Stage 1-2 Archaeological Assessment, Crescent Acres, Fort Erie.

Part of Lot4 Concession 3 Lake Erie. Geographic township of Bertie Historical County of Welland, now the Regional Municipality of Niagara.

Submitted to:

Crescent Acres Ltd 3350 Merrittville Highway, Unit 9 Thorold, Ontario L2V 1Y6

and

Ontario's Ministry of Heritage, Sport, Tourism and Culture Industries

Submitted by:



196 Westheights Drive, Kitchener, Ontario, N2N 1J9
Mobile/Office: 519-744-7018
email: garth@golden.net www.detritusconsulting.ca

Licensee: Mr. Michael Pitul License Number: P462 PIF Number: P462-0155-2022 CP Number: 2022-57

ORIGINAL REPORT

October 18, 2022

Executive Summary

Detritus Consulting Ltd. ('Detritus') was retained by Crescent Acres Ltd. ('the Proponent') to conduct a Stage 1-2 archaeological assessment on Part of Lot 4 Concession 3 Lake Erie. Geographic township of Bertie Historical County of Welland, now the Regional Municipality of Niagara, Ontario ('Study Area'; Figure 1). This assessment was undertaken in advance of residential and mixed-use development (Figure 4).

The assessment was triggered by the Provincial Policy Statement ('PPS') that is informed by the *Planning Act* (Government of Ontario 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger *Ontario Heritage Act* (1990b). According to Section 2.6.2 of the PPS, "development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved." To meet the condition, a Stage 1-2 assessment of the Study Area was conducted during the application phase of the proposed residential and mixed use development, under archaeological consulting license P462 issued to Mr. Michael Pitul by the Ministry of Heritage, Sport, Tourism and Culture Industries ('MHSTCI') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MHSTCI 2011 *Standards and Guidelines for Consultant Archaeologists* ('Standards and Guidelines'); (Government of Ontario 2011).

The Assessment Property is an irregular shaped parcel measuring 10.7 hectares ('ha'). The Assessment Property was bound by residential and commercial properties to the West and North, and agricultural land to the East and South. The limits of the Study Area were surveyed and marked by the Proponent prior to the assessment. The Study Area comprised the entire Assessment Property.

The Stage 1 background research indicated that the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources. A Stage 2 field assessment was recommended for the agricultural land and scrub land.

The subsequent Stage 2 assessment conducted on July 15th, 2022 involved a typical test pit survey at 5m intervals of the scrub land and the agricultural was subjected to a typical pedestrian survey at 5m intervals. This investigation resulted in the identification and documentation of no archaeological resources; therefore; **no further archaeological assessment of the Study Area is recommended.**

The Executive Summary highlights key points from the report only; for complete information and findings, the reader should examine the complete report.

Table of Contents

Executive Summary2
Table of Contents3
Project Personnel4
Project Acknowledgements
1.0 Project Context5
1.1 Development Context5
1.2 Historical Context
1.2.1 Post-Contact Aboriginal Resources
1.2.2 Euro-Canadian Resources8
1.3 Archaeological Context
1.3.1 Property Description and Physical Setting
1.3.2 Pre-Contact Aboriginal Land Use10
Table 1: Cultural Chronology for Bertie Township10
1.3.3. Previously Identified Archaeological Work
Table 2: Registered Archaeological Sites within 1km of the Study Area11
1.3.4. Archaeological Potential11
2. Field Methods
3. Record of Findings
Table 3: Inventory of Document Record
4. Analysis and Conclusions
5. Recommendations
6. Advice on Compliance with Legislation
7. Bibliography and Sources
8. Images
8.1 Maps20
8.2 Photos

Project Personnel

Project Manager: Garth Grimes, Po17 Field Director: Michael Pitul, P462

Field Technicians: Maria Cecchini, Courtney Nadon, Wyatt Boutilier,

Emily Marsh, Alysha Gullion

Report Preparation: Michael Pitul P462, Brittanee Mason Mapping and GIS: Michael Pitul P462, Brittanee Mason

Licensee Review: Mr. Michael Pitul, P462

Project Acknowledgements

Generous contributions by Mr. Mr. Matt Vartanian of Mountain View Homes for making this report possible.

1.0 Project Context

1.1 Development Context

Detritus Consulting Ltd. ('Detritus') was retained by Crescent Acres Ltd. ('the Proponent') to conduct a Stage 1-2 archaeological assessment on Part of Lot 4 Concession 3 Lake Erie. Geographic township of Bertie Historical County of Welland, now the Regional Municipality of Niagara, Ontario ('Study Area'; Figure 1). This assessment was undertaken in advance of residential and mixed-use development (Figure 4).

The assessment was triggered by the Provincial Policy Statement ('PPS') that is informed by the *Planning Act* (Government of Ontario 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger *Ontario Heritage Act* (1990b). According to Section 2.6.2 of the PPS, "development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved." To meet the condition, a Stage 1-2 assessment of the Study Area was conducted during the application phase of the proposed residential and mixed use development, under archaeological consulting license P462 issued to Mr. Michael Pitul by the Ministry of Heritage, Sport, Tourism and Culture Industries ('MHSTCI') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MHSTCI 2011 *Standards and Guidelines for Consultant Archaeologists* ('Standards and Guidelines'); (Government of Ontario 2011).

The purpose of a Stage 1 Background Study is to compile all available information about the known and potential archaeological heritage resources within the Study Area and to provide specific direction for the protection, management and/or recovery of these resources. In compliance with the *Standards and Guidelines* (Government of Ontario 2011), the objectives of the following Stage 1 assessment are as follows:

- To provide information about the Study Area's geography, history, previous archaeological fieldwork and current land conditions;
- to evaluate in detail, the Study Area's archaeological potential which will support recommendations for Stage 2 survey for all or parts of the property; and
- to recommend appropriate strategies for Stage 2 survey.

To meet these objectives Detritus archaeologists employed the following research strategies:

- A review of relevant archaeological, historic and environmental literature pertaining to the Study Area;
- a review of the land use history, including pertinent historic maps; and
- an examination of the Ontario Archaeological Sites Database ('ASDB') to determine the presence of known archaeological sites in and around the Study Area.

The purpose of a Stage 2 Property Assessment was to provide an overview of any archaeological resources within the Study Area, and to determine whether any of the resources might be archaeological sites with cultural heritage value or interest ('CHVI'), and to provide specific direction for the protection, management and/or recovery of these resources. In compliance with the Standards and Guidelines (Government of Ontario 2011), the objectives of the following Stage 2 assessment are as follows:

- To document all archaeological resources within the Study Area;
- to determine whether the Study Area contains archaeological resources requiring further assessment; and
- to recommend appropriate Stage 3 assessment strategies for archaeological sites identified.

The licensee received permission from the Proponent to enter the land and conduct all required archaeological fieldwork activities, including the recovery of artifacts.

1.2 Historical Context

1.2.1 Post-Contact Aboriginal Resources

Prior to the arrival of European settlers, much of the central and southern Ontario was occupied by Iroquoian speaking linguistic groups that had united to form confederacies, including the Huron-Wendat, the Neutral (or Attawandaran), and the Petun in Ontario, as well as the Five Nations Iroquois Confederacy in Upper New York State (Birch 2010; Warrick 2013). Of these groups, the Huron-Wendat established themselves to the east of the Niagara escarpment and the Neutral, to the west (Warrick 2000).

Throughout the middle of the 17th century, the Iroquois Confederacy sought to expand upon their territory and to monopolize the fur trade between the European markets and the tribes of the western Great Lakes region. A series of bloody conflicts followed known as the Beaver Wars or the French and Iroquois Wars, contested between the Iroquois Confederacy and the Algonkian speaking communities of the Great Lakes region. Many communities were destroyed including the Huron, Neutral, Susquehannock and Shawnee leaving the Iroquois as the dominant group in the region. By 1653 after repeated attacks, the Niagara peninsula and most of Southern Ontario had been vacated (Heidenreich 1990).

At this same time, the Anishinaabeg Nation, an Algonkian-speaking community situated inland from the northern shore of Lake Huron, began to challenge the Haudenosaunee for dominance in the Lake Huron and Georgian Bay region in order to advance their own role in the fur trade (Gibson 2006). The Algonkian-speaking groups that settled in the area bound by Lake Ontario, Lake Erie, and Lake Huron were referred to by the English as the Chippewas or Ojibwas. By 1680, the Ojibwa began expanding into the evacuated Huron-Wendat territory, and eventually into Southern Ontario. By 1701, the Haudenosaunee had been driven out of Ontario completely and were replaced by the Ojibwa (Gibson 2006; Schmalz 1991).

The late 17th and early 18th centuries also mark the arrival of an Ojibwa band known as the Mississaugas into Southern Ontario and, in particular, the watersheds of the lower Great Lakes. 'The Mississaugas' is the name that the Jesuits had used in 1840 for the Algonquin community living near the Mississaugas River on the northwestern shore of Lake Huron (Smith 2002). The oral traditions of the Mississaugas, as recounted by Chief Robert Paudash and recorded in 1904, suggest that the Mississaugas defeated the Mohawk Nation, who retreated to their homeland south of Lake Ontario. Following this conflict, a peace treaty was negotiated between the two groups (Praxis Research Associates n.d.).

From the beginning of the 18th century until the end of the Seven Year War in 1763, the Ojibwa nation, including the Mississaugas, experienced a golden age in trade holding no alliance with either the French or the British (Schmalz 1991). At the end of the 17th century, the Mississaugas' settled permanently in Southern Ontario (Praxis Research Associates n.d.). Around this same time, in 1722, the Five Nation Iroquois Confederacy adopted the Tuscarora in New York becoming the Six Nations (Pendergast 1995).

The Study Area enters the Euro-Canadian historic record on May 9th 1781 as part of the Niagara Treaty No. 381 with the Mississauga and Chippewa. This treaty involved the surrender of ...

...all that certain tract of land situated on the west side of the said strait or river, leading from Lake Erie to Lake Ontario, beginning at a large white oak tree, forked six feet from the ground, on the bank of the said Lake Ontario, at the distance of four English miles measured in a straight line, from the West side of the bank of the said straight, opposite to the Fort Niagara and extending from thence by a southerly course to the Chipeweigh River, at the distance of four miles on a direct line from where the said river falls into the said strait about the great Fall of Niagara or such a line as will pass at four miles west of the said Fall in its course to the said river and running from thence by a southeasterly course to the northern bank of Lake Erie at the distance of four miles on a straight line, westerly from the Post called Fort Erie, thence easterly along the said Lake by the

said Post, and northerly up the west side of the said strait to the said lake Ontario, thence westerly to the place of beginning.

Morris 1943:15-16

The size and nature of the pre-contact settlements and the subsequent spread and distribution of Aboriginal material culture in Southern Ontario began to shift with the establishment of European settlers. Lands in the Lower Grand River area were surrendered by the Six Nations to the British Government in 1832, at which point most Six Nations people moved into Tuscarora Township in Brant County and a narrow portion of Oneida Township (Page & Co. 1879:8; Tanner 1987:127; Weaver 1978:526). Despite the inevitable encroachment of European settlers on previously established Aboriginal territories, "written accounts of material life and livelihood, the correlation of historically recorded villages to their archaeological manifestations, and the similarities of those sites to more ancient sites have revealed an antiquity to documented cultural expressions that confirms a deep historical continuity to Iroquoian systems of ideology and thought" (Ferris 2009:114). As Ferris observes, despite the arrival of a competing culture, First Nations communities throughout Southern Ontario have left behind archaeologically significant resources that demonstrate continuity with their pre-contact predecessors, even if they have not been recorded extensively in historical Euro-Canadian documentation.

1.2.2 Euro-Canadian Resources

The current Study Area occupies an archaeological assessment on Part of Lot 4 Concession 3 Lake Erie. Geographic township of Bertie Historical County of Welland, now the Regional Municipality of Niagara, Ontario.

In 1763, the Treaty of Paris brought an end to the Seven Years War, contested between the British, the French, and their respective allies. Under the Royal Proclamation of 1763, the large stretch of land from Labrador in the east, moving southeast through the Saint Lawrence River Valley to the Great Lakes and on to the confluence of the Ohio and Mississippi Rivers became the British Province of Québec (Niagara Historical Society and Museum 2008).

On July 24, 1788, Sir Guy Carleton, the Governor-General of British North America, divided the Province of Québec into the administrative districts of Hesse, Nassau, Mecklenburg, and Lunenburg (Archives of Ontario 2012-2015). Further change came in December 1791 when the province was rearranged into Upper Canada and Lower Canada under the Constitutional Act. Colonel John Graves Simcoe was appointed as Lieutenant-Governor of Upper Canada; he initiated several initiatives to populate the province including the establishment of shoreline communities with effective transportation links between them (Coyne 1895).

On July 1792, Simcoe divided Upper Canada into 19 counties, including Niagara, stretching from Essex in the west to Glengarry in the east. Later that year, the four districts originally established in 1788 were renamed the 'Western', 'Home', 'Midland' and 'Eastern' Districts. As population levels in Upper Canada increased, smaller and more manageable administrative bodies were needed resulting in the establishment of many new counties and townships (Archives of Ontario 2012-2015).

As population levels in Upper Canada increased, smaller and more manageable administrative bodies were needed resulting in the establishment of many new counties and townships. As part of this realignment, the boundaries of the Home and Western Districts were shifted and the London and Niagara Districts were established. Under this new territorial arrangement, the Study Area became part of Lincoln County within the Niagara District (Archives of Ontario 2009).

In 1845, after years of increasing settlement that began after the War of 1812, the southern portion of Lincoln County was severed to form Welland County (the two counties would be amalgamated once again in 1970 to form the Regional Municipality of Niagara).

Bertie Township was settled in 1784 by United Empire Loyalist and others from American colonies. The soil of the township was a large attraction to early settlers as it was suitable for growing barley, wheat, oats amongst other things. Ridgeway is located in the southern portion of the township and was described as a thriving village, in 1876. At this time the village had 800

Stage 1-2 Archaeological Assessment, Crescent Acres, Fort Erie.

inhabitants as well as three hotels, 20 different stores and the Buffalo and Goderich division of the Grand Trunk Railway (Page & Co. 1876).

The *Illustrated Historical Atlas of the Counties of Lincoln and Welland ('Historical Atlas'*), demonstrates the extent to which Bertie Township had been settled by 1876 (Page & Co. 1876; Figure 2). Landowners are listed for every lot within the township, many of which had been subdivided multiple times into smaller parcels to accommodate an increasing population throughout the late 19th century. Structures and orchards are prevalent throughout the township, almost all of which front early roads an especially the Niagara River and Lake Erie.

The Study Area is shown in the *Historical Atlas* as occupying part of Lot 4 Concession 3 Lake Erie and is labelled as being owned by John B Benner. In the Northern section of the lot is a structure with an associated orchard. The Town of Fort Erie is located to the East of the Study Area as well as two lines of the Grand Trunk Railway.

Although significant and detailed landowner information is available on the current *Historical Atlas* map of Bertie Township (Page & Co 1876: Figure 2), it should be recognized that historical county atlases were funded by subscriptions fees and were produced primarily to identify factories, offices, residences and landholdings of subscribers. Landowners who did not subscribe were not always listed on the maps (Caston 1997:100). Moreover, associated structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984).

1.3 Archaeological Context

1.3.1 Property Description and Physical Setting

The Study Area is an irregular shaped parcel measuring 10.7 hectares ('ha') and is surrounded by by residential and commercial properties to the West and North, and agricultural land to the East and South. The majority of the region surrounding the Study Area has been subject to European-style agricultural practices for over 100 years, having been settled by Euro-Canadian farmers by the mid-19th century. Much of the region today continues to be used for agricultural purposes.

The Niagara Region as a whole is located within the Deciduous Forest Region of Canada, and contains tree species which are typical of the more northern Great Lakes-St. Lawrence Biotic zone, such as beech, sugar maple, white elm, basswood, white oak and butternut (MacDonald & Cooper 1997:21). During pre-contact and early contact times, the land in the vicinity of the Study Area comprised a mixture of hardwood trees such as sugar maple, beech, oak and cherry. This pattern of forest cover is characteristic of areas of clay soil within the Maple-Hemlock Section of the Great Lakes-St. Lawrence Forest Province-Cool Temperate Division (McAndrews and Manville 1987). In the early 19th, Euro-Canadian settlers began to clear the forests for agricultural purposes.

The Study Area is situated within the Haldimand Clay Plain. According to Chapman and Putnam

...although it was all submerged in Lake Warren, the till is not all buried by stratified clay; it comes to the surface generally in low morainic ridges in the north. In fact, there is in that area a confused intermixture of stratified clay and till. The northern part has more relief than the southern part where the typically level lake plains occur.

Chapman and Putnam 1984:156

Haldimand clay is slowly permeable, imperfectly drained with medium to high water-holding capacities. Surface runoff is usually rapid, but water retention of the clayey soils can cause it to be droughty during dry periods (Kingston and Presant 1989). The soil is suitable for corn and soy beans in rotation with cereal grains as well as alfalfa and clover (Huffman and Dumanski 1986).

The closest source of potable water is Lake Erie, which runs approximately 1.8 Kilometres (km) to the South of the Study Area.

1.3.2 Pre-Contact Aboriginal Land Use

This portion of southwestern Ontario has been demonstrated to have been occupied by people as far back as 11,000 years ago as the glaciers retreated. For the majority of this time, people were practicing hunter gatherer lifestyles with a gradual move towards more extensive farming practices. Table 1 provides a general outline of the cultural chronology of Bertie Township based on Ellis and Ferris (1990).

Table 1: Cultural Chronology for Bertie Township

Time Periods	Cultural Periods	Comments
		first human occupation
9500 - 7000 BC	Paleo-Indian	hunters of caribou and other extinct Pleistocene game
		nomadic, small band society
		ceremonial burials
7500-1000 BC	Archaic	increasing trade network
		hunter gatherers
		large and small camps
1000 BC - 400 BC	Early Woodland	spring congregation/fall dispersal
		introduction of pottery
		kinship based political systemn
400 BC - AD 800	Middle Woodland	incipient horticulture
		long distance trade networks

AD 800 - 1300	Early Iroquoian	limited agriculture
AD 800 - 1300	(Late Woodland)	developing hamlets and villages
	Middle Iroquoian	shift to agriculture complete
AD 1300 - 1400	(Late Woodland)	increasing political complexity
	(Late Woodiand)	large, palisaded villages
AD 1400 - 1650s Late Iroquoian		regional warefare and political/tribal alliances
AD 1400 - 1050s	Late Hoquolali	destruction of Huron and Neutral

1.3.3. Previously Identified Archaeological Work

To compile an inventory of archaeological resources, the registered archaeological site records kept by the MHSTCI were consulted. In Ontario, information concerning archaeological sites stored in the ASDB (Government of Ontario n.d.) is maintained by the MHSTCI. This database contains archaeological sites registered according to the Borden system. Under the Borden system, Canada is divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13km east to west and approximately 18.5km north to south. Each Borden Block is referenced by a four-letter designator and sites within a block are numbered sequentially as they are found. The Study Area under review is situated within Borden Block AfGr.

Information concerning specific site locations is protected by provincial policy and is not fully subject to the Freedom of Information and Protection of Privacy Act (Government of Ontario 1990c). The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to all media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The MHSTCI will provide information concerning site location to the party or an agent of the party holding title to a property, or a licensed archaeologist with relevant cultural resource management interests.

An examination of the ASDB has shown that there are four post-contact Euro-Canadian sites registered within a 1km radius of the Study Area (Table 2).

Table 2: Registered Archaeological Sites within 1km of the Study Area

Borden Numbers	Site Names	Time Period	Affinity	Site Types
AfGr-13	AfGr-13	Post-Contact	Euro-Canadian	house
AfGr-103		Post-Contact	Euro-Canadian	scatter
AfGr-104		Post-Contact	Euro-Canadian	scatter
AfGr-105		Post-Contact	Euro-Canadian	scatter

To The best of Detritus' knowledge, no other assessments have been conducted within 50m of the Study Area. It should be noted, however, that previous archaeological assessments (Stage 1 and 2) may have been conducted within 50m of the Study Area, however, if no archaeological resources were registered with the MHSTCI, no notification on any such previous assessment is provided to consultant archaeologists.

1.3.4. Archaeological Potential

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Detritus applied archaeological potential criteria commonly used by the MHSTCI to determine areas of archaeological potential within the Study Area. According to Section 1.3.1 of the *Standards and Guidelines* (Government of Ontario 2011) these variables include proximity to previously identified archaeological sites, distance to various types of water sources, soil texture and drainage, glacial geomorphology, elevated topography, and the general topographic variability of the area.

Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and, when considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils or topographic variability, may also indicate archaeological potential. When evaluating distance to water it is important to distinguish between water and

Stage 1-2 Archaeological Assessment, Crescent Acres, Fort Erie.

shoreline, as well as natural and artificial water sources, as these features affect site locations and types to varying degrees. As per Section 1.3.1 of the *Standards and Guidelines* (Government of Ontario 2011), water sources may be categorized in the following manner:

- Primary water sources, lakes, rivers, streams, creeks;
- secondary water sources, intermittent streams and creeks, springs, marshes and swamps;
- past water sources, glacial lake shorelines, relic river or stream channels, cobble beaches, shorelines of drained lakes or marshes; and
- accessible or inaccessible shorelines, high bluffs, swamp or marshy lake edges, sandbars stretching into marsh.

As was discussed above, the closest source of potable water is Lake Erie, which runs approximately 1.8 kilometres (km) to the South of the Study Area.

Soil texture is also an important determinant of past settlement, usually in combination with other factors such as topography. The Study Area is situated within the Haldimand Clay Plain physiographic region. As was discussed earlier, the soils within this region are suitable for precontact and post-contact Aboriginal agriculture.

For Euro-Canadian sites, archaeological potential can be extended to areas of early Euro-Canadian settlement, including places of military or pioneer settlements; early transportation routes; and properties listed on the municipal register or designated under the *Ontario Heritage Act* (Government of Ontario 1990b) or property that local histories or informants have identified with possible historical events.

The *Historical Atlas* map of Bertie Township (Figure 2; Page & Co. 1876), demonstrates that Bertie Township was densely occupied by Euro-Canadian farmers by the late 19th century. Much of the established road system and agricultural settlement from that time is still visible today. Considering also the proximity of the Study Area to the early community of Fort Erie as well as the Grand Trunk Railway, the Euro-Canadian archaeological potential of the Study Area is judged to be moderate to high.

2.0 Field Methods

The Stage 2 assessment of the Study Area was conducted on July 15th, 2022, under archaeological consulting license P462 issued to Mr. Michael Pitul by the MHSTCI. The limits of the Study Area were surveyed and marked by the Proponent prior to the assessment.

At the time of primary assessment, the weather was sunny with a high of 25° Celsius; the soil was dry and screened easily. Assessment conditions were excellent and at no time were the field, weather, or lighting conditions detrimental to the recovery of archaeological material. Photos 1-25 demonstrate the land conditions at the time of the survey throughout the Study Area. Figure 3 illustrates the Stage 2 assessment methods, as well as photograph locations and directions all in relation to the proposed development of the Study Area.

Approximately 90% of the Study Area comprised a large agricultural field that was accessible to ploughing, and thus met the criteria for a Stage 2 pedestrian survey as per Section 2.1.1, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011). The land was ploughed and allowed to weather prior to assessment, as per Section 2.1.1, Standards 2 and 3 of the *Standards and Guidelines* (Government of Ontario 2011). The ploughing was deep enough to provide total topsoil exposure and provided a minimum of 80% surface visibility as per Section 2.1.1, Standards 4 and 5 of the *Standards and Guidelines* (Government of Ontario 2011). The ploughed land was subject to pedestrian survey at a 5m interval in accordance with Section 2.1.1, Standard 6 of the *Standards and Guidelines* (Government of Ontario 2011). The pedestrian survey resulted in the recovery of no archaeological material.

Approximately 10% of the Study Area comprised the wooded and grassy areas that were determined to be inaccessible to ploughing. These areas were subject to a typical Stage 2 test pit survey, conducted at 5m intervals in accordance with Section 2.1.2, Standards 1 and 2 of the *Standards and Guidelines* (Government of Ontario 2011; Photos 4 to 11). Each test pit was at least 30 centimetres ('cm') in diameter and excavated 5cm into sterile subsoil as per Section 2.1.2, Standards 5 and 6 of the *Standards and Guidelines* (Government of Ontario 2011). A small portion of a laneway was observed in the northeastern corner. Given that this small area was less than 5m wide it did not affect the test pit survey intervals.

The test pits featured a single layer of brown sandy loam, identified as topsoil, above an orange-brown sandy subsoil. The test pits ranged in depth from 23cm to 37cm. Considering that each test pit was excavated 5cm into subsoil, the topsoil at H1 (AgGt-296) ranged in thickness from 18 to 32cm. The soil was examined for stratigraphy, cultural features, or evidence of fill. All soil was screened through six-millimetre mesh hardware cloth to facilitate the recovery of small artifacts and then used to backfill the pits as per Section 2.1.2, Standards 7 and 9 of the *Standards and Guidelines* (Government of Ontario 2011). The test pit survey resulted in the recovery of no archaeological material; therefore, no additional assessment methods were employed.

3. Record of Findings

The Stage 2 archaeological assessment was conducted employing the methods described in Section 2.0. An inventory of the documentary record generated by fieldwork is provided in Table 2 below.

Table 3: Inventory of Document Record

Document Types	Current Location of Document Types	Additional Comments
1 Page of Field Notes	Detritus offices	Stored digitally in project files
1 Map provided by the Proponent	Detritus offices	Stored digitally in project files
1 Field Map	Detritus offices	Stored digitally in project files
36 Digital Photographs	Detritus offices	Stored digitally in project files

No archaeological resources were identified within the Study Area and so no material culture was collected. As a result, no storage arrangements were required.

4. Analysis and Conclusions

Detritus Consulting Ltd. ('Detritus') was retained by Crescent Acres Ltd. ('the Proponent') to conduct a Stage 1-2 archaeological assessment on Part of Lot 4 Concession 3 Lake Erie. Geographic township of Bertie Historical County of Welland, now the Regional Municipality of Niagara, Ontario ('Study Area'; Figure 1). This assessment was undertaken in advance of residential and mixed-use development (Figure 4). The Assessment Property is an irregular shaped parcel measuring 10.7 hectares ('ha'). The Assessment Property was bound by residential and commercial properties to the West and North, and agricultural land to the East and South. The limits of the Study Area were surveyed and marked by the Proponent prior to the assessment. The Study Area comprised the entire Assessment Property.

The Stage 1 background research indicated that the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources. Therefore, a Stage 2 assessment was recommended for the untended scrub farmland portion of the Study Area.

The subsequent Stage 2 assessment conducted on July 15th, 2022 involved a test pit survey at 5m intervals of the scrub land and a pedestrian survey of the agricultural land. This investigation resulted in the identification and documentation of no archaeological resources.

5. Recommendations

The Stage 2 assessment of the Study Area resulted in the identification of no archaeological resources; therefore, **no additional archaeological assessment of the Study Area is recommended.**

6. Advice on Compliance with Legislation

This report is submitted to the Minister of Heritage, Sport, Tourism and Culture Industries as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the *Standards and Guidelines for Consultant Archaeologists* (2011a) 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.

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 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 Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

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*.

The Cemeteries Act, R.S.O. 1990 c. C.4 and the Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33 require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Government and Consumer Services.

7. Bibliography and Sources

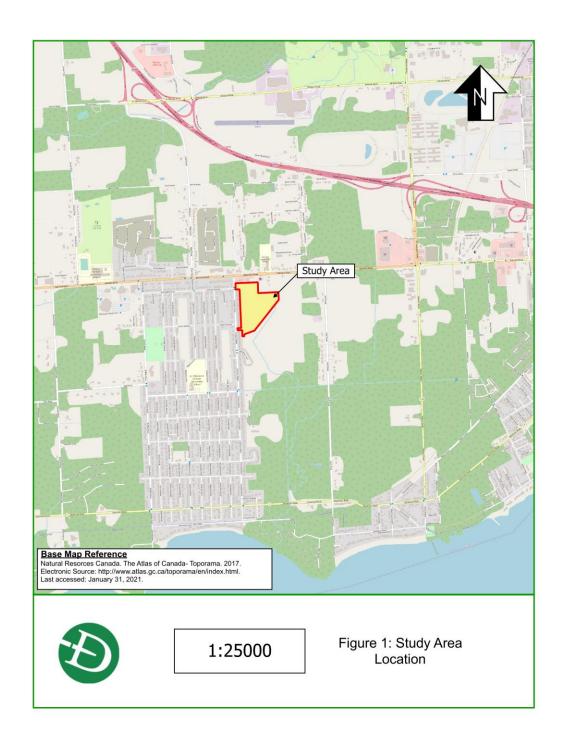
- Archives of Ontario. 2009. *The Evolution of the District and County System*, 1788-1899. Electronic Document: http://www.archives.gov.on.ca/en/maps/ontario-districts.aspx. Last accessed, September 07, 2022.
- Birch, J. 2010. Coalescence and Conflict in Iroquoian Ontario. Electronic resource:

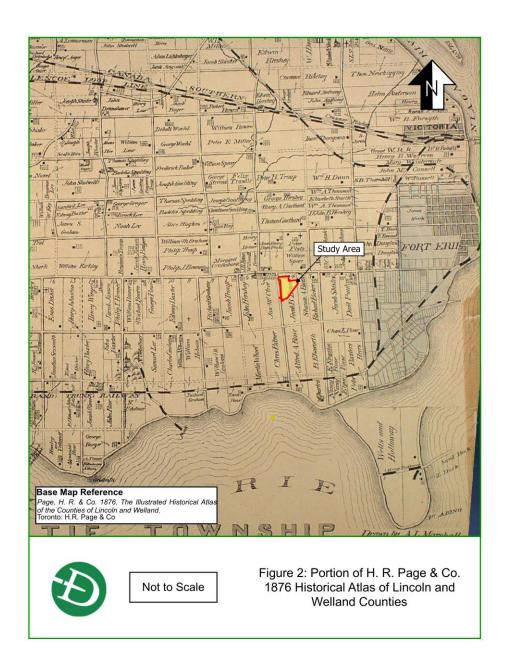
 http://uga.academia.edu/JenniferBirch/Papers/183903/Coalescence and Conflict in Iroquoian Ontario. Last accessed, January 20, 2022.
- Caston, Wayne A. 1997. Evolution in the Mapping of Southern Ontario and Wellington County. *Wellington County History* 10:91-106.
- Chapman, L.J. and D.F. Putnam. 1984. *The Physiography of Southern Ontario. Third Edition. Ontario Geological Survey. Special Volume 2.* Toronto: Ontario Ministry of Natural Resources.
- Coyne, J. H. 1895. *The Country of the Neutrals (As Far as Comprised in the County of Elgin):* From Champlain to Talbot. St. Thomas: Times Print.
- Ellis, Chris J. and Neal Ferris (editors). 1990. *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5.
- Ferris, Neal. 2009. *The Archaeology of Native-Lived Colonialism: Challenging History in the Great Lakes.* Tucson: University of Arizona Press.
- Gentilcore, R. Louis and C. Grant Head. 1984. *Ontario's History in Maps*. Toronto: University of Toronto Press.
- Gibson, M. M. 2006. In the Footsteps of the Mississaugas. Mississauga Heritage Foundation.
- Government of Ontario. 1990a. *Ontario Planning Act, R.S.O. 1990, CHAPTER P.13*. Last amendment: 2022, c. 12, s. 5. Electronic document: https://www.ontario.ca/laws/statute/90p13. Last accessed, June 16, 2022.
- Government of Ontario. 1990b. *Ontario Heritage Act, R.S.O. 1990, CHAPTER O.18*. Last amendment: 2021, c. 34, Sched. 6, s. 74. Electronic document: https://www.ontario.ca/laws/statute/90018. Last accessed, June 16, 2022.
- Government of Ontario. 1990c. *Freedom of Information and Protection of Privacy Act, R.S.O.* 1990, CHAPTER F.31. Last amendment: 2021, c. 40, Sched. 12, s. 2. Electronic document: https://www.ontario.ca/laws/statute/90f31. Last accessed, June 16, 2022.
- Government of Ontario. 2011. Standards and Guidelines for Consultant Archaeologists. Toronto: Ministry of Heritage, Sport, Tourism and Cultural Industries.
- Government of Ontario. n.d. *Archaeological Sites Database Files*. Toronto: Culture Services Unit, Ministry of Heritage, Sport, Tourism and Cultural Industries.
- Heidenreich, Conrad. 1990. History of the St. Lawrence-Great Lakes Area to 1650. In Chris J. Ellis and Neal Ferris (Eds), *The Archaeology of Southern Ontario*, Occasional Publications of the London Chapter 5, pp. 475-492. Ontario Archaeological Society, Ontario.
- Huffman, E. and J. Dumanski. 1986. *Agricultural Land Use Systems in the Regional Municipality of Niagara*. Ottawa: Land Resource Research Institute.
- Kingston, M.S. and E.W. Presant. 1989. *The Soils of the Regional Municipality of Niagara*. Report No. 60 of the Ontario Institute of Pedology. Guelph: Ontario Ministry of Agriculture.
- MacDonald, Robert and M.S. Cooper. 1997. Environmental Context. In R.F. Williamson and R.I. MacDonald (Eds.), *The Shadow of the Bridge The Archaeology of the Peace Bridge Site* (AfGr-9),1994-1996 Investigations. Toronto: Occasional Publications of Archaeological Services Inc., Vol.1.

- McAndrews, J.H. and G.C. Manville. 1987. Descriptions of Ecological Regions. In R. Cole Harris (Ed.), *Historical Atlas of Canada from the Beginning to 1800*. Toronto: University of Toronto Press.
- Morris, J.L. 1943. *Indians of Ontario* (1964 reprint). Toronto: Department of Lands and Forests, Government of Ontario.
- Niagara Historical Society and Museum. 2008. *Our Glory, A Brief History of Niagara-on-the-Lake*. Niagara-on-the-Lake: Niagara Historical Society and Museum.
- Page, H.R. & Co. 1879. *Illustrated Historical Atlas of the County of Haldimand, Ontario.* Toronto: H.R. Page & Co.
- Pendergast, James. 1995. The Identity of Jacques Cartier's Stadaconans and Hochelagans: The Huron-Iroquois Option. In *Origins of the People of the Longhouse: Proceedings of the 21st Annual Symposium of the Ontario Archaeological Society*, pp. 106-118. André Bekerman and Gary Warrick, editors. North York: Ontario Archaeological Society.
- Powell, Janet R. and Barbara F. Coffman. 1956. *Lincoln County*, 1856-1956. St. Catharines: Lincoln County Council.
- Praxis Research Associates. n.d. *The History of the Mississaugas of the New Credit First Nation*. Hagersville: Lands, Research and Membership, Mississaugas of the New Credit First Nation.
- Schmalz, Peter S. 1991. The Ojibwa of Southern Ontario. Toronto: University of Toronto Press.
- Smith, Donald. 2002 Their Century and a Half on the Credit: The Mississaugas. In Dieterman, Frank (editor), *Mississauga: The First 10,000 Years*, pp. 107-122. Toronto Eastend Books.
- Tanner, Helen (Ed.). 1987. *Atlas of Great Lakes Indian History*. Norman: University of Oklahoma Press.
- Warrick, G.A. .2000. The Precontact Iroquoian Occupation of Southern Ontario. *Journal of World Prehistory*, Vol.14, No.4: pp. 415-466.
- Warrick, G. 2013. The Aboriginal Population of Ontario in Late Prehistory. In Munson, M.K. and Jamieson, S.M (editors), *Before Archaeology: The Archaeology of a Province*. McGill Queen's University Press.
- Weaver, Sally. 1978. Six Nations of the Grand River, Ontario. In Trigger, B.G. (editor), *Handbook of North American Indians*. *Volume 15: Northeast*, pp. 525-536. Smithsonian Institution Press.

8. Images

8.1 Maps

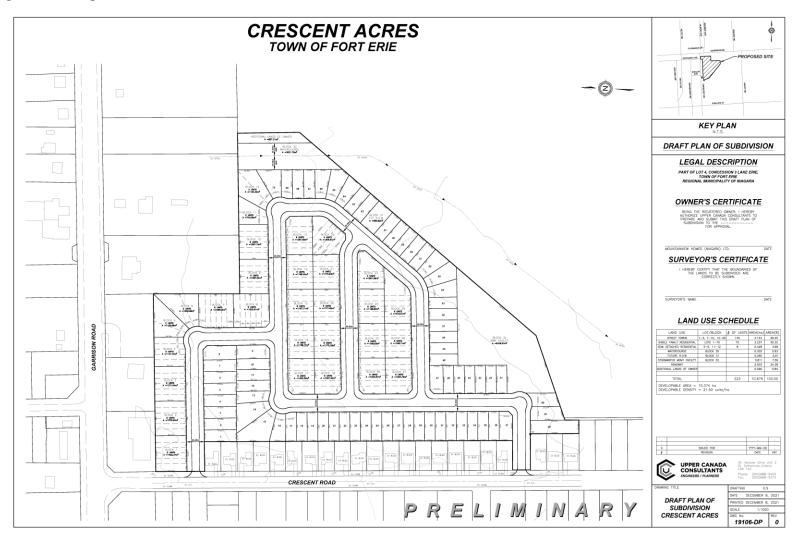




Stage 1-2 Archaeological Assessment, Crescent Acres, Fort Erie.



Figure 4: Development Plan



8.2 Photos

Photo 1: Study Area Property Extent, facing South-East



Photo 3: Study Area Property Extent, facing West

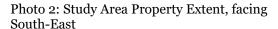




Photo 4: Study Area Property Extent, facing West



Photo 5: Study Area Property Extent, facing East



Photo 6: Study Area Property Extent, facing South-West





Photo 7: Study Area Property Extent, facing West

Photo 8: Study Area Property Extent, facing North-West



Photo 9: Study Area Property Extent, facing North-East



Photo 10: Scrub land, Test Pit Surveyed at 5m Intervals, facing South



Photo 11: Study Area Property Extent, agricultural land, and scrub land, facing East



Photo 12: Scrub land, Test Pit Surveyed at 5m Intervals, facing South





Photo 13: Scrub land, Test Pit Surveyed at 5m Intervals, facing East

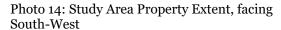




Photo 15: Scrub land, Test Pit Surveyed at 5m Intervals, facing South-East



Photo 16: Scrub land, Test Pit Surveyed at 5m Intervals, facing West



Photo 17: Scrub land, Test Pit Surveyed at 5m Intervals, facing West



Photo 18: Scrub land, and agricultural land, Test Pit Surveyed at 5m Intervals, facing North





Photo 19: Scrub land, and agricultural land, Test Pit Surveyed at 5m Intervals, facing North

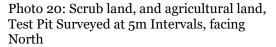




Photo 21: Scrub land, and agricultural land, Test Pit Surveyed at 5m Intervals, facing West



Photo 22: Scrub land, Test Pit Surveyed at 5m Intervals, facing West



Photo 23: Scrub land, Test Pit Surveyed at 5m Intervals, facing West



Photo 24: Scrub land, Test Pit Surveyed at 5m Intervals, facing North

Stage 1-2 Archaeological Assessment, Crescent Acres, Fort Erie.





Photo 25: Scrub land, Test Pit Surveyed at 5m Intervals, facing South

Photo 26: Test Pit 1



