



**STAGE 1 ARCHAEOLOGICAL  
ASSESSMENT: HIGHWAY 401 PLANNING  
STUDY EAST OF BROCKVILLE (GWP  
4111-22-00)**

Part of Multiple Lots, Concession 1, Township  
of Elizabethtown, Former County of Leeds,  
now the United Counties of Leeds and  
Grenville, Part of Lot 37, Concession 1,  
Township of Augusta, United Counties of  
Leeds and Grenville, Ontario

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**ORIGINAL REPORT**

## Limitations and Conclusions

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## **Executive Summary**

The Ontario Ministry of Transportation (MTO) (the Client) has retained Stantec Consulting Ltd. (Stantec) complete a Stage 1 Archaeological Assessment as part of the Preliminary Design undertaking, and Class Environmental Assessment (Class EA) Study on Highway 401 for the replacement and rehabilitation of one bridge and one culvert, and identifying the future Highway 401 footprint for an interim six lanes and ultimate eight lanes, from 0.75 kilometres (km) east of North Augusta Road to 3.3 km west of Maitland Road (approximately 2.6km ) (GWP 4111-22-00) (the Project). The study area is located within parts of Lots 1 to 7 and Common, Concession 1, Geographic Township of Elizabethtown, former County of Leeds, now the United Counties of Leeds and Grenville, Part of Lot 37, Concession 1, Township of Augusta, United Counties of Leeds and Grenville, Ontario. The study area is approximately 70.65 hectares and includes Highway 401 and its Right of Ways, manicured lawns, grassy and small forested pockets, and agricultural fields. The Stage 1 Archaeological Assessment was carried out in accordance with the provisions of the *Ontario Heritage Act* (Government of Ontario 1990a) and conducted in compliance with the provincial standards and guidelines set out in the Ministry of Citizenship and Multiculturalism's (MCM) *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

Stage 1 Archaeological Assessment was conducted under Project Information Form number P394-0220-2024, issued by the Ministry of Citizenship and Multiculturalism (MCM) to Sarah Henderson, MA. The Stage 1 Archaeological Assessment involved background research and a property inspection conducted on June 12, 2024, to evaluate the archaeological potential of the study area. The Stage 1 Archaeological Assessment determined parts of the study area to have archaeological potential.

Based on the Stage 1 Archaeological Assessment results presented in this report, Stantec recommends:

1. No further archaeological assessment is required for parts of the study area evaluated to be disturbed and that hold no or low archaeological potential
2. Stage 2 Archaeological Assessment for parts of the study area evaluated to have archaeological potential. Stage 2 Archaeological Assessment will involve both test pit survey and pedestrian survey, as per Sections 2.1.1 and 2.1.2 of the MCM's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011)
  - a. Portions of the study area comprised of actively or recently cultivated agricultural fields will be subject to pedestrian survey, as per Section 2.1.1 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Fields should be ploughed deep enough to provide total topsoil soil exposure but not deeper than previous ploughing and allowed to weather appropriately prior to the pedestrian survey.

If archaeological resources are identified during pedestrian survey, survey transects should be reduced to one-metre intervals over a minimum of a 20-metre radius around the find to determine whether it is an isolated find or part of a larger scatter, as per



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Section 2.1.1, Standard 7 of the 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

- b. Portions of the study area comprised of scrubland that are not accessible for ploughing will be subject to test pit survey, as per Section 2.1.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Test pits should be hand excavated by shovel and trowel, extending at least 30 centimetres in diameter and at least five centimetres into the subsoil where possible. Soil from all test pits will be screened through a six-millimetre hardware mesh to facilitate the identification and recovery of archaeological resources. All test pits will be examined for stratigraphy, cultural features, and evidence of fill. All test pits were backfilled.

If archaeological resources were identified, test pit survey will continue on the grid to determine how many additional test pits are positive, while staying within the limits of the study area. If sufficient archaeological resources are identified to meet the criteria for making a recommendation to carry out a Stage 3 Archaeological Assessment, no further intensification is required. If insufficient archaeological resources are found, further intensification following Section 2.1.3 Standard 2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) is required.

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

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



## **Acronyms / Abbreviations**

BCE	Before Common Era
CE	Common Era
EA	Class Environmental Assessment
GIS	Geographical Information Services
km	Kilometres
MA	Master of Arts
MCM	Ministry of Citizenship and Multiculturalism
mm	Millimetre
MTO	Ministry of Transportation
P.Eng	Professional Engineer
PIF	Project Information Form
RoW	Right of Way
Stantec	Stantec Consulting Inc.



**Project Personnel**

## Project Personnel

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## Acknowledgements

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# 1 Project Context

## 1.1 Development Context

The Ontario Ministry of Transportation (the Client) retained Stantec Consulting Ltd. (Stantec) to complete a Stage 1 Archaeological Assessment for the Preliminary Design and Class Environmental Assessment (EA) Study of a portion of Highway 401 for the replacement and rehabilitation of one bridge and one culvert, and the potential future Highway 401 footprint for an interim six lanes and ultimate eight lanes of highway, from 0.75 kilometres (km) east of North Augusta Road to 3.3 km west of Maitland Road (approximately 2.6 km) (the Project). The purpose of the Study is to identify a Recommended Plan that addresses current and future transportation needs in the study Area as part of MTO's ongoing review of safety and operational needs for the provincial highway network. The study area is located within parts of Lots 1 to 7 and Common, Concession 1, Geographic Township of Elizabethtown, former County of Leeds, now the United Counties of Leeds and Grenville, Part of Lot 37, Concession 1 Township of Augusta, United Counties of Leeds and Grenville, Ontario (Figure 1). The study area is approximately 70.65 hectares and includes the Highway 401 corridor, additional road Rights of Way (RoW), manicured lawns, forested areas, and agricultural fields (Figure 2).

The Stage 1 Archaeological Assessment was carried out in accordance with the provisions of the *Ontario Heritage Act* (Government of Ontario 1990a) and conducted in compliance with the provincial standards and guidelines set out in the Ministry of Citizenship and Multiculturalism's (MCM) *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

The Client provided Stantec with permission to conduct a Stage 1 Archaeological Assessment, including property inspection on MTO property and within the RoW.

### 1.1.1 OBJECTIVES

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

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

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

- Review of relevant archaeological, historical, and environmental literature pertaining to the study area.
- Review of the land use history, including pertinent historical maps.



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- Examination of the *Ontario Archaeological Sites Database* to determine the presence of registered archaeological sites in and around the study area.
- Property inspection to document areas of archaeological potential.

The Client provided permission to access to Highway 401 and the RoW.

## 1.2 Historical Context

“Contact” is typically used as a chronological benchmark when discussing Indigenous archaeology in Canada and describes the contact between Indigenous and European cultures. There is no definitive moment of contact and the understanding of when Indigenous and European communities first began to influence one another is evolving with new study of archaeological and historical evidence, and from Indigenous oral tradition. Contact in what is now the province of Ontario is broadly assigned to the 16<sup>th</sup> century (Loewen and Chapdelaine 2016).

### 1.2.1 PRE-CONTACT INDIGENOUS RESOURCES

Overall, archaeological research in many parts of eastern Ontario has been fairly limited, at least compared to adjoining areas in southern Ontario and northern New York State, resulting in a limited understanding of the cultural processes that occurred in this part of the province. Much of what is understood about the lifeways of these Indigenous peoples is derived from archaeological evidence and ethnographic analogy. In Ontario, Indigenous culture prior to the period of contact with European peoples has been distinguished into archaeological culture periods based on observed changes in material culture. These archaeological culture periods are largely based on observed changes to formal lithic tools, and separated into the Early Paleo, Late Paleo, Early Archaic, Middle Archaic, Late Archaic, and Terminal Archaic periods. Following the advent of ceramic technology in the Indigenous archaeological record, archaeological culture periods are separated into the Early Woodland, Middle Woodland, and Late Woodland periods, based primarily on observed changes in formal ceramic decoration. It should be noted that these archaeological culture periods do not necessarily represent specific cultural identities but are a useful paradigm for understanding changes in Indigenous culture through time. The current understanding of Indigenous archaeological culture is summarized in Table 1, based on syntheses in Ellis and Ferris (1990). The provided time periods are based on the “Common Era” calendar notation system, i.e., Before Common Era (BCE) and Common Era (CE).

**Table 1: Generalized Pre-Contact Cultural Chronology for Southern Ontario**

Archaeological Period	Time Period	Characteristics
Early Paleo	9000 – 8400 BCE	Caribou and extinct Pleistocene mammal hunters, small camps.
Late Paleo	8400 – 8000 BCE	Smaller but more numerous sites.
Early Archaic	8000 – 6000 BCE	Slow population growth, emergence of woodworking industry, development of specialized tools.
Middle Archaic	6000 – 2500 BCE	Environment similar to present, fishing becomes important component of subsistence, wide trade networks for exotic goods.



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<b>Archaeological Period</b>	<b>Time Period</b>	<b>Characteristics</b>
Late Archaic	2500 – 1100 BCE	Increasing site size, large chipped lithic tools, introduction of bow hunting.
Terminal Archaic	1100 – 950 BCE	Emergence of true cemeteries with inclusion of exotic trade goods.
Early Woodland	950 – 400 BCE	Introduction of pottery, continuation of Terminal Archaic settlement and subsistence patterns.
Middle Woodland	400 BCE – 600 CE	Increased sedentism, larger settlements in spring and summer, dispersed smaller settlement in fall and winter, some elaborate mortuary ceremonialism.
Transitional Woodland	600 – 900 CE	Incipient agriculture in some locations, seasonal hunting & gathering.
Early Late Woodland	900 – 1300 CE	Limited agriculture, development of small village settlement, small communal longhouses.
Middle Late Woodland	1300 – 1400 CE	Shift to agriculture as major component of subsistence, larger villages with large longhouses, increasing political complexity.
Late Late Woodland	1400 – 1650 CE	Very large villages with smaller houses, politically allied regional populations, increasing trading network
Contact Indigenous	1650 – 1875 CE	Early written records and treaties.

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

By approximately 8000 BCE, evidence exists, and becomes more common for, the production of ground-stone tools such as axes, chisels, and adzes. These tools are believed to be indicative specifically of woodworking. This evidence can be extended to indicate an increased craft production and, arguably, craft specialization. This latter statement is also supported by evidence, dating to approximately 7000 BCE, of ornately carved stone objects which would be laborious to produce and have explicit aesthetic qualities (Ellis 2013:41). This is indirectly indicative of changes in the social organization which permitted individuals to devote time and effort to craft specialization. Around 8000 BCE, the Great Lakes basin experienced a low-water phase, with shorelines significantly below current lake levels (Stewart 2013: Figure 1.1.C). It is presumed that most human settlements would have been focused along these former shorelines. At approximately 6500 BCE, the climate had warmed considerably since the recession of the glaciers, and the environment had grown more similar to the present day.

During the late part of the Middle Archaic (6000 – 2500 BCE) a distinctive occupation, or tradition, known as the Laurentian Archaic, appears in south-eastern Ontario, western Quebec, northern New York and Vermont. Laurentian Archaic sites are found only within the transitional zone between the deciduous forests to the south and coniferous forests to the north known as the Canadian Biotic Province and are identifiable through the association of certain diagnostic tool types, including ground slate semi-lunar knives (or “ulus”), plummets for use in fishing, ground slate points and knives, and ground stone gouges, adzes and grooved axes. It is thought that there was less reliance on plant foods and a greater reliance on hunting and fishing in this region than for Archaic peoples in southern and south-western Ontario.



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Laurentian Archaic sites have been found in the middle Ottawa River valley, along the Petawawa River and Trent River watersheds, and at Brockville.

The trend towards decreased territory size and a broadening subsistence base continued during the Late Archaic (2500 – 1100 BCE). Late Archaic sites are far more numerous than either Early or Middle Archaic sites. It appears that the increase in numbers of sites at least partly represents an increase in population. The appearance of the first true cemeteries occurs during the Late Archaic. Prior to this period, individuals were interred close to the location where they died. However, with the advent of the Late Archaic and local cemeteries, individuals who died at a distance from the cemetery would be returned for final burial at the group cemetery, often resulting in disarticulated skeletons, occasionally missing minor bone elements (e.g., finger bones). The emergence of local group cemeteries has been interpreted as being a response to both increased population densities and competition between local groups for access to resources, in that cemeteries would have provided symbolic claims over a local territory and its resources.

Increased territoriality and more limited movement are also consistent with the development of distinct local styles of projectile points. The trade networks, which began in the Middle Archaic, expand during this period and begin to include marine shell artifacts (such as beads and gorgets) from as far away as the Mid-Atlantic coast. These marine shell artifacts, and native copper implements, show up as grave goods, indicating the value of the items. Other artifacts such as polished stone pipes and slate gorgets also appear on Late Archaic sites. One of the more unusual of the Late Archaic artifacts is the "birdstone", small, bird-like effigies usually manufactured from green banded slate.

The Early Woodland period (950 – 400 BCE) is distinguished from the Late Archaic period primarily by the addition of ceramic technology. While the introduction of pottery provides a useful demarcation point for archaeologists, it may have made less difference in the lives of the Early Woodland peoples. The first pots were very crudely constructed, thick walled, and friable. It has been suggested that they were used in the processing of nut oils by boiling crushed nut fragments in water and skimming off the oil. These vessels were not easily portable, and individual pots must not have enjoyed a long use life. There have also been numerous Early Woodland sites located at which no pottery was found, suggesting that these poorly constructed, undecorated vessels had yet to assume a central position in the day-to-day lives of Early Woodland peoples.

Other than the introduction of this rather limited ceramic technology, the life-ways of Early Woodland peoples show a great deal of continuity with the preceding Late Archaic period. Thin, well-made projectile points that were produced during the terminal part of the Archaic period continue in use. However, the Early Woodland variants were side-notched rather than corner-notched, giving them a slightly altered and distinctive appearance. The trade networks which were established in the Middle and Late Archaic also continued to function, although there does not appear to have been as much traffic in marine shells during the Early Woodland period. These trade items were included in increasingly sophisticated burial ceremonies, some of which involved construction of burial mounds.

In terms of settlement and subsistence patterns, the Middle Woodland (1300 – 1400 CE) provides a major point of departure from the Archaic and Early Woodland periods. While Middle Woodland peoples still relied on hunting and gathering to meet their subsistence requirements, fish were becoming an even



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more important part of the diet. Middle Woodland vessels are often heavily decorated with hastily impressed designs covering the entire exterior surface and upper portion of the vessel interior. Consequently, even very small fragments of Middle Woodland vessels are easily identifiable.

It is also at the beginning of the Middle Woodland period that rich, densely occupied sites appear along the margins of major rivers and lakes. While these areas had been utilized by earlier peoples, Middle Woodland sites are significantly different in that the same location was occupied off and on for as long as several hundred years. These Middle Woodland sites appear to have functioned as base camps, occupied off and on throughout the course of the year. There are also numerous small upland Middle Woodland sites, many of which can be interpreted as special purpose camps from which localized resource patches were exploited. This shift towards a greater degree of sedentism continues the trend witnessed since the Middle Archaic and provides a prelude to the developments that follow during the Late Woodland period.

The relatively brief period of the Transitional Woodland period is marked by the acquisition of cultivar plants species, such as maize and squash, from communities living south of the Great Lakes. The appearance of these plants began a transition to food production, which consequently led to a reduced need to acquire naturally occurring food resources. Sites were thus occupied for longer periods and by larger populations. Transitional Woodland sites have not been discovered in eastern Ontario.

The Late Woodland period in southern Ontario is often divided into three temporal components; Early, Middle and Late Late Woodland. In eastern Ontario, there is considerable overlap of people continuing to practice a hunting and gathering economy and those using limited horticulture as a supplement to gathered plants. For the most part, however, classic Late Woodland sites in eastern Ontario are limited to an area at the east end of Lake Ontario and along the St. Lawrence River valley. Middle Late Woodland sites have not been identified east of the Kingston area.

During the Late Late Woodland period (1400 – 1650 CE) a distinctive material culture emerges at the east end of Lake Ontario and along the St. Lawrence River up to Québec City, known as the St. Lawrence complex. St. Lawrence complex sites are characterized by large semi-permanent villages and associated satellite settlements. The inhabitants of these villages and satellites practiced horticulture of staple crops which made up the bulk of their diet. Other food resources were hunted, fished and gathered. St. Lawrence complex village sites can be extensive, up to four hectares or more in size and composed of a number of longhouse structures. Special purpose satellite settlements, such as hunting and fishing camps, are smaller in area and in the number and size of structures within the settlement. While the early contact period descendants of the Late Woodland St. Lawrence complex and Huron used the Ottawa River and its tributaries as transportation routes between the St. Lawrence River and the interior, Late Late Woodland village sites have not been identified.

### **1.2.2 POST-CONTACT INDIGENOUS RESOURCES**

The nature of Indigenous settlement size, population distribution, and material culture shifted as European settlers encroached upon Indigenous territory. However, despite this shift, written accounts of material culture and livelihood, correlations of historically recorded villages to their archaeological assemblages, and the resemblances of those sites to more ancient sites have revealed an antiquity to



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documented cultural expressions that confirms a deep historical continuity to systems of ideology and thought (Ferris 2009:114). As a result, Indigenous peoples have left behind archaeological resources throughout the region which show continuity with past peoples, even if they have not been explicitly recorded in Euro-Canadian documentation.

During the Late Woodland period (1400 – 1650 Common Era (CE)) a distinctive material culture emerges at the east end of Lake Ontario and along the St. Lawrence River up to Québec City, associated with a population generally known the St. Lawrence Iroquoians. However, recent examinations of ethnographic data and historical resources has suggested that not all of the sites associated with this material culture represent the presence of Iroquoian peoples, and that some sites may have been home to Algonquin peoples within this area (Gates-St. Pierre 2016:49). The St. Lawrence Iroquoians, or more appropriately, people of the St. Lawrence complex, occupied a territory that extended from the mouth of Lake Ontario to Québec City, southward to the northern tip of Lake Champlain. Seasonal habitation also extended into the estuarine area and the shores of the Gulf of the St. Lawrence (Gates-St. Pierre 2016:48). Many of the known St. Lawrence complex archaeological sites are concentrated in the west, near present day Jefferson County in upper New York State; however, St. Lawrence complex sites have been found eastwards along the St. Lawrence River valley towards the region of modern-day Québec City. As a result of their geographic location, people of the St. Lawrence complex were among the earliest Indigenous societies to encounter Europeans, namely Jacques Cartier in 1534 (Jamieson 1990:385).

The people of the St. Lawrence complex practiced maize agriculture and occupied large, fortified settlements. Fishing was also a very important part of their subsistence base: yellow perch in particular, have been found on St. Lawrence complex sites and Jacques Cartier described the eel fishery as a very important part of their diet (Gates-St. Pierre 2016:56; Jamieson 1990:385). Cartier specifically describes two settlements: Stadacona, near modern day Québec City; and Hochelaga, at the modern-day site of Montreal. By 1603, when Samuel de Champlain sailed up the St. Lawrence River, people of the St. Lawrence complex had abandoned the settlements described by Cartier (Jamieson 1990:385; Tremblay 2006). There have been multiple hypotheses proposed as to why people of the St. Lawrence complex dispersed. These include climate change, disease, famine, and intertribal warfare between each other or with outside groups such as the Anishnaabeg, the Iroquois of New York State and the Huron-Wendat (Tremblay 2006:123). It is now understood that during the late 16<sup>th</sup> century, people of the St. Lawrence complex abandoned the St. Lawrence Valley and coalesced with populations living elsewhere in the Great Lakes Basin. Oral traditions of both the Huron-Wendat and Mohawk identify ancestral lands in the St. Lawrence Valley (Warrick and Lesage 2016:135-6). Archaeological and linguistic evidence indicates that some St. Lawrence complex populations lived amongst the Huron-Wendat in the late 16<sup>th</sup> century (Birch 2016:41; Ramsden 1990, 2016; Steckley 2016:24).

The traditional homeland of the Mohawk at the time of European contact was along the middle Mohawk River in what is now New York State. Being the easternmost of the Iroquoians they were among the first to encounter Europeans and enter into trading relationships (Fenton and Tooker 1978:467). One of the earliest encounters, in 1609, was between the Mohawk and Champlain and his Huron and Algonquin allies, which resulted in the death of three Mohawk chiefs. The following summer another attack resulted in the deaths of 15 Mohawk warriors and the capture of dozens of others (Trigger 1985:176). These events initiated a period of hostilities between the Mohawk and the Indigenous and French allegiance that



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was centered at Montréal and along the St. Lawrence and Ottawa Rivers (Bonaparte n.d.). The Mohawk instead focused their trade with the Dutch and English along the Hudson River (Trigger 1985:177).

As the fur trade intensified during the first quarter of the 17<sup>th</sup> century the Mohawk became increasingly concerned that the Dutch would enter into trade with the Huron and Algonquin to the north. To circumvent this, in 1624 the Mohawk made peace with the Huron, Algonquin and Montagnais alliance (Trigger 1985:182). Trade with the Dutch continued and eventually the supply of furs began to dwindle, resulting in the need to obtain furs from territories controlled by groups to the north of the lower Great Lakes and St. Lawrence River and led to increasing instances of raiding of Algonquin trade parties and hunting and trapping within the Algonquin territory (Fenton and Tooker 1978:468). Eventually, in the latter half to the 1640s, this led to the dispersal of the northern Iroquoian groups (the Huron, Petun, Neutral and Erie) by a combined effort of the Mohawk and the Seneca. This resulted in the acquisition of many furs and an influx of captives to help replenish their population, which had been reduced through the effects of introduced diseases and decades of hostilities (Fenton and Tooker 1978:468).

With the dispersal of their Indigenous allies, the French entered a peace treaty with the Mohawk in 1653 (Fenton and Tooker 1978:467; Trigger 1985:277-278). In pursuing greater economic relations with the French, many Mohawk left their traditional territory and settled along the St. Lawrence River near Montréal; by the 1670s there was one settlement on the north side of the Island of Montréal and another on the south side of the St. Lawrence River (Fenton and Tooker 1978:469). However, the area on the south side of the river was unsuitable for growing crops and that settlement moved upriver to a new location near the Lachine Rapids. This settlement was known as Kahnawake (“at the rapids”), named after their village on the Mohawk River (Bonaparte n.d.; Fenton and Tooker 1978:470).

By the middle of the 1700s the soil around Kahnawake was becoming depleted and an additional settlement was established upriver at the head of Lake St. Francis (a widening of the St. Lawrence River east of present-day Cornwall) between the Saint Regis and Raquette rivers, on the south side of the St. Lawrence River (Fenton and Tooker 1978:473). Known as Saint Regis, the settlement dates to around 1750 and was the foundation of the present-day Mohawk community of Akwesasne, which straddles the Canada – United States border southeast of Cornwall. Shortly thereafter, the so-called “French and Indian War” occurred between the British and French, and their Indigenous allies, in their colonial territories. In this war the Mohawk were for the most part allied with the French. Peace after the conclusion of the French and Indian War was short-lived though, and in 1775 the 13 American colonies declared war on Britain in what became the American Revolutionary War. In this conflict the Mohawk largely sided with the British and at the conclusion of the war the Mohawk largely left their traditional lands in the Mohawk River valley and settled on lands on the Bay of Quinte, west of Kingston (Fenton and Tooker 1978:476) and the Mohawk presence along the upper St. Lawrence River has continued into the present day.

The study area is located within the boundaries of the 1783 Crawford’s Purchase (Figure 3). Note that Figure 3 does not represent an exhaustive list of the various treaties, land claims, and land cessions within the region. Rather, Figure 3 is based on Morris (1943) which provides a general outline of some of the treaties within the Province of Ontario from 1783 to 1923. Crawford’s Purchases consist of three purchases between Captain Crawford and the Iroquois and Mississaugas. The first treaty, identified as



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“B”, was made between the Crown and the Iroquois. It included lands “reaching from Point Baudet on the north side of Lake St. Francis, up to the mouth of Gananoque River...includes the Counties of Leeds, Grenville, Dundas, Stormont, and Glengarry, Russell, Prescott, the eastern part of Carleton and the southern part of Lanark” (Morris 1943:16-17).

In 2018, a settlement was reached between the seven Williams Treaty First Nations (comprising the Mississaugas of Alderville First Nation, Curve Lake First Nation, Hiawatha First Nation, Scugog Island First Nation, the Chippewas of Beausoleil First Nation, Georgina Island First Nation, and the Rama First Nation) and the provincial and federal governments that provided financial compensation to the nations and formally recognized pre-existing harvesting rights to areas covered by Treaties 5, 16, 18, 20 and 27<sup>1/4</sup>, the Crawford Purchases (including the “Gunshot Treaty”) and around Lake Simcoe.

### **1.2.3 EURO-CANADIAN RESOURCES**

In 1791, the provinces of Upper Canada and Lower Canada were created from the former Province of Quebec by an act of British Parliament. At this time, Colonel John Graves Simcoe was appointed as the Lieutenant Governor of Upper Canada and was tasked with governing the new province, directing its Euro-Canadian settlement, and establishing a constitutional government modelled after that of Britain (Coyne 1895). In 1792, Simcoe divided Upper Canada into nineteen counties, consisting of previously settled lands, new lands opened for Euro-Canadian settlement, and lands not yet acquired by the Crown. These new counties stretched from Essex in the west to Glengarry in the east.

To settle the Loyalists, eight townships were surveyed in 1783 and 1784 along the St. Lawrence River. Originally these townships were simply referred to as Townships 1 through 8. After Haldimand’s departure from Canada these townships became known as the “Royal Townships” as Lord Dorchester named the eight townships after the children of George III. The Township of Augusta was Township Number 7. The Township of Elizabethtown was originally Township Number 8 and was the westernmost of the Royal Townships (Fryer 1984:102).

#### **1.2.3.1 United Counties of Leeds and Grenville**

Leeds County was formally established in 1792 and included the Townships of Bastard, Burgess, North Crosby, South Crosby, Elizabethtown, Elmsley, Escott, Kitley, Front of Leeds and Lansdowne, Rear of Leeds and Lansdowne, Front of Yonge, and Rear of Yonge and Escott, as well as the Villages of Gananoque and Newboro, and the Town of Brockville. At the same time, Grenville County included the townships of Augusta, Edwardsburg, South Gower, Oxford, and Wolford, as well as the villages of Kemptville, Merrickville, and the Town of Prescott. Leeds and Grenville Counties saw Euro-Canadian settlement as early as 1784 (Leavitt 1879). Following the end of the American War of Independence (1775-1783), the British government began settlement in the counties of Leeds and Grenville by granting lots to United Empire Loyalists who chose to build new lives in Canada. Among the individuals who received grants was General Benedict Arnold of the American Continental Army during the War of Independence (1775-1783) who defected to the British Army (Leavitt 1879). In 1850, Leeds County and Grenville County were joined administratively to form the United Counties of Leeds and Grenville. By 1860 the population of the United Counties was nearly 60,000 (Leavitt 1879:11).



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**Geographic Township of Augusta**

The Township of Augusta was initially settled by European settlers in 1783, with the arrival of United Empire Loyalists, many belonging to Edward Jessup’s corps known as the Loyal Rangers (Connell 1985). Surveying of the township was begun along the north bank of the St. Lawrence River in 1784 by Lewis Kotte. Others, including Jeremiah McCarthy and Edward Jessup, continued the initial survey of the First, Second, and Third Concessions between 1785 and 1787; but it was not until 1795 that the concessions were properly laid out by Reuben Sherwood, extending all the way to Concession 10 (Connell 1985). A census from 1784 shows that the population of Augusta Township had reached 228 settlers (Connell 1985:13). A second wave of immigration began in 1815 as the area began to be populated by European emigrants, largely of Scottish and Irish descent, and by 1850 the population of Augusta Township had swelled to nearly 4,200 settlers (Connell 1985:21).

The 1861 map of the United Counties of Leeds and Grenville (Putnam and Walling 1861) depicts the Township of Augusta as an agricultural landscape with numerous farmsteads; homesteads; a local road and railway system; and a number of villages and hamlets, including Maitland and Prescott. Table 2 summarizes the applicable landowners and historical features in Augusta Township relevant to the study area (Figure 4).

**Table 2: Property Owners/Residents and Historical Features Depicted in the 1861 Map of the Township of Augusta**

Lot	Concession	Owner / Resident	Parcel Portion	Euro-Canadian Features in Proximity to Study Area
37	1	J. Hargrave	West side	2 <sup>nd</sup> Concession Road at north end of lot; Grand Trunk Railroad runs through middle of lot; unnamed watercourse along west side of lot
		H. Freeland	East side	2 <sup>nd</sup> Concession Road at north end of lot; Grand Trunk Railroad runs through middle of lot

**Geographic Township of Elizabethtown**

By 1802, settlement in the Township of Elizabethtown had developed to the point that a town plot was laid out in the southern parts of Lots 11 and 12, Concession 1 along the St. Lawrence River. The hamlet was originally laid out by Ensign William Buell and was known initially as “Buell’s Bay.” By 1808, the settlement was renamed Elizabethtown and was chosen as the district town for the Johnston District. A jail and courthouse were built in the community in 1810. By 1811 the community contained 26 buildings and a growing population. In the summer of 1812, the hamlet was renamed Brockville in honour of General Isaac Brock. In 1832, Brockville was the first community in Upper Canada to be incorporated (Heritage Brockville 2021).

The Township of Elizabethtown also prospered during the first decades of the 19<sup>th</sup> century. According to *Smith’s Canadian Gazetteer*, the township contained a population of 6,437 in 1846 and had five gristmills and nine sawmills (Smith 1846:53). The variable soil of the township and the unpredictability of the local wheat harvest led to most of the forested land in the township being logged and cleared (Austin 2009).



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Smith described Brockville as a “handsome town” of mostly stone buildings with a population of 2,111 (Smith 1846:21).

The 1861 map of the United Counties of Leeds and Grenville (Putnam and Walling 1861) depicts the Township of Elizabethtown shows that much of the land in the township had been settled and most lots are depicted as having an owner and containing a structure (Figure 4). Table 3 lists the landowners and historical features of Lots 1 to 7, Concession 1 and the Common, Concession 1 relevant to the study area.

**Table 3: Property Owners/Residents and Historical Features Depicted in the 1879 Map of the Township of Elizabethtown**

Lot	Concession	Owner / Resident	Parcel Portion	Euro-Canadian Features in Proximity to Study Area
Commons	1	Rob Shepherd	Full	Structure on south side of 2 <sup>nd</sup> Concession Road; 2 <sup>nd</sup> Concession Road; Grand Trunk Railroad runs through middle of lot
1	1	J. Stewart	Northeast portion	Structure on south side of 2 <sup>nd</sup> Concession Road; 2 <sup>nd</sup> Concession Road; Grand Trunk Railroad runs through middle of lot
2	1	Chas. Kilborn	Northeast portion	Structure on south side of 2 <sup>nd</sup> Concession Road; 2 <sup>nd</sup> Concession Road; Grand Trunk Railroad runs through middle of lot
		Mrs. McGrow	Northwest corner	Structure on east side of Sharpe's Lane; 2 <sup>nd</sup> Concession Road; Grand Trunk Railroad runs through middle of lot
3	1	James Sewart	North part	Structure and school house (S.H.) on south side of 2 <sup>nd</sup> Concession Road; 2 <sup>nd</sup> Concession Road; Grand Trunk Railroad runs through middle of lot
4	1	Chas. Dyer	East part	2 <sup>nd</sup> Concession Road; Grand Trunk Railroad runs through middle of lot
		A. Sherwood	West part	2 <sup>nd</sup> Concession Road; Grand Trunk Railroad runs through middle of lot
5	1	GD Sherwood	East part	Structure on south side of 2 <sup>nd</sup> Concession Road; 2 <sup>nd</sup> Concession Road; Grand Trunk Railroad runs through middle of lot; Butlers Creek
		T. Sherwood	West part	Structure on south side of 2 <sup>nd</sup> Concession Road; 2 <sup>nd</sup> Concession Road; Grand Trunk Railroad runs through middle of lot; Butlers Creek
6	1	Geo. McEachton	Northeast part	Structure on south side of 2 <sup>nd</sup> Concession Road; 2 <sup>nd</sup> Concession Road; Grand Trunk Railroad runs through middle of lot; Butlers Creek
7	1	Thos. Stewart	North part	Structure on east side of North Augusta Road; 2 <sup>nd</sup> Concession Road; Grand Trunk Railroad runs through middle of lot; Butlers Creek

In discussing the late 19<sup>th</sup> century historical mapping, it must be remembered that historical county atlases were produced primarily to identify factories, offices, residences, and landholdings of subscribers



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and were funded by subscription fees. Landowners who did not subscribe were not always listed on the maps (Caston 1997: 100). As such, structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984).

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

## **1.3 Archaeological Context**

### **1.3.1 THE NATURAL ENVIRONMENT**

The study area is located within the Smith Falls Limestone Plain physiographic region (Chapman and Putnam 1984). The Smiths Falls Limestone Plain is the largest tract of shallow soil over limestone in southern Ontario. It covers nearly 1,400 square miles of the United Counties of Leeds and Grenville, Lanark County, and the City of Ottawa. The town of Smiths Falls is located generally in the centre of the region and the Rideau River divides the region into two portions (Chapman and Putnam 1984: 196).

Soils within the study area include Grenville loam and Rubicon sand (Richards et al. 1949; Gillespie *et al.* 1968). Grenville loam is loam to sandy loam in composition, with good friability, developing on gentle to moderate slopes (Gillespie *et al.* 1968:28). The gravel inclusions in the soil can sometimes lead to susceptibility to drought (Gillespie *et al.* 1968:28). Overall Grenville soils are good for general farming and dairying (Gillespie *et al.* 1968:28) and would have been suitable for early horticultural and agricultural practices. Rubicon sand is an imperfectly drained soil that forms in areas associated with outwash sand related to old beaches associated with the glacial Champlain Sea (Gillespie *et al.* 1968:37). Rubicon soils in the general areas of the Project are fine-textured and produce fair crops of hay, grain and corn (Gillespie *et al.* 1968:38) and would have been suitable for early horticultural and agricultural practices.

Butlers Creek and an unnamed watercourse run through the study area. Both watercourses empty directly into the St. Lawrence River, located about 2 kilometres to the south of the study area.

### **1.3.2 REGISTERED ARCHAEOLOGICAL SITES AND SURVEYS**

In Canada, archaeological sites are registered within the Borden system, a national grid system designed by Charles Borden in 1952 (Borden 1952). The grid covers the entire surface area of Canada and is divided into major units containing an area that is two degrees in latitude by four degrees in longitude. Major units are designated by upper case letters. Each major unit is subdivided into 288 basic unit areas, each containing an area of 10 minutes in latitude by 10 minutes in longitude. The width of basic units reduces as one moves north due to the earth’s curvature. In southern Ontario, each basic unit measures approximately 13.5 kilometres east-west by 18.5 kilometres north-south. In northern Ontario, adjacent to Hudson Bay, each basic unit measures approximately 10.2 kilometres east-west by 18.5 kilometres north-



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south. Basic units are designated by lowercase letters. Individual sites are assigned a unique, sequential number as they are registered. These sequential numbers are issued by the MCM, who maintains the *Ontario Archaeological Sites Database*. The study area under review is located within Borden Blocks BdFv and BdFw.

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

An examination of the *Ontario Archaeological Sites Database* has shown that there are four registered archaeological sites located within a one-kilometre radius of the study area (Table 4) (Government Ontario 2024a). None of these sites are within 300 metres of the study area.

**Table 4: Registered Archaeological Sites within One Kilometre of the Study Area**

<b>Borden Number</b>	<b>Site Name</b>	<b>Temporal or Cultural Affiliation</b>	<b>Site Type</b>
BdFv-5	Church Family Site	Euro-Canadian	Residential/farmstead
BdFv-6	none given	Euro-Canadian	Other psychiatric hospital/asylum, hospital
BdFw-2	Beley House	Euro-Canadian	House
BdFw-6	Fulford Place	Euro-Canadian	Homestead

A search of the *Ontario Public Register of Archaeological Reports* has shown that two archaeological assessments have been carried out within 50 metres of the study area and overlaps into a section of the current study area (Government of Ontario 2024b). Table 5 provides a summary of this report.

**Table 5: Summary of Archaeological Reports within Fifty Metres of the Study Area**

<b>Company</b>	<b>Report</b>	<b>Project Information Form (PIF) Number</b>	<b>Year</b>
Stantec	<i>Stage 1 Archaeological Assessment: Highway 401 Brockville, Two Kilometres West of Interchange 696 to 750 Metres East of Interchange 698 Parts of Lots 6 to 18 Concession 1, Geographic Township of Elizabethtown-Kitley, United Counties of Leeds and Grenville, and City of Brockville, Ontario</i>	P415-0244-2020	2021
Past Recovery Archaeological Services (PRAS)	<i>Stage 1 and 2 Archaeological Assessments Detail Design Study for Highway 401 Improvements in Brockville MTO Class EA (GWP 4003-19-00) Part of Lots 6-18, Concession 1, Geographic Township of Elizabethtown, Now Township of Elizabethtown-Kitley, United Counties of Leeds and Grenville, and City of Brockville, Ontario.</i>	P1074-0111-2023	2024



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In 2021, Stantec completed a Stage 1 Archaeological Assessment for the MTO as part of the Planning, Preliminary Design, and Class Environmental Assessment (Class) Study for Highway 401, Group Work Project (GWP) 4003-19-00 (Stantec 2021). The Stage 1 background review determined that there was potential for the presence of Indigenous and Euro-Canadian archaeological resources within portions of the study area (Stantec 2021). Stantec recommended that Stage 2 Archaeological Assessment be completed for any portions of the areas retaining archaeological potential that may be impacted by the Project's planned construction (Stantec 2021). A portion of the west end of the current study area is included in an area noted by Stantec (2021) as retaining archaeological potential (Figure 5). In addition, other parts of the Stantec (2021) study area were determined to have low to no archaeological potential due to previous intensive ground disturbance (Figure 5).

In 2023, PRAS completed a Stage 1 and Stage 2 for the MTO as part of the Planning, Preliminary Design, and Class Environmental Assessment (Class) Study for Highway 401, Group Work Project (GWP) 4003-19-00 (PRAS 2024). The Stage 1 determined that any land not disturbed by the existing Highway 401 footprint, or other urban development within the study area, still retained potential for the presence of Indigenous and Euro-Canadian archaeological resources (PRAS 2024). A Stage 2 archaeological assessment was completed for any areas retaining potential also in 2023. No archaeological resources were identified during test pit survey as part of the Stage 2 archaeological assessment. Based on the mapping provided by PRAS, the majority of the land associated with their Stage 2 which overlaps with the current project identified no resources. However, there is a portion of the PRAS study area which is illustrated as "Additional Stage 1 Study Area" that was not subject to either Stage 1 or Stage 2 assessment by PRAS and which overlaps with a larger portion of the current report. PRAS does not offer any recommendations or conclusions as to the lands identified as requiring additional Stage 1, so the recommendations of this current report will stand for those areas (Figure 5).

## **1.4 Existing Conditions**

The study area is approximately 70.65 hectares and includes the Highway 401 corridor, additional road Rights of Way (RoW), manicured lawns, forested areas, and agricultural fields (Figure 2).



## **2 Field Methods**

The Stage 1 Archaeological Assessment was completed under PIF number P394-0221-2024 issued by the MCM to Sarah Henderson, MA. Patrick Hoskins, MA (P415) conducted a property inspection of the study area on June 12, 2024. During the property inspection, field conditions and lighting were suitable and at no time were they detrimental to the identification of features of archaeological potential.

The property inspection was carried out systematically every 20 to 30 metres, reviewing the study area from the Right of Way. Photographic images of the study area are presented in Section 7. Location and orientation information associated with representative photographs taken in the field is provided in Figure 5.

Features of archaeological potential were confirmed to be present, including watercourses, physiography conducive to past land use, and historical transportation routes.

Per Section 1.3.2 of the 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the study area was evaluated for extensive disturbances that would have removed archaeological potential. According to the 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), disturbances may include, but are not limited to, grading to below topsoil, quarrying, building footprints, or sewage and infrastructure development. Disturbances consisting of existing infrastructure (i.e., roadways, gravel shoulders, ditching), and gravel and paved laneways were encountered (Photo's 1-2, 4-8).



### **3 Analysis and Conclusions**

Archaeological potential is established by determining the likelihood of archaeological resources on a subject property. Stantec applied archaeological potential criteria commonly used by the MCM (Government of Ontario 2011) to determine areas of archaeological potential within the region under study. Features and characteristics that indicate the potential for archaeological resources are defined within Section 1.3.1 of the 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011, 17-18) and include:

- Previously identified archaeological sites.
- Water sources:
  - Primary water sources (lakes, rivers, streams, creeks).
  - Secondary water sources (intermittent streams and creeks; springs; marshes; swamps).
  - Features indicating past water sources (e.g., glacial lake shorelines indicated by the presence of raised gravel, sand, or beach ridges; relic river or stream channels indicated by clear dip or swale in the topography; shorelines of drained lakes or marshes; and cobble beaches).
  - Accessible or inaccessible shoreline (e.g., high bluffs, swamps, or marsh fields by the edge of a lake; sandbars stretching into marsh).
- Elevated topography (eskers, drumlins, large knolls, plateau).
- Pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground; Distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases (there may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings).
- Resource areas including:
  - Food or medicinal plants.
  - Scarce raw minerals (e.g., quartz, copper, ochre, or outcrops of chert).
  - Early Euro-Canadian industry (fur trade, mining, logging).
- Areas of Euro-Canadian settlement. These include places of early military or pioneer settlements (e.g., pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches and early cemeteries. There may be commemorative markers of their history, such as local, provincial, or federal monuments or heritage parks.
- Early historical transportation routes (e.g., trails, passes, roads, railways, portage routes).
- Property listed on a municipal register or designated under the Ontario Heritage Act (Government of Ontario 1990a) or site.
- Property that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations.



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Many of the above features of archaeological potential have a buffer assigned to them, extending the zone of archaeological potential beyond the physical feature. Section 1.4 of the MCM's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011, 20-21) employs the following buffers:

- 300-metre buffer for previously identified archaeological sites, water sources; areas of early Euro-Canadian settlement, or locations identified through local knowledge or informants
- 100-metre buffer for early historical transportation route

If no buffer is present, the potential is restricted to the physical limits or the feature: elevated topography, pockets of well-drained sandy soil, distinctive land formations, and resource areas.

Butlers Creek and an unnamed watercourse run through the west and east ends of the study area, respectively. Both watercourses empty directly into the St. Lawrence River, located about 2 kilometres to the south of the study area.

Soils within the study area include Grenville loam and Rubicon sand. Grenville loam is loam to sandy loam in composition, with good friability, developing on gentle to moderate slopes. Rubicon sand is an imperfectly drained soil that forms in areas associated with outwash sand related to old beaches associated with the glacial Champlain Sea. Overall, both soil types would have been suitable for early horticultural and agricultural practices.

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 1990a) or property that local histories or informants have identified with possible historical events. Historical mapping indicates that several early 19<sup>th</sup> century homesteads or farmsteads, a schoolhouse, and historical transportation routes are within, or in close proximity to, the study area. An examination of the *Ontario Archaeological Sites Database* identified four registered Euro-Canadian archaeological sites within one kilometre of the study area. None are located within 300 m of the study area.

When the above listed criteria are applied, portions of the study area have archaeological potential. Other portions of the study area have been evaluated to have no or low archaeological potential due to previous disturbance, and/or permanently low and wet conditions.

In addition, Stantec (2021) conducted a Stage 1 Archaeological Assessment that partially overlaps with the current study area (see Figure 5). This study determined the portions of the overlapping study area retained archaeological potential and Stage 2 Archaeological Assessment was recommended for those areas. The other portions of the 2021 study area were identified as being previously disturbed and having low to no archaeological potential.

Beyond the areas assessed by Stantec in 2021, PRAS also completed both a Stage 1 and Stage 2 of lands which partially overlap the study area. The Stage 2 archaeological assessment found no resources in lands which had been identified as having potential by both Stantec's Stage 1 assessment and by PRAS's Stage 1 assessment. However, mapping in PRAS report identifies additional lands which overlap



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with this current report that still require additional Stage 1 archaeological assessment (PRAS 2024). Since Stantec recommends Stage 2 for those areas in this report, which is more recent than that of the PRAS recommendations, the Stantec recommendations from this report will stand for these overlapping areas.



## 4 Recommendations

Based on the Stage 1 Archaeological Assessment results presented in this report, Stantec recommends:

3. No further archaeological assessment is required for parts of the study area evaluated to be disturbed and that hold no or low archaeological potential
4. Stage 2 Archaeological Assessment for parts of the study area evaluated to have archaeological potential. Stage 2 Archaeological Assessment will involve both test pit survey and pedestrian survey, as per Sections 2.1.1 and 2.1.2 of the MCM's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011)

- a. Portions of the study area comprised of actively or recently cultivated agricultural fields will be subject to pedestrian survey, as per Section 2.1.1 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Fields should be ploughed deep enough to provide total topsoil soil exposure but not deeper than previous ploughing and allowed to weather appropriately prior to the pedestrian survey.

If archaeological resources are identified during pedestrian survey, survey transects should be reduced to one-metre intervals over a minimum of a 20-metre radius around the find to determine whether it is an isolated find or part of a larger scatter, as per Section 2.1.1, Standard 7 of the 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

- b. Portions of the study area comprised of scrubland that are not accessible for ploughing will be subject to test pit survey, as per Section 2.1.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Test pits should be hand excavated by shovel and trowel, extending at least 30 centimetres in diameter and at least five centimetres into the subsoil where possible. Soil from all test pits will be screened through a six-millimetre hardware mesh to facilitate the identification and recovery of archaeological resources. All test pits will be examined for stratigraphy, cultural features, and evidence of fill. All test pits were backfilled.

If archaeological resources were identified, test pit survey will continue on the grid to determine how many additional test pits are positive, while staying within the limits of the study area. If sufficient archaeological resources are identified to meet the criteria for making a recommendation to carry out a Stage 3 Archaeological Assessment, no further intensification is required. If insufficient archaeological resources are found, further intensification following Section 2.1.3 Standard 2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) is required.

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



## **5 Advice on Compliance with Legislation**

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

This report is submitted to the Minister of Citizenship and Multiculturalism as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c. O.18 (Government of Ontario 1990a). 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* (Government of Ontario 1990a) for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the *Ontario Public Register of Archaeological Reports* referred to in Section 65.1 of the *Ontario Heritage Act* (Government of Ontario 1990a).

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990a). The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990a).

The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c. 33 (Government of Ontario 2002), requires that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Business and Public Delivery Services and Procurement.

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



## 6 References

- Austin, Alvin. 2009. *Elizabethtown—The Early Years*. Electronic document: <https://www.lynmuseum.ca/2016/04/26/elizabethtown-the-early-years/>. Last accessed August 30, 2024.
- Birch, Jennifer. 2016. *Geopolitics and Dimensions of Social Complexity in Ancestral Wendake c. A.D. 1450-1600*. Ontario Archaeological Society, Volume 96 (35-46).
- Bonaparte, Darren. n.d. *The History of Akwesasne from Pre-Contact to Modern Times*. Electronic document: <http://www.wampumchronicles.com/history.html>. Last accessed August 30, 2024.
- Borden, Charles E. 1952. A Uniform Site Designation Scheme for Canada. *Anthropology in British Columbia* 3:44-48.
- Caston, Wayne A. 1997. Evolution in the Mapping of Southern Ontario and Wellington County. *Wellington County History* 10:91-106.
- Chapman, Lyman John and Donald F. Putnam. 1984. *The Physiography of Southern Ontario*. 3rd ed. Ontario Geological Survey Special Volume 2. Ontario Ministry of Natural Resources, Toronto.
- Connell, Goldie A. 1985. *Augusta: Royal Township Number Seven*. Prescott, Ontario: St. Lawrence Printing Company Limited.
- Coyne, J.H. 1895. *The County of the Neutrals (As Far as Comprised in the County of Elgin): From Champlain to Talbot*. St. Thomas: Times Print.
- Ellis, Chris J. and Neal Ferris (editors). 1990. *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5.
- Ellis, Christopher J. 2013. Before Pottery: Paleoindian and Archaic Hunter-Gatherers. In *Before Ontario: The Archaeology of a Province*, edited by Marit K. Munson and Susan M. Jamieson, 35-47. Montreal and Kingston: McGill-Queen's University Press.
- Fenton, William N., and Elizabeth Tooker. 1978. Mohawk. In *Handbook of North American Indians*. Vol.15 Northeast, pp. 466-480. B.G. Trigger, ed. Washington: Smithsonian Institution Press.
- Ferris, Neal. 2009. *The Archaeology of Native-Lived Colonialism: Challenging History in the Great Lakes*. Tucson: University of Arizona Press.
- Fryer, Mary Beacock. 1984. First Large-Scale Immigration, 1784-1800, in *Loyal She Remains: A Pictorial History of Ontario*, M.B. Fryer and C.J. Humber (eds.). Toronto: The United Empire Loyalists' Association of Canada, pp.96-127.
- Gates-St. Pierre, Christian. 2016. *Iroquoians in the St. Lawrence River Valley before European Contact*. Ontario Archaeological Society, Volume 96 (47-64).



## STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HIGHWAY 401 MALLORYTOWN TO BROCKVILLE (GWP 4111-002-00), ONTARIO

### References

- Gentilcore, R. Louis and C. Grant Head. 1984. *Ontario's History in Maps*. Toronto: University of Toronto Press.
- Gillespie, J.E., R.E. Wicklund and M.H. Miller. 1968. *The Soils of Leeds County*. Report No. 41 of the Ontario Soil Survey. Guelph: Canadian Department of Agriculture and Ontario Department of Agriculture and Food.
- Government of Ontario. 1990a. *Ontario Heritage Act*, R.S.O. 1990, CHAPTER O.18. Electronic document: <http://www.ontario.ca/laws/statute/90o18>. Last accessed August 30, 2024.
- Government of Ontario. 1990b. *Freedom of Information and Protection of Privacy Act*, R.S.O. 1990, CHAPTER F.31. Electronic document: <https://www.ontario.ca/laws/statute/90f31>. Last accessed on August 30, 2024.
- Government of Ontario. 2002. *Funeral, Burial and Cremation Services Act, 2002*, S.O. 2002, CHAPTER 33. Electronic document: <https://www.ontario.ca/laws/statute/02f33>. Last accessed on August 30, 2024.
- Government of Ontario. 2011. *Standards and Guidelines for Consultant Archaeologists*. Toronto: Ministry of Citizenship and Multiculturalism.
- Government of Ontario. 2024a. *Ontario Archaeological Sites Database*. Electronic document: <https://www.iaa.gov.on.ca/iaalogin/IAALogin.jsp?REDID=PASTPORT>. Last accessed on May 30, 2024.
- Government of Ontario. 2024b. *PastPortal – Ontario Public Register of Archaeological Reports*. Electronic document: <https://www.iaa.gov.on.ca/iaalogin/IAALogin.jsp?REDID=PASTPORT>. Last accessed on May 30, 2024.
- Heritage Brockville. 2020. *A Brief History of Brockville*. Electronic document: <http://www.heritagebrockville.ca/history#:~:text=The%20village%20of%20Elizabethtown%20was,the%20Battle%20of%20Queenston%20Heights>. Last accessed August 30, 2024.
- Jamieson, James Bruce. 1990. *The Archaeology of the St. Lawrence Iroquoians*. In: Ellis and Ferris 1990, (385-404).
- Loewen, Brad and Claude Chapdelaine (editors). 2016. *Contact in the 16<sup>th</sup> Century: Networks among Fishers, Foragers and Farmers*. Mercury Series Archaeology Paper 176. Ottawa: University of Ottawa Press.
- Morris, J.L. 1943. *Indians of Ontario*. 1964 reprint. Toronto: Department of Lands and Forests.
- Past Recovery Archaeological Services. 2024. *Stage 1 and 2 Archaeological Assessments Detail Design Study for Highway 401 Improvements in Brockville MTO Class EA (GWP 4003-19-00) Part of Lots 6-18, Concession 1, Geographic Township of Elizabethtown, Now Township of Elizabethtown-Kitley, United Counties of Leeds and Grenville, and City of Brockville, Ontario*.



## STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HIGHWAY 401 MALLORYTOWN TO BROCKVILLE (GWP 4111-002-00), ONTARIO

### References

- Project Information Form number P1074-0111-2023. Report on file with the Ministry of Citizenship and Multiculturalism, Toronto.
- Putnam & Walling. 1861. *Historical County Map of Leeds County*. Electronic document: <https://utoronto.maps.arcgis.com/apps/webappviewer/index.html?id=8cc6be34f6b54992b27da17467492d2f>. Last accessed September 11, 2024.
- Ramsden, Peter G. 1990. The Hurons: Archaeology and Culture History. In Ellis and Ferris 1990, pp. 361-384.
- Ramsden, Peter. 2016. Becoming Wendat: Negotiating a New Identity around Balsam Lake in the Late Sixteenth Century. *Ontario Archaeology* 96: 121-132.
- Richards, N.R., B.C. Matthews and F.F. Morwick. 1949. *Soil Survey of Grenville County*. Report No. 12 of the Ontario Soil Survey. Guelph: Canadian Department of Agriculture and Ontario Agricultural College.
- Stantec Consulting Ltd. 2021. *Stage 1 Archaeological Assessment: Highway 401 Brockville, Two Kilometres West of Interchange 696 to 750 Metres East of Interchange 698 Parts of Lots 6 to 18 Concession 1, Geographic Township of Elizabethtown-Kitley, Untied Counties of Leeds and Grenville, and City of Brockville, Ontario*. Project Information Form number P415-0244-2020. Report on file with the Ministry of Citizenship and Multiculturalism, Toronto.
- Sherwood, Reuben. 1811. *Elizabethtown B.12*. Peterborough: Ministry of Natural Resources and Forestry, Office of the Surveyor General.
- Smith, William, 1846. *Smith's Canadian Gazetteer*. Toronto: H&W Roswell.
- Steckley, John. 2016. St. Lawrence Iroquoians among the Wendat: Linguistic Evidence. *Ontario Archaeology* 96:17-25.
- Stewart, Andrew M. 2013. Water and Land. In *Before Ontario: The Archaeology of a Province*, edited by Marit K. Munson and Susan M. Jamieson, pp. 24-34. Montreal and Kingston: McGill-Queen's University Press.
- Tremblay, Roland. 2006. *The St. Lawrence Iroquoians: Corn People*. Montreal. Pointe-a-Calliere, Montreal Museum of Archaeology and History.
- Trigger, Bruce. 1985. *Natives and Newcomers: Canada's "Heroic Age" Reconsidered*. Kingston and Montreal: McGill-Queen's University Press.
- Warrick, Gary, and Louis Lesage. 2016. The Huron-Wendat and the St, Lawrence Iroquoians: New Findings of a Close Friendship. *Ontario Archaeology* 96: 133-143).



**Images**

## **7 Images**

### **7.1 Photographs**

**Photo 1: Engineered slope to forested area, facing northeast**



**Photo 2: Engineered slope, ditching and highway, evidence of previous disturbance, facing southwest**



**Photo 3: Manicured lawn and forested area, facing northeast**



**Photo 4: Graded slope and ditching abutting shoulder of highway, facing southwest**



**STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HIGHWAY 401 MALLORYTOWN TO BROCKVILLE  
(GWP 4111-002-00), ONTARIO**

**Images**

**Photo 5: Slope of graded shoulder down to forested area, facing northeast**



**Photo 6: Engineered slope of overpass leading down to forested area, facing south**



**Photo 7: Graded slope and ditching, evidence of previous disturbance, facing northwest**



**Photo 8: Graded slope and ditching, evidence of previous disturbance, facing southeast**



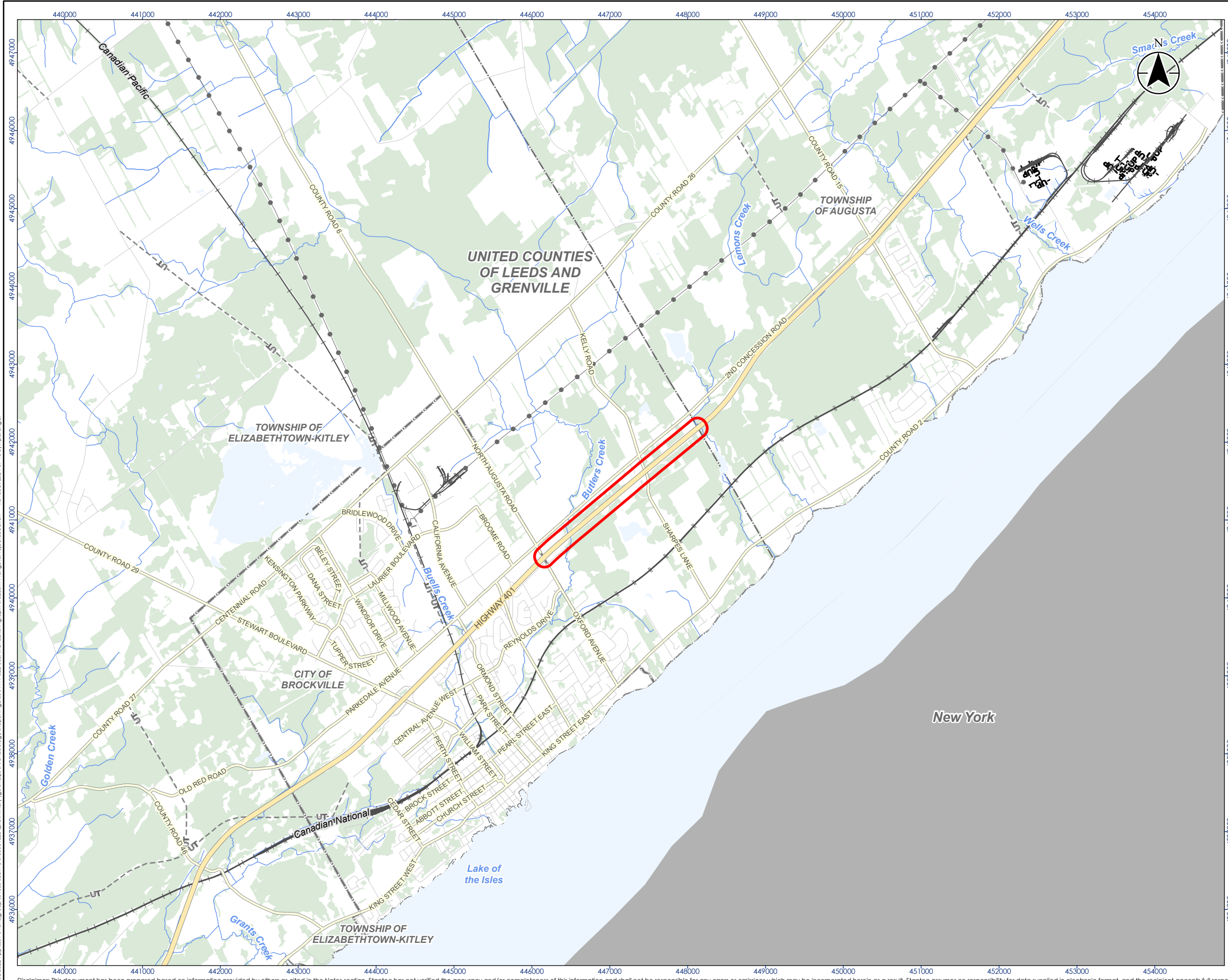
## Maps

# 8 Maps

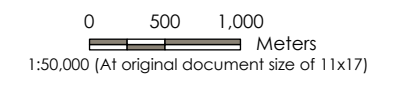
General maps of the study area for the Project follow on succeeding pages. Maps illustrating exact site locations do not form part of this public report; they may be found in the Supplementary Documentation.



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- Legend**
- Project Location
  - Constructed Drain
  - Hydro Line
  - UP- Unknown Pipeline
  - UT- Unknown Transmission Line
  - Expressway / Highway
  - Major Road
  - Minor Road
  - Railway
  - Watercourse (Intermittent)
  - Watercourse (Permanent)
  - Municipal Boundary - Lower Tier
  - Waterbody
  - Wooded Area



- Notes**
1. Coordinate System: NAD 1983 UTM Zone 18N
  2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023.



Project Location: United Counties of Leeds and Grenville  
 Prepared by: rparangat on 2024-09-18  
 Technical Review by: JWH on 2024-08-20

Client/Project: MINISTRY OF TRANSPORTATION  
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HIGHWAY 401  
 PLANNING STUDY EAST OF BROCKVILLE (GWP 4111-22-00)

Figure No.

**1**

Title

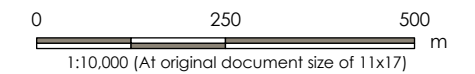
**Project Location**

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Legend

- Project Location
- Project Line Extent
- Railway
- Watercourse (Permanent)
- Municipal Boundary - Lower Tier



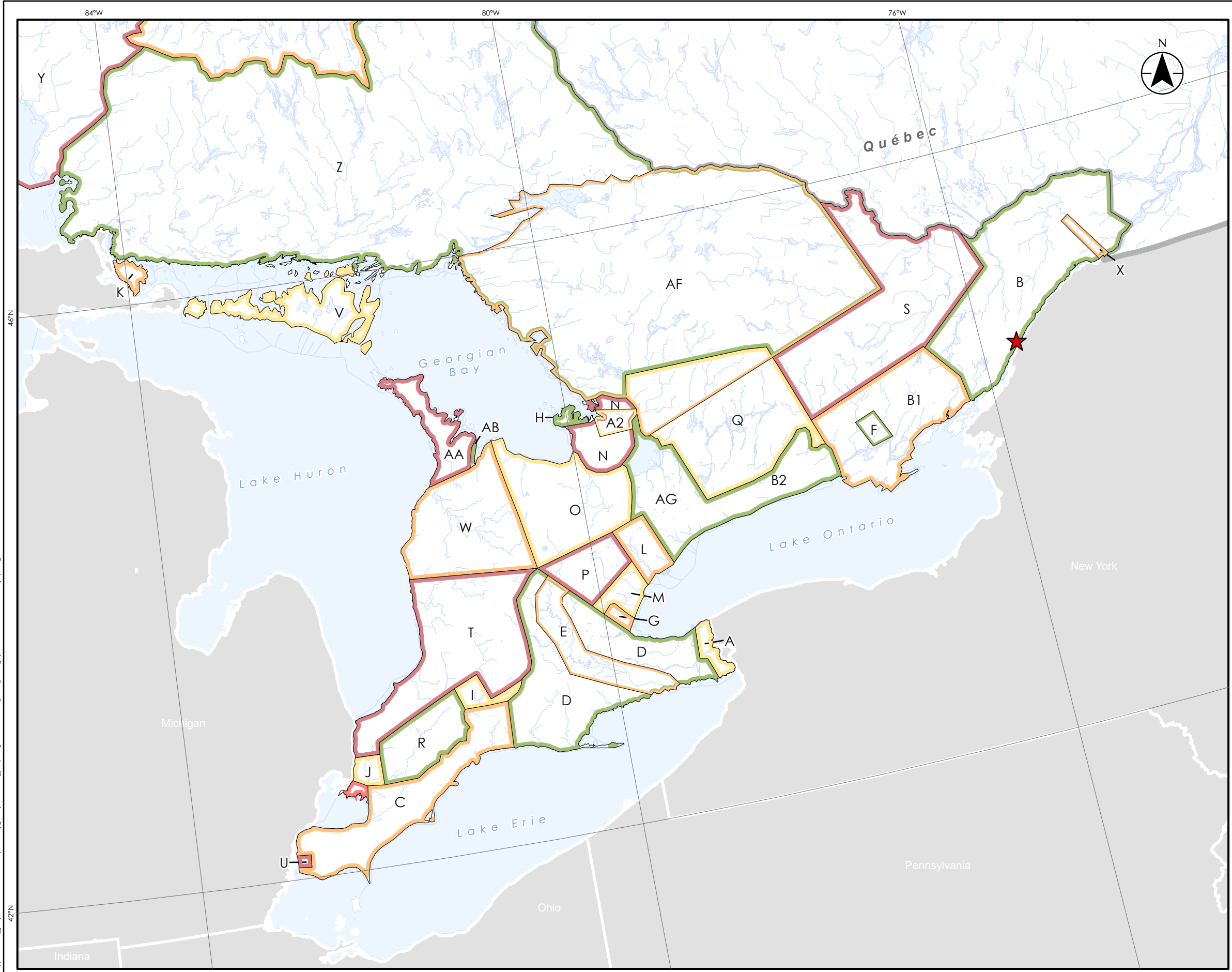
- Notes**
1. Coordinate System: NAD 1983 UTM Zone 18N
  2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © King's Printer for Ontario, 2024.
  3. Orthoimagery obtained from First Base Solutions, Leeds, 2008.

Project Location	165001328 REVA
United Counties of	Prepared by rparangat on 2024-09-18
Leeds and Grenville	Technical Review by JWH on 2024-08-20

Client/Project  
 MINISTRY OF TRANSPORTATION  
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HIGHWAY 401  
 PLANNING STUDY EAST OF BROCKVILLE (GWP 4111-22-00)

Figure No.  
**2**

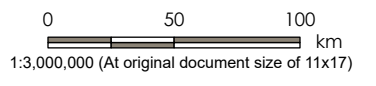
Title  
**Study Area**



**Legend**

- ★ Study Area (approximate)
- Waterbody

- A** Treaty No. 381, May 9th, 1781 (Mississauga and Chippewa)
- AA** Treaty No. 72, October 30th, 1854 (Chippewa)
- AB** Treaty No. 82, February 9th, 1857 (Chippewa)
- AE** Treaty No. 9, James Bay 1905, 1906 (Ojibway and Cree)
- AF** Williams Treaty, October 31st and November 15th, 1923 (Chippewa and Mississauga)
- AG** Williams Treaty, October 31st, 1923 (Chippewa)
- A2** John Collins' Purchase, 1785 (Chippewa)
- B** Crawford's Purchase, October 9th, 1783 (Algonquin and Iroquois)
- B1** Crawford's Purchase, October 9th, 1783 (Mississauga)
- B2** Crawford's Purchase, 1783, 1787, 1788 (Mississauga)
- C** Treaty No. 2, May 19th, 1790 (Odawa, Chippewa, Pottawatomi, and Huron)
- D** Treaty No. 3, December 2nd, 1792 (Mississauga)
- E** Haldimand Tract: from the Crown to the Mohawk, 1793
- F** Tyendinaga: from the Crown to the Mohawk, 1793
- G** Treaty No. 3 3/4: from the Crown to Joseph Brant, October 24th, 1795
- H** Treaty No. 5, May 22nd, 1798 (Chippewa)
- I** Treaty No. 6, September 7th, 1796 (Chippewa)
- J** Treaty No. 7, September 7th, 1796 (Chippewa)
- K** Treaty No. 11, June 30th, 1798 (Chippewa)
- L** Treaty No. 13, August 1st, 1805 (Mississauga)
- M** Treaty No. 13A, August 2nd, 1805 (Mississauga)
- N** Treaty No. 16, November 18th, 1815 (Chippewa)
- O** Treaty No. 18, October 17th, 1818 (Chippewa)
- P** Treaty No. 19, October 28th, 1818 (Chippewa)
- Q** Treaty No. 20, November 5th, 1818 (Chippewa)
- R** Treaty No. 21, March 9th, 1819 (Chippewa)
- S** Treaty No. 27, May 31st, 1819 (Mississauga)
- T** Treaty No. 27 1/2, April 25th, 1825 (Ojibwa and Chippewa)
- U** Treaty No. 35, August 13th, 1833 (Wyandot or Huron)
- V** Treaty No. 45, August 9th, 1836 (Chippewa and Odawa, "For All Indians To Reside Thereon")
- W** Treaty No. 45 1/2, August 9th, 1836 (Saugeen)
- X** Treaty No. 57, June 1st, 1847 (Iroquois of St. Regis)
- Y** Treaty No. 60, Robinson, Superior, September 7th, 1850 (Ojibwa)
- Z** Treaty No. 61, Robinson, Huron, September 9th, 1850 (Ojibwa)



- Notes**
1. Coordinate System: NAD 1983 Statistics Canada Lambert
  2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © King's Printer for Ontario, 2024.
  3. Treaty boundaries adapted from Morris 1943 (1964 reprint). For cartographic representation only.

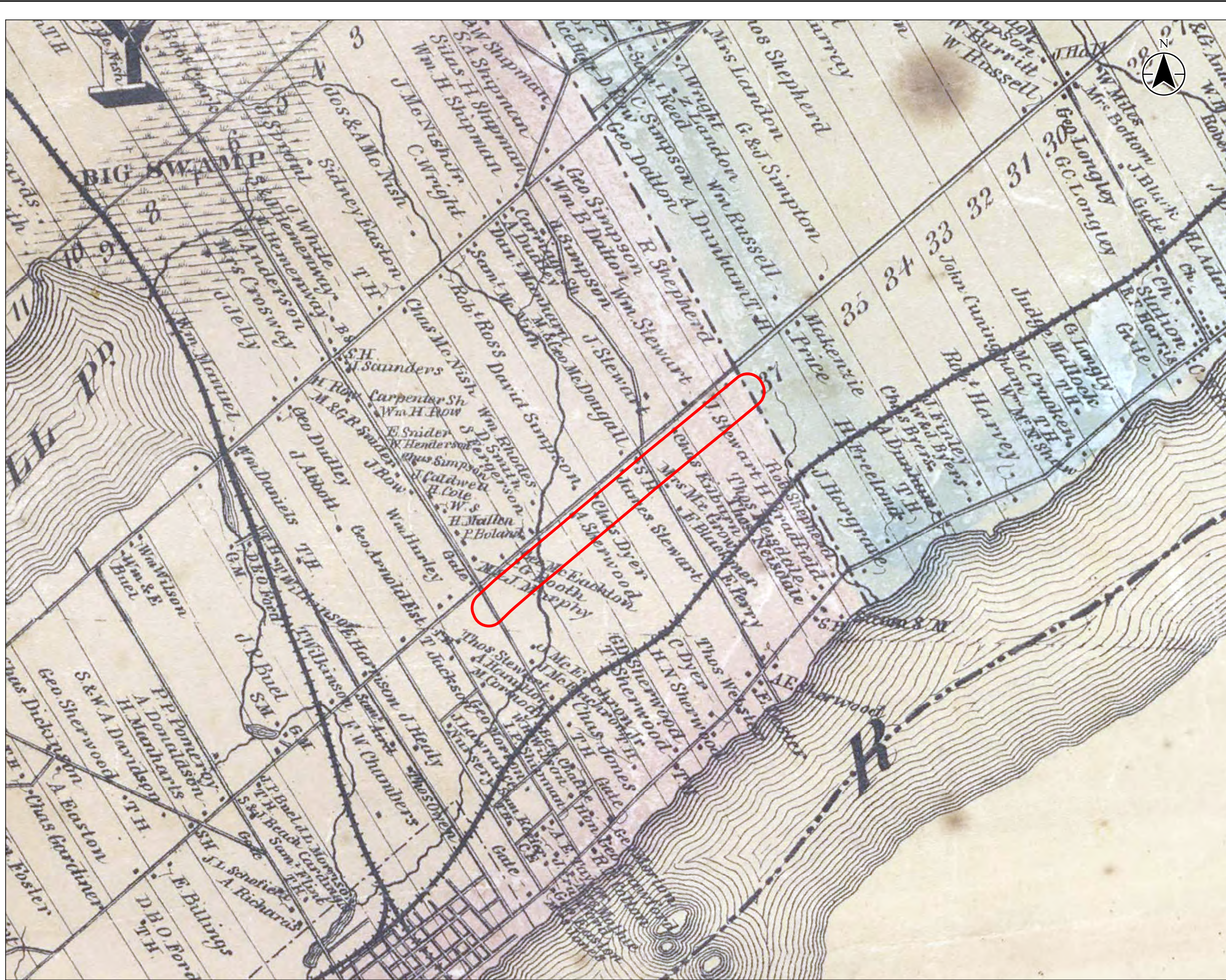
Project Location: 165001328 REVA  
 United Counties of Leeds and Grenville Prepared by rparangat on 2024-09-18  
 Technical Review by JWH on 2024-08-20

Client/Project  
 MINISTRY OF TRANSPORTATION  
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HIGHWAY 401  
 PLANNING STUDY EAST OF BROCKVILLE (GWP 4111-22-00)

Figure No.  
**3**

Title  
**Treaties and Purchases (Adapted from Morris 1943)**

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Legend

Project Location (Approximate)

Figure Not to Scale

**Notes**  
 1. Reference: Walling, H.F. 1861. Map of the United Counties of Leeds and Grenville, Canada West. Kingston: Putnam and Walling

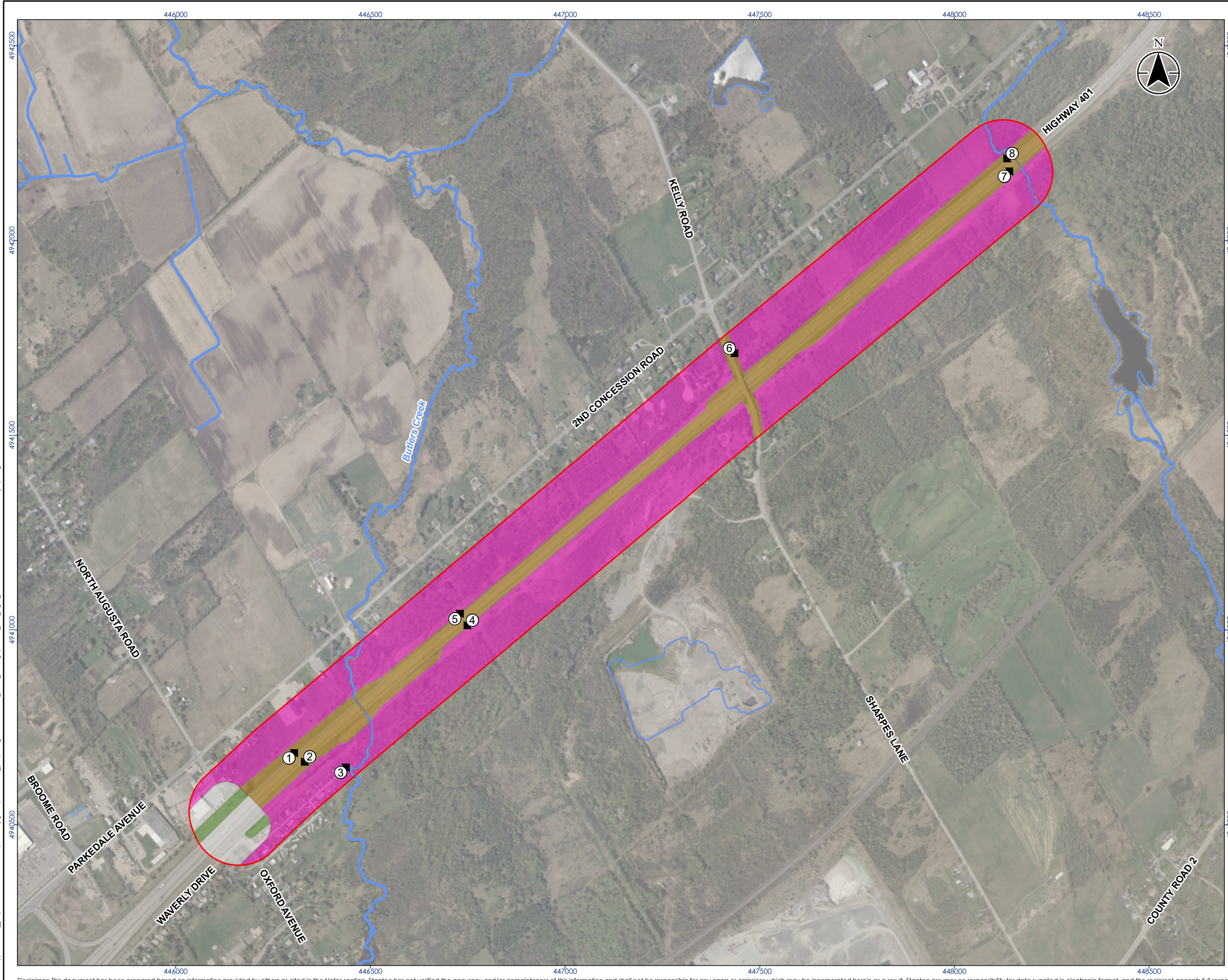
Project Location 165001328 REVA  
 United Counties of Prepared by rparangot on 2024-09-18  
 Leeds and Grenville Technical Review by JWH on 2024-08-20

Client/Project  
 MINISTRY OF TRANSPORTATION  
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HIGHWAY 401  
 PLANNING STUDY EAST OF BROCKVILLE (GWP 4111-22-00)

Figure No.

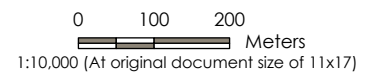
**4**

Title  
**Portion of the 1861 Map of the Townships of  
 Augusta and Elizabethtown**



**Legend**

- Study Area
- Photo Location and Direction
- Watercourse (Permanent)
- Waterbody
- Assessment Method**
- Area of Archaeological Potential - Further Archaeological Work Required (Stage 2)
- Previously Assessed - Disturbed (Stantec, 2021)
- Previously Assessed - Stage 2 required (Stantec 2021)
- Previously Disturbed, Low to No Archaeological Potential - No Further Archaeological Work Required



**Notes**

1. Coordinate System: NAD 1983 UTM Zone 18N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry King's Printer for Ontario, 2024.
3. Orthoimagery obtained from First Base Solutions, Leeds, 2008.

Project Location: 165001328 REVA  
 United Counties of Leeds and Grenville  
 Prepared by rparangat on 2024-09-18  
 Technical Review by JWH on 2024-08-20

Client/Project: MINISTRY OF TRANSPORTATION  
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HIGHWAY 401  
 PLANNING STUDY EAST OF BROCKVILLE (GWP 4111-22-00)

Figure No. **5**

Title: **Stage 1 Archaeological Assessment Results**

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