



Stage 1 Archaeological Assessment

540 King Street East
Part of Lot 10, Concession A
Geographic Township of Hamilton
Town of Cobourg
County of Northumberland

Prepared for:
Sunnyside Village Inc.
6849 County Road #10,
Port Hope, Ontario
L1A 3V5

Licensee: Michael Golloher
PIF: P1037-0124-2022
Original Report



Earthworks Archaeological Services Inc.
2365 Watts Road,
Haliburton, Ontario
K0M 1S0

March 16, 2022

Executive Summary

Earthworks Archaeological Services Inc. was retained by Restoration Depot Inc. to conduct a Stage 1 archaeological assessment of a 3.93 hectare property located at 540 King Street East, Part of Lot 10, Concession A, Geographic Township of Hamilton, Town of Cobourg, County of Northumberland. The assessment was undertaken in support of an Application for Draft Plan of Subdivision and was conducted as part of the requirements defined in Section 5.2.3 of *The Town of Cobourg Official Plan*, which requires an archaeological assessment in areas of archaeological potential where development is proposed

The results of the background investigation indicate features indicating archaeological potential. These include:

- Location of the study area adjacent to King Street East, which historical maps suggest functioned as a historic transportation route
- Location of the study area adjacent to the historic Grand Trunk Railway
- Location of a historic structure within the study area, as indicated by historic mapping
- Location of the study area within 97 metres of an unnamed creek.

As a result of the identification of these features, it is determined that the study area contains archaeological potential, and a Stage 2 archaeological assessment is recommended.

It is determined that a portion of the study area is actively or recently cultivated land that is accessible to ploughing, and is recommended to be subject to a Stage 2 pedestrian survey. These lands shall be ploughed, and must be weathered by one heavy rainfall or several light rains to improve the visibility of archaeological resources. Ploughing must be deep enough to provide total topsoil exposure, but not deeper than the previous ploughing. At least 80% of the ploughed ground surface must be visible. Survey transects shall be spaced at maximum intervals of five metres. If archaeological resources are found, survey transects shall be reduced to one metre survey intervals over a minimum 20 metre radius around the find to determine whether it is an isolated find or part of a larger scatter. This intensified survey method shall be continued outward until the full extent of any surface scatters are defined. All formal artifact types and diagnostic categories shall be collected. For the portion of the study area that cannot be ploughed, a test pit survey shall be required. Test pits shall be spaced at maximum intervals of five metres apart, and to within one metre of standing structures. Each test pit shall be excavated by hand to 30 centimetres in diameter, and excavated into the first five centimetres of subsoil. Each test pit shall be examined for stratigraphy, cultural features, or evidence of fill, and all soil shall be screened through wire mesh of no greater than six-millimetre width. Any identified artifacts shall be collected according to their associated test pit. All test pits shall be backfilled.

The Ministry of Heritage, Sport, Tourism and Culture Industries is requested to review this report and provide a letter indicating their satisfaction that the fieldwork and reporting for this archaeological assessment are consistent with the Ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* and the terms and conditions for archaeological licences, and to enter this report into the Ontario Public Register of Archaeological Reports.



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1.0 Project Context

1.1 Development Context

Earthworks Archaeological Services Inc. was retained by Sunnyside Village Inc. to conduct a Stage 1 archaeological assessment of a 3.93 hectare property located at 540 King Street East, Part of Lot 10, Concession A, Geographic Township of Hamilton, Town of Cobourg, County of Northumberland (Maps 1). The assessment was undertaken in support of an Application for Draft Plan of Subdivision (Map 2) and was conducted as part of the requirements defined in Section 5.2.3 of *The Town of Cobourg Official Plan*, which requires an archaeological assessment in areas of archaeological potential where development is proposed (Town of Cobourg 2018:99)

The objective of the Stage 1 archaeological assessment, as outlined by the Ministry of Heritage, Sport, Tourism and Culture Industries' (MHSTCI) *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), are as follows:

- To provide information about the property's geography, history, previous archaeological fieldwork and current land condition
- To evaluate the property's potential for archaeological resources and to provide recommendations for Stage 2 assessment

As part of this assessment, background research was conducted in Earthworks corporate library, the Northumberland County Land Registry Office (LRO #39) and the Federal Canadian Census located online at Library and Archives Canada.

Permission to access the property was provided by the proponent.



1.2 Historic Context

1.2.1 Pre-Contact Indigenous History

Table 1 provides a summary of the general culture history of southern Ontario, as based on Ellis and Ferris (1990).

Table 1: Summary of Pre-contact Culture History of Ontario

Culture Period	Diagnostic Artifacts	Time Span (Years B.P.)	Detail
Early Paleo-Indian	Fluted Projectile Points	11,000-10,400	Nomadic caribou hunters
Late Paleo-Indian	Hi-Lo, Holcombe, Plano Projectile Points	10,400-10,000	Gradual population increase
Early Archaic	Nettling and Bifurcate Points	10,000-8,000	More localized tool sources
Middle Archaic	Brewerton and Stanly-Neville Projectile Points	8,000-4,500	Re-purposed projectile points and greater amount of endscrapers
Narrow Point Late Archaic	Lamoka and Normanskill Projectile Points	4,000-3,800	Larger site size
Broad Point Late Archaic	Genessee, Adder Orchard Projectile Points	3,800-3,500	Large bifacial tools. First evidence of houses
Small Point Late Archaic	Crawford Knoll, Innes Projectile Points	3,500-3,100	Bow and Arrow Introduction
Terminal Archaic	Hind Projectile Points	3,100-2,950	First evidence of cemeteries
Early Woodland	Meadowood Points, Cache Blades, and pop-eyed birdstones	2,950-2,400	First evidence of Vinette I Pottery
Middle Woodland	Pseudo-scallop shell	2,450-1550	Burial Mounds
	Princess Point pottery	1550-1100	First evidence of corn horticulture
Late Woodland	Levanna Point	1,100-700	Early longhouses
	Saugeen Projectile Points	700-600	Agricultural villages
	Nanticoke Notched Points	600-450	Migrating villages, tribal warfare



1.2.2 Post-Contact Indigenous History

The study area enters the historic record in 1615, where Samuel de Champlain travelled through the area with soldiers on the way to attack the Ononondaga tribe of the Five Nations Iroquois. Early accounts by European explorers suggest the study area was considered part of a loosely defined hunting territory associated with the Huron Confederacy (Trigger 1994). European influence in the region was generally restricted to the beaver pelt trade, and Aboriginal groups practiced a way of life that did not differ significantly from the pre-Contact period. By the 1640's, the increasing scarcity of beaver pelts prompted the invasion of Huronia by the League of Five Nations Iroquois. By 1649, five Huron villages were destroyed and the remainder abandoned, resulting in the complete disintegration of the Huron Confederacy and its absorption into the Petun, Neutral and other groups (Stone and Chaput 1978). The study area remained virtually unpopulated as an Iroquoian hunting territory for the proceeding fifty years prior to the migration of the Ojibwa into the region in the early eighteenth century (Rogers 1978). Following their defeat of the French at the Battle of the Plains of Abraham in 1759, the British began purchasing large tracts of land in Ontario through treaties with the Aboriginal communities in the region. By the late eighteenth century, increasing Euro-Canadian settlement pressure resulted in the British purchasing a stretch of Mississauga land in 1788 that encompassed an area between the Trent River and Etobicoke Creek that would be available for settler purchase, in what later became known as the Gun Shot Treaty. Irregularities in the treaty documents led to legal challenges and review, and the Mississauga did not formally surrender the land which encompasses the study area until the William's Treaty of 1923 (Surtees 1994:107).

1.2.3 European Settlement History

The study area is historically located in the Township of Hamilton and presently located in the Town of Cobourg boundaries. The county was first settled by United Empire Loyalists as well as immigrants from England and Scotland. It is surrounded to the north by Rice Lake and to the south by Lake Ontario, Hope Township in the west and Haldimand township in the east. Eluid Nickerson is credited to have been the first settler in 1798, on the site of present-day Cobourg. It changed names many times, but in 1819 was permanently named Cobourg in honour of the marriage of Princess Charlotte Augusta to Prince Leopold of Saxe-Cobourg-Saalfeld. By 1827, there were close to forty homes, two inns, distilleries and a grist mill, and a population of 350. On July 1st, 1837, Cobourg was officially incorporated as a town. The population increased with a massive wave of immigration from the United Kingdom and by the mid-1800's Cobourg's population was close to 5,000. Cobourg soon became the main centre in Hamilton township and expanded even more rapidly when a harbour was built in 1832. Lumber was the chief export commodity shipped from Cobourg's harbour. Cobourg was also a regular port of call for Durham boats and early steamers on Lake Ontario (Mika & Mika 1981:220).

1.2.4 Land Use History of Study Area

The Crown Patent for all 200 acres within Lot 10, Concession A was granted to Roger Woollett in 1805. In 1839, Malcolm McNeill purchased the entirety of the lot, except for 1 acre. By 1850, George Eastic purchased all 200 acres with the exception of 1 acre. In 1856, the Grand Trunk Railway purchased 2 acres for the construction of the railway along the northern border of the lot. The property was sold to James Cockburn and P.J. Haintry, who proceeded to lease out the land to tenant farmers. The 1861 lists William Robertson, a Scottish farmer with a two storey frame house as the resident of the property with 122 acres under cultivation (Government of



Canada 1863:2, 8). In 1868, the property was sold to James Beatty, who is listed as the owner in contemporary historic mapping (Map 3). The Schedule of Cultivated lands from 1871 indicates that James Beatty held 195 acres within the lot, with 140 acres being worked, 70 acres in pasture, and 2 acres in orchard (Government of Canada 1873:6). The property remained with the Beatty family until the 1895, when it was deeded to John Davidson. Topographic mapping from the 20th century indicates that by 1969 there were three structures within the study area (Map 4). These are the same structures which reside on the lot today, including a house, shed and barn.

1.2.5 Historic Plaques

As per Section 1, Standard 1.1 of the *Standards and Guidelines for Consultant Archaeologists*, Earthworks consulted local historical plaques in order to inform archaeological potential and assessment strategies. No local plaques were found which related to the history of the current study area.

1.3 Archaeological Context

1.3.1 Current Conditions

The property consists of a gravel driveway, house, shed, barn, a small area of manicured lawn, one agricultural field, and an open meadow.

1.3.2 Natural Environment

The study area is located within a sand plain, with a very small portion of the southwest corner being located in a clay plain (Map 5) of the Iroquois Plain physiographic region (Chapman & Putnam 1984:172-174), which is a sloping plateau from the Lake Iroquois bluff to the Lake Ontario shoreline. The glacier that once covered the area laid down several deposits of glacial till (a poorly sorted sediment of silt/sand/clay with boulder/gravel inclusions). These deposits were eventually covered by silt and clay. As the glacier retreated, the area was filled with meltwater, creating glacial lake Iroquois around 12,500 years ago (Chapman & Putnam 1984:190). The surficial geology of the area consists of massive to laminated silt and clay (Map 6), and the soils consist of a mix of Smithfield silty clay loam to Tecumseth sandy loam, which consist of a silt loam and clay belonging to the Grey-Brown Podzolic Great Soil Group and a medium sand belonging to the Brown Forest Great Soil Group (Map 7; Hoffman & Acton 1974)

The nearest water source is an unnamed creek that is approximately 97 metres to the east of the study area. This channel drains into Lake Ontario, which is located approximately one kilometre to the south of the study area.

The study area is located within the Oshawa- Cobourg District of the Lake Simcoe – Rideau Ecoregion, which itself is situated within the Mixedwood Plains Ecozone. This region encompasses 6,311,957 hectares, and contains a diverse array of flora and fauna. It is characterized by diverse hardwood forests dominated by sugar maple, American beech, white ash, eastern hemlock, and numerous other species are found where substrates are well developed on upland sites. Lowlands, including rich floodplain forests, contain green ash, silver maple, red maple, eastern white cedar, yellow birch, balsam fir, and black ash. Peatlands (some quite large) occur along the northern edge and in the eastern portion of the ecoregion, and these contain fens, and rarely bogs, with black spruce and tamarack:



Characteristic mammals include white-tailed deer, Northern raccoon, striped skunk, and woodchuck. Wetland habitats are used by many species of water birds and shorebirds, including wood duck, great blue heron, and Wilson’s snipe. Open upland habitats are used by species such as field sparrow, grasshopper sparrow, and eastern meadowlark. Upland forests support populations of species such as hairy woodpecker, wood thrush, scarlet tanager, and rose-breasted grosbeak. Reptiles and amphibians found in this ecosystem include American bullfrog, northern leopard frog, spring peeper, red-spotted newt, snapping turtle, eastern gartersnake, and common watersnake. Characteristic fish species in the ecoregion include the white sucker, smallmouth bass, walleye, northern pike, yellow perch, rainbow darter, emerald shiner, and pearl dace.

(Crins et al. 2009:48-49)

1.3.3 Known Archaeological Sites

A search of registered archaeological sites within the MHSTCI Archaeological Sites Database was conducted. Six archaeological sites were identified within a one-kilometre radius of the study area. A summary of these sites is provided in Table 2.

Table 2: Summary of Registered Archaeological Sites within 1 kilometre of the Study Area

Borden #	Site Name	Time Period	Affinity	Site Type
AlGm-22	Location 1	Post-Contact	Euro-Canadian	Scatter
AlGm-21	Location 6	Post-Contact	Euro-Canadian	Residential
AlGm-20	Location 5	Post-Contact	Euro-Canadian	House, Residential
AlGm-19	Location 4	Post-Contact	Euro-Canadian	Residential
AlGm-18	Location 3	Post-Contact	Euro-Canadian	Residential
AlGm-17	Location 2	Post-Contact	Euro-Canadian	House

1.3.4 Adjacent Archaeological Assessments

No archaeological assessments conducted within 50 metres of the study area were identified.



2.0 Analysis and Conclusions

Section 1.3 of the *Standards & Guidelines for Consultant Archaeologists* details a list of features that indicate archaeological potential when making and evaluation for developing recommendations. As documented in Section 1.0 of this report, there are features documented during background research that indicate archaeological potential. These include:

- Location of the study area adjacent to King Street East, which historical maps suggest functioned as a historic transportation route
- Location of the study area adjacent to the historic Grand Trunk Railway
- Location of a historic structure within the study area, as indicated by historic mapping
- Location of the study area within 97 metres of an unnamed water creek

As a result of the identification of these features, it is determined that the study area contains archaeological potential, and additional archaeological assessment is required (Map 8).



3.0 Recommendations

Based on the results of the Stage 1 background investigation, the study area contains archaeological potential, and a Stage 2 archaeological assessment is recommended.

It is determined that a portion of the study area is actively or recently cultivated land that is accessible to ploughing, and is recommended to be subject to a Stage 2 pedestrian survey. These lands shall be ploughed, and must be weathered by one heavy rainfall or several light rains to improve the visibility of archaeological resources. Ploughing must be deep enough to provide total topsoil exposure, but not deeper than the previous ploughing. At least 80% of the ploughed ground surface must be visible. Survey transects shall be spaced at maximum intervals of five metres. If archaeological resources are found, survey transects shall be reduced to one metre survey intervals over a minimum 20 metre radius around the find to determine whether it is an isolated find or part of a larger scatter. This intensified survey method shall be continued outward until the full extent of any surface scatters are defined. All formal artifact types and diagnostic categories shall be collected. For the portion of the study area that cannot be ploughed, a test pit survey shall be required. Test pits shall be spaced at maximum intervals of five metres apart, and to within one metre of standing structures. Each test pit shall be excavated by hand to 30 centimetres in diameter, and excavated into the first five centimetres of subsoil. Each test pit shall be examined for stratigraphy, cultural features, or evidence of fill, and all soil shall be screened through wire mesh of no greater than six-millimetre width. Any identified artifacts shall be collected according to their associated test pit. All test pits shall be backfilled.

The Ministry of Heritage, Sport, Tourism and Culture Industries is requested to review this report and provide a letter indicating their satisfaction that the fieldwork and reporting for this archaeological assessment are consistent with the Ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* and the terms and conditions for archaeological licences, and to enter this report into the Ontario Public Register of Archaeological Reports.



4.0 Advice on Compliance with Legislation

This report is submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries as a condition of licensing in accordance with Part VI of the Ontario Heritage Act, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Heritage, Sport, Tourism and Culture Industries, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

It is an offence under Sections 48 and 69 of the Ontario Heritage Act for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the Ontario Heritage Act.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the Ontario Heritage Act. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the Ontario Heritage Act.

The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.



5.0 References

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Government of Ontario

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Town of Cobourg

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Trigger, Bruce G.

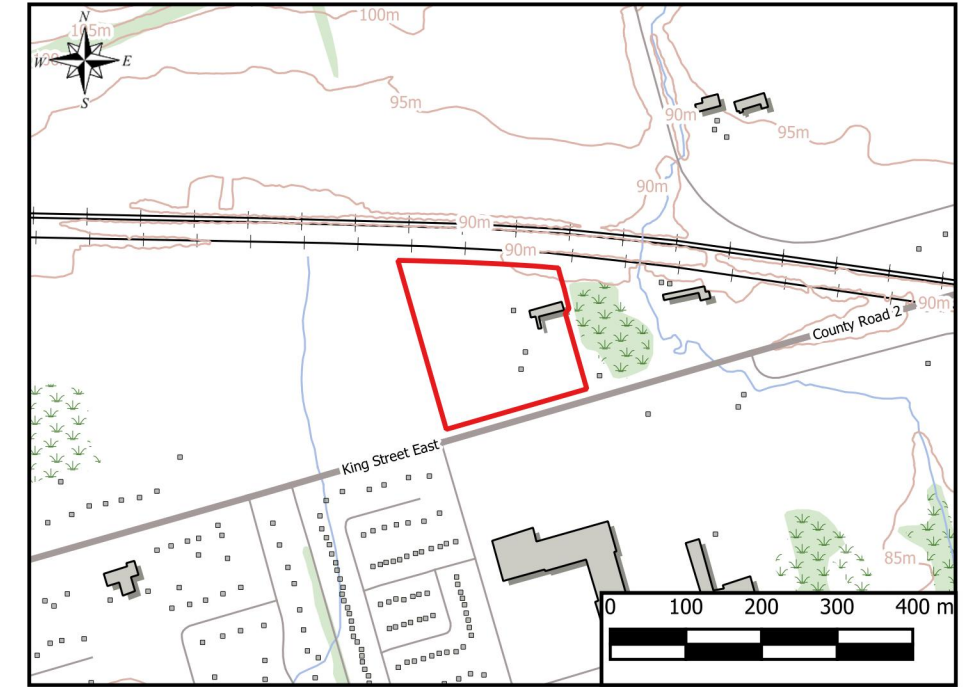
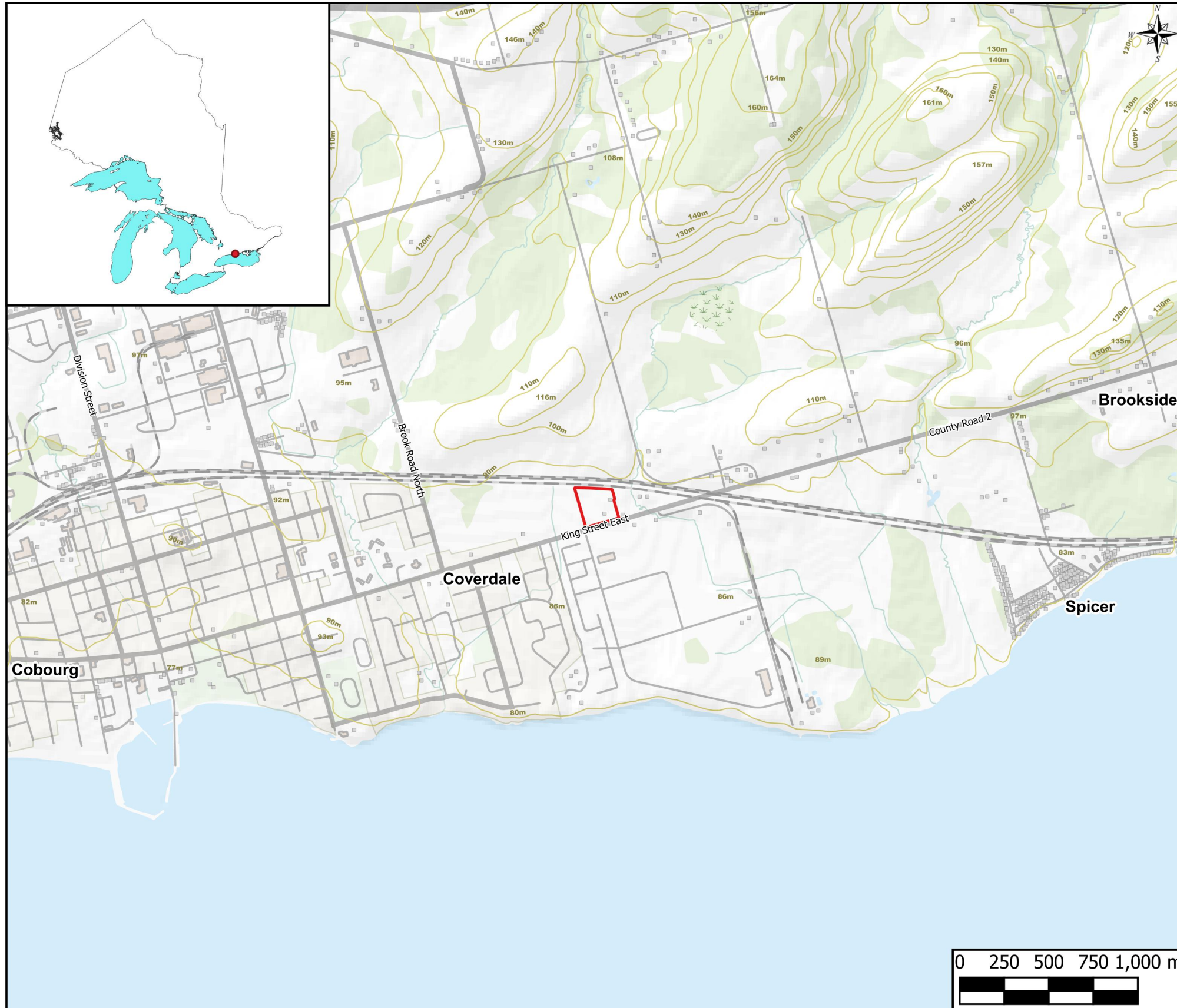
- 1994 The Original Iroquoians: Huron, Petun and Neutral. In Aboriginal Ontario, Edward S. Rogers and Donald B. Smith (eds.). Dundurn Press, Toronto.



6.0 Maps



Earthworks Archaeological Services Inc.
 Stage 1 Archaeological Assessment
 540 King Street East
 Cobourg



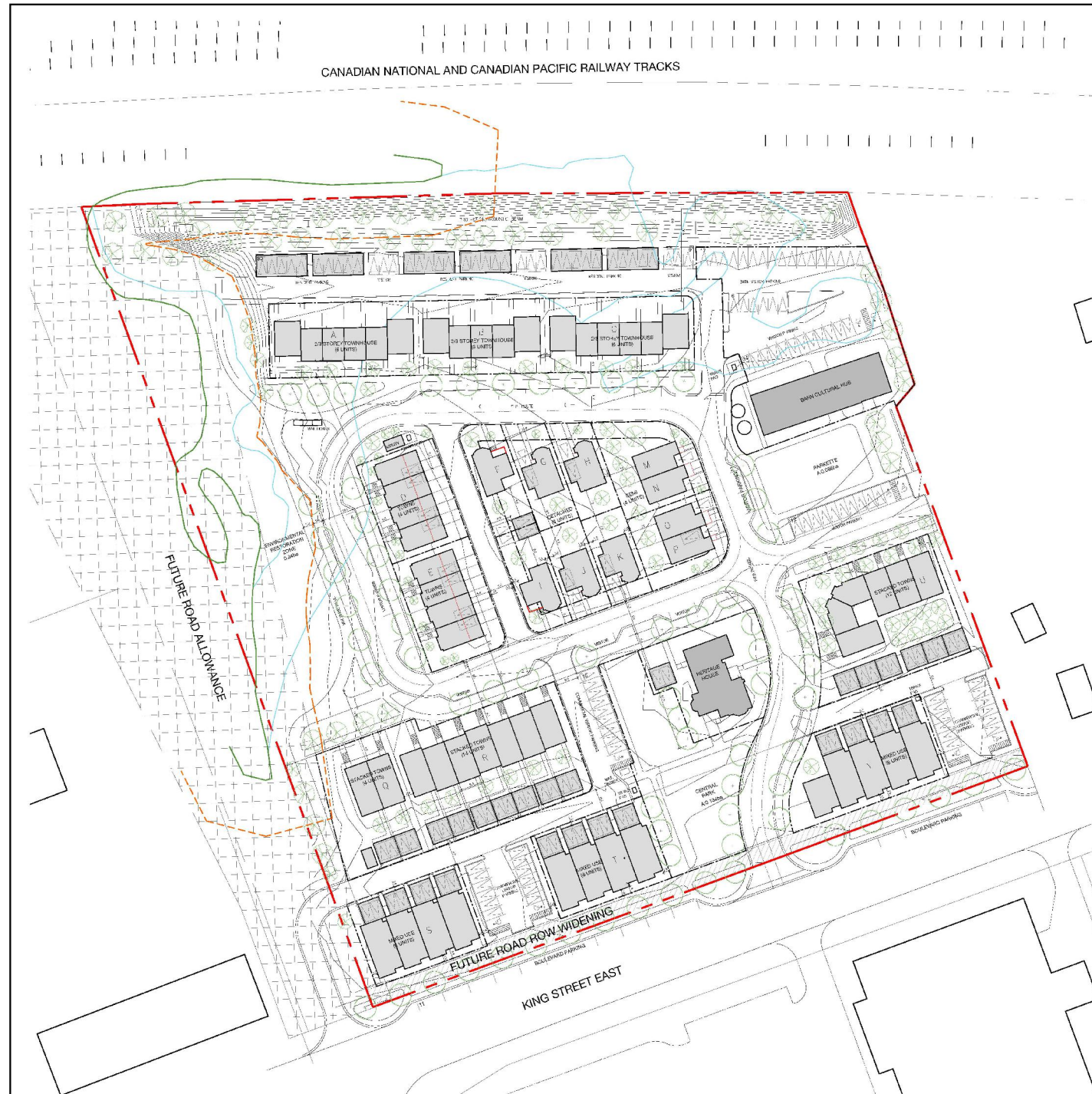
Legend

Study Area

Reference:
 Canvec Data. Scale 1:50000
 Ontario Basic Mapping. Scale 1:10000
 Town of Cobourg SCOP2018 Aerial Imagery

Map 1: Regional Map

Earthworks Archaeological Services Inc.
 Stage 1 Archaeological Assessment
 540 King Street East
 Cobourg



SITE INFORMATION

SITE AREA	
Total Site Area:	3.97he
PARKING RATES	
Residential (Detached, Semi-detached):	2.0 p/unit
Residential (Townhouses):	1.0 p/unit
Mixed-Use	1.0 p/unit
Retail:	3 p/100m ² GFA

SETBACKS		F.Y.	C.Y.	S.Y.	R.Y.
Detached	4.5m	2.4m	1.2m	7.5m	
Semi-Detached	4.5m	2.4m	1.2m	7.5m	
Townhouses	4.5m	2.4m	1.2m	-	
Mixed-Use	1.8m	1.8	0m	-	

DEVELOPMENT STATISTICS

RESIDENTIAL UNITS	
Detached:	6
Semi-Detached:	4
Townhouses:	55
Mixed-Use:	24
TOTAL:	89

PARKING		Required	Provided
Residential:	87		118
Visitor:	22		33
Commercial:	36		38
Subtotal:	145		190

Barn Cultural Hub:	49
Total:	239

OPEN SPACE	
Storm Water Management Pond Park	0.255he
Central Park	0.136he
Barn Cultural Hub Parkette	0.085he



LEGEND

- PROPERTY BOUNDARY
- ENVIRONMENTAL ZONE
- FUTURE ROAD ROW WIDENING



7	REVISED CONCEPT PLAN	2022.02.22	UMG
6	REVISED CONCEPT PLAN	2022.02.18	UMG
5	REVISED CONCEPT PLAN	2021.09.08	TK
4	PREFERRED CONCEPT PLAN	2021.06.18	TK
3	CONCEPT PLAN	2021.05.11	TK
2	CONCEPT PLAN	2021.04.23	TK
1	BASE PLAN	2021.04.07	TK
No.	REVISION	DATE	BY

CLIENT
 RUTH KANE

FOTENN
 Planning + Design

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 616.789.4630 www.fotenn.com

DESIGNED	TK
REVIEWED	UM
DATE	2022.02.22

P1

Map 2: Site Plan



Legend

 Study Area

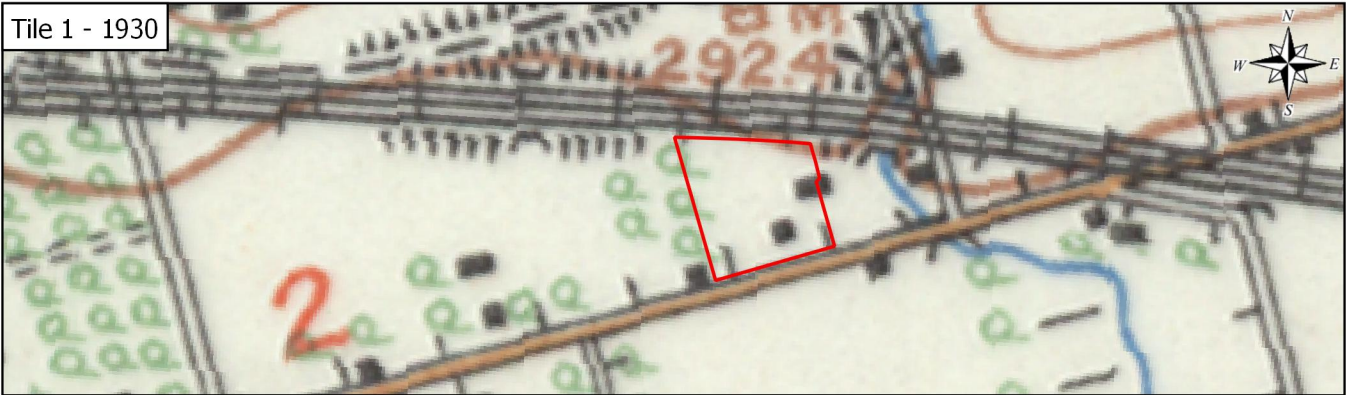
Base Map:
1878 Miles & Co.
*Illustrated Historical Atlas of the county of
Northumberland and Durham*

Not to Scale

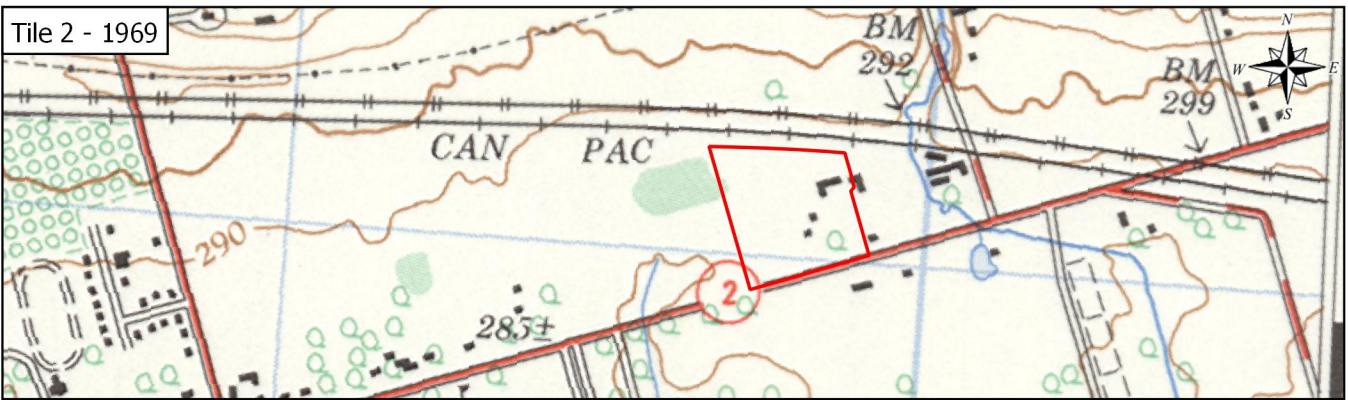
Map 3: 1878 Illustrated Historical Atlas of Northumberland County



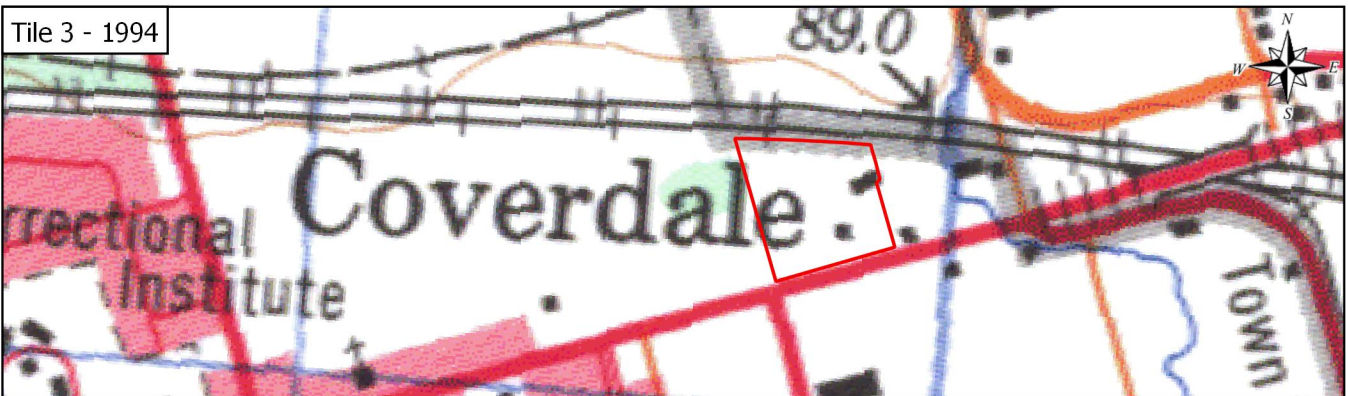
Tile 1 - 1930



Tile 2 - 1969



Tile 3 - 1994



Legend

 Study Area

Tile 1 - Canada, Department of National Defence, Port Hope, Ontario. 1:63,360. Map Sheet 030M16, [ed.1], 1930

Tile 2 - Canada, Department of Energy, Mines and Resources [Natural Resources Canada], Cobourg, Ontario. 1:50,000. Map Sheet 30 M/16, [ed.1], 1969.

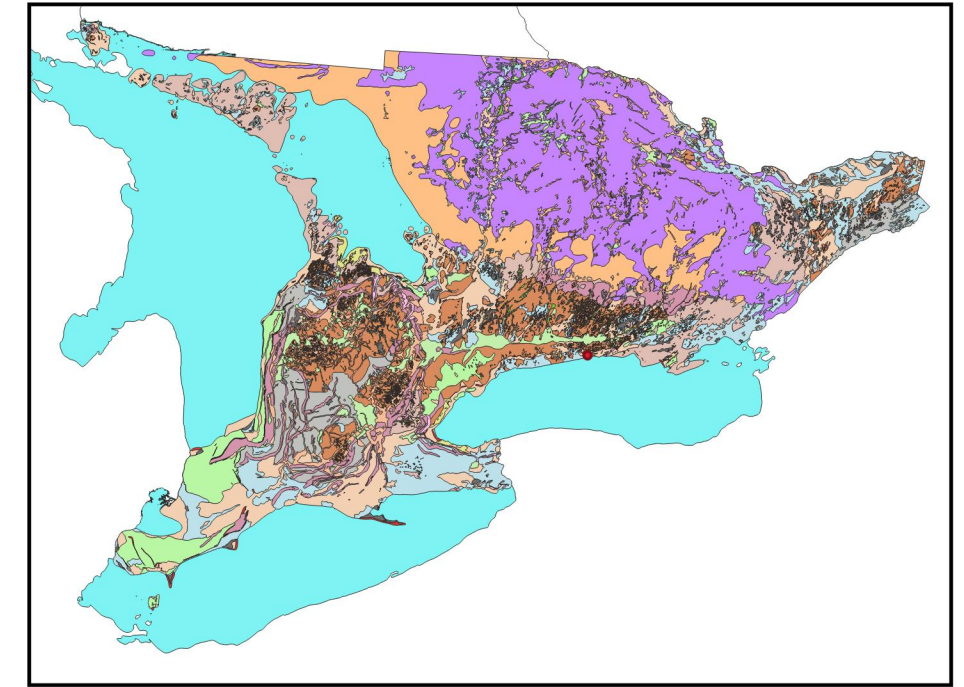
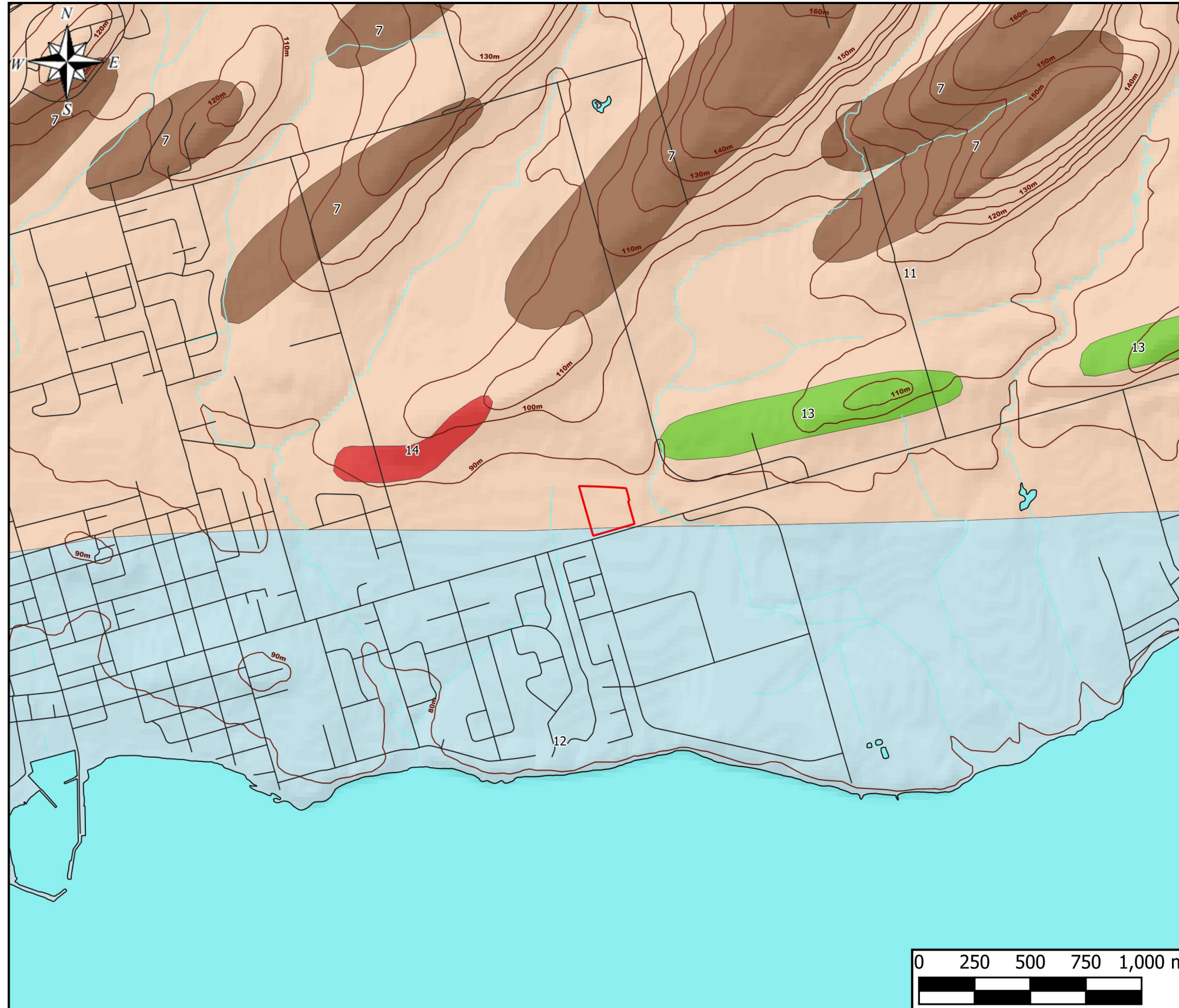
Tile 3 - Canada, Department of Energy, Mines and Resources [Natural Resources Canada], Port Hope, Ontario. 1:50,000. Map Sheet 30 M/16, [ed.6], 1994.

0 100 200 300 400 m










Map 4: Twentieth Century Topographic Mapping

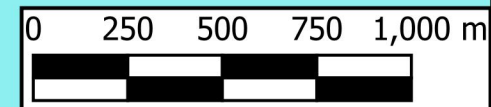




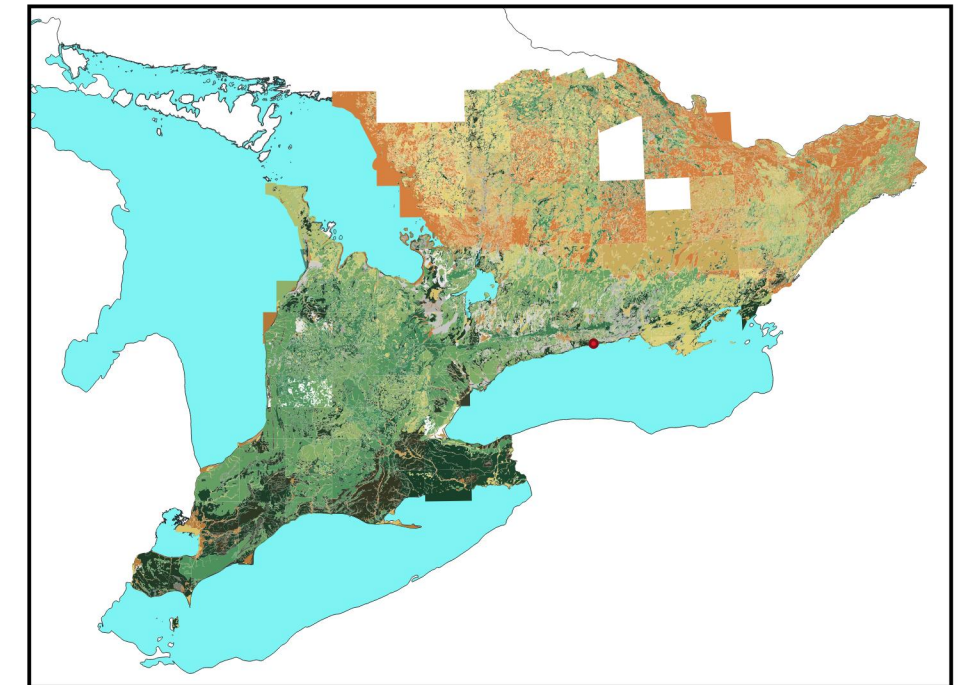
Legend

-  Study Area
-  Road Network
-  7 - Drumlins
-  11 - Sand Plains
-  12 - Clay Plains
-  13 - Eskers
-  14 - Beaches

Base Data:
Chapman, L.J. and Putnam, D.F. 2007. Physiography of southern Ontario; Ontario Geological Survey, Miscellaneous Release—
Data 228.



Map 5: Physiographic Landforms



Legend

- Study Area
- Road Network
- 3 - Limy mudrock and clastic sedimentary rock (Carbonate)
- 5b - sandy silt to sand till; 3% stone content
- 8a - Silt and clay; massive to laminated
- 9b - Gravelly sand and gravel; 1-5m thick; raised shorelines
- 9c - Sand and silty sand; 1->50m thick
- 18, 17, 14b - Sand, gravel, and diamicton; 1-3m thick
- 19 - Gravel, sand, silt, clay, muck; 1-2m thick

Base Data:
 Ontario Geological Survey 2010. Surficial geology of Southern Ontario; Ontario Geological Survey, Miscellaneous Release--Data 128-REV ISBN 978-1-4435-2483-4

Map 5: Surficial Geology



Legend

- Study Area
- Road Network
- 6 - Stream Courses
- B - Bondhead Loam
- Br - Brighton Sandy Loam
- Fa - Foxboro Fine Sandy Loam
- Gr - Granby Sandy Loam
- Pe - Percy Fine Sandy Loam
- Sh - Schomberg Silt Loam
- S - Schomberg Silty Clay Loam
- Se - Simcoe Silt Loam
- Si - Simcoe Silty Clay Loam
- Sm - Smithfield Silty Clay Loam
- Te - Tecumseth Sandy Loam
- Tr - Trent Fine Sandy Loam
- Mn - Matson Silt Loam

Reference:
 Soil Map of Northumberland County. Soil Survey Report No. 42. Scale 1:63,360

Map 7: Regional Soil Map



Legend

-  Study Area
-  Area of Archaeological Potential
Stage 2 Archaeological Assessment Required

Reference:
Town of Cobourg SCOOP2018 Aerial Imagery

**Map 8: Stage 1
Assessment Results**