Stage 1-2 Archaeological Assessment of 282A Highway 5 in part of Lot 10, Concession 2, Former Township of Dumfries, Now Town of Saint George, Brant County, Ontario

Submitted to

Panattoni Development Company
185 The West Mall
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and

The Ontario Ministry of Heritage, Sport, Tourism, and Culture Industries

Prepared by

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Report Type: Original
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Executive Summary

Lincoln Environmental Consulting Corp. (LEC) was retained by Panattoni Development Company to complete a Stage 1-2 archaeological assessment of 282A Highway 5 to meet the requirements of the *Planning Act* (Government of Ontario 2014) in advance of a planning permit. The study area measures approximately 35.43 hectares in size and is located in part of Lot 10, Concession 2, Former Township of Dumfries, Now Town of Saint George, Brant County, Ontario.

This assessment was triggered by the Provincial Policy Statement 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*."

In accordance with Section 1.3.1 of the Ministry of Tourism, Culture and Sport's (MHSTCI) 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the Stage 1 archaeological assessment of 282A Highway 5 has determined that the study area exhibits high potential for the identification and recovery of archaeological resources and a Stage 2 archaeological assessment is recommended.

The Stage 2 assessment was conducted on November 26th, 2021, under archaeological consulting license P1131 issued to Matthew Haruta, MSc, of LEC by the MHSTCI. No archaeological resources were identified during the Stage 2 archaeological assessment of the study area, and as such **no further archaeological assessment of the property is recommended.**

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

Project Personnel

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Project Manager:	Derek Lincoln, MA (P344)
Licensed Field Director:	Matthew Haruta, MSc (P1131)
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Acknowledgements

Proponent Contact:	Chris Serio, Panattoni Development Company

1.0 PROJECT CONTEXT

1.1 DEVELOPMENT CONTEXT

Lincoln Environmental Consulting Corp. (LEC) was retained by Panattoni Development Company to complete a Stage 1-2 archaeological assessment of 282A Highway 5 to meet the requirements of the *Planning Act* (Government of Ontario 2014) in advance of a planning permit. The study area measures approximately 35.43 hectares in size and is located in part of Lot 10, Concession 2, Former Township of Dumfries, Now Town of Saint George, Brant County, Ontario.

This assessment was triggered by the 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*."

Permission to enter the study area and document archaeological resources was provided by Chris Serio of Panattoni Development Company.

1.1.1 Objectives

In compliance with the provincial standards and guidelines set out in the Ministry of Heritage, Sport, Tourism, and Culture Industries' (MHSTCI) 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the objectives of the Stage 1 Archaeological Overview/Background Study 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 LEC 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;
- An examination of the Ontario Archaeological Sites Database (ASDB) to determine the presence of known archaeological sites in and around the project area.

The objective of the Stage 2 assessment was to provide an overview of archaeological resources on the property and to determine whether any of the resources might be archaeological sites with cultural heritage value or interest and to provide specific direction for the protection, management and/or recovery of these resources. In compliance with the provincial standards and guidelines set out in the MHSTCI' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the objectives of the Stage 2 Property 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.

1.2 HISTORICAL CONTEXT

The study area consists of 35.43 hectares of which approximately 90% is active agricultural field and 10% consists of woodlot and surrounding manicured lawn of unknown archaeological integrity. The study area is located in part of Lot 10, Concession 2, Former Township of Dumfries, Now Town of Saint George, Brant County, Ontario.

1.2.1 Pre and early Post-contact Aboriginal Resources

Our knowledge of past First Peoples settlement and land use in Middlesex County is incomplete. Nonetheless, using province-wide (MCCR 1997) and region-specific archaeological data, a generalized cultural chronology for native settlement in the area can be proposed. The following paragraphs provide a basic textual summary of the known general cultural trends and a tabular summary appears in Table 1.

The Paleoindian Period

The first human populations to inhabit Ontario came to the region between 12,000 and 10,000 years ago, coincident with the end of the last period of glaciation. Climate and environmental conditions were significantly different than they are today; local environs would not have been welcoming to anything but short-term settlement. Termed Paleoindians by archaeologists, Ontario first peoples would have crossed the landscape in small groups (i.e., bands or family units) searching for food, particularly migratory game species. In the area, caribou may have provided the staple of the Paleoindian diet, supplemented by wild plants, small game, birds and fish. Given the low density of populations on the landscape at this time and their mobile nature, Paleoindian sites are small and ephemeral. They are usually identified by the presence of fluted projectile points and other finely made stone tools.

Table 1: Cultural Chronology for Native Settlement within Brant County

Period			Time Range (circa)	Diagnostic Features	Complexes
Paleoindian	Early		9000 – 8400 B.C.	fluted projectile points	Gainey, Barnes, Crowfield
	Late		8400 – 8000 B.C.	non-fluted and lanceolate points	Holcombe, Hi-Lo, Lanceolate
Archaic	Early		8000 – 6000 B.C.	serrated, notched, bifurcate base points	Nettling, Bifurcate Base Horizon
	Middle		6000 – 2500 B.C.	stemmed, side & corner notched points	Brewerton, Otter Creek, Stanly/Neville
	Late		2000 – 1800 B.C.	narrow points	Lamoka
			1800 – 1500 B.C.	broad points	Genesee, Adder Orchard, Perkiomen
			1500 – 1100 B.C.	small points	Crawford Knoll
	Terminal		1100 – 850 B.C.	first true cemeteries	Hind
Woodland	Early		800 – 400 B.C.	expanding stemmed points, Vinette pottery	Meadowood
	Middle		400 B.C. – A.D. 600	thick coiled pottery, notched rims; cord marked	Couture
	Late	Western Basin	A.D. 600 – 900	Wayne ware, vertical cord marked ceramics	Riviere au Vase-Algonquin
			A.D. 900 – 1200	first corn; ceramics with multiple band impressions	Young- Algonquin
			A.D. 1200 – 1400	longhouses; bag shaped pots, ribbed paddle	Springwells-Algonquin
			A.D 1400-1600	villages with earthworks; Parker Festoon pots	Wolf- Algonquin
Contact		Aboriginal	A.D. 1600 – 1700	early historic native settlements	Neutral Huron, Odawa, Wenro
		Euro-Canadian	A.D. 1700-1760	fur trade, missionization, early military establishments	French
			A.D. 1760-1900	Military establishments, pioneer settlement	British colonials, UELs

Archaic

The archaeological record of early native life in Southern Ontario indicates a change in lifeways beginning circa 10,000 years ago at the start of what archaeologists call the Archaic Period. The Archaic populations are better known than their Paleoindian predecessors, with numerous sites found throughout the area. The characteristic projectile points of early Archaic populations appear similar in some respects to early varieties and are likely a continuation of early trends. Archaic populations continued to rely heavily on game, particularly caribou, but diversified their diet and exploitation patterns with changing environmental conditions. A seasonal pattern of warm season riverine or lakeshore settlements and interior cold weather occupations has been documented in the archaeological record. Since the large cold weather mammal species that formed the basis of the Paleoindian subsistence pattern became extinct or moved northward with the onset of warmer climates, Archaic populations had a more varied diet, exploiting a range of plant, bird, mammal and fish species. Reliance on specific food resources like fish, deer and nuts becomes more pronounced through time and the presence of more hospitable environs and resource abundance led to the expansion of band and family sizes. In the archaeological record, this is evident in the presence of larger sites and aggregation camps, where several families or bands would come together in times of resource abundance. The change to more preferable environmental circumstances led to a rise in population density. As a result, Archaic sites are more abundant than those from the earlier period. Artifacts typical of these occupations include a variety of stemmed and notched projectile points, chipped stone

scrapers, ground stone tools (e.g. celts, adzes) and ornaments (e.g. bannerstones, gorgets), bifaces or tool blanks, animal bone and waste flakes, a by-product of the tool making process.

Woodland Period

Significant changes in cultural and environmental patterns are witnessed in the Woodland Period (circa 950 B.C to historic times). The coniferous forests of earlier times were replaced by stands of mixed and deciduous species. Occupations became increasingly more permanent in this period, culminating in major semi-permanent villages by 1,000 years ago. Archaeologically, the most significant changes by Woodland times are the appearance of artifacts manufactured from modeled clay and the construction of house structures. The Woodland Period is often defined by the occurrence of pottery, storage facilities and residential areas similar to those that define the incipient agricultural or Neolithic period in Europe. The earliest pottery was rather crudely made by the coiling method and house structures were simple enclosures.

Iroquoian Period

The primary Late Woodland occupants of the area were the Neutral Nation, an Iroquoian speaking population described by European missionaries. Like other known Iroquoian groups including the Huron (Wendat) and Petun, the Neutral practiced a system of intensive horticulture based on three primary subsistence crops (corn, beans and squash). Neutral villages incorporated a number of longhouses, multi-family dwellings that contained several families related through the female line. The Jesuit Relations describe several Neutral centres in existence in the 17th century, including a number of sites where missions were later established. While precontact Neutral sites may be identified by a predominance of well-made pottery decorated with various simple and geometric motifs, triangular stone projectile points, clay pipes and ground stone implements, sites post-dating European contact are recognized through the appearance of various items of European manufacture. The latter include materials acquired by trade (e.g., glass beads, copper/brass kettles, iron axes, knives and other metal implements) in addition to the personal items of European visitors and Jesuit priests (e.g., finger rings, stoneware, rosaries, glassware). The Neutral were dispersed, and their population decimated by the arrival of epidemic European diseases and inter-tribal warfare.

1.2.2 Historic Euro-Canadian Resources

The 1875 *Illustrated Historical Atlas of Brant County's* map of the Township of Dumfries depicts an urban landscape with several landowners, structures, early transportation routes, and early town sites. A portion of the 1875 historic map of the Township of Dumfries is depicted in Figure 3, and this part of the Lot is listed as being owned by one D.McKenzie, with one structures depicted within the study area.

1.3 ARCHAEOLOGICAL CONTEXT

The study area consists of 35.43 hectares of which approximately 90% is active agricultural field and 10% consists of woodlot and surrounding manicured lawn of unknown archaeological integrity. The study area

is located in part of Lot 10, Concession 2, Former Township of Dumfries, Now Town of Saint George, Brant County, Ontario.

1.3.1 The Natural Environment

The project area is located in the Norfolk Sand Plain physiographic region as identified by Chapman and Putnam (1984:146).

This physiographic regional was formed as a delta in the glacial Whittlesey and Warren Lakes and now sloped very gently downwards towards Lake Erie. The Norfolk Sand Plain is characterized by nearly level ground cut by streams which form tributaries of the Grand River or flow directly into Lake Erie.

(Chapman and Putnam 1984)

The soils here are comprised of sandy loam, ideal for agricultural practices and aboriginal settlement.

Potable water is the single most important resource for any extended human occupation or settlement and since water sources in southwestern Ontario have remained relatively stable over time, proximity to drinkable water is regarded as a useful index for the evaluation of archaeological site potential. In fact, distance to water is one of the most commonly used variables for predictive modeling of archaeological site location in Ontario. The closest extant source of potable water are tributaries of the Grand River which passes East of the study area.

1.3.2 Previously Known Archaeological Sites and Surveys

In order to compile an inventory of archaeological resources, the registered archaeological site records kept by the MHSTCI were consulted. In Ontario, information concerning archaeological sites stored in the ASDB is maintained by the MHSTCI. 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 kilometers east to west and approximately 18.5 kilometers 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.

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*. The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to all media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The MHSTCI will provide information concerning site location to the party or an agent of the party holding title to a property, or to a licensed archaeologist with relevant cultural resource management interests.

An examination of the ASDB has shown that there are 41 archaeological sites registered within a one-kilometer radius of the study area (Sites Data Search, Government of Ontario, November 24th, 2021); Table 2 summarizes the registered archaeological sites within one-kilometer of the study area. None of the sites fall within the current study area, nor within 50m of it.

Table 2: Registered Archaeological Sites within One Kilometer of the Study Area

Borden #	Site Name	Site Type	Cultural Affiliation
AhHe-11		Farmstead	Post-Contact, Euro-Canadian
AhHc-245	Location 1		
AhHb-5		Unknown	Woodland, Late
AhHb-234	High Beverly	Scatter	Pre-Contact
AhHb-238	Lawrason	Scatter	Post-Contact, Euro-Canadian
AhHb-232		Unknown	Post-Contact, Euro-Canadian
AhHb-221	175 Brant Road Location 2		
AhHb-212	AhHb-212-P60	Findspot	Archaic, Late
AhHb-211	AhHb-211-P59	Findspot	Archaic, Late
AhHb-210	AhHb-210	Unknown	Pre-Contact
AhHb-209	AhHb-209	Unknown	Pre-Contact
AhHb-208	AhHb-208-P45,P46	Findspot	Pre-Contact
AhHb-207	AhHb-207-P43	Findspot	Pre-Contact
AhHb-206	AhHb-206-P38,P39	Findspot	Pre-Contact
AhHb-205	AhHb-205	Findspot	Pre-Contact
AhHb-204	AhHb-204-P32	Findspot	Pre-Contact
AhHb-203	AhHb-203	Scatter	Pre-Contact
AhHb-202	AhHb-202-P25,P27	Scatter	Pre-Contact
AhHb-201	AhHb-201	Camp/Campsite/Homestead	Post-Contact, Euro-Canadian, Pre-Contact
AhHb-200	AhHb-200	Camp/Campsite/Homestead	Post-Contact, Euro-Canadian, Pre-Contact
AhHb-199	AhHb-199	Findspot	Pre-Contact
AhHb-197	AhHb-197	Other	Other
AhHb-196	AhHb-196-P8	Scatter	Pre-Contact
AhHb-195	AhHb-195-P4	Scatter	Pre-Contact
AhHb-194	AhHb-194	Homestead/Scatter	Post-Contact, Pre-Contact
AhHb-193	AhHb-193-P1	Scatter	Pre-Contact
AhHb-192	AhHb-192-H7	Unknown	Post-Contact, Euro-Canadian
AhHb-191	AhHb-191-H6	Unknown	Post-Contact, Euro-Canadian
AhHb-190	AhHb-190	Camp/Campsite/Farmstead	Post-Contact, Euro-Canadian Pre-Contact
AhHb-189	AhHb-189	House	Post-Contact, Euro-Canadian
AhHb-186			
AhHb-183			
AhHb-182	St. George XVI		Pre-Contact, Other Euro-Canadian
AhHb-181			
AhHb-175	St. George IX		Pre-Contact
AhHb-174			
AhHb-173			
AhHb-172			
AhHb-171			
AhHb-170			
AhHb-169			

1.3.3 Summary of Past Archaeological Investigations within 50m

There have been no documented archaeological investigations within 50 meters of the subject property. However, it should be noted that the Ministry of Tourism, Culture and Sport currently does not provide an

inventory of archaeological assessments carried out within 50 meters of a property, so a complete inventory of assessments on lands adjacent to the subject property cannot be provided.

1.3.4 Archaeological Potential

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. LEC applied archaeological potential criteria commonly used by MHSTCI (Government of Ontario 2011) to determine areas of archaeological potential within the region under study. 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. Finally, extensive land disturbance can eradicate archaeological potential (Wilson and Horne 1995).

As discussed above, distance to water is an essential factor in archaeological potential modeling. When evaluating distance to water it is important to distinguish between water and shoreline, as well as natural and artificial water sources, as these features affect sites' locations and types to varying degrees. The MHSTCI 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.

The closest extant source of potable water are Tributaries of the Grand River which passes East of the study area. The water resources that exist and existed close to the study area indicate archaeological potential.

Soil texture can be an important determinant of past settlement, usually in combination with other factors such as topography. As indicated previously, the soils within the study area are variable, but include pockets of well-drained and sandy soils that would be suitable for pre-contact Aboriginal agriculture.

An examination of the ASDB has shown that there are 41 archaeological sites registered within a one-kilometer radius of the study area, though none of them lie within it, nor within 50 meters of it.

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* or property that local histories or informants have identified with possible historical events. The *Illustrated Historical Atlas of Brant County* demonstrates that the study area and its environs were densely occupied by Euro-Canadian settlers by the later 19th century. Much of the established road system and agricultural settlement from that time is still visible today.

When the above listed criteria are applied to the study area, the archaeological potential for pre-contact Aboriginal, post-contact Aboriginal, and Euro-Canadian sites is deemed to be moderate to high. Thus, in accordance with Section 1.3.1 of the MHSTCI' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the Stage 1 archaeological assessment of 980 Wilton Grove Road has determined that the study area exhibits moderate to high potential for the identification and recovery of archaeological resources and a Stage 2 archaeological assessment is recommended.

2.0 FIELD METHODS

The Stage 2 assessment of 282A Highway 5 was conducted on Novermber 26th, 2021 under PIF # P1131-0019-2021 issued to Matthew Haruta, MSc, of LEC by the MHSTCI. The study area consists of 35.43 hectares of which approximately 90% is active agricultural field and 10% consists of woodlot and surrounding lawn of unknown archaeological integrity. The study area is located at 282A Highway 5 in part of Lot 10, Concession 2, Former Township of Dumfries, Now Town of Saint George, Brant County, Ontario.

During the Stage 2 survey, assessment conditions were excellent and at no time were the field, weather, or lighting conditions detrimental to the recovery of archaeological material (Table 4). Photos 1 to 8 confirm that field conditions met the requirements for a Stage 2 archaeological assessment, as per the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Section 7.8.6 Standard 1a; Government of Ontario 2011). Figure 4 provides an illustration of the Stage 2 assessment methods, as well as photograph locations and directions.

Table 3: Field and Weather Conditions

Date	Activity	Weather	Field Conditions
November 26th, 2021	Pedestrian survey and test pit survey	Cold, overcast	soils dry and friable, screens well;

Approximately 90% of the study area consists of active agricultural field. These areas were subject to pedestrian survey at 5-metre intervals in accordance with Section 2.1.1 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The agricultural land subject to pedestrian survey was recently ploughed deep enough to provide total topsoil exposure but not deeper

than previous ploughing, and additionally given time to be weathered by rainfall to allow for improved visibility of archaeological resources. At least 80% of the ploughed surface was visible.

Approximately 10% of the study consists of woodlot and surrounding lawn. These areas were subject to test pit survey at 5-metre intervals in accordance with Section 2.1.2 of the MHSTCI' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Each test pit was approximately 30 centimeters in diameter and excavated five centimeters into sterile subsoil. The soils and test pits were then examined for stratigraphy, cultural features, or evidence of fill. All soil was screened through six millimeter (mm) mesh hardware cloth to facilitate the recovery of small artifacts and then used to backfill the pit. No further archaeological methods were employed since no artifacts were recovered during the test pit survey.

3.0 RECORD OF FINDS

The Stage 2 archaeological assessment was conducted employing the methods described in Section 2.0. An inventory of the documentary record generated by fieldwork is provided in Table 5 below. No archaeological resources were identified during the Stage 2 archaeological assessment of the study area.

Table 4: Inventory of Documentary Record

Document Type	Current Location of Document Type	Additional Comments
2 Pages of field notes	LEC office, London	In original field book and photocopied in project file
1 Hand drawn map	LEC office, London	In original field book and photocopied in project file
1 map provided by Client	LEC office, London	Hard and digital copies in project file
31 Digital photographs	LEC office, London	Stored digitally in project file

4.0 ANALYSIS AND CONCLUSIONS

Approximately 90% of the study area consists of active agricultural field. These areas were subject to pedestrian survey at 5-metre intervals in accordance with Section 2.1.1 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The agricultural land subject to pedestrian survey was recently ploughed deep enough to provide total topsoil exposure but not deeper than previous ploughing, and additionally given time to be weathered by rainfall to allow for improved visibility of archaeological resources. At least 80% of the ploughed surface was visible. Approximately 10% of the study consists of woodlot and surrounding lawn. These areas were subject to test pit survey at 5-metre intervals in accordance with Section 2.1.2 of the MHSTCI' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Each test pit was approximately 30 centimeters in diameter and excavated five centimeters into sterile subsoil. The soils and test pits were then examined for stratigraphy, cultural features, or evidence of fill. All soil was screened through six millimeter (mm) mesh hardware cloth to facilitate the recovery of small artifacts and then used to backfill the pit. No further archaeological methods were employed since no artifacts were recovered during the test pit survey.

The Stage 2 assessment did not result in the identification of any archaeological resources.

5.0 RECOMMENDATIONS

Approximately 90% of the study area consists of active agricultural field. These areas were subject to pedestrian survey at 5-metre intervals in accordance with Section 2.1.1 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The agricultural land subject to pedestrian survey was recently ploughed deep enough to provide total topsoil exposure but not deeper than previous ploughing, and additionally given time to be weathered by rainfall to allow for improved visibility of archaeological resources. At least 80% of the ploughed surface was visible. Approximately 10% of the study consists of woodlot and surrounding lawn. These areas were subject to test pit survey at 5-metre intervals in accordance with Section 2.1.2 of the MHSTCI' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Each test pit was approximately 30 centimeters in diameter and excavated five centimeters into sterile subsoil. The soils and test pits were then examined for stratigraphy, cultural features, or evidence of fill. All soil was screened through six millimeter (mm) mesh hardware cloth to facilitate the recovery of small artifacts and then used to backfill the pit. No further archaeological methods were employed since no artifacts were recovered during the test pit survey.

All work met provincial standards and no archaeological sites were identified during the Stage 2 assessment. If construction plans change to incorporate new areas that were not subject to a Stage 2 field survey, these must be assessed prior to the initiation of construction. In keeping with legislative stipulations, all construction and demolition-related impacts (including, for example, machine travel, material storage and stockpiling, earth moving) must be restricted to the areas that were archaeologically assessed and cleared by the Ministry of Heritage, Sport, Tourism, and Culture Industries through acceptance of the assessment report into the provincial register.

As no archaeological resources were found on the subject property, no further archaeological assessment of the property is required.

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

This report is submitted to the Minister of Tourism, Culture and Sport 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 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*.

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.

Brock, Daniel. 1972. *History of the County of Brant, Canada.* Belleville: Mika Studio.

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. Toronto: Ministry of Natural Resources.

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

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 *Handbook of North American Indians.* Vol.15 Northeast, pp. 772-786. B.G. Trigger, ed. Washington: Smithsonian Institute.

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

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

Gentilcore, Louis R. 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: 2011, c. 6, Sched. 2.

Government of Ontario. 1990b. *Ontario Heritage Act*, R.S.O. 1990, CHAPTER O.18. Last amendment: 2009, c. 33, Sched. 11, s. 6.

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

Government of Ontario. n.d. *Archaeological Sites Database Files*. Toronto: Archaeology Programs Unit, Ministry of Tourism, Culture and Sport.

Konrad, Victor. 1981. An Iroquois Frontier: The North Shore of Lake Ontario during the Late Seventeenth Century. *Journal of Historical Geography* 7(2).

Middleton, Jess Edgar and Fred Landon. 1927. *Province of Ontario – A History 1615 to 1927*. Toronto: Dominion Publishing Company.

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

Page & Co. H.R. 1875. *Illustrated Historical Atlas of the County of Brant, Ont.* Toronto: H.R. Page &Co.

Rogers, Edward S. 1978. Southeastern Ojibwa. In *Handbook of North American Indians*, Vol. 15 Northeast, pp. 760-771. B.G. Trigger, ed. Washington: Smithsonian Institute Press.

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

Smith, W.H. 1946. *Smith's Canadian Gazetteer: Comprising Statistical and General Information Respecting all Parts of the Upper Province, or Canada West.* Toronto: H. & W. Rowsell.

Williamson et. al. 2017 *City of London Archaeological Management Plan.* London: City of London.

8.0 IMAGES

8.1 PHOTOGRAPHS

Images
December 2021

Photo 1: Area Assessed by 5m Test Pit Survey Facing East

Photo 2: Area Assessed by 5m Pedestrian Survey Facing West

Images
December 2021

Photo 3: Area Assessed by 5m Pedestrian Survey Facing North

Photo 4: Visually Disturbed, Not Assessed Facing North

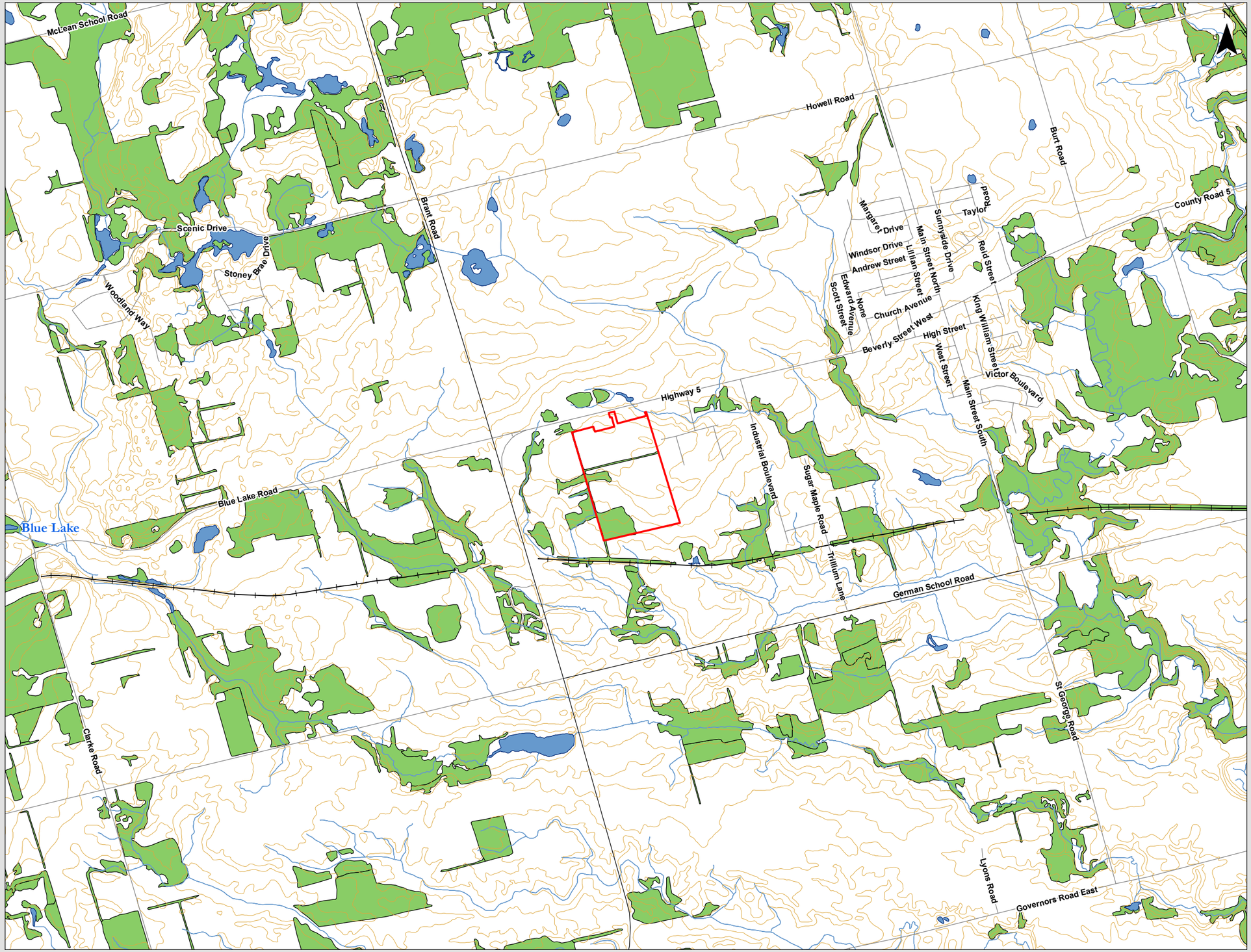
Photo 5: Visually Disturbed, Not Assessed Facing Southwest

Photo 6: Area Assessed by 5m Pedestrian Survey Facing Northwest

Photo 7: Typical Test Pit Facing East

Photo 8: Typical Test Pit Facing South

9.0 MAPS



LINCOLN ENVIRONMENTAL CONSULTING

Stage 1-2 Archaeological Assessment of 282A Highway 5, St. George, Ontario

Figure 1: Topographic Map of Study Area

Date: December, 2021

Source: OBM
http://www.geographynetwork.ca/website/obm/viewer.htm

Scale 1:25,000

Datum: NAD 1983 UTM Zone 17N

Legend

- Study Area
- Local Road
- Major Road
- Railroad
- Contour Lines
- Water
- Waterbody
- Wooded Area

Metres
0 500 1,000

LINCOLN ENVIRONMENTAL CONSULTING

Stage 1-2 Archaeological Assessment of 282A Highway 5, St. George, Ontario

Figure 2: Study Area

Date: December, 2021

Source: Bing Maps

Scale 1:4,000

Datum: NAD 1983 UTM Zone 17N

Legend

- Study Area
- Watercourse

Metres

0 100 200

LINCOLN ENVIRONMENTAL CONSULTING

Stage 1-2 Archaeological Assessment of 282A Highway 5, St. George, Ontario

Figure 3: Portion of the 1875 Illustrated Historical Atlas of the County of Brant, South Dumfries Township

Date: December, 2021

Source: Illustrated Historical Atlas of the County of Brant Ont. Toronto : Page & Smith, 1875.

NOT TO SCALE

Datum: NAD 1983 UTM Zone 17N

Legend

Study Area

LINCOLN ENVIRONMENTAL CONSULTING

Stage 1-2 Archaeological Assessment of 282A Highway 5, St. George, Ontario

Figure 4: Assessment Strategies and Results

Date: December, 2021

Source: Bing Maps

Scale 1:4,000

Datum: NAD 1983 UTM Zone 17N

Legend

- Photo Location
- Study Area
- Assessed by Pedestrian Survey at 5m Intervals
- Assessed by Test Pit Survey at 5m Intervals
- Watercourse

Metres

0 100 200