (Stage 2) to this project. The licensee of ACC received permission from the Proponent to access the property and to conduct all required archaeological fieldwork activities including the removal of artifacts, as necessary. The property was assessed on November 2<sup>nd</sup>, 2022.

Stage 1 background research indicates that the subject property has general archaeological potential due to the historic presence of a farmstead within the subject property, historic proximity to a watercourse, and proximity to twenty registered archaeological sites. A visual property inspection determined that 3.74 ha of the subject property had low to no archaeological potential because it had been previously disturbed by modern construction activities or was low-lying and permanently wet. The balance of the subject property, 29.77 ha, retained archaeological potential and was recommended for Stage 2 archaeological assessment.

26.86 ha of the subject property consisted of agricultural field that was ploughed and subject to pedestrian survey at 5 m intervals. 2.91 ha of the subject property consisted of brushland and trees and was assessed by test pit survey at 5 m intervals (Figure 6).

Two locations were identified during the Stage 1 & 2 assessment. Location 1 is an Indigenous findspot documented during test pit survey where a single flake was identified. Location 2 is a Euro-Canadian findspot documented during pedestrian survey where a single fragment of ironstone was identified.

The following recommendations are provided for consideration by the Proponent and the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries:

1. The pre-contact Indigenous archaeological findspot identified as Location 1 in this report does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' *Standards and Guidelines for Consultant Archaeologists* (2011). The site has no further Cultural Heritage Value or Interest and does not require further fieldwork.

- 2. The Euro-Canadian archaeological findspot identified as Location 2 in this report does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' *Standards and Guidelines for Consultant Archaeologists* (2011). The site has no further Cultural Heritage Value or Interest and does not require further fieldwork.
- 3. The subject property has now been fully assessed according to the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' 2011 *Standards and Guidelines for Consultant Archaeologists*. No further archaeological assessment of the property is required.

TABLE OF CONTENTS				
Executive Summary	2			
Project Personnel	6			
1.0 PROJECT CONTEXT	7			
1.1 Development Context	7			
1.2 Historical Context	8			
1.2.1 Background Research	8			
1.2.2 A Cultural Chronology for Southern Ontario	8			
1.3 Archaeological Context	11			
1.3.1 Natural Environment	11			
1.3.2 Current Land Use	12			
1.3.3 Previous Archaeological Investigations	12			
1.3.3.1 Registered Archaeological Sites	12			
1.3.3.2 Previous Archaeological Reports	13			
1.3.4 Potential for Archaeological Resources	13			
2.0 FIELD METHODS	16			
3.0 RECORD OF FINDS	18			
3.1 Soils	18			
3.2 Archaeological Resources	18			
3.2.1 Location 1	18			
3.2.2 Location 2	19			
3.3 Documentary Record	19			
4.0 ANALYSIS AND CONCLUSIONS	20			
4.1 Location 1	20			
4.2 Location 2	20			
5.0 RECOMMENDATIONS 22				
6.0 ADVICE ON COMPLIANCE WITH LEGISLATION	23			

7.0 BIBLIOGRAPHY AND SOURCES	24
TO DIDDIO OR HITT THE DOCKED	21
8.0 IMAGES	26
9.0 FIGURES	30
LIST OF TABLES	
LIST OF TABLES	
1. General Cultural Chronology for Southern Ontario	9
	9 12
1. General Cultural Chronology for Southern Ontario	

#### LIST OF FIGURES

- 1. Location of the Subject Property on a 1:50,000 Scale Topographic Map
- 2. Location of the Subject Property on Tremaine's 1860 Historic Map of the County of York, Canada West
- 3. Location of the Subject Property on Miles & Co.'s 1878 Historic Atlas Map of Whitchurch Township, York County
- 4. Location of the Subject Property on a Map of Peel County Soils
- 5. Aerial Photograph Showing Results of ACC's Stage 1 Archaeological Assessment of the Subject Property
- 6. Aerial Photograph Showing Results of the Stage 2 Archaeological Assessment of the Subject Property

## PROJECT PERSONNEL

Project Manager: Matthew Muttart, M.A., P1208

Professional Licence: Matthew Muttart, M.A., P1208

Field Director: Leah Peacock, B.A., R1273

Field Archaeologists: Elise MacDonald, B.A.

Morgan Berg, B.A. Victoria Bierwirth, B.A. Delaney Parent, B.A. Emily Cangiano, B.A. John Wasilik, B.A. Spencer Krick, B.A. Jodi McKay, B.A.

Matthew Muttart, M.A., P1208 Donny Vongphakdy, B.A.

Report Preparation: Kristy O'Neal, M.A., P066

Michelle Volpe, M.A., R1241

Artifact Analyst: Joshua Garrett, M.A., P1293

Graphics: Kristy O'Neal, M.A., P066

## Stage 1 & 2 Archaeological Assessment

## **Proposed Development**

15374 Woodbine Avenue, Part of Lots 21 & 22, Concession 3, Township of Whitchurch, Town of Whitchurch-Stouffville, Regional Municipality of York, Ontario

## 1.0 PROJECT CONTEXT

## 1.1 Development Context

Archaeological Consultants Canada ("ACC") was contracted by the Proponent to conduct a Stage 1 & 2 archaeological assessment ahead of the future development of 15374 Woodbine Avenue, in the Town of Whitchurch-Stouffville, Ontario. The assessment was requested by the city under the Planning *Act*, *R.S.O.* 1990. The subject property measures 33.51 ha and is located on Part of Lots 21 and 22, Concession 3, Town of Whitchurch-Stouffville, Regional Municipality of York, Ontario (Figure 1).

The objective of a Stage 1 background study is to provide information about the subject property's geography, history, previous archaeological fieldwork, and current land conditions. A Stage 1 study evaluates the subject property's archaeological potential in order to recommend appropriate strategies for the Stage 2 survey.

The objective of a Stage 2 property assessment is to document all archaeological resources present on the property and to make a determination about whether these resources, if present, have cultural heritage value or interest. Archaeological resources consist of artifacts (Indigenous stone tools, pottery and subsistence remains as well as Euro-Canadian objects), subsurface settlement patterns and cultural features (post moulds, trash pits, privies, and wells), and sites (temporary camps and special purpose activity areas, plus more permanent settlements such as villages, homesteads, grist mills and industrial structures). If any archaeological resources are present that exhibit cultural heritage value or interest, a Stage 2 survey will determine whether these resources require further assessment and, if necessary, recommend appropriate Stage 3 strategies for identified archaeological sites.

The Stage 1 & 2 assessment was conducted under Professional Archaeological License P1208, held by Matthew Muttart, who also field directed the project. The Ontario Ministry of Heritage, Sport, Tourism and Culture Industries ("MHSTCI") assigned Project Information Numbers ("PIF") P1208-0139 (Stage 1) and P1208-0150-2022 (Stage 2) to this project. The licensee of ACC received permission from the Proponent to access the property and to conduct all required archaeological fieldwork activities including the removal of artifacts, as necessary. The property was assessed on November 2<sup>nd</sup>, 2022.

All fieldwork and reporting were completed using MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists*. This report documents the research, the field methods and results, and the conclusions and recommendations based on the Stage 1 & 2 archaeological assessment. All documents and records related to this project will be curated at the offices of Archaeological Consultants Canada, in accordance with subsection 66(1) of the *Ontario Heritage Act*.

#### 1.2 Historical Context

#### 1.2.1 Background Research

Stage 1 background research was conducted by ACC to determine the potential for finding and identifying archaeological resources including sites within the current subject property and to determine the necessity of conducting a Stage 2 survey. This was done by reviewing geographic, archaeological, and historical data for the property and the surrounding area. The background research was conducted to:

- amass all the readily available information on any previous archaeological surveys in the area.
- determine the locations of any registered and unregistered sites within and around the subject property.
- develop an historical framework for assigning levels of potential significance to any new sites discovered during fieldwork.

#### 1.2.2 A Cultural Chronology for Southern Ontario

Over their thousands of years of occupation in the general region, Indigenous peoples have left behind physical evidence of their lifeway activities and settlements at many locations. Based upon a published synthesis of Indigenous cultural occupations (Wright, 1968), Table 1 is a general outline of the cultural history of southern Ontario that is applicable to the subject property. Ellis and Ferris (1990) provide greater detail of the distinctive characteristics of each time period and cultural group.

It is likely that Ontario was occupied soon after the retreat of the Ice Age glaciers. The earliest known human occupation in the area was during the Paleoindian period (between 12,000 and 9,500 years ago) wherein small groups of nomadic peoples hunted big game such as caribou in a cool sub-arctic climate. Sites are typically found near glacial features such as the shorelines of glacial lakes or kettle ponds which allowed access to the low-lying environments favoured by the caribou and other wildlife. These people were few and their small, temporary campsites are relatively rare. Paleoindian sites are recognized by the presence of distinctive artifacts such as fluted projectile points, beaked scrapers, and gravers and by the preference for light colored cherts, such as Collingwood chert. The Paleoindian Period is divided into two sub-periods, Early Paleoindian, and Late Paleoindian.

Table 1: General Cultural Chronology for Southwestern Ontario

PERIOD	SUBDIVISION I	SUBDIVISION II	YEARS BEFORE PRESENT	COMMENTS
PALEOINDIAN	Early Paleoindian	Fluted Point Horizon	12,000-10,500	big game hunters
Late Paleoindian		Holcombe & Hi-Lo Horizons	10,500-9,500	small nomadic groups
ARCHAIC Early Archaic		Side Notched Horizon 10,000-9,700		nomadic hunters and gatherers
		Corner-Notched Horizon	9,700-8,900	
		Bifurcate Horizon	8,900-8,000	
	Middle Archaic	Middle Archaic I/Stemmed 8,000-5,500 Horizon		territorial settlements
		Middle Archaic II	5,500-4,500	polished ground stone tools
	Late Archaic	Narrow Point Horizon	4,500-3,500	
		Broad Point Horizon	4,000-3,500	
		Small Point Horizon (including Haldimand and Glacial Kame Complexes)	3,500-2,800	burial ceremonialism
WOODLAND	Early Woodland	Meadowood Complex	2,900-2,400	introduction of pottery
		Middlesex Complex	2,500-2,000	
	Middle Woodland	SW Ontario: Saugeen	2,300-1,500	long distance trade networks
		Western Basin: Couture	2,300-1,500	
	Transitional Woodland	SW Ontario:		
		Princess Point	1,500/1,400-1,200	incipient agriculture
		Western Basin:		
		Riviere au Vase	1500/1400-1200/1100	
	Late Woodland: Ontario	Early: Glen Meyer	1200/100-750/700	transition to village life
Ir	Iroquois Tradition	Middle I: Uren	720/700-710/670	large villages with palisades
		Middle II: Middleport	710/670-670/600	wide distribution of ceramic styles
		Late: Neutral	600-450	
	Late Woodland:	Younge Phase	1200/1100-800	
	Western Basin Tradition	Springwells Phase	800-600	
		Wolf Phase	600-450	
HISTORIC	SW Ontario Iroquois	Historic Neutral	450-350	tribal warfare
	European Contact	Initial Contact	380-300	tribal displacement
		European Settlement	200 >	European settlement
		First Nations Resettlement	200 >	

(Compiled from Adams, 1994, Ellis et al., 1990, Wright, 1968)

People during the Archaic period (*circa* 10,000 to 2,800 years ago) were still primarily nomadic hunters, but they adapted to a more temperate climate. Groups were dispersed during winter months and converged around watercourses from the spring to fall in large fishing campsites. The Archaic period is characterized by the appearance of ground stone tools, notched, or stemmed projectile points. The Archaic Period is divided into three sub-periods, Early, Middle

and Late Archaic. During the Archaic Period groups began to establish territorial settlements and introduce burial ceremonialism. There is a marked increase in the number and size of sites, especially during the Late Archaic period.

The Woodland period is distinguished by the introduction of pottery vessels for storage and cooking. Sites of the Woodland period (*circa* 2,900 to 400 years ago) are usually the most numerous because the population levels in southern Ontario had significantly increased, especially along the shores of Lakes Erie and Ontario. The Woodland Period is also marked by the establishment of complex long distance trading networks. The Woodland Period is divided into three sub-periods, Early, Middle and Late Woodland. During the Late Woodland Period, there is increasing sedentarism and the establishment of horticulture, a reliance on tribal warfare, and the introduction of semi-permanent villages with large protective palisades. The Late Woodland period also envelops the emergence of Iroquoian tribes and confederacies.

The historic period (from A.D. 1650 to 1900) begins with the arrival of Euro-Canadian groups. While North America had been visited by Europeans on an increasing scale since the end of the fifteenth century, it was not until the voyages of Jacques Cartier in the 1530s that Europeans visited Ontario Iroquoians in their home territories. Sites of this period document European exploration, trade, and the displacement and devastation of native groups caused by warfare and infectious disease. The most common sites of this period include Euro-Canadian homesteads, industries, churches, schools, and cemeteries.

The subject property is located within Part of Lots 21 and 22, Concession 3, in the Geographic Township of Whitchurch, York County. York County was first formed in 1792 when Lieutenant John Graves Simcoe divided Upper Canada into 19 counties. York County itself was divided into 13 townships (Mika and Mika 1983:681). Prior to the forming of the County there was a French fort located near the Lake Ontario shoreline near the mouth of the Humber River. This fort was constructed in 1749 to control fur trade traffic (Miles & Co. 1880: v). The fort was dubbed Rouillé, but it became more commonly known as Fort Toronto.

The Township of Whitchurch was first surveyed in 1800 by John Stegmann, a Hessian officer during the American War of Independence. The first Euro-Canadian settlers came to Whitchurch as early as 1795 and took up their land claims in what are now Vaughan and Markham. In addition to Quakers and United Empire Loyalists, settlers included Mennonites and Tunkers, with Dutch and German backgrounds, and some French loyalist immigrants (Mika and Mika 1983:644). By 1842, Whitchurch Township had a population of 3,836 (Carter 1984b:1304).

Historical records and mapping were examined for evidence of early Euro-Canadian occupation within and near the subject property. Figures 2 and 3 represent the Euro-Canadian settlement in and around the current subject property in the late nineteenth century. Tremaine's 1860 map of York County indicates that at this time Isaac Petch owned the southern half of the subject property, which rests within Lot 21. Petch appears in the 1861 Census as a 40-year-old farmer married to Emma Petch, aged 39. The couple were both Wesleyan Methodists born in Canada

and recorded one son at this time: Arthur, aged 11 (Library and Archives Canada [LAC], 1861). The community of Petchville is shown at the southwest corner of Lot 21.

The northern half of the subject property, resting in Lot 22, was owned by an individual named Peter, whose last name is illegible, except for the last three letters ("-ine"), due to primary document damage. This individual does not appear in census record searches for people named Peter living at this time within the Township of Whitchurch.

Miles & Co.'s 1878 map of Whitchurch Township in the *Illustrated Historical Atlas of the County of York* indicates that the south half of the subject property is still owned by Isaac Petch. The northern half is now owned by Henry Lyne, who does not appear in census records. There is now a farmstead and orchard illustrated near the northeast corner of the subject property where a house now stands. A watercourse is also now depicted, flowing from the northwest corner of the subject property down to the centre where it disappears. Petchville is shown in the southwest corner of Lot 21 and a grist mill is shown in the southeast corner of Lot 21, both outside the subject property.

## 1.3 Archaeological Context

#### 1.3.1 Natural Environment

The subject property is located within the Schomberg Clay Plains physiographic region (Chapman and Putnam, 1984). This region was subject to the Schomberg Ponding event during post-glacial recession that resulted in the development of Lake Schomberg composed of glacial meltwater (Lewis et al., 1994). The surficial geology of the subject property is till and glaciolacustrine deposits (*Surficial Geology of Southern Ontario*, 2010). The region is shaped by the emergence and recession of both Lake Algonquin and Lake Schomberg (Chapman and Putnam, 1984; Lewis et al., 1994).

The *Soils of York County* (Hoffman and Richards, 1955) indicates that the dominant surface soil types within the subject property are Percy find sandy loam and Granby sandy loam (Figure 4). The eastern portion of the subject property is comprised of the Granby sandy loam, which is a dark grey Gleysolic soil. Gleysolic soils are typical of wetlands due to poor drainage. The rest of the subject property is composed of Percy fine sandy loam, which is a grey-brown Podzolic soil with good drainage.

The presence of potable water is the single most important resource necessary for any extended human occupation or settlement. In historic mapping, an unnamed creek is depicted flowing through the subject property, from its northwestern corner to its centre (Figures 2 to 3). This watercourse appears to have since been diverted and modern maps now show a small watercourse approximately 300 m northeast of the subject property.

#### 1.3.2 Current Land Use



The subject property is currently a largely agricultural property surrounded by other agricultural properties. There is a farmstead in the northeast corner and a marshy area in the southeast corner, both along Woodbine Avenue. Highway 400 runs from north to south along the western edge of the subject property.

Figure 1 provides the location of the subject property on a 1:50,000 scale topographic map. Fieldwork for the project was conducted on November 2<sup>nd</sup>, 2022.

#### 1.3.3 Previous Archaeological Investigations

## 1.3.3.1 Registered Archaeological Sites

Previously registered archaeological sites can be used to indicate archaeological potential. To determine if any previous assessments have yielded archaeological sites, either within or surrounding the current subject property, two main sources were consulted. These include the *Ontario Archaeological Sites Database* ("OASD") and the *Public Register of Archaeological Reports*, both of which are maintained by MHSTCI.

The OASD contains archaeological sites registered within the Borden system (Borden, 1952). The Borden system divides Canada into 13 kilometre ("km") by 18.5 km blocks based on longitude and latitude. Each Borden block is designated with a four-letter label and sites identified within the block are numbered sequentially as they are registered. The subject property is located within the *BaGu* Borden block.

No archaeological sites have been registered within the subject property. Twenty sites have been registered within one km of the subject property (MHSTCI 2022a). No sites are within 250 m of the subject property. Five sites have an Indigenous component, and nine sites have a Euro-Canadian component. Six sites are of unknown cultural affiliation. Sites include a findspots, farmsteads, and homesteads. Table 2 lists these sites along with the current Cultural Heritage Value or Interest ("CHVI") for each site. Information in Table 2 is provided by MHSTCI through the OASD.

Table 2: Registered Archaeological Sites within 1 km of the Subject Property

REG. #	NAME	TIME PERIOD	CULTURAL AFFILIATION	SITE TYPE	STATUS
BaGu-99	-	Late Archaic	Indigenous	Findspot	Unknown
BaGu-98	-	Pre-Contact	Indigenous	Findspot	Unknown
BaGu-97	-	Pre-Contact	Indigenous	Findspot	Unknown
BaGu-96	-	Post-Contact	Euro-Canadian	Homestead	Unknown
BaGu-214	H2	Post-Contact	Euro-Canadian	Farmstead	No further CHVI
BaGu-213	H1	Post-Contact	Euro-Canadian	Unknown	Further CHVI
BaGu-212	-	Unknown	Unknown	Unknown	Unknown
BaGu-203	-	Post-Contact	Unknown	Homestead	No further CHVI
BaGu-202	Cedar Site	Middle Archaic	Unknown	Findspot	No further CHVI

BaGu-201	Collins Site	Post-Contact	Unknown	Homestead	Further CHVI
BaGu-168	Lyon Site	Post-Contact	Euro-Canadian	Homestead	Unknown
BaGu-163	The Graham Site H2	Post-Contact	Euro-Canadian	Homestead	Unknown
BaGu-161	Richardson Site	Post-Contact	Euro-Canadian	Homestead	Further CHVI
BaGu-13	Kay	Pre-Contact	Indigenous	Findspot	Unknown
BaGu-124	BaGu-124	Unknown	Unknown	Unknown	Unknown
BaGu-123	Laughton	Post-Contact	Euro-Canadian	Cabin	Unknown
BaGu-122	Newton	Post-Contact	Euro-Canadian	Unknown	Unknown
BaGu-121	Richardson House Dump	Post-Contact	Euro-Canadian	Dump, scatter	Unknown
BaGu-101	Whitwell	Unknown	Unknown	Unknown	Unknown
BaGu-100	-	Pre-Contact	Indigenous	Findspot	Unknown

#### 1.3.3.2 Previous Archaeological Reports

A review of archaeological reports within the *Public Register of Archaeological Reports* indicated that there are no archaeological reports detailing previous archaeological fieldwork within the subject property. There are no assessments conducted within 50 m of the subject property filed with MHSTCI at the time this report was written (MHSTCI, 2022b).

#### 1.3.4 Potential for Archaeological Resources

Archaeological potential is defined as the likelihood of finding archaeological sites within a subject property. For planning purposes, determining archaeological potential provides a preliminary indication that significant sites might be found within the subject property, and consequently, that it may be necessary to allocate time and resources for archaeological survey and mitigation.

The framework for assigning levels of potential archaeological significance is drawn from provincial guidelines found in the *Standards and Guidelines for Consultant Archaeologists* (MHSTCI, 2011: Sections 1.3.1 and 1.3.2). The following are features or characteristics that can indicate archaeological potential:

- previously identified archaeological sites
- water sources (It is important to distinguish types of water and shoreline, and to distinguish natural from artificial water sources, as these features affect site locations and types to varying degrees.).
  - o primary water sources (e.g., lakes, rivers, streams, creeks)

- secondary water sources (e.g., intermittent streams and creeks, springs, marshes, swamps)
- o features indicating past water sources (e.g., 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, cobble beaches)
- o accessible or inaccessible shoreline (e.g., high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh)
- elevated topography (e.g., eskers, drumlins, large knolls, plateaus)
- pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground
- distinctive land formation 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.
- resource areas, including:
  - o food or medicinal plants (e.g., migratory routes, spawning areas, prairie)
  - o scarce raw materials (e.g., quartz, copper, ochre or outcrops of chert)
  - o early Euro-Canadian industry (e.g., fur trade, logging, prospecting, mining)
- areas of early Euro-Canadian settlement. These include places of early military or pioneer settlement (e.g., pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches and cemeteries. There may be commemorative markers of their history, such as local provincial, or federal monuments or heritage parks
- early historical transportation routes (e.g., trails, passes, roads, railways, portages)
- property listed on a municipal register or designated under the *Ontario Heritage Act* or that is in a federal, provincial, or municipal historic landmark site
- property that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations

Archaeological potential can be determined not to be present for either the entire property or parts of it when the area under consideration has been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. This is commonly referred to as "disturbed" or "disturbance" and may include:

quarrying



- major landscaping involving grading below topsoil
- building footprints
- sewage and infrastructure development
- activities such as agricultural cultivation, gardening, minor grading and landscaping do not necessarily affect archaeological potential.

Several factors can be used to assess the potential for recovery of Euro-Canadian archaeological resources on a property. The subject property was the location of a historic farmstead and is comprised largely of well-drained land that is suitable for human habitation. Additionally, a watercourse used to flow through the subject property and there are nine Euro-Canadian sites and six sites of unknown cultural affiliation within 1 km of the subject property. The community of Petchville and a grist mill are also located nearby.

Several factors can be used to assess the potential for recovery of Indigenous archaeological resources on a property. The subject property is largely comprised of well-drained land that is suitable for human habitation. Additionally, a watercourse used to flow through the subject property and there are five Indigenous sites within 1 km of the subject property.

Given the above, background archival research indicates that all previously undisturbed portions of the subject property exhibit general archaeological potential for the discovery of both pre/post-contact Indigenous and Euro-Canadian archaeological resources therefore, a Stage 2 archaeological assessment is required.

Areas that have been disturbed by modern activities, both extensive and intensive, have low potential for the recovery of archaeological resources. The subject property has a long driveway and multiple buildings standing near its northeastern corner. The footprints of this driveway and these buildings no longer retain archaeological potential due to this disturbance (Figure 5).

Low-lying and permanently wet areas have low potential for the recovery of archaeological resources. The southeastern portion of the subject property is made up of permanently wet marshland (Figure 5).

## 2.0 FIELD METHODS

Stage 1 visual inspection and Stage 2 property assessment were conducted concurrently on November 2<sup>nd</sup>, 2022, with advance permission to enter the subject property obtained from the Proponent. Weather conditions during the assessment were excellent, with early morning light fog clearing to sunny skies with a maximum daily temperature of 16° Celsius. There were no weather, ground, or lighting conditions detrimental to the recovery of artifacts. As such, it is confirmed that the assessment met Section 2.1 Standard 3 of the *Standards and Guidelines for Consultant Archaeologists* regarding weather and lighting.

The subject property measures 33.51 ha. The assessment began with an on-site property inspection to gain first-hand knowledge of the geography, topography, and current condition of the property. The entirety of the property was accessible and was inspected. Appropriate photographic documentation was taken during the visual inspection. Coverage of the property was sufficient to identify the presence or absence of features of archaeological potential, meeting the requirements of Section 1.2 Standard 1 of the *Standards and Guidelines for Consultant Archaeologists*.

Areas of low to no archaeological potential include lands that have been previously disturbed, lands that have steeply sloping topography, and lands that are low-lying and permanently wet. The visual property inspection determined that 0.37 ha, 1%, of the subject property has low to no archaeological potential because it had been previously disturbed by modern construction activities for construction of a driveway, house and farm structures. 3.37 ha, 10%, is permanently low-lying and wet marsh. The balance of the subject property, 29.77 ha, was recommended for Stage 2 archaeological assessment.

26.86 ha, 80%, of the subject property consists of agricultural field that was assessed by means of pedestrian survey at 5 m intervals. The fields had been recently ploughed, with direction provided to the contractor undertaking the ploughing that the ploughing should be deep enough to provide total topsoil exposure, but not deeper than previous ploughing. The ploughed lands were weathered by several light rains to improve the visibility of archaeological resources. At least 80% of the ground surface was visible, meeting conditions for field visibility.

As per Section 2.1.3 Standard 1 and 2 of the *Standards and Guidelines for Consultant Archaeologists*, any artifacts recovered triggered an intensified survey. This survey was completed at a 1-metre interval within a 20-metre radius of each findspot. The intensive survey was continued until the full extent of the surface scatter was defined.

2.91 ha, 9%, of the subject property is comprised of brushland and trees, and as such it meets the requirements of Section 2.1.2 le of the *Standards and Guidelines for Consultant Archaeologists*, that ploughing, or cultivation is not viable. Therefore, Stage 2 archaeological assessment in these areas was conducted by test pit survey at 5 m intervals (ACC, 2022). Each test pit dug by hand and was 30 centimetres in diameter and was dug to at least five centimetres into the subsoil. Test pits were examined for stratigraphy, cultural features, or evidence of fill. Test pits placed to

within one m of all disturbances and other areas of low to no archaeological potential. Moderate soil disturbance was observed in some areas around the house and driveway, but as the disturbance was irregular, 5 m grid intervals were maintained during the survey. All soil was screened through 6-millimetre mesh to maximize the potential for artifact recovery. Appropriate photographic documentation was taken, and all test pits were backfilled upon completion.

Once artifact bearing, or "positive", test pits was encountered, test pitting was continued on the 5 m survey grid to determine if there were further positive test pits. During the test pit survey along the 5 m survey grid, only one positive test pit was encountered. As this did not result in sufficient archaeological resources to meet the criteria to proceed to Stage 3 assessment, intensified survey was completed around the positive test pit. Eight additional test pits were placed at a 2.5 m interval in each cardinal direction around the positive test pit. Following this a 1 m by 1m test unit was placed over the positive test pit.

GPS coordinates were recorded for every positive test pit and surface artifact findspot, using a Garmin ETrex set to the North American Datum 83 ("NAD 83") with an accuracy of  $\pm 3$  m. There were no conditions that affected the accuracy of the readings. Locations of fixed reference landmarks were also taken. GPS information is provided in the supplementary documentation accompanying this report.

The entirety of the subject property was assessed. Results of the Stage 2 assessment are shown on Figure 6.

## 3.0 RECORD OF FINDS

### 3.1 Soils

Soils encountered during the assessment consisted of medium brown sandy loam. Test pits and the test unit contained approximately 25 to 40 centimetres of medium brown sandy loam topsoil above yellow-orange sandy loam subsoil. Areas of moderate soil disturbance were observed around an existing house on the property.

## 3.2 Archaeological Resources

Two locations containing archaeological resources were identified during the Stage 1 & 2 assessment. The locations include an Indigenous artifact findspot and a Euro-Canadian artifact findspot. All artifacts found during Stage 2 survey was collected, recorded, and catalogued according to their provenience. All artifacts were analysed according to the standards for analysis presented in Table 6.1 (Aboriginal Artifacts) and Table 6.2 (European and other non-Aboriginal manufactured artifacts) of the *Standards and Guidelines for Consultant Archaeologists* (MHSTCI, 2011). A full catalogue of recovered artifacts is presented in Table 3. Images of the artifacts appear in Section 8.0, below.

Table 3: Artifact Catalogue

Cat.#	Location	Provenience	Layer	Description	Туре	Freq.	Comments	Storage
1000	1	TP 1	topsoil	flake	flake fragment	1	Onondaga	263-02-22
1001	2	CSP 1	ploughzone	ironstone	fragment	1		263-02-22

#### 3.2.1 Location 1

Location 1 consists of one positive test pit identified during the Stage 2 assessment. This pit contained one Onondaga chert flake fragment. None of the eight cardinal test pits produced additional artifacts and no artifacts were recovered from the test unit (see Supplementary Documentation accompanying this report). Soils within some test pits and the test unit dug at Location 1 appeared moderately disturbed.

The artifact recovered from Location 1 is a single chert flake. Flakes, or chipping detritus, are the waste by-product of stone tool manufacture. The analysis of these waste flakes provides information about techniques used by knappers. Certain flakes have a characteristic appearance and indicate the tools that were made or prepared at a site even when the tools themselves are absent. Each flake was analyzed according to chert type and the descriptive categories listed in Table 6.1 of the 2011 Ontario Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists*. The flake is a fragment made of Onondaga chert, a locally available source. The flake showed no evidence of heat alteration.

#### 3.2.2 Location 2

Location 2 consists of a single Euro-Canadian artifact that was identified during pedestrian survey. One piece of ironstone was identified at Location 2. Despite intensive survey in a 20-m radius of the findspot, no additional artifacts were identified. Ironstone is commonly found on sites dating to between 1875 and 1920 (Kenyon, 1980:21).

## 3.3 Documentary Record

All fieldwork-related activities were documented and kept, including field notes and observations and detailed maps. Appropriate photographic records were kept of the excavation, and all pictures were recorded in a photo log.

A detailed list of field records is presented in Table 4. All digital items have been duplicated and all paper items have been scanned and stored as digital documents. All items are housed in the corporate offices of ACC.

Under Section 6 of Regulation 881 of the *Ontario Heritage Act*, ACC will keep in safekeeping all objects of archaeological significance that are found under the authority of the license and all field records that are made in the course of the work authorized by the license, except where the objects and records are donated to Her Majesty the Queen in right of Ontario or are directed to be deposited in a public institution under subsection 66 (1) of the Act.

Table 4: Inventory of Documentary and Material Records

PROJECT INFORMATION				
ACC project number	257-01-22 &	257-01-22 & 263-02-22		
Licensee	Matthew Muttart			
MHSTCI PIF number	P1208-0139-2022 & P1208-0150-2022			
DOCUMENT/MATERIAL	NUMBER DESCRIPTION			
field notes & photo logs	1 pages (paper, with digital copies)			
maps	1 sketch map of subject property			
	1 aerial photograph of subject property			
artifacts	1 Onondaga chert flake			

## 4.0 ANALYSIS AND CONCLUSIONS

Stage 1 background research indicates that the subject property has general archaeological potential due to the historic presence of a farmstead within the subject property, historic proximity to a watercourse, and proximity to twenty registered archaeological sites.

A visual property inspection determined that 3.74 ha of the subject property had low to no archaeological potential because it had been previously disturbed by modern construction activities or was low-lying and permanently wet. The balance of the subject property, 29.77 ha, retained archaeological potential and was recommended for Stage 2 archaeological assessment.

26.86 ha of the subject property consisted of agricultural field that was ploughed and subject to pedestrian survey at 5 m intervals. 2.91 ha of the subject property consisted of brushland and trees and was assessed by test pit survey at 5 m intervals (Figure 6).

Two locations were identified during the Stage 1 & 2 assessment. An evaluation of the CHVI of each location is provided below.

## 4.1 Location 1

Location 1 consists of a single Indigenous artifact found during test pit survey. Intensification did not yield any further artifacts. The flake is not temporally diagnostic.

Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* identifies criteria for requiring Stage 3 assessment at sites found during Stage 2 property assessment. In this case, Location 1 represents an Indigenous single artifact findspot found during test-pit survey; therefore, Standard 1a.ii and Standard 1b are applicable to this type of site.

Standard 1.a.ii states that that artifacts, groups of artifacts, or archaeological sites that are found within a 10-m by 10-m test-pit survey area must be subjected to Stage 3 site-specific assessment if they meet the following requirements: (1) at least one diagnostic artifact from combined test pit and test unit excavations, or (2) at least five non-diagnostic artifacts from combined test pit and test unit excavations. Standard 1b details single examples of special interest. A recommendation for Stage 3 assessment is required if any of the following are found: (i) Indigenous ceramics, (ii) exotic or period specific cherts, and (iii) isolated Paleoindian or Early Archaic diagnostic artifacts.

The flake at Location 1 does not meet any of the above standards, therefore the site has been fully assessed and no longer retains CHVI. A Stage 3 site-specific assessment is not required.

## 4.2 Location 2

Location 2 consists of a findspot containing a single piece of white ironstone found during pedestrian survey. Intensification did not yield any further artifacts. Ironstone is commonly found on sites dating to between 1875 and 1920 (Kenyon, 1980:21).

Section 2.2 of the Standards and Guidelines for Consultant Archaeologists identifies criteria for requiring Stage 3 assessment at sites found during Stage 2 property assessment. In this case, the Euro-Canadian site at Location 2 represents a post-contact archaeological findspot dating the period of use from the mid-nineteenth century to the present. According to the Standards and Guidelines for Consultant Archaeologists, Location 2 does not meet the criteria for requiring a Stage 3 assessment at post-contact sites. Specifically, at least 20 artifacts that date the period of use to before 1900 are required on a site [Section 2.2, Standard 1c]. Twentieth century archaeological sites where background documentation or archaeological features indicate possible cultural heritage value or interest at this site also warrant further Stage 3 assessment [Section 2.2, Standard 1d]. Only one artifact was recovered from this location. In addition, background documentation and archaeological features do not indicate CHVI for this site.

The fragment of ironstone at Location 2 is deemed to have no further CHVI and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 2.

#### 5.0 RECOMMENDATIONS

Subject to acceptance of the results and approval of the recommendations, MHSTCI is requested to deem this report compliant with ministry requirements for archaeological fieldwork and reporting and to issue a letter accepting this report into the *Ontario Public Register of Archaeological Reports*.

The following recommendations are provided for consideration by the Proponent and the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries:

- 1. The pre-contact Indigenous archaeological findspot identified as Location 1 in this report does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' *Standards and Guidelines for Consultant Archaeologists* (2011). The site has no further Cultural Heritage Value or Interest and does not require further fieldwork.
- 2. The Euro-Canadian archaeological findspot identified as Location 2 in this report does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' *Standards and Guidelines for Consultant Archaeologists* (2011). The site has no further Cultural Heritage Value or Interest and does not require further fieldwork.
- 3. The subject property has now been fully assessed according to the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' 2011 *Standards and Guidelines for Consultant Archaeologists*. No further archaeological assessment of the property is required.

## 6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

The following advice on compliance with current legislation is provided for consideration:

- a. This report is submitted to the Minister of Heritage, Sport, Tourism and Culture Industries as a condition of licensing in accordance with Part IV of the *Ontario Heritage Act*, R.S.O. 2005, c O.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection, and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Heritage, Sport, Tourism and Culture Industries, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.
- b. It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such a time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeological Reports referred to in Section 65.1 of the *Ontario Heritage Act*.
- c. Should previously undocumented archaeological resources be discovered, 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 consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.
- d. The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 requires that any person discovering human remains must notify the local police or coroner and the Registrar of Cemeteries at the Ministry of Government and Consumer Services.

## 7.0 BIBLIOGRAPHY AND SOURCES

#### Adams, Nick

1994 Field Manual for Avocational Archaeologists in Ontario. Publication No.16, Ontario Archaeological Society Inc.

#### Borden, Charles E.

1952 A Uniform Site Designation Scheme for Canada. *Anthropology in British Columbia*, No. 3, 44-48.

## Chapman, Lyman John and Donald F. Putnam

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

## Energy Mines and Resources Canada

1996 Newmarket. 1:50,000 Scale Topographic Map.

#### Hoffman, D. W. and N. R. Richards

1955 *Soil Survey of York County*. Report No. 19 of the Ontario Soil Survey. Experimental Farms Service, Canada Department of Agriculture, and the Ontario Agricultural College, Guelph.

#### Kenyon, Ian

1980 *Ceramics, The ACO Guide to 19<sup>th</sup> Century Archaeological Sites.* Ontario Ministry of Culture and Recreation, Historical Planning and Research Branch, London, Ontario.

#### Library and Archives Canada

1861 Census of Canada

https://www.bac-lac.gc.ca/eng/census/1861/Pages/1861.aspx [Accessed 03 October 2022].

#### Mika, Nick and Helma Mika

1983 *Places in Ontario: Their Name Origins and History. Part II, N-Z.* Mika Publishing Company, Belleville.

#### Ministry of Heritage, Sport, Tourism and Culture Industries ("MHSTCI")

- 2005 The Heritage Act, R.S.O. 2005. Queen's Printer, Toronto.
- 2011 Standards and Guidelines for Consultant Archaeologists. Toronto.
- 2022a Sites within a one km radius of the subject property. Provided from the *Ontario Archaeological Sites Database*.
- 2022b Archaeological assessments completed within the subject property or within 50 m of the subject property. Provided from the *Ontario Public Register of Archaeological Report*.



Ministry of Natural Resources and Forestry ("MNRF")

2019 Topographic Map, Land Information Ontario

https://www.lioapplications.lrc.gov.on.ca/MakeATopographicMap/index.html?viewer=Make\_A\_Topographic\_Map.MATM&locale=en-CA[Accessed 03 October 2022].

Ontario Ministry of Agriculture, Food and Rural Affairs ("OMAFRA")

2012 GIS Layers for Soils and Physiography in the Province of Ontario. <a href="http://sis.agr.gc.ca/cansis/publications/surveys/on/index.html">http://sis.agr.gc.ca/cansis/publications/surveys/on/index.html</a>. [Accessed 03 October 2022].

Wright James V.

1968 Ontario Prehistory: an eleven thousand-year archaeological outline.

Archaeological Survey of Canada, National Museums of Canada, Ottawa.

## 8.0 IMAGES



Image 1: Marsh, facing southeast.



Image 2: Driveway, facing east.



Image 3: Area of disturbance, facing southeast.



Image 4: Marsh, facing southeast.







Image 7: Crew at work, pedestrian survey, facing northeast.



Image 8: Crew at work, intensified pedestrian survey, facing south.



Image 9: Crew at work, test pit survey, facing east.



Image 10: Crew at work, unit excavation, southeast.



Image 11: Typical test pit.



Image 12: Test unit at Location 1, planview.



Image 13: Test unit at Location 1, north wall profile.



Image 14: Artifacts recovered during Stage 1 & 2 assessment. Left: Onondaga chert flake fragment, Location 1. Right: Ironstone fragment, Location 2.

## 9.0 FIGURES

Figure 1: Location of the Subject Property on a 1:50,000 Scale Topographic Map

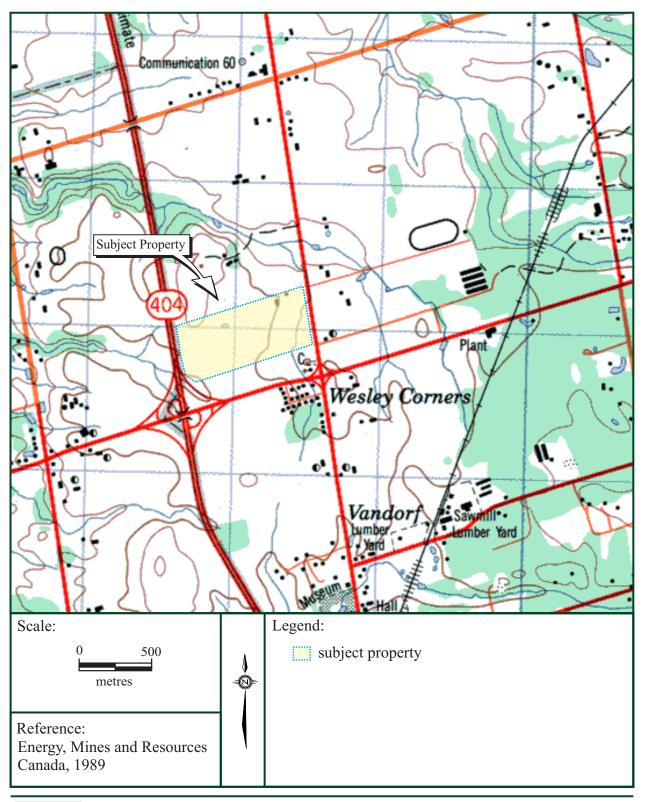


Figure 2: Location of the Subject Property on Tremaine's 1860 Map of the County of York, Canada West

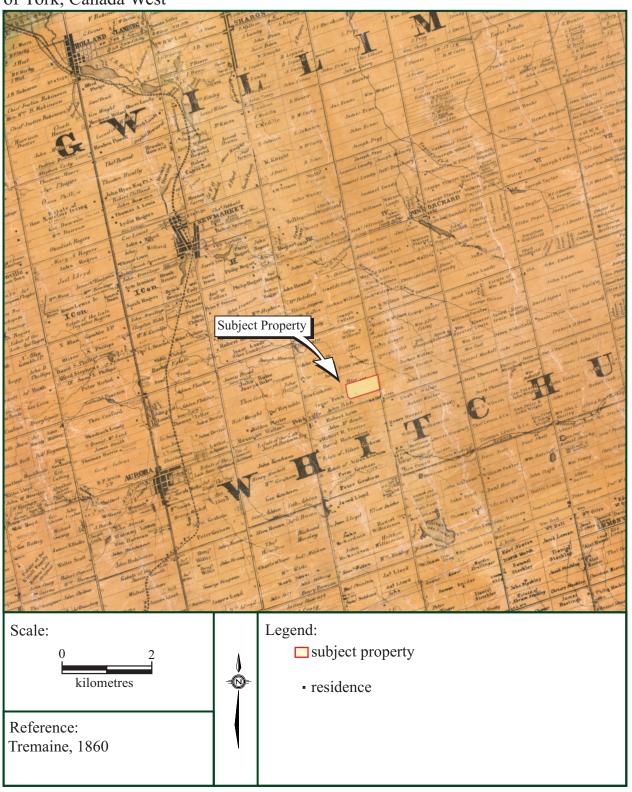


Figure 3: Location of the Subject Property on Miles & Co.'s 1878 Historical Atlas Map of Whitchurch Township, York County

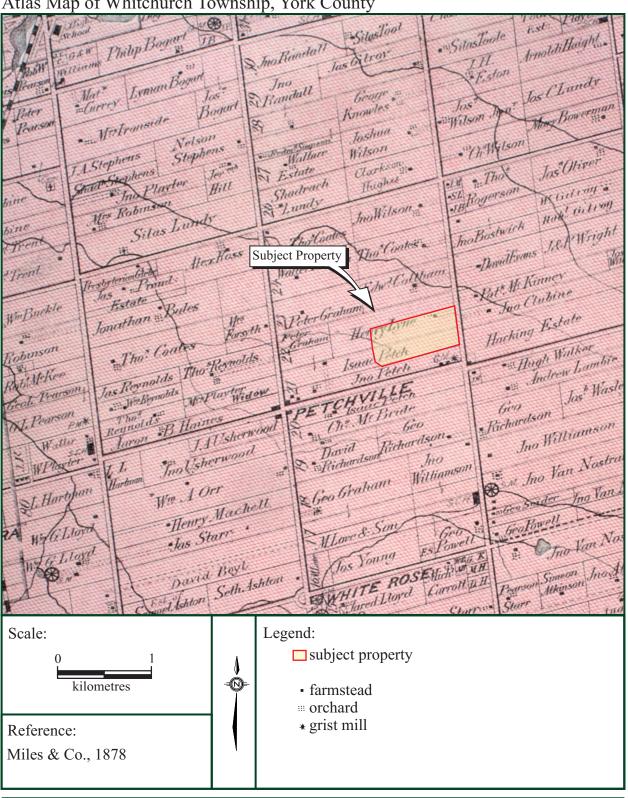


Figure 4: Location of the Subject Property on a Map of York County Soils

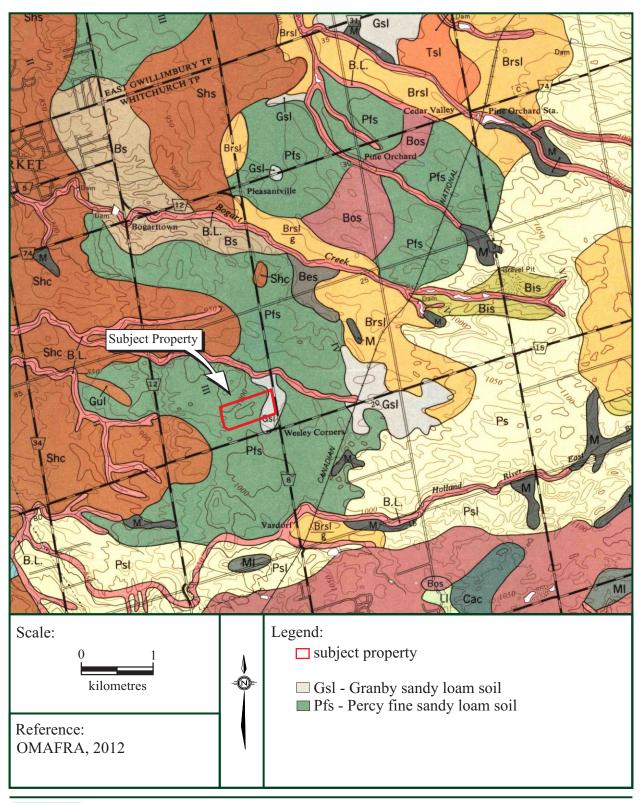


Figure 5: Aerial Photograph Showing the Results of the Stage 1 Archaeological Assessment of the Subject Property, with Photograph Locations and Directions

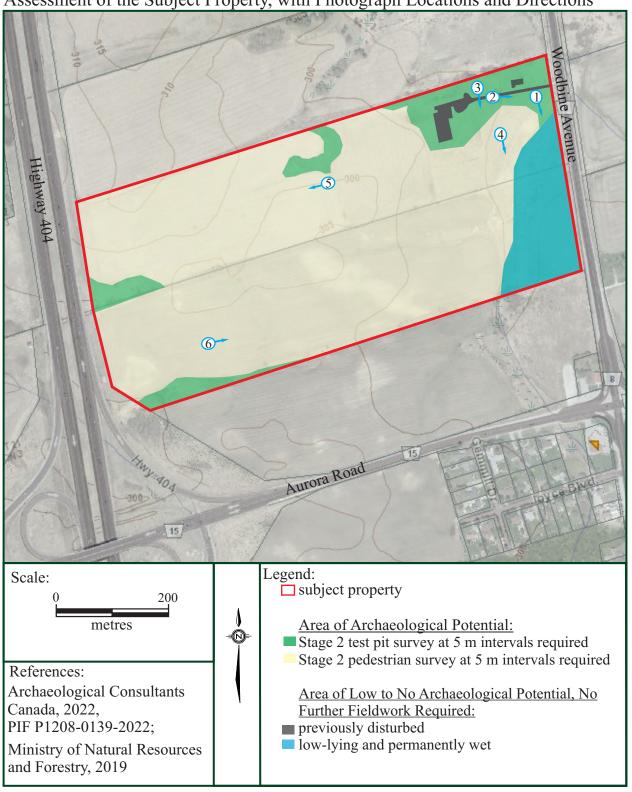


Figure 6: Aerial Photograph Showing the Results of the Stage 2 Archaeological Assessment of the Subject Property, with Photograph Locations and Directions

