



ACC

ARCHAEOLOGICAL
CONSULTANTS CANADA

Stage 1 & 2 Archaeological Assessment

Proposed Development

54 Plymouth Road, Part of Lot 25, Concession 6, Geographical Township of
Crowland, City of Welland, Regional Municipality of Niagara, Ontario

Original Report

Prepared for:

Ontario Ministry of Citizenship and Multiculturalism

Prepared by:

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Project No. 352-12-24

16 December 2024

EXECUTIVE SUMMARY

Archaeological Consultants Canada (“ACC”) was contracted by the Proponent to conduct a Stage 1 & 2 archaeological assessment as part of a proposed development. assessment was conducted in the pre-approval process and was required under the *Planning Act, R.S.O. 1990*. The area of assessment, or the “subject property”, is located at 54 Plymouth Road, Part of Lot 25, Concession 6, Geographical Township of Crowland, City of Welland, Regional Municipality of Niagara, Ontario. The subject property measures 0.09 hectares (“ha”) in size.

The Stage 1 & 2 assessment was conducted under Professional Archaeological License P066, held by Kristy O’Neal. Fieldwork was conducted under the direction of Michelle Volpe (R1241). The Ontario Ministry of Citizenship and Multiculturalism (“MCM”) assigned Project Information Form (“PIF”) number P066-0439-2024 to this project. The licensee of ACC received permission from the Proponent to access the property and to conduct all required archaeological fieldwork activities including the removal of artifacts, as necessary.

Stage 1 background research indicated that the subject property has general archaeological potential due to the following factors:

- The subject property is largely comprised of well- drained land that is suitable for human habitation and agriculture
- The subject property fronts Plymouth Road, an early historical transportation route (Tremaine, 1862; Page & Co., 1876).
- Proximity of the subject property to the historic limits of the town of Welland (Page & Co., 1876).
- Four archaeological sites have been registered within 1 km of the subject property.

The subject property measures 0.09 ha. A visual property inspection determined that the entirety retained archaeological potential. The subject property consisted of manicured green space and was assessed by test pit survey at 5 m intervals. No artifacts or other archaeological resources were identified during the Stage 2 archaeological assessment.

The following recommendation is provided for consideration by the Proponent and by the MCM:

1. No artifacts or other archaeological resources were identified during the Stage 1 & 2 archaeological assessment. The subject property has now been fully assessed according to the Ontario Ministry of Citizenship and Multiculturalism’s 2011 *Standards and Guidelines for Consultant Archaeologists*. No further archaeological assessment of the property is required.

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LIST OF ABBREVIATIONS

The following is a list of abbreviations and acronyms used throughout this report.

ACC	Archaeological Consultants Canada
CHVI	Cultural Heritage Value or Interest
cm	centimetre
ha	hectares
km	kilometre
m	metre
MCM	Ministry of Citizenship and Multiculturalism
OASD	Ontario Archaeological Sites Database
PIF	Project Information Form
%	percent



PROJECT PERSONNEL

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Professional License:	Kristy O’Neal, M.A., P066
Field Director:	Michelle Volpe, MLIS, R1241
Field Technicians:	Mathew Muttart, M.A., P1208
Report Preparation:	Brianne McDonald, B.A.
Graphics:	Brianne McDonald, B.A.



Stage 1 & 2 Archaeological Assessment

Proposed Development

54 Plymouth Road, Part of Lot 25, Concession 6, Geographical Township of Crowland, City of Welland, Regional Municipality of Niagara, Ontario

1.0 PROJECT CONTEXT

1.1 Development Context

Archaeological Consultants Canada (“ACC”) was contracted by the Proponent to conduct a Stage 1 & 2 archaeological assessment as part of a proposed development. The assessment was conducted in the pre-approval process and was required under the *Planning Act, R.S.O. 1990*. The area of assessment, or the “subject property”, is located at 54 Plymouth Road, Part of Lot 25, Concession 6, Geographical Township of Crowland, City of Welland, Regional Municipality of Niagara, Ontario. The subject property measures 0.09 hectares (“ha”) in size.

The objective of a Stage 1 background study is to provide information about the subject property’s geography, history, previous archaeological fieldwork, and current land conditions. A Stage 1 study evaluates the subject property’s archaeological potential in order to recommend appropriate strategies for the Stage 2 survey.

The objective of a Stage 2 property assessment is to document all archaeological resources present on the property and to make a determination about whether these resources, if present, have Cultural Heritage Value or Interest (CHVI). Archaeological resources consist of artifacts (Indigenous stone tools, pottery and subsistence remains as well as Euro-Canadian objects), subsurface settlement patterns and cultural features (post moulds, trash pits, privies, and wells), and sites (temporary camps and special purpose activity areas, plus more permanent settlements such as villages, homesteads, grist mills and industrial structures). If any archaeological resources are present that exhibit CHVI, a Stage 2 survey will determine whether these resources require further assessment and, if necessary, recommend appropriate Stage 3 strategies for identified archaeological sites.

The Stage 1 & 2 assessment was conducted under Professional Archaeological License P066, held by Kristy O’Neal. Fieldwork was conducted under the direction of Michelle Volpe (R1241). The Ontario Ministry of Citizenship and Multiculturalism (“MCM”) assigned Project Information Form (“PIF”) number P066-0439-2024 (Stage 1 & 2) to this project. The licensee of ACC received permission from the Proponent to access the property and to conduct all required archaeological fieldwork activities including the removal of artifacts, as necessary. The property was accessed on November 29, 2024.

All fieldwork and reporting were completed using MCM’s 2011 *Standards and Guidelines for Consultant Archaeologists*. This report documents the research, the field methods and results,



and the conclusions and recommendations based on the Stage 1 & 2 archaeological assessment. All documents and records related to this project will be curated at the offices of ACC, in accordance with subsection 66(1) of the *Ontario Heritage Act* (OHA).

1.2 Historical Context

1.2.1 Background Research

Stage 1 background research was conducted to determine the potential for finding and identifying archaeological resources including sites within the current subject property and to determine the necessity of conducting a Stage 2 survey. This is done by reviewing geographic, archaeological, and historical data for the property and the surrounding area. The background research was conducted to:

- amass all the readily available information on any previous archaeological surveys in the area.
- determine the locations of any registered and unregistered sites within and around the subject property.
- develop an historical framework for assigning levels of potential significance to any new sites discovered during fieldwork.

1.2.2 A Cultural Chronology for Southern Ontario

Over their thousands of years of occupation in the general region, Indigenous peoples have left behind, to a greater or lesser degree, physical evidence of their lifeway activities and settlements at many locations. Based upon a published synthesis of Indigenous cultural occupations (Wright, 1968). Table 1 is a general outline of the cultural history of southern Ontario that is applicable to the subject property. Ellis and Ferris (1990) provide greater detail of the distinctive characteristics of each time period and cultural group.

It is likely that Ontario was occupied soon after the retreat of the Ice Age glaciers. The earliest known human occupation in the area was during the Paleoindian period (between 12,000 and 9,500 years ago) wherein small groups of nomadic peoples hunted big game such as caribou in a cool sub-arctic climate. Sites are typically found near glacial features such as the shorelines of glacial lakes or kettle ponds which would have allowed access to the low-lying environments that were favoured by the caribou and other wildlife. These people were few and their small, temporary campsites are relatively rare. Paleoindian sites are recognized by the presence of distinctive artifacts such as fluted projectile points, beaked scrapers, and graves and by the preference for light colored cherts, such as Collingwood chert. The Paleoindian Period is divided into two sub-periods, Early Paleoindian, and Late Paleoindian.

Table 1: General Cultural Chronology for Southern Ontario

PERIOD	SUBDIVISION I	SUBDIVISION II	YEARS BEFORE PRESENT	COMMENTS
PALEOINDIAN	Early Paleoindian	Fluted Point Horizon	12,000-10,500	big game hunters



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PERIOD	SUBDIVISION I	SUBDIVISION II	YEARS BEFORE PRESENT	COMMENTS
	Late Paleoindian	Holcombe & Hi-Lo Horizons	10,500-9,500	small nomadic groups
ARCHAIC	Early Archaic	Side Notched Horizon	10,000-9,700	nomadic hunters and gatherers
		Corner-Notched Horizon	9,700-8,900	
		Bifurcate Horizon	8,900-8,000	
	Middle Archaic	Middle Archaic I/Stemmed Horizon	8,000-5,500	territorial settlements
		Middle Archaic II	5,500-4,500	polished ground stone tools
	Late Archaic	Narrow Point Horizon	4,500-3,500	
		Broad Point Horizon	4,000-3,500	
Small Point Horizon (including Haldimand and Glacial Kame Complexes)		3,500-2,800	burial ceremonialism	
WOODLAND	Early Woodland	Meadowood Complex	2,900-2,400	introduction of pottery
		Middlesex Complex	2,500-2,000	
	Middle Woodland	SW Ontario: Saugeen	2,300-1,500	long distance trade networks
		Western Basin: Couture	2,300-1,500	
	Transitional Woodland	SW Ontario:		
		Princess Point	1,500/1,400-1,200	incipient agriculture
		Western Basin:		
	Late Woodland: Ontario Iroquois Tradition	Riviere au Vase	1500/1400-1200/1100	
		Early: Glen Meyer	1200/100-750/700	transition to village life
		Middle I: Uren	720/700-710/670	large villages with palisades
		Middle II: Middleport	710/670-670/600	wide distribution of ceramic styles
	Late Woodland: Western Basin Tradition	Late: Neutral	600-450	
		Younge Phase	1200/1100-800	
Springwells Phase		800-600		
HISTORIC	SW Ontario Iroquois	Wolf Phase	600-450	
		Historic Neutral	450-350	tribal warfare
		Initial Contact	380-300	tribal displacement
	European Contact	European Settlement	200 >	European settlement
First Nations Resettlement		200 >		

(Compiled from Adams, 1994, Ellis *et al.*, 1990, Wright, 1968)

People during the Archaic period (*circa* 10,00 to 500 years ago) were still primarily nomadic hunters, but they adapted to a more temperate climate. Groups were dispersed during winter months and converged around watercourses from the spring to fall in large fishing campsites. The Archaic period is characterized by the appearance of ground stone tools, notched, or stemmed projectile points. The Archaic Period is divided into three sub-periods, Early, Middle, and Late Archaic. During the Archaic Period, groups began to establish territorial settlements and introduce burial ceremonialism. There is a marked increase in the number and size of sites, especially during the Late Archaic period.

The Woodland period is distinguished by the introduction of pottery vessels for storage and cooking. Sites of the Woodland period (*circa* 3000 to 400 years ago) are usually the most numerous because the population levels in southern Ontario had significantly increased, especially along the shores of Lakes Erie and Ontario. The Woodland Period is also marked by the establishment of complex long distance trading networks. The Woodland Period is divided into three sub-periods, Early, Middle and Late Woodland. During the Late Woodland Period, there is increasing sedentarism and the establishment of horticulture, a reliance on tribal warfare, and the introduction of semi-permanent villages with large protective palisades. The Late Woodland period also envelops the emergence of Iroquoian tribes and confederacies.

The historic period (from A.D. 1650 to 1900) begins with the arrival of Euro-Canadian groups. Sites of this period document European exploration, trade, and the displacement and devastation of native groups caused by warfare and infectious disease. The most common sites of this period include Euro-Canadian homesteads, industries, churches, schools, and cemeteries.

While North America had been visited by Europeans on an increasing scale since the end of the 15th century, the first European to venture into what would become southern Ontario was Étienne Brûlé. Brûlé was sent by Samuel de Champlain in the summer of 1610 to consolidate an emerging friendship between the French and the First Nations, and to learn their languages and customs. Other Europeans would subsequently be sent by the French to train as interpreters. These men played an essential role in communications with the First Nations (Gervais and Rothe, 2004:182).

The late 17th and early 18th centuries saw the growth and spread of the fur trade, with the establishment and maintenance of trading posts along the Great Lakes. In 1754, hostilities over trade and the territorial ambitions of the French and the British led to the Seven Years' War, which ended when the French surrendered in 1760 (Smith, 1987:22). In addition to cementing British control over the Province of Quebec, the British victory over the French also proved pivotal in catalyzing the Euro-Canadian settlement process.

During pre-contact and early contact times, the vicinity of the subject property would have contained a mixture of deciduous trees, coniferous trees, and open areas. In the early 19th century, Euro-Canadian settlers arrived via easily accessible colonization routes and began to clear the forests for agricultural purposes. In the 19th and early 20th centuries, the subject property and surrounding land were primarily used for agricultural purposes, Mixed farming was common, with wheat crops and beef cattle dominating the landscape (Chapman and Putnam, 1984:177).

The subject property was historically located on Part of Lot 25, Concession 6, in the Township of Crowland, County of Welland. In 1791, the provinces of Lower Canada and Upper Canada were created from the former province of Quebec by a British parliamentary act. Colonel John Graves Simcoe was appointed as the Lieutenant Governor of Upper Canada and was tasked with governing and directing its settlement, as well as establishing a constitutional government based on Britain's model (Coyne et al, 1895:33).

Welland County was formed in 1851, when land from the southern section of Lincoln County broke away (Mika & Mika, 1983). The county was named after the Welland River, which, in turn, was named by John Graves Simcoe, after a stream in Lincolnshire, England (Middleton, 1927). The townships in this county were among the earliest settlements in Upper Canada, made up of United Empire Loyalists who came to the area after the American Revolutionary war (Carter, 1984). The building of the first Welland Canal in the 1820's also helped stimulate the growth of settlement in the area (Mika & Mika, 1983). The earliest recorded European visitor to the county is Father Louis Hennepin, who explored the area as a missionary in 1678. He is best known for publishing an account of his travels, which include the first written description of Niagara Falls, published in 1689 (Page, 1876).

Briefly called Quaker Township, Crowland Township was established in 1788. Crowland was named after a town in Lincolnshire, England. The township was largely settled by United Empire Loyalists in the late 1770s. By 1803, the township had municipal organization. The township had a population of 216 in 1803, 1,478 in 1852, and 600 in 1871 (Carter, 1984:967). Waterways were crucial to early settlement, with the Welland, Chippawa, and Lyon's Creek being used for transport of goods and erection of saw and grist mills (Mika & Mika, 1977:505).

Historical records and mapping were examined for evidence of early Euro-Canadian occupation within and near the subject property. Figures 2 and 3 represent the Euro-Canadian settlement in and around the current subject property in the late 19th century. Tremaine's 1862 *Map of Welland County, Canada West* indicates that lot lines and Plymouth Road have been altered, the subject property is depicted along the early transportation road, and on Lot 25, Concession 6 (Figure 2). J. Hellem's was the owner of Lot 25, Concession 6; he was a 67-year-old farmer from Pennsylvania. John lived with his wife, Elizabeth age 65 and Augusta Farr, age 14 and possibly a niece. The 1861 census describes them living in a single-story frame house with two families in the house. There are no structures depicted within the subject property. There is a historical transport road, Lincoln Street, located approximately 122 metres ("m") north of the subject property. The historic limits of the community of Welland are approximately 315 m northwest of the subject property.

Page & Co.'s 1876 map of Crowland Township in the *Illustrated Historical Atlas of the counties of Lincoln & Welland, Ontario* depicts the same lot lines and location of the Plymouth Road as the previous map. The portion of the property on Lot 25, Concession 6 is within the historic limits of Welland. A railway line is approximately 391 m east of the subject property. The town limits of Welland have also expanded 121 m north of the subject property.

While there are no structures illustrated within the subject property on the historical atlas mapping, this does not necessarily mean that one or more additional structures were not present at that time, earlier or later. Not all features of interest were mapped systematically on the Ontario series of historical maps and atlases, given that they were financed by subscription, and subscribers were given preference regarding the level of detail provided on the maps (Caston, 1977:100). Given that the subject property fronts a historic concession road and proximity to the historic limits of the community of Welland there is the potential for 19th century buildings to be present, depending on the level of disturbance.

1.3 Archaeological Context

1.3.1 Natural Environment

The subject property is located within the Haldimand Clay Plain physiographic region (Chapman and Putnam, 1984:113). Lying between the Niagara Escarpment and Lake Erie, this area is made up of a series of parallel belts that were once submerged in Lake Warren. The highest ground adjoins the Niagara Escarpment. The main part of Welland County is characterized by level topography and poor drainage and several square miles are covered in peat bogs. The drainage in the belt is controlled by several parallel streams, such as Twenty Mile Creek, Forty Mile Creek, and the Welland River (Chapman and Putnam, 1984:157).

The *Soils of Fort Erie- Port Colbourne, in Regional Municipality of Niagara* (Kingston & Presant, 1989) list the subject property and surrounding area as not mapped and part of a residential, industrial, and recreational land area.

Water has been identified as the major determinant of site selection and the presence of potable water is the single most important resource necessary for any extended human occupation or settlement. Primary water sources include, among others, lakes, rivers, creeks, and streams. Secondary water sources include intermittent streams, creeks, springs, marshes, and swamps. Past water sources, such as raised beach ridges, relic water channels, and glacial shorelines are also considered to have archaeological potential. Swamps and marshes are also important as resource extraction areas, and any resource areas are considered to have archaeological potential. The nearest water source is the Welland Canal approximately 623 m west of the subject property.

1.3.2 Current Land Use

Figure 4 shows the current land use of the subject property. The property consists of manicured green space. The subject property is located within a residential area within the city of Welland. First Street is to the north, a residential house is to the east, manicured greenspace is to the south and Plymouth Road is to the west.

Figure 5 shows the subject property on an aerial from 1954 (University of Toronto, 1954). The area is green space within the city of Welland. It appears the subject property was part of Plymouth Public School. The school is located in its present location east of the subject property. First Street is to the north, and Plymouth Road is to the west.

Fieldwork for the project was completed on November 29, 2024.

1.3.3 Previous Archaeological Investigations

1.3.3.1 Registered Archaeological Sites

Previously registered archaeological sites can be used to indicate archaeological potential. To determine if any previous assessments have yielded archaeological sites, either within or surrounding the current subject property, two main sources were consulted. These include the *Ontario Archaeological Sites Database* (“OASD”) and the *Public Register of Archaeological Reports*, both of which are maintained by MCM.



The OASD contains archaeological sites registered within the Borden system (Borden, 1952). The Borden system divides Canada into 13 km by 18.5 km blocks based on longitude and latitude. Each Borden block is designated with a four-letter label and sites identified within the block are numbered sequentially as they are registered. The subject property is located within the AfGt Borden block.

According to the OASD, no archaeological sites have been registered within the subject property, however, four sites have been registered within 1 km of the subject property (MCM, 2024a). The nearest of these sites is over 300 m from the subject property. One is Euro-Canadian or has a Euro-Canadian component. Two are Indigenous or have an Indigenous component. Two sites is of unknown cultural affiliation. Sites include camps, and farmsteads.

Table 2 lists the sites within 1 km along with the current Cultural Heritage Value or Interest (“CHVI”) for each site. CHVI is a term used by MCM and consultant archaeologists to describe archaeological resources that meet one or more criteria that recommend further fieldwork in MCM’s *Standards and Guidelines for Consultant Archaeologists*. Under the *Ontario Heritage Act* and its regulations, archaeological resources that have been determined to possess CHVI are protected as archaeological sites under Section 48 of the act. Information in Table 2 is provided by MCM through the OASD (MCM, 2024a).

Table 2: Registered Archaeological Sites within 1 km of the Subject Property

BORDEN #	NAME	TIME PERIOD	CULTURAL AFFILIATION	SITE TYPE	STATUS
AfGt-237		Post-Contact, Pre-Contact	Indigenous, Euro-Canadian	camp / campsite, farmstead	No Further CHVI
AfGt-171		Archaic, Middle	Indigenous	Othercamp/campsite	Unknown
AfGt-157	Blue River 3	Other	Unknown	Otherunknown_, Unknown	Unknown
AfGt-155	Blue River 1	Other	Unknown	Otherunknown_, Unknown	Unknown

Information concerning specific site locations is protected by provincial policy and is not fully subject to the *Freedom of Information 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. MCM will provide information concerning site location to the party or an agent of the party holding title to a property, or to a licensed archaeologist with relevant cultural resource management interests.

1.3.3.2 Previous Archaeological Reports

A review of archaeological reports within the *Public Register of Archaeological Reports* indicated that there are no archaeological reports detailing previous archaeological fieldwork within the subject property. There were no additional reports detailing fieldwork within 50 m of the subject property filed with the MCM at the time this report was written. Reports were searched based on registered site information, historic lots and concessions, and nearby streets.

1.3.4 Archaeological Master Plans



Niagara Region has an official plan that sets out directions and policies that guide economic, environmental, and community planning decisions for the region. In 2023, Niagara Region developed an Archaeological Management Plan. The plan is to be a comprehensive approach for the conservation of archaeological resources, The plan provides policies and process recommendations for planning and developmental approvals for the conservation of archaeological resources. The recommendations and policies are consistent with the Provincial Policy statement and makes them standard clauses for Niagara region and municipalities (Niagara Region, 2023).

The document also includes an Archaeological Potential Model for Niagara Region which highlights the lands within the Region that contain archaeological potential. The model was based on inductive and deductive approaches to determined potential. The Pre-Contact Indigenous site layer uses data from the Ontario Archaeological Site Database. While the historical site potential layer uses digitization of residential, commercial and industrial features and transportation routes from historical mapping; along with all previously discovered historical sites. The Archaeological Potential Model indicates that a portion of the subject property has potential for archaeological resources (Figure 6).



2.0 FIELD METHODS

The subject property measures 0.09 ha. A Stage 1 visual inspection and Stage 2 property assessment were conducted concurrently on November 29, 2024, with advance permission to enter the subject property obtained from the Proponent. Weather conditions during the assessment consisted of clear skies with a few passing clouds and a maximum daily temperature of 2 degrees Celsius.

The Stage 1 assessment of the subject property began with an on-site property inspection to gain first-hand knowledge of the geography, topography, and current condition of the property. The entirety of the subject property was accessible and was inspected. Appropriate photographic documentation was taken during the visual inspection. Coverage of the property was sufficient to identify the presence or absence of features of archaeological potential, meeting the requirements of Section 1.2 Standard 1 of the *Standards and Guidelines for Consultant Archaeologists*.

Areas of low to no archaeological potential include lands that have been previously disturbed, lands that have steeply sloping topography, and lands that are low-lying and permanently wet. No areas of low to no archaeological potential were observed within the subject property and entirety of the subject property, or 100 percent (“%”), was determined to retain archaeological potential and require Stage 2 archaeological assessment.

The entirety of the subject property consisted of manicured green space. As these lands could not be ploughed, Stage 2 archaeological assessment was conducted by test pit survey at 5 m intervals in accordance with Section 2.1.2d of the *Standards and Guidelines for Consultant Archaeologists*. Each test pit was dug by hand and was 30 centimetres (cm) in diameter and was dug to at least five cm into the subsoil. Test pits were examined for stratigraphy, cultural features, or evidence of fill. All soil was screened through 6-millimetre mesh to maximize the potential for artifact recovery. Test pits showed the land was deeply disturbed., with evidence of fill and modern debris was found throughout topsoil. Appropriate photographic documentation was taken, and all test pits were backfilled upon completion. As no artifacts were observed during the test pit assessment no intensified survey was conducted.

The ground was not snow covered and soil was not frozen or saturated during the assessment, and there were no adverse conditions created by conducting winter survey, as per requirements listed in MCM’s *Winter Archaeology: A Technical Bulletin for Consultant Archaeologists in Ontario* (MCM, 2013:3). There were no weather, ground, or lighting conditions detrimental to the recovery of artifacts. As such, it is confirmed that the assessment met Section 1.2 Standard 2 and Section 2.1 Standard 3 of the *Standards and Guidelines for Consultant Archaeologists* regarding weather and lighting.

The entirety of the subject property was assessed. The results of Stage 1 & 2 assessment are shown in Figures 7. Images of the assessment are shown in Section 8.0.

3.0 RECORD OF FINDS

3.1 Soils

The soil of the subject property was deeply disturbed. Fill and modern debris were observed throughout topsoil, with a layer of redeposited topsoil observed at 40 cm deep. Test pits were approximately 60 to 65 cm of disturbed topsoil above an orange clay.

3.2 Archaeological Resources

No artifacts or other archaeological resources were observed during the Stage 1 & 2 assessment of the subject property.

3.3 Documentary Record

All fieldwork-related activities were documented and kept, including field notes and observations and detailed maps. Appropriate photographic records were kept of the assessment and all image descriptions were recorded in a photo log.

A detailed list of field records is presented in Table 3. All digital items have been duplicated and all paper items have been scanned and stored as digital documents. All items are housed in the corporate offices of ACC.

Under Section 6 of Regulation 881 of the *Ontario Heritage Act*, ACC will keep in safekeeping all objects of archaeological significance that are found under the authority of the license and all field records that are made in the course of the work authorized by the license, except where the objects and records are donated to His Majesty the King in right of Ontario or are directed to be deposited in a public institution under subsection 66 (1) of the Act.

Table 3: Inventory of Documentary and Material Records

PROJECT INFORMATION		
ACC project number	352-12-24	
Licensee	Kristy O’Neal	
MCM PIF number	P066-0439 -2024	
DOCUMENT/MATERIAL	NUMBER	DESCRIPTION
field notes & photo logs	1	pages (paper, with digital copies)
maps	1	aerial imagery of the subject property
photos	4	digital colour photographs

4.0 ANALYSIS AND CONCLUSIONS

4.1 Potential for Archaeological Resources

Archaeological potential is defined as the likelihood of finding archaeological sites within a subject area. For planning purposes, determining archaeological potential provides a preliminary indication that significant sites might be found within the subject area, and consequently, that it may be necessary to allocate time and resources for archaeological survey and mitigation.

The framework for assigning levels of potential archaeological significance is drawn from provincial guidelines found in the *Standards and Guidelines for Consultant Archaeologists* (MCM, 2011: Sections 1.3.1 and 1.3.2). The following are features or characteristics that can indicate archaeological potential:

- previously identified archaeological sites
- water sources (It is important to distinguish types of water and shoreline, and to distinguish natural from artificial water sources, as these features affect site locations and types to varying degrees.)
 - primary water sources (e.g., lakes, rivers, streams, creeks)
 - secondary water sources (e.g., intermittent streams and creeks, springs, marshes, swamps)
 - 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, cobble beaches)
 - accessible or inaccessible shoreline (e.g., high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh)
- elevated topography (e.g., eskers, drumlins, large knolls, plateaus)
- pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground
- distinctive land formation 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 (e.g., migratory routes, spawning areas, prairie)
 - scarce raw materials (e.g., quartz, copper, ochre or outcrops of chert)
 - early Euro-Canadian industry (e.g., fur trade, logging, prospecting, mining)



- areas of early Euro-Canadian settlement. These include places of early military or pioneer settlement (e.g., pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches and 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, portages)
- property listed on a municipal register or designated under the OHA or that is in a federal, provincial, or municipal historic landmark site
- property that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations

Archaeological potential can be determined not to be present for either the entire property or parts of it when the area under consideration has been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. This is commonly referred to as “disturbed” or “disturbance” and may include:

- quarrying
- major landscaping involving grading below topsoil
- building footprints
- sewage and infrastructure development
- activities such as agricultural cultivation, gardening, minor grading, and landscaping do not necessarily affect archaeological potential.

4.2 Discussion

Section 1.3.1 of the *Standards and Guidelines for Consultant Archaeologists* (MCM, 2011) lists criteria indicative of archaeological potential. Stage 1 background research indicated that the subject property has general archaeological potential due to the following factors:

- The subject property is largely comprised of well- drained land that is suitable for human habitation and agriculture
- The subject property fronts Plymouth Road, an early historical transportation route (Tremaine, 1862; Page & Co., 1876).
- Proximity of the subject property to the historic limits of the town of Welland (Page & Co., 1876).
- Four archaeological sites have been registered within 1 km of the subject property.

Given the above criteria, background archival research indicates that the subject property exhibits general archaeological potential for the discovery of both pre/post-contact Indigenous



and Euro-Canadian archaeological resources therefore, a Stage 2 archaeological assessment was required.

The subject property measures 0.09 ha. A visual property inspection determined that the entirety retained archaeological potential. The subject property consisted of manicured green space and was assessed by test pit survey at 5 m intervals.

No artifacts or other archaeological resources were identified during the Stage 2 archaeological assessment. According to the *Standards and Guidelines for Consultant Archaeologists* (MCM, 2011), the subject property has now been completely assessed and does not require any additional fieldwork.



5.0 RECOMMENDATIONS

Subject to acceptance of the results and approval of the recommendations, MCM is requested to deem this report compliant with ministry requirements for archaeological fieldwork and reporting and to issue a letter accepting this report into the *Ontario Public Register of Archaeological Reports*.

The following recommendation is provided for consideration by the Proponent and by the MCM:

1. No artifacts or other archaeological resources were identified during the Stage 2 archaeological assessment. The subject property has now been fully assessed according to the Ontario Ministry of Citizenship and Multiculturalism's 2011 *Standards and Guidelines for Consultant Archaeologists*. No further archaeological assessment of the property is required.



6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

The following advice on compliance with current legislation is provided for consideration:

- a. This report is submitted to the Minister of Citizenship and Multiculturalism as a condition of licensing in accordance with Part IV of the *Ontario Heritage Act*, R.S.O. 2005, c O.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection, and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Citizenship and Multiculturalism, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.
- 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 a 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 consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.
- d. The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 requires that any person discovering human remains must notify the local police or coroner and the Registrar, Burials Unit, at the Ministry of Public and Business Service Delivery.

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8.0 IMAGES





Image 1: Subject property, facing south



Image 2: Subject property, facing southeast



Image 3: Subject property, facing northeast



Image 4: Typical test pit



9.0 FIGURES



Figure 1: Location of the Subject Property on a 1:50,000 Scale Topographic Map

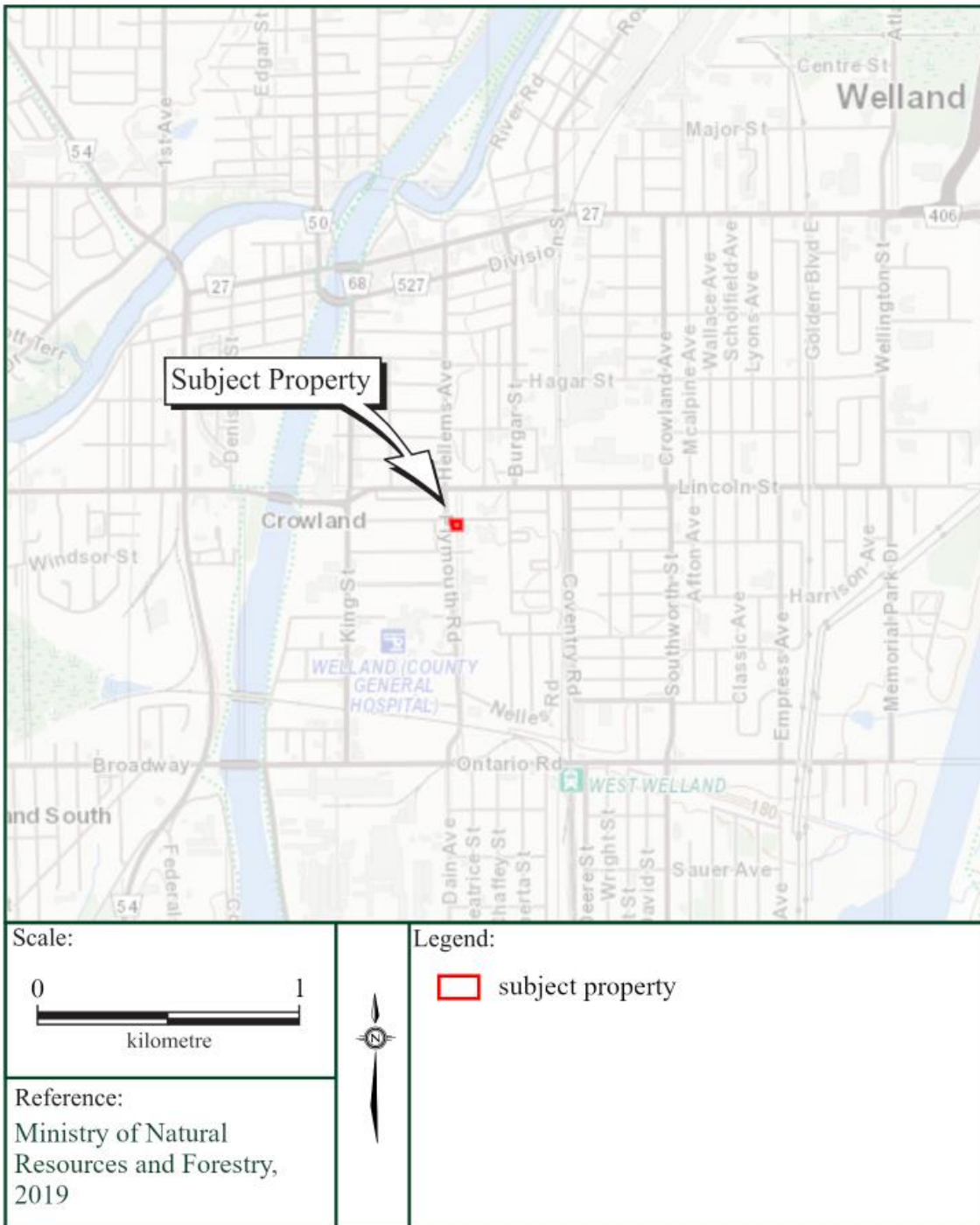


Figure 2: Location of the Subject Property on Tremaine's 1862 Map of Welland County, Canada West

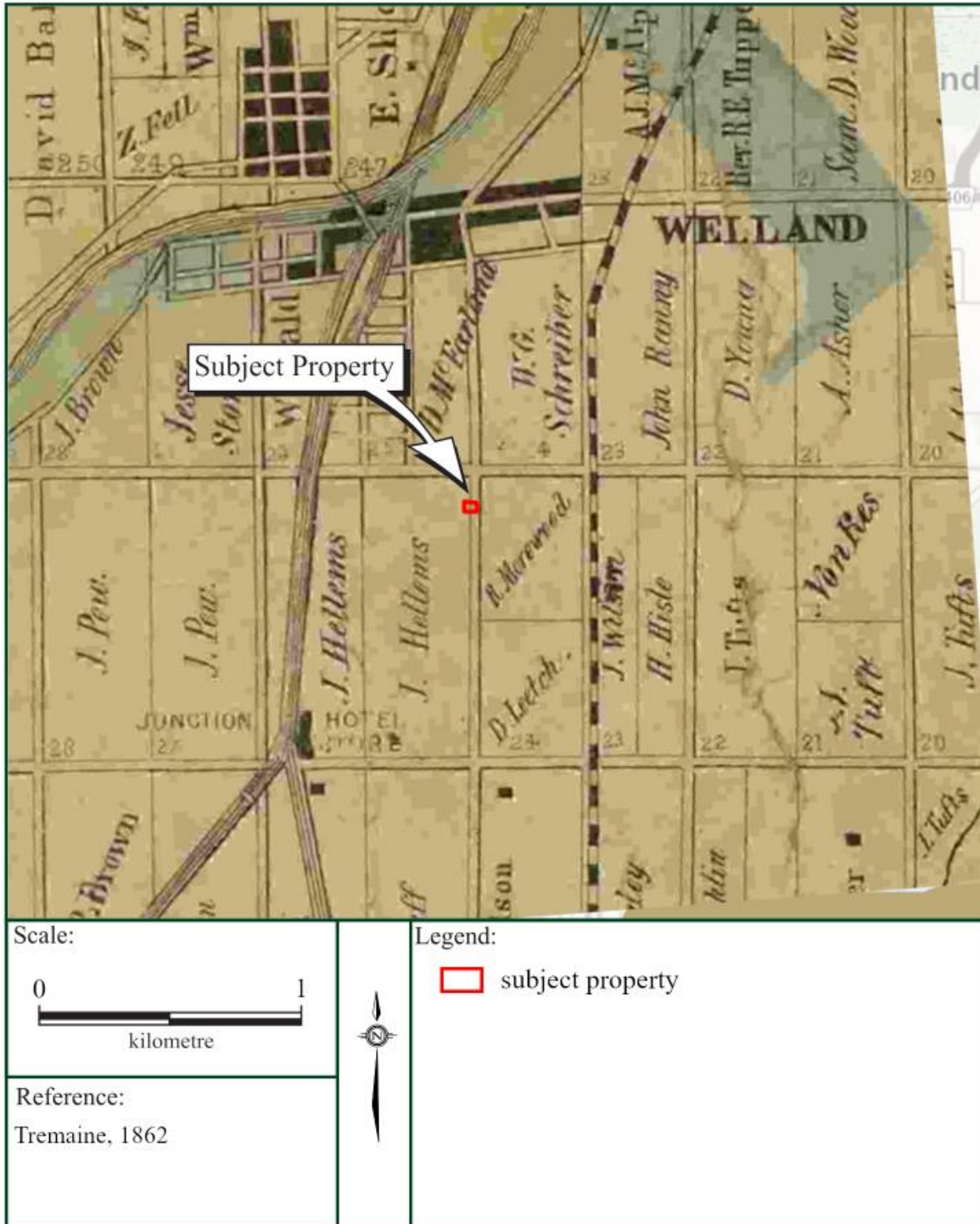


Figure 3: Location of the Subject Property on H.R. Page & Co.'s 1876 Illustrated Historical Atlas of the counties of Lincoln & Welland, Ontario



Figure 4: Current Land Use of the Subject Property



Figure 5: Location of the Subject Property on 1954 Aerial Imagery



Figure 6: Location of the Subject Property on Niagara Regions Archaeological Potential Map



Figure 7: Aerial Imagery Showing the Results of the Stage 1 & 2 Archaeological Assessment of the Subject Property, with Image Locations and Directions

