### Stage 1-2 Archaeological Assessment Bridge 34/B-T9 (Bridge St. Bridge)

Lots 20 and 21 Concession 3, Lots 20 and 21 Concession 4 and the road allowance between Concessions 3 and 4, Geographic Township of Wilmot, Region of Waterloo, Ontario

> Submitted to: K. Smart Associates on behalf of the Township of Wilmot

> > and

Ontario's Ministry of Tourism, Culture and Sport

Submitted by:



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### **ORIGINAL REPORT**

August 4, 2021

## **Executive Summary**

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Pedram Yazdan Panah of K. Smart Associates on behalf of the Township of Wilmot ('the Proponent') to conduct a Stage 1-2 archaeological assessment on Lots 20 and 21 Concession 3, Lots 20 and 21 Concession 4, and the road allowance between Concessions 3 and 4, Geographic Township of Wilmot, Region of Waterloo, Ontario (Figure 1). This assessment was undertaken in advance of a proposed bridge replacement located on Bridge Street ( bridge 34/B-T9).

The original area to be assessed ('Study Area') comprised sections of Bridge Street, it's right-ofway, and bridge 34/B-T9. In accordance with the preference of indigenous representatives present at the time of assessment, and in agreement with the engineer present representing the proponent, the Study Area was adjusted to incorporate a two-transect-wide test pit survey on the north and south sides of the road. The revised shape of the Study Area was increased in width to 10m north and south of the highway right-of-way, but reduced in length to a point 130m east of the west end of the bridge, and 105m west of the east end of the bridge (see Figure 3).This revised Study Area measures approximately 1.04 hectares (ha).

The assessment was triggered by the Provincial Policy Statement ('PPS') that is informed by the *Planning Act* (Government of Ontario 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger *Ontario Heritage Act* (1990b). According to Section 2.6.2 of the PPS, "development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved." To meet the condition, a Stage 1-2 assessment of the Study Area was conducted, during the pre-approval phase of the proposed bridge replacement, under archaeological consulting license P462 issued to Mr. Mike Pitul by the Ministry of Tourism, Culture and Sport ('MTCS') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* ('Standards and Guidelines'; Government of Ontario 2011).

At the time of the assessment terrestrial components of the Study Area included sections of asphalt road with gravel shoulders and embankments, graveled driveways, and areas of scrub and forest.

The Stage 1 background research indicated that the scrub and forest components of the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources and were recommended for Stage 2 archaeological assessment (Figure 3). The existing asphalt road sections with gravel shoulders, and the gravel driveways 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). These areas of disturbance, as confirmed during the Stage 2 field survey, 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). Furthermore, a portion of the Nith River is present within the Study Area. This was evaluated as being permanently wet and therefore was determined to retain no potential, as per Section 2.1. Standard 2a of the Standards and Guidelines (Government of Ontario 2011). Additionally, a portion of the forest in the northwest section of the Study Area was steeply sloped (>20°). This was also evaluated as retaining no potential, as per Section 2.1, Standard 2a of the Standards and Guidelines (Government of Ontario 2011). The permanently wet area as confirmed during the Stage 2 field survey, were mapped and photo documented in accordance with Section 2.1, Standard 6 and Section 7.8.1, Standard 1a of the Standards and Guidelines (Government of Ontario 2011).

The subsequent Stage 2 assessment was conducted on October 13, 2020. This investigation consisted of a standard test pit survey at a five-metre interval and resulted in the identification and documentation of no archaeological resources. Therefore, **no additional investigation is recommended for 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.

Detritus Consulting Ltd.

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# **Project Personnel**

Project Manager: Field Director: Field Technician: Report Preparation: Mapping and GIS: Licensee Review: First Nations FLR: Mike Pitul, P462 Mathew Gibson, R1160 Walter McCall, P389 Mathew Gibson, R1160 Mathew Gibson, R1160 Garth Grimes, P017 Chris Tobicoe, MCFN

# **Acknowledgments**

Generous contributions by the following individuals made this report possible.

• Mr. Pedram Yazdan Panah and the Township of Wilmot

# 1.0 Project Context

### **1.1 Development Context**

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Pedram Yazdan Panah of K. Smart Associates on behalf of the Township of Wilmot ('the Proponent') to conduct a Stage 1-2 archaeological assessment on Lots 20 and 21 Concession 3, Lots 20 and 21 Concession 4, and the road allowance between Concessions 3 and 4, Geographic Township of Wilmot, Region of Waterloo, Ontario (Figure 1). This assessment was undertaken in advance of a proposed bridge replacement located on Bridge Street (bridge 34/B-T9).

The original area to be assessed ('Study Area') comprised sections of Bridge Street, it's right-ofway, and bridge 34/B-T9. In accordance with the preference of indigenous representatives present at the time of assessment, and in agreement with the engineer present representing the proponent, the Study Area was adjusted to incorporate a two-transect-wide test pit survey on the north and south sides of the road. The revised shape of the Study Area was increased in width to 10m north and south of the highway right-of-way, but reduced in length to a point 130m east of the west end of the bridge, and 105m west of the east end of the bridge (see Figure 3).This revised Study Area measures approximately 1.04 hectares (ha).

The assessment was triggered by the Provincial Policy Statement ('PPS') that is informed by the *Planning Act* (Government of Ontario 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger *Ontario Heritage Act* (1990b). According to Section 2.6.2 of the PPS, "development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved." To meet the condition, a Stage 1-2 assessment of the Study Area was conducted, during the pre-approval phase of the proposed bridge replacement, under archaeological consulting license P462 issued to Mr. Mike Pitul by the Ministry of Tourism, Culture and Sport ('MTCS') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists ('Standards and Guidelines'*; Government of Ontario 2011).

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

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

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

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

The purpose of a Stage 2 Property Assessment was to provide an overview of any archaeological resources within the Study Area, and to determine whether any of the resources might be archaeological sites with cultural heritage value or interest ('CHVI'), and to provide specific direction for the protection, management and/or recovery of these resources. In compliance with

the *Standards and Guidelines* (Government of Ontario 2011), the objectives of the following Stage 2 assessment are as follows:

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

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

## **1.2 Historical Context**

### **1.2.1 Post-Contact Aboriginal Resources**

The earliest recorded history of southern Ontario 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). In 1647, the Seneca attacked one eastern group of the Neutral (White 1978) and, by 1653, the Neutral had been assimilated by the Five Nations (Jamieson 1992; Noble 1978). The Five Nations relinquished the Niagara Peninsula and northern Lake Ontario area before 1700.

The late 17<sup>th</sup> and early 18<sup>th</sup> centuries represent a watershed moment in the evolution of the postcontact Aboriginal occupation of southern Ontario. At this time, various Iroquoian-speaking communities began migrating into southern Ontario from New York State, followed by the arrival of Algonkian-speaking groups from northern Ontario (Konrad 1981; Schmalz 1991). This period also marks the arrival of the Mississaugas into southern Ontario and, in particular, the watersheds of the lower Great Lakes.

The oral traditions of the Mississaugas, as told by Chief Robert Paudash and recorded in 1904, suggest that the Mississaugas defeated the Mohawk Nation, who retreated to their homeland south of Lake Ontario. Following this conflict, a peace treaty was negotiated between the two groups and, at the end of the 17<sup>th</sup> century, the Mississaugas settled permanently in southern Ontario (Praxis Research Associates n.d.). Around this same time, members of the Three Fires Confederacy (Chippewa, Ottawa, and Potawatomi) began immigrating from Ohio and Michigan into southwestern Ontario (Feest and Feest 1978).

In 1722, the Five Nations adopted the Tuscarora in New York becoming the Six Nations (Pendergast 1995). 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 (Weaver 1978). 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 25<sup>th</sup>, 1784 and was intended to extend a distance of six miles on each side of the Grand River from mouth to source (Weaver 1978).

In July 1792, Simcoe divided Upper Canada into 19 counties stretching from Essex in the west to Glengarry in the east. Later that year, the four districts originally established in 1788 were renamed as the Western, Home, Midland and Eastern Districts. The current Study Area is situated in the historic Home District, which comprised lands obtained in the 'Between the Lakes Purchases' of 1784 and 1792 (Archives of Ontario 2012-2015).

The Study Area first enters the Euro-Canadian historic record a few years later on May 19<sup>th</sup> 1790, as part of Treaty Number 2 made between the First Nation inhabitants of the area and the British, specifically Alexander McKee of the Indian Department (Surtees 1994). This treaty...

...was made with the Ottawas, Chippewas, Pottawatomys and Hurons May 19th, 1790, portions of which nations had established themselves on the Detroit River all of whom had been driven by the Iroquois from the northern and eastern parts of the Province, from the Detroit River easterly to Catfish Creek and south of the river La Tranche [Thames River] and Chenail Ecarte, and contains Essex County except Anderdon Township and Part of West Sandwich; Kent County except Zone Township, and Gores of Camden and Chatham; Elgin County except Bayham Township and parts of South Dorchester and Wilmot. In Middlesex County, Del[a]ware and Westminster Townships and part of North Dorchester.

Morris 1943: 17

At this time, European squatters had already begun to settle along the banks of the Thames River, although their specific locations were not recorded until the first survey of the area was made after the First Nation land surrender in 1790 (Hamil 1951).

The size and nature of the pre-contact settlements and the subsequent spread and distribution of Aboriginal material culture in southern Ontario began to shift with the establishment of European settlers in southern Ontario.

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

### 1.2.2 Euro-Canadian Resources

The current Study Area is located in the Wilmot, Region of Waterloo, Ontario (Figure 1).

On July 24, 1788, Sir Guy Carleton, the Governor-General of British North America, divided the Province of Québec into the administrative districts of Hesse, Nassau, Mecklenburg and Lunenburg (Archives of Ontario 2009). Further change came in December 1791 when the former Province of Québec was rearranged into Upper Canada and Lower Canada under the *Constitutional Act.* Colonel John Graves Simcoe was appointed as Lieutenant-Governor of Upper Canada (Coyne 1895) and he introduced several initiatives to populate the province including the establishment of shoreline communities with effective transportation links between them.

In July 1792, Simcoe divided Upper Canada into 19 counties, including Waterloo County, stretching from Essex in the west to Glengarry in the east. Later that year, the four districts originally established in 1788 were renamed as the Western, Home, Midland and Eastern Districts (Archives of Ontario 2009). At this time, the land including Wilmot Township was declared a Crown Reserve, but was opened to immigration to Mennonite and Amish families following its survey in 1824 (Township of Wilmot 2020).

The *Illustrated Historical Atlas of the Counties of Waterloo and Willington, Ont.* ('*Historical Atlas';* Parsell & Co. 1881), demonstrates the extent to which Wilmot Township had been settled by 1881 (Figure 2). Landowners are listed for many lots within the township. Structures and orchards are prevalent throughout the township, almost all of which front early roads.

The *Historical Atlas* map of Wilmot Township lists no owners for any of the four lots that the Study Area is part of. In addition, no structures are indicated on the properties, nor any community structures nearby (schools, churches etc.).

Significant and detailed landowner information is available on the historical atlas map of Wilmot Township; however, it should be recognized that historical county atlases were produced primarily to identify factories, offices, residences and landholdings of subscribers and were funded by subscriptions fees. Therefore, landowners who did not subscribe were not always listed on the maps (Caston 1997). Moreover, associated structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984).

## **1.3 Archaeological Context**

### 1.3.1 Property Description and Physical Setting

The Study Area comprises portions of Bridge Street to the west and east of the Nith River spanned by bridge 34/B-T9, as well as the right-of-way, which measures 1.04ha. The limits of the study area were determined through coordination with engineers deployed during stage 2 activities by K. Smart Associates. The assessment was conducted over an area extending 10m from the road edge. At the time of the assessment terrestrial components of the Study Area included sections of asphalt road with gravel shoulders and embankments, graveled driveways, and areas of scrub and forest.

The Study Area is situated within the Oxford Till Plain physiographic region. The Oxford Till Plain is located in the centre of southwestern Ontario and covers an area of approximately 155,400ha, primarily within Oxford County. The plain is at an approximate elevation of between 305 and 365m metres (m) above sea level. The region consists of a drumlinized till plain formed when glacier advance overrode a pre-existing moraine from a northwesterly direction. The dominant parent material is Middle Devonian limestone creating a calcareous till. The region contains the headwaters of the Thames River from a swamp within a clay plain. Many of the drainages are misfits within their valleys existing as small drainages within glacial spillways. These spillways often have gravel deposits or have sufficiently eroded overburden down to bedrock such that it is conducive for quarrying. The region is marked for being generally good for agriculture; soils in the region are primarily developed beneath a maple-beech forest (Chapman and Putnam 1984: 143-44).

The closest source of potable water is the Nith River, which transects the centre of the Study Area.

### 1.3.2 Pre-Contact Aboriginal Land Use

This portion of southwestern Ontario has been demonstrated to have been occupied by people as far back as 11,000 years ago as the glaciers retreated. For the majority of this time, people were practicing hunter gatherer lifestyles with a gradual move towards more extensive farming practices. Table 1 provides a general outline of the cultural chronology of Wilmot Township, based on Ellis and Ferris (1990).

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

Table 1: Cultural Chronology for Wilmot Township

Time Period	Cultural Period	Comments
AD 1300 - 1400	Middle Iroquoian (Late Woodland)	shift to agriculture complete increasing political complexity large palisaded villages
AD 1400 - 1650	Late Iroquoian	regional warfare and political/tribal alliances destruction of Huron and Neutral

### 1.3.3 Previously Identified Archaeological Work

In order to compile an inventory of archaeological resources, the registered archaeological site records kept by the MTCS were consulted. In Ontario, information concerning archaeological sites stored in the ASDB (Government of Ontario n.d.) is maintained by the MTCS. This database contains archaeological sites registered according to the Borden system. Under the Borden system, Canada is divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13 kilometres (km) east to west and approximately 18.5km north to south. Each Borden Block is referenced by a four-letter designator and sites within a block are numbered sequentially as they are found. The study area under review is within Borden Block AiHd.

Information concerning specific site locations is protected by provincial policy, and is not fully subject to the *Freedom of Information and Protection of Privacy Act* (Government of Ontario 1990c). The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to all media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The MTCS will provide information concerning site location to the party or an agent of the party holding title to a property, or to a licensed archaeologist with relevant cultural resource management interests.

According to the ASDB, three archaeological site has been registered within 1km of the Study Area, all pre-contact Aboriginal sites dated to the Archaic, Early Woodland and Late Woodland periods. For further information See Table 2, below.

Borden Number	Site Name	Time Period	Affinity	Site Type
AiHd-13	Brown	Woodland, Early	Aboriginal	Unknown
AiHd-12	Zimmer	Archaic	Aboriginal	Unknown
AhHd-5	Wintemberg 1	Archaic, Woodland	Aboriginal	Other camp/campsite

Table 2: Registered Archaeological Sites within 1km

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

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Detritus applied archaeological potential criteria commonly used by the MTCS (Government of Ontario 2011) to determine areas of archaeological potential within Study Area. These variables include proximity to previously identified archaeological sites, distance to various types of water sources, soil texture and drainage, glacial geomorphology, elevated topography, and the general topographic variability of the area.

Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and, considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils or topographic variability, may also indicate archaeological potential. When evaluating distance to water it is important to distinguish between water and shoreline, as well as natural and artificial water sources, as these features affect sites locations

and types to varying degrees. The MTCS (Government of Ontario 2011) categorizes water sources in the following manner:

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

As was discussed above, the closest source of potable water is the Nith River, which transects the centre 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 Norfolk Sand Plain physiographic region. As was discussed earlier, the primary soils within the Study Area, have been documented as being suitable for pre-contact Aboriginal practices. Add to this discussion the presence of a single multi-component site within 1km of the Study Area and the Aboriginal archaeological potential is judged to be moderate to high.

For Euro-Canadian sites, archaeological potential can be extended to areas of early Euro-Canadian settlement, including places of military or pioneer settlements; early transportation routes; and properties listed on the municipal register or designated under the *Ontario Heritage Act* (Government of Ontario 1990b) or property that local histories or informants have identified with possible historical events.

As was discussed above, the *Historical Atlas* map (Parsell & Co. 1881; Figure 2) demonstrates the extent to which Wilmot Township had been settled by 1881. The Study Area is a historical road, and near the early community of New Dundee. The potential for post-contact Euro-Canadian archaeological resources is judged to be moderate.

Finally, despite the factors mentioned above, extensive land disturbance can eradicate archaeological potential within a Study Area (Wilson and Horne 1995). The existing asphalt road and gravel shoulder was identified 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 1.3.2 of the *Standards and Guidelines* (Government of Ontario 2011).

These possible areas of previous disturbance were confirmed during a Stage 2 property inspection, conducted as per Section 2.1.8 of the *Standards and Guidelines* (Government of Ontario 2011). Based on the results of this inspection, the existing asphalt roads with gravel shoulders was excluded from the Stage 2 assessment, as per Section 2.1, Standard 2b of the *Standards and Guidelines* (Government of Ontario 2011). Additionally, the Nith River that transects the centre of the Study Area; this was excluded from the Stage 2 assessment, as per Section 2.1, Standard 2a of the *Standards and Guidelines* (Government of Ontario 2011). The remainder of the Study Area comprised forest and scrub areas which demonstrated no signs of visible disturbance and therefore retained archaeological potential and were recommended for assessment.

# 2.0 Field Methods

The current Stage 2 archaeological assessment was conducted on October 13, 2020 under archaeological consulting license P462 issued to Mr. Mike Pitul by the MTCS (P462-0036-2019).

At the time of the assessment conditions were excellent and at no time were the field, weather, or lighting conditions detrimental to the recovery of archaeological material. The temperature was a high of 13 degrees Celsius. Photos 1 to 9 demonstrate the land conditions at the time of the survey throughout the Study Area. Figure 3 provides an illustration of the Stage 2 assessment methods, as well as photograph locations and directions.

Approximately 65% of the Study Area comprised the two sections of asphalt road with gravel shoulder. These areas 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). These disturbed areas were mapped and photo documented only in accordance with Section 2.1, Standard 6 and Section 7.8.1, Standard 1b of the *Standards and Guidelines* (Government of Ontario 2011).

Approximately 30% of the Study Area comprised scrub and forest on level ground, which was deemed inaccessible to ploughing. These areas were subject to a typical test pit survey at 5m intervals in accordance with Section 2.1.2 of the *Standards and Guidelines* (Government of Ontario 2011). All test pits were approximately 30 centimetres (cm) in diameter and were excavated 5cm into sterile subsoil. The soils were then examined for stratigraphy, cultural features, or evidence of fill. A single soil layer (topsoil) was observed. All soil from the test pits was screened through six-millimetre (mm) hardware cloth to facilitate the recovery of small artifacts and then used to backfill the pit. No additional techniques were employed as no artifacts were recovered.

The remaining 15% of the Study Area comprises a section of the Nith River. This area was evaluated as having no archaeological potential (see Section 1.3.4 above). These permanently wet areas were mapped and photo documented in accordance with Section 2.1 Standard 6; Section 7.8.1, Standard 1a; and Section 7.8.6, Standard 1b of the *Standards and Guidelines* (Government of Ontario 2011).

# 3.0 Record of Finds

The Stage 2 archaeological assessment was conducted employing the methods described in Section 2.0 and resulted in the identification and recovery of no archaeological resources. An inventory of the documentary record generated by fieldwork is provided in Table 3 below.

#### **Table 3: Inventory of Document Record**

Document Type	Current Location of Document Type	Additional Comments
2 Page of Field Notes	Detritus office	Stored digitally in project file
1 Map provided by the Proponent	Detritus office	Stored digitally in project file
1 Field Map	Detritus office	Stored digitally in project file
12Digital Photographs	Detritus office	Stored digitally in project file

As no material culture was collected during the Stage 2 survey, no storage arrangements have been made.

# 4.0 Analysis and Conclusions

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Pedram Yazdan Panah on behalf of the Township of Wilmot ('the Proponent') to conduct a Stage 1-2 archaeological assessment on Lots 20 and 21 Concession 3, Lots 20 and 21 Concession 4, and the road allowance between Concessions 3 and 4, Geographic Township of Wilmot, Region of Waterloo, Ontario (Figure 1). This assessment was undertaken in advance of a proposed bridge replacement located on Bridge Street ( bridge 34/B-T9).

The original Study Area comprised sections of Bridge Street, it's right-of-way, and bridge 34/B-T9. In accordance with the preference of indigenous representatives present at the time of assessment, and in agreement with the engineer present representing the proponent, the Study Area was adjusted to incorporate a two-transect-wide test pit survey on the north and south sides of the road. The revised shape of the Study Area was increased in width to 10m north and south of the highway right-of-way, but reduced in length to a point 130m east of the west end of the bridge, and 105m west of the east end of the bridge (see Figure 3).This revised Study Area measures approximately 1.04ha.

At the time of the assessment the terrestrial components of the Study Area included sections of asphalt road with gravel shoulders, gravel driveways, and areas of scrub and forest.

The Stage 1 background research indicated that the scrub and forest components of the Study Area exhibited moderate potential for the identification and recovery of archaeological resources and were recommended for Stage 2 archaeological assessment (Figure 3).

The subsequent Stage 2 assessment was conducted on October 13, 2020. This investigation consisted of a standard test pit survey at a five-metre interval and resulted in the identification and documentation of no archaeological resources.

The existing sections of asphalt roads with gravel shoulders 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). These areas of disturbance, as confirmed during the Stage 2 field survey, 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). Furthermore, a section of the Nith River transects the centre of the Study Area. This area was evaluated as being permanently wet and therefore were determined to retain no potential, as per Section 2.1, Standard 2a of the *Standards and Guidelines* (Government of Ontario 2011). Additionally, a portion of the forest in the northwest section of the Study Area was steeply sloped (>20°). This was also evaluated as retaining no potential, as per Section 2.1, Standard *Guidelines* (Government of Ontario 2011). The permanently wet area and steeply sloped area, as confirmed during the Stage 2 field survey, were mapped and photo documented in accordance with Section 2.1, Standard 5 and *Guidelines* (Government of Ontario 2011). The permanently wet area and steeply sloped area, as confirmed during the Stage 2 field survey, were mapped and photo documented in accordance with Section 2.1, Standard 6 and Section 7.8.1, Standard 1a of the *Standards and Guidelines* (Government of Ontario 2011).

## 5.0 Recommendations

No artifacts were recovered from the Study Area. Accordingly, **no further archaeological assessment of the Study Area is recommended.** 

Detritus Consulting Ltd.

# 6.0 Advice on Compliance with Legislation

This report is submitted to the Minister of Tourism and Culture as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 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 Tourism, Culture and Sport, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

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

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

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

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

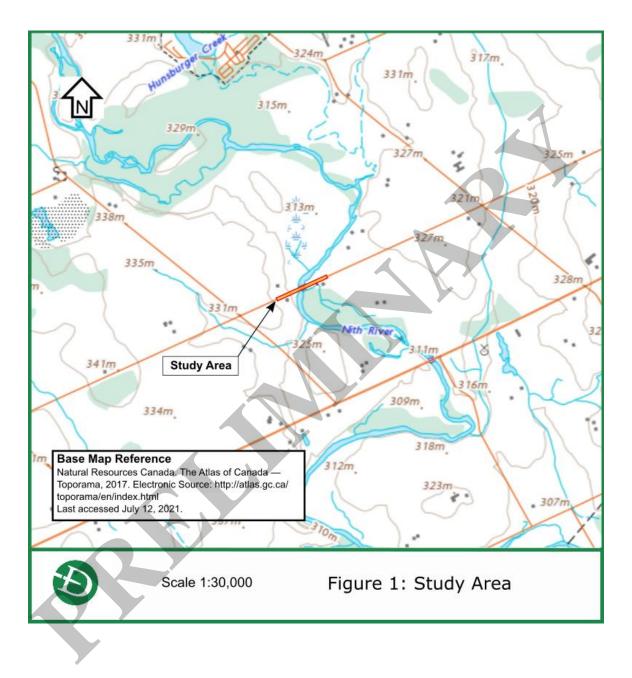
## 7.0 Bibliography and Sources

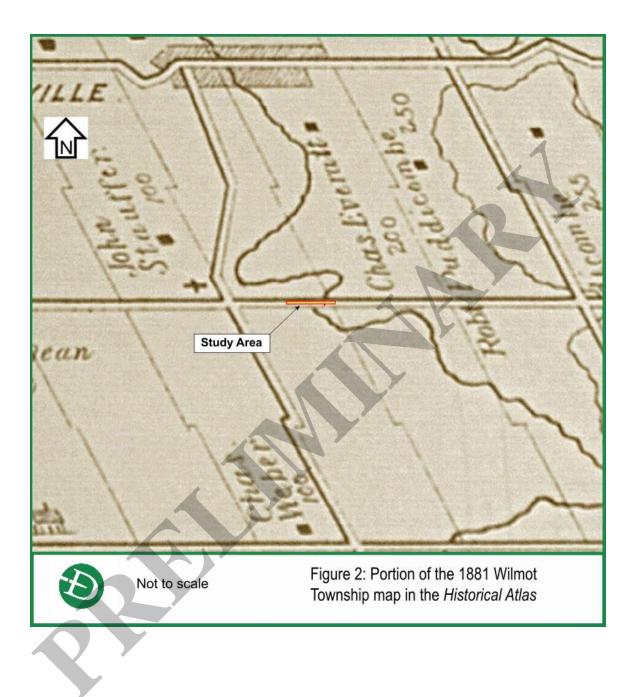
- Adams, Nick. 1994. *Field Manual for Avocational Archaeologists in Ontario*. Ontario Archaeological Society Inc., Archaeological Stewardship Project.
- Archives of Ontario. 2009. *The Evolution of the District and County System, 1788-1899*. Electronic document: http://www.archives.gov.on.ca/en/maps/ontario-districts.aspx. Last accessed, August 11, 2019.
- Beaudoin, Matthew A. 2013. *De-essentializing the Past: Deconstructing Colonial Categories in* 19th-Century Ontario. Unpublished Ph.D. thesis, University of Western Ontario, London, Ontario.
- Caston, Wayne A. 1997. Evolution in the Mapping of Southern Ontario and Wellington County. Wellington County History 10:91-106.
- Chapman, L.J. and D.F. Putnam. 1984. *The Physiography of Southern Ontario*. Third Edition. Ontario Geological Survey. Special Volume 2. Ontario Ministry of Natural Resources, Toronto.
- Coyne, J. H. 1895. The Country of the Neutrals (As Far as Comprised in the County of Elgin): From Champlain to Talbot. Times Print, St. Thomas.
- Davidson, R.J. 1989. Foundations of the Land Bedrock Geology. In J.B. Theberge (editor) *The Natural History of Ontario*, pp. 36-47. McClelland and Stewart Inc., Toronto.
- 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.
- Feest, Johanna E. and Christian F. Feest 1978. The Ottawa. In Trigger B.G. (editor) Handbook of North American Indians. Vol.15 Northeast, pp. 772-786. Smithsonian Institute, Washington.
- Ferris, Neal. 2009. The Archaeology of Native-Lived Colonialism: Challenging History in the Great Lakes. Tucson: University of Arizona Press.
- Gentilcore, R. Louis and C. Grant Head. 1984. Ontario's History in Maps. Toronto: University of Toronto Press.
- Government of Ontario. 1990a. Ontario Planning Act, R.S.O. 1990, CHAPTER P.13. Last amendment: 2018, c. 16, s. 8. Electronic document: https://www.ontario.ca/laws/statute/90p13. Last accessed August 16, 2019.
- Government of Ontario. 1990b. Ontario Heritage Act, R.S.O. 1990, CHAPTER O.18. Last amendment: 2017, c. 34, Sched. 46, s. 37. Electronic document: https://www.ontario.ca/laws/statute/90018. Last accessed August 16, 2019.
- Government of Ontario. 1990c. Freedom of Information and Protection of Privacy Act, R.S.O. 1990, CHAPTER F.31. Last amendment: 2018, c. 17, Sched. 19. Electronic document: https://www.ontario.ca/laws/statute/90f31. Last accessed August 16, 2019.
- Government of Ontario. 2011. *Standards and Guidelines for Consultant Archaeologists*. Ministry of Tourism, Culture and Sport, Toronto.
- Government of Ontario. n.d. *Archaeological Sites Database Files*. Culture Services Unit, Ministry of Tourism, Culture and Sport, Toronto.
- Heritage Wilmot. 2020. "History of Wilmot Township." In *Heritage Wilmot*. Electronic document: . www.wilmot.ca/en/living-here/History-of-Wilmot-Township.aspx#. Last accessed November 11, 2020
- Jamieson, S. M. 1992 Regional Interaction and Ontario Iroquois Evolution. *Canadian Journal of Archaeology* 16:70-88.

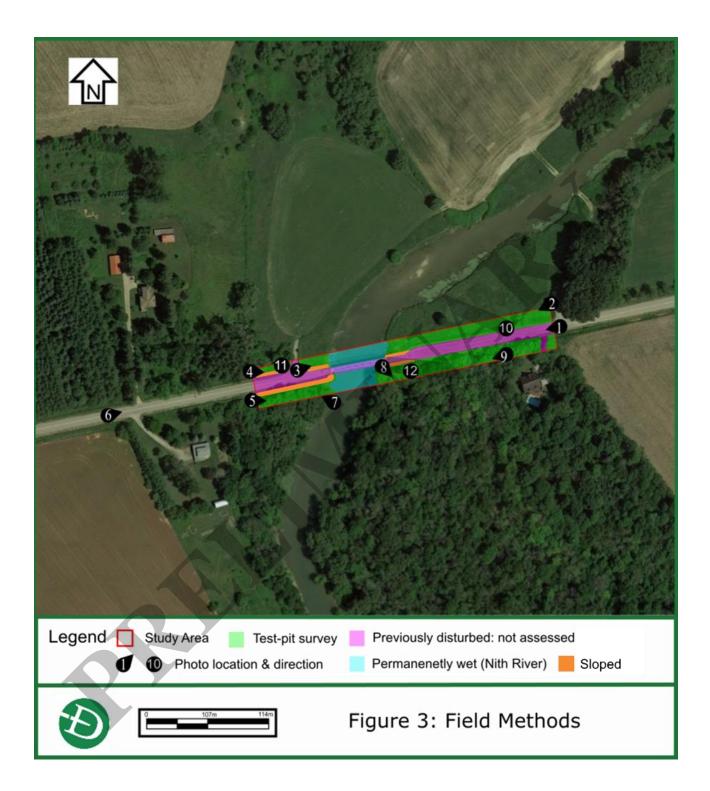
Kenyon, Ian. 1980. 19th Century Notes. KEWA (80-2).

- 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, Paul. 1983. *The Horner Creek Site: An Historic Neutral Encampment in Brant County*. Report on file with the Ministry of Tourism, Culture, and Sport, Toronto.
- Morris, J.L. 1943. *Indians of Ontario*. 1964 reprint. Toronto: Department of Lands and Forests, Government of Ontario.
- Noble, William. 1978. "The Neutral Indians." In *Essays in Northeastern Anthropology in Memory of Marian E. White*, Occasional Publications in Northeastern Anthropology 5, pp. 152-164. William Engelbrecht and Donald Grayson, editors. Department of Anthropology, Franklin Pierce College, Rindge, New Hampshire.
- Parsell & Co. 1881 Illustrated Historical Atlas of Waterloo and Wellington Counties, Ont. Parsell & Co., Toronto
- 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.
- Schmalz, Peter S. 1991. The Ojibwa of Southern Ontario. University of Toronto Press, Toronto.
- Shott, Michael J. 1993. The Leavitt Site: A Parkhill Phase Paleo-Indian Occupation in Central Michigan. Memoirs. Vol. 25. : Museum of Anthropology, University of Michigan, Ann Arbor.
- Surtees, Robert J. 1994. "Land Cessations, 1763-1830." In *Aboriginal Ontario: Historical Perspectives on the First Nations*, pp. 92-121. Edward Rogers and Donald B. Smith (editors). Dundurn Press, Toronto.
- Voss, Barbara L. 2008. *The Archaeology of Ethnogenesis: Race and Sexuality in Colonial San Francisco*. University of California Press, Berkeley.
- Weaver, Sally. 1978. "Six Nations of the Grand River, Ontario." In *Handbook of North American Indians. Volume 15: Northeast*, pp. 525-536. Bruce G. Trigger, editor. Smithsonian Institution Press, Washington.
- White, Marian. 1978. "Neutral and Wenro." In *Handbook of North American Indians Volume 15: Northeast*, pp. 407-411. Bruce G. Trigger, editor. Washington: Smithsonian Institution Press, Washington.
- Wilson, J.A. and M. Horne 1995. City of London Archaeological Master Plan. City of London, Department of Planning and Development, London, Ontario.

# 8.0 Maps







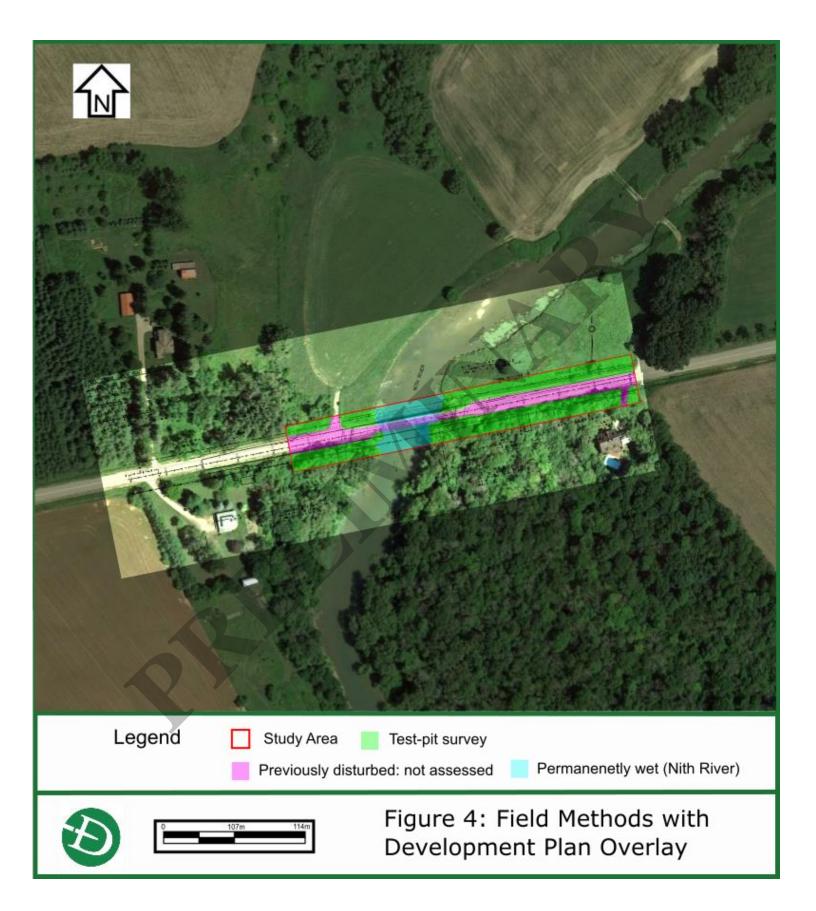
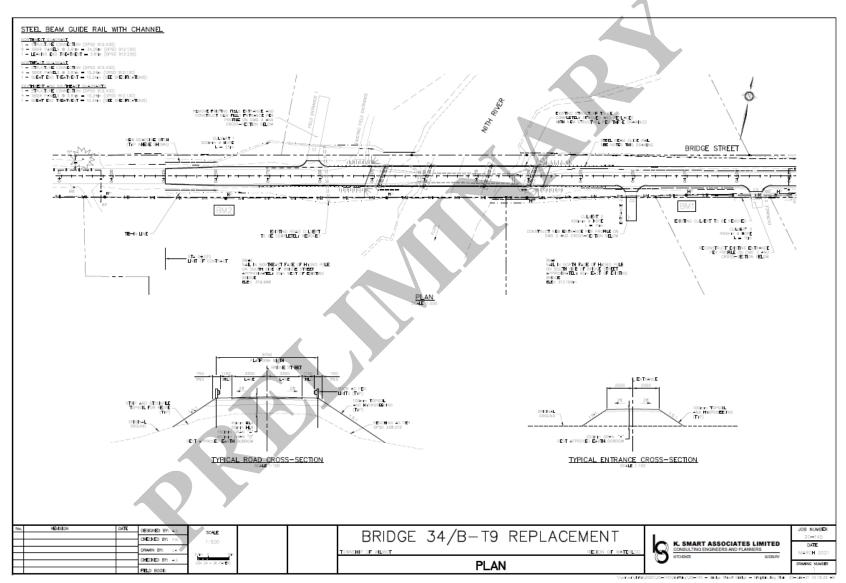


Figure 5: Development Map



#### Images 9.0

Photo 1: Looking west along Bridge Street

### Photo 2: Looking west across scrub with test pitting





Photo 3: Looking east over scrub with test pitting

Photo 4: Test pit survey in trees, looking east



Photo 5: Test pit survey in forest



Photo 6: Looking east along Bridge Street





Photo 7: Forest south of road and west of river, looking northwest



Photo 9: Forest south of road and east of river, looking west

Photo 8: Forest south of road and east of river, looking south



Photo 10: Sample test pit



Photo 11: Sample test pit



Photo 12: Sample test pit



