

Stage 1-2 Archaeological Assessment 2495 Spragues Road, North Dumfries

Part of Lots 24 and 25, Concession 7 and Road Allowances
between Lots 24 and 25, 8 Geographic Township of North
Dumfries, Historical County of Waterloo now the Regional
Municipality of Waterloo, Ontario

Submitted to:

Jeremy Hohl
Shear Metal Products
95 Heroux Devtek Drive,
Cambridge, Ontario, N3E 0A7

and

Ontario's Ministry of Citizenship and Multiculturalism

Submitted by:



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

Licensee: Walter McCall
License Number: P389
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ORIGINAL REPORT

June 25, 2024

Executive Summary

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Jeremy Hohl of Shear Metal Products (the 'Proponent') to conduct a Stage 1-2 archaeological assessment on part of Lots 24 and 25, Concession 7, and the road allowance between Lots 24 and 25, in the geographic Township of North Dumfries, in the Historical County of Waterloo, now the Regional Municipality of Waterloo, Ontario (Figure 1). This assessment was undertaken in advance of future development on the property at 2495 Spragues Road, North Dumfries (the 'Study Area;' Figure 4). The proposed development will span the entire Study Area.

This assessment was triggered by the Provincial Policy Statement ('PPS') that is informed by the *Planning Act* (Government of Ontario, 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger *Ontario Heritage Act* (Government of Ontario, 1990b). According to Section 2.6.2 of the PPS, "development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved." To meet this condition, a Stage 1-2 assessment was conducted as part of the application phase of development under archaeological consulting license P389 issued to Dr. Walt McCall by the Ministry of Citizenship and Multiculturalism ('MCM') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario, 1990b) and the MCM's *Standards and Guidelines for Consultant Archaeologists* ('*Standards and Guidelines*'; Government of Ontario, 2011).

The Study Area comprises a rectangular-shaped parcel that fronts onto Spragues Road and measures approximately 0.93 hectares ('ha'). The Study Area is bound by Spragues Road to the west, an agricultural field to the north, a commercial property to the east, and residential properties to the south (Figure 3). At the time of assessment, a laydown area occupied the eastern end of the Study Area, and included several portable offices and work spaces and a large parking area surrounded by grass. The laydown area was accessed by a long, wide driveway bordered by trees on both sides that spanned the southern edge of the property. The remainder of the Study Area comprised a large open field. According to aerial imagery of the Study Area, this field does not appear to have been utilised for agriculture since at least 2006. Nevertheless, given that it was accessible to ploughing, the field was subject to ploughing. The ploughed portion of the field was ringed by overgrown grass to the east, west and south.

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

The subsequent Stage 2 field assessment of the Study Area was conducted on May 7th, 2024. This investigation began with a property inspection, conducted according to Section 2.1.8, which is informed by Section 1.2 of the *Standards and Guidelines* (Government of Ontario, 2011). The inspection revealed that the long wide driveway along the southern edge of the Study Area, as well as the parking areas and portable buildings at the eastern end of the Study Area retained no or low archaeological potential based on the identification of extensive and deep land alteration that has severely damaged the integrity of archaeological resources as per Section 2.1, Standard 2b of the *Standards and Guidelines* (Government of Ontario, 2011). Furthermore, test pits in the grassy areas to the east of the portable buildings and along the northern edge of the driveway contained compact gravel fill. These areas were subject to test pitting at judgemental intervals to confirm the limits of the disturbance. All of the previously disturbed areas throughout the Study Area, as confirmed during the Stage 2 property inspection with judgemental test pitting, were mapped and photo documented only in accordance with Section 2.1, Standard 6, and Section 7.8.1, Standards 1a and 1b of the *Standards and Guidelines* (Government of Ontario, 2011).

The remainder of the Study Area comprised the large ploughed field ringed by overgrown grassy areas. The grassy areas were assessed by means of a typical test pit survey at 5m intervals; no artifacts were encountered. The ploughed field was assessed by means of a typical pedestrian survey also at 5m intervals. This investigation resulted in the documentation of an isolated tool thinning flake manufactured from Onondaga chert in the middle of the field (Tile 3 of the Supplementary Documentation). The findspot was identified as Findspot 1.

Given that insufficient resources were documented to meet the criteria for continuing to Stage 3, the pedestrian survey coverage was intensified around Findspot 1 in a 20m radius to determine whether a recommendation for Stage 3 could be supported. No additional artifacts were observed. Given the isolated nature of the flake, it is difficult to draw any useful conclusions regarding function or specific temporal association of Findspot 1.

Given the results of the Stage 2 assessment Findspot 1 has been interpreted as a small activity area of unknown function, occupied by unspecified Aboriginal people during the pre-contact period. Given that the Stage 2 pedestrian survey only recovered one non-diagnostic artifact within a 10m-by-10m area, the findspot does not meet the criteria for Stage 3 assessments as per Section 2.2, Standard 1.a.i of the *Standards and Guidelines* (Government of Ontario, 2011). Therefore, **Findspot 1 retains no further cultural heritage value or interest, and a Stage 3 archaeological assessment is not recommended for Findspot 1.**

Given that the Stage 2 survey did not identify any further archaeological remains, it is **recommended that no further archaeological assessment is required for the remainder of the Study Area.**

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

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Project Personnel

| | |
|-------------------------------|---|
| Project Manager: | Garth Grimes, P017 |
| Field Director: | Jon Cousins, R296 |
| Field Technician: | Leander Foster Nathan Homerski Mackenzie 'Mac' Oja Hannah Nemes Jessica Rae Jonathan Vandervoort Timothy Wenn |
| First Nations Representative: | Bill Lucas, Six Nations of the Grand River |
| Report Preparation: | Tina Ross |
| Mapping: | Tina Ross |
| Licensee Review: | Walter McCall, P389 |

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Generous contributions by Mr. Jeremy Hohl of Shear Metal Products made this report possible.

1.0 Project Context

1.1 Development Context

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Jeremy Hohl of Shear Metal Products (the 'Proponent') to conduct a Stage 1-2 archaeological assessment on part of Lots 24 and 25, Concession 7, and the road allowance between Lots 24 and 25, in the geographic Township of North Dumfries, in the Historical County of Waterloo, now the Regional Municipality of Waterloo, Ontario (Figure 1). This assessment was undertaken in advance of future development on the property at 2495 Spragues Road, North Dumfries (the 'Study Area;' Figure 4). The proposed development will span the entire Study Area.

This assessment was triggered by the Provincial Policy Statement ('PPS') that is informed by the *Planning Act* (Government of Ontario, 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger *Ontario Heritage Act* (Government of Ontario, 1990b). According to Section 2.6.2 of the PPS, "development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved." To meet this condition, a Stage 1-2 assessment was conducted as part of the application phase of development under archaeological consulting license P389 issued to Dr. Walt McCall by the Ministry of Citizenship and Multiculturalism ('MCM') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario, 1990b) and the MCM's *Standards and Guidelines for Consultant Archaeologists* ('*Standards and Guidelines*'; Government of Ontario, 2011).

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

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

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

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

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

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

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

1.2 Historical Context

1.2.1 Post-Contact Aboriginal Resources

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

The earliest recorded history of Haldimand County began in 1626, when French Recollet Father Daillon travelled the entire length of the Grand River and documented 28 Neutral villages in the area (Harper, 1950; White, 1978). A dozen such Neutral sites were identified along the Lower Grand River in the general location of a possible Neutral community known as the Antouaronon (White, 1978; Poulton, Spence, Dodd, & Fecteau, 1996).

Throughout the middle of the 17th century, the Iroquois Confederacy sought to expand upon their territory and to monopolize the fur trade as well as the trade between the European markets and the tribes of the western Great Lakes region. A series of bloody conflicts followed known as the Beaver Wars, or the French and Iroquois Wars, contested between the Iroquois Confederacy and the Algonkian speaking communities of the Great Lakes region. Many communities were destroyed including the Huron, Susquehannock, and Shawnee leaving the Iroquois as the dominant group in the region. Within Haldimand County, the Seneca attacked one of the eastern groups of the Neutral 1647 (White, 1978). By 1653, most of Southern Ontario had been vacated (Heidenreich, 1990), while the Neutral had been assimilated by the Five Nations (Jamieson, 1992; Noble, 1978).

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

The late 17th and early 18th centuries also mark the arrival of an Ojibwa band known as the Mississaugas into Southern Ontario and, in particular, the watersheds of the lower Great Lakes. 'The Mississaugas' is the name that the Jesuits had used in 1840 for the Algonquin band living near the Mississagi River on the northwestern shore of Lake Huron (Smith, 2002). The oral traditions of the Mississaugas, as recounted by Chief Robert Paudash and recorded in 1904, suggest that the Mississaugas defeated the Mohawk Nation, who retreated to their homeland south of Lake Ontario. Following this conflict, a peace treaty was negotiated between the two groups (Praxis Research Associates, n.d.). From the beginning of the 18th century until the end of the Seven Year War in 1763, the Ojibwa, including the Mississaugas, experienced a golden age in trade holding no alliance with either the French or the British (Schmalz, 1991). At the end of the 17th century, the Mississaugas' settled permanently in Southern Ontario (Praxis Research Associates, n.d.). In 1722, meanwhile, the Five Nation Iroquois Confederacy adopted the Tuscarora in New York becoming the Six Nations (Pendergast, 1995).

On May 22, 1784, the Mississaugas ceded to the Crown approximately 3,000,000 acres of land between Lake Huron, Lake Erie and Lake Erie in return for trade goods valued at £1180. One of the stated objectives of this transaction, known as the "Between the Lakes Purchase" was "to procure for that part of the Six Nation Indians coming into Canada a permanent abode" (Morris, 1943, p. 17). Shortly after the transaction had been finalised, Sir Frederick Haldimand, Governor of Québec, made preparations to grant a large plot of land in south-central Ontario to those Six Nations who remained loyal to the Crown during the American War of Independence. More specifically, Haldimand arranged for the purchase of the Haldimand Tract in south-central Ontario from the Mississaugas. The Haldimand Tract, also known as the 1795 Crown Grant to the

Six Nations, was provided for in the Haldimand Proclamation of October 25th, 1784 (Weaver, 1978). According to the specifics of the treaty,

...this Grant was composed of the following Townships: Dunn, Sherbrooke, Moulton, Canborough, North and South Cayuga, Oneida and Seneca in Haldimand County; Tusc[aro]ra, Onondaga, Brantford and South Dumfries in Brant County; North Dumfries, Waterloo and Woolwich in Waterloo County; Pilkington and Nichol in Wellington County; and is described as a parcel or tract of land six miles on each side of the Ouse or Grand River from it's mouth toward its source, to be bounded by the tract of land deeded December the 7th, 1792 by the Mississauga[u]lga Chiefs and people to the Crown. This part was set aside as a suitable retreat for the Six Nation Indians who had shewn attachment and Fidelity to the British Government during the troublous times 1759 to 1783 and was granted to the Chiefs, Warriors, Women and People of the Six Nations and their heirs forever.

Morris, 1943, pp. 19-21

By the end of 1784, representatives from each member nation of the Six Nations, as well as other allies, relocated to the Haldimand Tract with Joseph Brant (Weaver, 1978; Tanner, 1987).

Throughout southern Ontario, the size and nature of the pre-contact settlements and the subsequent spread and distribution of Aboriginal material culture began to shift with the establishment of European settlers. By 1834 it was accepted by the Crown that losses of portions of the Haldimand Tract to Euro-Canadian settlers were too numerous for all lands to be returned. Lands in the Lower Grand River area were surrendered by the Six Nations to the British Government in 1832, at which point most Six Nations people moved into Tuscarora Township in Brant County and a narrow portion of Oneida Township (Page, 1879; Weaver, 1978; Tanner, 1987). Following the population decline and the surrender of most of their lands along the Credit River, the Mississaugas were given 6000 acres of land on the Six Nations Reserve, establishing the Mississaugas of New Credit First Nation (now the Mississaugas of the Credit First Nation), in 1847 (Smith, 2002).

Despite the encroachment of European settlers on previously established Aboriginal territories, “written accounts of material life and livelihood, the correlation of historically recorded villages to their archaeological manifestations, and the similarities of those sites to more ancient sites have revealed an antiquity to documented cultural expressions that confirms a deep historical continuity to Iroquoian systems of ideology and thought” (Ferris, 2009, p. 114). As Ferris observes, despite the arrival of a competing culture, First Nations communities throughout Southern Ontario have left behind archaeologically significant resources that demonstrate continuity with their pre-contact predecessors, even if they have not been recorded extensively in historical Euro-Canadian documentation.

1.2.2 Euro-Canadian Resources

The current Study Area is located on part of Lots 24 and 25, Concession 7, and the road allowance between Lots 24 and 25, in the geographic Township of North Dumfries, in the Historical County of Waterloo, now the Regional Municipality of Waterloo, Ontario.

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

On July 24, 1788, Sir Guy Carleton, the Governor-General of British North America, divided the Province of Québec into the administrative districts of Hesse, Nassau, Mecklenburg and Lunenburg (Archives of Ontario, 2012-2015). Further change came in December 1791 when the province was rearranged into Upper Canada and Lower Canada under the Constitutional Act. Colonel John Graves Simcoe was appointed as Lieutenant-Governor of Upper Canada; he

introduced several initiatives to populate the province including the establishment of shoreline communities with effective transportation links between them (Coyne, 1895).

In July 1792, Simcoe divided Upper Canada into nineteen counties extending from Essex in the west to Glengarry in the east. Each new county was named after a county in England or Scotland; the constituent townships were then given the names of the corresponding townships from each original British county (Powell & Coffman, 1956). Later that year, the four districts originally established in 1788 were renamed the 'Western,' 'Home,' 'Midland,' and 'Eastern' Districts. Under this territorial arrangement, the Study Area became part of York County in the Western District.

As population levels in Upper Canada increased, smaller and more manageable administrative bodies were needed resulting in the establishment of many new counties and townships. As part of this realignment, the boundaries of the Home and Western Districts were shifted and the London and Niagara Districts were established. In June of 1840, territory was transferred from both the Home and London Districts to establish Wellington District. At that time, Wellington District contained Wellington County, Waterloo County, Grey County, and parts of Dufferin County. Under this newly revised territorial arrangement, the Study Area became part of Waterloo County in the Wellington District. In 1852 Waterloo County, Wellington County, and Grey County were merged to form the United Counties. By 1853, Wellington and Waterloo Counties had separated from this union (Archives of Ontario, 2012-2015). Waterloo County contains ten municipalities: Galt, Berlin, Hespeler, New Hamburg, Preston, Waterloo, North Dumfries, Wellesley, Wilmot and Woolwich.

Official settlement of North Dumfries Township began in 1816, although Euro-Canadian settlers and squatters were had arrived before the registered survey. The land comprising the township had initially been acquired by Philip Steadman from Joseph Brant in 1789. Steadman died shortly after taking possession of the land. Following his death, Mr. Steadman's estate was transferred to his sister, Mrs. Sparkman. In 1811, Mr. and Mrs. Sparkman conveyed the land to Mr. Thomas Clarke, who in turn conveyed it to his cousin Mr. William Dickson in 1816. Mr. Dickson was a prominent Niagara merchant and land speculator, and he initiated the surveying and subsequent settlement of the township (Dean, 1969).

The survey of North Dumfries Township was conducted between October 1816 and May 1817 by Deputy Provincial Surveyor Adrian Marlett and included the land along East River Road beginning in Paris and ending in Galt. The survey was generally conducted according to the single front survey system, which divided the land into five lots, each containing 200-acre parcels surrounded by roads. Numerous modifications to this system were required, however, due to the challenging terrain and heavy bush that Mr. Marlett encountered upon arrival (Dean, 1969)

Generally, settlement of the township was slow with the exception of the area between Galt and Branchton. A member of the original survey party from New York State, William Mackenzie, along with approximately seven others returned to settle the area shortly after the survey was completed. Settlement within the vicinity of the current community of Galt commenced shortly after 1816 when William Dickson hired Absolom Shade, a young carpenter from Pennsylvania, to manage the Block One lands. The location of Dickson's mill, store and other buildings evolved into the town of Galt. Dickson later hired John Telfer to return to Scotland and recruit immigrants, which led to the early settler character of the township being predominantly Scottish. By the end of 1817, 38 families were living in Dumfries Township (Walker & Miles, 1877); by the 1880s, the population was reported to be 3,283 (Robinson, 1881).

The *Illustrated Historical Atlas of the County of Waterloo* ('*Historical Atlas*'), demonstrates the extent to which North Dumfries Township had been settled by 1877 (Walker & Miles, 1877; Figure 2). Few landowners and even fewer houses are illustrated throughout the township, although a number of churches, cemeteries, schools and other public building are depicted.

The Study Area is situated mostly within Lot 25 Concession 7 but a small portion of the eastern end of the Study Area lies within Lot 26. There is no owner information listed for Lot 25, but Lot 26 shows Jason Wrigley as owner. The early road depicted on the *Historic Atlas* map corresponds to the current Spragues Road. Several areas of water and one stream are depicted within Lots 25 and 26 Concession 7, and one house is depicted within Lot 26 to the north of the Study Area on

the opposite side of Spragues Road (Walker & Miles, 1877). The early village of Ayr is located approximately 4.5km to the west of the Study Area.

Although significant and detailed landowner information is available on the historical maps discussed here, it should be recognized that historical county atlases were funded by subscriptions fees and were produced primarily to identify factories, offices, residences and landholdings of subscribers. Landowners who did not subscribe were not always listed on the maps (Caston, 1997, p. 100). Moreover, associated structures were not necessarily depicted or placed accurately (Gentilcore & Head, 1984).

1.3 Archaeological Context

1.3.1 Property Description and Physical Setting

The Study Area at 2495 Spragues Road comprises a rectangular-shaped parcel that fronts onto Spragues Road and measures approximately 0.93 hectares ('ha'). The Study Area is bound by Spragues Road to the west, an agricultural field to the north, a commercial property to the east, and residential properties to the south (Figure 3). At the time of assessment, a laydown area occupied the eastern end of the Study Area, and included several portable offices and work spaces and a large parking area surrounded by grass. The laydown area was accessed by a long, wide driveway bordered by trees on both sides that spanned the southern edge of the property. The remainder of the Study Area comprised a large open field. According to aerial imagery of the Study Area, this field does not appear to have been utilised for agriculture since at least 2006. Nevertheless, given that it was accessible to ploughing, the field was subject to ploughing. The ploughed portion of the field was ringed by overgrown grass to the east, west and south.

The Study Area is located within the Horseshoe Moraines physiographic region (Chapman & Putnam, 1984). The Horseshoe Moraines is moderately hilly with gravel terraces and swampy floors and contains two to three morainic ridges of pale brown, hard and calcareous fine-textured till, with a moderate degree of stoniness. Moreover, this region

...forms the core of a horseshoe-shaped region flanking the upland that lies to the west of the highest part of the Niagara cuesta. The associated meltwater stream deposits are also included giving the region two chief landform components (a) the irregular, stony knobs and ridges which are composed mostly of till and with some sand and gravel deposits (kames); and (b) the more or less pitted sand and gravel terraces and swampy valley floors. ... The northern section, in Grey County, includes several tracts of shallow, stony drift on the Niagara cuesta and, also a few scattered groups of drumlin. The "toe" of the horseshoe-shaped region lies on the highest part of the upland south of Georgian Bay...

Chapman & Putnam, 1984, p. 127

The closest source of potable water are tributaries of the Grand River, one of which is located 128m to the west of the Study Area, while the other is located 157m to the east. The Grand River itself is located 2.3km to the southeast of the Study Area.

1.3.2 Pre-Contact Aboriginal Land Use

This portion of southern Ontario was occupied by people as far back as 11,000 years ago as the glaciers retreated. For the majority of this time, people were practicing hunter-gatherer lifestyles with a gradual move towards more extensive farming practices. Table 1 provides a general outline of the cultural chronology of North Dumfries Township (Ellis & Ferris, 1990).

Table 1: Cultural Chronology for North Dumfries Township

| Time Period | Cultural Period | Comments |
|--------------|-----------------|--|
| 9500–7000 BC | Paleo Indian | first human occupation hunters of caribou and other extinct Pleistocene game nomadic, small band society |

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

1.3.3 Previous Identified Archaeological Work

In order to compile an inventory of archaeological resources, the registered archaeological site records kept by the MCM were consulted. In Ontario, information concerning archaeological sites stored in the ASDB (Government of Ontario, n.d.) is maintained by the MCM. This database contains archaeological sites registered according to the Borden system. Under the Borden system, Canada is divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13 kilometres ('km') east to west and approximately 18.5km north to south. Each Borden Block is referenced by a four-letter designator and sites within a block are numbered sequentially as they are found. The Study Area lies within 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, 1990c). The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to all media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The 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.

According to the ASDB, three archaeological sites have been registered within a 1km radius of the Study Area (Table 2). All three sites are pre-contact Aboriginal sites, including one dating to the Archaic period.

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

| Borden Number | Site Name | Time Period | Affinity | Site Type |
|---------------|----------------|-------------|------------|---------------|
| AhHc-27 | Pinehurst | Archaic | Aboriginal | camp/campsite |
| AhHc-127 | Vanderzanden 2 | Pre-Contact | Aboriginal | scatter |
| AhHc-128 | Vanderzanden 1 | Pre-Contact | Aboriginal | scatter |

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

1.3.4 Archaeological Potential

Detritus applied archaeological potential criteria commonly used by the MCM to determine areas of archaeological potential within the Study Area. According to Section 1.3.1 of the *Standards and Guidelines* (Government of Ontario, 2011), these variables include proximity to previously identified archaeological sites, distance to various types of water sources, soil texture and drainage, glacial geomorphology, elevated topography, and the general topographic variability of the area.

Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and, when considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils or topographic variability, may also indicate archaeological potential. When evaluating distance to water it is important to distinguish between water and shoreline, as well as natural and artificial water sources, as these features affect site locations and types to varying degrees. As per Section 1.3.1 of the *Standards and Guidelines* (Government of Ontario, 2011), water sources may be categorized in the following manner:

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

As was discussed above, the closest source of potable water are tributaries of the Grand River, one of which is located 128m to the west of the Study Area, while the other is located 157m to the east. The Grand River itself is located 2.3km to the southeast of the Study Area.

Soil texture is also an important determinant of past settlement, usually in combination with other factors such as topography. The Study Area is situated within the Horseshoe Moraines physiographic region. As was discussed earlier, the soils within this region are imperfectly drained, but suitable for pre-contact and post contact Aboriginal agricultural. Considering also the length of occupation of North Dumfries Township prior to the arrival of Euro-Canadian settlers, as evidenced by the three pre-contact Aboriginal sites registered within 1km, the pre-contact and post-contact Aboriginal archaeological potential of the Study Area is judged to be moderate to high.

For Euro-Canadian sites, archaeological potential can be extended to areas of early Euro-Canadian settlement, including places of military or pioneer settlements; early transportation routes; and properties listed on the municipal register or designated under the *Ontario Heritage Act* (Government of Ontario, 1990b) or property that local histories or informants have identified with possible historical events. The *Historical Atlas* from 1877 show the Study Area in close proximity to historical infrastructure, including Early roads. Considering the location of the Study Area near to the early Village of Ayr, the potential for post-contact Euro-Canadian archaeological resources is judged to be moderate to high.

Finally, despite the factors mentioned above, extensive land disturbance can eradicate archaeological potential within a Study Area, as outlined in Section 1.3.2 of the *Standards and Guidelines* (Government of Ontario, 2011). Aerial imagery identified a possible disturbance area within the Study Area in the form of one long wide driveway spanning the southern edge of the property, as well as parking areas and several building clustered in the eastern end. It is recommended that these potential disturbances be subject to a Stage 2 property inspection to confirm the limits of the disturbance. Detritus determined that the remainder of the Study Area, including the large open field and overgrown grassy areas with some trees, demonstrated the potential for the recovery of pre-contact Aboriginal, post-contact Aboriginal, and Euro-Canadian archaeological resources, and were recommended for Stage 2 assessment.

2.0 Field Methods

The Stage 2 assessment of the Study Area was conducted on May 7th, 2024, under archaeological consulting license P389 issued to Dr. Walter McCall by the MCM. The limits of the Study Area were established in the field using a georeferenced shapefile produced using QGIS and uploaded to a hand-held GPS device running Qfield. Buried utility locates were obtained prior to initiating fieldwork.

During the Stage 2 assessment conditions were excellent and at no time were the field, weather, or lighting conditions detrimental to the recovery of archaeological material as per Section 2.1, Standard 3 of the *Standards and Guidelines* (Government of Ontario, 2011). The weather during the assessment was sunny and the soil was dry and screened easily and ground visibility was excellent. Photos 1 to 8 demonstrate the land conditions at the time of the survey throughout the Study Area, including areas that met the requirements for a Stage 2 archaeological assessment, as per Section 7.8.6, Standards 1a of the *Standards and Guidelines* (Government of Ontario, 2011). Figure 3 provides an illustration of the Stage 2 assessment methods, as well as photograph locations and directions. First Nations Representative joined Detritus on site during the Stage 2 Assessment (see Supplementary Documentation for further details regarding Aboriginal Engagement).

The Stage 2 field assessment began with a property inspection conducted as per Section 2.1.8, of the *Standards and Guidelines* (Government of Ontario, 2011). According to the results of this inspection, approximately 45% (0.42ha) of the Study Area comprised the possible disturbance areas identified on the current aerial imagery (see Section 1.3.4 above). The disturbed areas, which includes the long wide driveway along the southern edge of the property, as well as the parking areas and portable structures at the eastern end, were evaluated as having no potential based on the identification of extensive and deep land alteration that has severely damaged the integrity of archaeological resources, as per Section 2.1, Standard 2b of the *Standards and Guidelines* (Government of Ontario, 2011). The visible areas of previous disturbance observed within the Study Area were mapped and photo documented in accordance with Section 2.1, Standard 6 and Section 7.8.1, Standard 1b of the *Standards and Guidelines* (Government of Ontario, 2011).

Approximately 16% (0.15a) of the Study Area comprised the overgrown grassy areas with some trees that were deemed inaccessible to ploughing. Most of these areas were subject to a typical test pit survey at five-metre intervals in accordance with Section 2.1.2 of the *Standards and Guidelines* (Government of Ontario, 2011). The test pit survey was conducted to within 1m of the built structures or until test pits show evidence of recent ground disturbance, as per Section 2.1.2, Standard 4 of the *Standards and Guidelines* (Government of Ontario, 2011). Each test pit was at least 30 centimetres ('cm') in diameter and excavated 5cm into sterile subsoil as per Section 2.1.2, Standards 5 and 6 of the *Standards and Guidelines* (Government of Ontario, 2011). The soils were then examined for stratigraphy, cultural features, or evidence of fill.

Most of the test pits ranged in total depth from 16cm to 49cm and featured a single sandy loam soil layer (topsoil) above orange sand subsoil (Photos 8 to 10). Considering that each of these test pit was excavated 5cm into sterile subsoil, the observed topsoil layer ranged in depth from 11cm to 44cm. The test pits excavated to the east of the portable structures in the laydown area, and adjacent to the northern edge of the wide driveway featured a compact gravel fill layer (Photos 11 & 12). The areas of gravel fill were subject to test pit at judgemental intervals as per Section 2.1.8, Standard 2 of the *Standards and Guidelines* (Government of Ontario 2011) to confirm the limits of the disturbance.

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

The remaining 39% (0.36ha) of the Study Area comprised the large open field that was ploughed and allowed to weather as per Section 2.1.1, Standards 2 and 3 of the *Standards and Guidelines* (Government of Ontario, 2011; Photos 1 to 6). The ploughing was deep enough to provide total

topsoil exposure, and to provide a minimum of 80% surface visibility as per Section 2.1.1, Standards 4 and 5 of the *Standards and Guidelines* (Government of Ontario, 2011). The ploughed area was subject to pedestrian survey at 5m intervals in accordance with Section 2.1.1, Standard 6 of the *Standards and Guidelines* (Government of Ontario, 2011; Photo 1). During the pedestrian survey, when archaeological resources were recovered, survey intervals were intensified to 1m within a 20m radius of the find as per Section 2.1.1, Standard 7 of the *Standards and Guidelines* (Government of Ontario, 2011). This approach was taken to establish whether or not the artifact was an isolated find or part of a larger artifact scatter. The pedestrian survey resulted in the identification and documentation of one isolated pre-contact Aboriginal findspot, identified as Findspot 1, in the centre of the field (Tile 3 of the Supplementary Documentation).

The artifact was collected and recorded to the associated findspot and returned for laboratory analysis. Universal Transverse Mercator ('UTM') coordinates were recorded for Findspot 1 as well as a fixed landmark using a "Bad Elf" GPS Pro with a stationary accuracy of 2.5m (North American Datum 1983 ('NAD83') and UTM Zone 17T). These coordinates are presented in the Supplementary Documentation to this report.

3.0 Record of Finds

The Stage 2 archaeological assessment was conducted employing the methods described in Section 2.0 above, resulting in the documentation of one isolated findspot, identified as Findspot 1. An inventory of the documentary record generated during fieldwork is provided in Table 3, below. Maps indicating the exact location of Findspot 1, as well as all UTM coordinates recorded during the assessment are included in the Supplementary Documentation to this report.

Table 3: Inventory of Document Record

| Document Types | Current Location | Additional Comments |
|---------------------------------|------------------|-----------------------------------|
| 1 Page of Field Notes | Detritus offices | Stored digitally in project files |
| 1 Map provided by the Proponent | Detritus offices | Stored digitally in project files |
| 1 Field Map | Detritus offices | Stored digitally in project files |
| 20 Digital Photographs | Detritus offices | Stored digitally in project files |

All of the material culture collected during the Stage 2 survey is contained in one box and will be temporarily housed in the offices of Detritus until formal arrangements can be made for its transfer to His Majesty the King in right of the Province of Ontario or another suitable public institution acceptable to the MCM and the Study Area's owners.

3.1 Findspot 1

Findspot 1 was identified as a piece of pre-contact Aboriginal chipping detritus manufactured from Onondaga chert (Cat#1; Plate 1). Chert type identification was accomplished visually using reference materials located in personal collections or online.

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

In addition to identifying its chert type, the flake was subject to morphological analysis following the classification scheme described by Lennox, Dodd and Murphy for the Wiacek Site (Lennox, Dodd, & Murphy, 1986) and expanded upon by Fisher for the Adder Orchard site (Fisher, 1997). According to this system, primary and secondary flakes, along with cortical removal flakes, are a product of percussion flaking undertaken during the initial reduction phases of raw material into blanks, bifaces and preforms. These early-stage reduction flakes tend to exhibit minimal dorsal flake scarring, and are often characterized by the presence of cortex, or the original unflaked chert exterior, on their dorsal surfaces and proximal ends. For cortical removal flakes, over half of the dorsal surface comprises cortex; for primary flakes, less than half. Secondary flakes, meanwhile, may not contain any cortex. Thinning flakes are produced during the latter stages of lithic reduction, when blanks, bifaces, and preforms are shaped into projectile points and formal tools. They are the result of pressure flaking, where the maker uses a softer material such as antler, wood or bone to apply direct pressure onto a specific part of the tool. Pressure flaking generally produces smaller, thinner flakes than does percussion flaking. Thinning flakes also exhibit more flake scars on their dorsal surface than do primary or secondary flakes. Fragmentary flakes are flakes that may have some identifiable flake characteristic but cannot be classified with certainty into a specific category.

According to the results of this analysis, the specimen from Findspot 1 was identified as a thinning flake. Given the isolated nature of the artifact, however, it is difficult to draw any useful conclusions regarding site function or specific temporal association.

3.3 Artifact Catalogue

Table 4: Findspot 1 Stage 2 Artifact Catalogue

| Cat# | Findspot # | Artifact | Frequency | Chert Type | Morphology |
|------|------------|-------------------|-----------|------------|---------------|
| 1 | 1 | Chipping detritus | 1 | Onondaga | Tool Thinning |

4.0 Analysis and Conclusions

Detritus was retained by the Proponent to conduct a Stage 1-2 archaeological assessment in advance of future development on the property at 2495 Spragues Road, North Dumfries.

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

The subsequent Stage 2 field assessment of the Study Area was conducted on May 7th, 2024. This investigation began with a property inspection. This inspection revealed that the long wide driveway along the southern edge of the Study Area, as well as the parking areas and portable buildings at its eastern end retained no or low archaeological potential based on the identification of extensive and deep land alteration that has severely damaged the integrity of archaeological resources. Furthermore, test pits in the grassy areas to the east of the portable buildings and along the northern edge of the driveway contained compact gravel fill. These areas were subject to test pitting at judgemental intervals to confirm the limits of the disturbance. All of the previously disturbed areas throughout the Study Area, as confirmed during the Stage 2 property inspection with judgemental test pitting, were mapped and photo documented.

The remainder of the Study Area comprised the large ploughed field ringed by overgrown, undisturbed grassy areas. The undisturbed grassy areas were assessed by means of a typical test pit survey at 5m intervals; no artifacts were encountered. The ploughed field was assessed by means of a typical pedestrian survey also at 5m intervals. This investigation resulted in the documentation of an isolated tool thinning flake manufactured from Onondaga chert in the middle of the field. The findspot was identified as Findspot 1.

Given that insufficient resources were documented to meet the criteria for continuing to Stage 3, the pedestrian survey coverage was intensified around Findspot 1 in a 20m radius to determine whether a recommendation for Stage 3 could be supported. No additional artifacts were observed. Given the isolated nature of the flake, it is difficult to draw any useful conclusions regarding function or specific temporal association of Findspot 1.

Given the results of the Stage 2 assessment Findspot 1 has been interpreted as a small activity area of unknown function, occupied by unspecified Aboriginal people during the pre-contact period.

5.0 Recommendations

Given that the Stage 2 survey did not identify any archaeological sites requiring further assessment, it is recommended that **no further archaeological assessment is required for the Study Area.**

6.0 Advice on Compliance with Legislation

This report is submitted to the Minister Citizenship and Multiculturalism as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Citizenship and Multiculturalism, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.

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

7.0 Bibliography

- Archives of Ontario. (2012-2015). *The Evolution of the District and County System, 1788-1899*. Retrieved January 24, 2022, from <http://www.archives.gov.on.ca/en/maps/ontario-districts.aspx>
- Birch, J. (2010). *Coalescence and Conflict in Iroquoian Ontario*. Retrieved January 20, 2022, from http://uga.academia.edu/JenniferBirch/Papers/183903/Coalescence_and_Conflict_in_Iroquoian_Ontario
- Byerly, A. E. (1935). *The Beginning of Things in Wellington and Waterloo Counties*. Guelph: Guelph Publishing Company.
- Caston, W. A. (1997). Evolution in the Mapping of Southern Ontario and Wellington County. *Wellington County History*, 10, 91-106.
- Chapman, L. J., & Putnam, D. F. (1984). *The Physiography of Southern Ontario*. Ontario Geological Survey. Special Volume 2 (3rd ed.). Toronto: Ontario Ministry of Natural Resources.
- Coyne, J. H. (1895). *The Country of Neutrals (As Far as Comprised in the County of Elgin): From Champlain to Talbot*. St. Thomas: The St. Thomas Print.
- Dean, W. G. (Ed.). (1969). *Economic Atlas of Ontario*. Toronto: University of Toronto Press.
- Eley, B., & von Bitter, P. H. (1989). *Cherts of Southern Ontario*. Toronto: Royal Ontario Museum.
- Ellis, C. J., & Ferris, N. (1990). *The Archaeology of Southern Ontario to A.D. 1650. Occasional Publication No. 5*. London: Ontario Archaeology Society, London Chapter.
- Ferris, N. (2009). *The Archaeology of Native-Lived Colonialism: Challenging History in the Great Lakes*. Tuscon: University of Arizona.
- Fisher, J. 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).
- Gentilcore, L. R., & Head, G. (1984). *Ontario's History in Maps*. Toronto: University of Toronto Press.
- Gibson, M. M. (2006). *In the Footsteps of the Mississaugas*. Mississauga: Mississauga Heritage Foundation.
- Government of Ontario. (1990a). *Ontario Planning Act, R.S.O. 1990, CHAPTER P. 13. Last Amendment: 2021, c. 25, Sched. 24*. Retrieved 01 24, 2022, from <https://www.ontario.ca/laws/statute/90p13>
- Government of Ontario. (1990b). *Ontario Heritage Act, R.S.O. 1990, CHAPTER O.18. Last amendment: 2021, c. 4, Sched. 6, s. 74*. Retrieved 01 24, 2022, from <https://www.ontario.ca/laws/statute/90o18>
- Government of Ontario. (1990c). *Freedom of Information and Protection of Privacy Act, R.S.O. 1990, CHAPTER F.31. Last amendment: 2021, c. 4, Sched. 11, s. 11*. Retrieved 01 24, 2022, from <https://www.ontario.ca/laws/statute/90f31>
- Government of Ontario. (2011). *Standards and Guidelines for Consultant Archaeologists*. Toronto: Ministry of Citizenship and Multiculturalism.
- Government of Ontario. (n.d.). *Archaeological Sites Database Files*. Ministry of Citizenship and Multiculturalism.
- Harper, R. (1950). The Early History of Haldimand County. In *Grand River Sachem*. Caledonia: Harper & Arell Martindale Publishers.

- Heidenreich, C. (1990). History of the St. Lawrence–Great Lakes Area to 1650. In C. J. Ellis, & N. Ferris (Ed.), *The Archaeology of Southern Ontario. Occasional Publication No. 5*, pp. 475–492. London: Ontario Archaeological Society, London Chapter.
- Jamieson, S. M. (1992). Regional Interaction and Ontario Iroquois Evolution. *Canadian Journal of Archaeology*, 16, 70–88.
- Lennox, P., Dodd, C., & Murphy, C. (1986). *The Wiacek Site: A Late Middleport Component, Simcoe County*. London: Ontario Ministry of Transportation and Communications.
- Morris, J. L. (1943). *Indians of Ontario (1964 reprint)*. Ontario Department of Lands and Forests.
- Moyer, B. (1971). *This Unique Heritage: The Story of Waterloo County*. Kitchener: Radio Station CHYM Kitchener.
- Niagara Historical Society and Museum. (2008). *Our Glory, A Brief History of Niagara-on-the-Lake*. Niagara-on-the-Lake: Niagara Historical Society and Museum.
- Noble, W. (1978). The Neutral Indians. In Essays in Northeastern Anthropology in Memory of Marian E. White, Occasional Publications. In W. Englebrecht, & G. Donald (Ed.), *Northeastern Anthropology 5* (pp. 152-164). Rindge, NH: Department of Anthropology, Franklin Pierce College.
- Page, H. R. (1879). *The Illustrated Historical Atlas of the County of Haldimand, Ontario*. Toronto: H. R. Page & Co.
- Pendergast, J. (1995). The Identity of Jacques Cartier's Stadaconans and Hochelagans: The Huron-Iroquois Option. In A. Bekerman, & G. Warrick (Ed.), *Origins of the People of the Longhouse: Proceedings of the 21st Annual Symposium of the Ontario Archaeological Society* (pp. 106-118). Ontario Archaeological Society.
- Poulton, D., Spence, M., Dodd, C., & Fecteau, R. (1996). The Fradenburg Site: A Historical Neutral Village on the Lower Grand River. *KEWA*, 96(4-5), 2-51.
- Powell, J. R., & Coffman, F. (1956). *Lincoln County, 1856–1956*. St. Catharines: Lincoln County Council.
- Praxis Research Associates. (n.d.). *The History of the Mississaugas of the New Credit First Nation*. Hagersville: Lands, Research, and Membership, Mississaugas of the New Credit First Nation.
- Robinson, C. B. (1881). *Appendix B. Vol. II*. Toronto: Ontario Agricultural Commission.
- Schmalz, P. S. (1991). *The Ojibwa of Southern Ontario*. Toronto: University of Toronto Press.
- Smith, D. (2002). Their Century and a Half on the Credit: The Mississaugas. In F. Dieterman (Ed.), *Mississauga: The First 10,000 Years* (pp. 107-122). Mississauga: Eastendbooks.
- Tanner, H. (Ed.). (1987). *Atlas of Great Lakes Indian History*. Norman: University of Oklahoma Press.
- Walker & Miles. (1877). *The Illustrated Historical Atlas of the County of Waterloo, Ont.* Toronto: Walker & Miles.
- Warrick, G. A. (2000). The Precontact Iroquoian Occupation of Southern Ontario. *Journal of World Prehistory*, 14(4), 415-66.
- Warrick, G. A. (2013). The Aboriginal Population of Ontario in Late Prehistory. In M. K. Munson, & S. M. Jamieson (Eds.), *Before Archaeology: The Archaeology of a Province* (pp. 62-76). McGill-Queen's University Press.
- Weaver, S. (1978). Six Nations of the Grand River, Ontario. In B. Trigger (Ed.), *Handbook of North American Indians* (Vol. 15: Northeast, pp. 525-536). Washington: Smithsonian Institution Press.
- White, M. (1978). Neutral and Wenro. In B. G. Trigger (Ed.), *Handbook of North American Indians Volume 15: Northeast* (pp. 470-411). Washington: Smithsonian Institution Press.

8.0 Maps

Figure 1: Study Area Location

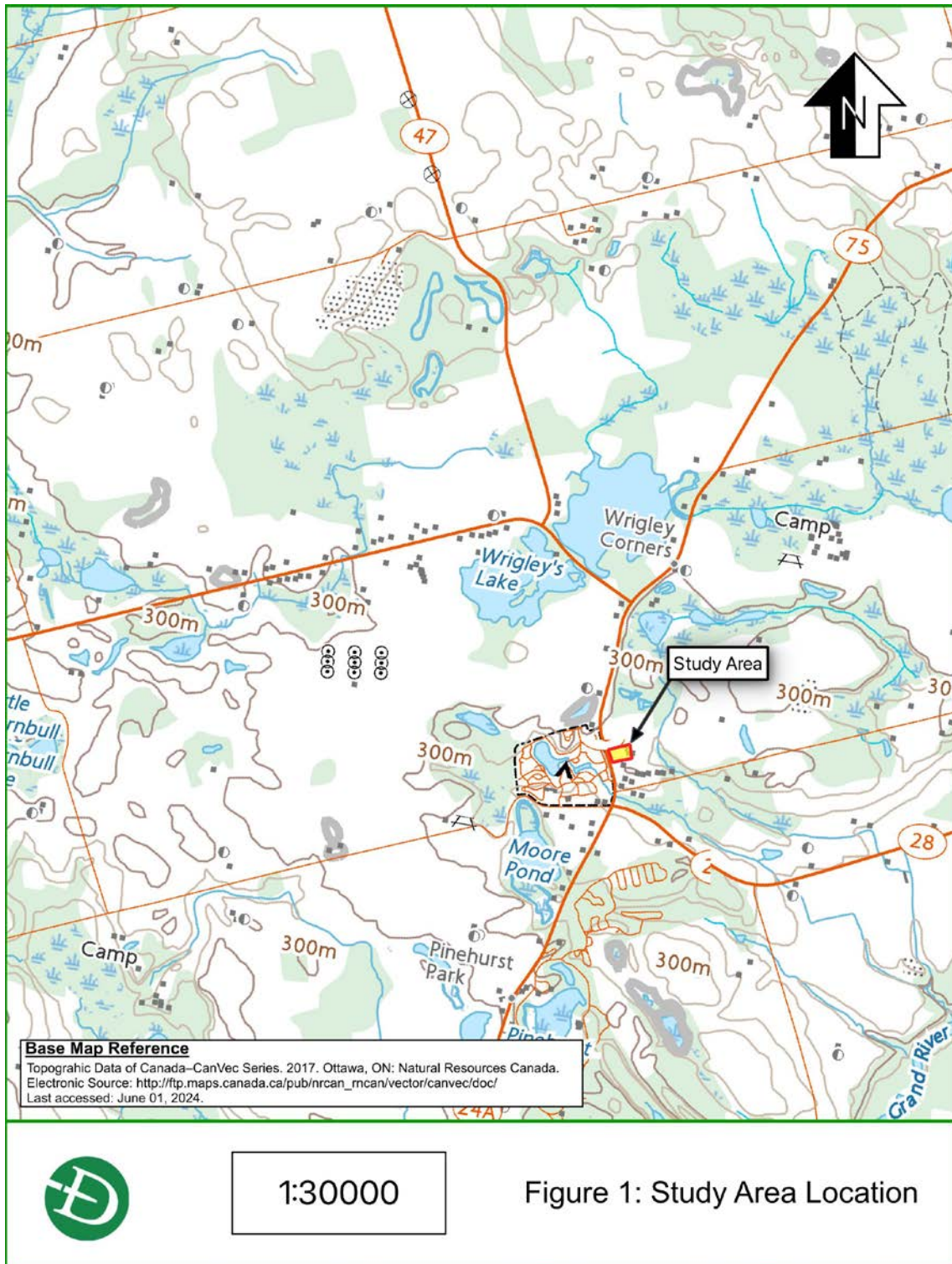


Figure 2: Historic Map Showing Study Area Location

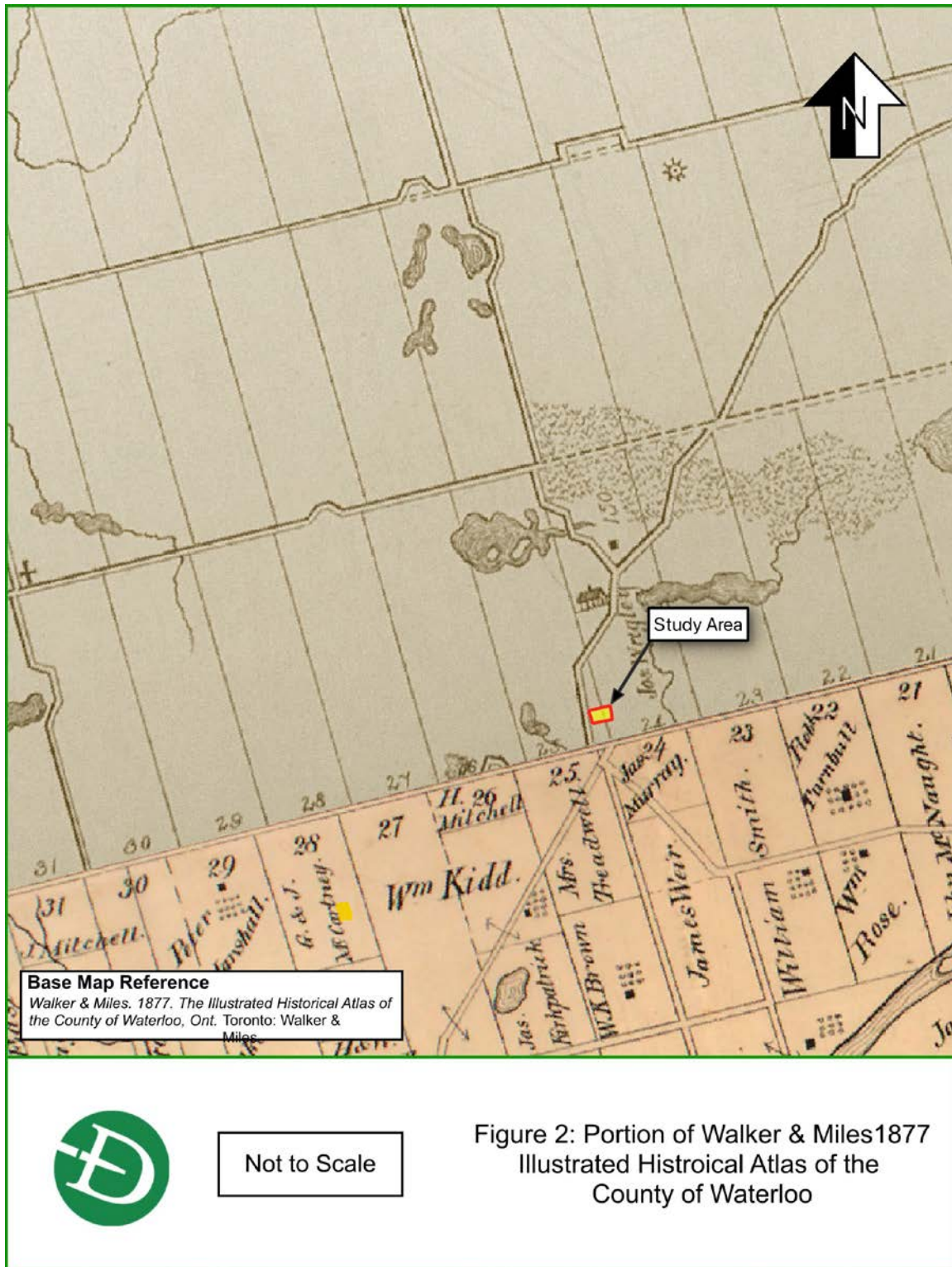
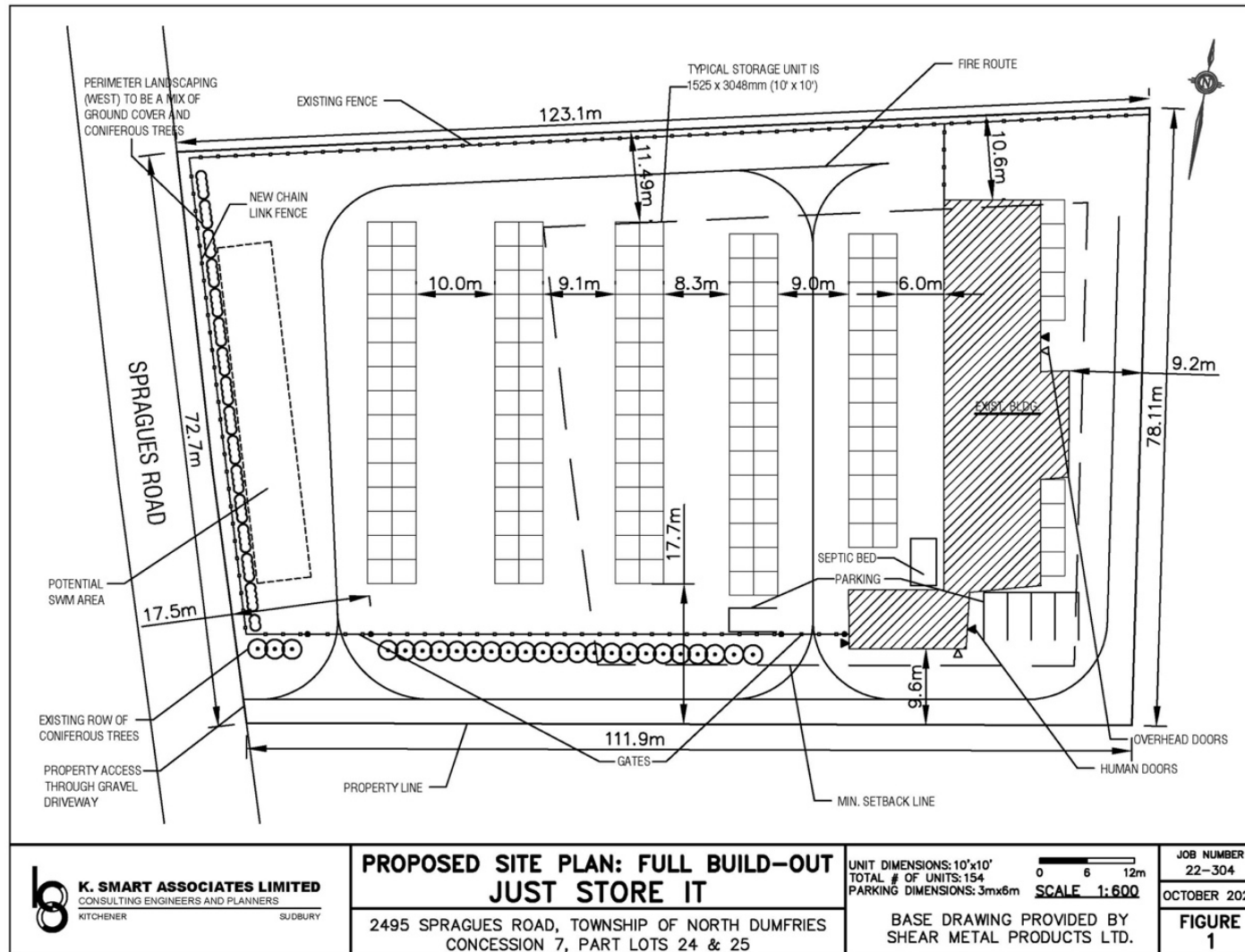


Figure 3: Stage 2 Field Methods Map



Stage 1-2 Archaeological Assessment, 2495 Spragues Road, North Dumfries

Figure 4: Development Plan



9.0 Images

9.1 Field Photos

Photo 1: Large open field, Pedestrian Surveyed at 5m Intervals, looking west



Photo 2: Long wide driveway, Previously Disturbed, looking north



Photo 3: Grassy Area, Test Pit Surveyed at 5m Intervals, and buildings at eastern end of Study Area, Previously Disturbed, looking south



Photo 4: Grassy Area, Test Pit Surveyed at 5m Intervals, and buildings at eastern end of Study Area, Previously Disturbed, looking east



Photo 5: Overgrown grassy area with trees, Test Pit Surveyed at 5m Intervals, looking south



Photo 6: Parking area and buildings at eastern end of Study Area, Previously Disturbed, looking northwest



Photo 7: Parking area and buildings at eastern end of Study Area, Previously Disturbed, looking north



Photo 8: Sample Test Pit



Photo 9: Sample Test Pit



Photo 10: Sample Test Pit



Photo 11: Sample Disturbed Test Pit



Photo 12: Sample Disturbed Test Pit



9.2 Artifacts

**Plate 1: Chipping Detritus Manufactured
from Onondaga Chert, Tool Thinning
Flake, Cat #1**

