

Stage 1-2 Archaeological Assessment Proposed Black Creek Road Development

Part of Lot 19, Broken Front on Niagara River Fronting
Upper End of GR& ISL,
Geographic Township of Willoughby,
Historic County of Welland
Niagara Region, Ontario

Submitted to:

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and

Ministry of Tourism, Culture and Sport

Submitted by:



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ORIGINAL REPORT

October 13, 2017

Executive Summary

Detritus Consulting Ltd. ('Detritus') was retained by Quartek Group Inc. on behalf of Lally Homes Ltd. ('the Proponent') to conduct a Stage 1-2 archaeological assessment on a large woodlot located on Lot 19, Broken Front on Niagara River Fronting Upper End of GR & ISL, Geographic Township of Willoughby, Historic County of Welland, Niagara Region, Ontario ('Study Area'). This assessment was undertaken in advance of a large residential development. The development property ('Study Area') is irregular in shape and measures 6.4 hectares. The Study Area is bound by Netherby Road to the west, the westbound off ramp for the Queen Elizabeth Way on the southwest, Black Creek Road to the east, neighbouring residential property to the north, and woodlot to the south. The limits of the Study Area were surveyed and marked with stakes by the Proponent prior to the assessment. The entire property was subject to assessment.

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 this condition, a Stage 1-2 assessment of the Study Area was conducted during the approval phase of the proposed development under archaeological consulting license PO17 issued to Mr. Garth Grimes by the Ministry of Tourism, Culture and Sport ('MTCS') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* ('Standards and Guidelines'; Government of Ontario 2011).

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

The subsequent Stage 2 assessment of the Study Area was conducted on **August 30, 2017**. This investigation consisted of a standard test pit survey at five metre intervals across the entire woodlot and resulted in the identification and documentation of no archaeological resources. Given the results of the Stage 2 assessment, wherein no archaeological material was encountered, **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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Acknowledgments

Generous contributions by the following individuals and agencies made this report possible.

- Susan Smyth, Planner, Quartek Group Inc.

1.0 Project Context

1.1 Development Context

Detritus Consulting Ltd. ('Detritus') was retained by Quartek Group Inc. on behalf of Lally Homes Ltd. ('the Proponent') to conduct a Stage 1-2 archaeological assessment on a large woodlot located on Lot 19, Broken Front on Niagara River Fronting Upper End of GR & ISL, Geographic Township of Willoughby, Historic County of Welland, Niagara Region, Ontario ('Study Area'). This assessment was undertaken in advance of a large residential development. The development property ('Study Area') is irregular in shape and measures 6.4 hectares (ha). The Study Area is bound by Netherby Road to the west, the westbound off ramp for the Queen Elizabeth Way on the southwest, Black Creek Road to the east, neighbouring residential property to the north, and woodlot to the south. The limits of the Study Area were surveyed and marked with stakes by the Proponent prior to the assessment. The entire property was subject to assessment.

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 this condition, a Stage 1-2 assessment of the Study Area was conducted during the approval phase of the proposed development under archaeological consulting license PO17 issued to Mr. Garth Grimes by the Ministry of Tourism, Culture and Sport ('MTCS') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* ('Standards and Guidelines'; Government of Ontario 2011).

The purpose of the Stage 1 assessment 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 provincial standards and guidelines set out in the *Standards and Guidelines* (Government of Ontario 2011), the objectives of the Stage 1 Archaeological Overview/Background Study 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 the Stage 2 assessment is to provide an overview of 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 provincial standards and guidelines set out in the *Standards and Guidelines* (Government of Ontario 2011), the objectives of the 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 1992:80; Noble 1978:161).

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 southwestern 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 Chipewigh 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

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 Lot 19, Broken Front on Niagara River Fronting Upper End of GR & ISL, Geographic Township of Willoughby, Historic County of Welland, Niagara Region, Ontario.

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 2009). Further change came in December 1791 when the Province of Québec 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 1895:33).

In July 1792, Simcoe divided Upper Canada into 19 counties, including Welland County, stretching from Essex in the west to Glengarry in the east. Later that year, the four districts originally established in 1788 were renamed as 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. 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 Welland County in 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).

Willoughby Township was settled in 1784 and was surveyed in 1787 along with many of the townships in the area. By 1817 the township had almost 450 inhabitants and property value had increased from 1 shilling per acre, in 1787 to 25 shillings in 1817. It was not until after 1830 that land started to be cleared around the Tamarack Swamp, which runs through the township from the southeast corner to the southwest corner. The soil of the township was a large attraction to

early settlers as it was suitable for growing barley, wheat, oats amongst other things. Also, located in the Township of Willoughby is the Village of Chippawa where a single road following along the banks of Lyons Creek was established. Chippawa was for a time the half-way station for people with trade goods being shipped from Niagara to be reshipped on Lake Erie from many different stations on the upper lakes (Page & Co 1876).

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

According to the *Historical Atlas* map of Willoughby Township, Lot 19, Broken Front on Niagara River Fronting Upper End of GR & ISL was owned by H.J. Beam. No structures or orchards are illustrated on the lot. Furthermore, the Grand Trunk Railway can be observed to the northeast, of the Study Area and the Black Creek post office is located to the north of the Study Area (Page & Co 1876; Figure 2).

Although significant and detailed landowner information is available on the current *Historical Atlas* map of Willoughby 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 a large woodlot measuring approximately 6.4ha. It is irregular in shape and is bound by Netherby Road to the west, the westbound off ramp for the Queen Elizabeth Way on the southwest, Black Creek Road to the east, neighbouring residential property to the north, and woodlot to the 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 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 a tributary of Black Creek, which runs approximately 140 metres (m) to the east of the Study Area and Black Creek itself is located 408m to the east 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 Willoughby Township, based on Ellis and Ferris (1990).

Table 1: Cultural Chronology for Willoughby Township

Time Period	Cultural Period	Comments
9500 – 7000 BC	Paleo Indian	first human occupation hunters of caribou and other extinct Pleistocene game nomadic, small band society
7500 - 1000 BC	Archaic	ceremonial burials increasing trade network hunter gatherers
1000 - 400 BC	Early Woodland	large and small camps spring congregation/fall dispersal introduction of pottery
400 BC – AD 800	Middle Woodland	kinship based political system incipient horticulture long distance trade network
AD 800 - 1300	Early Iroquoian (Late Woodland)	limited agriculture developing hamlets and villages
AD 1300 - 1400	Middle Iroquoian (Late Woodland)	shift to agriculture complete increasing political complexity large palisaded villages
AD 1400 - 1650	Late Iroquoian	regional warfare and political/tribal alliances destruction of Huron and Neutral

1.3.3 Previously Identified Archaeological Work

In order to compile an inventory of archaeological resources, the registered archaeological site records kept by the MTCS were consulted. In Ontario, information concerning archaeological sites stored in the ASDB (Government of Ontario n.d.) is maintained by the MTCS. 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 13 kilometres (km) 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 within Borden Block AfGs.

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 MTCS will provide information concerning site location to the party or an agent of the party holding title to a property, or to a licensed archaeologist with relevant cultural resource management interests.

An examination of the ASDB has shown that there are 24 archaeological sites registered within a 1km radius of the Study Area (Table 2).

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

Borden Number	Site Name	Time Period	Affinity	Site Type
AfGs-28	Baker Road	Archaic, Late		
AfGs-27	River Trail	Archaic, Late		
AfGs-26	River Trail 15			
AfGs-25	River Trail 14			
AfGs-24	River Trail 13			
AfGs-23	River Trail 12			
AfGs-22	River Trail 11			

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Borden Number	Site Name	Time Period	Affinity	Site Type
AfGs-21	River Trail 10			
AfGs-20	River Trail 9	Post-Contact, Woodland, Late		
AfGs-19	Jessop	Archaic, Late		
AfGs-18	River Trail 7			
AfGs-17	River Trail 6			
AfGs-16	River Trail 5			
AfGs-15	River Trail 4			
AfGs-14	River Trail 3	Woodland, Middle		
AfGs-13	River Trail 2			
AfGs-128	Black Creek 7	Pre-Contact	Aboriginal	camp / campsite
AfGs-127	Black Creek 6			
AfGs-126	Black Creek 5			
AfGs-125	Black Creek 4	Archaic, Late		
AfGs-124	Black Creek 3	Pre-Contact		
AfGs-123	Black Creek 2	Pre-Contact		
AfGs-122	Black Creek 1	Pre-Contact		
AfGs-12	River Trail 1			

One archaeological assessment for the River Trail Estates has been conducted within 70m east of the Study Area (Museum of Indian Archaeology n.d.).

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 MTCS (Government of Ontario 2011) to determine areas of archaeological potential within the Study Area. 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, 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. Finally, extensive land disturbance can eradicate archaeological potential (Wilson and Horne 1995).

Distance to water is an essential factor in archaeological potential modeling. 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 sites locations and types to varying degrees. The MTCS (Government of Ontario 2011) categorizes water sources in the following manner:

- Primary water sources: lakes, rivers, streams, creeks;
- Secondary water sources: intermittent streams and creeks, springs, marshes and swamps;

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- 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 a tributary of Black Creek, which runs approximately 140 metres (m) to the east of the Study Area and Black Creek itself is located 408m to the east of the Study Area.

The primary soils within the Study Area have been documented as being suitable for pre-contact Aboriginal practices. Add to this discussion the presence of pre-contact Aboriginal sites registered within 1km of the Study Area and the Aboriginal archaeological potential is judged to be moderate to high.

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 Willoughby Township (Figure 2; Page & Co 1876), demonstrates that the 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 post office of Black Creek as well as the Grand Trunk Railway, the Euro-Canadian archaeological potential of the Study Area is judged to be moderate to high.

When the above listed criteria are applied to the Study Area, the archaeological potential for pre-contact Aboriginal, post-contact Aboriginal, and Euro-Canadian sites is deemed to be moderate to high.

2.0 Field Methods

The Stage 1-2 archaeological assessment of the current Study Area was conducted under archaeological consulting license PO17 issued to Mr. Garth Grimes by the MTCS (PO17-0611-2017). The Study Area is a woodlot and measures 6.4ha. It is irregular in shape and is bound by Netherby Road to the west, the westbound off ramp for the Queen Elizabeth Way on the southwest, Black Creek Road to the east, neighbouring residential property to the north, and woodlot to the south. The limits of the Study Area were surveyed and marked with stakes by the Proponent prior to the assessment. The entire property was subject to assessment.

The Stage 1-2 assessment was conducted on August 30, 2017; the weather was partially sunny and cool. During the Stage 2 field work, assessment conditions were excellent and at no time were the field, weather, or lighting conditions detrimental to the recovery of archaeological material. Photos 1 to 4 demonstrate the current land conditions throughout the Study Area, as per Section 7.8.6 Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011). Figure 3 provides an illustration of the Stage 2 assessment methods, as well as photograph locations and directions.

The Stage 1 portion of the archaeological assessment compiled the available information concerning any known and/or potential archaeological heritage resources within the Study Area. This background research indicated that the entire Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources.

The entire Study Area consisted of a woodlot that was inaccessible for ploughing. This woodlot was subject to a standard test pit survey at 5m intervals in accordance with Section 2.1.2 of the *Standards and Guidelines* (Government of Ontario 2011; Photos 1 to 4). All test pits were approximately 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 (mm) hardware cloth to facilitate the recovery of small artifacts and then used to backfill the pit. Test pits ranged in depth from 25 to 32cm and contained a single stratigraphic layer; considering that each test was excavated 5cm into sterile subsoil, this observed soil layer ranged in depth from 20 to 27cm. No further archaeological methods were employed since no artifacts were identified during the test pit survey.

3.0 Record of Finds

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 3 below.

Table 3: Inventory of Document Record

Document Type	Current Location of Document Type	Additional Comments
1 Page of Field Notes	Detritus Consulting Ltd. office	Stored digitally in project file
1 Maps provided by the Client	Detritus Consulting Ltd. office	Stored digitally in project file
1 Field Map	Detritus Consulting Ltd. office	Stored digitally in project file
15 Digital Photographs	Detritus Consulting Ltd. office	Stored digitally in project file

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

4.0 Analysis and Conclusions

Detritus was retained by the Proponent to conduct a Stage 1-2 archaeological assessment on a large woodlot located on Lot 19, Broken Front on Niagara River Fronting Upper End of GR & ISL, Geographic Township of Willoughby, Historic County of Welland, Niagara Region, Ontario. This assessment was undertaken in advance of a large residential development. The Study Area is irregular in shape and measures 6.4ha; it is bound by Netherby Road to the west, the westbound off ramp for the Queen Elizabeth Way on the southwest, Black Creek Road to the east, neighbouring residential property to the north, and woodlot to the south. The limits of the Study Area were surveyed and marked with stakes by the Proponent prior to the assessment. The entire property was subject to assessment.

The Stage 1 background research indicated that the entire Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources and were recommended for Stage 2 assessment. The Stage 2 assessment, involving a test pit survey at 5m intervals, was conducted across the woodlot on August 30, 2017 and resulted in the identification and documentation of no archaeological resources.

5.0 Recommendations

No archaeological resources were documented during the Stage 1-2 assessment of the Study Area. Therefore, **no further archaeological assessment of the Study Area is recommended.**

6.0 Advice on Compliance with Legislation

This report is submitted to the Minister of Tourism and Culture as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, 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 Tourism, Culture and Sport, 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 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

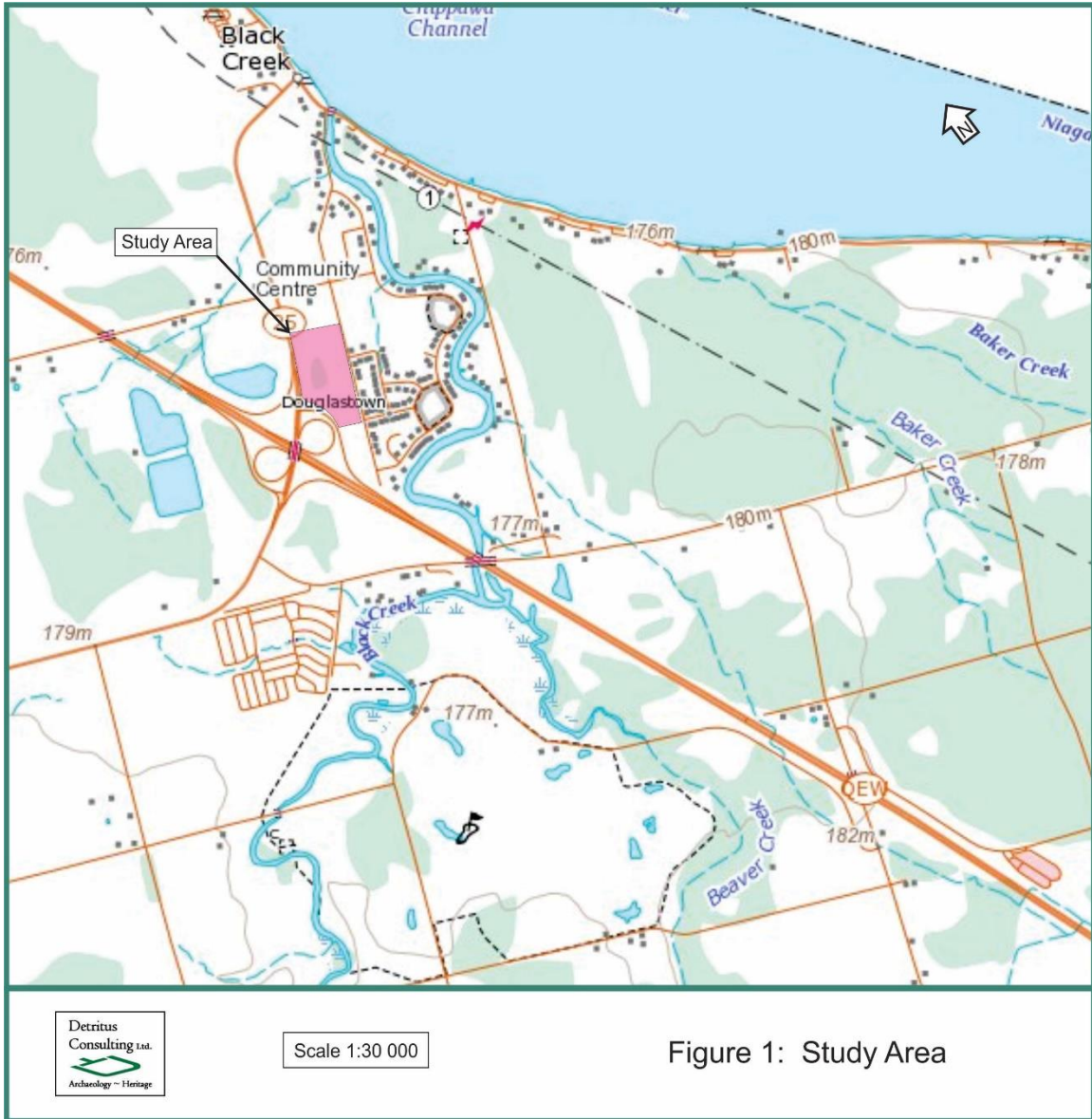
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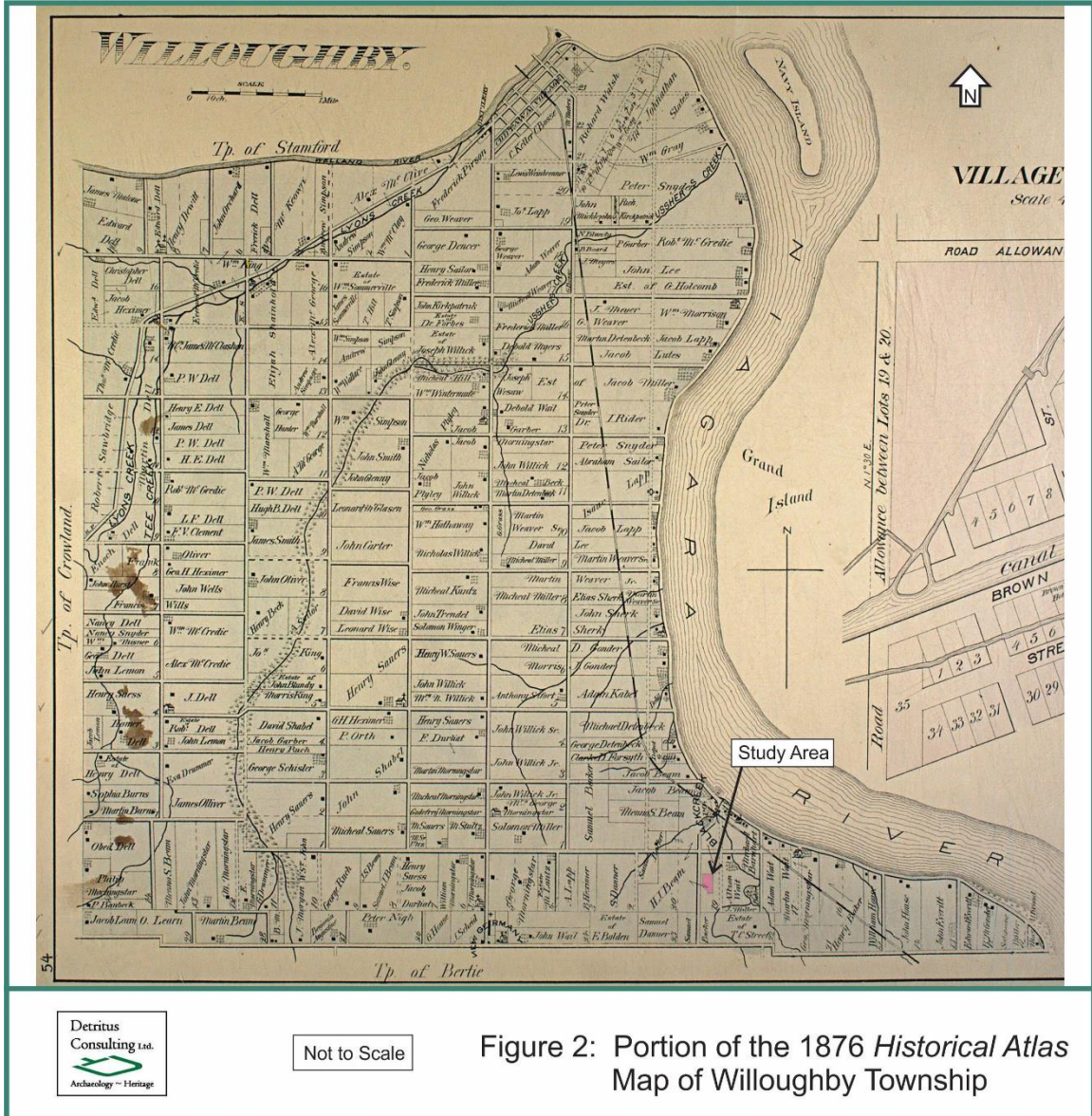
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8.0 Maps



Stage 1-2, Proposed Black Creek Road Development



Not to Scale

Figure 2: Portion of the 1876 *Historical Atlas* Map of Willoughby Township

Stage 1-2, Proposed Black Creek Road Development



Stage 1-2, Proposed Black Creek Road Development

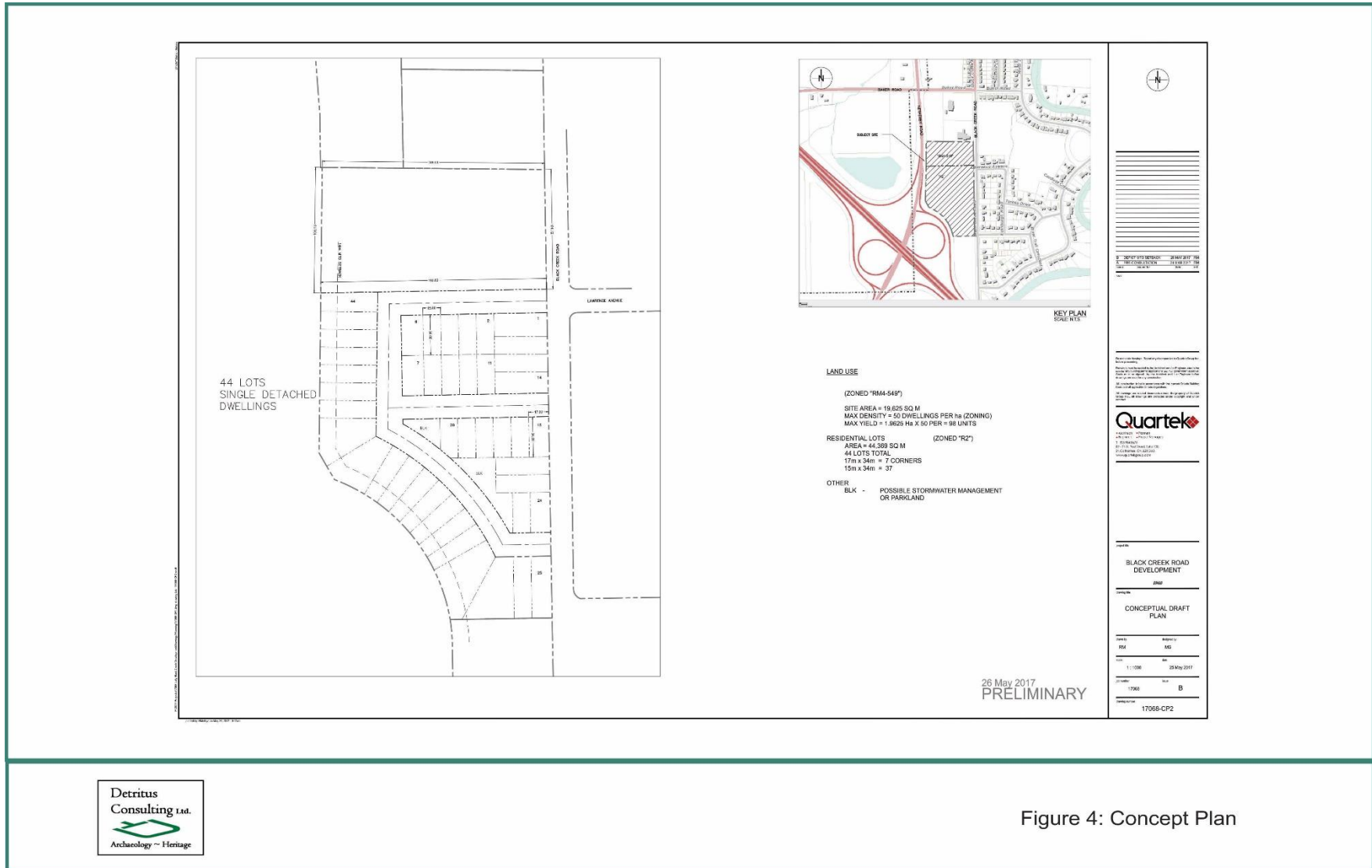


Figure 4: Concept Plan

9.0 Images

9.1 Photos