



ACC

ARCHAEOLOGICAL
CONSULTANTS CANADA

Stage 1 & 2 Archaeological Assessment

Proposed Residential Development

547 King Street, City of Port Colborne, Regional Municipality of Niagara, Part of
Lot 28, Concession 2, Former Geographic Township of Humberstone, Former
County of Welland, Ontario

Original Report

Prepared for:

Ontario Ministry of Citizenship and Multiculturalism

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EXECUTIVE SUMMARY

Archaeological Consultants Canada (ACC) was contracted by the Proponent to conduct a Stage 1 & 2 archaeological resource assessment, including background research and property survey, for a proposed residential development. An archaeological assessment was conducted during the pre-approval process and was required under the *Planning Act, R.S.O 1990*. The subject property is located at municipal address 547 King Street and is legally described as Part of Lot 28, Concession 2, City of Port Colborne, Regional Municipality of Niagara, Former Geographic Township of Humberstone, Former County of Welland, Ontario (Figure 1). The subject property measures 0.1 hectares (ha).

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 P066-0615-2025 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 Welland Canal is located 70 m to the east of the subject property.
- The subject property is located 150 m to the north of the historic boundary of the City of Port Colborne.
- The Niagara Region's archaeological management plan indicates that portions of the subject property have archaeological potential.

The subject property measures 0.1 ha. A visual property inspection determined that less than 0.1 ha of the subject property has been previously disturbed by modern construction activities and has low to no archaeological potential.

The remainder of the subject property, less than 0.1 ha retained archaeological potential and was recommended for Stage 2 assessment. The entirety of this area consisted of maintained lawn 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 of the subject property. The subject property has now been fully assessed according to MCM's 2011 *Standards and Guidelines for Consultant Archaeologists*. No further archaeological assessment of the subject property is required.

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LIST OF ABBREVIATIONS

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

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
OHA	Ontario Heritage Act
PIF	Project Information Form
%	percent



PROJECT PERSONNEL

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Stage 1 & 2 Archaeological Assessment

Proposed Residential Development

547 King Street, City of Port Colborne, Regional Municipality of Niagara, Part of Lot 28, Concession 2, Former Geographic Township of Humberstone, Former County of Welland, 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, including background research and property survey, for a proposed residential development including a 30-unit apartment building and parking lot. An archaeological assessment was conducted during the pre-approval process and was required under the *Planning Act, R.S.O 1990*. The assessed area, or the “subject property”, is located at municipal address 547 King Street and is legally described as Part of Lot 28, Concession 2, City of Port Colborne, Regional Municipality of Niagara, , Former Geographic Township of Humberstone, Former County of Welland, Ontario (Figure 1). The subject property measures 0.1 hectares (ha). The Proponent verified the subject property limits as defined within this report and provided a plan of survey confirming the boundaries (Figure 2).

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, (Applied Research License R1241). The Ontario Ministry of Citizenship and Multiculturalism (MCM) assigned Project Information Form (PIF) number P066-0615-2025 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.

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 a 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. This general outline uses longstanding labels that are used to describe the archaeological record in North America. Archaeological terms like Paleoindian, Archaic, and Woodland, are used here as a way to divide time and should be treated as such.

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 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 graters and by the preference for light colored chert, 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
	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
	European Contact	Initial Contact	380-300	tribal displacement
		European Settlement	200 >	European settlement
	First Nations Resettlement	200 >		

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

During the Archaic period (*circa* 10,000 to 2,800 years ago) people 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* 3,000 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 was 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 relationship 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 28, Concession 2, Former Geographic Township of Humberstone, County of Welland, Ontario. 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).

Humberstone township was opened in 1787, though the first settlers arrived in 1785. By 1850 the township had one grist mill, three sawmills, a foundry, two churches and eight schools (Middleton, 1927). The Welland canal is in the western portion of the township, leading to surveying of the towns of Petersburg and Port Colbourne. The northwestern portion of the township consists of large marshy area.

Originally known as Gravelly Bay, the City of Port Colborne was renamed in 1832 after the lieutenant Governor Sire John Colborne. The town began to be settled after the construction of the Welland Canal, as its location is at the end of the Canal, where it meets Lake Erie. The town was laid out in 1832 with streets on both sides of the Canal by the canal company (Mika and Mika, 1983). In the beginning the economy was completely dependent on the Canal. By 1850, it had become an important wheat shipping terminal, railway junction, and industrial centre. Port Colborne was incorporated as a village in 1870 and as a town in 1918 (Mika and Mika, 1983).

Historical records and mapping were examined for evidence of early Euro-Canadian occupation within and near the subject property in the mid- to late-19th century. Tremaine's 1862 *Map of Welland County, Canada West* lists J. Thompson as the owner of the eastern half of Lot 28, Concession 2 (Figure 3). John Thompson is a 53 year old farmer who lives with his wife, Sarah, 45, and their four children: George, 25, Charlies, 17, Mary, 14 and Sarah, 11 in a 1.5 storey frame home within Lot 28 (Library and Archives Canada, 1861). The Welland Canal is directly east of the subject property. A branch of the Welland Railroad is located approximately 160m to the east of the subject property. A branch of the Buffalo and Lake Huron Railway is located approximately 400 m to the south. The City of Port Colborne is located 150m to the south and the Town of Peterborough 310m to the north.

Page & Co.'s 1876 map of Humberstone Township in the *Illustrated Historical Atlas of the counties of Lincoln & Welland, Ontario*, indicates that there is no occupant of the subject property at this time (Figure 4). The subject property is still located 150m to the north of the City of Port Colborne and 310m to the south of the Town of Peterborough, now renamed to Humberstone. Both railway lines and the Welland Canal are located in the same location.

It should be noted that while there are no structures illustrated within the subject property on the historical atlas maps, it does not necessarily mean that one or more 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 railway and is within 300 m of the historic City of Port Colborne, 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 Putman, 1984:157).

The Soils of Welland County indicates that there is only one dominant surface soil type within the subject property: Farmington loam (Figure 5). Farmington loam soils are characterized by light brown stony loam over limestone bedrock with good drainage and can be found on smooth to sloping topographies (OMAFRA, 2012).

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, located 70 m to the east of the subject property.

1.3.2 Current Land Use

Figure 6 provides the current land use of the subject property. The subject property is currently used for residential purposes and contains a residential home and manicured lawn. There is a laneway along the southern edge of the property. The subject property is surrounded by residential and industrial properties to the north, south and west. The Welland Canal is located 70m to the east.

Fieldwork for the project was conducted on August 10th, 2025.

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, 4 sites have been registered within one and a half km of the subject property (MCM, 2025a). The site data search lists the following sites as being within one km of the subject property, however, site locations provided by the MCM’s database show the location of the sites as being over one km. The site information is still provided below. The nearest of these sites is over 300 m from the current subject property. One site is of Euro-Canadian cultural affiliation and includes a cemetery. Two sites are of Indigenous cultural affiliation and include a findspot and a lithic scatter. One site is of both Euro-Canadian and Indigenous cultural affiliation.

Table 2 lists the sites within 1 km along with the current 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 OHA 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, 2025a).

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

REG. #	NAME	TIME PERIOD	CULTURAL AFFILIATION	SITE TYPE	STATUS
AfGt-82	Wildwood	Post-Contact, Pre-Contact	Indigenous, Euro-Canadian	unknown	n/a
AfGt-347	23-354 P1	Pre-Contact	Indigenous	scatter	No Further CHVI
AfGt-346	Sugarloaf Cemetery	Post-Contact	Euro-Canadian	cemetery	Further CHVI
AfGt-101	Sugarloaf	Archaic, Late	Indigenous	camp/campsite, workshop	Further CHVI

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 only no reports detailing previous archaeological fieldwork within the subject property have been entered into MCM's register at the time this report was written (MCM, 2025b). There is one report detailing previous fieldwork within 50 m of the subject property within the register. Figure 7 shows the location of these assessments in relation to the current subject property.

Reports were searched based on registered site information, historic lots and concessions, and nearby streets. To the best of ACC's knowledge, there are no other reports concerning archaeological work conducted within 50 m of the subject property; however, it should be noted that the MCM does not maintain a database of all properties that have had past archaeological investigations and searches of the MCM's public register do not always result in a complete listing of all archaeological work conducted in a given area.

Stage 1 Archaeological Assessment, Eastside Sewage Pumping Station, Forcemain Replacement, Various Lots and Concessions, Geographic Township of Humberstone, former County of Welland, City of Port Colborne, Regional Municipality of Niagara, Ontario. WSP, 2023. PIF P390-0342-2020

WSP was contracted by Niagara Region to conduct a Stage 1 assessment of various areas within the City of Port Colborne in support of the Municipal Class Environmental Assessment Study to assess alternative routes for the Eastside Sewage Pumping Station (WSP, 2023). One of the areas within this assessment is located 30m to the east of the current subject property. The Stage 1 assessment concluded that the portion of the study area located to the east of the current subject property is disturbed and holds no further archaeological concern. No further work was recommended. (WSP, 2023).

1.3.4 Historical Plaques and Monuments

MCM's *Standards and Guidelines for Consultant Archaeologists* (MCM, 2011:17) stipulates that areas of early Euro-Canadian settlement (including places of early military pioneer settlement, pioneer homesteads, isolated cabins, farmstead complexes, early wharf or dock complexes, pioneer churches, and early cemeteries) are considered to have archaeological potential. There may be commemorative markers of their history, such as local, provincial, or federal monuments, plaques, cairns, or heritage parks. Early historical transportation routes (trails, passes, roads, railways, portage routes), properties listed on a municipal register or designated under the OHA or a federal, provincial, or municipal historic landmark or site, and properties that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations are also considered to have archaeological potential.



There are no plaques or commemorative markers within or near the subject property (Ontario Provincial Plaques, 2025).

1.3.5 Archaeological Master Plans

The Regional Municipality of Niagara (Niagara Region) has an Official Plan that sets out directions and policies that guide economic, environmental, and community planning decisions for the region. As part of the official planning process, Niagara Region developed an archaeological management plan. The document, Niagara Region Archaeological Management Plan, provides information about the archaeological history of the region, the Ontario archaeological assessment process, and sets out the process for integrating the archaeological assessment and development review processes (Niagara Region, 2024). The document also includes an Archaeological Potential Model for the region that highlights the lands within the Region that contain archaeological potential. Potential for lands to contain archaeological resources is based on the proximity of those lands to features such as water, well drained soils, known archeological sites, and early Euro-Canadian settlements. The potential model takes into consideration deep and extensive land alterations that have removed archaeological potential from the Region (Niagara Region, 2024). A review of this potential model indicates that the entirety of the subject property is within a zone considered to have archaeological potential (Figure 8).

1.3.6 Cemeteries

A search of the subject property and surrounding area determined that there were no cemeteries located within or near the subject property. The Bereavement Authority of Ontario's Public Register does not list any cemeteries within the subject property (Bereavement Authority of Ontario, 2025).



2.0 FIELD METHODS

The subject property measures 0.1 ha. The Stage 1 & 2 assessment were conducted on August 10th, 2025, with advance permission to enter the subject property obtained from the Proponent. Weather conditions during the assessment were excellent, with clear skies and a maximum daily high temperature of 30 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. The Stage 1 property inspection took place when the ground was fully visible, and under conditions that allowed for full viewing of archaeological potential. 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. Less than 0.1 ha of the subject property has been previously disturbed by intensive and extensive modern soil alterations, including a residential home and a driveway. There are no low-lying and permanently wet areas or areas of steeply sloping topography.

The remainder of the subject property, totaling less than 0.1ha, was determined to retain archaeological potential and require Stage 2 archaeological assessment. This area of the subject property consists of maintained lawn. 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 2.1.2 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 5 cm into the subsoil or to a sufficient depth to confirm deep disturbance if subsoil was not preserved. Test pits were examined for stratigraphy, cultural features, or evidence of fill. Test pits were dug to within one m of all disturbances and other areas of low archaeological potential. As the entire subject property retained archaeological potential, there was no need to test pit to within 1 m of disturbances and other areas of low archaeological potential. All soil was screened through 6-millimetre mesh to maximize the potential for artifact recovery. 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.

There was no weather, ground, or lighting conditions detrimental to the recovery of artifacts. As such, it is confirmed that the Stage 2 assessment met 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 the Stage 1 & 2 assessment are shown in Figures 9 and 10. Images of the assessment are provided in Section 9.0.

3.0 RECORD OF FINDS

3.1 Soils

Test pits contained approximately 20 to 25 cm of light brown sandy loam topsoil above an orange clay subsoil.

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 OHA, 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	320-12-23	
Licensee	Kristy O'Neal	
MCM PIF numbers	P066-0615-2025	
DOCUMENT/MATERIAL	NUMBER	DESCRIPTION
field notes & photo logs	1	pages (paper, with digital copies)
maps	1	aerial imagery of subject property
	1	plan of survey of the subject property
photographs	3	digital colour photographs



4.0 ANALYSIS AND CONCLUSIONS

4.1 Assessing 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 Analysis and Discussion

Section 1.3.1 of the *Standards and Guidelines for Consultant Archaeologists* (MCM, 2011) lists criteria indicative of archaeological potential. MCM stipulates the following requirements for Stage 2 property survey based on archaeological potential.

- No areas within 300 m of a previously identified site, water sources, areas of early Euro-Canadian settlement, or locations identified through local knowledge or informants can be recommended for exemption from further assessment.
- No areas within 100 m of early transportation routes can be recommended for exemption from further assessment.
- No areas within the property containing elevated topography, pockets of well-drained sandy soil, distinctive land formations, or resource areas can be recommended for exemption from further assessment.

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

- The Welland Canal is located 70 m to the east of the subject property.
- The subject property is located 150 m to the north of the historic boundary of the City of Port Colborne.
- The Niagara Region's archaeological management plan indicates that portions of the subject property have archaeological potential.

Given the above criteria, background archival research indicated that the subject property exhibited 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.

According to Section 1.4 Standard 1e, of the *Standards and Guidelines for Consultant Archaeologists* (MCM, 2011) no areas within a property containing locations listed or designated by a municipality can be recommended for exemption from further assessment unless the area can be documented as disturbed. The *Municipal Heritage Register* was consulted and there were no areas within or near the subject property that were Listed or Designated under the *Ontario Heritage Act*.

The subject property measures 0.1 ha. A visual property inspection determined that less than 0.1 ha of the subject property has been previously disturbed by modern construction activities and has low to no archaeological potential.

Natural subsoil was encountered through out the property during the Stage 2 assessment. Given that natural subsoil was identified, it is unlikely that there are deeply buried archaeological resources present.

The remainder of the subject property, less than 0.1 ha, retained archaeological potential and was recommended for Stage 2 assessment. The entirety of this area consisted of maintained lawn 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.



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*, as provided for in Section 65.1 of the OHA.

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 of the subject property. The subject property has now been fully assessed according to MCM's 2011 *Standards and Guidelines for Consultant Archaeologists*. No further archaeological assessment of the subject 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 VI of the *Ontario Heritage Act*, R.S.O. 1990, 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 (when proclaimed in force) requires that any person discovering human remains must notify the police or coroner and the Registrar, Burials Unit, at the Ministry of Public and Business Service Delivery and Procurement.
- 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 license.



7.0 CLOSURE

This report was prepared for the exclusive use of the Proponent, unless otherwise expressly stated in the report or contract. This report documents work that was performed in accordance with the accepted professional standards at the time and location in which the services were provided.

The report is based solely on data and information collected during the archaeological assessment as described in this report. All information received from the Proponent or third parties in the preparation of this report has been assumed by ACC to be factual and accurate. ACC assumes no responsibility for any deficiency, misstatement, or inaccuracy in information received from others. ACC disclaims any obligation to update this report for events or information that becomes available to ACC after the assessment has been completed.

Conclusions made within this report consist of ACC's professional opinion as of the time of the writing of this report and are based solely on the scope and extent of work described in the report, the limited data available, and the results of the work. The conclusions are based on the conditions encountered by ACC at the time the work was performed. Due to the nature of archaeological assessment, which consists of systematic sampling, it is possible that unforeseen and undiscovered archaeological resources may be present within the assessed area. ACC does not warrant against undiscovered environmental liabilities nor that the sampling results are indicative of the condition of the entire property. No other representations, warranties, or guarantees are made concerning the accuracy or completeness of the data or conclusions contained within this report, including no assurance that this work has uncovered all potential archaeological resources associated with the identified property.

Any use of this report by any third party is prohibited. This report is not to be given over to any third party, for any purpose whatsoever, without the written permission of ACC, which shall not be unreasonably withheld. Any use which a third party makes of this report, in whole or in part, or any reliance on or decisions to be made based on any information and conclusions in the report, are the responsibility of the third party. ACC assumes no responsibility for losses, damages, liabilities or claims of any kind whatsoever, howsoever arising, from third party use of this report.

ACC makes no other representations whatsoever, including those concerning the legal significance of the report's findings, or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein.

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9.0 IMAGES



Image 1: Home and laneways within subject property, along eastern edge facing west.



Image 2: Home and laneways within subject property, along western edge facing east.



Image 3: Typical test pit.



10.0 FIGURES

See the following pages for detailed assessment mapping and figures.



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

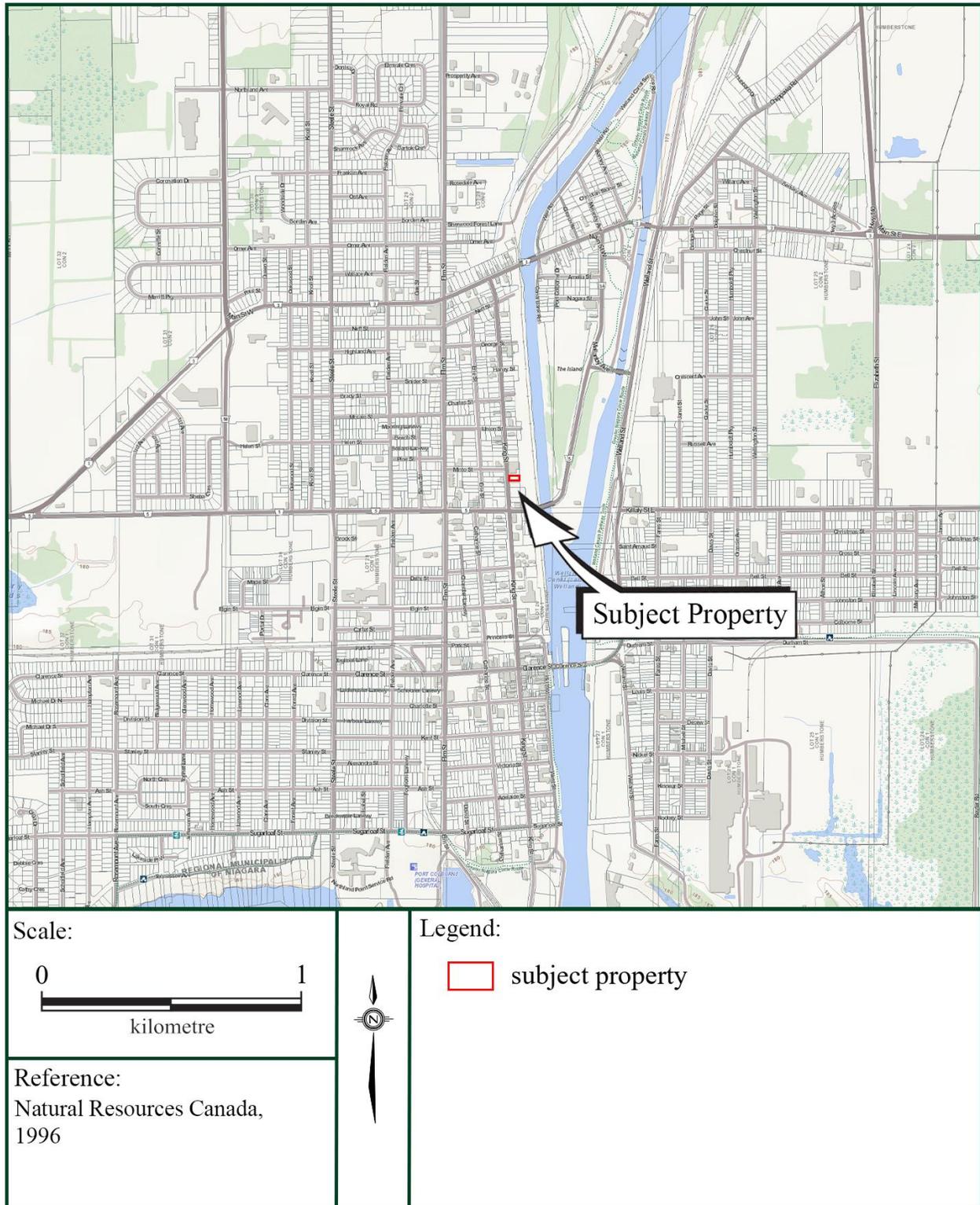
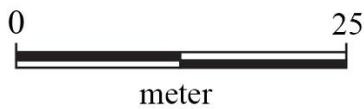


Figure 2: Plan of Survey of the Subject Property



Scale:



Reference:
 ESRI, 2025,
 Elevate Living, 2025



Legend:

subject property



Figure 3: Location of the Subject Property on Tremaine's 1862 Map of Welland County

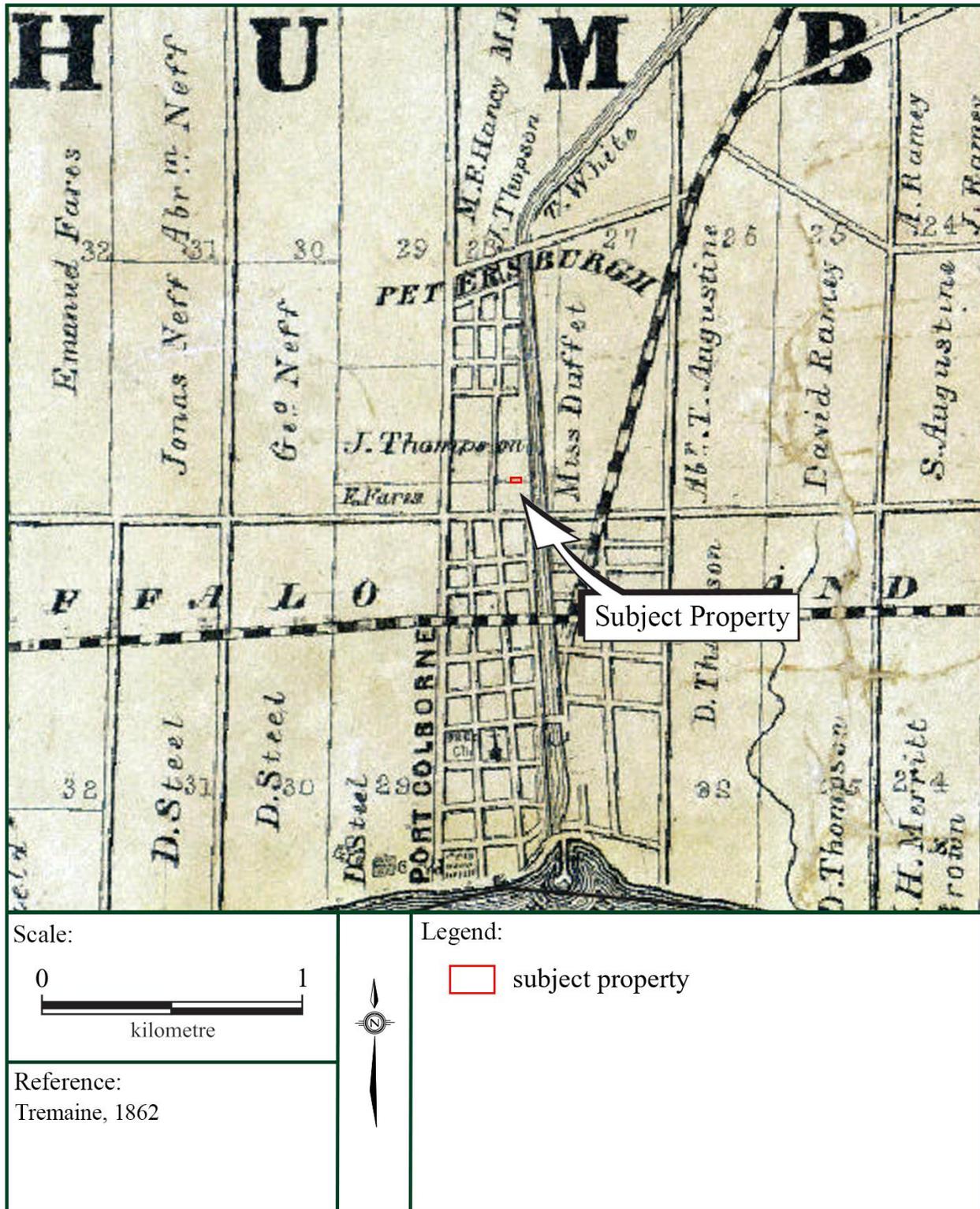


Figure 4: Location of the Subject Property on H.R. Page & Co's 1876 Illustrated Historical Atlas of the Counties of Lincoln and Welland, Ontario

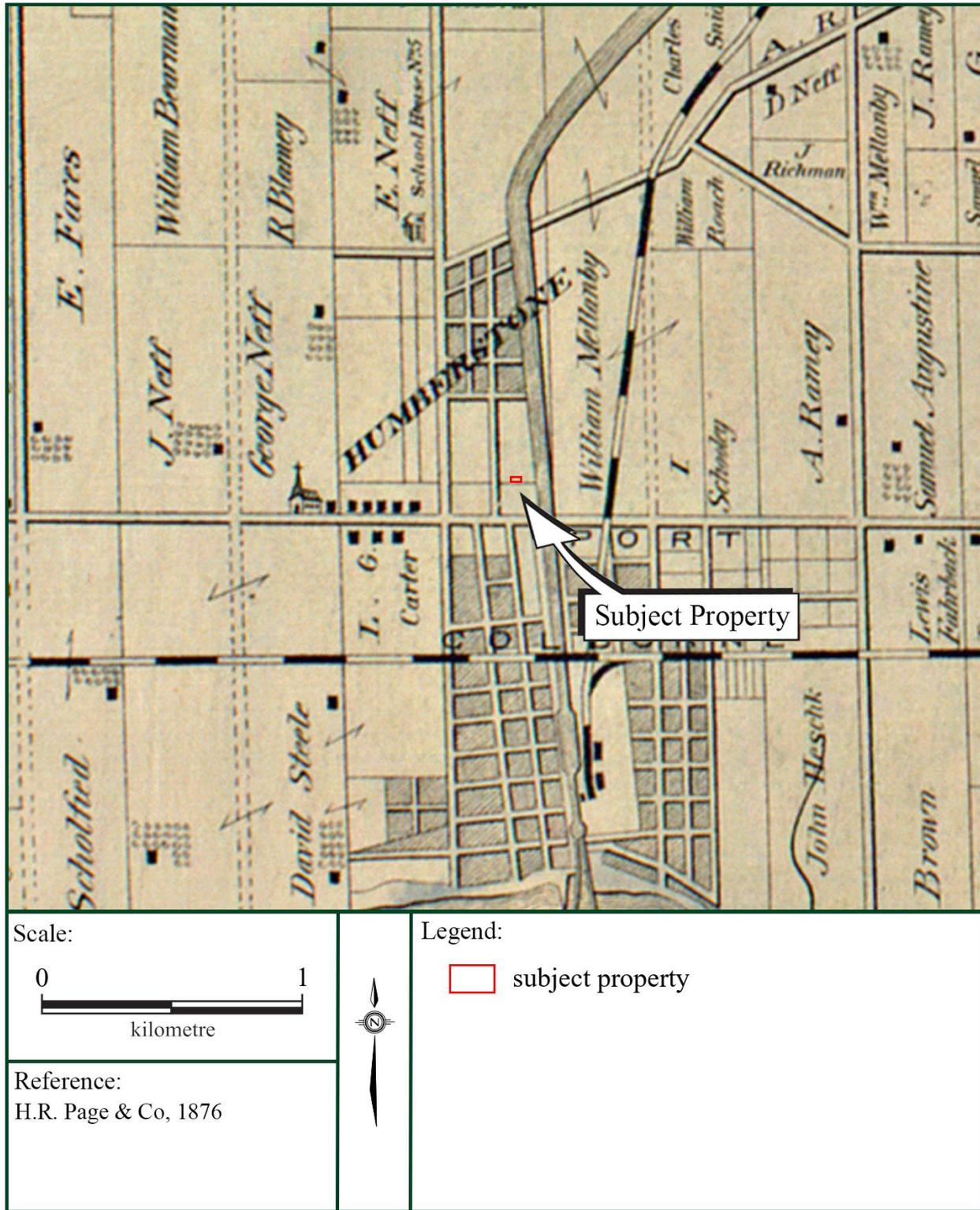


Figure 5: Location of the Subject Property on a Map of Welland County Soil

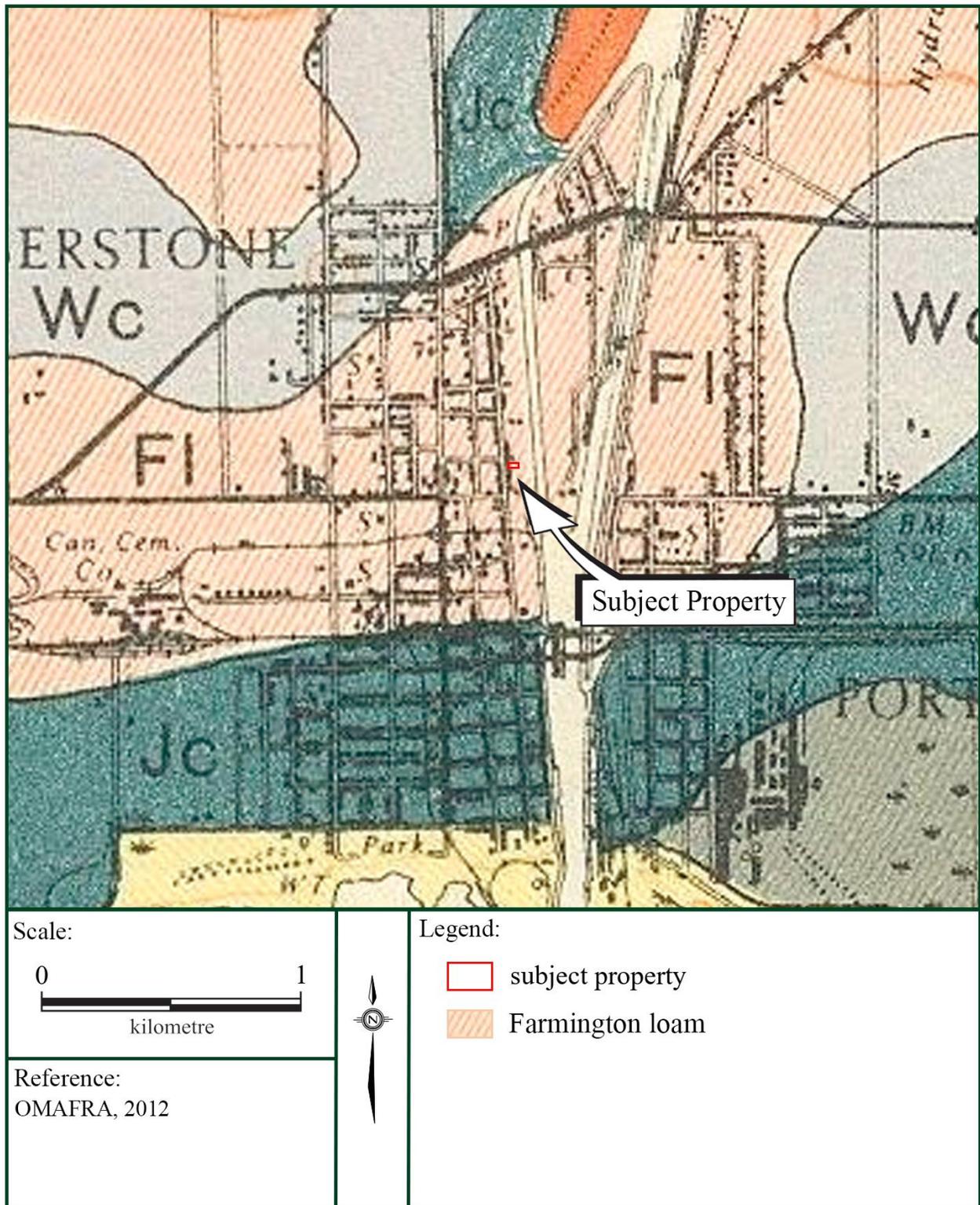


Figure 6: Current Land Use of the Subject Property

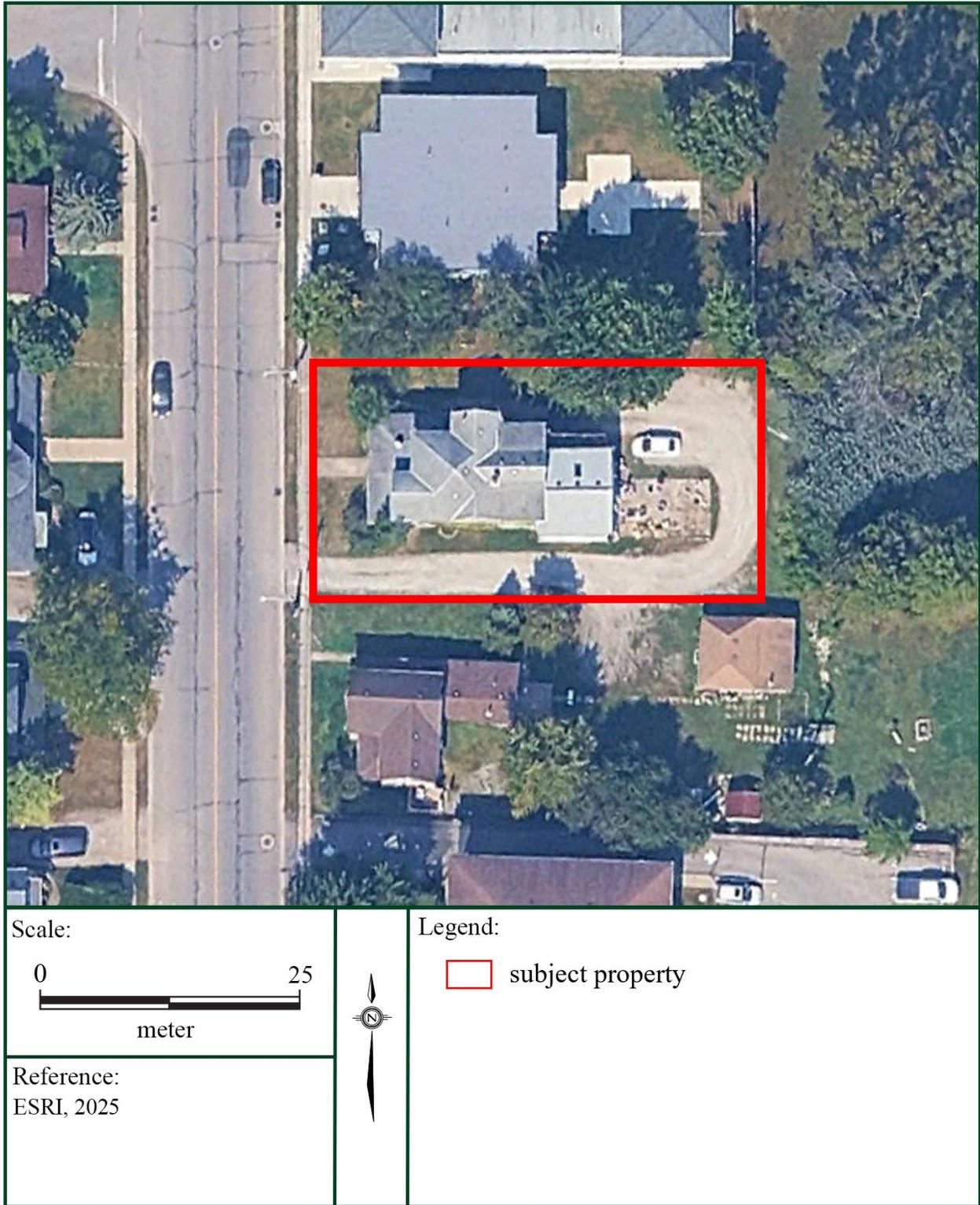


Figure 7: Previous Archaeological Assessments Conducted within 50 m of the Subject Property



Figure 8: Location of the Subject Property on Niagara Region’s Archaeological Potential Map



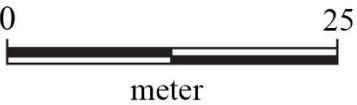
<p>Scale:</p>  <p>0 25 meter</p>		<p>Legend:</p> <ul style="list-style-type: none"> subject property Areas of archaeological potential
<p>Reference: Niagara Region, 2023</p>		



Figure 9: Aerial Imagery Showing the Results of the Stage 1 & 2 Archaeological Assessment of the Subject Property

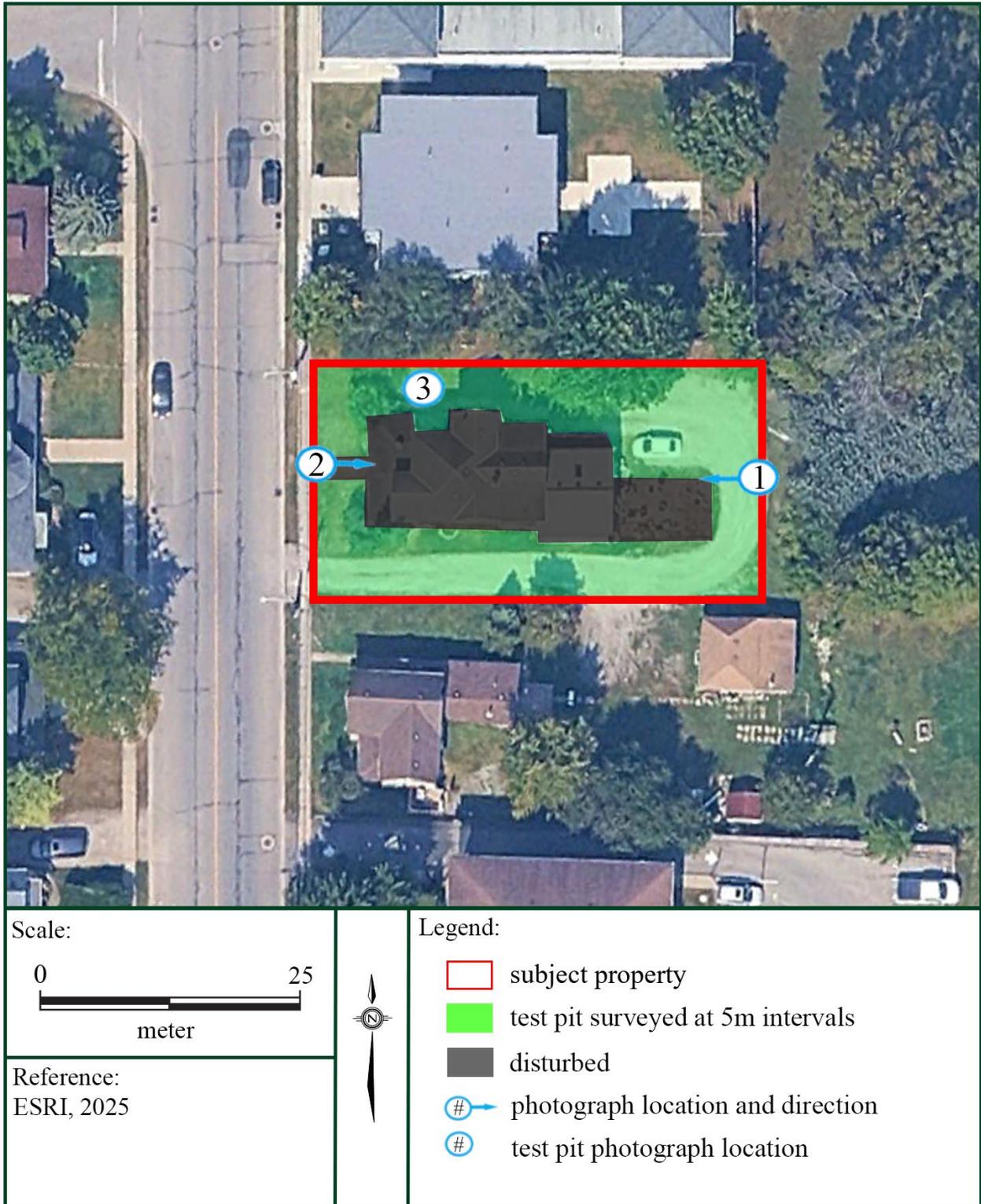
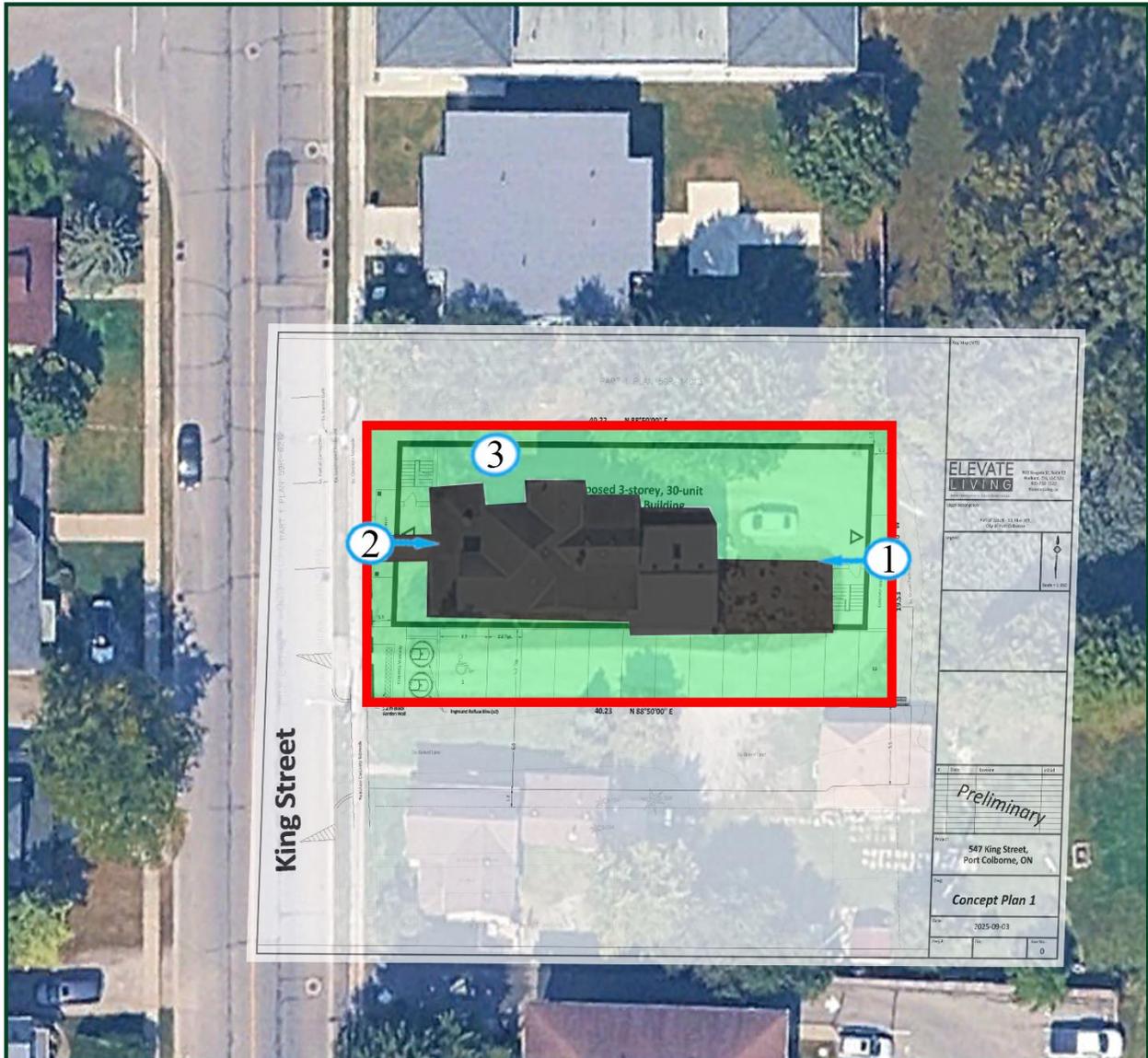
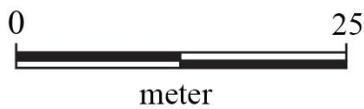


Figure 10: Plan of Survey Showing the Results of the Stage 1 & 2 Archaeological Assessment of the Subject Property



Scale:



Reference:
 ESRI, 2025
 Elevate Living, 2025



Legend:

- subject property
- test pit surveyed at 5m intervals
- disturbed
- photograph location and direction
- test pit photograph location

