



ACC

ARCHAEOLOGICAL
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Stage 1 & 2 Archaeological Assessment

3637 Firelane 12, City of Port Colborne, in Part of Lot 10, Concession 1,
Geographic Township of Humberstone, Regional Municipality of Niagara, Ontario
Original Report

Prepared for:

Ontario Ministry of Citizenship and Multiculturalism

Prepared by:

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PIF# P1208-0376-2023

Project No. 312-12-23

08 November 2023

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 development. An archaeological assessment was required as part of the pre-approval process for future development under the *Planning Act, R.S.O 1990*. The subject property is located at 3637 Firelane 12, in the City of Port Colborne, in part of Lot 10, Concession 1, Geographic Township of Humberstone, Regional Municipality of Niagara, Ontario. The subject property totals approximately 0.41 hectares (“ha”) (Figure 1). Only a portion of the subject property was subject to physical survey as part of this assessment. These lands identified as the “subject area” measure 0.21 ha. The Proponent provided the subject property limits and verified the subject area limits as defined within this report (Figures 5 & 6).

The Stage 1 & 2 assessment was conducted under Professional Archaeological License P1208, held by Matthew Muttart. Fieldwork was conducted under the direction of Michelle Volpe (R1241). The Ontario Ministry of Citizenship and Multiculturalism (“MCM”) assigned Project Information Form (“PIF”) number P1208-0376-2023 (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 3, 2023.

Stage 1 background research indicated that the subject property has general archaeological potential due to its proximity to Lake Erie and a historically redirected creek.

Physical Stage 1 & 2 assessment of the approximately 0.41 ha subject property was limited to a 0.21 ha subject area. A visual property inspection determined that 0.12 ha, or 58.4 per cent, of the subject area is previously disturbed and/or severely sloped.

0.09 ha or 41.6 per cent, of the subject area retained archaeological potential. This area consisted of manicured lawn and beach and was assessed by test pit survey at 5 m intervals. No artifacts or other archaeological resources were identified during the Stage 1 & 2 archaeological assessment.

The following recommendations are 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 area 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 subject area, as illustrated in Figure 6, is required.
2. 0.2 ha of the subject property, as illustrated in Figure 6 of this report, retains archaeological potential, and requires a marine archaeological assessment prior to development.

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PROJECT PERSONNEL

Project Manager:	Matthew Muttart, M.A., P1208
Professional Licence:	Matthew Muttart, M.A., P1208
Field Director:	Michelle Volpe, M.L.I.S., R1241
Field Crew:	Matthew Muttart, M.A., P1208
Report Preparation:	Michelle Volpe, M.L.I.S., R1241
Graphics:	Michelle Volpe, M.L.I.S., R1241



Stage 1 & 2 Archaeological Assessment

3637 Firelane 12, City of Port Colborne, in Part of Lot 10, Concession 1, Geographic Township of Humberstone, 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 resource assessment, including background research and property survey, for a proposed development. An archaeological assessment was required as part of the pre-approval process for future development under the *Planning Act, R.S.O 1990*. The subject property is located at 3637 Firelane 12, in the City of Port Colborne, in part of Lot 10, Concession 1, Geographic Township of Humberstone, Regional Municipality of Niagara, Ontario. The subject property totals approximately 0.41 hectares (“ha”) (Figure 1). Only a portion of the subject property was subject to physical survey as part of this assessment. These lands identified as the “subject area” measure 0.21 ha. The Proponent provided the subject property limits and verified the subject area limits as defined within this report (Figures 5 & 6).

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. 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 cultural heritage value or interest, 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 P1208, held by Matthew Muttart. Fieldwork was conducted under the direction of Michelle Volpe (R1241). The Ontario Ministry of Citizenship and Multiculturalism (“MCM”) assigned Project Information Form (“PIF”) number P1208-0376-2023 (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 3, 2023.

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*.

1.2 Historical Context

1.2.1 Background Research

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 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 allowed access to the low-lying environments 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 graters 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 Southwestern 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
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		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: Neutral	600-450	
Late Woodland: Western Basin Tradition		Younge Phase	1200/1100-800	
		Springwells Phase	800-600	
	Wolf Phase	600-450		
HISTORIC	SW Ontario Iroquois	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)

People during the Archaic period (*circa* 10,000 to 2,800 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* 2,900 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. While North America had been visited by Europeans on an increasing scale since the end of the fifteenth century, it was not until the voyages of Jacques Cartier in the 1530s that Europeans visited Ontario Iroquoians in their home territories. 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.

The subject property is historically located in part of Lot 10, Concession 1, Township of Humberstone, County of Welland. 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 & Landon, 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 named in 1787 for a town of the same name in England's Lincolnshire (Rayburn, 1997). It was first settled in 1785 with land selling for ten cents an acre. By 1817 it contained 75 occupied homes, one grist mill and one sawmill. By 1850 it contained 279 occupied homes, one grist mill, three sawmills, one foundry, two churches, and eight public schools. The population at time had reached 2,377. By 1875 it had risen to 3,200 (excluding the population of Port Colborne). Marshland occurs throughout the township and peat manufacture was a large industry, alongside standard agricultural production (Page, 1876).

Historical records and mapping were examined for evidence of early Euro-Canadian occupation within and near the subject property. Tremaine's 1862 *Historical County Map of Welland County* indicates that the part of Lot 10, Concession 1 containing the subject property was at the time owned by Ira Bearss. Bearss appears in the 1871 census as an 84-year-old farmer and Quaker who had been born in the United States. His wife, Lydia, aged 79 at this time also originated from the United States and is listed as a Mennonite (Library and Archives Canada, 1871). The map illustrates an unnamed creek approximately 300 m north of the subject property. As at

present day, the subject property's southern edge extends into Lake Erie. No structures are depicted within the subject property (Figure 2). The nearest settlement was Port Colborne, approximately 7 km west of the subject property.

H. R. Page & Co's 1876 *Illustrated Historic Atlas of the Counties of Lincoln and Welland* shows the subject property at this time owned by Gustuvus Ulz. Ulz does not appear in census records of this time. There are no structures depicted within the subject property (Figure 3). The nearest settlement is still Port Colborne.

1.3 Archaeological Context

1.3.1 Natural Environment

The subject property is located within the Iroquois Plain physiographic region (Chapman and Putnam 1984). This region is a lowland bordering Lake Ontario that was once inundated by a body of water known as Lake Iroquois. The area is made up of undulating till plains that once made up the shorelines of Lake Iroquois. These old shorelines and the smoothed lake bottoms are easily identifiable geographic features. The subject property is within the Niagara Fruit Belt, a lowland with excellent well-drained soils that allow orchards and vineyards to flourish.

The Soils of the Regional Municipality of Niagara (Kingston & Presant, 1989) indicates the entirety of the subject property occurs upon soils that have been built up and modified (Figure 4). An original soil type is not recorded.

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 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. The nearest water source is Lake Erie, which historically and currently covers the southern portion of the subject property. There was historically also a small, unnamed creek that passed approximately 300 m north of the subject property, terminating in Lake Erie (Figures 2 & 3).

1.3.2 Current Land Use

The subject property is currently a residential lot. A residence with multiple sheds and a large deck are located in the centre of the property, along with a gravel road. The northern portion of the subject property is a sloped, manicured lawn. Immediately south of the residence is a small, level manicured lawn and a steep slope that descends to a sandy beach. The subject property extends into Lake Erie at its southern edge.

Figure 1 provides the location of the subject property on a 1:50,000-scale topographic map. Fieldwork for the project was conducted on November 3, 2023.

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 kilometre (“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 *AfGs* Borden block.

There are no archaeological sites registered within 1 km of the subject property (MCM, 2023a).

1.3.3.2 Previous Archaeological Reports

A review of archaeological reports within the *Public Register of Archaeological Reports* indicated there are no archaeological reports detailing previous archaeological fieldwork within the subject property have been entered into MCM’s register at the time this report was written (MCM, 2023b). There are no reports detailing previous fieldwork within 50 m of the subject property. Reports were searched based on registered site information, historic lots and concessions, and nearby streets.

1.3.4 Potential for Archaeological Resources

Archaeological potential is defined as the likelihood of finding archaeological sites within a subject property. For planning purposes, determining archaeological potential provides a preliminary indication that significant sites might be found within the subject property, 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 *Ontario Heritage Act* 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.

Several factors can be used to assess the potential for recovery of Euro-Canadian and Indigenous archaeological resources on a property. The subject property was historically owned by a farmer, indicating that it was once predominantly cultivatable land and comprised of soils suitable for supporting human habitation. It is also in close proximity to Lake Erie, a historically significant body of water.

Given the above, 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 is required.



2.0 FIELD METHODS

The subject property measures 0.41 ha. However, only a 0.21 ha subject area was subject to a physical assessment during fieldwork. The Stage 1 & 2 assessment was conducted on November 3, 2023, with advance permission to enter the subject property obtained from the Proponent. Weather conditions during the assessment were excellent, with overcast skies and a maximum daily temperature of 15 degrees Celsius. The ground was bare and dry at the time of inspection. As such, it is confirmed that the assessment met Section 1.2 Standard 2 of the *Standards and Guidelines for Consultant Archaeologists* regarding weather and lighting.

The Stage 1 assessment of the subject area 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 area 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. Approximately 882 m², or 42 per cent, of the subject area has been previously disturbed by the residence, sheds, deck, and gravel road, as well as a large boulder riprap where the beach begins. Approximately 345 m², or 16.4 per cent, of the subject area is severely sloped.

The remainder of the subject area, totaling 873 m² or 41.6 per cent, retained archaeological potential and was recommended for Stage 2 archaeological assessment. 89 m², or 4.2 per cent of the subject area consists of beach sand. 784 m², or 37.4 per cent, of the subject area consists of manicured lawn. Both areas were subject to test pit excavation by hand at 5 m intervals. Ploughing of this area is not possible, meeting the requirements of Section 2.1.2 1e of the *Standards and Guidelines for Consultant Archaeologists*, that ploughing, or cultivation is not viable. Each test pit was 30 centimetres in diameter and was dug to at least five centimetres into the subsoil. Test pits were examined for stratigraphy, cultural features, or evidence of fill. Test pits were placed to within 1 m of all disturbances and other areas of low to no 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. No artifact bearing, or “positive”, test pits were encountered, therefore no intensified survey was conducted.

Results of the Stage 1 & 2 assessment are shown on Figure 5. Images of the assessment are provided in Section 8.0.

3.0 RECORD OF FINDS

3.1 Soils

Topsoil encountered during the assessment in the northern portion of the subject area consisted of approximately 30 centimetres of medium brown sand loam over a light brown sand subsoil (Image 7). Soil disturbance, exhibited by comingled soils and gravel inclusions, was observed to varying degrees throughout the subject area. Test pits in beach sand were excavated to 1.2 m and yielded no stratigraphic changes.

3.2 Archaeological Resources

No artifacts or other archaeological resources were recovered during the Stage 1 & 2 assessment of the 0.21 ha subject area.

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 excavation, and all pictures were recorded in a photo log.

A detailed list of field records is presented in Table 2. 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 2: Inventory of Documentary and Material Records

PROJECT INFORMATION		
ACC project number	312-12-23	
Licensee	Matthew Muttart	
MCM PIF number	P1208-0376-2023	
DOCUMENT/MATERIAL	NUMBER	DESCRIPTION
field notes & photo logs	1	pages (paper, with digital copies)
maps	1	aerial photograph of subject property
	1	constraints/opportunities to development mapping of the subject property
photographs	7	digital colour photographs

4.0 ANALYSIS AND CONCLUSIONS

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

- Proximity of Lake Erie

Physical Stage 1 & 2 assessment of the approximately 0.41 ha subject property was limited to a 0.21 ha subject area. A visual property inspection determined that 0.12 ha, or 58.4 per cent, of the subject area is previously disturbed and/or severely sloped.

0.09 ha or 41.6 per cent, of the subject area retained archaeological potential. This area consisted of manicured lawn and beach and was assessed by test pit survey at 5 m intervals. No artifacts or other archaeological resources were identified during the Stage 1 & 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*.

The following recommendations are 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 area 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 subject area, as illustrated in Figure 6, is required.
2. 0.2 ha of the subject property, as illustrated in Figure 6 of this report, retains archaeological potential, and requires a marine archaeological assessment prior to development.



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 subject 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 of Cemeteries at the Ministry of Government and Consumer Services.
- e. It is an offence to destroy or alter an archaeological site without approval from the Ministry of Citizenship and Multiculturalism. Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48(1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed from them, except by a person holding an archaeological license.

7.0 BIBLIOGRAPHY AND SOURCES

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8.0 IMAGES



Image 1: Subject area, facing southwest from northeastern corner.



Image 2: Subject area, facing northeast near centre.



Image 3: Subject area, facing north near center.



Image 4: Subject area, facing northwest near center.



Image 5: Subject area, facing south from centre.



Image 6: Subject area, facing northwest from eastern edge.



Image 7: Typical test pit throughout subject area.

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 Historical Map of Welland County

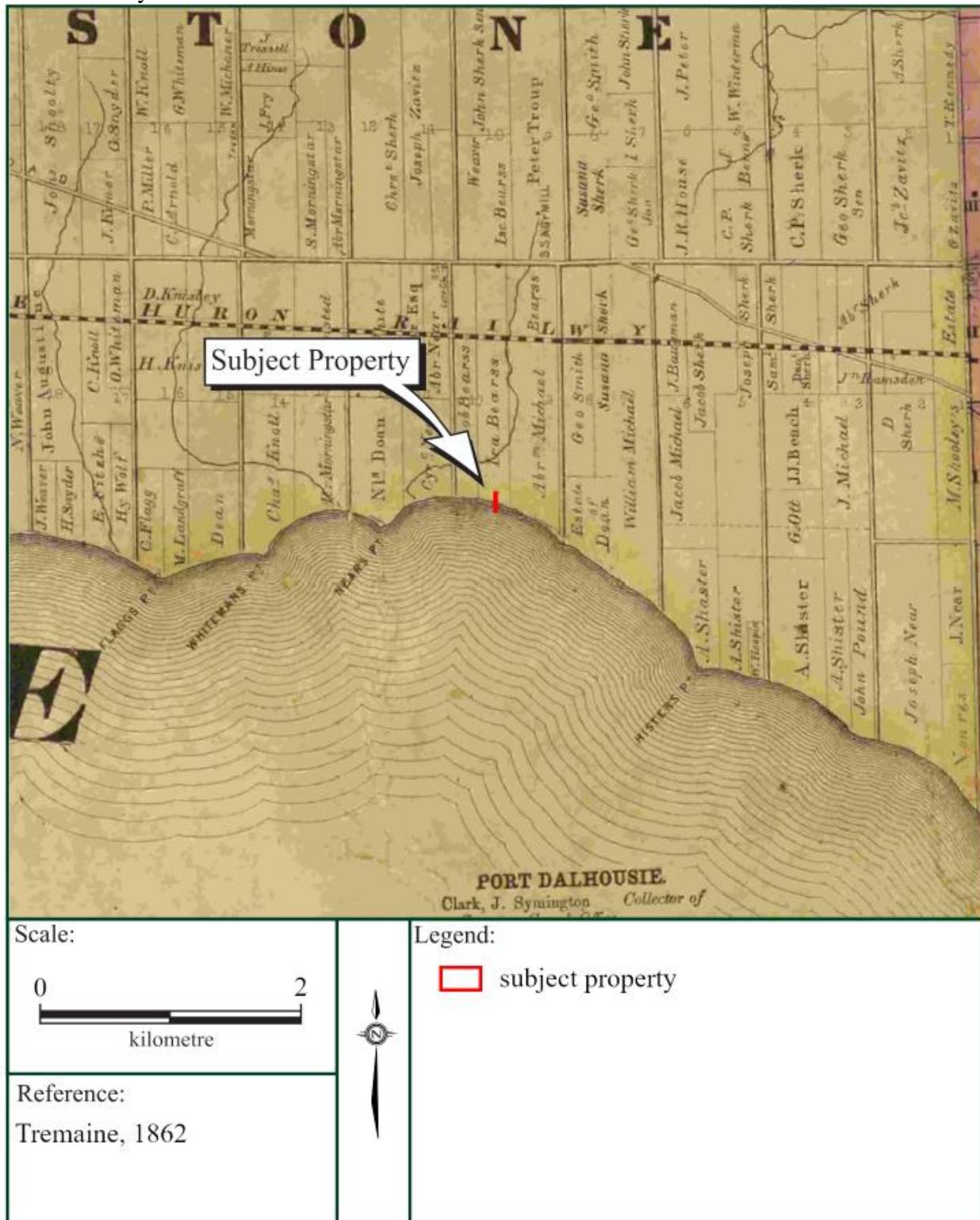


Figure 3: Location of the Subject Property on H.R. Page & Co.'s 1876 Historical Atlas Map of Humberstone Township, Welland County

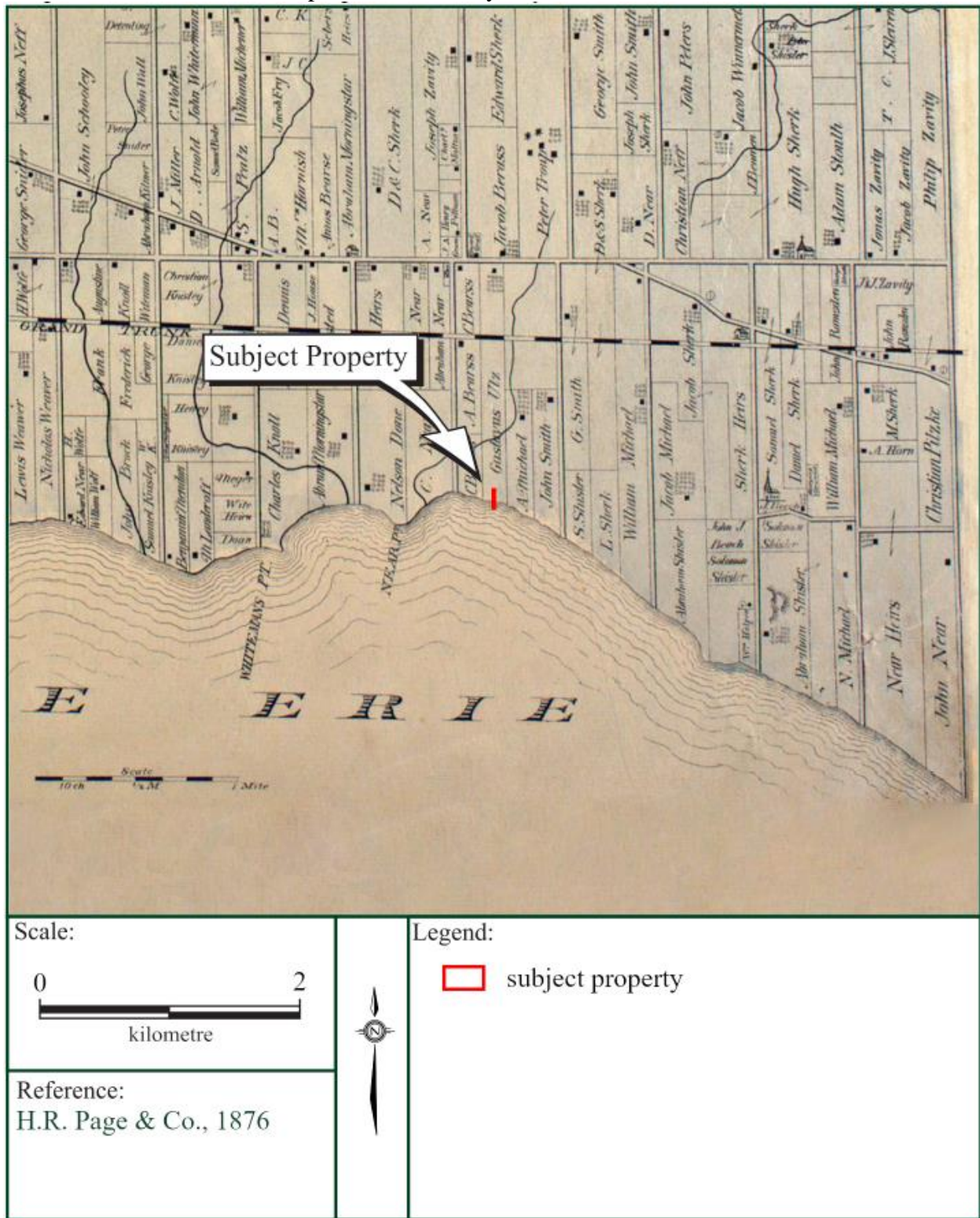


Figure 4: Location of the Subject Property on a Map of the Soils of the Regional Municipality of Niagara

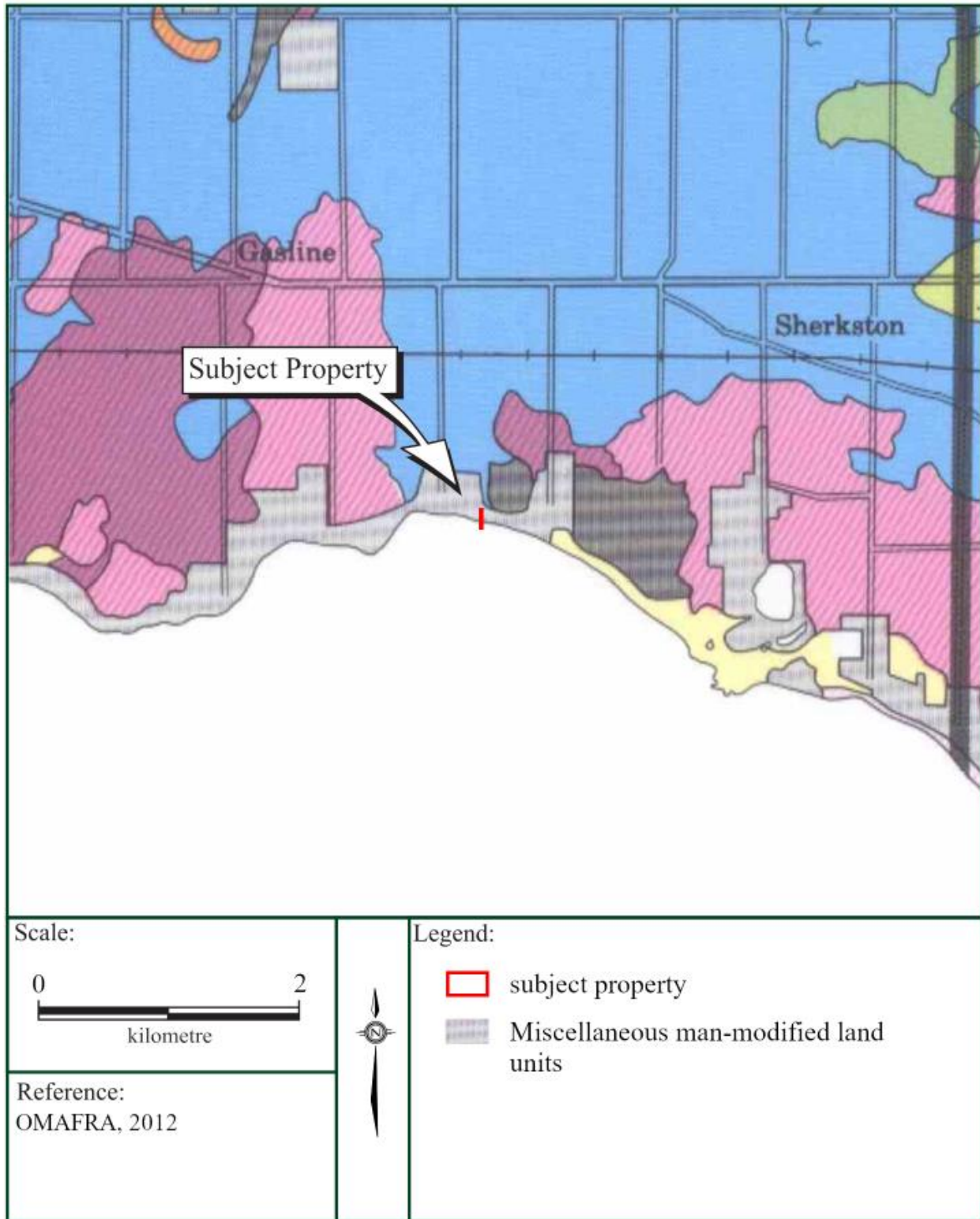


Figure 5: Aerial Photograph Showing the Results of the Stage 1 & 2 Archaeological Assessment of the Subject Area with Image Locations

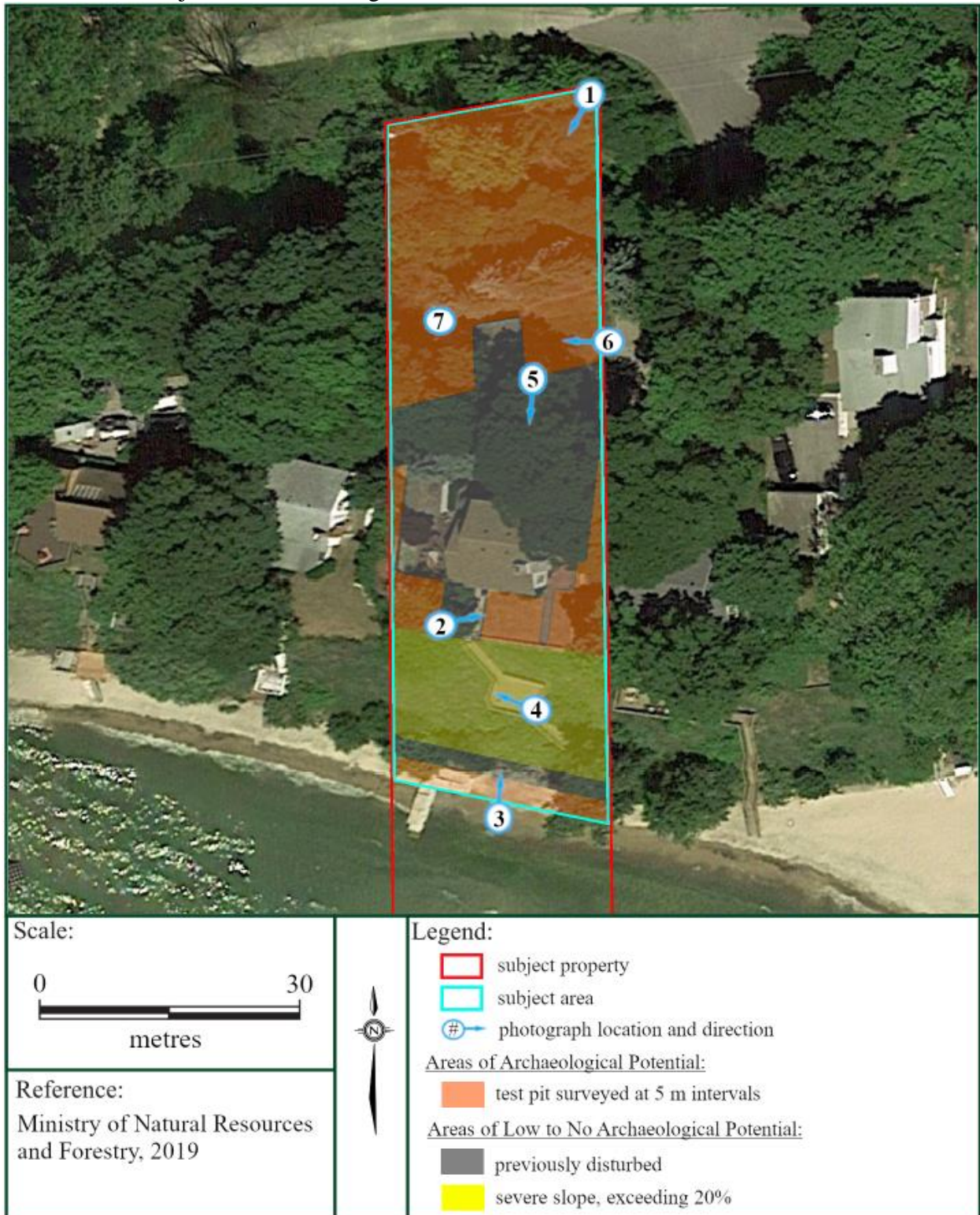


Figure 6: Aerial Photograph Showing Assessed Lands and Unassessed Lands

