



ORIGINAL 22 AUGUST 2022

STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT

*3011 Point Abino Road North, Fort Erie; part of Lot 14, Concession 15
Niagara River (Bertie), Niagara Region. (AMICK Corporate File #2022-
849/MTCS File #P058-2189-2022)*

SUBMITTED TO:

Ontario Ministry of Tourism, Culture & Sport
(MTCS)

SUBMITTED BY:

AMICK Consultants Limited
Southwestern District Office
237 Sanders Street East
Exeter, ON N0M 1S1
Phone: (519) 432-4435
Email: mhenry@amick.ca/mcornies@amick.ca
www.amick.ca

LICENSEE:

Michael B. Henry CD BA FRAI FRSA (P058)

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PROJECT PERSONNEL

AMICK CONSULTANTS LIMITED PARTNERS

Michael Henry (MTCS Professional Archaeologist Licence #P058)
Marilyn Cornies (MTCS Professional Archaeologist Licence #P038)

AMICK CONSULTANTS LIMITED BUSINESS MANAGER

Melissa Maclean BBA email mmaclean@amick.ca

PROJECT COORDINATOR

Marilyn Cornies (MTCS Professional Archaeologist Licence #P038)

PROJECT LICENSEE ARCHAEOLOGIST

Michael Henry (MTCS Professional Archaeologist Licence #P058)

PROJECT FIELD DIRECTORS

Alex Cassidy-Neumiller (MTCS Applied Research Archaeologist Licence #R1311)

PROJECT FIELD ASSISTANTS

Cameron Davenport Shannon Rayner Marshall Petrisor

PROJECT REPORT PREPARATION & GRAPHICS

Peter Ash Cutajar

PROJECT PHOTOGRAPHY

Alex Cassidy-Neumiller (MTCS Applied Research Archaeologist Licence #R1311)

EXECUTIVE SUMMARY

This report describes the results of the 2022 Stage 1-2 Archaeological Property Assessment of 3011 Point Albino Road North, Fort Erie; part of Lot 14, Concession 15 Niagara River (Bertie), Niagara Region, conducted by AMICK Consultants Limited. This assessment was undertaken as a requirement under the Planning Act (RSO 1990) and was conducted under Professional Archaeologist License #P058 issued to Michael Henry by the Minister of Tourism, Culture & Sport (MTCS) for the Province of Ontario. All work was conducted in conformity with Ontario Ministry of Tourism and Culture (MTC) Standards and Guidelines for Consultant Archaeologists (MTC 2011) and the Ontario Heritage Act (RSO 1990a).

The entirety of the study area is approximately 4.4 hectares (ha) in area and includes within it mostly lawn area, and a house, two sheds, an above-ground pool, and a detached garage. The study area is bounded on the north by College Road, on the east by Point Albino Road N, on the south by farmland and on the west by existing residential development. AMICK Consultants Limited was engaged by the proponent to undertake a Stage 1-2 Archaeological Property Assessment of lands potentially affected by the proposed undertaking and was granted permission to carry out archaeological fieldwork. Following the criteria outlined by MTCS (2011) for determining archaeological potential, portions of the study area were determined as having archaeological potential for Pre-contact and/or Post-contact archaeological resources. Consequently, this report is being prepared in advance of the planning process for this property.

The entirety of the study area was subject to property inspection and photographic documentation concurrently with the Stage 2 Property Assessment which consisted of high intensity test pit methodology at a five-metre interval between individual test pits and test pit survey at a ten-metre interval to confirm disturbance on 27 June 2022. All records, documentation, field notes, photographs, and artifacts (as applicable) related to the conduct and findings of these investigations are held at the Lakelands District corporate offices of AMICK Consultants Limited until such time that they can be transferred to an agency or institution approved by the MTCS on behalf of the government and citizens of Ontario.

As a result of the Stage 2 Property Assessment of the study area, no archaeological resources were encountered. Consequently, the following recommendations are made:

1. *No further archaeological assessment of the study area is warranted.*
2. *The Provincial interest in archaeological resources with respect to the proposed undertaking has been addressed.*
3. *The proposed undertaking is clear of any archaeological concern.*

1.0 PROJECT CONTEXT

1.1 DEVELOPMENT CONTEXT

This report describes the results of the 2022 Stage 1-2 Archaeological Property Assessment of 3011 Point Albino Road North, Fort Erie; part of Lot 14, Concession 15 Niagara River (Bertie), Niagara Region, conducted by AMICK Consultants Limited. This assessment was undertaken as a requirement under the Planning Act (RSO 1990) and was conducted under Professional Archaeologist License #P058 issued to Michael Henry by the Minister of Tourism, Culture & Sport (MTCS) for the Province of Ontario. All work was conducted in conformity with Ontario Ministry of Tourism and Culture (MTC) Standards and Guidelines for Consultant Archaeologists (MTC 2011) and the Ontario Heritage Act (RSO 1990a).

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The entirety of the study area was subject to property inspection and photographic documentation concurrently with the Stage 2 Property Assessment which consisted of high intensity test pit methodology at a five-metre interval between individual test pits and test pit survey at a ten-metre interval to confirm disturbance on 27 June 2022. All records, documentation, field notes, photographs, and artifacts (as applicable) related to the conduct and findings of these investigations are held at the Lakelands District corporate offices of AMICK Consultants Limited until such time that they can be transferred to an agency or institution approved by the MTCS on behalf of the government and citizens of Ontario.

The proposed development of the study area includes a 1-storey garage. A preliminary plan of the proposed development has been submitted together with this report to MTCS for review and reproduced within this report as Map 4.

1.2 HISTORICAL CONTEXT

1.2.1 PRE-CONTACT LAND-USE OUTLINE

Table 1 illustrates the chronological development of cultures within southern Ontario prior to the arrival of European cultures to the area at the beginning of the 17th century. This general

cultural outline is based on archaeological data and represents a synthesis and summary of research over a long period of time. It is necessarily generalizing and is not necessarily representative of the point of view of all researchers or stakeholders. It is offered here as a rough guideline and as a very broad outline to illustrate the relationships of broad cultural groups and time periods.

TABLE 1 PRE-CONTACT CULTURAL CHRONOLOGY FOR SOUTHERN ONTARIO

Years ago	Period	Southern Ontario
250	Terminal Woodland	Ontario and St. Lawrence Iroquois Cultures
1000 2000	Initial Woodland	Princess Point, Saugeen, Point Peninsula, and Meadowood Cultures
3000 4000 5000 6000	Archaic	Laurentian Culture
7000 8000 9000 10000 11000	Palaeo-Indian	Plano and Clovis Cultures
		(Wright 1972)

What follows is an outline of Aboriginal occupation in the area during the Pre-Contact Era from the earliest known period, about 9000 B.C. up to approximately 1650 AD.

1.2.1.1 PALEO-INDIAN PERIOD (APPROXIMATELY 9000-7500 B.C.)

North of Lake Ontario, evidence suggests that early occupation began around 9000 B.C. People probably began to move into this area as the glaciers retreated and glacial lake levels began to recede. The early occupation of the area probably occurred in conjunction with environmental conditions that would be comparable to modern Sub-Arctic conditions. Due to the great antiquity of these sites, and the relatively small populations likely involved, evidence of these early inhabitants is sparse and generally limited to tools produced from stone or to by-products of the manufacture of these implements.

1.2.1.2 ARCHAIC PERIOD (APPROXIMATELY 8000-1000 B.C.)

By about 8000 B.C. the gradual transition from a post glacial tundra-like environment to an essentially modern environment was largely complete. Prior to European clearance of the landscape for timber and cultivation, the area was characterized by forest. The Archaic Period is the longest and the most apparently stable of the cultural periods identified through archaeology. The Archaic Period is divided into the Early, Middle and Late Sub-Periods, each represented by specific styles in projectile point manufacture. Many more sites of this period are found throughout Ontario, than of the Palaeo-Indian Period. This is probably a reflection of two factors: the longer period of time reflected in these sites, and a greater population density. The greater population was likely the result of a more diversified

subsistence strategy carried out in an environment offering a greater variety of abundant resources (Smith 2002:58-59).

Current interpretations suggest that the Archaic Period populations followed a seasonal cycle of resource exploitation. Although similar in concept to the practices speculated for the big game hunters of the Palaeo-Indian Period, the Archaic populations utilized a much broader range of resources, particularly with respect to plants. It is suggested that in the spring and early summer, bands would gather at the mouths of rivers and at rapids to take advantage of fish spawning runs. Later in the summer and into the fall season, smaller groups would move to areas of wetlands to harvest nuts and wild rice. During the winter, they would break into yet smaller groups probably based on the nuclear family and perhaps some additional relatives to move into the interior for hunting. The result of such practices would be to create a distribution of sites across much of the landscape (Smith 2002: 59-60).

The material culture of this period is much more extensive than that of the Palaeo-Indians. Stylistic changes between Sub-Periods and cultural groups are apparent, although the overall quality in production of chipped lithic tools seems to decline. This period sees the introduction of ground stone technology in the form of celts (axes and adzes), manos and metates for grinding nuts and fibres, and decorative items like gorgets, pendants, birdstones, and bannerstones. Bone tools are also evident from this time period. Their presence may be a result of better preservation from these more recent sites rather than a lack of such items in earlier occupations. In addition, copper and exotic chert types appear during the period and are indicative of extensive trading (Smith 2002: 58-59).

1.2.1.3 WOODLAND PERIOD (APPROXIMATELY 1000 B.C.-1650 A.D.)

The primary difference in archaeological assemblages that differentiates the beginning of the Woodland Period from the Archaic Period is the introduction of ceramics to Ontario populations. This division is probably not a reflection of any substantive cultural changes, as the earliest sites of this period seem to be in all other respects a continuation of the Archaic mode of life with ceramics added as a novel technology. The seasonally based system of resource exploitation and associated population mobility persists for at least 1500 years into the Woodland Period (Smith 2002: 61-62).

The Early Woodland Sub-Period dates from about 1000-400 B.C. Many of the artifacts from this time are similar to the late Archaic and suggest a direct cultural continuity between these two temporal divisions. The introduction of pottery represents an entirely new technology that was probably acquired through contact with more southerly populations from which it likely originates (Smith 2002:62).

The Middle Woodland Sub-Period dates from about 400 B.C.-800 A.D. Within the region including the study area, a complex emerged at this time termed "Point Peninsula." Point Peninsula pottery reflects a greater sophistication in pottery manufacture compared with the earlier industry. The paste and temper of the new pottery is finer and new decorative techniques such as dentate and pseudo-scallop stamping appear. There is a noted Hopewellian influence in southern Ontario populations at this time. Hopewell influences

from south of the Great Lakes include a widespread trade in exotic materials and the presence of distinct Hopewell style artifacts such as platform pipes, copper or silver panpipe covers and shark's teeth. The populations of the Middle Woodland participated in a trade network that extended well beyond the Great Lakes Region.

The Late Woodland Sub-Period dates from about 500-1650 A.D. The Late Woodland includes four separate phases: Princess Point, Early Ontario Iroquoian, Middle Ontario Iroquoian and Late Ontario Iroquoian.

The Princess Point phase dates to approximately 500-1000 A.D. Pottery of this phase is distinguished from earlier technology in that it is produced by the paddle method instead of coil and the decoration is characterized by the cord wrapped stick technique. Ceramic smoking pipes appear at this time in noticeable quantities. Princess Point sites cluster along major stream valleys and wetland areas. Maize cultivation is introduced by these people to Ontario. These people were not fully committed to horticulture and seemed to be experimenting with maize production. They generally adhere to the seasonal pattern of occupation practiced by earlier occupations, perhaps staying at certain locales repeatedly and for a larger portion of each year (Smith 2002: 65-66).

The Early Ontario Iroquoian stage dates to approximately 950-1050 A.D. This stage marks the beginning of a cultural development that led to the historically documented Ontario Iroquoian groups that were first contacted by Europeans during the early 1600s (Petun, Neutral, and Huron). At this stage formal semi-sedentary villages emerge. The Early stage of this cultural development is divided into two cultural groups in southern Ontario. The areas occupied by each being roughly divided by the Niagara Escarpment. To the west were located the Glen Meyer populations, and to the east were situated the Pickering people (Smith 2002: 67).

The Middle Ontario Iroquoian stage dates to approximately 1300-1400 A.D. This stage is divided into two sub-stages. The first is the Uren sub-stage lasting from approximately 1300-1350 A.D. The second of the two sub-stages is known as the Middleport sub-stage lasting from roughly 1350-1400 A.D. Villages tend to be larger throughout this stage than formerly (Smith 2002: 67).

The Late Ontario Iroquoian stage dates to approximately 1400-1650 A.D. During this time the cultural divisions identified by early European explorers are under development and the geographic distribution of these groups within southern Ontario begins to be defined.

1.2.2 POST-CONTACT LAND USE OUTLINE

The County of Welland was formed in 1851, and was named after the Welland River. It should be noted that Welland County was one of the first major settlements within Upper Canada (Wikipedia.org 2010). Many of its first settlers were Loyalists and moved to the area as a result of the American Revolution. Due to the presence of the Welland River and to Niagara Falls, this allowed the area to develop rapidly as the River offered easy transportation and energy production. The construction of the Welland Canal began in 1824,

and would connect Lake Ontario to Lake Erie. The canal was at first a wooden structure and would later be replaced with stone (Welland.ca 2010). The counties of Lincoln and Welland were amalgamated in to the Regional Municipality of Niagara in 1970 (Wikipedia.org 2010).

Fort Erie was one of the first settlements in Bertie Township, in 1795 it was described as several longhouses with a palisade and 4 rough lumber warehouses for storage and men, there was a ferry across the river to Black Rock on the American side and a tavern and a few houses stood near the landing in Canada. This Fort saw a lot of action in the war of 1812 and after many veterans settled nearby. Bertie Township gets its name from a community of Mennonites that mostly emigrated from Pennsylvania in 1788. The first church was a log building that served about 30 years. By 1860 the log meetinghouse had been replaced by a brick church, which served during the greater period of strength and decline. In 1916 another church was erected on the same grounds and from it dated a revival of interest and attendance for more than a decade, when decline again set in (Fretz 1953).

Map 2 is a facsimile segment from Tremaine's Map of the Counties of Lincoln and Welland (Tremaine 1862). Map 2 illustrates the location of the study area and environs as of 1862. The study area is shown to belong to Henry Beem; one structure is shown to be directly adjacent to the study area to the south. This demonstrates that the original property of which the study area is a part was settled by the time that the atlas data was compiled. Accordingly, it has been determined that there is potential for archaeological deposits related to early Post-contact settlement within the study area. In addition, this map illustrates unnamed settlement roads that are depicted as adjacent to the study area to the north and east. These roads are the current College Road and Point Albino Road N.

Map 3 is a facsimile segment of the Township of Bertie map reproduced from The Illustrated Historical Atlas of the Counties of Lincoln and Welland (H.R. Page & Co. 1876). Map 3 illustrates the location of the study area and environs as of 1876. The study area is shown to belong to Henry Beem; an orchard is shown to be directly adjacent to the study area to the southwest. This demonstrates that the original property of which the study area is a part was settled by the time that the atlas data was compiled. Accordingly, it has been determined that there is potential for archaeological deposits related to early Post-contact settlement within the study area. In addition, this map illustrates unnamed settlement roads that are depicted as adjacent to the study area to the north and east. These roads are the current College Road and Point Albino Road N.

A plan of the study area is included within this report as Map 4. Current conditions encountered during the Stage 1-2 Property Assessment are illustrated in Maps 5 & 6.

1.3 ARCHAEOLOGICAL CONTEXT

The study area is located near Fort Erie and the Niagara River, and is bounded on the north by College Road, on the east by Point Albino Road N, on the south by farmland and on the west by existing residential development.

The study area contains mostly lawn areas. In addition to a house, two sheds, an above-ground pool, and a detached garage. The entirety of the study area contains mottled, and compacted soil indicating artificial grading of the property in the past. The study area does not contain any areas of steep slope. The study area does not contain any ploughable lands.

1.3.1 PHYSIOGRAPHIC REGION

The study area is situated within the Haldimand Clay Plain physiographic region. The Haldimand Clay Plain lies between the Niagara Escarpment and Lake Erie, and consists of an intermixture of stratified clay and till. The study area falls within an area of the plain where good silt loam is prime for orchards and vineyards of grapes, pears and apples (Chapman and Putnam 1984: 156-159).

1.3.2 SURFACE WATER

The study area is situated approximately 60 metres north of a section of Black Creek, which is a source of potable water. Additionally, the property contains a low-lying and wet area in the form of a man made pond.

1.3.3 REGISTERED ARCHAEOLOGICAL SITES

The Archaeological Sites Database administered by the MTCS indicates that there are no (0) previously documented sites within 1 kilometre of the study area. However, it must be noted that this assumes the accuracy of information compiled from numerous researchers using different methodologies over many years. AMICK Consultants Limited assumes no responsibility for the accuracy of site descriptions, interpretations such as cultural affiliation, or location information derived from the Archaeological Sites Database administered by MTCS. In addition, it must also be noted that a lack of formerly documented sites does not indicate that there are no sites present as the documentation of any archaeological site is contingent upon prior research having been conducted within the study area.

1.3.3.1 PRE-CONTACT REGISTERED SITES

A summary of registered and/or known archaeological sites within a 1-kilometre radius of the study area was gathered from the Archaeological Sites Database, administered by MTCS. As a result, it was determined that no (0) archaeological sites relating directly to Pre-contact habitation/activity had been formally registered within the immediate vicinity of the study area. However, the lack of formally documented archaeological sites does not mean that Pre-contact people did not use the area; it more likely reflects a lack of systematic archaeological research in the immediate vicinity. Even in cases where one or more assessments may have been conducted in close proximity to a proposed landscape alteration, an extensive area of physical archaeological assessment coverage is required throughout the region to produce a representative sample of all potentially available archaeological data in order to provide any meaningful evidence to construct a pattern of land use and settlement in the past.

1.3.3.2 POST-CONTACT REGISTERED SITES

A summary of registered and/or known archaeological sites within a 1-kilometre radius of the study area was gathered from the Archaeological Sites Database, administered by MTCS. As a result, it was determined that no (0) archaeological sites relating directly to Post-contact habitation/activity had been formally registered within the immediate vicinity of the study area.

1.3.4 PREVIOUS ARCHAEOLOGICAL ASSESSMENTS

On the basis of information supplied by MTCS, no archaeological assessments have been conducted within 50 metres of the study area. AMICK Consultants Limited assumes no responsibility for the accuracy of previous assessments, interpretations such as cultural affiliation, or location information derived from the Archaeological Sites Database administered by MTCS. In addition, it must also be noted that the lack of formerly documented previous assessments does not indicate that no assessments have been conducted.

1.3.4.2 PREVIOUS REGIONAL ARCHAEOLOGICAL POTENTIAL MODELLING

The study area is situated within an area (Niagara Region) that is in the process of creating an Archaeological Management Plan. In 2019, the Region of Niagara produced the Niagara Region Archaeological Management Plan: Phase II Research and Background Report (ASI 2019). This report suggests recommended best practices in archaeological resource planning through development of an Archaeological Management Plan (AMP). The purpose of creating the AMP is to more easily identify where archaeological assessments are required and manage archaeological resources, all within compliance of the Provincial Policy Statement (2014) and revised Heritage Act (2005) (ASI 2019).

1.3.5 HISTORIC PLAQUES

There are no relevant plaques associated with the study area, which would suggest an activity or occupation within, or near, the study area that may indicate potential for associated archaeological resources of significant CHVI.

1.3.6 SUMMARY OF ARCHAEOLOGICAL CONTEXT

The study area contains mostly lawn areas. In addition to a house, two sheds, an above-ground pool, and a detached garage. The entirety of the study area contains mottled, and compacted soil indicating artificial grading of the property in the past. The study area does not contain any areas of steep slope. The study area does not contain any ploughable lands. The study area is approximately 60 metres north of Black Creek, which is a source of potable water.

Current conditions within the study area indicate that some areas of the property may have no or low archaeological potential and do not require Stage 2 Property Assessment or should be excluded from Stage 2 Property Assessment. These areas would include the footprint of existing structures, areas under pavement, and areas that are not accessible due to previously dumped soil covering the original pavement surface of the ground. A significant proportion of the study area does exhibit archaeological potential and therefore a Stage 2 Property Assessment is required.

Background research also indicates that the study area is situated in the Haldimand Clay Plain physiographic region, which is characterized by silty clay soils, which provide an excellent soil for orchards and viticulture.

No previously registered archaeological sites have been documented within 1km of the study area. The study area is situated within an area subject to an archaeological master plan or a similar regional overview study. There are no relevant plaques associated with the study area.

The study area has potential for archaeological resources of Native origins based on proximity to a source of potable water. Background research also suggests potential for archaeological resources of Post-contact origins based on proximity to a historic roadway, and proximity to areas of documented historic settlement.

2.0 FIELD WORK METHODS AND WEATHER CONDITIONS

2.1 INTRODUCTION

A property inspection was carried out in compliance with Standards and Guidelines for Consultant Archaeologists (MTC 2011) to document the existing conditions of the study area to facilitate the Stage 2 Property Assessment. All areas of the study area were visually inspected and select features were photographed as a representative sample of each area defined within Maps 5 and 6. Observations made of conditions within the study area at the time of the inspection were used to inform the requirement for Stage 2 Property Assessment for portions of the study area as well as to aid in the determination of appropriate Stage 2 Property Assessment strategies. The locations from which photographs were taken and the directions toward which the camera was aimed for each photograph are illustrated in Maps 5 & 6 of this report.

The Stage 2 Assessment of the study area was carried out on 27 June 2022 and consisted of high intensity test pit methodology at a five-metre interval between individual test pits and test pit survey at a ten-metre interval to confirm disturbance which was conducted in compliance with the Standards and Guidelines for Consultant Archaeologists, section 2.1.2: Test Pit Survey (MTC 2011). Weather conditions were appropriate for the necessary fieldwork required to complete the Stage 2 Property Assessment and to create the documentation appropriate to this study.

2.3 TEST PIT SURVEY

Approximately 4.0 ha of the study area was areas of lawn that could not be strip ploughed and was subjected to test pit survey at 5m intervals per Section 2.1.2, Standard 1 (MTC 2011).

All test pits were excavated within 1m of all built structures, were at least 30cm in diameter and were excavated into the first 5cm of subsoil to examine stratigraphy, cultural features and evidence of fill. All soils were screen through mesh no greater than 6mm and all test pits were backfilled. All work was photo documented.

During the 5m test pit survey, no archaeological resources were encountered.

2.4 CONFIRMATION OF DISTURBANCE

Approximately 4.0 ha of the study area was subject to test pit survey at 10m intervals to confirm disturbance. Areas of suspected disturbance within the study area consists of an area identified as probable disturbance likely from the construction of two artificial swales AMICK Consultants Limited tested the suspected disturbed area at a 10-metre interval to confirm disturbance in a manner consistent with the objectives to ensure that the area is accurately delimited and properly identified. This procedure demonstrated that the entire disturbed portion of the study area consists of deeply mottled and compacted soil. There is no archaeological potential within this area.

Approximately 99% of the study area consisted of lawn that was test pit surveyed at an interval of 10 metres between individual test pits, due to the presence of mottled and compact soil. Approximately 2% of the study area consisted of sand-fill surrounding a swing set. Approximately 10% of the study area was not assessable due to the presence of existing structures and disturbed gravel driveway, and a man made pond. Maps 5 & 6 of this report illustrate the Stage 2 Assessment methodology within the study area.

3.0 RECORD OF FINDS

3.1 INTRODUCTION

As a result of the Stage 1-2 Assessment of the study area, no archaeological resources of any description were encountered.

The documentation produced during the field investigation conducted in support of this report includes: one sketch map, one page of photo log, one page of field notes, and 29 digital photographs.

4.0 ANALYSIS AND CONCLUSIONS

4.1 STAGE 1 ANALYSIS AND CONCLUSIONS

4.1.1 CHARACTERISTICS INDICATING ARCHAEOLOGICAL POTENTIAL

Section 1.3.1 of the Standards and Guidelines for Consultant Archaeologists specifies the property characteristics that indicate archaeological potential (MTC 2011). Factors that indicate archaeological potential are features of the local landscape and environment that may have attracted people to either occupy the land or to conduct activities within the study area. One or more of these characteristics found to apply to a study area would necessitate a Stage 2 Property Assessment to determine if archaeological resources are present. These characteristics include:

- 1) Within 300m of Previously Identified Archaeological Sites
- 2) Within 300m of Primary Water Sources (e.g., lakes, rivers, streams, and creeks)
- 3) Within 300m of Secondary Water Sources (e.g., intermittent streams and creeks, springs, marshes, and swamps)
- 4) Within 300 m of Features Indicating Past Water Sources (e.g., glacial lake shorelines indicated by the presence of raised sand or gravel 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)
- 5) Within 300m of an Accessible or Inaccessible Shoreline (e.g., high bluffs, swamp, or marsh fields by the edge of a lake, sandbars stretching into marsh)
- 6) Elevated Topography (e.g., eskers, drumlins, large knolls, and plateaux)
- 7) Pockets of Well-drained Sandy Soil, especially near areas of heavy soil or rocky ground.
- 8) 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.
- 9) Resource Areas, including:
 - food or medicinal plants (e.g., migratory routes, spawning areas, and prairie)
 - scarce raw materials (e.g., quartz, copper, ochre or outcrops of chert)
 - resources of importance to early Post-contact industry (e.g., logging, prospecting, and mining)
- 10) Within 300m of Areas of Early Post-contact Settlement, including:
 - military or pioneer settlement (e.g., pioneer homesteads, isolated cabins, and farmstead complexes)

- early wharf or dock complexes, pioneer churches and early cemeteries
- 11) Within 100m of Early Historical Transportation Routes (e.g., trails, passes, roads, railways, portage routes)
 - 12) Heritage Property – A property listed on a municipal register or designated under the Ontario Heritage Act or is a federal, provincial, or municipal historic landmark or site.
 - 13) Documented Historical or Archaeological Sites – property that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations. These are properties which have not necessarily been formally recognized or for which there is additional evidence identifying possible archaeological resources associated with historic properties in addition to the rationale for formal recognition.

The study area lies 60 metres north of Black Creek which is a source of potable water. The study area is within 300 metres of early post contact settlement as shown by the historic atlas maps of 1862 and 1876. In addition, the study area is adjacent to early settlement roads to the north and east. These roads are the current College Road and Point Albino Road N.

4.1.2 CHARACTERISTICS INDICATING REMOVAL OF ARCHAEOLOGICAL POTENTIAL

Section 1.3.2 of the Standards and Guidelines for Consultant Archaeologists specifies the property characteristics which indicate no archaeological potential or for which archaeological potential has been removed (MTC 2011). These characteristics include:

- 1) Quarrying
- 2) Major Landscaping Involving Grading Below Topsoil
- 3) Building Footprints
- 4) Sewage and Infrastructure Development

The study area contains a house, two sheds, an above-ground pool, and a detached garage. Additionally, almost the entirety of the assessable portion of the study area consists of deeply mottled and compacted soil likely from the construction of two swales on the property.

4.1.3 SUMMARY OF ARCHAEOLOGICAL POTENTIAL

Table 2 below summarizes the evaluation criteria of the Ministry of Tourism, Culture & Sport (MTCS) together with the results of the Stage 1 Background Study for the proposed undertaking. Based on the criteria, the property is deemed to have archaeological potential on

the basis of proximity to water, proximity to historic settlement structures, and the location of early historic settlement roads adjacent to the study area.

TABLE 2 EVALUATION OF ARCHAEOLOGICAL POTENTIAL

FEATURE OF ARCHAEOLOGICAL POTENTIAL		YES	N O	N/A	COMMENT
1	Known archaeological sites within 300m		N		If Yes, potential determined
PHYSICAL FEATURES					
2	Is there water on or near the property?	Y			If Yes, what kind of water?
2 a	Primary water source within 300 m. (lakeshore, river, large creek, etc.)	Y			If Yes, potential determined
2 b	Secondary water source within 300 m. (stream, spring, marsh, swamp, etc.)		N		If Yes, potential determined
2 c	Past water source within 300 m. (beach ridge, river bed, relic creek, etc.)		N		If Yes, potential determined
2 d	Accessible or Inaccessible shoreline within 300 m. (high bluffs, marsh, swamp, sand bar, etc.)		N		If Yes, potential determined
3	Elevated topography (knolls, drumlins, eskers, plateaus, etc.)		N		If Yes, and Yes for any of 4-9, potential determined
4	Pockets of sandy soil in a clay or rocky area		N		If Yes and Yes for any of 3, 5-9, potential determined
5	Distinctive land formations (mounds, caverns, waterfalls, peninsulas, etc.)		N		If Yes and Yes for any of 3-4, 6-9, potential determined
HISTORIC/PREHISTORIC USE FEATURES					
6	Associated with food or scarce resource harvest areas (traditional fishing locations, agricultural/berry extraction areas, etc.)		N		If Yes, and Yes for any of 3-5, 7-9, potential determined.
7	Early Post-contact settlement area within 300 m.	Y			If Yes, and Yes for any of 3-6, 8-9, potential determined
8	Historic Transportation route within 100 m. (historic road, trail, portage, rail corridors, etc.)	Y			If Yes, and Yes for any 3-7 or 9, potential determined
9	Contains property designated and/or listed under the Ontario Heritage Act (municipal heritage committee, municipal register, etc.)		N		If Yes and, Yes to any of 3-8, potential determined
APPLICATION-SPECIFIC INFORMATION					
1 0	Local knowledge (local heritage organizations, Pre-contact, etc.)		N		If Yes, potential determined
1 1	Recent disturbance not including agricultural cultivation (post-1960-confirmed extensive and intensive including industrial sites, aggregate areas, etc.)	Y			If Yes, no potential or low potential in affected part (s) of the study area.

If **YES** to any of 1, 2a-c, or 10 Archaeological Potential is **confirmed**

If **YES** to 2 or more of 3-9, Archaeological Potential is **confirmed**

If **YES** to 11 or No to 1-10 Low Archaeological Potential is **confirmed** for at least a portion of the study area.

4.2 STAGE 2 ANALYSIS AND CONCLUSIONS

No archaeological sites or resources were found during the Stage 2 survey of the study area.

5.0 RECOMMENDATIONS

5.1 STAGE 1-2 RECOMMENDATIONS

As a result of the Stage 2 Property Assessment of the study area, no archaeological resources were encountered. Consequently, the following recommendations are made:

- 4. No further archaeological assessment of the study area is warranted;*
- 5. The Provincial interest in archaeological resources with respect to the proposed undertaking has been addressed;*
- 6. The proposed undertaking is clear of any archaeological concern.*

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

While not part of the archaeological record, this report must include the following standard advisory statements for the benefit of the proponent and the approval authority in the land use planning and development process:

- a. *This report is submitted to the Minister of Tourism and Culture as a condition of licensing in accordance with Part VI of the Ontario Heritage Act, R.S.O. 1990, c. 0.18. The report is reviewed to ensure that it complies with the standards and guidelines 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 and Culture, 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.*
- b. *It is an offence under Sections 48 and 69 of the Ontario Heritage Act for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeological Reports referred to in Section 65.1 of the Ontario Heritage Act.*
- c. *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 archaeologist to carry out archaeological fieldwork, in compliance with sec. 48 (1) of the Ontario Heritage Act.*
- d. *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.*
- e. *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 licence.*

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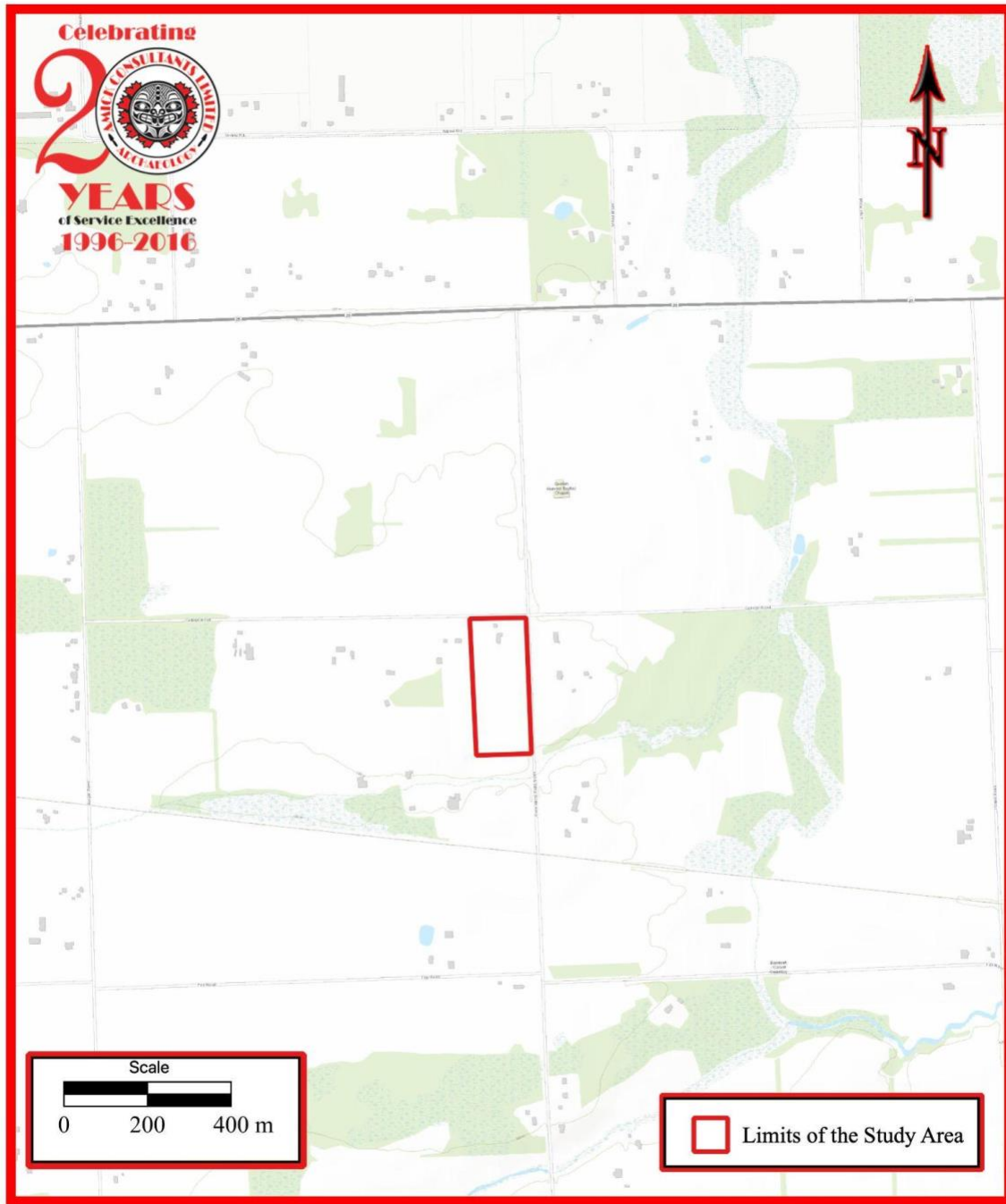
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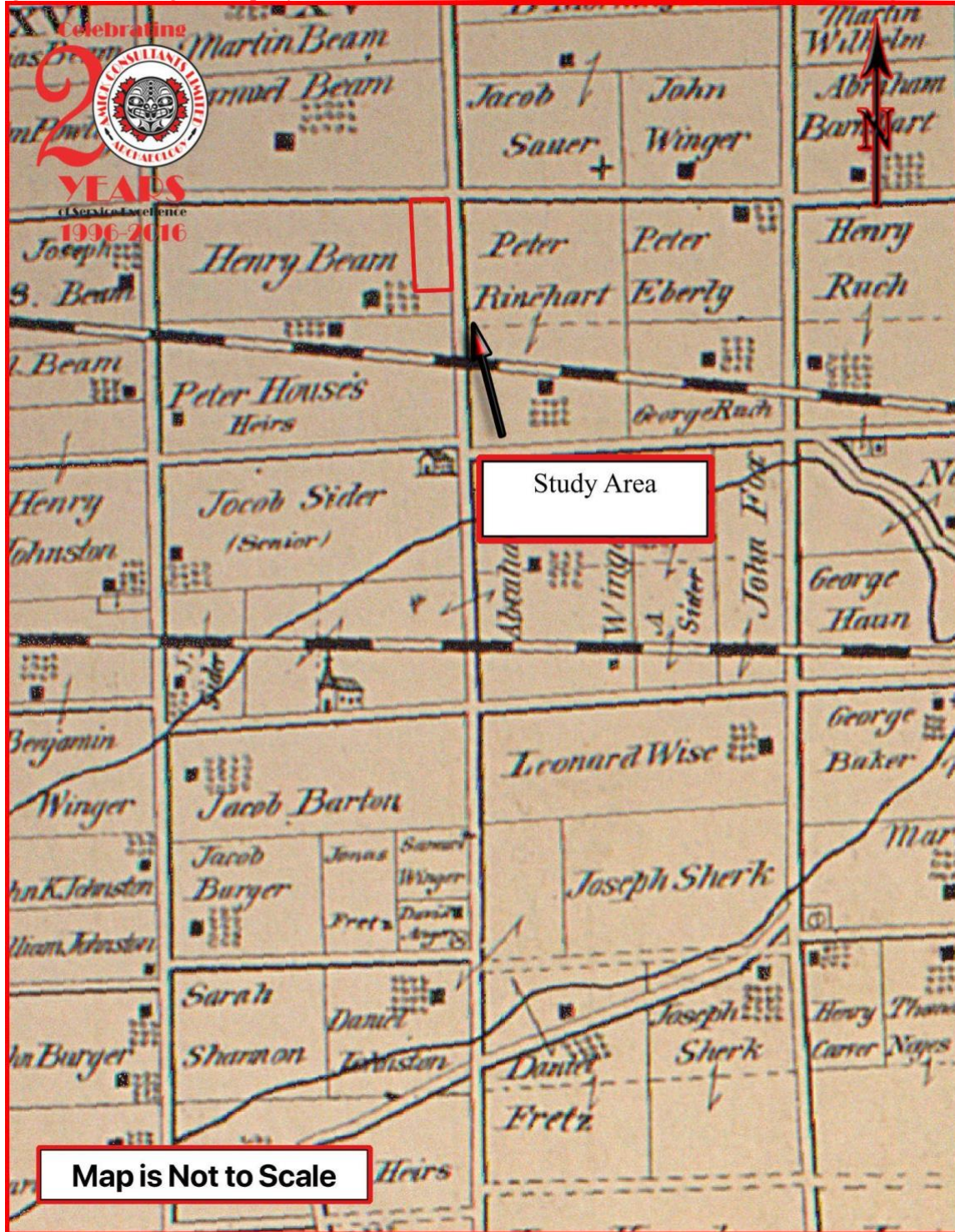
MAPS



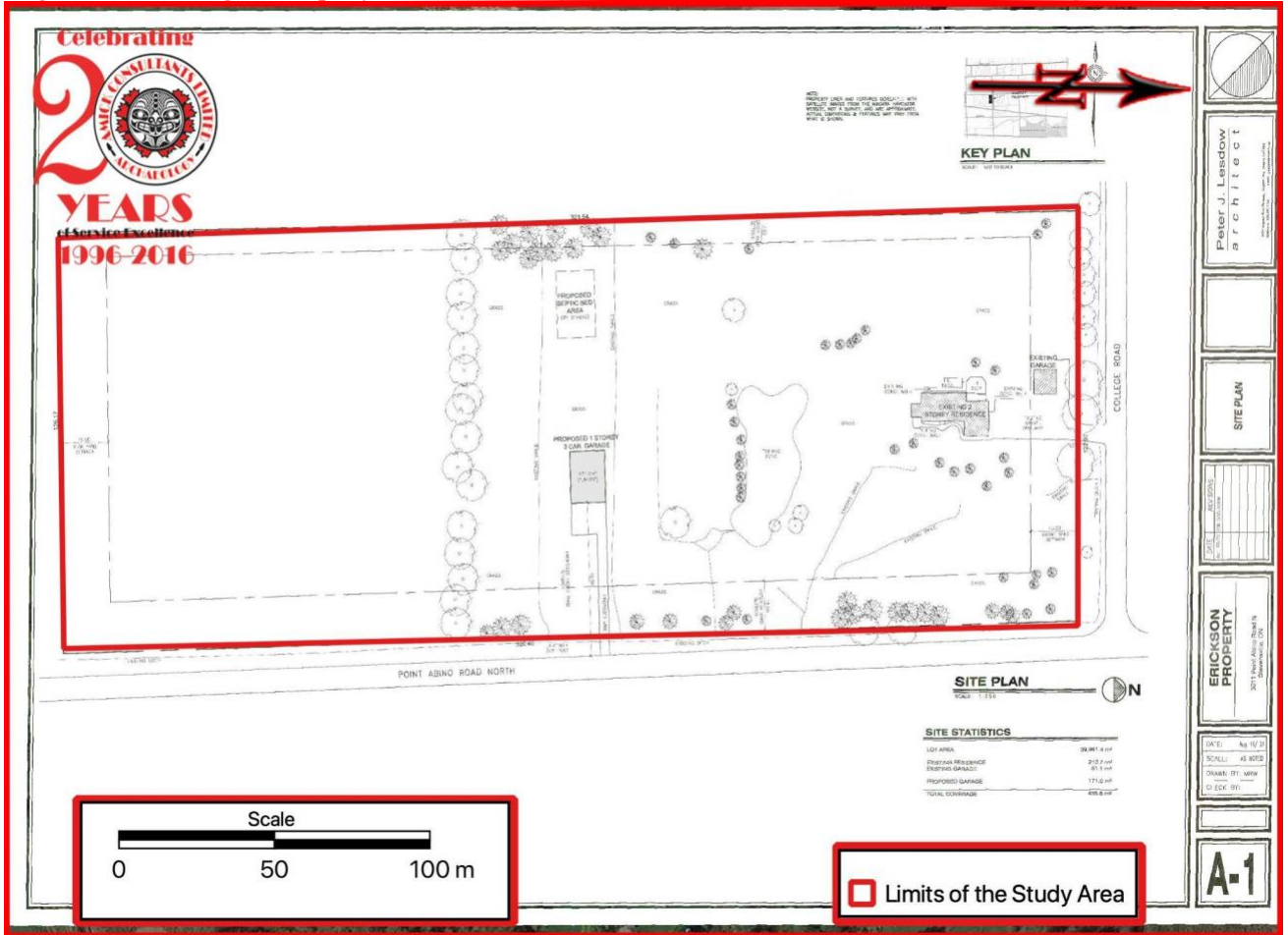
MAP 1 LOCATION OF THE STUDY AREA (ESRI 2019)



MAP 2 FACSIMILE SEGMENT OF TREMAINE'S MAP OF THE COUNTIES OF LINCOLN AND WELLAND (TREMAINE 1862)



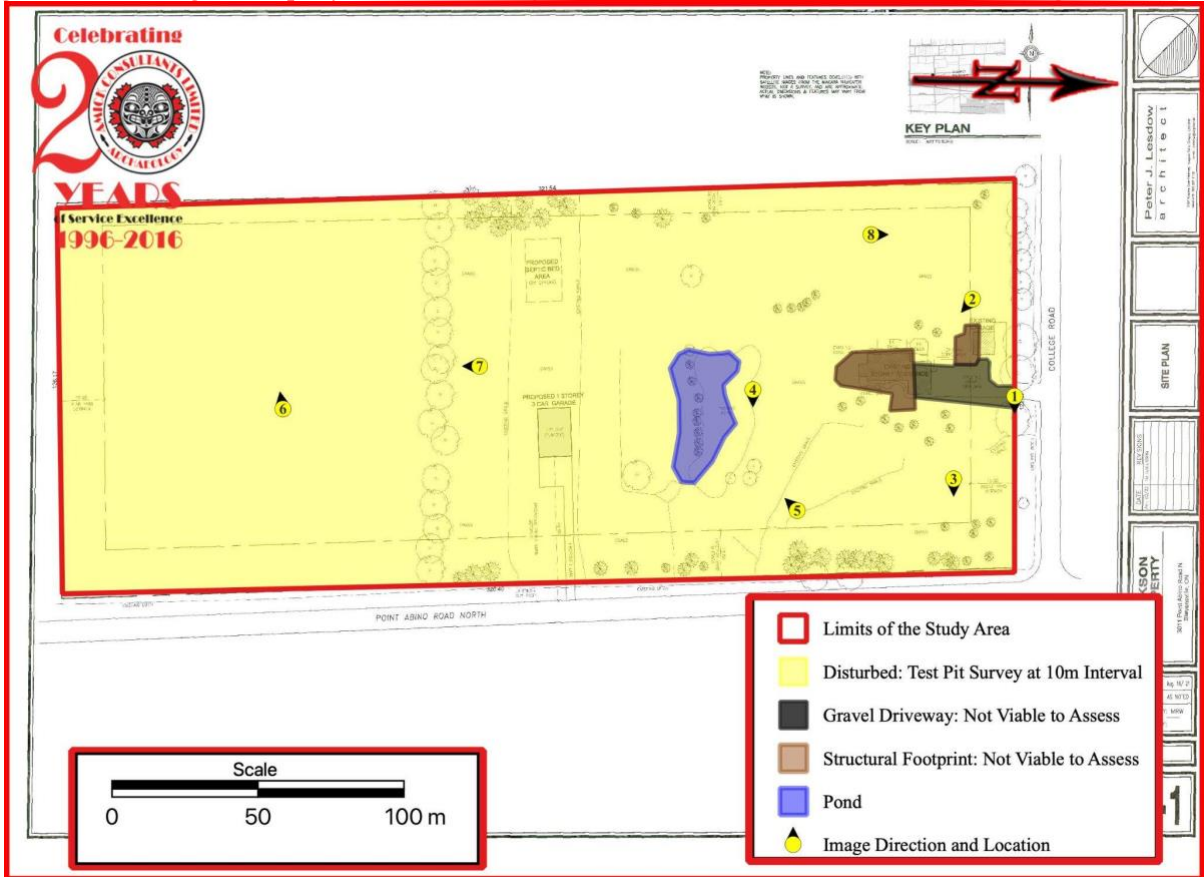
MAP 3 FACSIMILE SEGMENT OF THE HISTORIC ATLAS MAP OF THE TOWNSHIP OF BERTIE
(WALKER & MILES 1876)



MAP 4 SITE PLAN (PETER J. LESDOW. 2022)



MAP 5 AERIAL PHOTO OF THE STUDY AREA (GOOGLE EARTH 2016)



MAP 6 DETAILED PLAN OF THE STUDY AREA (AFTER PETER J. LESDOW. 2022)

IMAGES



IMAGE 1 DRIVWAY AND STRUCTURES



IMAGE 2 ABOVE GROUND POOL



IMAGE 3 TEST PIT SURVEY CONDITIONS



IMAGE 4 MAN-MADE POND



IMAGE 5 CREW AT WORK



IMAGE 6 CREW AT WORK



IMAGE 7 TEST PIT IN PROGRESS: MOTTLED AND COMPACTED, DISTURBED



IMAGE 8 TEST PIT IN PROGRESS: SAND FILL, DISTURBED