Stage 1-2 Archaeological Assessment: 2509 Cedar Creek Road

Part of Lot 29, Concession 10, Geographic Township of Dumfries, former County of Waterloo, now Township of North Dumfries, Regional Municipality of Waterloo, Ontario

June 22, 2023

Prepared for:

Flora Designs Inc.
1109 Britannia Road East
Mississauga, Ontario L4W 3X1

Prepared by:

Stantec Consulting Ltd.
300W-675 Cochrane Drive
Markham, Ontario L3R 0B8

Licensee: Sarah Henderson, MA
License Number: P394
Project Information Form Number: P394-0089-2022
Project Number 161414214

ORIGINAL REPORT

Table of Contents

LIST OF TABLES

LIST OF FIGURES

Executive Summary

Stantec Consulting Ltd. (Stantec) was retained by Flora Designs Inc. to complete Stage 1-2 archaeological assessment in support of their proposed draft plan application of their property at 2509 Cedar Creek Road (the Project) in the Township of North Dumfries, Regional Municipality of Waterloo, Ontario. The study area for the Project comprises approximately 17.92 hectares, and is a mix of agricultural field, manicured lawns, scrubland, laneways and buildings. This Stage 1-2 archaeological assessment is being completed in the preliminary planning phase of the Project in accordance with the *Planning Act* (Government of Ontario 1990a).

The Stage 1-2 archaeological assessment was completed under Project Information Form number P394-0089-2022 issued to Sarah Henderson, MA by the Ministry of Citizenship and Multiculturalism (MCM). The Stage 1 archaeological assessment determined that the study area retained potential for the identification of archaeological resources. The Stage 2 archaeological assessment of the study area was conducted on May 17, June 16, and June 17, 2022.

During the Stage 2 survey, ten new archaeological locations were identified. No further archaeological assessment is recommended for Location 1, Location 2 (AhHc-379), Location 3, Location 4 (AhHc-380), Location 5 (AhHc-381), Location 6, Location 7, Location 8, and Location 9. Stage 3 archaeological assessment is recommended for Location 10 (AhHc-382). Full and detailed recommendations are provided in the body of the report.

The MCM is asked to review the results presented and accept this report into the *Ontario Public Register of Archaeological Reports*.

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

Project Personnel

Project Manager:	Kevin Brousseau, CET
Task Lead:	Sarah Henderson, MA (P394)
Licensed Archaeologist:	Sarah Henderson, MA (P394)
Licensed Field Directors:	Nathan Ng, BA (R1223), Krista Lane, BA (R382)
Field Crew:	Samuel Adams, Chloe Doyle, Lorelyn Giese, Kevin Hicks, Nathan Lofthouse, Ryan Moon, Nicholas Salazar-Reid, Alexandra Wilson-Hodge
Report Writers:	Paul David Ritchie, MA (P392), Creighton Avery, Ph.D., MA
Artifact Analysis:	Kurt Kostuk
Mapping:	Garret Bury, B.ENCS
Quality Review:	Parker Dickson, MA (P256)
Independent Review:	Colin Varley, MA, RPA (P002)

Acknowledgements

Proponent Contact:	Chirag Patel, Flora Designs Inc.
Ministry of Citizenship and Multiculturalism:	Robert von Bitter, Archaeological Data Coordinator

1.0 PROJECT CONTEXT

1.1 DEVELOPMENT CONTEXT

Stantec Consulting Ltd. (Stantec) was retained by Flora Designs Inc. to complete Stage 1-2 archaeological assessment in support of their proposed draft plan application of their property at 2509 Cedar Creek Road (the Project) in the Township of North Dumfries, Regional Municipality of Waterloo, Ontario (Figure 1). The proposed draft plan includes the creation of a new street and eight industrial zoned lots. The study area for the Project comprises approximately 17.92 hectares, and is a mix of agricultural field, manicured lawns, scrubland, laneways and buildings (Figure 2). This Stage 1-2 archaeological assessment is being completed in the preliminary planning phase of the Project in accordance with the *Planning Act* (Government of Ontario 1990a).

1.1.1 Objectives

In compliance with the provincial standards and guidelines set out in the Ministry of Citizenship and Multiculturalism's (MCM's) 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the objectives of the Stage 1 component of the assessment are as follows:

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

To meet these objectives, Stantec archaeologists employed the following research strategies:

- A review of relevant archaeological, historical, and environmental literature pertaining to the study area.
- A review of the land use history, including pertinent historical maps.
- An examination of the *Ontario Archaeological Sites Database* to determine the presence of registered archaeological sites in and around the study area.
- A query of the *Ontario Public Register of Archaeological Reports* to identify previous archaeological assessments within 50 metres of the study area.

The objectives of the Stage 2 component of the archaeological assessment are as follows:

- To document archaeological resources within the study area.
- To determine whether the study area contains archaeological resources requiring further assessment.
- To recommend appropriate Stage 3 assessment strategies for archaeological sites identified.

Access to the study area for the purposes of the Stage 1-2 archaeological assessment was granted by Flora Designs Inc.

1.2 HISTORICAL CONTEXT

1.2.1 Post-contact Indigenous Resources

"Contact" is typically used as a chronological benchmark when discussing Indigenous archaeology in Canada and describes the contact between Indigenous and European cultures. The precise moment of contact is a constant matter of discussion. Contact in what is now the province of Ontario is broadly assigned to the 16th century (Loewen and Chapdelaine 2016).

The post-contact Indigenous occupation of southern Ontario was heavily influenced by the dispersal of various Iroquoian-speaking communities by the New York State Iroquois and the subsequent arrival of Algonkian speaking groups from northern Ontario at the end of the 17th century and the beginning of the 18th century (Konrad 1981; Schmalz 1991). Broadly, numerous Indigenous groups and communities are associated with the post-contact occupation of southern Ontario and the general area of the Project.

At the turn of the 17th century, the region of the study area was occupied by Iroquoian populations who are historically described as the *Neutre* (by the French), the *Atawandaron* (by the Huron-Wendat), and the Neutral (by the English); their autonym is not conclusively known (Birch 2015). In 1626, French Recollet Father Daillon reportedly travelled the length of the Grand River and counted 28 Neutral villages (Harper 1950:10-11; White 1978:410). This initial survey of the Grand River and the lands adjacent to it demonstrated the significance of the area and its resources to Indigenous peoples and their communities.

To the north was territory occupied by the Wendat-Tionontati (Huron-Wendat) (Heidenreich 1978). The Five Nations Iroquois, located in present-day upstate New York, failed to convince the Wendat-Tionontati to join them in an alliance (Warrick 2013). In 1649, the Seneca and the Mohawk led a campaign into southern Ontario and dispersed the Atawandaron and the Wendat-Tionontati, and established dominance over the region (Heidenreich 1978; Konrad 1981).

In 1667, surviving Huron-Wendat warriors joined in alliance with the French-allied Ojibwa and Mississaugas to counterattack the Iroquois who had settled along the north shore of Lake Ontario. By 1690, Ojibwa (Anishinaabe) speaking people had begun moving south into the lower Great Lakes basin (Konrad 1981; Rogers 1978). Mississauga oral traditions, as told by Chief Robert Paudash and recorded in 1905, indicate that after the Mississauga defeat of the Mohawk, the Mohawk retreated to their homeland south of Lake Ontario and a peace treaty was negotiated between those groups around 1695 (Paudash 1905). Upon the Mississaugas' return they settled permanently in southern Ontario.

Since contact with European explorers and immigrants, and, later, with the establishment of provincial and federal governments (the Crown), the lands within Ontario have been included in various treaties, land claims, and land cessions. Following the American War of Independence (1775-1783), the British government (the Crown) began negotiations with Indigenous nations to secure land for settlement. The study area for the Project falls within the historical and traditional territory of several Indigenous communities, including, but not limited to, the Mississaugas of the Credit First Nation (Wybenga and Dalton 1028), the Six Nations of the Grand River, and the Haudenosaunee Confederacy. Though not an exhaustive list, Morris (1943) provides a general outline of some of the treaties within the Province of

Ontario from 1783 to 1923 (Figure 3). However, earlier treaties were made between Indigenous nations and the Crown, such as the 1701 Albany Deed (Six Nations Lands & Resources Department 2018).

Based on Morris (1943), the study area is situated within the described limits of Treaty Number 3, the "Between the Lakes Treaty" from 1792 (identified by the letter "D") and the Haldimand Tract (identified by the letter "E") on Figure 3. The Between the Lakes Treaty was:

> *...made with the Mississa[ug]a Indians 7th December, 1792, though purchased as early as 1784. This purchase in 1784 was to procure for that part of the Six Nation Indians coming into Canada a permanent abode. The area included in this Treaty is, Lincoln County excepting Niagara Township; Saltfleet, Binbrook, Barton, Glanford and Ancaster Townships, in Wentworth County; Brantford, Onondaga, Tusc[a]r[o]ra, Oakland and Burford Townships in Brant County; East and West Oxford, North and South Norwich, and Dereham Townships in Oxford County; North Dorchester Township in Middlesex County; South Dorchester, Malahide and Bayham Township in Elgin County; all Norfolk and Haldimand Counties; Pelham, Wainfleet, Thorold, Cumberland and Humberstone Townships in Welland County.*
>
> (Morris 1943:17-18)

The Haldimand Tract (identified by the letter "E" on Figure 3) was carved out of the Between the Lakes Treaty lands the following year, in 1793. The original tract consisted of approximately 273,000 hectares and occupied an approximately 10-kilometre-deep tract on either side of the Grand River from mouth to source. This tract was granted by the Crown to the Mohawks "…and such others of the Six Nations Indians as wish to settle in that quarter" (Government of Canada 1905) in restitution for the loss of their homeland following the American War of Independence and in recognition of their loyalty to the Crown during that war. The original Six Nations (Haudenosaunee) settlers were also accompanied by several Delaware, Nanticoke, Tutelo, Creek, and Cherokee who had previously settled with the Haudenosaunee prior to the beginning of the war.

The Haudenosaunee and accompanying Indigenous peoples settled in villages along the Grand River. In the area around Brantford, villages were occupied by the Mohawk, (Upper) Cayuga, Oneida, Tutelo, and Tuscarora. In the late 1820s and into the 1830s, itinerant Christian missionaries became increasingly active across the Haldimand Tract and many Haudenosaunee that had settled up-river converted to Christianity. While clan and lineage affiliations under the Longhouse social organization had been important aspects of Haudenosaunee society, this affiliation became rare among Christians for whom the nuclear family became the primary social and economic unit (Weaver 1978:525-527).

From 1830 onward, the Crown pursued an active assimilation policy, such as in 1869 with the statutorily enacted patrilineal kinship, contrary to traditional matrilineal kinship of the Haudenosaunee. Despite these policies, Longhouse traditionalism persisted into the late 19th century. By the late 1830s, most of the Haudenosaunee population had left the original villages and settled farms along the Haldimand Tract. Indigenous economy in the 19th century was comparable to that of neighbouring Euro-Canadian inhabitants, cultivating maize only on a small scale, with larger scale cultivation of cash crops such as wheat, oats, hay, and peas. With the continued piecemeal sales of lands, in 1841 the remaining approximate 89,000 hectares of the Haldimand Tract was surrendered to the Crown and the Six Nations of the Grand River reserve was established (Weaver 1978:525-526).

As demonstrated above, the nature of Indigenous settlement size, population distribution, and material culture shifted as European settlers encroached upon Indigenous territory. Despite this shift, "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…systems of ideology and thought" (Ferris 2009:114). As a result, Indigenous peoples have left behind archaeological resources throughout the region which show continuity with past peoples, even if they have not been explicitly recorded in Euro-Canadian documentation.

1.2.2 Euro-Canadian Resources

The study area is situated on part of Lot 29, Concession 10, in the Geographic Township of Dumfries, County of Waterloo.

1.2.2.1 Waterloo County

In 1849, the *Baldwin Municipal Act* was passed, enabling the creation of a revised county system; with the subsequent *Hincks Act* of 1852, Waterloo County was created. After several political battles over how the boundaries of Waterloo County should be defined, the Township of Dumfries was divided into two halves: north and south. North Dumfries was included as a township of Waterloo County, joining the townships of Waterloo, Wilmot, Wellesley, and Woolwich. At that time, South Dumfries became a township in Brant County (Taylor 1967:24).

1.2.2.2 Geographic Township of Dumfries

The Geographic Township of Dumfries constituted "Block One" of the Haldimand Tract, the largest of six blocks of land within the Mohawk grant sold in 1798. On February 5, 1798, Joseph Brant sold all 94,305 acres (approximately 38,160 hectares) of Block One to Philip Stedman, of an established carting company in Niagara, for the sum of £8,841 (Dunham 1945). Stedman died several years later, and the mortgage passed to Thomas Clark, a prominent merchant also from the Niagara region. William Dickson, a lawyer of Scottish birth and cousin to Clark, acquired the land in 1816 (Dunham 1945).

Dickson paid his cousin £24,000 cash for Block One, named it Dumfries after his home county in Scotland, and set about planning its development so that he could bring Scottish immigrants to Upper Canada to provide them with a fresh start. He hired a Pennsylvanian carpenter, Absalom Shade, to build the first settlement. By 1819, Shade had completed the building of both the grist and sawmills, originally known as Shade's Mills and which became known as Dumfries Mills (Hayes 1997:8-9). The construction of the Dumfries Mills attracted several immigrant families who settled in the area within a few years. By 1819, a bridge over the Grand River was completed, and one year later a distillery was established (Hayes 1997:9). In 1821, a tavern was built, and by 1824 the "Red" store of Absalom Shade was established (Hayes 1997:9; Young 1880:110). As an increasing number of Euro-Canadian settlers arrived elsewhere in the township after 1816, farms and settlements were established further afield in the township.

Dumfries Township was surveyed by Deputy Provincial Surveyor Adrian Marlet, who divided it into twelve concessions, each twelve miles in length and one mile apart. The majority of its lots contained 200 acres of land (Wood 1960:40). The survey provided allowances for the construction of roads and paths between each concession and every sixth lot (Taylor 1967:27-29). The initial Euro-Canadian settlement of the township was rather slow. In 1818, only 63 people resided in the township (Young 1880:32). Significant settlement of the township did not begin in earnest until the later years of the 1820s. Because settlement was slow to get underway, Dickson hired John Telfer, a Hudson Bay Company deserter, to promote and encourage Scottish groups to settle in the area (Young 1880:42). Telfer's efforts were successful, and Scottish immigrants arrived in substantial numbers. Despite the township's predominantly Scottish and Presbyterian population from the 1820s onward, a small number of Pennsylvanian Mennonite settlers from Waterloo Township also bought land and settled in North Dumfries Township. They settled mainly in the northern reaches of the township in the vicinity of Roseville (Barrie 1952:43).

In 1827, John Galt, acting Commissioner of the Canada Company, initiated the construction of a road between Dumfries Mills and Canada Company land in the area to the north and east that would become the city of Guelph. During this time, the first post office of the township, located at Dumfries Mills, was established. Dickson, in honour of John Galt, named the post office Galt (Jaffray 1926:235). By the 1830s, the population of the township had reached about 4,177, and the population of Galt had reached about 250 (Hayes 1997:14). In 1841, the population of North Dumfries Township was 6,129. By 1851, it had reached 7,316, second only to that of Waterloo Township. A network of roads and highways had been constructed and improved, connecting outlying settlements to the central villages of Ayr and Galt. Log houses and buildings had been replaced increasingly by frame and stone structures. Social institutions, including churches and schools, had evolved into stable organizations. A variety of businesses and industries were flourishing, especially production of grain for export, which was the leader in Waterloo County. At this time, Galt had a population of well over 2,000 inhabitants and was the market center of rich agricultural land (Schmalz 1968:55). In 1853, Galt became an incorporated village. It was later amalgamated with Hespeler and Preston in 1973 to form the present-day City of Cambridge.

Although Galt and North Dumfries were excluded from the Grand Trunk Railway's mainline, they did receive branch lines during the 1850s. In 1854, the first train passed through North Dumfries from Harrisburg in Brant County north to Galt through North Dumfries Township. The Credit Valley Railway, later part of the Canadian Pacific Railway, connected Ayr and surrounding rural areas to markets abroad from the 1870s onward. The railways allowed North Dumfries to reach grain markets abroad, furthering development of its agricultural and milling enterprises. By the 1860s, a greater variety of farm produce was grown for export, especially wheat and oats (Hayes 1997:37).

1.2.2.3 Historical Mapping Review

Historical mapping from 1861 (Tremaine 1861) lists Thomas Kerr as the occupant of the north half of Lot 29, Concession 10 (Figure 4). A house is indicated as present on the property, just to the west of the study area (Figure 4). Additionally, immediately to the east of the study area, the map indicates a house on the property held by the Estate of Adam Kersel (Figure 4). The 1881 map of North Dumfries (Parsell & Co. 1881) illustrates the Credit Valley Railway, located south and east of the study area, but no landowners and no historical features are indicated on this map for the study area (Figure 5).

In discussing 18th and 19th century historical mapping it must be remembered that many historical county atlases were produced primarily to identify factories, offices, residences, and landholdings of subscribers and were funded by subscription fees. Landowners who did not subscribe were not always listed on the maps (Caston 1997:100). As such, structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984).

Further, review of historical mapping has inherent accuracy difficulties due to potential error in georeferencing. Georeferencing is conducted by assigning spatial coordinates to fixed locations and using these points to spatially reference the remainder of the map. Due to changes in "fixed" locations over time (e.g., road intersections, road alignments, water courses, etc.), errors/difficulties of scale and the relative idealism of the historical cartography, historical maps may not translate accurately into real space points. This may provide obvious inconsistencies during historical map review.

1.2.2.4 Property Histories

Lot 29, Concession 10 of the Township of North Dumfries was divided into two 100-acre lots. In 1855, the south half was sold via bargain and sale by William Dickson Junior to John Johnston. The north half, containing the study area, was sold via bargain and sale by William Dickson Junior to John Kerr in 1856 (ONLand 2022). However, it is possible that John Kerr settled on the north half of Lot 29, Concession 10 prior to receiving formal title since he arrived in Upper Canada in 1831 along with several families who settled in Dumfries (Young 1880:60). Dickson was also known to allow his settlers to open an account to pay for their land by installments of money or agricultural product (Reville 1920:268). The earliest census to list John Kerr in Dumfries is the Census of 1851. He was listed as a 57-year-old farmer born in Scotland. He lived with his wife Elisabeth, age 57; Thomas, age 23; Margaret, age 20; Jesse, age 25; and John, age 4. The family also included William Kerr, a 31-year-old shoemaker who lived in Waterloo (Library and Archives Canada 1851). The Census of 1861 lists John Kerr as a 65-year-old farmer. He lived with Jessie Kerr, age 38; John Kerr, age 12; Thomas Kerr, age 33; and Margaret Kerr, age 28. Margaret was the wife of Thomas Kerr and Elisabeth Kerr had died in 1859 (Library and Archives Canada 1861).

The Census of 1861 noted that the Kerr family lived in a one storey stone house (Library and Archives Canada 1861). The existing residence at 2509 Cedar Creek Road may have been built at any point between 1831 and 1861, however, a construction date in the 1840s and 1850s is most likely as most new settlers to Upper Canada originally resided in log houses and built a more substantial dwelling once they were established on a lot. In addition, Kerr did not take formal ownership of the lot until 1856 and likely would have waited to invest in building a more substantial dwelling until his title to the property was secured.

Historical mapping, discussed in Section 1.2.2.3, shows Thomas Kerr as the occupant of the north half of Lot 29, Concession 10 in 1861. John Kerr died in 1874 and is buried at Cedar Creek Cemetery in North Dumfries Township (Region of Waterloo Generations 2022). The property was then inherited by Thomas Kerr, a 50-year-old farmer who was born in Scotland, according to the 1881 Census records (ONLand 2022). He lived with his wife Margaret, age 38; servant Jessie Henderson, age 20; and farm laborer Peter Don, age 19 (Census of Canada 1881). In 1889, Thomas Kerr sold the entire 100 acres of the north half of Lot 29 to James McDonald (ONLand 2022).

The Census of 1891 listed James McDonald as a 41-year-old farmer born in Ontario. He lived with his wife Elizabeth, age 41; daughter Alice, age 9; son George, age 6; and daughter Myrtle, age 1 (Library and Archives Canada 1891). Based on land registry records James McDonald died in about 1915. Elizabeth McDonald continued to live on the property until 1925 when it was sold to Charles Bogg. Bogg owned the entire north half of the lot until 1945 when it was sold to the Veterans Land Act (ONLand 2022).

The *Veterans Land Act* was passed during the Second World War to settle veterans on farms. These farms would serve to supplement the income of veterans (Harris and Shulist 2001). In 1962, the Veterans Land Act granted the north half of the lot to Andrew Thompson (ONLand 2022). Industrial development to the west of the study area began after 1986 when Plan 67R-2572 was registered and the estate of Andrew Thompson sold the property to Boida Holdings, Inc. (ONLand 2022).

1.3 ARCHAEOLOGICAL CONTEXT

1.3.1 The Natural Environment

The study area is situated within the Waterloo Hills physiographic region (Chapman and Putnam 1984). The Waterloo Hills consists of:

> *… sandy hills, some of them being ridges of sandy till while others are kames or kame moraines, with outwash sands occupying the intervening hollows…. Adjoining the hilly region is an extensive area of alluvial terraces of the Grand River spillway system which, although more nearly horizontal, contains similar but more uniform sandy and gravelly materials…. The original forest consisted of splendid pines and hardwoods such as sugar maple, beech, wild cherry, and red oak.*
>
> (Chapman and Putnam 1984:136)

Soils within the study area are composed of Burford-Fox series soils (Presant and Wicklund 1971) and specifically for the study area are a mix dominated by Burford gravelly loam with equal proportions of Fox sandy loam and Caledon sandy loam (Ecologistics Limited 1996: Map 3). These soils are characterized by an A horizon of dark brown to yellowish brown soil comprising silt loam to gravelly loam; a B horizon of reddish-brown soil comprising gravelly sandy clay loam; and a C horizon of brown soil comprising very gravelly sand (Presant and Wicklund 1971:27). All three soil types represented in the soil complex are well-drained soils that have low water-holding capacity, low fertility, and occasionally steep or complex slopes and occasional cobbles (Presant and Wicklund 1971: 27).

The closest water source to the study area is the Cedar Creek, located approximately 350 metres southeast of the study area. Cedar Creek drains into the Nith River at Ayr, approximately 5.5 kilometres to the south-southwest of the study area. The Nith River is a tributary to the Grand River, which it meets at Paris, 16 kilometres to the south of the study area. The Grand River is approximately nine kilometres east of the study area. Additional secondary tributaries and intermittent creeks exist near the study area.

1.3.2 Pre-contact Indigenous Resources

It has been demonstrated that Indigenous people began occupying southern Ontario as the Laurentide glacier receded, as early as 11,000 years ago (Ellis and Ferris 1990:13). Much of what is understood about the lifeways of these Indigenous peoples is derived from archaeological evidence and ethnographic

analogy. In Ontario, Indigenous culture prior to the period of contact with European peoples has been distinguished into cultural periods based on observed changes in material culture. These cultural periods are largely based on observed changes to formal lithic tools, and separated into the Early Paleo-Indian, Late Paleo-Indian, Early Archaic, Middle Archaic, Late Archaic, and Terminal Archaic periods. Following the advent of ceramic technology in the Indigenous archaeological record, cultural periods are separated into the Early Woodland, Middle Woodland, and Late Woodland periods, based primarily on observed changes in formal ceramic decoration. It should be noted that these cultural periods do not necessarily represent specific cultural identities but are a useful paradigm for understanding changes in Indigenous culture through time.

The current understanding of Indigenous archaeological culture is summarized in Table 1, based on Ellis and Ferris (1990). The provided time periods are based on the "Common Era" calendar notation system, i.e., Before Common Era (BCE) and Common Era (CE).

Table 1: Generalized Cultural Chronology of the Study Area

Period	Characteristics	Time Period	Comments
Early Paleo	Fluted Projectiles	9000 – 8400 BCE	Spruce parkland, caribou hunters
Late Paleo	Hi-Lo Projectiles	8400 – 8000 BCE	Smaller but more numerous sites
Early Archaic	Kirk and Bifurcate Base Points	8000 – 6000 BCE	Slow population growth
Middle Archaic	Brewerton-like points	6000 – 2500 BCE	Environment similar to present
Late Archaic	Narrow Points	2500 – 1800 BCE	Increasing site size
	Broad Points	1800 – 1500 BCE	Large chipped lithic tools
	Small Points	1500 – 1100 BCE	Introduction of bow hunting
Terminal Archaic	Hind Points	1100 – 950 BCE	Emergence of true cemeteries
Early Woodland	Meadowood Points	950 – 400 BCE	Introduction of pottery
Middle Woodland	Dentate/Pseudo-Scallop Pottery	400 BCE – 500 CE	Increased sedentism
	Princess Point	550 – 900 CE	Introduction of corn
Late Woodland	Early Late Woodland	900 – 1300 CE	Emergence of agricultural villages
	Middle Late Woodland	1300 – 1400 CE	Long longhouses (100+ metres)
	Late Late Woodland	1400 – 1650 CE	Tribal warfare and displacement

Between 9000 and 8000 BCE, Indigenous populations were sustained by hunting, fishing, and foraging and lived a relatively mobile existence across an extensive geographic territory. Despite these wide territories, social ties were maintained between groups. One method of maintaining social ties was through gift exchange, evident through exotic lithic material documented on many sites (Ellis 2013:35-40).

By approximately 8000 BCE, evidence exists and becomes more common for the production of ground-stone tools such as axes, chisels, and adzes. These tools themselves are believed to be indicative specifically of woodworking. This evidence can be extended to indicate an increase in craft production and arguably craft specialization. This latter statement is also supported by evidence, dating to approximately 7000 BCE of ornately carved stone objects which would be laborious to produce and have explicit aesthetic qualities (Ellis 2013:41). This is indirectly indicative of changes in social organization

which permitted individuals to devote time and effort to craft specialization. Since 8000 BCE, the Great Lakes basin experienced a low-water phase, with shorelines significantly below modern lake levels (Stewart 2013: Figure 1.1.C). It is presumed that the majority of human settlements would have been focused along these former shorelines. At approximately 6500 BCE the climate had warmed considerably since the recession of the glaciers and the environment had grown more similar to the present day. By approximately 4500 BCE, evidence exists from southern Ontario for the utilization of native copper, i.e., naturally occurring pure copper metal (Ellis 2013:42). The recorded origin of this material along the north shore of Lake Superior indicates the existence of extensive exchange networks across the Great Lakes basin.

At approximately 3500 BCE, the isostatic rebound of the North American plate following the melt of the Laurentide glacier had reached a point which significantly affected the watershed of the Great Lakes basin. Prior to this, the Upper Great Lakes had drained down the Ottawa Valley via the French-Mattawa River valleys. Following this shift in the watershed, the drainage course of the Great Lakes basin had changed to its present course. This also prompted a significant increase in water-level to approximately modern levels (with a brief high-water period); this change in water levels is believed to have occurred catastrophically (Stewart 2013:28-30). This change in geography coincides with the earliest evidence for cemeteries (Ellis 2013:46). By 2500 BCE, the earliest evidence exists for the construction of fishing weirs (Ellis et al. 1990: Figure 4.1). Construction of these weirs would have required a large amount of communal labour and are indicative of the continued development of social organization and communal identity. The large-scale procurement of food at a single location also has significant implications for permanence of settlement within the landscape. This period is also marked by further population increase and by 1500 BCE evidence exists for substantial permanent structures (Ellis 2013:45-46).

By approximately 950 BCE, the earliest evidence exists for populations using ceramics. Populations are understood to have continued to seasonally exploit natural resources. This advent of ceramic technology correlated, however, with the intensive exploitation of seed foods such as goosefoot and knotweed as well as mast such as nuts (Williamson 2013:48). The use of ceramics implies changes in the social organization of food storage as well as in the cooking of food and changes in diet. Fish also continued to be an important facet of the economy at this time. Evidence continues to exist for the expansion of social organization (including hierarchy), group identity, ceremonialism (particularly in burial), interregional exchange throughout the Great Lakes basin and beyond, and craft production (Williamson 2013:48-54).

By approximately 550 CE, evidence emergences for the introduction of maize into southern Ontario. This crop would have initially only supplemented Indigenous people's diet and economy (Birch and Williamson 2013:13-14). Maize-based agriculture gradually became more important to societies and by approximately 900 CE permanent communities emerge which are primarily focused on agriculture and the storage of crops, with satellite locations oriented toward the procurement of other resources such as hunting, fishing, and foraging. By approximately 1250 CE, evidence exists for the common cultivation of historic Indigenous cultigens, including maize, beans, squash, sunflower, and tobacco. The extant archaeological record demonstrates many cultural traits similar to historical Indigenous nations (Williamson 2013:55).

1.3.3 Registered Archaeological Sites and Surveys

In Canada, archaeological sites are registered within the Borden system, a national grid system designed by Charles Borden in 1952 (Borden 1952). The grid covers the entire surface area of Canada and is divided into major units containing an area that is two degrees in latitude by four degrees in longitude. Major units are designated by upper case letters. Each major unit is subdivided into 288 basic unit areas, each containing an area of 10 minutes in latitude by 10 minutes in longitude. The width of basic units reduces as one moves north due to the curvature of the earth. In southern Ontario, each basic unit measures approximately 13.5 kilometres east-west by 18.5 kilometres north-south. In northern Ontario, adjacent to Hudson Bay, each basic unit measures approximately 10.2 kilometres east-west by 18.5 kilometres north-south. Basic units are designated by lower case letters. Individual sites are assigned a unique, sequential number as they are registered. These sequential numbers are issued by the MCM who maintain the *Ontario Archaeological Sites Database*. The study area under review is within Borden Block AhHc.

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 1990b). The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The MCM 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 *Ontario Archaeological Sites Database* has shown that there are 63 archaeological sites registered within a one-kilometre radius of the study area; these are summarized in Table 2. Of these, 30 sites are within 300 metres of the study area (Government of Ontario 2022a), the closest of which is 250 metres west of the study area, and Euro-Canadian homestead and mill (AhHc-49).

Table 2: Registered Sites within One Kilometre of the Study Area

Borden Number	Site Name	Cultural Affiliation	Site Type
AhHc-6	Dry Lake	Indigenous Late Woodland	Village
AhHc-18	Hidden Valley	Indigenous Pre-Contact, Post-Contact	Homestead, village
AhHc-49	Boida	Euro-Canadian	Homestead, mill
AhHc-51	Boida 2	Indigenous Early Woodland	Findspot
AhHc-122	CBM 3	Indigenous Middle Woodland	Findspot
AhHc-123	Barber	Indigenous Middle Woodland	Scatter
AhHc-140	Cedar Creek Location 1	Indigenous Pre-Contact	Scatter
AhHc-142	Not applicable (n/a)	Indigenous, Early Archaic	Findspot
AhHc-143	n/a	Indigenous Pre-Contact	Scatter
AhHc-144	n/a	Indigenous, Late Archaic	Findspot
AhHc-263	Site 4	Indigenous Pre-Contact	Unknown

Borden Number	Site Name	Cultural Affiliation	Site Type
AhHc-264	Bridge	Indigenous, Early Archaic, Late Woodland	Camp/campsite
AhHc-267	Whale site	Indigenous, Late Archaic	Unknown
AhHc-268	Swan site	Indigenous Pre-Contact	Unknown
AhHc-269	Phoenix site	Indigenous Pre-Contact	Unknown
AhHc-270	Hedge site	Indigenous Pre-Contact	Camp/campsite, unknown
AhHc-274	Wet River site	Indigenous, Middle Woodland	Camp/campsite
AhHc-275	Beaver site	Indigenous, Late Archaic	Unknown
AhHc-276	Sol site	Indigenous, Middle Woodland	Camp/campsite
AhHc-277	Luna site	Indigenous Pre-Contact	Camp/campsite, unknown
AhHc-278	Wave site	Indigenous Pre-Contact	Camp/campsite
AhHc-279	Star site	Indigenous Pre-Contact	Camp/campsite
AhHc-280	Zeus site	Indigenous, Late Woodland	Camp/campsite
AhHc-281	Cove site	Indigenous, Early Archaic	Unknown
AhHc-285	Rim site	Indigenous, Early Archaic	Unknown
AhHc-286	Wood site	Indigenous, Early Archaic	Unknown
AhHc-287	Bowser site	Indigenous, Late Archaic	Camp/campsite
AhHc-288	Ladybug site	Indigenous Pre-Contact, Post-Contact	Unknown
AhHc-289	Lobster site	Indigenous, Early Archaic	Unknown
AhHc-290	Heron site	Indigenous Pre-Contact	Camp/campsite
AhHc-291	Leopold site	Indigenous Pre-Contact	Unknown
AhHc-292	Lynx site	Indigenous, Early Archaic	Unknown
AhHc-293	Horn site	Indigenous, Late Woodland	Unknown
AhHc-294	Dawn site	Indigenous, Early Archaic	Unknown
AhHc-295	Dusk site	Indigenous, Middle Archaic	Unknown
AhHc-296	Elephant site	Indigenous Pre-Contact	Camp/campsite
AhHc-297	Rattlesnake site	Indigenous Pre-Contact	Camp/campsite
AhHc-298	Valley site	Indigenous Pre-Contact	Camp/campsite
AhHc-300	Formerly part of Site 29 (Wood site)	Indigenous Pre-Contact	Camp/campsite
AhHc-360	Location 1	Indigenous Pre-Contact	Camp/campsite, scatter
AhHc-361	Location 8	Indigenous Archaic, Late Woodland	Camp/campsite
AhHc-362	Location 9	Indigenous Pre-Contact	Scatter
AhHc-363	Location 11	Indigenous Early Archaic, Late Archaic, Late Woodland	Camp/campsite, scatter
AhHc-364	Location 13	Indigenous Middle Archaic	Camp/campsite, scatter
AhHc-365	Location 14	Indigenous Early Archaic	Findspot

Borden Number	Site Name	Cultural Affiliation	Site Type
AhHc-366	Location 15	Indigenous Early Archaic, Middle Archaic, Late Archaic	Camp/campsite
AhHc-367	Location 17	Indigenous Late Archaic	Camp/campsite
AhHc-368	Location 18	Indigenous Late Archaic	Camp/campsite
AhHc-369	Location 19	Indigenous Late Archaic, Early Woodland	Camp/campsite
AhHc-370	Location 20	Indigenous Late Archaic, Late Woodland	Camp/campsite
AhHc-371	Location 21	Indigenous Pre-Contact	Scatter
AhHc-372	Location 22	Indigenous Early Archaic, Middle Archaic, Late Archaic	Camp/campsite
AhHc-373	Location 29	Indigenous Woodland	Village
AhHc-374	Location 30	Indigenous Woodland	Village
AhHc-375	Location 10	Indigenous Archaic	Scatter
AhHc-376	Location 23	Indigenous Late Archaic	Hunting loss
AiHc-175	CBM1	Indigenous Late Archaic	Findspot
AiHc-176	CBM 2	Indigenous Late Paleo-Indian, Early Archaic	Findspot
AiHc-222	Brown	Euro-Canadian	Homestead
AiHc-509	Brown's Cabin	Euro-Canadian	Cabin
AiHc-510	IF379-322-01	Indigenous Middle Woodland	Hunting loss
AiHc-563	Location 6	Indigenous Pre-Contact	Campsite, scatter
AiHc-564	Location 7	Indigenous Late Archaic, Woodland, Post-Contact; Euro-Canadian	Campsite, homestead, scatter

In addition to the above, an examination of the *Ontario Public Register of Archaeological Reports* (Government of Ontario 2022b) notes one archaeological assessment completed within 50 metres of the study area. In 2019, Archaeological Research Associates Ltd. (ARA) undertook Stage 1-2 archaeological assessment of lands immediately northwest of the current study area under Project Information Form (PIF) number P007-0919-2018 (ARA 2019). The Stage 1 identified areas of archaeological potential and Stage 2 assessment was recommended. No archaeological resources were identified during the Stage 2 assessment and no further work was recommended (ARA 2019).

1.4 ARCHAEOLOGICAL POTENTIAL

Archaeological potential is established by determining the likelihood that archaeological resources may be present within a study area. Stantec applied archaeological potential criteria commonly used by the MCM (Government of Ontario 2011) to determine areas of archaeological potential within the study area. These variables include proximity to registered 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. However, it is worth noting that extensive land disturbance can eradicate archaeological potential (Government of Ontario 2011).

Potable water is the single most important resource for any extended human occupation or settlement and since water sources in Ontario have remained relatively stable over time, proximity to drinkable water is regarded as a useful index for the evaluation of archaeological site potential. In fact, distance to water is one of the most commonly used variables for predictive modeling of archaeological site locations. 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.

As discussed above, 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 site location and type to varying degrees. The MCM categorizes water sources in the following manner:

- Primary water sources: lakes, rivers, streams, and 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, and shorelines of drained lakes or marshes.
- Accessible or inaccessible shorelines: high bluffs, swamp or marshy lake edges, and sandbars stretching into marsh.

Based on mapping, the study area is located close to potential water sources (see Section 1.3.1), including Cedar Creek, approximately 350 metres southeast of the study area. Additional secondary tributaries and intermittent creeks exist near the study area. It is also important to note that the study area is near enough to the Nith River (5.5 kilometeres) and Grand River waterway (nine kilometres) that past interaction with these major travel and trade conduits would have been likely. Soil texture can be an important determinant of past settlement, usually in combination with other factors such as topography. As indicated previously, soils within the study area are primarily various compositions of silt, sand, and clay loams, which would have been suitable for Indigenous agriculture. The proximity of these features meets the MCM's defined characteristics for archaeological potential.

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 1990c) or property that local histories or informants have identified with possible historical events. A review of the properties designated under the *Ontario Heritage Act*, demonstrates that there are six properties within five kilometres of the study area. This includes Detweiler Meeting House, a religious facility (Ontario Heritage Trust 2022a), a stone outbuilding used as a cheese factory and stone smokehouse (Ontario Heritage Trust 2022b), and four single dwelling residences: Elmcroft House (Ontario Heritage Trust 2022c), Harmony Grove (Ontario Heritage Trust 2022d), Hilldale (Ontario Heritage Trust 2022e), and 2270 Alps Road (Ontario Heritage Trust 2022f). Moreover, the existing home located at 2509 Cedar Creek Road is a Listed Part IV Provincially Designated Heritage Building and is described as an 1840 farmstead.

Late 19th century historical mapping demonstrates that the study area, and the surrounding region, was occupied by Euro-Canadian farmers by the late 19th century. Moreover, the study area is in close

proximity to early road and rail transportation routes. Much of the established road and rail networks and agricultural settlement from the 19th century is still visible today.

A review of the *Ontario Archaeological Sites Database* identified 60 Indigenous sites and four Euro-Canadian sites within one kilometre of the study area (Government of Ontario 2022a). These sites range from the Late Paleo-Indian to Post-Contact time periods and represent a range of site types from findspots to village sites.

When the above listed criteria are applied, the study area is considered to retain potential for Indigenous and Euro-Canadian archaeological resources. Thus, in accordance with Section 1.3.1 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), Stage 2 archaeological assessment is recommended in areas of archaeological potential.

1.5 EXISTING CONDITIONS

The study area consists of the property at 2509 Cedar Creek Road, in the Township of North Dumfries, Regional Municipality of Waterloo, Ontario. The study area comprises approximately 17.92 hectares, and is a mix of agricultural field, manicured lawn, and scrubland, as well as existing laneways and buildings (see Figure 2).

2.0 FIELD METHODS

The Stage 2 archaeological assessment for the study area was conducted under PIF number P394-0089-2022 issued to Sarah Henderson, MA by the MCM. The study area comprises approximately 17.92 hectares, and is a mix of agricultural field, manicured lawn, and scrubland, as well as existing laneways and buildings. Prior to the start of the Stage 2 archaeological assessment, the client provided AutoCAD files which defined the study area. These files were then geo-referenced by Stantec's Geographic Information Services (GIS) team and a digital file (i.e., a shape file) was created of the Project's study area. The digital file was uploaded to handheld devices for use in the field.

During the Stage 2 archaeological assessment, field, weather, and lighting conditions were suitable for the identification and recovery of archaeological resources (Table 3). At no time was the archaeological assessment conducted when the field, weather, or lighting conditions were detrimental to the recovery of archaeological material. Photography in Section 8.1 of this report confirms that field conditions met the requirements for Stage 2 archaeological assessment, as per the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Section 7.8.6 Standard 1.a.; Government of Ontario 2011). Figure 6 provides an illustration of the Stage 2 assessment methods, as well as photograph locations and directions. A map illustrating the exact site locations and UTM coordinates recorded during the Stage 1-2 assessment are provided in the Supplementary Documentation to this report.

Table 3: Weather and Field Conditions

Date	Field Director	Weather	Soil conditions	Activity
17 May 2022	Nathan Ng (R1223)	Mainly sunny, warm	Dry	Pedestrian survey; Photo documentation
16 June 2022	Krista Lane (R382)	Sunny, hot	Dry, friable	Pedestrian and test pit survey
17 June 2022	Krista Lane (R382)	Sunny, hot	Dry, friable	Pedestrian and test pit survey

Approximately 85.47% of the study area consists of active agricultural field and was subject to pedestrian survey in accordance with Section 2.1.1 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Agricultural fields were recently ploughed to a depth to provide total topsoil exposure and allowed to weather to improve visibility. Ground surface visibility during the pedestrian survey was greater than 80% and provided for adequate conditions for the identification of archaeological resources. Pedestrian survey was conducted at five metre intervals unless archaeological resources were identified. Photos 1 to 4 illustrate the pedestrian survey of the study area.

When archaeological resources were identified during the pedestrian survey, the survey transect was decreased to a one metre interval and spanned a minimum 20 metre radius around the identified artifact. This approach was used to determine if the artifact was an isolated find or part of a larger surface scatter, as per Section 2.1.1 Standard 7 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The identified artifact was collected, and a Universal Transverse Mercator (UTM) coordinate was taken as per Section 2.1 Standard 4.a of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The Stage 2 surface collection was conducted according to Stage 3 controlled surface pickup (CSP) standards, as

allowed by the *Fieldwork: Stage 2 – Frequently Asked Questions* document issued by the MCM (Government of Ontario 2016). If the identified archaeological resource comprised a single isolated find (see Section 3.0 for record of finds for each archaeological location), no further UTM coordinates were required or recorded. The UTM coordinates were taken using ArcGIS Collector powered by ESRI, customized for archaeological survey and assessment, on a handheld mobile device paired with an R1 Receiver to an accuracy of less than one metre. The UTM coordinates are located in zone 17T and are based upon the North American Datum 1983 (NAD83). Maps illustrating the exact site locations and a listing of UTM coordinates recorded during the assessment are provided in the Supplementary Documentation to this report.

Approximately 3.86% of the site consists of manicured lawn and scrubland that was inaccessible for ploughing and was subject to test pit survey (Photos 5 and 7). Of this, approximately 1.01% of the total study area was test pit surveyed at a five-metre interval in accordance with Section 2.1.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The excavated test pits were at least 30 centimetres in diameter and excavated five centimetres into sterile subsoil. The test pits were examined for stratigraphy, cultural features, or evidence of fill. The excavated soil was screened through six-millimetre mesh hardware cloth to facilitate the recovery of artifacts and then used to backfill the pit. Around the existing residential building and laneways, some test pit stratigraphy provided evidence of previous disturbance, characterized by compacted gravel overlain with sod. When evidence of disturbance was encountered, the test pit interval was increased to 10 metres to confirm disturbance in accordance with Section 2.1.8 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Approximately 2.85% of the total study area was assessed by test pit survey at a 10-metre interval. The initial finds of archaeological resources through test pitting were sufficient to make it clear that Stage 3 archaeological assessment would be necessary, and thus, no further intensification of the study area was undertaken.

Approximately 2.74% of the study area includes steep slope (i.e., greater than 20 degrees) and was not surveyed in accordance with Section 2.1.1 Standard 1.a.iii of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Additionally, approximately 7.93% of the study area was identified as previously disturbed, including a constructed berm (Photo 6), residential buildings and laneways (Photo 8), construction debris (Photo 9), and a buried septic system (Photo 10). While these areas were not surveyed, they were photographically documented to confirm that physical features affected the ability to survey portions of the study area in accordance with Section 7.8.6 Standard 1.b of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

Representatives from interested Indigenous communities participated in the Stage 2 archaeological assessment alongside Stantec archaeological field staff. Additional information on the Indigenous Engagement practices conducted by Stantec during the Stage 2 archaeological assessment is provided in the Record of Indigenous Engagement. The Record of Indigenous Engagement is a separate document submitted to the MCM which may include who was engaged, engagement procedures, dates of engagement, strategies to incorporate community input, and processes for providing results to the community. The Record of Indigenous Engagement is provided as a separate document and does not form a part of the *Ontario Public Register of Archaeological Reports.*

3.0 RECORD OF FINDS

The Stage 2 archaeological assessment was conducted employing the methods described in Section 2.0 of this report. An inventory of the documentary record generated by fieldwork is provided in Table 4. Ten archaeological locations were identified during the Stage 2 survey of the study area. In accordance with Section 7.12 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), Borden numbers were assigned to Location 2 (AhHc-379), Location 4 (AhHc-380), Location 5 (AhHc-381), and Location 10 (AhHc-382).

Maps illustrating exact site locations do not form part of this public report; they may be found in the Supplementary Documentation. An overview of Location 1, Location 2 (AhHc-379), Location 3, Location 4 (AhHc-380), Location 5 (AhHc-381), Location 6, Location 7, Location 8, and Location 9 is illustrated on Tile 1 in Supplementary Documentation. Tile 2 illustrates Location 10 (AhHc-382).

Table 4: Inventory of Documentary Record

Document Type	Current Location of Document Type	Additional Comments
Eight pages of field notes	Stantec office in London, Ontario	In original field book and digital copy in project file
One digitally drawn map	Stantec GIS server in Marham, Ontario	Stored digitally on central GIS server
80 digital photographs	Stantec office in London, Ontario	Stored digitally in project file

The material culture collected during the Stage 2 archaeological survey of the study area is contained in one Bankers box, labeled by location number, Borden number (as applicable), and artifact type. The box will be temporarily housed at the Stantec London office until formal arrangements can be made for a transfer to a MCM collections facility.

3.1 LOCATION 1

Location 1 was identified during the pedestrian survey of a ploughed agricultural field, which yielded one Indigenous biface (Supplementary Documentation Tile 1). The recovered artifact is illustrated on Plate 1 in Section 8.2.

Chert is a naturally occurring mineral found in sedimentary rocks that is a granular crystalline form of quartz, composed of cryptocrystalline and microcrystalline crystals (Eley and von Bitter 1989). Raw material acquisition and procurement strategies have long been theorized in academic literature. Some researchers suggest that raw material choices are purely utilitarian (e.g., Deller 1979; Ellis 1989; Parker 1986a, 1986b), while others suggest non-utilitarian reasons (e.g., Hall 1993; Simmons et al. 1984). Regardless of the reason, chert type identification and their respective quantities within a particular assemblage provide an opportunity to evaluate numerous archaeological variables, including group mobility and sedentism, lithic reduction strategy and technique, transportation, trade, and symbolism.

Chert type identification was accomplished visually using reference materials located in the Stantec London office. The biface from Location 1 is manufactured from Onondaga chert.

Onondaga formation chert is from the Middle Devonian age, with outcrops occurring along the north shore of Lake Erie between Long Point and the Niagara River (Eley and von Bitter 1989). Primary outcrops have also been reported along the banks of the Grand River (Ellis et al. 1990). It is a high-quality raw material frequently utilized by pre-contact people and often found at archaeological sites in southern Ontario. Onondaga chert occurs in nodules or irregular thin beds. It is a dense non-porous rock that may be light to dark grey, bluish grey, brown or black and can be mottled with a dull to vitreous or waxy lustre (Eley and von Bitter 1989).

The recovered biface from Location 1 is complete and measures 51.9 millimetres (mm) in length, 30.4 mm in width, and 9.6 mm in thickness. The biface is not temporally diagnostic.

3.1.1 Location 1 Artifact Catalogue

Table 5 provides the complete artifact catalogue (Cat.) of the Stage 2 assemblage from Location 1.

Table 5: Location 1 Artifact Catalogue

Cat. #	Context	Depth (m)	Artifact	Quantity	Chert	Comment
1	CSP 1	0	Biface	1	Onondaga	Complete; Length (L)= 51.9mm, Width (W) = 30.4mm, Thickness (TH) = 9.6mm.

3.2 LOCATION 2 (AhHc-379)

Location 2 (AhHc-379) was identified during pedestrian survey of the study area (Supplementary Documentation, Tile 1). Location 2 (AhHc-379) is an isolated surface find of a projectile point manufactured from Kettle Point chert. The artifact is illustrated on Plate 2 in Section 8.2.

Kettle Point formation chert is from the Late Devonian age and is situated between the Kettle Point (Late Devonian shales) and the Ipperwash formations (Middle Devonian Limestone). It occurs as submerged outcrops that extend approximately 1,350 metres into Lake Huron (Janusas 1984). Secondary deposits have been reported in Essex County (Janusas 1984) and the Ausable Basin (Eley and Von Bitter 1989). Kettle Point chert can be identified by the presence of a waxy lustre and occurs in a range of colours including brown, grey, and greenish colours, as well as reddish purple and dark blue varieties (Eley and von Bitter 1989). A rusty staining on the surface of artifacts is frequently noted (Fisher 1997).

The recovered projectile point from Location 2 (AhHc-379) is nearly complete and measures 30.7 mm in length, 19.2 mm in width, and 3.6 mm in thickness. The base width is 19.2 mm, the neck width is 12.7 mm, and the haft length is 9.1 mm. Based on observed characteristics, the point has been identified as a Port Maitland projectile point, with slight damage to the base. These points are typical of the Middle Woodland period in southern Ontario, *circa* 2,000 to 1,200 B.P. (Ritchie 1971).

3.2.1 Location 2 (AhHc-379) Artifact Catalogue

Table 6 provides the complete artifact catalogue (Cat.) of the Stage 2 assemblage from Location 2 (AhHc-379).

Table 6: Location 2 (AhHc-379) Artifact Catalogue

Cat. #	Context	Depth (m)	Artifact	Quantity	Chert	Comment
1	CSP 1	0	Projectile point	1	Kettle Point	Nearly complete, Port Maitland point, L=30.7mm, W=19.2mm, TH=3.6mm, Base Width=19.2mm, Neck Width=12.7mm, Haft Length=9.1mm

3.3 LOCATION 3

Location 3 was identified during pedestrian survey of the study area and consists of two utilized fakes of Onondaga chert (Supplementary Documentation, Tile 1). The artifacts are illustrated on Plate 3 in Section 8.2.

Utilized flakes are fragments of chipping detritus that show evidence of use and are considered informal expedient tools that were discarded after use. One utilized flake exhibits use wear on the lateral edge, ventral side, while the other exhibits use wear on the lateral edge, dorsal side. Expedient tools, such as utilized flakes and retouched flakes, cannot be used to determine the cultural affiliation or time period of the occupation of a site.

3.3.1 Location 3 Artifact Catalogue

Table 7 provides the complete artifact catalogue (Cat.) of the Stage 2 assemblage from Location 3.

Table 7: Location 3 Artifact Catalogue

Cat. #	Context	Depth (m)	Artifact	Quantity	Chert	Comment
1	CSP 1	0	Utilized flake	1	Onondaga	Use wear on lateral edge, ventral side
1	CSP 2	0	Utilized flake	1	Onondaga	Use wear on lateral edge, dorsal side

3.4 LOCATION 4 (AhHc-380)

Location 4 (AhHc-380) is an isolated surface find identified during pedestrian survey of the study area; a projectile point manufactured from Onondaga chert (Supplementary Documentation, Tile 1). The artifact is illustrated on Plate 4 in Section 8.2.

The recovered projectile point from Location 4 (AhHc-380) is incomplete and measures 30.6 mm in length, 31.8 mm in width, and 7.9 mm in thickness. The base width is 23.3 mm, the neck width is 22.3 mm, and the haft length is 10.6 mm. Based on observed characteristics, the point has been identified as a

Brewerton Corner-Notched point. These points are typical of the Middle Archaic in most of eastern North America, *circa* 2500 BCE (Ritchie 1971).

3.4.1 Location 4 (AhHc-380) Artifact Catalogue

Table 8 provides the complete artifact catalogue (Cat.) of the Stage 2 assemblage from Location 4 (AhHc-380).

Table 8: Location 4 (AhHc-380) Artifact Catalogue

Cat. #	Context	Depth (m)	Artifact	Quantity	Chert	Comment
1	CSP 1	0	Projectile point	1	Onondaga	Missing tip and partial midsection, Brewerton Corner-Notched point, L=30.6*mm, W=31.8mm, TH=7.9mm, Base Width=23.3mm, Neck Width=22.3mm, Haft Length=10.6mm

*Indicates measurement taken from incomplete portion.

3.5 LOCATION 5 (AhHc-381)

Location 5 (AhHc-381) was identified during pedestrian survey of the study area (Supplementary Documentation, Tile 1). Location 5 (AhHc-381) is an isolated surface find, a projectile point manufactured from Onondaga chert. The artifact is illustrated on Plate 5 in Section 8.2.

The recovered projectile point from Location 5 (AhHc-381) is complete and measures 29.7 mm in length, 23.9 mm in width, and 7.4 mm in thickness. The base width is 23.9 mm, the neck width is 17.6 mm, and the haft length is 11.2 mm. Based on observed characteristics, the point has been identified as a Brewerton Eared point. This type of point is part of the Brewerton Complex, which began in the late Middle Archaic period, and continued through to the Late Archaic. Similar Brewerton Eared points have been radiocarbon dated to 4795 +/- 230 BP or approximately 3650 BCE (Funk 1993).

3.5.1 Location 5 (AhHc-381) Artifact Catalogue

Table 9 provides the complete artifact catalogue (Cat.) of the Stage 2 assemblage from Location 5 (AhHc-381).

Table 9: Location 5 (AhHc-381) Artifact Catalogue

Cat. #	Context	Depth (m)	Artifact	Quantity	Chert	Comment
1	CSP 1	0	Projectile point	1	Onondaga	Complete, Brewerton Eared point, L=29.7mm, W=23.9mm, TH=7.4mm, Base Width=23.9mm, Neck Width=17.6mm, Haft Length=11.2mm

3.6 LOCATION 6

Location 6 was identified during pedestrian survey of the study area and comprises two pieces of chipping detritus made of Onondaga chert (Supplementary Documentation, Tile 1). The artifacts are illustrated on Plate 6 in Section 8.2.

The recovered chipping detritus was subject to morphological analysis following the classification scheme described by Lennox et al. (1986:79-81) and expanded upon by Fisher (1997:41-49). Primary flakes feature dorsal surfaces that are either entirely covered with cortex or have substantial visible cortex present. Secondary flakes can also have a trace of cortex on the dorsal surface. Both varieties, along with shatter, are associated with early stages of lithic reduction as chert cores or flint nodules are converted into blanks or preforms. Tertiary flakes and micro flakes are produced during the further reduction of blanks and preforms into formal tool shapes. They are the result of precise flake removal through pressure flaking, where the maker applies direct pressure onto a specific part of the tool in order to facilitate flake removal. Pressure flaking generally produces smaller, thinner flakes than does percussion flaking. Broadly, primary, secondary, and shatter flakes indicate early stages of lithic reduction, while tertiary and micro flakes indicate later stages of the reduction sequence. Of the two pieces of chipping detritus recovered from Location 6, one was a tertiary flake, suggesting later stages of the reduction sequence; the other was a broken flake.

3.6.1 Location 6 Artifact Catalogue

Table 10 provides the complete artifact catalogue (Cat.) of the Stage 2 assemblage from Location 6.

Table 10: Location 6 Artifact Catalogue

Cat. #	Context	Depth (m)	Artifact	Quantity	Chert	Comment
1	CSP 1	0	Chipping detritus	1	Onondaga	Broken flake
1	CSP 2	0	Chipping detritus	1	Onondaga	Tertiary flake

3.7 LOCATION 7

Location 7 was identified during the pedestrian survey of a ploughed agricultural field, which yielded one biface and one piece of chipping detritus, both made of Onondaga chert (Supplementary Documentation, Tile 1). The recovered artifacts are illustrated on Plate 7 in Section 8.2.

The recovered biface from Location 7 represents the tip and partial midsection of a biface, and measures 28.2 mm in length, 23.3 mm in width, and 4.3 mm in thickness. The piece of chipping detritus is a tertiary flake, representing late-stage reduction processes. Neither artifact is temporally diagnostic.

3.7.1 Location 7 Artifact Catalogue

Table 11 provides the complete artifact catalogue (Cat.) of the Stage 2 assemblage from Location 7.

Table 11: Location 7 Artifact Catalogue

Cat. #	Context	Depth (m)	Artifact	Quantity	Chert	Comment
1	CSP 1	0	Biface	1	Onondaga	Tip and partial midsection, L=28.2*mm, W=23.3*mm, TH=4.3*mm
2	CSP 2	0	Chipping detritus	1	Onondaga	Tertiary flake

*Indicates measurement taken from incomplete portion.

3.8 LOCATION 8

Location 8 was identified during pedestrian survey of the study area and comprises one piece of chipping detritus made of Kettle Point chert (Supplementary Documentation, Tile 1). The artifact is illustrated on Plate 8 in Section 8.2. The chipping detritus recovered from Location 8 is morphologically a tertiary flake, suggesting later stages of the reduction sequence.

3.8.1 Location 8 Artifact Catalogue

Table 12 provides the complete artifact catalogue (Cat.) of the Stage 2 assemblage from Location 8.

Table 12: Location 8 Artifact Catalogue

Cat. #	Context	Depth (m)	Artifact	Quantity	Chert	Comment
1	CSP 1	0	Chipping detritus	1	Kettle Point	Tertiary flake

3.9 LOCATION 9

Location 9 was identified during pedestrian survey of the study area and comprises one piece of chipping detritus made of Onondaga chert, and one utilized flake made of indeterminate chert (Supplementary Documentation, Tile 1). The artifacts are illustrated on Plate 9 in Section 8.2.

The chipping detritus recovered from Location 9 is morphologically a tertiary flake, suggesting later stages of the reduction sequence. The utilized flake exhibits use wear on both lateral edges, along the dorsal side. Neither artifact is temporally diagnostic.

3.9.1 Location 9 Artifact Catalogue

Table 13 provides the complete artifact catalogue (Cat.) of the Stage 2 assemblage from Location 9.

Table 13: Location 9 Artifact Catalogue

Cat. #	Context	Depth (m)	Artifact	Quantity	Chert	Comment
1	CSP 1	0	Chipping detritus	1	Onondaga	Tertiary flake
2	CSP2	0	Utilized flake	1	Indeterminate	Use wear on both lateral edges, dorsal side

3.10 LOCATION 10 (AhHc-382)

3.10.1 Indigenous Component

Location 10 (AhHc-382) was identified during test pit survey of the study area (Supplementary Documentation, Tile 2. The Indigenous component of Location 10 (AhHc-382) comprises one biface, made of Onondaga chert from Test Pit # 9. The artifact is illustrated on Plate 10 in Section 8.2. The recovered biface from Location 10 (AhHc-382) is incomplete, representing the base, and measures 13.7 mm in length, 16.7 mm in width, and 4.7 mm in thickness. The biface is not temporally diagnostic.

3.10.2 Euro-Canadian Component

A total of 95 Euro-Canadian artifacts was recovered from Location 10 (AhHc-382) from 28 positive test pits in an area measuring 100 metres (north-south) by 35 metres (east-west). A summary of Euro-Canadian artifacts recovered is provided in Table 14. Maps indicating the results of the test unit excavations as they pertain to recovered Euro-Canadian artifacts are included in Tile 2 of the Supplementary Documentation to this report. A sample of the Euro-Canadian artifacts recovered from the Stage 2 assessment of Location 10 (AhHc-382) is depicted in Plates 11 to 14 in Section 8.2.

Table 14: Location 10 (AhHc-382) Euro-Canadian Artifact Summary

Artifact	Frequency	%
Ceramic	144	60.00%
Household	55	22.92%
Structural	32	13.33%
Personal	5	2.08%
Metal	3	1.25%
Horse hardware	1	0.42%
Total	**240**	**100.00%**

3.10.2.1 Ceramic Artifacts

A total of 144 ceramic artifacts was recovered during the Stage 2 assessment of Location 10 (AhHc-382). A summary of the ceramic assemblage by ware type is provided in Table 15. A sample of ceramic artifacts is illustrated in Plate 11.

Table 15: Ceramic Assemblage by Ware Type

Ceramic Artifacts	Frequency	%
Yellowware	92	63.89%
Whiteware	17	11.81%
Ironstone	15	10.42%
Utilitarian	13	9.03%

Ceramic Artifacts	Frequency	%
Pearlware	4	2.78%
Stoneware	2	1.39%
Ceramic, undetermined	1	0.69%
Total	**144**	**100.00%**

A breakdown of ceramic assemblage by decorative style is provided in Table 16.

Table 16: Ceramic Assemblage by Decorative Type

Ceramic Artifacts	Frequency	%
Yellowware	91	63.19%
Ironstone, undecorated	15	10.42%
Whiteware, undecorated	13	9.03%
Earthenware, red	13	9.03%
Whiteware, transfer printed	2	1.39%
Pearlware, edged	2	1.39%
Pearlware, moulded	2	1.39%
Whiteware, flow transfer printed	1	0.69%
Whiteware, edged	1	0.69%
Yellowware, banded	1	0.69%
Stoneware	1	0.69%
Stoneware, salt-glazed	1	0.69%
Ceramic, undetermined	1	0.69%
Total	**144**	**100.00%**

Yellowware

Yellowware is partially vitrified earthenware used mostly for food preparation, storage and toiletwares. It is made from naturally buff coloured clay and generally has a clear glaze (Sussman 1997). Yellowware was manufactured circa 1840 to present and was at its peak from 1870 to 1900 (Saint Mary's University 2013). Ninety-one pieces of undecorated yellowware were collected from Location 10 (AhHc-382), all of unknown function. One additional piece of yellowware of indeterminate function has brown slip band decoration.

Whiteware

Whiteware is a variety of refined earthenware with a near-colourless glaze. By the 1830s it had replaced earlier, near-white ceramics such as pearlware and creamware. Early whiteware paste tends to be porous but becomes more vitrified later in the 19th century (Adams 1994). A total of 17 pieces of whiteware of was recovered from Location 10 (AhHc-382), the majority of which (n=13) is undecorated. Most of these were of unknown function, due to the small size of the fragments. One piece of transfer printed whiteware

was determined to derive from a cup, while one piece of undecorated whiteware was determined to derive from flatware.

Early transfer printed whiteware often has thick lines because of the paper using during the transfer of pattern from paper to ceramic. Later transfer printed whiteware was done using tissue paper, which allowed for shading and finer line details, or oil and a sheet of glue to create a design with little dots (Stelle 2001). Transfer printing was popular throughout the 19th century. Before the 1830s, blue was the most common colour used. During the 1830s and 1840s other colours, such as brown, black, red, green, and purple, became popular. Between 1850 and 1890 only blue, black, and brown were popular, with a variety of colour becoming popular again in the late 19th century (Adams 1994). Two pieces of transfer decorated whiteware were collected from Location 10 (AhHc-382). Both had purple patterns, exhibiting linear and scroll decorations and foliage, suggesting a manufacturing date between 1830s and 1840s.

Flow transfer printing is a variation of transfer printing in which the pigment, primarily blue, is allowed to flow into the glaze resulting in a less crisp pattern. This process was popular in the middle of the 19th century and was revived again in the 1890s (Adams 1994). One piece of flow transfer printed whiteware was recovered from Location 10 (AhHc-382), exhibiting blue foliage designs. The recovered fragment comes from flatware of unknown function.

Edged wares are created by molding the rim then applying colour over top. The practice of molding and colouring the edges of tableware began in the late 18th century and remained popular until the 1870s. The earliest examples had scalloped or undulating edges but these decreased in popularity after 1840 (Adams 1994). Blue was the most common colour until the 1830s, with occasional green. Red was introduced at that time, although blue remained the dominant colour throughout (Adams 1994). One piece of blue edged whiteware was recovered from Location 10 (AhHc-382), of indeterminate function with a blue, shell edge decoration.

Ironstone

Ironstone, also known as white granite or stone china, is a ceramic classified between earthenware and porcelain, with thick vitrified white paste, a background colour of white to bluish gray tint and a thick clear glasslike glaze (Florida Museum of Natural History 2022). It was introduced in the 1840s for tablewares, kitchenwares and toiletwares and became the most popular tableware ceramic by the 1870s and 1880s (Saint Mary's University 2013). A total of 15 undecorated fragments of ironstone was recovered from Location 10 (AhHc-382).

Utilitarian

Earthenware vessels, or utilitarian wares, are red or buff coloured and were often lead glazed. In Ontario, earthenwares were manufactured in the early 19th century with a decline by the end of the 19th century as other material, such as glass, became more popular (Adams 1994). Thirteen fragments of red earthenware were collected from Location 10 (AhHc-382). The majority of fragments had brown glaze and are of indeterminate function.

Pearlware

Pearlware can be easily identified by a bluish glaze that appears along footing crevices because of the addition of cobalt to the glaze. Pearlware first came into production in 1779 with its decline in the 1830s (Adams 1994). Two pieces of edged pearlware with a green, shell edge decoration, and two pieces of moulded pearlware with a basket weave and rope decoration, were recovered from Location 10 (AhHc-382).

The practice of moulding the edges of tableware began in the late 18th century and remained popular until the 1870s. The earliest examples had scalloped or undulating edges. Scalloped edges decreased in popularity after 1840. Blue was the most common colour until the 1830s, with occasional green. Red was introduced at that time, although blue remained the dominant colour throughout (Adams 1994). Edged wares are created by moulding the rim then applying colour over top (Adams 1994).

Stoneware

Stoneware has vitrified stone-like paste due to the high temperatures used to fire the pottery. The paste colours vary from white, gray, and tan and are generally quite thick and durable. A common glaze on stoneware is salt-glazed, which is achieved by introducing salt to the kiln during the firing process (Maryland Archaeological Conservation Lab 2002). Stoneware was made in Ontario from 1849 onwards (Adams 1994). One fragment of stoneware was recovered from Location 10 (AhHc-382), from hollowware vessels with a brown glaze

One additional hollowware fragment of salt-glazed stoneware was recovered from Location 10 (AhHc-382), with a brown glaze on the exterior surface. Salt-glazing was introduced as early as the 18th century, gaining popularity in the 19th century, before being replaced by metal and glass containers in the early 20th century (Maryland Archaeological Conservation Lab 2022).

Undetermined

Those ceramic artifacts which could not be positively identified by type have been classified as ‘undetermined’ for the sake of inclusion in this study. One undetermined ceramic fragment was recovered from Location 10 (AhHc-382).

3.10.2.2 Household Artifacts

Fifty-five household artifacts were recovered during the Stage 2 assessment at Location 10 (AhHc-382), consisting of bottle glass, faunal remains, coal, and miscellaneous glass fragments. A summary of artifacts is provided in Table 17. Plate 12 illustrates a sample of the household artifacts from the site.

Table 17: Summary of Household Artifacts at Location 10 (AhHc-382)

Artifact	Frequency	%
Glass, bottle	25	45.45%
Faunal remains	19	34.55%
Glass, undetermined	6	10.91%

Coal/clinker	2	3.64%
Glass, chimney/lamp	1	1.82%
Glass, white	1	1.82%
Utensil	1	1.82%
Total	**55**	**100.00%**

Twenty-five fragments of bottle glass were recovered at Location 10 (AhHc-382), including 14 fragments of colourless, 5 aqua, 3 amber, 2 amethyst, and 1 dark olive. Bottle glass is generally not narrowly diagnostic and often is simply categorized according to colour. Uncommon prior to the 1870s, clear or colourless glass came into widespread use after the development of automatic bottle manufacturing machines in the early 20th century (Lindsey 2022). Embossing also occurred between 1860 and 1900 (Kendrick 1971). Three fragments from Location 10 (AhHc-382) had embossed text, including, "CON..", "…2…", and "…D". Additional glass fragments recovered from Location 10 (AhHc-382) include one body fragment of a glass lamp, one white glass fragment, four aqua fragments, and two amethyst fragments. They are not temporally diagnostic.

Nineteen faunal remains were recovered from Location 10 (AhHc-382), all from mammals and some exhibit evidence of burning and mending. Other household artifacts include two pieces of coal clinker and an incomplete spoon made of non-ferrous metal. These artifacts are not temporally diagnostic.

3.10.2.3 Structural Artifacts

A total of 32 structural artifacts was recovered from the Stage 2 archaeological assessment of Location 10 (AhHc-382). The artifacts comprise 17 cut nails, 5 pieces of window glass, 4 undetermined nails, 4 wire drawn nails, and 2 wrought nails. Table 18 provides a summary of the structural artifacts, and a sample is illustrated on Plate 13.

Table 18: Summary of Structural Artifacts at Location 10 (AhHc-382)

Artifact	Frequency	%
Nail, cut	17	53.13
Glass, window	5	15.63
Nail, undetermined	4	12.50
Nail, wire drawn	4	12.50
Nail, wrought	2	6.25
Total	**32**	**100.00%**

Nails

Iron nails can be temporally diagnostic. Wrought nails are manufactured by hand and display distinctive facetted or "rose" heads. Shanks are generally square in cross-section with all sides tapering to a point. These were by far the most common variety of nail before the widespread adoption of machine-cut nails in the 1830s (Adams 1994). Machine cut nails were cut from a flat sheet of iron and as a result their shanks have a rectangular cross-section. The head is usually rectangular and was often welded into

place. Invented about 1790, cut nails saw common use from the 1830s until the 1890s (Adams 1994). Wire nails are still in widespread use today, with a round cross-section and round head. First developed in the 1850s, they began to replace the cut nail in the 1890's (Adams 1994). Overall, the nail assemblage from Location 10 (AhHc-382) suggests a period of occupation starting in the mid-1800s, with the repurposing of wrought iron nails, and continuing through the remainder of the 19th century.

Window Glass

Window glass can also be temporally diagnostic. In the 1850s window glass thickness changed dramatically in a large part due to the lifting of the English import tax on window glass in 1850, which taxed glass by weight and encouraged manufacturers to produce thin panes. Thus, most window glass manufactured before 1850 tends to be less than 1.6 mm thick, while later glass is thicker (Kenyon 1980). Of the five recovered pieces of window glass from Location 1, four (80.0%) are thicker than 1.6 mm and one (20.0%) is thinner than 1.6 mm. Although the sample size is small, the window glass assemblage may suggest that the site was occupied during the mid-to-late 19th century, when some windows were being replaced with thicker glass.

3.10.2.4 Personal Artifacts

Five personal artifacts were recovered from Location 10 (AhHc-382), including a button, a slate pencil, a snap fastener, a bowl fragment from a white clay pipe, and a zipper. A sample of personal artifacts in illustrated in Plate 14.

Buttons

Metal buttons were popular in the early 19th century. They were generally thick, had a maker's mark stamped on them and were often used as coat buttons (Adams 1994). The button retrieved from Location 10 (AhHc-382) is metal, heavily corroded, with no makers mark visible. It is not temporally diagnostic.

White Clay Pipes

White clay pipes were a popular item in the 19th century but declined in popularity after 1880 due to the increasing use of cigarettes (Adams 1994). The fragment from Location 10 (AhHc-382) is an undecorated rim fragment and does not have any maker's stamps or other identifiable decoration.

3.10.2.5 Metal

Three metal artifacts recovered from the Stage 2 survey of Location 10 (AhHc-382). All recovered metal artifacts are thin, heavily corroded ferrous metal fragments that may be metal strapping. These artifacts are not narrowly temporally diagnostic.

3.10.2.6 Horse Hardware

One horseshoe nail was recovered from the Stage 2 excavation of Location 10 (AhHc-382). It is not narrowly temporally diagnostic.

3.10.3 Location 10 (AhHc-382) Indigenous Artifact Catalogue

Table 19 provides the complete artifact catalogue (Cat.) of the Indigenous artifacts from Location 10 (AhHc-382).

Table 19: Location 10 (AhHc-382) Indigenous Artifact Catalogue

Cat. #	Context	Depth (m)	Artifact	Quantity	Chert	Comment
96	Test pit 9	0	Biface	1	Onondaga	Base, L=13.7*mm, W=16.7*mm, TH=4.7*mm

*Indicates measurement taken from incomplete portion.

3.10.4 Location 10 (AhHc-382) Euro-Canadian Artifact Catalogue

The complete catalogue for the Euro-Canadian artifacts from Location 10 (AhHc-382) is available in Appendix A.

4.0 ANALYSIS AND CONCLUSIONS

Stantec was retained by the client to conduct Stage 1-2 archaeological assessment of a proposed residential development at 2409 Cedar Creek Road. The Stage 1-2 archaeological assessment was conducted on May 17, June 16, and June 17, 2022. During the Stage 2 survey, ten new archaeological locations were identified.

4.1 LOCATION 1

Location 1 is an isolated surface find, a complete biface manufactured from Onondaga chert. The biface is not temporally diagnostic. Given the isolated nature of the artifact, the cultural heritage value or interest of Location 1 is sufficiently documented and does not fulfill the criteria for Stage 3 archaeological investigation as per Section 2.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

4.2 LOCATION 2 (AhHc-379)

Location 2 (AhHc-379) is an isolated surface find, a nearly complete projectile point manufactured from Kettle Point chert. Based on observed characteristics, the point has been identified as a Port Maitland point. These points are typical of the Middle Woodland period in southern Ontario, *circa* 2,000-1,200 B.P. (Ritchie 1971). Given the isolated nature of the artifact, the cultural heritage value or interest of Location 2 (AhHc-379) is sufficiently documented and does not fulfill the criteria for Stage 3 archaeological investigation as per Section 2.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

4.3 LOCATION 3

Location 3 is a surface find of two utilized flakes made of Onondaga chert. Utilized flakes are fragments of chipping detritus that show evidence of use and are considered informal expedient tools that were discarded after use. Utilized flakes are generally considered to be temporally non-diagnostic other than being produced by Indigenous peoples. Given the lack of low number of non-diagnostic artifacts i, the cultural heritage value or interest of Location 3 is sufficiently documented and does not fulfill the criteria for Stage 3 archaeological investigation as per Section 2.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

4.4 LOCATION 4 (AhHc-380)

Location 4 (AhHc-380) is an isolated surface find, a nearly complete projectile point manufactured from Onondaga chert. Based on observed characteristics, the point has been identified as a Brewerton Corner-Notched point. These points are typical of the Middle Archaic in southern Ontario, *circa* 2500 BCE (Ritchie 1971). Given the isolated nature of the artifact, the cultural heritage value or interest of Location 4 (AhHc-380) is sufficiently documented and does not fulfill the criteria for Stage 3 archaeological

investigation as per Section 2.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

4.5 LOCATION 5 (AhHc-381)

Location 5 (AhHc-381) is an isolated surface find, a complete projectile point manufactured from Onondaga chert. Based on observed characteristics, the point has been identified as a Brewerton Eared point. These points are typical of the Middle Archaic in southern Ontario, *circa* 3650 BCE (Ritchie 1971). Given the isolated nature of the artifact, the cultural heritage value or interest of Location 5 (AhHc-381) is sufficiently documented and does not fulfill the criteria for Stage 3 archaeological investigation as per Section 2.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

4.6 LOCATION 6

Location 6 is a surface find of two pieces of chipping detritus, both made of Onondaga chert. One piece is indicative of tertiary morphology, indicating later stages of the reduction sequence, while the other is broken. Chipping detritus is not temporally diagnostic. Given the low number of non-diagnostic artifacts, the cultural heritage value or interest of Location 6 is sufficiently documented and does not fulfill the criteria for Stage 3 archaeological investigation as per Section 2.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

4.7 LOCATION 7

Location 7 is a surface find of one biface and one piece of chipping detritus, both made of Onondaga chert. Neither are temporally diagnostic. Given the low number of non-diagnostic artifacts, the cultural heritage value or interest of Location 7 is sufficiently documented and does not fulfill the criteria for Stage 3 archaeological investigation as per Section 2.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

4.8 LOCATION 8

Location 8 is a surface find of one piece of chipping detritus, made of Kettle Point chert. Chipping detritus is not temporally diagnostic. Given the low number of non-diagnostic artifacts, the cultural heritage value or interest of Location 8 is sufficiently documented and does not fulfill the criteria for Stage 3 archaeological investigation as per Section 2.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

4.9 LOCATION 9

Location 9 is a surface find of one piece of chipping detritus made of Onondaga chert, and one utilized flake made of indeterminate chert. Neither artifact is temporally diagnostic. Given the low number of non-diagnostic artifacts, the cultural heritage value or interest of Location 9 is sufficiently documented and

does not fulfill the criteria for Stage 3 archaeological investigation as per Section 2.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

4.10 LOCATION 10 (AhHc-382)

4.10.1 Indigenous Artifacts

Location 10 (AhHc-382) was identified during test pit survey at the study area. The Indigenous artifact from Location 10 (AhHc-382) comprises one biface made of Onondaga chert. Despite the isolated nature of the non-diagnostic artifact, the Indigenous component at Location 10 (AhHc-382) is judged to retain cultural heritage value or interest as additional infill test pits were not excavated around the positive test pit which contained the biface, as per Section 2.2 Guideline 2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), thus, Stage 3 archaeological investigation is recommended.

4.10.2 Euro-Canadian Artifacts

The Euro-Canadian artifact assemblage recovered from Location 10 (AhHc-382) comprises of 144 ceramic, 55 household, 32 structural, 5 personal, and 3 metal artifacts, and piece of 1 horse hardware. The ceramic assemblage is dominated by yellowware (63.89%), whiteware (11.81%), and ironstone (10.42%).

Yellowware was manufactured circa 1840 to present and was at its peak from 1870 to 1900 (Saint Mary's University 2013). Whiteware, a variety of refined earthenware, replaced earlier, near-white ceramics by the 1830s (Adams 1994). Ironstone was introduced in the 1840s for tablewares, kitchenwares and toiletwares, and became the most popular tableware ceramic by the 1870s and 1880s (Saint Mary's University 2013). Consequently, the ceramic assemblage is consistent with a mid- to late-19th century period of use. Structural and personal artifacts also support a mid- to late-19th century period of use at the site. The window glass assemblage indicates a likely date of manufacture after 1850, and the cut nails saw common use between 1830 and 1890. Overall, the majority of the Euro-Canadian artifact assemblage indicates a period of use from the mid- to late-19th century. This corresponds to the construction of the residential building at 2509 Cedar Creek, which may have been built as early as the 1840s or 1850s by the Kerr Family.

Location 10 (AhHc-382) represents a 19th century archaeological site with more than 20 artifacts suggesting a period of use to before 1900. As a result, Location 10 (AhHc-382) fulfills the criteria for Stage 3 archaeological investigation as per Section 2.2 Standard 1.c of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) and Section 6 of MCM's 2014 *The Archaeology of Rural Historical Farmsteads* (Government of Ontario 2014).

4.11 PRELIMINARY INDICATION OF STAGE 4 ARCHAEOLOGICAL MITIGATION

This preliminary indication of whether any site could be eventually recommended for Stage 4 archaeological mitigation is required under Section 7.8.3 Standard 2.c. of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). No firm recommendation for or against Stage 4 archaeological mitigation will be made until Stage 3 archaeological assessment has been completed for Location 10 (AhHc-382) whether as a part of the current Project or later. Possible Stage 4 recommendations and a reason are provided in Table 20.

Table 20: Possible Stage 4 Mitigation of Impacts Recommendations

Archaeological Site Name	Borden #	Cultural Affiliation	Possible Stage 4?	Reason
Location 10	AhHc-382	19th century Euro-Canadian	Maybe	Stage 3 assessment may yield additional dateable ceramics and other material which indicate most (80%) of the period of occupation is prior to 1870; Section 3.4.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011)
		Indigenous, indeterminate	Maybe	Stage 3 assessment may yield additional Indigenous material in sufficient quantities or dateable type; Section 3.4 and Section 3.4.1 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011)

5.0 RECOMMENDATIONS

5.1 LOCATION 1

Location 1 retains no further cultural heritage value or interest and does not fulfill the criteria for Stage 3 archaeological investigation as per Section 2.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Therefore, **no further archaeological assessment is recommended for Location 1.**

5.2 LOCATION 2 (AhHc-379)

Location 2 (AhHc-379) retains no further cultural heritage value or interest and does not fulfill the criteria for Stage 3 archaeological investigation as per Section 2.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Therefore, **no further archaeological assessment is recommended for Location 2 (AhHc-379)**

5.3 LOCATION 3

Location 3 retains no further cultural heritage value or interest and does not fulfill the criteria for Stage 3 archaeological investigation as per Section 2.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Therefore, **no further archaeological assessment is recommended for Location 3.**

5.4 LOCATION 4 (AhHc-380)

Location 4 (AhHc-380) retains no further cultural heritage value or interest and does not fulfill the criteria for Stage 3 archaeological investigation as per Section 2.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Therefore, **no further archaeological assessment is recommended for Location 4 (AhHc-380)**

5.5 LOCATION 5 (AhHc-381)

Location 5 (AhHc-381) retains no further cultural heritage value or interest and does not fulfill the criteria for Stage 3 archaeological investigation as per Section 2.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Therefore, **no further archaeological assessment is recommended for Location 5 (AhHc-381)**

5.6 LOCATION 6

Location 6 retains no further cultural heritage value or interest and does not fulfill the criteria for Stage 3 archaeological investigation as per Section 2.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Therefore, **no further archaeological assessment is recommended for Location 6.**

5.7 LOCATION 7

Location 7 retains no further cultural heritage value or interest and does not fulfill the criteria for Stage 3 archaeological investigation as per Section 2.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Therefore, **no further archaeological assessment is recommended for Location 7.**

5.8 LOCATION 8

Location 8 retains no further cultural heritage value or interest and does not fulfill the criteria for Stage 3 archaeological investigation as per Section 2.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Therefore, **no further archaeological assessment is recommended for Location 8.**

5.9 LOCATION 9

Location 9 retains no further cultural heritage value or interest and does not fulfill the criteria for Stage 3 archaeological investigation as per Section 2.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Therefore, **no further archaeological assessment is recommended for Location 9.**

5.10 LOCATION 10 (AhHc-382)

The Stage 2 assessment of Location 10 (AhHc-382) resulted in the recovery of 144 Euro-Canadian artifacts and one Indigenous artifact from 28 test pits. In accordance with Section 2.2. Standard 1.c, and Section 2.2 Guideline 2 for the recovered Indigenous artifact, of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), Location 10 (AhHc-382) retains further cultural heritage value or interest. Therefore, in accordance with Section 7.8.4 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) and Section 6 of MCM's 2014 *The Archaeology of Rural Historical Farmsteads* (Government of Ontario 2014), **Stage 3 archaeological assessment is recommended for Location 10 (AhHc-382).**

The Stage 3 archaeological assessment of Location 10 (AhHc-382) will be conducted according to the procedures outlined in the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) and Section 3 of the MCM's 2014 *The Archaeology of Rural Historical Farmsteads* (Government of Ontario 2014). The Stage 3 archaeological assessment will consist of the hand excavation of Stage 3 test units every five metres in systematic levels and into the first five

centimetres of subsoil. Test unit excavations will be conducted across the entire site limits as defined by the Stage 2 test pit survey data. Additional one-metre test units, amounting to 20% of the grid total, will be placed in areas of interest within the site extent. Any artifacts recovered will be recorded and catalogued by the corresponding grid unit designation. If a subsurface cultural feature is encountered, the plan of the exposed feature will be recorded, and geotextile fabric will be placed over the unit before backfilling the unit. In addition, interested Indigenous communities will be engaged when assessing the cultural heritage value or interest of the site during the Stage 3 archaeological assessment.

5.11 SUMMARY OF RECOMMENDATIONS

No further archaeological assessment is recommended for Location 1, Location 2 (AhHc-379), Location 3, Location 4 (AhHc-380), Location 5 (AhHc-381), Location 6, Location 7, Location 8, and Location 9.

Stage 3 archaeological assessment is recommended for Location 10 (AhHc-382).

The MCM is asked to review the results presented and accept this report into the *Ontario Public Register of Archaeological Reports*.

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

In accordance with Section 7.5.9 of the MTCS' 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), the following standard statements are a required component of archaeological reporting and are provided from the MCM's 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

This report is submitted to the Minister of Tourism, Culture and Sport Industries as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18 (Government of Ontario 1990c). The report is reviewed to make sure 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* (Government of Ontario 1990c) 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 fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeological Reports referred to in Section 65.1 of the *Ontario Heritage Act* (Government of Ontario 1990c).

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* (Government of Ontario 1990c). 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* (Government of Ontario 1990c).

The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (Government of Ontario 2002) requires that any person discovering human remains must notify the police or coroner and the Bereavement Authority of Ontario on behalf of the Ministry of Government and Consumer Service.

Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990c) and may not be altered, or have artifacts removed, except by a person holding an archaeological license.

7.0 BIBLIOGRAPHY AND SOURCES

Adams, Nick. 1994. *Field Manual for Avocational Archaeologists in Ontario*. North York: Ontario Archaeological Society.

Archaeological Research Associates Ltd. 2019. *Stage 1 and 2 Archaeological Assessments, Highway 401 and Waterloo Regional Road 97 (Cedar Creek Road) Underpass Replacement and Interchange Improvements Project, GWP No. 3055-11-00, Township of North Dumfries, Regional Municipality of Waterloo, Part of Lots 29-30, Concession 10-11, Geographic Township of North Dumfries, Waterloo County, Ontario, PIF Number P007-0919-2018*. Report on file, Toronto: Ministry of Citizenship and Multiculturalism.

Barrie, E. G. 1952. *North Dumfries Centennial Address*. Waterloo: Waterloo Historical Society.

Birch, Jennifer and Ronald F. Williamson. 2013. *The Mantle Site: An Archaeological History of an Ancestral Huron Wendat Community*. Lanham: Altamira Press.

Birch, Jennifer. 2015. Current Research on the Historical Development of Northern Iroquoian Societies. *Journal of Archaeological Research* 22(4):263-323.

Borden, Charles E. 1952. A Uniform Site Designation Scheme for Canada. *Anthropology in British Columbia* 3:44-48.

Caston, Wayne A. 1997. Evolution in the Mapping of Southern Ontario and Wellington County. *Wellington County History* 10:91-106.

Census of Canada. 1881. *Census of Canada, 1880-81, Volume III.* Ottawa: Maclean Roger and Co.

Chapman, Lyman John and Donald F. Putnam. 1984. *The Physiography of Southern Ontario*. Third edition. Ontario Geological Survey Special Volume 2. Toronto: Ministry of Natural Resources.

Deller, D. B. 1979. Paleo-Indian Reconnaissance in the Counties of Lambton and Middlesex, Ontario. *Ontario Archaeology* 26: 3-20.

Dunham, Mabel. 1945. *Grand River*. Toronto: McClelland & Stewart Limited.

Ecologistics Limited. 1996. *State of the Resources: Improving the Land Resource Data Base - The Regional Municipality of Waterloo Soil Information Upgrade.* Report prepared for Research Branch, Agriculture and Agri-Food Canada, Pest Management Research Centre, London, Ontario.

Eley, Betty E. and Peter H. von Bitter 1989. *Cherts of Southern Ontario*. Toronto: Royal Ontario Museum.

Ellis, Christopher J. 1989. "The Explanation of Northeastern Paleoindian Lithic Procurement Patterns." In *Eastern Paleoindian Lithic Resource Use*, edited by Christopher J. Ellis and Jonathan C. Lothrop, pp. 139-164. Boulder: Westview Press.

Ellis, Chris J. and Neal Ferris (editors). 1990. *The Archaeology of Southern Ontario to A.D. 1650.* Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5.

Ellis, Chris J., Ian T. Kenyon, and Michael W. Spence. 1990. The Archaic. In Ellis and Ferris 1990, pp. 65-124.

Ellis, Christopher J. 2013. Before Pottery: Paleoindian and Archaic Hunter-Gatherers. In *Before Ontario: The Archaeology of a Province, e*dited by Marit K. Munson and Susan M. Jamieson, pp. 35-47. Montreal and Kingston: McGill-Queen's University Press.

Ferris, Neal. 2009. *The Archaeology of Native-Lived Colonialism: Challenging History in the Great Lakes*. Tucson: University of Arizona Press.

Fisher, Jacqueline A. 1997. *The Adder Orchard Site: Lithic Technology and Spatial Organization in the Broadpoint Late Archaic*. Occasional Publications of the London Chapter, Ontario Archaeological Society, Number 3.

Florida Museum of Natural History. 2022. *Digital Type Collections.* Electronic document: http://www.flmnh.ufl.edu/histarch/gallery_types. Last accessed November 15, 2022.

Funk, Robert E. 1993. *Archaeological Investigations in the Upper Susquehanna Valley, New York State: Volume 1.* Persimmon Press, Buffalo.

Gentilcore, R. Louis and C. Grant Head. 1984. *Ontario's History in Maps*. Toronto: University of Toronto Press.

Government of Canada. 1905. *Indian Treaties and Surrenders from 1680 to 1890.* Two volumes. 1971 Coles reprint. Ottawa: Queen's Printer.

Government of Ontario. 1990a. *Planning Act*, R.S.O. 1990, CHAPTER P.13. Electronic document: https://www.ontario.ca/laws/statute/90p13. Last accessed November 15, 2022.

Government of Ontario. 1990b. *Freedom of Information and Protection of Privacy Act,* R.S.O. 1990, CHAPTER F.31. Electronic document: https://www.ontario.ca/laws/statute/90f31. Last accessed November 15, 2022.

Government of Ontario. 1990c. *Ontario Heritage Act*, R.S.O. 1990, CHAPTER O.18. Electronic document: https://www.ontario.ca/laws/statute/90o18?search=ontario+heritage+act. Last Accessed November 15, 2022.

Government of Ontario. 2002. *Funeral, Burial and Cremation Services Act, 2002,* S.O. 2002, c. 33. Electronic document: https://www.ontario.ca/laws/statute/02f33. Last Accessed November 15, 2022.

Government of Ontario. 2011. *Standards and Guidelines for Consultant Archaeologists***.** Toronto: Ministry of Tourism, Culture and Sport.

Government of Ontario. 2014. *The Archaeology of Rural Historical Farmsteads: A Draft Technical Bulletin for Consultant Archaeologists in Ontario.* Electronic document: http://www.mtc.gov.on.ca/en/archaeology/archaeology_pdfs/The_Archaeology_of_Rural_Historical_Farmsteads.pdf. Last accessed November 15, 2022.

Government of Ontario. 2016. *Fieldwork: Stage 2 – Frequently Asked Questions.* Digital document provided by the MCM.

Government of Ontario. 2022a. *Ontario Archaeological Sites Database*. Electronic database. Last Accessed November 14, 2022.

Government of Ontario. 2022b. *Ontario Public Register of Archaeological Reports*. Electronic database. Last Accessed November 14, 2022.

Hall, Robert L. 1993. "A Pan-Continental Perspective on Red Ocher and Glacial Kame Ceremonialism." In *Lulu Linear Punctuated: Essays in Honor of George Irving Quimby*, edited by R.C. Dunnell and D.K. Grayson, pp. 75-107. Anthropological Papers, Museum of Anthropology, University of Michigan, No. 72.

Harper, Russell. 1950. *The Early History of Haldimand County.* Caledonia: Grand River Sachem.

Harris, Richard and Shulist, Tricia. 2001. Canada's Reluctant Housing Program: The Veterans Land Act, 1942-75. In *Canadian Historical Review, 82, 2, pp. 253-282.*

Hayes, Geoffrey. 1997. *Waterloo County: An Illustrated History*. Waterloo: Waterloo Historical Society.

Heidenreich, Conrad E. 1978. "Huron." In *Handbook of North American Indians, Volume 15, Northeast*, edited by Bruce G. Trigger, pp. 368-388. Washington: Smithsonian Institution Press.

Jaffray, J. P. 1926. *Blazing the Trail in Dumfries*. Waterloo: Waterloo Historical Society.

Janusas, Scarlett E. 1984. Petrological Analysis of Kettle Point Chert and its Spatial and Temporal Distribution in Regional Prehistory. *Mercury Series* Vol 128. Ottawa, National Museums of Canada.

Kendrick, Grace 1971. *The Antique Bottle Collector*. New York: Pyramid Books.

Kenyon, Ian. 1980. Nineteenth Century Notes: Window Glass Thickness. *KEWA* 80-2.

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.

Lennox, P., C. Dodd, and C. Murphy. 1986. *The Wiacek Site: A Late Middleport Component, Simcoe County*. London: Ontario Ministry of Transportation and Communications.

Library and Archives Canada. 1851. *Census of 1851 (Canada East, Canada West, New Brunswick and Nova Scotia.* District 38, Subdistrict 359, Reel C-11754.

Library and Archives Canada. 1861. *Census of 1861 (Canada East, Canada West, Prince Edward Island, New Brunswick, and Nova Scotia.* District Waterloo, Subdistrict North Dumfries, Reel C-1077.

Library and Archives Canada. 1891. *Census of Canada 1891.* District 123, Subdistrict B, Reel T-6375.

Lindsey, Bill. 2022. *Historic Glass Bottle Identification and Information Website*. Electronic document: http://www.sha.org/bottle/index.htm. Last accessed on November 15, 2022.

Loewen, Brad and Claude Chapdelaine (editors). 2016. *Contact in the 16th Century: Networks among Fishers, Foragers and Farmers*. Mercury Series Archaeology Paper 176. Ottawa: University of Ottawa Press.

Maryland Archaeological Conservation Lab. 2002. *Post-Colonial Ceramics*. Electronic document: https://apps.jefpat.maryland.gov/diagnostic/Post-Colonial%20Ceramics/index-PostColonialCeramics.htm. Last accessed November 15, 2022.

Morris, J.L. 1943. *Indians of Ontario*. 1964 reprint. Toronto: Department of Lands and Forests, Government of Ontario.

ONLand. 2022. *Abstract/Parcel Register Book, Waterloo (58), North Dumfries, Concession 10; Lot 12 to 38.* Electronic Document: https://www.onland.ca/ui/58/books/85082/viewer/. Last Accessed: April 1, 2022.

Ontario Heritage Trust. 2022a. *Detweiler Meeting House.* Electronic document: https://www.heritagetrust.on.ca/en/oha/details?id=6369&backlinkslug=search-results&fields%5Blocation%5D=49%2C279. Last accessed November 14, 2022.

Ontario Heritage Trust. 2022b. Stone outbuilding – former Cheese Factory and Stone Smokehouse. Electronic document: https://www.heritagetrust.on.ca/en/oha/details?id=6361&backlinkslug=search-results&fields%5Blocation%5D=49%2C279. Last accessed November 14, 2022.

Ontario Heritage Trust. 2022c. Elmcroft House. Electronic document: https://www.heritagetrust.on.ca/en/oha/details?id=6350&backlinkslug=search-results&fields%5Blocation%5D=49%2C279. Last accessed November 14, 2022.

Ontario Heritage Trust. 2022d. Harmony Grove. Electronic document: https://www.heritagetrust.on.ca/en/oha/details?id=6357&backlinkslug=search-results&fields%5Blocation%5D=49%2C279. Last accessed November 14, 2022.

Ontario Heritage Trust. 2022e. Hilldale. Electronic document: https://www.heritagetrust.on.ca/en/oha/details?id=6356&backlinkslug=search-results&fields%5Blocation%5D=49%2C279. Last accessed November 14, 2022.

Ontario Heritage Trust. 2022f. 2270 Alps Road. Electronic document: https://www.heritagetrust.on.ca/en/oha/details?id=6351&backlinkslug=search-results&fields%5Blocation%5D=49%2C279. Last accessed November 14, 2022.

Parker, L. 1986a. "Haldimand Chert: A Preferred Raw Material in Southwestern Ontario During the Early Holocene Period." *KEWA* 86-4:4-21.

Parker, L. 1986b. *Haldimand Chert and its Utilization During the Early Holocene Period in Southwestern Ontario*. Unpublished MA Thesis, Department of Geology, Brock University, St. Catharines.

Parsell, H. & Co. 1881. *Illustrated Historical Atlas of Waterloo County*. Reprint 1972. Toronto: Parsell & Co.

Paudash, Robert. 1905. The Coming of the Mississagas. *Ontario Historical Society, Papers and Records.* Volume VI: 7-11. Toronto: Ontario Historical Society.

Presant, E. W., & Wicklund, R. E. 1971. *The Soils of Waterloo County. Report No. 44 of the Ontario Soil Survey*. Research Branch Canada Department of Agriculture, Guelph.

Region of Waterloo Generations. 2022. *John Kerr*. Electronic Resources: https://generations.regionofwaterloo.ca/getperson.php?personID=I275980&tree=generations. Last accessed: November 23, 2022.

Reville, F. Douglas. 1920. *History of the County of Brant.* Brantford: Hurley Printing Company.

Ritchie, William A. 1971. *A Typology and Nomenclature for New York Projectile Points.* New York State Museum and Science Service Bulletin 384, Albany.

Rogers, Edward S. 1978. Southeastern Ojibwa. In *Handbook of North American Indians, Volume 15 Northeast*. Edited by Bruce G. Trigger, pp. 760-771. Washington: Smithsonian Institution Press.

Saint Mary's University. 2013. *Saint Mary's University Archaeology Lab Ceramics Database.* Electronic document: https://www.smu.ca/anthropology/lab-ceramics-database.html. Last accessed November 15, 2022.

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

Schmalz, W. H. E. 1968. *Postal History of Waterloo County*. *Waterloo: Waterloo Historical Society.*

Simmons, D.L., M. Shott, and H.T. Wright. 1984. The Gainey Site: Variability in a Great Lakes Paleo-Indian Assemblage. *Archaeology of Eastern North America* 12:266-279.

Six Nations Lands & Resources Department. 2018. *Land Rights: A Global Solution for the Six Nations of the Grand River*. Ohsweken: Six Nations Lands & Resources Department. Electronic document: http://www.sixnations.ca/LandsResources/index.htm. Last accessed November 15, 2022.

Stelle, L. J. 2001. *An Archaeological Guide to Historic Artifacts of the Upper Sangamon Basin, Central Illinois, U.S.A.* Electronic document: http://virtual.parkland.edu/lstelle1/len/archguide/documents/arcguide.htm. Last accessed November 15, 2022.

Stewart, Andrew M. 2013. Water and Land. In *Before Ontario: The Archaeology of a Province,* edited by Marit K. Munson and Susan M. Jamieson, pp. 24-34. Montreal and Kingston: McGill-Queen's University Press.

Sussman, Lynne. 1997. *Mocha, Banded, Cat's Eye, and Other Factory-Made Slipware. Number 1. Studies in Northeast Historical Archaeology*. Boston: Boston University Press.

Taylor, Andrew W. 1967*. Our Todays, and Yesterdays, A History of the Township of North Dumfries and the Village of Ayr*. Ayr: North Dumfries-Ayr & Centennial Committee.

Tremaine, George. 1861. *Tremaine's Map of the County of Waterloo, Canada West.* Toronto: George R. Tremaine.

Warrick, Gary. 2013. "The Aboriginal Population of Ontario in Late Prehistory." In *Before Ontario: The Archaeology of a Province, e*dited by Marit K. Munson and Susan M. Jamieson, pp. 62-76. Montreal and Kingston: McGill-Queen's University Press.

Weaver, Sally M. 1978. "Six Nations of the Grand River, Ontario." In *Handbook of North American Indians, Volume 15, Northeast*, edited by Bruce G. Trigger, pp. 525-536. Washington: Smithsonian Institution Press.

White, Marian. 1978. "Neutral and Wenro." In *Handbook of North American Indians, Volume 15, Northeast*, edited by Bruce Trigger, pp. 407-411. Washington: Smithsonian Institution Press.

Williamson, Ronald F. 2013. The Woodland Period, 900 BCE to 1700 CE. In *Before Ontario: The Archaeology of a Province,* edited by Marit K. Munson and Susan M. Jamieson, pp. 48-61. Montreal and Kingston: McGill-Queen's University Press.

Wood, J. David. 1960. The Stage is Set: Dumfries Township, 1816. *Waterloo Historical Society Annual Volume* 48 (1960): 40 – 50.

Wybenga, Darin P., and Kaytee Dalton. 2018. *Mississaugas of the New Credit First Nation: Past and Present*. Mississaugas of the New Credit First Nation Administration, Haggersville, ON.

Young, James. 1880. *Reminiscences of the Early History of Galt and the Settlement of Dumfries in the Province of Ontario*. Toronto: Hunter Rose.

8.0 IMAGES

8.1 PHOTOGRAPHS

Photo 1: View of general conditions during pedestrian survey, facing north northeast

Photo 2: View of typical ground conditions during pedestrian survey, facing east

Photo 3: View of pedestrian survey of the study area, facing northeast

Photo 4: View of pedestrian survey of the study area, facing north

Images
June 22, 2023

Photo 5: View of test pit survey general conditions, facing north

Photo 6: View of pedestrian field conditions and typical steep slope within the study area, facing north

Photo 7: Test pit survey, facing north

Photo 8: View of disturbed laneways and residential building within the study area, facing south-southwest

Photo 9: View of disturbed area with construction debris, facing northwest

Photo 10: Septic and weeping beds/tiles, facing north.

Images
June 22, 2023

8.2 PLATES

Plate 1: Location 1 Indigenous Artifact

Plate 2: Location 2 (AhHc-379) Indigenous Artifact

Plate 3: Location 3 Indigenous Artifacts

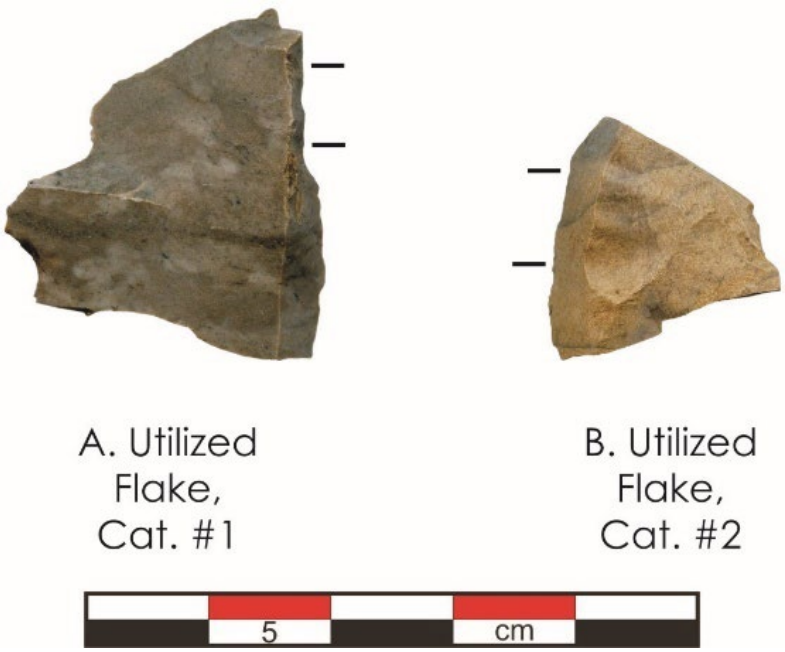


Plate 4: Location 4 (AhHc-380) Indigenous Artifact

Plate 5: Location 5 (AhHc-381) Indigenous Artifact

Plate 6: Location 6 Indigenous Artifacts

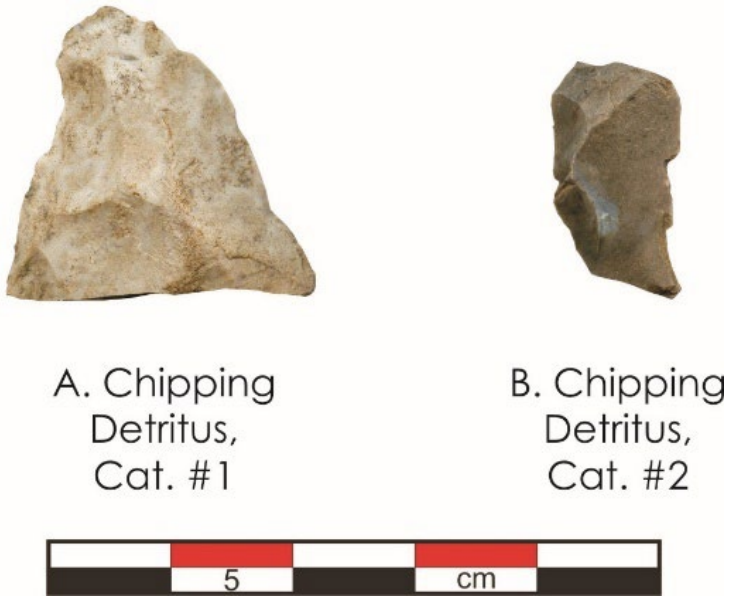


Plate 7: Location 7 Indigenous Artifacts

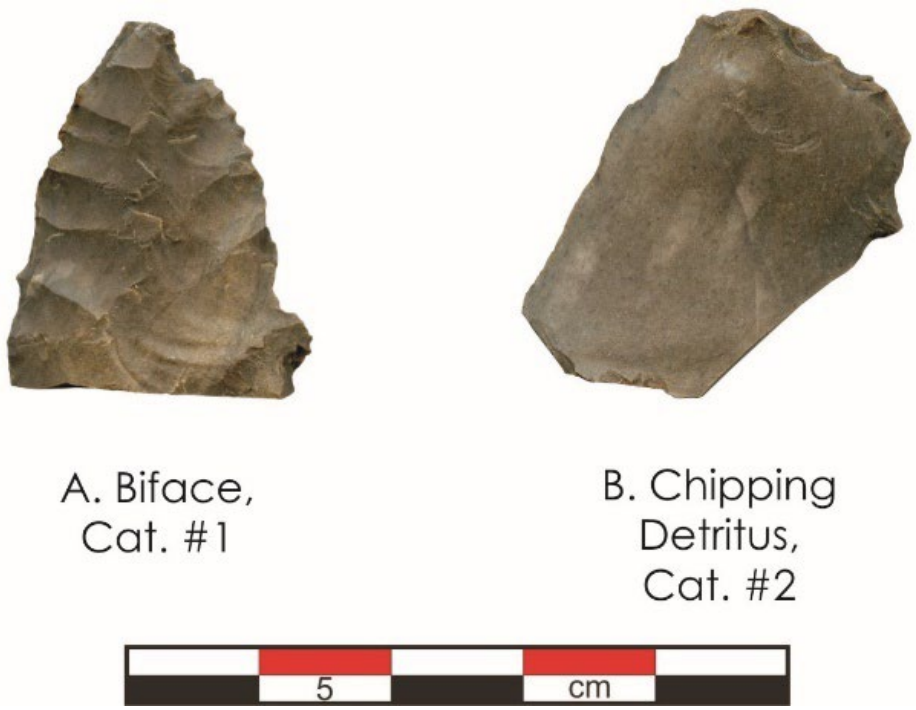


Plate 8: Location 8 Indigenous Artifact

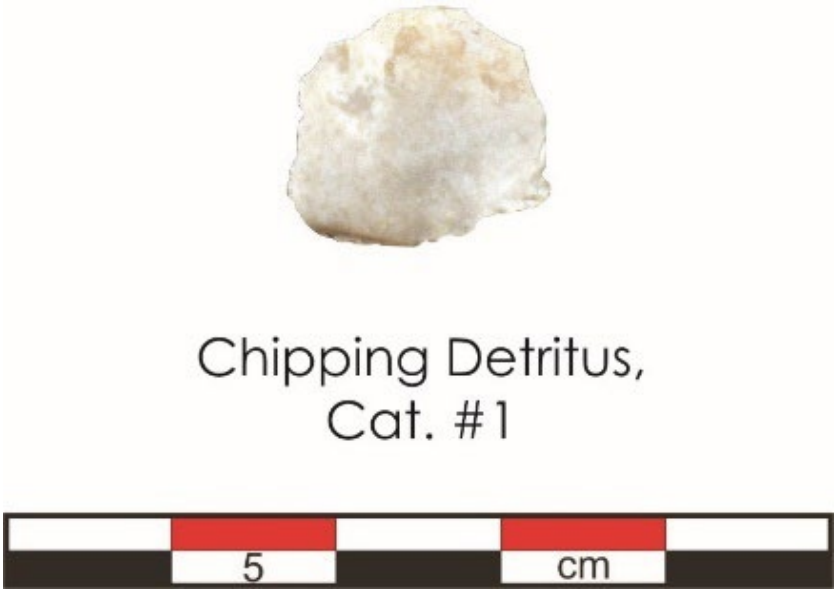


Plate 9: Location 9 Indigenous Artifacts

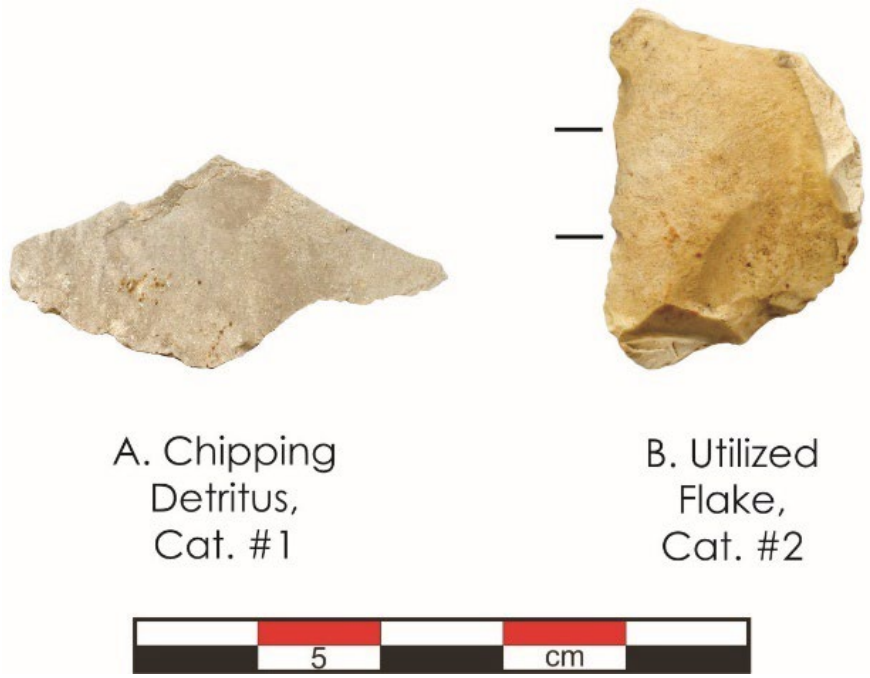
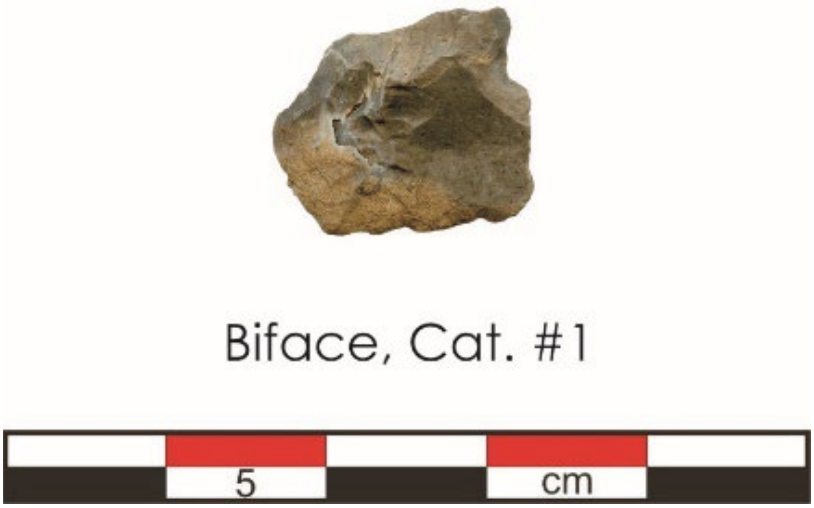
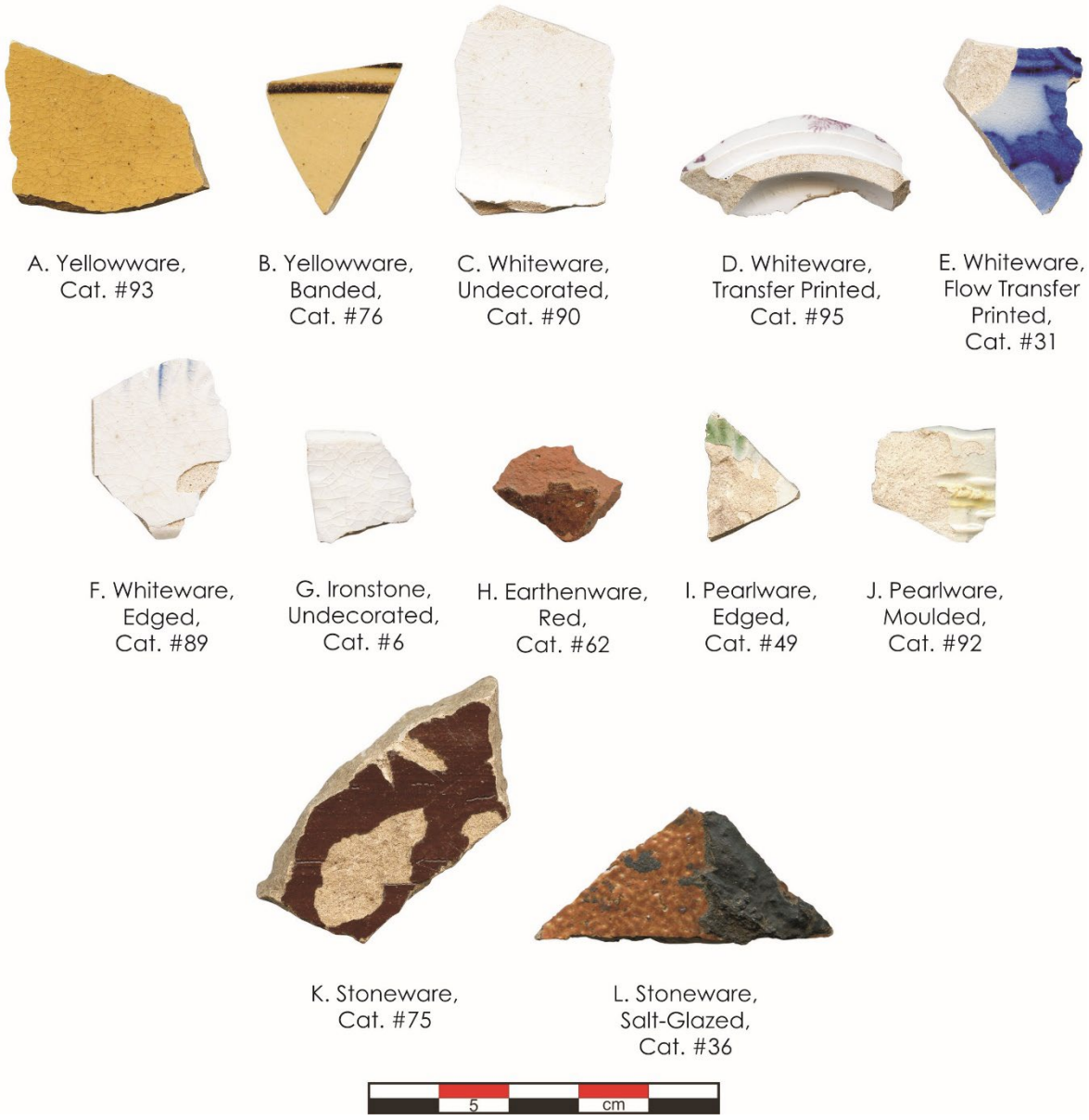


Plate 10: Location 10 (AhHc-382) Indigenous Artifact



Images
June 22, 2023

Plate 11: Sample of Location 10 (AhHc-382) Ceramic Artifacts



Images
June 22, 2023

Plate 12: Sample of Location 10 (AhHc-382) Household Artifacts

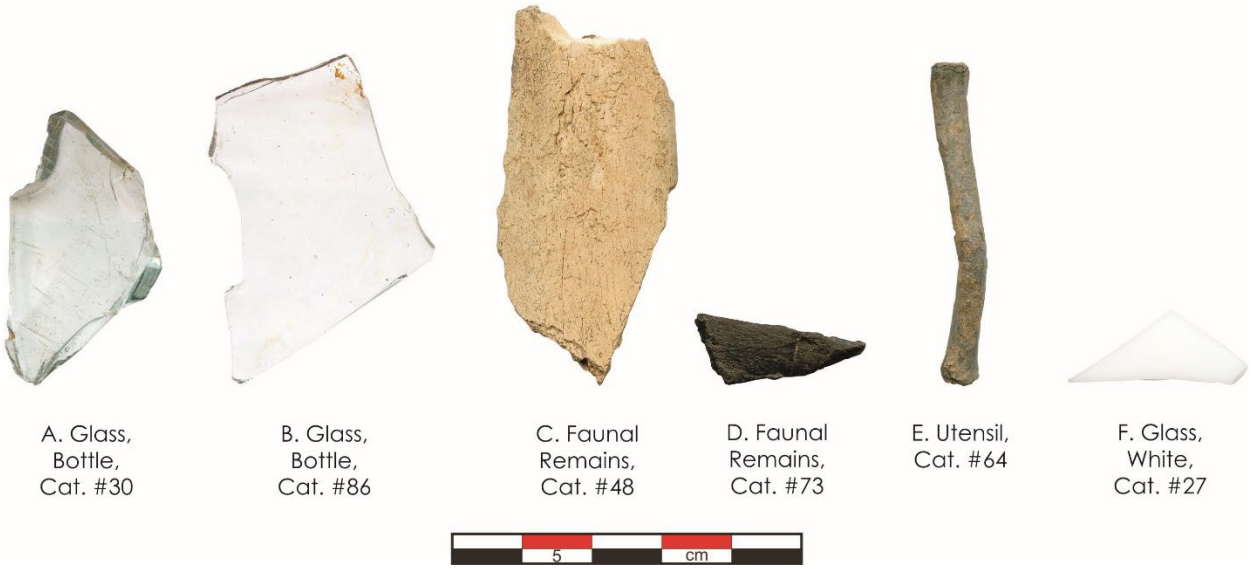
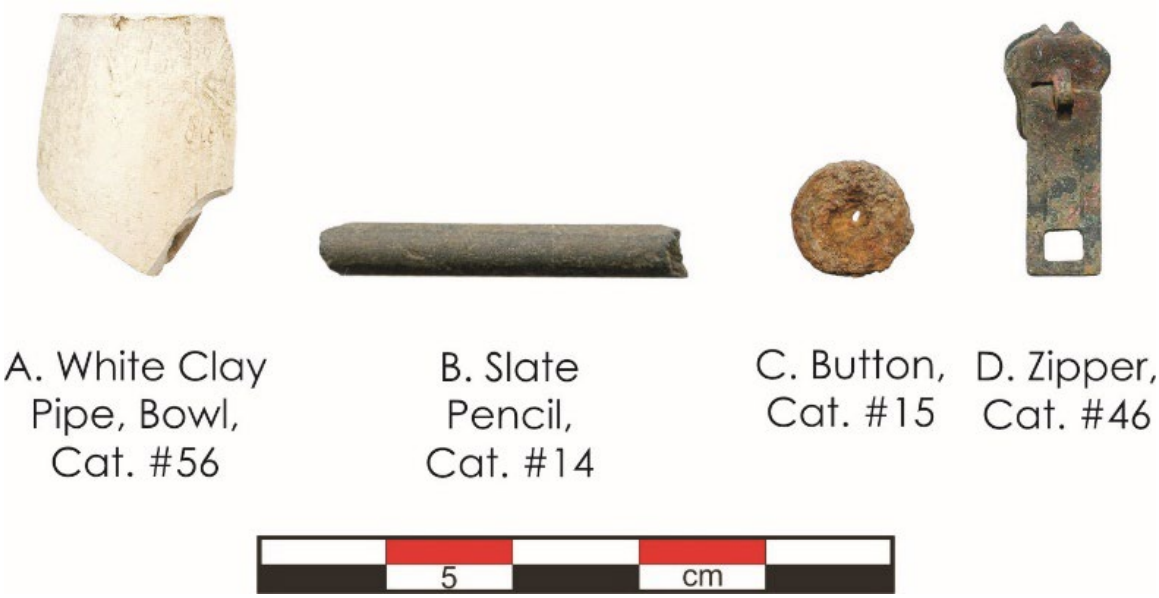


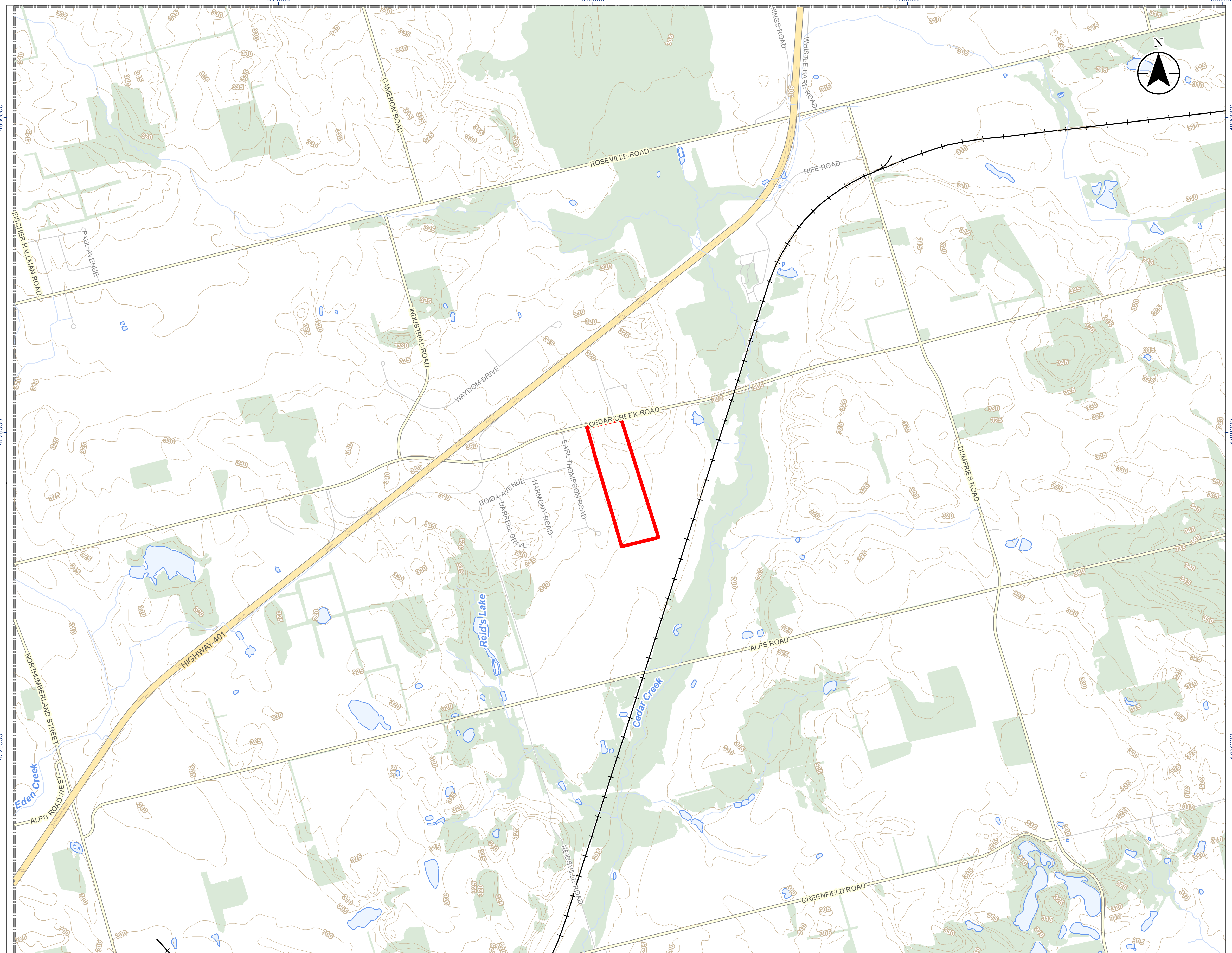
Plate 13: Sample of Location 10 (AhHc-382) Structural Artifacts

Plate 14: Sample of Location 10 (AhHc-382) Personal Artifacts



9.0 MAPS

General maps of the Stage 2 archaeological assessment of the study area follow on succeeding pages. Maps identifying exact site locations do not form part of this public report; they may be found in the Supplementary Documentation



Stantec

Legend

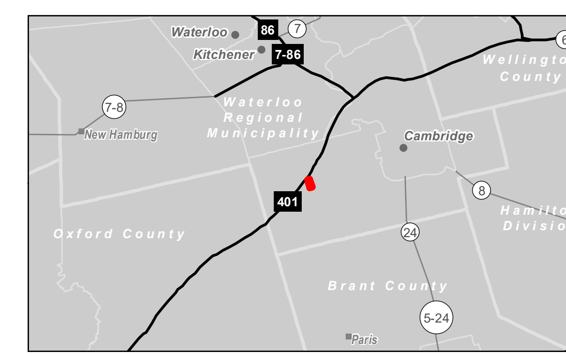
- Study Area
- Expressway / Highway
- Major Road
- Minor Road
- Railway - Operational
- Topographic Contour (m AMSL)
- Watercourse
- Waterbody
- Wooded Area

0 500 1,000 metres

1:25,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022.
3. Orthoimagery © First Base Solutions, 2022. Imagery Date, 2021.



Project Location
Township of
North Dumfries

161414214 REVA
Prepared by GB on 2022-11-29

Client/Project
FLORA DESIGNS INC.
STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: 2509 CEDAR CREEK ROAD

Figure No.
1

Title
Location of the Study Area

Stantec

Legend

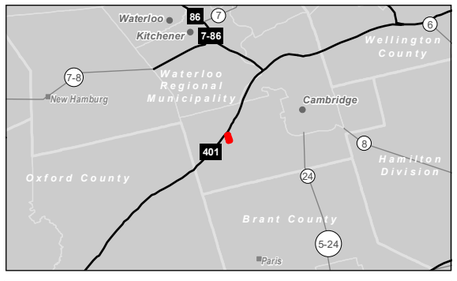
- Study Area
- Waterbody

0 50 100 metres

1:4,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022.
3. Orthoimagery © First Base Solutions, 2022. Imagery Date, 2021.



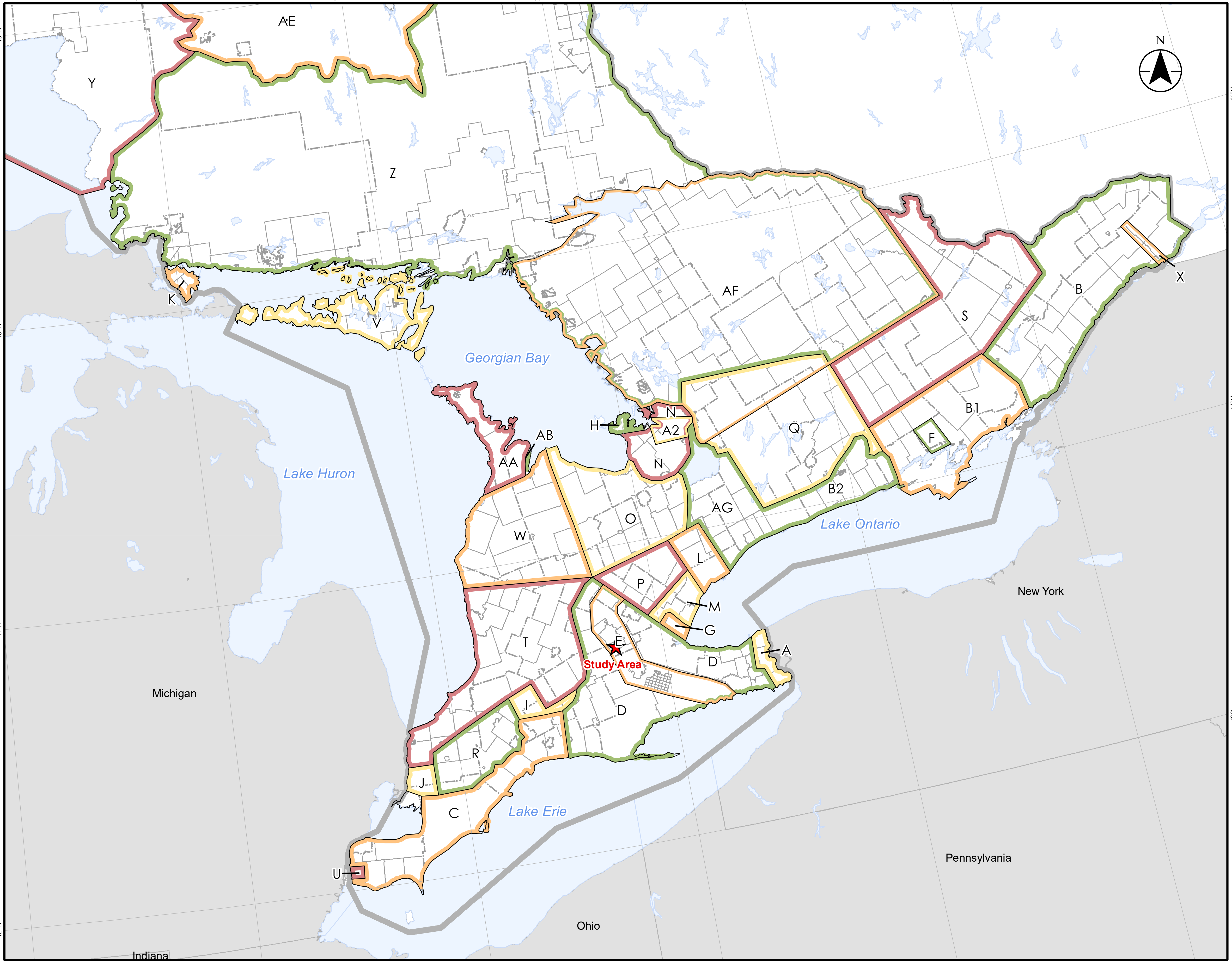
Project Location
Township of North Dumfries

161414214 REVA
Prepared by GB on 2022-11-29

Client/Project
FLORA DESIGNS INC.
STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: 2509 CEDAR CREEK ROAD

Figure No.
2

Title
Detailed Location of the Study Area



Stantec

Legend

- Study Area (Approximate)
- Municipal Boundary - Upper Tier
- Municipal Boundary - Lower or Single Tier
- Waterbody

Ontario Treaties (from Morris 1943)

- **A** Treaty No. 381, May 9th, 1781 (Mississauga and Chippewa)
- **B** Crawford's Purchase, October 9th, 1783 (Algonquin and Iroquois)
- **B1** Crawford's Purchase, October 9th, 1783 (Mississauga)
- **B2** Crawford's Purchases, 1784, 1787 And 1788 (Mississauga)
- **A2** John Collins' Purchase, 1785 (Chippewa)
- **C** Treaty No. 2, May 19th, 1790 (Odawa, Chippewa, Pottawatomi, and Huron)
- **D** Treaty No. 3, December 2nd, 1792 (Mississauga)
- **E** Haldimand Tract:from the Crown to the Mohawk, 1793
- **F** Tyendinaga:from the Crown to the Mohawk, 1793
- **G** Treaty No. 3 3/4:from the Crown to Joseph Brant, October 24th, 1795
- **H** Treaty No. 5, May 22nd, 1798 (Chippewa)
- **I** Treaty No. 6, September 7th, 1796 (Chippewa)
- **J** Treaty No. 7, September 7th, 1796 (Chippewa)
- **L** Treaty No. 13, August 1st, 1805 (Mississauga)
- **M** Treaty No. 13A, August 2nd, 1805 (Mississauga)
- **N** Treaty No.16, November 18th, 1815 (Chippewa)
- **O** Treaty No. 18, October 17th, 1818 (Chippewa)
- **P** Treaty No. 19, October 28th 1818 (Chippewa)
- **Q** Treaty No. 20, November 5th, 1818 (Chippewa)
- **R** Treaty No. 21, March 9th, 1819 (Chippewa)
- **S** Treaty No. 27, May 31st, 1819 (Mississauga)
- **T** Treaty No. 27½, April 25th, 1825 (Ojibwa and Chippewa)
- **U** Treaty No. 35, August 13th, 1833 (Wyandot or Huron)
- **V** Treaty No. 45, August 9th, 1836 (Chippewa and Odawa, "For All Indians To Reside Thereon")
- **W** Treaty No. 45½, August 9th, 1836 (Saugeen)
- **X** Treaty No. 57, June 1st, 1847 (Iroquois of St. Regis)
- **Z** Treaty No. 61, September 9th, 1850 (Robinson Treaty:Ojibwa)
- **AA** Treaty No. 72, October 30th, 1854 (Chippewa)
- **AB** Treaty No. 82, February 9th, 1857 (Chippewa)
- **AF** Williams Treaty, October 31st and November 15th, 1923 (Chippewa and Mississauga)
- **AG** Williams Treaty, October 31st, 1923 (Chippewa)

0 75 150 km

1:3,000,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 Statistics Canada Lambert
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2016.
3. Treaty boundaries adapted from Morris 1943 (1964 reprint).

Project Location
Township of
North Dumfries

161414214 REVA
Prepared by GB on 2022-11-15

Client/Project
FLORA DESIGNS INC.
STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: 2509 CEDAR CREEK ROAD

Figure No.
3

Title
Treaties and Purchases (Adapted from Morris 1943)

Stantec

Legend

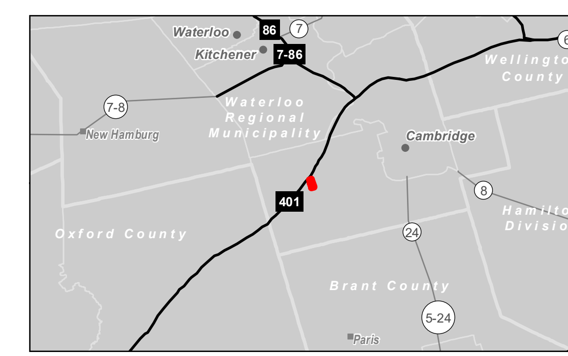
Study Area

0 500 1,000 metres

1:25,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022.
3. Orthoimagery: Tremaine. 1861. Map of Waterloo County.



Project Location
Township of
North Dumfries

161414214 REVA
Prepared by GB on 2022-11-29

Client/Project
FLORA DESIGNS INC.
STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: 2509 CEDAR CREEK ROAD

Figure No.
4

Title
Study Area over Portion of 1861 Tremaine Map of Waterloo County

Stantec

Legend

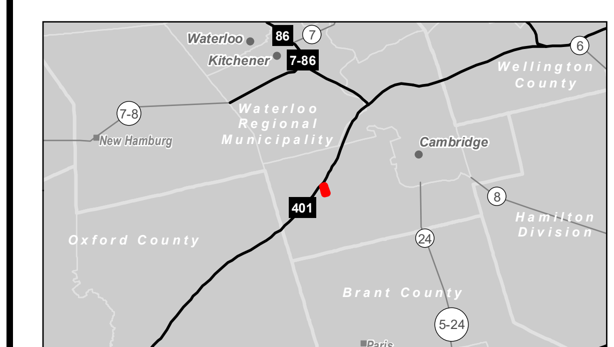
Study Area

0 500 1,000 metres

1:25,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022.
3. Orthoimagery Parsell & Co. 1881. Map of North Dumfries Township. Waterloo: Waterloo



Project Location
Township of
North Dumfries

161414214 REVA
Prepared by GB on 2022-11-29

Client/Project
FLORA DESIGNS INC.
STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: 2509 CEDAR CREEK ROAD

Figure No.
5

Title
Study Area over Portion of 1881 Map of Dumfries Township

Stantec

Legend

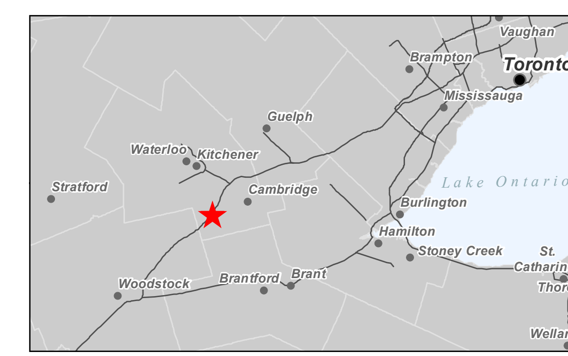
- Site Reconnaissance Photograph
- Study Area
- Area of Steep Slope, Low to No Archaeological Potential - No Further Archaeological Work Required
- Previously Disturbed, Low to No Archaeological Potential - No Further Archaeological Work Required
- Pedestrian Survey, 5 m Intervals
- Test Pit Survey, 5 m Intervals
- Test Pit Survey, 10 m Intervals

0 50 100 metres

1:3,500 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022.
3. Orthoimagery © First Base Solutions, 2022. Imagery Date, 2021.



Project Location
Township of North Dumfries

161414214 REVA
Prepared by GB on 2022-11-29

Client/Project
FLORA DESIGNS INC.
STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: 2509 CEDAR CREEK ROAD

Figure No.
6

Title
Stage 2 Archaeological Assessment Methods

10.0 CLOSURE

This report documents work that was performed in accordance with generally accepted professional standards at the time and location in which the services were provided. No other representations, warranties or guarantees are made concerning the accuracy or completeness of the data or conclusions contained within this report, including no assurance that this work has uncovered all potential archaeological resources associated with the identified property.

All information received from the client or third parties in the preparation of this report has been assumed by Stantec to be correct. Stantec assumes no responsibility for any deficiency or inaccuracy in information received from others.

Conclusions made within this report consist of Stantec's professional opinion as of the time of the writing of this report and are based solely on the scope of work described in the report, the limited data available and the results of the work. The conclusions are based on the conditions encountered by Stantec at the time the work was performed. Due to the nature of archaeological assessment, which consists of systematic sampling, Stantec does not warrant against undiscovered environmental liabilities nor that the sampling results are indicative of the condition of the entire property.

This report has been prepared for the exclusive use of the client identified herein and any use by any third party is prohibited. Stantec assumes no responsibility for losses, damages, liabilities, or claims, howsoever arising, from third party use of this report. We trust this report meets your current requirements. Please do not hesitate to contact us should you require further information or have additional questions about any facet of this report.

Quality Review  Dickson, Parker 2023.06.23 11:00:41 -04'00'

(signature)

Parker Dickson – Senior Associate, Senior Archaeologist

Independent Review  Digitally signed by Colin Varley Date: 2023.06.23 10:31:07 -04'00'

(signature)

Colin Varley - Senior Associate, Senior Archaeologist

Appendix A

Appendix A: Location 10 (AhHc-382) Euro-Canadian Artifact Catalogue

Cat.	Context	Artifact	Quantity	Form/Function	Comments
1	Test pit 1	Nail, cut	2	-	1 head and partial shank, 1 partial shank and tip
2	Test pit 1	Glass, bottle	2	-	Colourless, body fragments
3	Test pit 1	Glass, bottle	2	-	Sun coloured amethyst, body fragments
4	Test pit 1	Glass, bottle	1	-	Dark olive, body fragment
5	Test pit 1	Whiteware, undecorated	1	Unidentifiable / unknown (non-rim)	-
6	Test pit 1	Ironstone, undecorated	1	Hollowware / unknown (rim)	-
7	Test pit 2	Snap fastener	1	-	Post portion, heavily corroded
8	Test pit 2	Nail, cut	1	-	Head and partial shank
9	Test pit 2	Nail, wire drawn	1	-	Complete
10	Test pit 2	Glass, bottle	1	-	Colourless, body fragment, embossed "CON…"
11	Test pit 2	Glass, bottle	1	-	Aqua, body fragment, embossed "…2…"
12	Test pit 2	Earthenware, red	3	Hollowware / unknown (non-rim)	Brown interior and exterior glaze
13	Test pit 2	Whiteware, undecorated	1	Unidentifiable / unknown (non-rim)	-
14	Test pit 3	Slate pencil	1	-	Midsection fragment
15	Test pit 3	Button	1	-	Metal, small, heavily corroded, sew-through type
16	Test pit 3	Glass, chimney/lamp	1	-	Colourless, body fragment
17	Test pit 3	Glass, bottle	1	-	Colourless, body fragment
18	Test pit 3	Glass, bottle	1	-	Amber, body fragment
19	Test pit 3	Nail, wire drawn	2	-	Head and partial shank
20	Test pit 3	Earthenware, red	2	Hollowware / unknown (non-rim)	Brown glaze on intact interior surface
21	Test pit 3	Whiteware, undecorated	1	Unidentifiable / unknown (non-rim)	-

Appendix A: Location 10 (AhHc-382) Euro-Canadian Artifact Catalogue
June 22, 2023

Cat.	Context	Artifact	Quantity	Form/Function	Comments
22	Test pit 3	Ironstone, undecorated	1	Unidentifiable / unknown (non-rim)	-
23	Test pit 3	Ceramic, undetermined	1	Flatware / unknown (rim)	Burnt
24	Test pit 4	Nail, undetermined	1	-	Shank fragment
25	Test pit 5	Glass, window	1	-	Less than 1.6mm
26	Test pit 5	Nail, cut	1	-	Head and partial shank
27	Test pit 5	Glass, white	1	-	Small, thin fragment
28	Test pit 5	Faunal remains	1	-	Mammal
29	Test pit 6	Glass, bottle	2	-	Amber, base/body fragments
30	Test pit 6	Glass, bottle	3	-	Aqua; 2 body fragments, 1 base/body fragment
31	Test pit 7	Whiteware, flow transfer printed	1	Flatware / unknown (non-rim)	Blue, foliage
32	Test pit 7	Whiteware, transfer printed	1	Unidentifiable / unknown (non-rim)	Purple, linear and scroll decoration
33	Test pit 8	Nail, wire drawn	1	-	Head and partial shank
34	Test pit 8	Glass, bottle	2	-	Colourless, body fragments
35	Test pit 8	Glass, bottle	1	-	Aqua, body fragment
36	Test pit 8	Stoneware, salt-glazed	1	Hollowware / unknown (non-rim)	Brown glaze on intact exterior surface
37	Test pit 8	Ironstone, undecorated	1	Flatware / unknown (non-rim)	-
38	Test pit 9	Faunal remains	3	-	Mammal
39	Test pit 10	Faunal remains	1	-	Mammal
40	Test pit 10	Metal, miscellaneous	1	-	Thin, heavily corroded ferrous metal fragment, circular intact end with round hole in centre, broken off at narrow stem or shaft
41	Test pit 10	Coal/clinker	2	-	-
42	Test pit 11	Nail, cut	3	-	2 head and partial shank, 1 partial shank and tip
43	Test pit 11	Nail, horseshoe	1	-	Head and partial shank

Appendix A: Location 10 (AhHc-382) Euro-Canadian Artifact Catalogue
June 22, 2023

Cat.	Context	Artifact	Quantity	Form/Function	Comments
44	Test pit 11	Glass, undetermined	4	-	Aqua, small fragments
45	Test pit 11	Faunal remains	2	-	Mammal
46	Test pit 11	Zipper	1	-	Slider and pull tab
47	Test pit 11	Whiteware, undecorated	1	Unidentifiable / unknown (non-rim)	-
48	Test pit 12	Faunal remains	2	-	Mammal, mending
49	Test pit 12	Pearlware, edged	1	Flatware / unknown (non-rim)	Green, shell edge decoration
50	Test pit 13	Faunal remains	1	-	Mammal
51	Test pit 13	Whiteware, undecorated	1	Unidentifiable / unknown (non-rim)	-
52	Test pit 14	Nail, undetermined	1		Shank fragment
53	Test pit 15	Ironstone, undecorated	1	Unidentifiable / unknown (non-rim)	-
54	Test pit 16	Glass, window	1	-	Greater than 1.6mm
55	Test pit 16	Faunal remains	1	-	Mammal
56	Test pit 16	White clay pipe, bowl	1	-	Undecorated rim fragment
57	Test pit 17	Faunal remains	1	-	Mammal
58	Test pit 17	Earthenware, red	1	Hollowware / unknown (non-rim)	Dark brown glaze on intact exterior surface
59	Test pit 17	Whiteware, undecorated	1	Unidentifiable / unknown (non-rim)	-
60	Test pit 18	Glass, undetermined	2	-	Sun coloured amethyst, small fragments
61	Test pit 19	Nail, cut	2	-	Partial shank and tip
62	Test pit 19	Earthenware, red	1	Hollowware / unknown (non-rim)	Brown glaze on intact exterior surface
63	Test pit 20	Nail, cut	1	-	Head and partial shank
64	Test pit 20	Utensil	1	-	Spoon, non-ferrous metal stem fragment, slightly curved

Appendix A: Location 10 (AhHc-382) Euro-Canadian Artifact Catalogue
June 22, 2023

Cat.	Context	Artifact	Quantity	Form/Function	Comments
65	Test pit 21	Nail, undetermined	1	-	Shank fragment
66	Test pit 22	Nail, cut	1	-	Missing tip
67	Test pit 22	Pearlware, edged	1	Flatware / unknown (non-rim)	Green, shell edge decoration
68	Test pit 22	Whiteware, undecorated	1	Unidentifiable / unknown (non-rim)	-
69	Test pit 23	Nail, wrought	1	-	Head and partial shank
70	Test pit 23	Whiteware, undecorated	1	Unidentifiable / unknown (non-rim)	-
71	Test pit 24	Glass, window	1	-	Greater than 1.6mm
72	Test pit 24	Nail, cut	4	-	3 head and partial shank, 1 partial shank and tip
73	Test pit 24	Faunal remains	1	-	Mammal, burnt
74	Test pit 24	Metal, miscellaneous	2	-	Thin, heavily corroded ferrous metal fragments
75	Test pit 24	Stoneware	1	Hollowware / unknown (non-rim)	Brown glaze on intact interior surface
76	Test pit 24	Yellowware, banded	1	Hollowware / unknown (non-rim)	Thin, brown slip bands
77	Test pit 24	Whiteware, undecorated	1	Unidentifiable / unknown (non-rim)	-
78	Test pit 24	Ironstone, undecorated	1	Unidentifiable / unknown (non-rim)	-
79	Test pit 25	Glass, window	1	-	Greater than 1.6mm
80	Test pit 25	Nail, wrought	1	-	Head and partial shank
81	Test pit 25	Nail, cut	1	-	Head and partial shank
82	Test pit 25	Nail, undetermined	1	-	Shank fragment
83	Test pit 26	Earthenware, red	1	Hollowware / unknown (non-rim)	Brown interior and exterior glaze
84	Test pit 27	Nail, cut	1	-	Complete
85	Test pit 27	Faunal remains	6	-	Mammal

Appendix A: Location 10 (AhHc-382) Euro-Canadian Artifact Catalogue
June 22, 2023

Cat.	Context	Artifact	Quantity	Form/Function	Comments
86	Test pit 27	Glass, bottle	8	-	Colourless; 7 body fragments, 1 base fragment embossed "…D"
87	Test pit 27	Earthenware, red	1	Hollowware / unknown (non-rim)	Light brown glaze on intact interior surface
88	Test pit 27	Earthenware, red	4	Hollowware / unknown (non-rim)	No intact surface
89	Test pit 27	Whiteware, edged	1	Flatware / unknown (non-rim)	Blue, shell edge decoration
90	Test pit 27	Whiteware, undecorated	4	Flatware / unknown (non-rim)	-
91	Test pit 27	Ironstone, undecorated	10	Hollowware / unknown (5 rim, 5 non-rim)	-
92	Test pit 27	Pearlware, moulded	2	Flatware / unknown (1 rim, 1 non-rim)	Moulded basket weave and rope decoration below scalloped edge with yellow and brown painted highlights
93	Test pit 27	Yellowware	91	Hollowware / unknown (5 rim, 86 non-rim)	Multiple mending fragments
94	Test pit 28	Glass, window	1		Greater than 1.6mm
95	Test pit 28	Whiteware, transfer printed	1	Holloware / cup (non-rim)	Purple, foliage