Part of Lots 1 & 2, Broken Front Concession, Geographic Township of Crowland, Historical County of Welland, now the City of Niagara Falls, Regional Municipality of Niagara, Ontario

Submitted to:

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and

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

Submitted by:



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> > ORIGINAL REPORT June 07, 2022

Executive Summary

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Mark West of E.S. Fox Limited ('the Proponent') to conduct a Stage 1-2 archaeological assessment on Part of Lots 1 & 2, Broken Front Concession, Geographic Township of Crowland, Historical County of Welland, now the City of Niagara Falls, Regional Municipality of Niagara, Ontario (Figure 1). This assessment was undertaken in advance of a proposed commercial development ('Study Area'; Figure 3).

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 a proposed commercial development, under archaeological consulting license P017 issued to Mr. Garth Grimes 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).

At the time of the assessment, the Study Area comprised a single commercial lot fronting onto Grassy Brook Road. The parcel that made up the Study Area formed an irregular rectangular shaped area, which measured 1.05 hectares ('ha'). The Study Area was bound by commercial properties to the north and east, a private commercial laneway to the west and Grassy Brook Road to the south.

The Stage 1 background research indicated that the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources. The Stage 2 field assessment was recommended for the manicured lawn area. The area containing piles of stone, metal and soil was determined to retain low or no archaeological potential based on the Stage 2 identification of extensive a deep land alteration that has severely damaged the integrity of archaeological resources. The previously disturbed area, as confirmed during a Stage 2 property inspection, was mapped and photo documented only.

The subsequent Stage 2 assessment conducted on May 13th, 2022 involved a test pit survey at 5m intervals of the manicured lawn area. 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.

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Project Personnel

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Project Acknowledgements

Generous contributions by Mr. Mark West of E.S. Fox Limited for making this report possible.

1.0 Project Context

1.1 Development Context

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Mark West of E.S. Fox Limited ('the Proponent') to conduct a Stage 1-2 archaeological assessment on Part of Lots 1 & 2, Broken Front Concession, Geographic Township of Crowland, Historical County of Welland, now the City of Niagara Falls, Regional Municipality of Niagara, Ontario (Figure 1). This assessment was undertaken in advance of a proposed commercial development ('Study Area'; Figure 3).

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 a proposed commercial development, under archaeological consulting license P017 issued to Mr. Garth Grimes 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, the Niagara Region was occupied by the Neutral, or Attawandaron tribe. The earliest recorded visit was undertaken by Étienne Brûlé, an interpreter and guide for Samuel de Champlain. In June 1610, Brûlé requested permission to live among the Algonquin people and to learn their language and customs. In return, Champlain agreed to take on a young Huron named Savignon and to teach him the language and customs of the French. The purpose of this endeavour was to establish good relations with Aboriginal communities in advance of future military and colonial enterprises in the area. In 1615, Brûlé joined twelve Huron warriors on a mission to cross enemy territory and seek out the Andaste people, allies of the Huron, to ask for their assistance in an expedition being planned by Champlain. The mission was a success, but took much longer than anticipated. Brûlé returned with the Andaste two days too late to help Champlain and the Hurons, who had already been defeated by the Iroquois (Heidenreich 1990).

Throughout the middle of the 17th century, the Iroquois of the Five Nations sought to expand upon their territory and to monopolise the local fur trade as well as trade between the European markets and the tribes of the western Great Lakes. A series of bloody conflicts followed known as the Beaver Wars, or the French and Iroquois Wars, were contested between the Iroquois and the French with their Huron and other Algonquian speaking allies of the Great Lakes region. Many communities were destroyed including the Huron, Neutral, Erie, 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. By 1667, all members of the Five Nations had signed a peace treaty with the French and allowed their missionaries to visit their villages (Heidenreich, 1990).

Ten years later, hostilities between the French and the Iroquois resumed after the latter formed an alliance with the British through an agreement known as the Covenant Chain (Heidenreich 1990). In 1696, an aging Louis de Buade, Comte de Frontenac et de Palluau, the Governor General of New France, rallied the Algonquin forces and drove the Iroquois out of the territories north of Lake Erie, as well as those west of present-day Cleveland, Ohio. A second treaty was concluded between the French and the Iroquois in 1701, after which the Iroquois remained mostly neutral (Jamieson 1992; Noble 1978).

Throughout the late 17th and early 18th centuries, various Iroquoian-speaking communities had been migrating into southern Ontario from New York State. In 1722, the Five Nations adopted the Tuscarora in New York becoming the Six Nations (Pendergast 1995:107). This period also marks the arrival of the Mississaugas into Southern Ontario and, in particular, the watersheds of the lower Great Lakes (Konrad 1981; Schmalz 1991). The oral traditions of the Mississaugas, as told by Chief Robert Paudash 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 and, at the end of the 17th century, the Mississaugas settled permanently in Southern Ontario (Praxis Research Associates n.d.). Around this same time, members of the Three Fires Confederacy (Chippewa, Ottawa, and Potawatomi) began immigrating from Ohio and Michigan into southeastern Ontario (Feest and Feest 1978:778-779).

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 1964:17-18

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 part of Lot 1 and 2, Broken Front Concession, Geographic Township of Crowland, Historical County of Welland, Niagara Regional Municipality, 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, when 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).

The Township of Crowland was an interior township within the county, separated from the Townships of Thorold and Stamford by the Welland River. More specifically, the Welland River passes through the western side of the township and the Welland Canal, through the southwest portion. Given the fact that Crowland Township did not border on the Niagara River or any of its lakes, settlement in the area was slow. When the first settlers began arriving in 1788, most of the township remained an unbroken forest. The first major road in the area was surveyed in 1801 by Charles Fell; this road began at Zavitt's mills in Bertie Township and passed through Crowland Township before ending at the Welland River. In 1803, the township was officially recognised and public officials were elected. According to the census records from that year, the population of Crowland Township was 216, including 120 males and 96 females. By 1817, the population had increased to approximately 600 residents. The addition of a grist mill and saw mill saw land prices increase from 18 pence to 20 shillings per acre. By the next year, land within Crowland County was valued at four pounds per cleared acre or thirty shillings per uncleared acre (Page & Co. 1876).

The two largest communities in the township were the Hamlet of Cook's Mill and the Village of Welland. In 1799, the Yokom family arrived from Pennsylvania and built a gist mill on Lyon's Creek. Just prior to the War of 1812, English settler Calvin Cook purchased the mill and added a tannery, saw mill and distillery. The resulting community that developed here was called Cook's Mill (it is also often referred to simply as Crowland). Towards the end of the War of 1812, 1200 American soldiers were dispatched to take Cook's Mill and destroy the British flour and grain supply. Following a skirmish here on October 19, 1814, the Americans destroyed all the flour and grain in the mill, burned a number of the houses in the vicinity, then retreated back to Black Creek, in Buffalo (Page & Co. 1876).

The *Illustrated Historical Atlas of the Counties of Lincoln and Welland ('Historical Atlas')*, demonstrates the extent to which Crowland 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.

According to the *Historical Atlas* map of Crownland Township, Lot 1 and 2, Broken front Concession was divided into three parcels; one parcel is the entire north half, and the south half is divided into two parcels. What is now called Grassy Brook Road runs east to west through the lots. J.O. Dell owned in the northern half of the lots as well as a north section of Lot 3. A hotel and secondary structure are illustrated north-east of where the Study Area is located; the community of Niagara Falls would have been located north-east of the Study Area.

Although significant and detailed landowner information is available on the current *Historical Atlas* map of Crowland 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 measures 1.05 hectares (ha) and is of an irregular rectangular shape. At the time of the assessment, a large majority of the Study Area comprised manicured lawn and recent disturbances. The manicured lawn area is located throughout the western half of the Study Area. The recent disturbances identifiable on recent satellite imagery are piles of stone, metal and earth throughout the eastern half of the property. The study area itself is confined by commercial properties to the north and east, a private commercial laneway to the west and Grassy Brook Road to the south. The limits of the Study Area were surveyed and marked by the Proponent prior to the assessment.

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 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 Grassy Brook, a tributary of the Welland River, which runs approximately 110 metres (m) 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 Crowland Township based on Ellis and Ferris (1990).

Time Period	Cultural Period	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 - 400 BC	Early Woodland	spring congregation/fall dispersal
		introduction of pottery
		kinship based political system
400 BC – AD 800	Middle Woodland	incipient horticulture
		long distance trade network
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
		large palisaded villages

Table 1: Cultural Chronology for Crowland Township

AD 1400 - 1650	Late Iroquoian	regional warfare and political/tribal alliances destruction of Huron and Neutral	
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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 AgGs.

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 41 archaeological sites registered within a 1km radius of the Study Area (Table 2). 14 of the sites are pre-contact Aboriginal scatters or findspots, three of which can be dated to the Late Archaic period. 6 sites are post-contact Aboriginal, Euro-Canadian sites and include homestead, campsite site types.

The Site AgGs-28 (1 utilized flake) is shown within the Study Area. The findspot was found in 1984 by the Museum of Indian Archaeology ('MIA'), likely for a Hydro corridor assessment given the report title. AgGs-26 to AgGs-35, were likely also documented in the same report. (MIA., 1984.)

Borden Number	Site Name	Time Period	Affinity	Site Type
AgGs-15	MIA 8469			
AgGs-16	MIA 8470			
AgGs-17	MIA 8471			
AgGs-18	MIA 8472			
AgGs-19	MIA 8473	Archaic, Late	Aboriginal	Othercamp/campsite
AgGs-20	MIA 8474	Archaic, Late	Aboriginal	Othercamp/campsite
AgGs-21	MIA 8475			
AgGs-22	MIA 8476			
AgGs-229	James Macklem	Post-Contact, Pre- Contact	Aboriginal, Euro-Canadian	homestead
AgGs-23	MIA 8477			
AgGs-230	Grassy Brook Camp II	Pre-Contact	Aboriginal	Unknown
AgGs-231	John Steinhoff	Post-Contact, Pre- Contact	Aboriginal, Euro-Canadian	homestead
AgGs-232	Welland River Camp	Pre-Contact	Aboriginal	Othercamp/campsite
AgGs-233	Alexander Simpson	Post-Contact, Pre- Contact	Aboriginal, Euro-Canadian	homestead
AgGs-234				

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

AgGs-235	Cabeiroi Camp I	Pre-Contact	Aboriginal	Unknown
AgGs-236	Cabeiroi Camp 2	Pre-Contact	Aboriginal	Othercamp/campsite, scatter
AgGs-237		Post-Contact	Euro-Canadian	Unknown
AgGs-238	Welland Drain	Pre-Contact	Aboriginal	Othercamp/campsite
AgGs-25	MIA 8479			
AgGs-251		Pre-Contact	Aboriginal	Unknown
AgGs-252		Pre-Contact	Aboriginal	Unknown
AgGs-253		Pre-Contact	Aboriginal	Unknown
AgGs-26	MIA 8480	Pre-Contact	Aboriginal	findspot
AgGs-27	MIA 8481	Archaic, Late	Aboriginal	Othercamp/campsite
AgGs-28	MIA 8482	Pre-Contact	Aboriginal	findspot
AgGs-33	MIA 8483	Post-Contact	Euro-Canadian	house
AgGs-34	MIA 8484	Woodland, Early	Aboriginal	findspot
AgGs-35	MIA 8485	Pre-Contact	Aboriginal	findspot
AgGs-375		Post-Contact	Euro-Canadian	farmstead
AgGs-4	Feren			
AgGs-435				
AgGs-436				
AgGs-437				
AgGs-438				
AgGs-439				
AgGs-440				
AgGs-51	Thompsons Creek	Paleo-Indian, Late, Woodland, Early	Aboriginal	hunting
AgGs-56		Other		Otherfindspot_
AgGs-93	TCPL 90-13	Other		Otherfindspot_
AgGs-95	TCPL 91-3	Other		Otherfindspot_

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 MTCS, 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 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 potable water source is Grassy Brook, a tributary of the Welland River which is located approximately 110 metres ('m') 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.

Finally, despite the factors mentioned above, extensive land disturbance can eradicate archaeological potential within a Study Area, as per Section 1.3.2 of the *Standards and Guidelines* (Government of Ontario 2011). Current aerial imagery identified a number of potential disturbance areas within the Study Area including piles of stone, metal and earth (see Section 1.3.1 above). It is recommended that these areas be subject to a Stage 2 property inspection, conducted according to Section 2.1.8, Section 1.2 of the *Standards and Guidelines* (Government of Ontario 2011), to confirm and document the degree and extent of the disturbance.

2. Field Methods

The Stage 2 assessment of the Study Area was conducted on May 13th, 2022, under archaeological consulting license P017 issued to Mr. Garth Grimes by the MHSTCI. The limits of the Study Area were surveyed and marked by the Proponent before the assessment.

At the time of primary assessment, the weather was sunny with a high of 27° 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 1-13 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 72% of the Study Area comprised manicured lawn which was inaccessible for ploughing. These areas were subject to a typical test pit survey at 5m intervals following Section 2.1.2 of the *Standards and Guidelines* (Government of Ontario 2011;). Test pits were excavated to within 1m of all standing structures, or until test pits demonstrated evidence of recent ground disturbance as per Section 2.1.2, Standard 4 of the *Standards and Guidelines* (Government of Ontario 2011). All test pits were at least 30 centimetres ('cm') in diameter and were excavated 5cm into sterile subsoil. The soils were then examined for stratigraphy, cultural features, or evidence of fill. All soil from the test pits was screened through six-millimetre hardware cloth to facilitate the recovery of small artifacts and then used to backfill the pit. The test pit depth ranged from 16cm to 27cm and resulted in the identification of a single stratigraphic dry clay layer throughout the Study Area. No further archaeological methods were employed since no artifacts were identified during the test pit survey.

The remaining 28% of the Study Area comprised areas of disturbance identified on the current aerial imagery of the Study Area. Following a Stage 2 property inspection (see Section 1.3.4 above) this area was found to consist of piles of stone, metal and soil interspersed with areas of soil stripping and was evaluated as having no potential based on the identification of extensive and deep land alteration that has severely damaged the integrity of archaeological resources, as per Section 2.1, Standard 2b of the *Standards and Guidelines* (Government of Ontario 2011). The disturbed areas were mapped, and photo documented in accordance with Section 2.1, Standard 6 and Section 7.8.1, Standard 1b of the *Standards and Guidelines* (Government of Ontario 2011; Photos 1, 2, and 11 - 13)

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 1: Cultural Chronology for Crowland Township

Document Type	Current Location	Additional Comments
1 page of field notes	Detritus office	stored digitally in project file
1 map provided by the Proponent	Detritus office	stored digitally in project file
1 field map	Detritus office	stored digitally in project file
14 digital photographs	Detritus office	stored digitally in project file

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 Mr. Mark West of E.S. Fox Limited ('the Proponent') to conduct a Stage 1-2 archaeological assessment on Part of Lots 1 & 2, Broken Front Concession, Geographic Township of Crowland, Historical County of Welland, now the City of Niagara Falls, Regional Municipality of Niagara, Ontario (Figure 1). This assessment was undertaken in advance of a proposed commercial development ('Study Area'; Figure 3).

The Stage 1 background research indicated that the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources. The Stage 2 field assessment was recommended for manicured lawn. The stripped area containing piles of stone, metal and soil was determined to retain low or no archaeological potential based on the Stage 2 identification of extensive a deep land alteration that has severely damaged the integrity of archaeological resources. The previously disturbed areas, as confirmed during a Stage 2 property inspection, were mapped and photo documented only.

The subsequent Stage 2 assessment conducted on May 13th, 2022 involved a test pit survey at 5m intervals of the manicured lawn areas. 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. 2012-2015. *The Evolution of the District and County System*, *1788-1899*. Electronic document: <u>http://www.archives.gov.on.ca/en/maps/ontario-districts.aspx</u>. Last accessed, May 10, 2021.
- Caston, Wayne A. 1997. Evolution in the Mapping of Southern Ontario and Wellington County. *Wellington County History* 10: pp. 91-106.
- Chapman, L.J. and D.F. Putnam. 1984. *The Physiography of Southern Ontario*. Third Edition. Ontario Geological Survey. Special Volume 2. 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. The St. Thomas Times Print.
- Ellis, Chris J. and Neal Ferris (editors). 1990. The Archaeology of Southern Ontario to A.D. 1650. Occasional Publications of the London Chapter Ontario Archaeological Society ('OAS') No. 5. OAS Inc.
- Feest, Johanna E. and Christian F. Feest 1978. The Ottawa. In Trigger, B.G. (editor), Handbook of North American Indians. Vol.15 Northeast, pp. 772-786. Washington: Smithsonian Institute.
- Ferris, Neal. 2009. *The Archaeology of Native-Lived Colonialism: Challenging History in the Great Lakes*. University of Arizona Press.
- Gentilcore, R. Louis and C. Grant Head. 1984. *Ontario's History in Maps*. University of Toronto Press.
- Government of Ontario. n.d. Archaeological Sites Database Files. MHSTCI.
- Government of Ontario. 1990a. *Ontario Planning Act*, R.S.O. 1990, c.P.13. Last amendment: 2021, c. 2, Sched. 3. Electronic document: <u>https://www.ontario.ca/laws/statute/90p13</u>. Last accessed April 15, 2021.
- Government of Ontario. 1990b. *Ontario Heritage Act, R.S.O. 1990, c.O.18*. Last amendment: 2019, c.9, Sched. 11. Electronic document: <u>https://www.ontario.ca/laws/statute/90018</u>. Last accessed April 15, 2021.
- Government of Ontario. 1990c. *Freedom of Information and Protection of Privacy Act, R.S.O.* 1990, CHAPTER F.31. Last amendment: 2020, c.11, Sched. 15, s.54. Electronic document: <u>https://www.ontario.ca/laws/statute/90f31</u>. Last accessed April 15, 2021.
- Government of Ontario. 1993. Archaeological Assessment Technical Guidelines. MHSTCI.
- Government of Ontario. 2011. Standards and Guidelines for Consultant Archaeologists. MHSTCI.
- Heidenreich, Conrad. 1990. History of the St. Lawrence-Great Lakes Area to 1650. In Ellis, Chris J. Neal Ferris (editors), *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publications of the London Chapter OAS No. 5, pp. 475-492. OAS Inc.
- Jamieson, S. M. 1992 Regional Interaction and Ontario Iroquois Evolution. *Canadian Journal of Archaeology* 16:70-88.
- Konrad, Victor. 1981. An Iroquois Frontier: The North Shore of Lake Ontario during the Late Seventeenth Century. *Journal of Historical Geography* 7(2):129-144.
- MIA. 1984. *84-15 Licence Report: Report to Ontario Hydro, MCC HO*. Report on file with the MHSTCI, Toronto.
- Morris, J.L. 1943. Indians of Ontario. 1964 reprint. Ontario Department of Lands and Forests.
- Noble, William. 1978 The Neutral Indians. In *Essays in Northeastern Anthropology in Memory* of Marian E. White, Occasional Publications in Northeastern Anthropology 5, pp. 152-164.

William Engelbrecht and Donald Grayson, editors. Rindge, NH: Department of Anthropology, Franklin Pierce College.

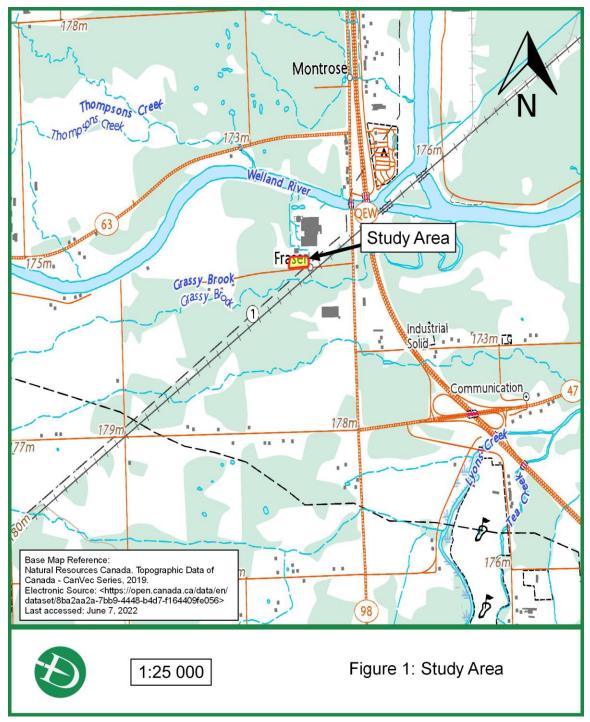
- Page, H.R. & Co. 1876. Illustrated Historical Atlas of the Counties of Lincoln and Welland, Ont. H.R. Page & Co.
- Pendergast, James. 1995. The Identity of Jacques Cartier's Stadaconans and Hochelagans: The Huron-Iroquois Option. In Bekerman, André and Gary Warrick (editors), Origins of the People of the Longhouse: Proceedings of the 21st Annual Symposium of the Ontario Archaeological Society, pp. 106-118. OAS Inc.
- Praxis Research Associates. n.d. *The History of the Mississaugas of the New Credit First Nation*. Lands, Research and Membership, Mississaugas of the New Credit First Nation.

Schmalz, Peter S. 1991. The Ojibwa of Southern Ontario. University of Toronto Press.

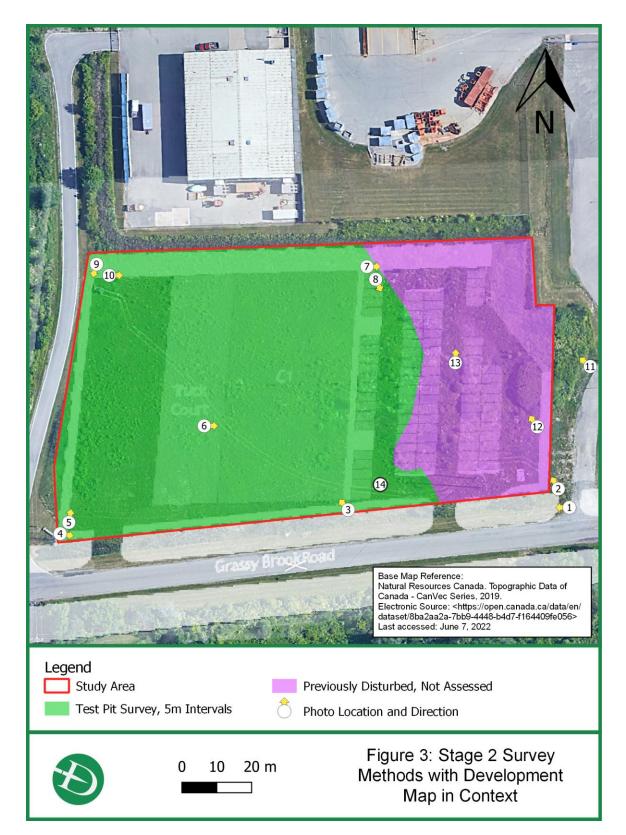
- Tanner, Helen (editor). 1987. Atlas of Great Lakes Indian History. University of Oklahoma Press.
- Weaver, Sally. 1978. Six Nations of the Grand River, Ontario. In Trigger, B.G. (editor), *Handbook* of North American Indians. Vol.15 Northeast, pp. 525-536. Smithsonian Institute.

8. Images

8.1 Maps







8.2 Photos

Photo 1: South Property Boundary; Disturbed Piles of Gravel and Dirt Not Assessed; facing west



Photo 3: Manicured Lawn Test Pit Surveyed at 5m Intervals, facing north

Photo 2: Eastern Property Boundary; Disturbed Piles of Gravel and Dirt Not Assessed; facing northwest



Photo 4: South Property Boundary; Manicured Lawn Surveyed at 5m Intervals; facing east



Photo 5: West Property Boundary; Test Pit Surveyed at 5m Intervals, facing north



Photo 6: Manicured Lawn Surveyed at Test Pit Surveyed at 5m Intervals, facing east





Photo 7: Disturbed Piles of Gravel and Dirt Not Assessed; facing east



Photo 9: West Property Boundary; Test Pit Surveyed at 5m Intervals, facing south

Photo 8: Disturbed Piles of Gravel and Dirt Not Assessed; facing southeast



Photo 10: North Property Boundary; Test Pit Surveyed at 5m Intervals, facing east



Photo 11: East Property Boundary; Disturbed Piles of Gravel and Dirt Not Assessed; facing northwest



Photo 12: Disturbed Piles of Gravel and Dirt Not Assessed; facing northwest





Photo 13: Disturbed Piles of Gravel and Dirt Not Assessed; facing north Photo 14: Test Pit showing Dry Clay Subsoil; Test Pit Surveyed at 5m Intervals



