

Stage 1-2 Archaeological Assessment 294 Quaker Road, Pelham

Thorold Township Lot 227
Historical County of Welland,
now Regional Municipality of Niagara, Ontario

Submitted to:

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Submitted by:



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ORIGINAL REPORT

October 28, 2021

Executive Summary

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Joe Candeloro of Centennial Construction & Contracting (Niagara) Inc. / Centennial Homes (Niagara) Inc. (the 'Proponent') to conduct a Stage 1-2 archaeological assessment at a vacant property located on Thorold Township Lot 227, former County of Welland, now Regional Municipality of Niagara, Ontario (Figure 1). This assessment was undertaken in advance of the proposed residential development at 294 Quaker Road, Pelham ('Study Area'; 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 this condition, a Stage 1-2 assessment of the Study Area was conducted during the pre-approval phase of 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 MHSTIC' 2011 Standards and Guidelines for Consultant Archaeologists ('Standards and Guidelines'; Government of Ontario 2011).

The Stage 1 archaeological assessment of the Study Area was completed by Detritus and determined that portions of the Study Area exhibited a moderate to high potential for the identification and recovery of archaeological resources. A Stage 2 archaeological assessment was recommended for the manicured lawn and treed areas. The residential dwelling with its associated gravel driveway, an above ground pool, a garden shed and garden were evaluated as having little or no archaeological potential due to the identification of extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. These areas of previous areas of disturbance, as confirmed during a Stage 2 property inspection, were not subject to Stage 2 assessment, but were mapped and photo documented only, in accordance with Section 2.1, Standard 6 and Section 7.8.1, Standard 1b of the *Standards and Guidelines* (Government of Ontario 2011).

The subsequent Stage 2 assessment was conducted on July 21, 2021 and involved a typical test pit survey at a 5m interval across the current Study Area, conducted according to Section 2.1.2 of the *Standards and Guidelines* (Government of Ontario 2011). 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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- Mr. Joe Candeloro of Centennial Construction & Contracting (Niagara) Inc. / Centennial Homes (Niagara) Inc.
- Mr. William Heikoop, Upper Canada Consulting Ltd.

1.0 Project Context

1.1 Development Context

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Joe Candeloro of Centennial Construction & Contracting (Niagara) Inc. / Centennial Homes (Niagara) Inc. (the 'Proponent') to conduct a Stage 1-2 archaeological assessment at a vacant property located on Thorold Township Lot 227, former County of Welland, now Regional Municipality of Niagara, Ontario (Figure 1). This assessment was undertaken in advance of the proposed residential development at 294 Quaker Road, Pelham ('Study Area'; 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 this condition, a Stage 1-2 assessment of the Study Area was conducted during the pre-approval phase of 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

The earliest documented pre-European settlers arrived to the Niagara Peninsula from southwestern Ontario during the 14th century AD, at the peak of Iroquois culture. By 1400, the majority of the region was occupied by an Iroquoian speaking tribe referred to as the Attawandaran (aka the Atiquandaronk or Attouanderonks), who exploited the fertile land and abundant water sources throughout the region for fishing, hunting and agriculture (Niagara Falls Info 2019). This moniker was given to the community by the neighbouring Wendat as a slur against their unusual dialect. Those Attawandaran tribes that settled along the Niagara River were referred to as the Onguiaahra (later the Ongiara), which has been loosely translated as one of **“the Straight,” “the Throat,” or “the Thunder of Waters”** (Hill 2016; Niagara-on-the-Lake Realty 2019). The Town of Niagara-on-the-Lake derives its name from the Onguiaahra village site on which it **was founded. The name ‘Neutral’ was given to the Attawandaron by French explorers who began arriving in the 17th century. This new designation referred to the community’s status as peacekeepers between the warring Huron and Iroquois tribes** (Niagara Falls Info 2019).

The earliest recorded European visit to the Niagara region was undertaken by Etienne 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 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 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, but arrived 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 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 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).

The late 17th and early 18th centuries represent a turning point in the evolution of the post-contact Aboriginal occupation of Southern Ontario. It was at this time that various Iroquoian-speaking communities began migrating from New York State, followed by the arrival of new Algonkian-speaking groups from northern Ontario (Konrad 1981; Schmalz 1991). More specifically, this period marks the arrival of the Mississaugas into Southern Ontario and, in particular, the watersheds of the lower Great Lakes. 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 and, at the end of the 17th century, the **Mississaugas’ settled permanently in Southern Ontario, including the Niagara Peninsula** (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 first 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: 15-17

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 is located in the Township of Thorold, Former County of Welland, now Region 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 2009). 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).

In July 1792, Simcoe divided Upper Canada into 19 counties stretching from Essex in the west to Glengarry in the east. Each new county was named after a county in England or Scotland; the constituent townships were then given the names of the corresponding townships from each original British county (Powell and Coffman 1956:17-18). 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. 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 *Illustrated Historical Atlas of the Counties of Lincoln and Welland* ('*Historical Atlas*'), demonstrates the extent to which Thorold 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.

The *Historical Atlas* map of Thorold Township illustrates that Lot 227 was divided into two parcels, the eastern parcel owned by E. Early and the west by Orin Bemis (Figure 2). A single structure and orchards are depicted on the Bemis parcel, with a single structure and orchard also depicted on the Early parcel. The Study Area is located in the southern section of the Lot. Also visible are the early communities of Fonthill and Port Robinson, both illustrated to the northwest and northeast of the Study Area respectively. The Welland Canal is illustrated to the east of the Study Area.

Significant and detailed landowner information is available on the current *Historical Atlas*; however, 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). 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 approximately 5.58ha. At the time of the assessment it comprised primarily a flat manicured lawn with mature trees, a residential dwelling **with it's associated** gravel driveway, an above ground pool, a garden shed and garden in its south and an area with long grass, shrubbery, trees and a dry intermittent watercourse running west to east **in it's** northern half. 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 physiographic region (Chapman and Putnam 1984). This region occupies some 1350 square miles that were once submerged below glacial Lake Warren. The clay plain can be subdivided into a series of belt-like regions. 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 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). 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 closest source of potable water is an unnamed seasonal watercourse of the Welland River, which is running west to east through the northern half of the Study Area. The Welland River itself is located 2 kilometres (km) to the east of the Study Area.

1.3.2 Pre-Contact Aboriginal Land Use

This portion of southern 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 Thorold Township, based on Ellis and Ferris (1990)

Table 1: Cultural Chronology for Thorold 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 Previous Identified Archaeological Work

In order to compile an inventory of known archaeological resources in the vicinity of the Study Area, Detritus consulted the ASDB. The ASDB, which is maintained by the MHSTCI (Government of Ontario n.d.), contains information concerning archaeological sites that have been 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 lies within block AgGt.

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 to a licensed archaeologist with relevant cultural resource management interests.

According to the ASDB, three archaeological sites have been registered within a 1km radius of the Study Area. Two of the sites are pre-contact Aboriginal sites and do not have a specified date. The remaining site is a post-contact Euro Canadian site. For further information see Table 2 below.

Table 2: Registered Archaeological Sites within 1km

Borden Number	Site Name	Time Period	Affinity	Site Type
AgGt-83	Round	Post-Contact	Euro-Canadian	homestead
AgGt-262		Pre-Contact		Unknown
AgGt-263		Pre-Contact		Unknown

Detritus conducted a Stage 1-2 assessment on the adjacent property to the east at 210, 256 and 276 Quaker Road in 2021 (PIF P017-0930-2021) in July 2021 but no report has yet been filed with the MHSTCI.

To the best of Detritus' knowledge, no assessments have been conducted adjacent to the Study Area, and no sites are registered within 50m of the Study Area.

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 (Government of Ontario 2011) to determine areas of archaeological potential within 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. 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 MHSTCI (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;
- 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 an unnamed seasonal watercourse of the Welland River, which is running west to east through the northern half of the Study Area; Welland River itself is located 2 kilometres (km) to the east 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 imperfectly drained making them suitable for pre-contact and post contact Aboriginal agricultural. Given the quality of the soil, the proximity of potable water, and the length of occupation of Thorold Township prior to the arrival of Euro-Canadian settlers as well as the two pre-contact Aboriginal sites registered within 1km of the Study Area and the pre-contact and post-contact Aboriginal archaeological potential of the Study Area 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* (Page & Co. 1876; Figure 2) map of Thorold Township, demonstrates the extent to which the area had been settled by 1876. 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. The Study Area lies in the south of lot 227, which was divided into two parcels, the eastern parcel owned by E. Early and the west by Orin Bemis (Figure 2). Single structures and associated orchards are illustrated to the south of the Study Area. Also visible is the early community of Fonthill illustrated to the northwest of the Study Area respectively. The Welland Canal is also visible to the east of the Study Area. Considering the early occupation of the area and the proximity of the Study Area to the early communities of Fonthill and Port Robinson, the Euro-Canadian archaeological potential of the Study Area is judged to be moderate to high.

Finally, despite the factors mentioned above, extensive land disturbance can eradicate archaeological potential within a Study Area (Wilson and Horne 1995). Within the Study Area, three areas of disturbance were identified on current satellite imagery. In the south of the Study Area there is a residential dwelling with a gravel driveway, an above ground pool, a garden shed and garden. The remainder of the Study Area comprised manicured lawn and trees in its southern section and an area with long grass, shrubbery and trees in its northern section.

Given that no additional disturbance areas could be identified, Detritus determined that the manicured lawn component of the Study Area demonstrated the potential for the recovery of pre-contact Aboriginal, post-contact Aboriginal, and Euro-Canadian archaeological resources, and were recommended for additional assessment.

2.0 Field Methods

The Stage 2 assessment of the Study Area was conducted on July 21, 2021 under archaeological consulting license P017 issued to Mr. Garth Grimes by the MHSTCI (P017-0951-2021). The limits of the Study Area were surveyed and marked by the Proponent prior to the assessment.

The weather during the assessment was sunny and 30°C; **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 to 32 demonstrate the land conditions at the time of the survey throughout the Study Area, including areas that met the requirements for a Stage 2 field assessment, as per Section 7.8.6, Standards 1a, 1b, and 1c of the *Standards and Guidelines* (Government of Ontario 2011). Figure 3 provides an illustration of the Stage 2 assessment methods, as well as all photograph locations and directions.

Approximately 97% of the Study Area comprised a manicured lawn with mature trees observed throughout and an area with long grass, shrubbery, trees and a dry intermittent watercourse running west to east through the back of the property. These areas were considered to be inaccessible to ploughing and 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). The test pits were excavated to within 1m of all built structures or until they showed evidence of recent ground disturbance as per Section 2.1.2, Standard 4 of the *Standards and Guidelines* (Government of Ontario 2011). 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). The soils were examined for stratigraphy, cultural features, or evidence of fill. Test Pit depth ranged from 28-32 cm and a single soil layer of brown topsoil layer on top of a light brown, yellowish sand subsoil was observed.

All soil was screened through six-millimetre mesh hardware cloth to facilitate the recovery of small artifacts and then used to backfill the pit as per Section 2.1.2, Standards 7 and 9 of the *Standards and Guidelines* (Government of Ontario 2011). No material culture was encountered during the test pit survey; therefore, no additional assessment methods were employed.

Approximately 3% of the Study Area comprised the possible disturbance areas identified on the current aerial imagery of the Study Area (see Section 1.3.4 above). Following a Stage 2 property inspection, conducted according to Section 2.1.8, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011), the main disturbances impacting the Study Area were an existing residential dwelling with a gravel driveway, an above ground pool, a garden shed and garden. These were 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). All of the visibly disturbed areas documented within the Study Area were mapped and photo-documented per Section 2.1, Standard 6 and Section 7.8.1, Standard 1b of the *Standards and Guidelines* (Government of Ontario 2011).

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 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
97 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.

4.0 Analysis and Conclusions

Detritus was retained by the Proponent to conduct a Stage 1-2 archaeological assessment in advance of a proposed residential development.

The Stage 1 archaeological assessment of the Study Area was completed by Detritus and determined that portions of the Study Area exhibited a moderate to high potential for the identification and recovery of archaeological resources. A Stage 2 archaeological assessment was recommended for the manicured lawn and treed areas. The residential dwelling with its associated gravel driveway, an above ground pool, a garden shed and garden were evaluated as having little or no archaeological potential due to the identification of extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. These areas of previous areas of disturbance, as confirmed during a Stage 2 property inspection, were not subject to Stage 2 test pit assessment, but were mapped and photo documented only in accordance with Section 2.1, Standard 6 and Section 7.8.1, Standard 1b of the *Standards and Guidelines* (Government of Ontario 2011).

The subsequent Stage 2 assessment was conducted on July 21, 2021, and involved a typical test pit survey at a 5m interval across the current Study Area, conducted according to Section 2.1.2 of the *Standards and Guidelines* (Government of Ontario 2011). This investigation resulted in the identification and documentation of no archaeological resources.

5.0 Recommendations

No archaeological resources were documented during the Stage 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 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 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*.

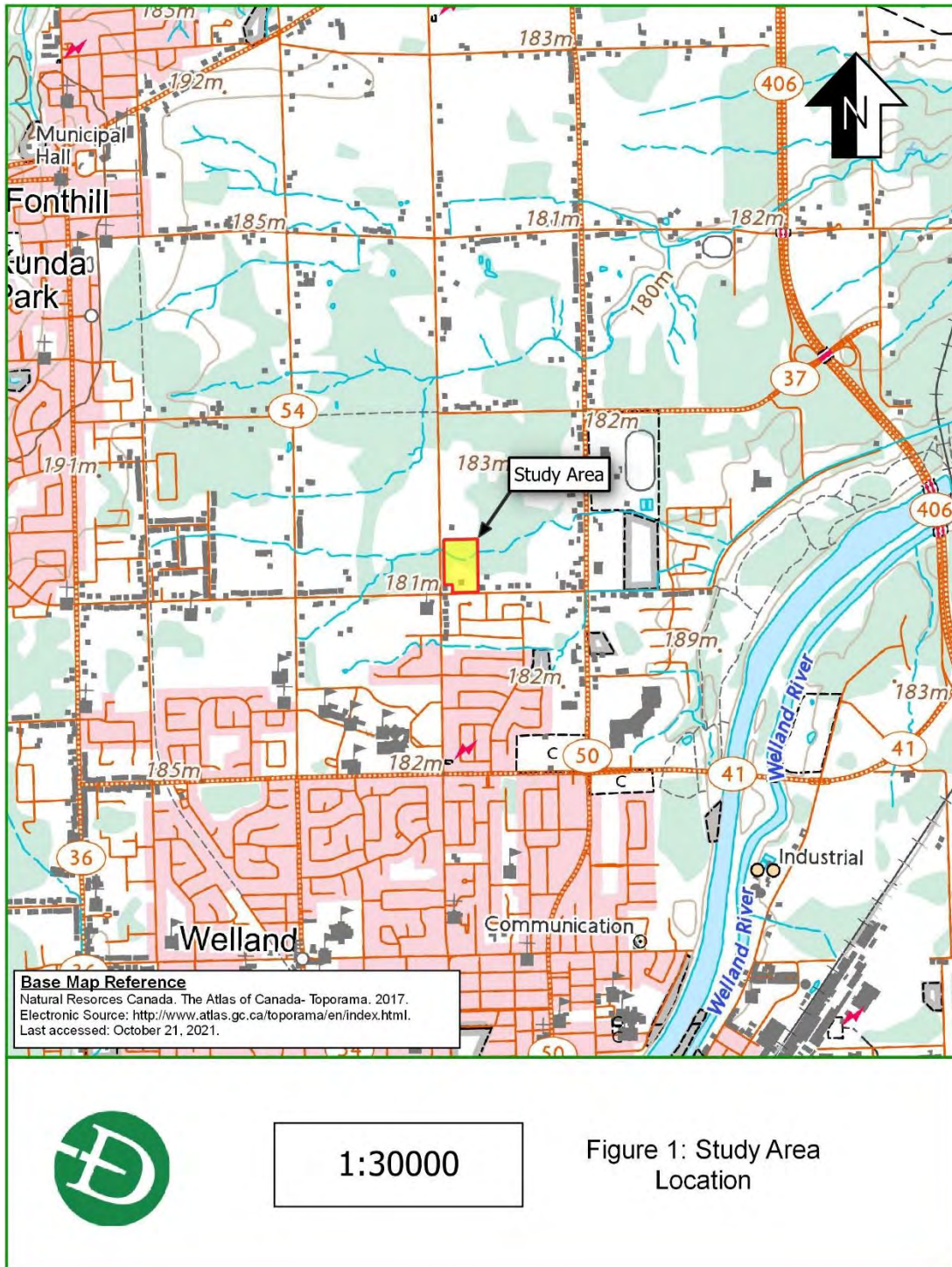
The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

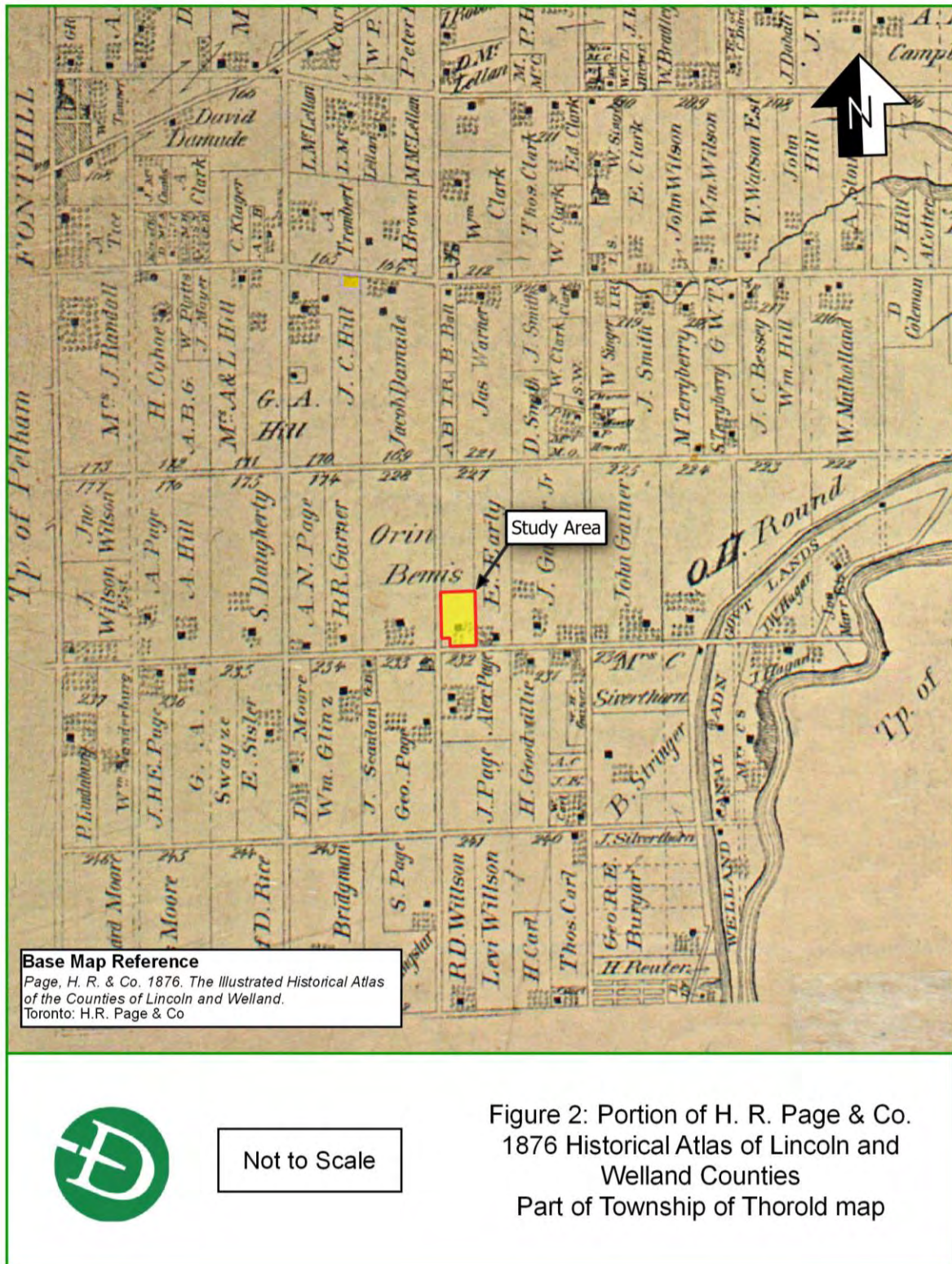
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8.0 Maps







Legend

- Study Area
- Test Pit Surveyed at 5m Intervals
- Previously Disturbed - Not Assessed
- Photo Location and Direction
- Sample Test Pit

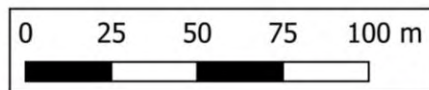
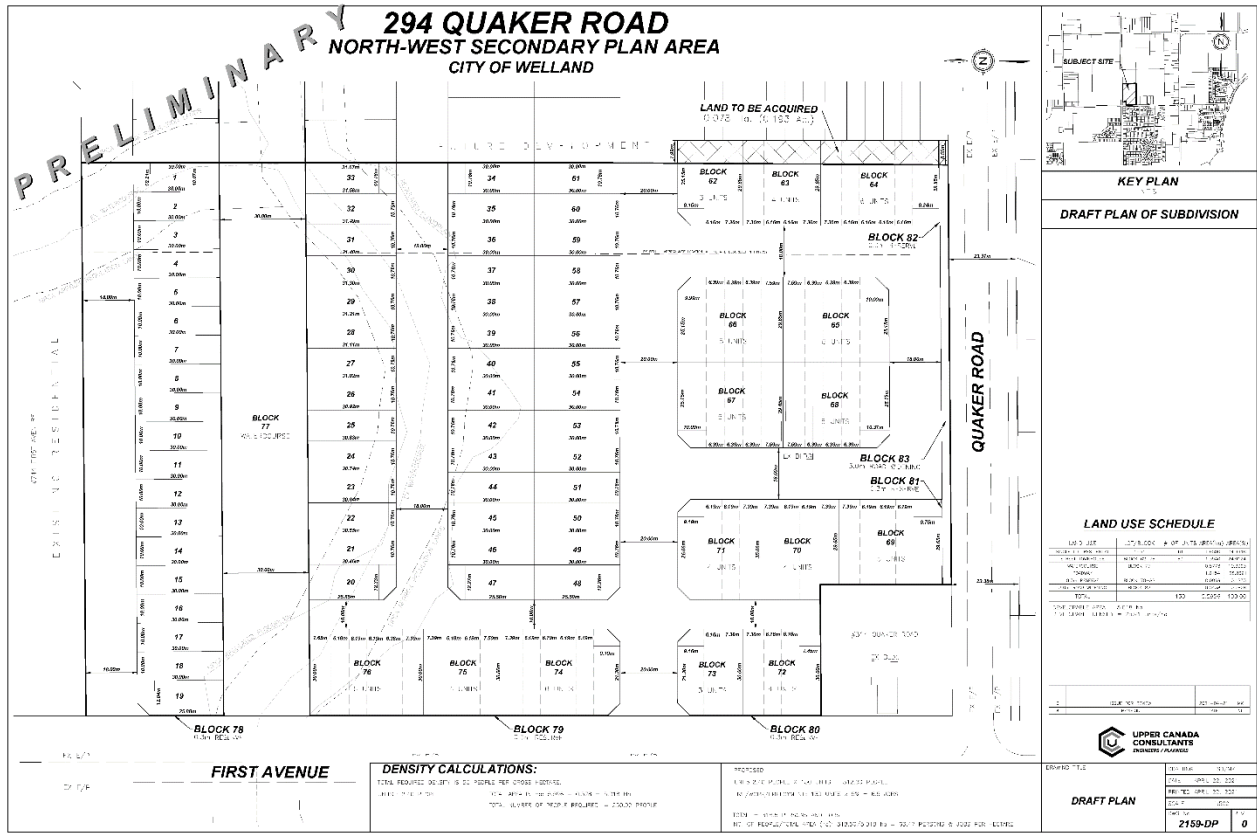


Figure 3: Stage 2 Field Methods

Figure 4: Development Map



9.0 Images

9.1 Field Photos

**Photo 1: Manicured Lawn Test Pit
Surveyed at 5m Intervals, facing north**



**Photo 2: Manicured Lawn Test Pit
Surveyed at 5m Intervals, facing northwest**



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



**Photo 4: Manicured Lawn Test Pit
Surveyed at 5m Intervals; garden shed and
garden – previously disturbed, not
assessed, facing northwest**



Photo 5: Manicured Lawn Test Pit Surveyed at 5m Intervals; residential dwelling and above ground pool – previously disturbed, not assessed, facing southwest



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



Photo 7: Manicured Lawn Test Pit Surveyed at 5m Intervals; residential dwelling and gravel driveway – previously disturbed, not assessed, facing north



Photo 8: Manicured Lawn Test Pit Surveyed at 5m Intervals; residential dwelling and above ground pool – previously disturbed, not assessed, facing north



Photo 9: Manicured Lawn Test Pit Surveyed at 5m Intervals; residential dwelling and gravel driveway – previously disturbed, not assessed, facing east



Photo 10: Manicured Lawn Test Pit Surveyed at 5m Intervals, facing south



Photo 11: Manicured Lawn Test Pit Surveyed at 5m Intervals, facing northeast



Photo 12: Manicured Lawn Test Pit Surveyed at 5m Intervals, facing north



Photo 13: Manicured Lawn Test Pit Surveyed at 5m Intervals; garden shed and garden – previously disturbed, not assessed, facing northeast



Photo 14: Manicured Lawn Test Pit Surveyed at 5m Intervals, facing southeast



Photo 15: Manicured Lawn Test Pit Surveyed at 5m Intervals; garden shed and above ground pool – previously disturbed, not assessed, facing east



Photo 16: Overgrown Grass and Shrub Area Test Pit Surveyed at 5m Intervals, facing north



Photo 17: Overgrown Grass and Shrub Area Test Pit Surveyed at 5m Intervals, facing northwest



Photo 18: Overgrown Grass and Shrub Area Test Pit Surveyed at 5m Intervals, facing south



Photo 19: Overgrown Grass and Shrub Area Test Pit Surveyed at 5m Intervals, facing west



Photo 20: Overgrown Grass and Shrub Area Test Pit Surveyed at 5m Intervals, facing north



Photo 21: Overgrown Grass and Shrub Area Test Pit Surveyed at 5m Intervals, facing northeast



Photo 22: Overgrown Grass and Shrub Area Test Pit Surveyed at 5m Intervals, facing north



Photo 23: Overgrown Grass and Shrub Area, Pathways cut through trees; Test Pit Surveyed at 5m Intervals, facing northwest



Photo 24: Overgrown Grass and Shrub Area, Pathways cut through trees; Test Pit Surveyed at 5m Intervals, facing south



Photo 25: Overgrown Grass and Shrub Area Test Pit Surveyed at 5m Intervals, facing east



Photo 26: Overgrown Grass and Shrub Area, Pathways cut through trees; Test Pit Surveyed at 5m Intervals, facing southeast



Photo 27: Overgrown Grass and Shrub Area, Pathways cut through trees; Test Pit Surveyed at 5m Intervals, facing northwest



Photo 28: Overgrown Grass and Shrub Area, Pathways cut through trees; Test Pit Surveyed at 5m Intervals, facing northwest



Photo 29: Overgrown Grass and Shrub Area, Pathways cut through trees; Test Pit Surveyed at 5m Intervals, facing northeast



Photo 30: Overgrown Grass and Shrub Area, Pathways cut through trees; Test Pit Surveyed at 5m Intervals, facing east



Photo 31: Overgrown Grass and Shrub Area, Pathways cut through trees; Test Pit Surveyed at 5m Intervals, facing north



Photo 32: Overgrown Grass and Shrub Area, Pathways cut through trees; Test Pit Surveyed at 5m Intervals, facing south



Sample Test Pit #1 showing stratigraphy and conditions, facing north

