

Pickering Harbour Company

Stage 1-2 Archaeological Assessment

591 Liverpool Road

Part of Lot 22, Concession 3, Geographic Township of Pickering, Ontario County, now the City of Pickering, Durham Region, Ontario

Prepared by:

AECOM

410 – 250 York Street, Citi Plaza
London, ON, Canada N6A 6K2

www.aecom.com

519 673 0510 tel
519 673 5975 fax

Licensee: Adria Grant

License: P131

PIF Number: P131-0029-2017

July 24, 2017
Original Report

Project Number: 60540633

Distribution List

# Hard Copies	PDF Required	Association / Company Name
1	Yes	Pickering Harbour Company
0	Yes	Ministry of Tourism , Culture, and Sport
0	Yes	AECOM

Revision History

Revision #	Date	Revised By:	Revision Description

Statement of Qualifications and Limitations

The attached Report (the "Report") has been prepared by AECOM Canada Ltd. ("AECOM") for the benefit of the Client ("Client") in accordance with the agreement between AECOM and Client, including the scope of work detailed therein (the "Agreement").

The information, data, recommendations and conclusions contained in the Report (collectively, the "Information"):

- is subject to the scope, schedule, and other constraints and limitations in the Agreement and the qualifications contained in the Report (the "Limitations");
- represents AECOM's professional judgement in light of the Limitations and industry standards for the preparation of similar reports;
- may be based on information provided to AECOM which has not been independently verified;
- has not been updated since the date of issuance of the Report and its accuracy is limited to the time period and circumstances in which it was collected, processed, made or issued;
- must be read as a whole and sections thereof should not be read out of such context;
- was prepared for the specific purposes described in the Report and the Agreement; and
- in the case of subsurface, environmental or geotechnical conditions, may be based on limited testing and on the assumption that such conditions are uniform and not variable either geographically or over time.

AECOM shall be entitled to rely upon the accuracy and completeness of information that was provided to it and has no obligation to update such information. AECOM accepts no responsibility for any events or circumstances that may have occurred since the date on which the Report was prepared and, in the case of subsurface, environmental or geotechnical conditions, is not responsible for any variability in such conditions, geographically or over time.

AECOM agrees that the Report represents its professional judgement as described above and that the Information has been prepared for the specific purpose and use described in the Report and the Agreement, but AECOM makes no other representations, or any guarantees or warranties whatsoever, whether express or implied, with respect to the Report, the Information or any part thereof.

Without in any way limiting the generality of the foregoing, any estimates or opinions regarding probable construction costs or construction schedule provided by AECOM represent AECOM's professional judgement in light of its experience and the knowledge and information available to it at the time of preparation. Since AECOM has no control over market or economic conditions, prices for construction labour, equipment or materials or bidding procedures, AECOM, its directors, officers and employees are not able to, nor do they, make any representations, warranties or guarantees whatsoever, whether express or implied, with respect to such estimates or opinions, or their variance from actual construction costs or schedules, and accept no responsibility for any loss or damage arising therefrom or in any way related thereto. Persons relying on such estimates or opinions do so at their own risk.

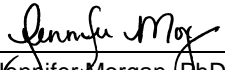
Except (1) as agreed to in writing by AECOM and Client; (2) as required by-law; or (3) to the extent used by governmental reviewing agencies for the purpose of obtaining permits or approvals, the Report and the Information may be used and relied upon only by Client.

AECOM accepts no responsibility, and denies any liability whatsoever, to parties other than Client who may obtain access to the Report or the Information for any injury, loss or damage suffered by such parties arising from their use of, reliance upon, or decisions or actions based on the Report or any of the Information ("improper use of the Report"), except to the extent those parties have obtained the prior written consent of AECOM to use and rely upon the Report and the Information. Any injury, loss or damages arising from improper use of the Report shall be borne by the party making such use.

This Statement of Qualifications and Limitations is attached to and forms part of the Report and any use of the Report is subject to the terms hereof.


Quality Information

Report Prepared By:



Jennifer Morgan, PhD
Intermediate Archaeologist

Report Reviewed By:



Adria Grant, MA, CAHP
Manager, Cultural Resources

Executive Summary

AECOM Canada Ltd. (AECOM) was contracted by the Pickering Harbour Company Ltd. in coordination with the Biglieri Group Ltd. to conduct and Stage 1-2 archaeological assessment for a property located at 591 Liverpool Road in the City of Pickering, Ontario. The study area consists of an approximate 2.1 hectare (ha) parcel of land located on part of Lot 22, Concession 3, Geographic Township of Pickering, Ontario County, now the City of Pickering, Durham Region, Ontario (Figures 1 and 2).

This Stage 1-2 archaeological assessment was conducted to meet the requirements of Section 3 of the *Planning Act*, and Section 2.6 of the most recent Provincial Policy Statement (Ontario Government 1990a). This project is also subject to the *Ontario Heritage Act* (Ontario Government 1990b) and the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011).

AECOM's Stage 1 background study for the property at 591 Liverpool Road in the City of Pickering, Ontario determined that the potential for the recovery of pre-contact First Nation and 19th century Euro-Canadian archaeological resources is high as a result of the proximity of previously identified archaeological sites, general physiography and geographic characteristics, and historic mapping.

The Stage 2 field assessment determined that archaeological potential has been removed from the study area as a result of significant commercial and recreational development. Despite careful scrutiny, the Stage 2 field assessment did not result in the identification of any archaeological resources.

AECOM's Stage 1-2 archaeological assessment for the property at 591 Liverpool Road did not result in the identification of any archaeological resources and determined that the entirety of the study area have been previously disturbed as a result of residential, recreational, and urban development. **In light of these results, no further archaeological work is required for the study area land at 591 Liverpool Road.**

The Ministry of Tourism, Culture and Sport is asked to accept this report into the Ontario Public Register of Archaeological Reports thereby concurring with the recommendations presented herein.

Table of Contents

	page
1. Project Context	1
1.1 Development Context	1
1.1.1 Objectives	1
1.2 Historical Context.....	2
1.2.1 Pre-Contact First Nation Settlement	3
1.2.2 Post-Contact Period Settlement	5
1.2.3 Euro-Canadian Settlement	6
1.2.4 Reports with Relevant Background Information	7
1.3 Archaeological Context	8
1.3.1 Natural Environment.....	8
1.3.2 Known Archaeological Sites	9
1.3.3 Determination of Archaeological Potential	9
1.3.4 Existing Conditions.....	10
2. Field Methods.....	11
3. Record of Finds.....	12
4. Analysis and Conclusions	13
5. Recommendations	14
6. Advice on Compliance with Legislation.....	15
7. Bibliography	16
8. Images	19
9. Figures	22

List of Figures

Figure 1: Location of the Study Area	23
Figure 2: Study Area in Detail	24
Figure 3: Treaties and Purchases, adapted from Morris 1943	25
Figure 4: Portion of Tremaine's 1860 Map of Ontario County	26
Figure 5: Portion of the 1877 Illustrated Historical Atlas of Ontario County	27
Figure 6: Results of the Stage 1-2 Archaeological Assessment.....	28

List of Tables

Table 1: Cultural Chronology for Ontario County.....	2
Table 2: Registered Archaeological Sites within 1 km of the Study Area.....	9
Table 3: Inventory of Documentary Record	12

1. Project Context

1.1 Development Context

AECOM Canada Ltd. (AECOM) was contracted by the Pickering Harbour Company Ltd. in coordination with the Biglieri Group Ltd. to conduct and Stage 1-2 archaeological assessment for a property located at 591 Liverpool Road in the City of Pickering, Ontario. The study area consists of an approximate 2.1 hectare (ha) parcel of land located on part of Lot 22, Concession 3, Geographic Township of Pickering, Ontario County, now the City of Pickering, Durham Region, Ontario (Figures 1 and 2).

This Stage 1-2 archaeological assessment was conducted to meet the requirements of Section 3 of the *Planning Act*, and Section 2.6 of the most recent Provincial Policy Statement (Ontario Government 1990a). This project is also subject to the *Ontario Heritage Act* (Ontario Government 1990b) and the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011).

All archaeological consulting activities were conducted under PIF number P131-0029-2017 issued to Professional Archaeologist Adria Grant, MA, in accordance with the Ministry of Tourism Culture, and Sport's (MTCS) *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011). Permission to enter the property to conduct fieldwork, including the collection of artifacts when present, was provided by Melinda Holland of the Biglieri Group Ltd. on behalf of the Pickering Harbour Company Ltd. No limits were placed on access.

1.1.1 Objectives

The objective of the Stage 1 background study is to document the archaeological and land use history and present conditions of the study area. This information will be used to support recommendations regarding cultural heritage value or interest as well as assessment and mitigation strategies. The Stage 1 research information is drawn from:

- MTCS's Archaeological Sites Database (ASDB) for a listing of registered archaeological sites within a 1 kilometre (km) radius of the study area;
- Reports of previous archaeological assessment within 50 metre (m) of the study area;
- Recent and historical maps of the study area;
- Archaeological management plans or other archaeological potential mapping when available;
- Municipal Registers of listed heritage properties and properties designated under the *Ontario Heritage Act* (Government of Ontario 1990); and,
- Commemorative plaques and monuments identified on or near the property.

The objective of the Stage 2 field survey is to provide an overview of archaeological resources on the property, make a determination as to whether any of the resources might be artifacts or archaeological sites with cultural heritage value or interest requiring further assessment, and to recommend appropriate Stage 3 assessment strategies for any archaeological sites identified.

1.2 Historical Context

Years of archaeological research and assessments in southern Ontario have resulted in a well-developed understanding of the historic use of land in Ontario County from the earliest First Nation people to the more recent Euro-Canadian settlers and farmers. Table 1 provides a breakdown of the cultural and temporal history of past occupations in Ontario County.

Table 1: Cultural Chronology for Ontario County

Archaeological Period	Characteristics	Time Period	Comments
Early Paleo	Fluted Points	9000-8400 BC	Arctic tundra and spruce parkland, caribou hunters
Late Paleo	Holcombe, Hi-Lo and Lanceolate Points	8400-8000 BC	Slight reduction in territory size
Early Archaic	Notched and Bifurcate base Points	8000-6000 BC	Growing populations
Middle Archaic	Stemmed and Brewerton Points, Laurentian Development	6000-2500 BC	Increasing regionalization
Late Archaic	Narrow Point	2000-1800 BC	Environment similar to present
	Broad Point	1800-1500 BC	Large lithic tools
	Small Point	1500-1100 BC	Introduction of bow
Terminal Archaic	Hind Points, Glacial Kame Complex	1100-950 BC	Earliest true cemeteries
Early Woodland	Meadowood Points	950-400 BC	Introduction of pottery
Middle Woodland	Dentate/Pseudo-scallop Ceramics	400 BC – AD 500	Increased sedentism
	Princess Point	AD 550-900	Introduction of corn horticulture
Late Woodland	Early Ontario Iroquoian	AD 900-1300	Agricultural villages
	Middle Ontario Iroquoian	AD 1300-1400	Increased longhouse sizes
	Late Ontario Iroquoian	AD 1400-1650	Warring nations and displacement
Contact Aboriginal	Various Algonkian and Iroquoian Groups	AD 1600-1875	Early written records and treaties
Historic	French and English Euro-Canadian	AD 1749-present	European settlement

Notes: Taken from Ellis and Ferris (1990)

The following sections provide a detailed summary of the archaeological cultures that have settled in the vicinity of the study area. As Chapman and Putnam (1984) illustrate, the modern physiography of southern Ontario is largely a product of events of the last major glacial stage and the landscape is a complex mosaic of features and deposits produced during the last series of glacial retreats and advances prior to the withdrawal of the continental glaciers from the area. Southwestern Ontario was finally ice free by 12,500 years ago. With continuing ice retreat and lake regressions the land area of southern Ontario progressively increased while barriers to the influx of plants, animals, and people steadily diminished (Karrow and Warner 1990). The lands within Ontario County have been extensively utilized by pre-contact First Nation people who began occupying southwestern Ontario as the glaciers receded from the land, as early as 11,000 BC.

1.2.1 Pre-Contact First Nation Settlement

The Paleo Period

In this area the first human settlement can be traced back to 11,000 BC; these earliest well-documented groups are referred to as Paleo which literally means old or ancient. Paleo people were non-agriculturalists who depended on hunting and gathering of wild food stuffs, they moved their encampments on a regular basis to be in the locations where these resources naturally became available and the size of the groups occupying any particular location would vary depending on the nature and size of the available food resources (Ellis and Deller 1990). The picture that has emerged for the early and late Paleo is of groups at low population densities who were residentially mobile and made use of large territories during annual cycles of resource exploitation (Ellis and Deller 1990).

The Archaic Period

The next major cultural period following the Paleo is termed the Archaic, which is broken temporally into the Early, Middle, and Late Archaic periods. There is much debate on how the term Archaic is employed; general practice bases the designation off assemblage content as there are marked differences in artifact suites from the preceding Paleo-peoples and subsequent Woodland periods. As Ellis *et al.* (1990) note, from an artifact and site characteristic perspective the Archaic is simply used to refer to non-Paleo manifestations that pre-date the introduction of ceramics. Ellis *et al.* (1990) stress that Archaic groups can be distinguished from earlier groups based on site characteristics and artifact content.

Early Archaic sites have been reported throughout much of southwestern Ontario and extend as far north as the Lake Huron Basin region and as far east as Rice Lake (Deller *et al.* 1986). A lack of excavated assemblages from southern Ontario has limited understandings and inferences regarding the nature of stone tool kits in the Early Archaic and tool forms other than points are poorly known in Ontario; however, at least three major temporal horizons can be recognized and can be distinguished based on projectile point form (Ellis *et al.* 1990). These horizons are referred to as Side-Notched (*ca.* 8,000-7,700 BC), Corner-Notched (*ca.* 7,700-6,900 BC), and Bifurcated (*ca.* 6,900-6,000 BC) (Ellis *et al.* 1990). Additional details on each of these horizons and the temporal changes to tool types can be found in Ellis *et al.* (1990).

The Middle Archaic period (6,000-2,500 BC), like the Early Archaic, is relatively unknown in southern Ontario. Ellis *et al.* (1990) suggest that artifact traits that have come to be considered as characteristic of the Archaic period as a whole, first appear in the Middle Archaic. These traits include fully ground and polished stone tools, specific tool types including banner stones and net-sinkers, and the use of local and/or non-chert type materials for lithic tool manufacture (Ellis *et al.* 1990).

The Late Archaic begins around approximately 2,000 BC and ends with the beginning of ceramics and the Meadowood Phase at roughly 950 BC. Much more is known about this period than the Early and Middle Archaic and a number of Late Archaic sites are known. Sites appear to be more common than earlier periods, suggesting some degree of population increase. True cemeteries appear and have allowed for the analysis of band size, biological relationships, social organization, and health. Narrow and Small point traditions appear as well as tool recycling wherein points were modified into drills, knives, end scrapers, and other tools (Ellis *et al.* 1990). Other tools including serrated flakes used for sawing or shredding, spokeshaves, and retouched flakes manufactured into perforators, gravers, micro-perforators, or piercers. Tools on coarse-grained rocks such as sandstone and quartz become common and include hammerstones, net-sinkers, anvils, and cobble spalls. Depending on preservation, several Late Archaic sites include bone and/or antler artifacts which likely represent fishing toolkits and ornamentation. These artifacts include bone harpoons, barbs or hooks, notched projectile points, and awls. Bone ornaments recovered have included tubular bone beads and drilled mammal canine pendants (Ellis *et al.* 1990).

Throughout the Early to Late Archaic periods the natural environment warmed and vegetation changed from closed conifer-dominated vegetation cover, to the mixed coniferous and deciduous forest in the north and deciduous vegetation in the south we see in Ontario today (Ellis *et al.* 1900). During the Archaic period there are indications of increasing populations and decreasing size of territories exploited during annual rounds; fewer moves of residential camps throughout the year and longer occupations at seasonal campsites; continuous use of certain locations on a seasonal basis over many years; increasing attention to ritual associated with the deceased; and, long range exchange and trade systems for the purpose of obtaining valued and geographically localized resources (Ellis *et al.* 1990).

The Woodland Period

The Early Woodland period is distinguished from the Archaic period primarily by the addition of ceramic technology, which provides a useful demarcation point for archaeologists but is expected to have made less difference in the lives of the Early Woodland peoples. The settlement and subsistence patterns of Early Woodland people shows much continuity with the earlier Archaic with seasonal camps occupied to exploit specific natural resources (Spence *et al.* 1990). During the Middle Woodland well-defined territories containing several key environmental zones were exploited over the yearly subsistence cycle. Large sites with structures and substantial middens appear in the Middle Woodland associated with spring macro-band occupations focussed on utilizing fish resources and created by consistent returns to the same site (Spence *et al.* 1990). Groups would come together into large macro-bands during the spring-summer at lakeshore or marshland areas to take advantage of spawning fish; in the fall inland sand plains and river valleys were occupied for deer and nut harvesting and groups split into small micro-bands for winter survival (Spence *et al.* 1990). This is a departure from earlier Woodland times when macro-band aggregation is thought to have taken place in the winter (Ellis *et al.* 1988; Granger 1978).

The period between the Middle and Late Woodland period was both technically and socially transitional for the ethnically diverse populations of southern Ontario and these developments laid the basis for the emergence of settled villages and agriculturally based lifestyles (Fox 1990). The Late Woodland period began with a shift in settlement and subsistence patterns involving an increasing reliance on maize horticulture. Corn may have been introduced into southwestern Ontario from the American Midwest as early as 600 AD; however, it did not become a dietary staple until at least three to four hundred years later. A more sedentary lifestyle was adopted by the Ontario Iroquoians and villages with longhouses and palisades were occupied by large numbers of people. Increased warfare is inferred from the defensive placement of village walls and recorded changes over time in village organization are taken to indicate the initial development of the clans which were a characteristic of the historically known Iroquoians.

The Late Woodland period began with a shift in settlement and subsistence patterns involving an increasing reliance on corn horticulture. Corn may have been introduced into southwestern Ontario from the American Midwest as early as 600 AD; however, it did not become a dietary staple until at least three to four hundred years later. The first agricultural villages in southwestern Ontario date to the 10th century AD. Unlike the riverine base camps of the Middle Woodland period, these sites are located in the uplands, on well-drained sandy soils. Categorized as "Early Ontario Iroquoian" (900-1300 AD), many archaeologists believe that it is possible to trace a direct line from the Iroquoian groups which inhabited Southwestern Ontario at the time of first European contact, to these early villagers

Village sites dating between 900 and 1300 AD, share many attributes with the historically reported Iroquoian sites, including the presence of longhouses and sometimes palisades. However, these early longhouses were actually not all that large, averaging only 12.4 metres (m) in length. It is also quite common to find the outlines of overlapping house structures, suggesting that these villages were occupied long enough to necessitate re-building. The Jesuits reported that the Huron moved their villages once every 10-15 years, when the nearby soils had been depleted by farming and conveniently collected firewood grew scarce. It seems likely that Early Ontario Iroquoians

occupied their villages for considerably longer, as they relied less heavily on corn than did later groups, and their villages were much smaller, placing less demand on nearby resources.

Judging by the presence of carbonized corn kernels and cob fragments recovered from sub-floor storage pits, agriculture was becoming a vital part of the Early Ontario Iroquoian economy. However, it had not reached the level of importance it would in the Middle and Late Ontario Iroquoian periods. There is ample evidence to suggest that more traditional resources continued to be exploited, and comprised a large part of the subsistence economy. Seasonally occupied special purpose sites relating to deer procurement, nut collection, and fishing activities, have all been identified. While beans are known to have been cultivated later in the Late Woodland period, they have yet to be identified on Early Ontario Iroquoian sites.

The Middle Ontario Iroquoian period (1300-1400 AD) witnessed several interesting developments in terms of settlement patterns and artifact assemblages. Changes in ceramic styles have been carefully documented, allowing the placement of sites in the first or second half of this 100-year period. Moreover, villages, which averaged approximately 0.6 hectares (ha) in extent during the Early Ontario Iroquoian period, now consistently range between one and two ha. House lengths also change dramatically, more than doubling to an average of 30 m, while houses of up to 45 m have been documented. A number of hypotheses have been put forward to explain this radical increase in longhouse length. The simplest possibility is that increased house length is the result of a gradual, natural increase in population. Other possible explanations involve changes in economic and socio-political organization. One suggestion is that during the Middle Ontario Iroquoian period small villages were amalgamating to form larger communities for mutual defense. If this was the case, the more successful military leaders may have been able to absorb some of the smaller family groups into their households, thereby requiring longer structures. This hypothesis draws support from the fact that some sites had up to seven rows of palisades, indicating at least an occasional need for strong defensive measures. There are, however, other Middle Ontario Iroquoian villages which had no palisades present.

Initially at least, many of the trends observed in the Late Ontario Iroquoian period (1400-1650 AD) continue into the proceeding century. For instance, between 1400 and 1450 AD house lengths continue to grow, reaching an average length of 62 m. One longhouse excavated on a site southwest of Kitchener, Ontario spanned an incredible 123 m. After 1450 AD, house lengths begin to decrease, with houses from 1500-1580 AD averaging only 30 m length. Why house lengths decrease after 1450 AD is poorly understood, but it is believed that drastically shorter houses documented on historic period sites may be partially attributed to population reductions associated with the introduction of European diseases.

1.2.2 Post-Contact Period Settlement

The post-contact Indigenous occupation of southern Ontario was heavily influenced by the dispersal of Iroquoian speaking peoples, such as the Huron, Petun and Neutral by the New York State Confederacy of Iroquois, followed by the arrival of Algonkian speaking groups from northern Ontario. The Ojibwa of southern Ontario date from about 1701 and occupied the territory between Lakes Huron, Erie and Ontario (Schmalz 1991). This is also the period in which the Mississaugas are known to have moved into southern Ontario and the Great Lakes watersheds (Konrad 1981) while at the same time the members of the Three Fires Confederacy, the Chippewa, Ottawa and Potawatomi were immigrating from Ohio and Michigan (Feest and Feest 1978). As European settlers encroached on their territory the nature of Aboriginal population distribution, settlement size and material culture changed. Despite these changes it is possible to correlate historically recorded villages with archaeological manifestations and the similarity of those sites to more ancient sites reveals an antiquity to documented cultural expressions that confirms a long historical continuity to Iroquoian systems of ideology and thought (Ferris 1009).

The study area falls within the limits of the Williams Treaty made on October 31, 1923, after the Canadian Government made an inquiry into the status of land surrenders in Upper Canada. The Government determined that a new treaty should be undertaken for lands in Central Ontario. Two separate treaties were negotiated for the surrender of lands in Central Ontario and along the northern shoreline of Lake Ontario. The study area falls within the Williams Treaty that comprises parts of the Counties of Northumberland, Durham, Ontario, and York:

Commencing at the point where the easterly limit of that portion of the lands said to have been ceded in 1787, which was confirmed on the first of August, 1805, of record as No. 13 in Volume One of the Book of Surrenders, intersects the northerly shore of Lake Ontario; thence northerly along the said easterly and northerly limits of the confirmed tract to the Holland River; thence northerly along the Holland River and along the westerly shore of Lake Simcoe and Kempenfeldt Bay to the narrows between Lake Couchiching and Lake Simcoe; thence south easterly along the Talbot River to the boundary between the Counties of Victoria and Ontario; thence southerly along that boundary to the north west angle of the Township of Darlington; thence along the northern boundary of the Townships of Darlington, Clarke, Hope and Hamilton to Rice Lake; thence along the southern shore of said Lake to River Trent, and along the River Trent to Bay of Quinte; thence westerly and southerly along the shore of the Bay of Quinte to the road leading to Carrying Place and Wellers Bay; then westerly along the northern shore of Lake Ontario to the place of beginning.

Morris 1943:62

The above treaty includes the portion of southern Ontario to the east of the Toronto Purchase as far as the Trent River and bounded to the south by Lake Ontario and to the north by Lake Simcoe and Treaty No. 20 (Figure 3). The Government of Canada and two distinct First Nations groups were involved in the Williams Treaty, The Mississauga of Rice Lake, Mud Lake, Scugog Lake, and Alderville, and the Chippewa of Christian Island, Georgina Island, and Rama (Surtees 1986). At the time of the Williams Treaties, much of the land involved was already being used by the government for settlement and the exploitation of natural resources, including lumber and mineral extraction.

1.2.3 Euro-Canadian Settlement

The study area at 591 Liverpool Road falls on part of Lot 22, Concession 3, Geographic Township of Pickering, Ontario County, now the City of Pickering, Durham Region, Ontario. A discussion of the early settlement of these areas provides general context for the historical development of the region and the possible identification of specific features indicating historic Euro-Canadian archaeological potential.

Ontario County

The original County of Ontario was formed in 1792 as part of the Eastern District and included the island on the St. Lawrence River. In 1800, this county was dissolved and the islands were re-assigned to the nearest mainland counties. The second Ontario County was created in 1851 from the eastern portion of York County (Armstrong 2004). Ontario County originally housed nine townships – Brock, Mara, Rama, Pickering, Reach, Scott, Thorah, Uxbridge, and Whitby (J.H. Beers and Co. 1877). A number of villages were also incorporated as separate municipalities in the County after its formation including Port Perry in 1871, Uxbridge in 1872, Cannington in 1878, and Beaverton in 1884. The Village of Pickering was incorporated as a Village in 1953. In 1973, the area of Ontario County south of the Trent Severn Waterway, along with half of adjacent Durham County to the east, was amalgamated into what is now the Regional Municipality of Durham. The remaining portion of Ontario County to the north was transferred to Simcoe County and Ontario County was dissolved (Armstrong 2004).

Pickering Township

The Township of Pickering was initially surveyed in 1791 by Augustus Jones, Deputy Provincial Land Surveyor and was designated as Township 8 and later renamed Edinburgh before becoming Pickering. The first documented settler in Pickering was William Peak, who arrived in 1798. Peak was a reputable trader and interpreter with local First Nations and settled along the lakeshore at the mouth of Duffins Creek (Armstrong 1985). The westernmost portion of the township was settled in part by German settlers with the remaining lands settled by Loyalists, emigrants from Europe, and Quakers from both Ireland and the United States (Farewell 1907).

In the 1813 census, Pickering had 180 residents, 40 more than neighbouring Scarborough Township. By the mid-19th century, a number of large farms were established as a result of the increasing demand for wheat production and grist and sawmills were erected at strategic points along the watercourses in the township. Large tracts of land were cleared as were road allowances for the settlement of larger villages and agricultural lands (Wood 1911). At Frenchman's Bay, a well-sheltered Bay along the northern shores of Lake Ontario in south Pickering, the Pickering Harbour Company constructed a channel entrance leading into the Bay in the 1840s. Several decades later, in the 1870s, the Frenchman's Bay Harbour Company built a lighthouse, wharf, and grain elevator along the eastern edge of Frenchman's Bay and a small village grew around this development (Welch and Payne 2012).

19th Century Land Use on Lot 22, Concession 3, Pickering Township

The 1860 *Tremaine's Map of the County of Ontario* and the 1877 *Illustrated Historical Atlas of Ontario County* (J.H. Beers and Co.) were reviewed to identify the presence of any historic features within the study area during the 19th century settlement of the township.

The 1860 *Tremaine's Map* depicts the subject property fronted on present-day Liverpool Road, an early concession road in Pickering Township. Lot 22 has been severed into three parcels owned by, from north to south, Weston Palmer, Stephen Gardiner, and John Palmer. The study area falls on the southern portion of Lot 23 that is owned by John Palmer. No settlement features are illustrated within the study area or in close proximity on the 1860 map; however, to the west of the property on adjacent Lot 23, the land has been severed for urban development along the shoreline of Frenchmans Bay (Figure 4).

By 1877, the southern portion of Lot 23 had changed ownership from John Palmer to J. Hill. A large wetland makes up most of the lot with the exception of the northwest corner where a structure is now illustrated. At this time, the settlement along Frenchman's Bay had not undergone any significant urban expansion. To the north, the Liverpool Post Office is illustrated at the intersection of present-day Liverpool Road and Kingston Road.

In addition to Liverpool Road, historic transportation routes in proximity to the study area include the Grand Trunk Railway, present-day Bayly Street, and Kingston Road, all of which are located north of the study area and were constructed prior to 1860 (Tremaine 1860).

1.2.4 Reports with Relevant Background Information

To inform the current Stage 1-2 archaeological assessment and further establish the archaeological context of the study area, a search of the ASDB was conducted by AECOM on April 6, 2017 to determine if any previous archeological work has been completed within the current study area or within 50 m of the study area boundaries. Two archaeological reports concerning work to the north of the study area on Lot 22, Concession 3 were identified.

Archaeological Services Inc. (ASI) conducted a Stage 1-2 archaeological assessment for a proposed development on the property located at 747 Liverpool Road. The Stage 1 background review determined that there is potential

for the presence of pre-contact First Nation and 19th century Euro-Canadian resources within the subject property. The subsequent Stage 2 field survey did not result in the recovery of archaeological resources and no further work was recommended (ASI 2015).

In 2000, Advance Archaeology conducted a Stage 1-2 archaeological assessment and subsequent Stage 3 site excavation for Glenbrook Homes as part of a proposed townhome development on the east side of Liverpool Road on Lot 22, Concession 3 adjacent to the current study area boundaries. During the course of the assessment, one pre-contact archaeological site was identified, Glenbrook (AkGs-26). The site was subject to Stage 3 excavation in the same year and the land was subsequently cleared of archaeological concern.

In addition to previous archaeological reports, a review of the City of Pickering's Municipal Heritage Register (2008) and Ontario's Historical Plaques map was also conducted to determine the presence of any heritage properties or historically significant sites. This review did not result in the identification of any listed or designated heritage properties or historical plaques within or adjacent to the study area boundaries. An archaeological management plan is currently not in place for the City of Pickering.

To the best of our knowledge, there are no other reports concerning archaeological work conducted within 50 m of the current study area; however, it should be noted that the MTCS does not maintain a database of all properties that have had past archaeological investigations, particularly those properties where no archaeological resources were documented. In consequence, the only way a consultant archaeologist will know that a past assessment has been conducted in a given area is if they have personal knowledge of it, or if the assessment resulted in the discovery and registration of one or more archaeological sites.

1.3 Archaeological Context

1.3.1 Natural Environment

The modern physiography of Southern Ontario is largely a product of events of the last major glacial stage, the Wisconsinan and Late Wisconsinan time (ca. 25,000-10,000 B.P). The landscape in York and Ontario Counties is made up of a complex arrangement of features and deposits produced during the last series of glacial advances and retreats by the Simcoe Lobe and Ontario Lobe of the North American Laurentide ice sheet prior to the withdrawal of the glacier from Southern Ontario (Ellis and Ferris 1990). Those features and deposits that were formed by glacial action are represented by till plains, end moraines, and drumlins.

The study area is situated within the "Iroquois Plain" physiographic region (Chapman and Putnam 1984:190-194). This region is described as:

The lowland bordering Lake Ontario, when the last Glacier was receding but still occupied the St. Lawrence Valley, was inundated with by a body of water known as Lake Iroquois which emptied eastward at Rome, New York State. Its old shorelines, including cliffs, bars, beaches, and boulder pavements are easily identified features....The Iroquois Plain extends around the western part of Lake Ontario, from the Niagara River to the Trent River, its width varying from a few hundred meters to about eight miles.

Chapman and Putnam, 1984:190

The Lake Iroquois Plain region was created approximately 12,500 years ago along the shores of glacial Lake Iroquois and forms the southern boundary of the South Slope, cutting across the Highland Creek watershed. The

soils in this region are comprised largely of permeable lacustrine sandy soils and clay that are well drained, allowing the ground discharge of water to surrounding creeks and rivers.

The estimated location of the glacial Lake Iroquois shoreline is situated north of the study area. Based on the strength of its shorecliffs and beaches, Lake Iroquois was much longer lived than any of the earlier glacial lakes. The lake was, essentially, an enlargement of present-day Lake Ontario which was formed as a result of the glacial blockage of the St. Lawrence River.

1.3.2 Known Archaeological Sites

AECOM conducted a data search of the ASDB on April 6, 2017 to determine if any registered archaeological sites are located within the study area as well as within 1 km of the current study area boundaries. This search resulted in the identification of three registered archaeological sites outside of the limits of the study area boundaries. Table 2 provides details on the registered archaeological sites within 1 km of the current study area.

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

Borden #	Site Name	Cultural Affiliation	Site Type	Development Status
AkGs-2	Ganadatsetiagon	Post-contact	Campsite	
AkGs-26	Glenbrook	Pre-Contact	Lithic scatter	No further CHVI
AkGs-49	Frenchman's Bay Harbour Entrance	Post-Contact	Harbour entrance	

The closest registered archaeological site is Glenbrook (AkGs-26), located on Lot 22, Concession 3, north of the study area boundaries. It was identified during a Stage 1-2 archaeological assessment by Advance Archaeology in 2000 and subsequently subject to Stage 3 archaeological assessment. Based on the findings of the Stage 1 to 3 archaeological work, it was concluded that no further work is required for Glenbrook (AkGs-26).

Ganadatsetiagon (AkGs-2) and Frenchman's Bay Harbour Entrance (AkGs-49) are located further afield to the northwest and southwest of the study area boundaries, respectively. Ganadatsetiagon (AkGs-2) was originally documented in 1911 by W.R. Wood. Frenchman's Bay Harbour Entrance (AkGs-49) was originally documented in 1971 by Scarlett Janusas. Given the age of the original documentation of these archaeological sites, no associated reports or additional details on these sites could be located in the ASDB.

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. The MTCS 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 Determination of Archaeological Potential

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Criteria used by the MTCS to determine areas of archaeological potential are listed in Section 1.3.1 of the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011). Distance

to modern or ancient water sources is generally accepted as the most important element for past human settlement patterns and when considered alone may result in a determination of archaeological potential. In addition, any combination of two or more of the listed criteria indicates archaeological potential.

Based on a review of the historical, environmental, and archaeological context of the study area, it has been determined that potential for the recovery of pre- and post-contact First Nation and 19th century Euro-Canadian archaeological resources within the study area is high based on the presence of the following:

- Proximity to three previously identified archaeological sites;
- Distance to various types of water sources (Frenchman's Bay/Lake Ontario);
- Glacial geomorphology (Proximity to glacial Lake Iroquois shoreline);
- Areas of early Euro-Canadian industry (Frenchman's Harbour); and
- Areas of early Euro- Canadian settlement and early transportation routes.

Although the potential for the recovery of post-contact First Nation and 19th century Euro-Canadian archaeological resources is high, the identification and recovery of resources is dependent upon the degree of modern land developments and soil alterations. Given the existing conditions of the study area, it is likely that archaeological potential has been removed from the vast majority of the study area.

1.3.4 Existing Conditions

The study area at 591 Liverpool Road is bounded by Liverpool Road to the west, a portion of Frenchman's Bay Harbour to the south, a large wetland to the east, and to the north by a small access road to the Liverpool Road Pumping Station. The study area is comprised primarily of a large parking and boat storage lot, a small area of treed and sloped shoreline, and a small building.

2. Field Methods

The Stage 2 field assessment was conducted on April 7, 2017 under PIF# P131-0029-2017 issued by the MTCS to professional archaeologist Adria Grant, MA, of AECOM. Joseph Cull (R1061) acted as field supervisor and the field investigation involved the physical survey of all land within the study area boundaries. Weather conditions during the field assessment were overcast with light rain and small amounts of wet snow. The average temperature was 2°Celsius (°C) and at no time were conditions detrimental to the identification and/or recovery of archaeological material.

As a result of the field assessment, the majority of the study area at 591 Liverpool Road was determined to be significantly previously disturbed as a result of parking lot construction, a building footprint, and underground electrical and water utilities (~70%). The remaining portions of the study area included permanently wet areas (~15%), areas of steep slope (~10%), and a small, flat treed area of overgrowth adjacent to the shoreline.

In accordance with the *Standards and Guidelines for Consultant Archaeologists* (Section 2.1.2, Standards 1-9, Government of Ontario 2011), portion of the study area comprised of the flat treed area of overgrowth was subject to assessment by the standard shovel test pit method at a 5 m interval. Each test pit was approximately 30 centimetres (cm) in diameter, and was excavated at least 5 cm into sterile subsoil, where it existed. All test pits were examined for stratigraphy, cultural features or evidence of fill. All soil was screened through hardware mesh with an aperture of 6 millimetres (mm) to facilitate the recovery of cultural material and was then used to backfill the pit. The test pit survey indicated significant disturbance in the form of gravel and sandy fill, likely used for the construction of the harbour and surrounding lands. No archaeological resources were identified during the course of the Stage 2 field assessment.

As per the *Standards and Guidelines for Consultant Archaeologists* (Section 7.8.6, Standard 1a, Ontario Government 2011), photograph locations and directions are provided on Figure 6 along with an illustration of the methods used during the Stage 2 field assessment.

3. Record of Finds

This Stage 1-2 archaeological assessment was conducted by employing the methods outlined in Section 2 of this report. Table 3 provides a listing of the documentary record generated by the Stage 2 fieldwork and indicates the location of each document type.

Table 3: Inventory of Documentary Record

Document Type	Quantity	Location	Additional Comments
Field Notes	2	AECOM London Office	In original field folder and stored digitally in project file
Hand Drawn Maps	2	AECOM London Office	In original field folder and stored digitally in project file
Proponent Maps	1	AECOM London Office	Hard copy and digital copy in project file
Digital Photographs	50	AECOM London Office	Stored digitally in project file

Although AECOM's Stage 1 background research determined that the potential for the recovery of archaeological resources is high, the Stage 2 field assessment did not result in the identification of any archaeological resources and confirmed significant disturbance throughout the majority of the study area.

4. Analysis and Conclusions

AECOM's Stage 1 background study for the property at 591 Liverpool Road in the City of Pickering, Ontario determined that the potential for the recovery of pre-contact First Nation and 19th century Euro-Canadian archaeological resources is high as a result of the proximity of previously identified archaeological sites, general physiography and geographic characteristics, and historic mapping.

The Stage 2 field assessment determined that archaeological potential has been removed from the study area as a result of significant commercial and recreational development. Despite careful scrutiny, the Stage 2 field assessment did not result in the identification of any archaeological resources.

5. Recommendations

AECOM's Stage 1-2 archaeological assessment for the property at 591 Liverpool Road did not result in the identification of any archaeological resources and determined that the entirety of the study area have been previously disturbed as a result of residential, recreational, and urban development. **In light of these results, no further archaeological work is required for the study area land at 591 Liverpool Road.**

The Ministry of Tourism, Culture and Sport is asked to accept this report into the Ontario Public Register of Archaeological Reports thereby concurring with the recommendations presented herein.

6. Advice on Compliance with Legislation

This report is submitted to the Ontario Minister of Tourism, Culture and Sport 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 Tourism, Culture and Sport, 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*.

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.

The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ontario Ministry of Consumer Services.

7. Bibliography

Aboriginal Affairs and Northern Development Canada (AANDC)

2013 *Treaty Texts – Upper CanADa Land Surrenders*. Retrieved March 20, 2014 from: <https://www.aadnc-aandc.gc.ca/eng/1370372152585/1370372222012#ucls9>

Advance Archaeology

2000 *Stage 1 to 3 Archaeological Assessment of Part Lot 22, Range 3, Broken Front Concession, Township of Pickering, Durham Region*. CIF# 2000-018-028.

Archaeological Services Inc.

2015 *Stage 1 and 2 Archaeological Assessment of 74 Liverpool Road, Part of Lot 22, Range 3, Geographic Township of Pickering, County of Ontario, City of Pickering, Regional Municipality of Durham*. PIF# P046-0098-2015.

Armstrong, Frederick H.

1985 *Handbook of Upper Canadian Chronology*. Hamilton: Dundurn Press, Ltd.

Boylen, J.C.

1954 *York Township: An Historical Summary 1850-1954*. Toronto: Municipal Corporation of the Township of York and the Board of Education of the Township of York.

Chapman, L. J. and D. F. Putnam

1966 *The Physiography of Southern Ontario*. Second edition. Ontario Research Foundation, University of Toronto Press.

Ellis, C.J., J.A. Fisher and D.B. Deller

1988 Four Meadowood Phase Lithic Artifact Assemblages from Caradoc and Delaware Townships, Southwestern Ontario. *Kewa* 88(8):3-20.

Ellis, Chris J., Ian T. Kenyon and Michael W. Spence

1990 The Archaic. In *The Archaeology of Southern Ontario to AD 1650*, eds. Chris J. Ellis and Neal Ferris. Occasional Publication of the London Chapter, OAS Number 5.

Ellis, Chris J. and D. Brian Deller

1990 Paleo-Indians. In *The Archaeology of Southern Ontario to AD 1650*, eds. Chris J. Ellis and Neal Ferris. Occasional Publication of the London Chapter, OAS Number 5.

Ellis, Christopher J. and Neal Ferris (editors)

1990 *The Archaeology of Southern Ontario to AD 1650*, Eds. Christopher Ellis and Neal Ferris, Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5.

Farewell, J.E.

1907 *County of Ontario. Short Notes as to the Early Settlement and Progress of the County and Brief References to the Pioneers and Some Ontario County Men who have taken a Prominent Part in Provincial and Dominion Affairs*. Whitby: Gazette-Chronicle Press (Reprinted by Mika Publishing, Belleville, 1973)

Feest, Johanna E. and Christian F. Feest

1978 In *Handbook of North American Indians*. Vol.15 Northeast, pp.772-786. B.G. Trigger, Ed. Washington: Smithsonian Institute.

Ferris, Neal

2009 *The Archaeology of Native-lived Colonialism: Challenging History in the Great Lakes*. University of Arizona Press, Tucson.

Fisher, Jaqueline A.

1997 *The Adder Orchard Site: Lithic Technology and Spatial Organization in the BroADpoint Late Archaic*. Occasional Publications of the London Chapter, OAS, Number 3.

Fox, William A.

1990 The Middle to Late Woodland Transition. In *The Archaeology of Southern Ontario to AD 1650*, eds. Chris J. Ellis and Neal Ferris. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5.

Heidenriech, Conrad E.

1990 History of the St. Lawrence - Great Lakes Area to AD 1650. In *The Archaeology of Southern Ontario to AD 1650*, Eds. Christopher Ellis and Neal Ferris, Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5.

J.H. Beers & Co.

1877 *Illustrated Historical Atlas of the County of Ontario*. Toronto: Historical Atlas Publishing Co.

Karrow, P.F. and B.G Warner

1990 The Geological and Biological Environment for Human Occupation in Southern Ontario. In *The Archaeology of Southern Ontario to AD 1650*, eds. Chris J. Ellis and Neal Ferris. Occasional Publication of the London Chapter, OAS Number 5.

Konrad, Victor

1981 An Iroquois Frontier: the North Shore of Lake Ontario during the Late Seventeenth Century. *Journal of Historical Geography* 7(2).

Morris, J.L.

1943 Indians of Ontario. 1964 reprint. Department of Lands and Forests, Toronto

Murphy, Carl and Neal Ferris

1990 The Late Woodland Western Basin Tradition of Southwestern Ontario. In *The Archaeology of Southern Ontario to AD 1650*, eds. Chris J. Ellis and Neal Ferris. Occasional Publication of the London Chapter, OAS Number 5.

Ontario Government

1990a *Ontario Planning Act*. R.S.O. 1990. CHAPTER P.13. Last amendment: 2012, c. 6, Sched. 2, s. 1. Electronic document: http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90p13_e.htm. Last assessed January 1, 2012.

1990b *Ontario Heritage Act*. R.S.O. 1990, CHAPTER O.18, Last amendment: 2009, c. 33, Sched. 11, s. 6. Electronic document: http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90o18_e.htm. Last assessed July 2014.

2011 *Standards and Guidelines for Consultant Archaeologists*. Ministry of Tourism, Culture and Sport.

n.d Archaeological Sites Database (ASDB). Ministry of Tourism, Culture and Sport.

Schmalz, Peter S.

1991 *The Ojibwa of Southern Ontario*. University of Toronto Press.

Spence, Michael W., Robert H. Pihl and Carl R. Murphy

1990 Cultural Complexes of the Early and Middle Woodland Periods. In *The Archaeology of Southern Ontario to AD 1650*, eds. Chris J. Ellis and Neal Ferris. Occasional Publication of the London Chapter, OAS Number 5.

Surtees, Robert

1994 Land Cessions, 1763-1830. In *Aboriginal Ontario Historical Perspectives on the First Nations*, Edward S. Rogers and Donald B. Smith editors. Ontario Historical Studies Series, Dundurn Press.

Wood, W.R.

1911 *Past Years in Pickering*. Maps located in the National Archives No. H3-902.

Wright, James V.

1994 Before European Contact. In *Aboriginal Ontario: Historic Perspectives on the First Nations*. Eds. Edward S. Rogers and Donald B. Smith. Ontario Historical Studies Series, Dundurn Press, Toronto.

8. Images



Photo 1: Evidence of underground hydro utilities along west side of parking area, facing southeast



Photo 2: Parking area overview, facing southeast



Photo 3: Entrance to parking area at Liverpool Road, facing west



Photo 4: Underground water utilities in parking area, facing northwest



Photo 5: Building footprint disturbance at 591 Liverpool Road, facing northeast



Photo 6: Underground water utilities in landscaped area, facing northwest



Photo 7: Underground water utilities adjacent to building and parking area, facing south



Photo 8: Parking area overview, facing southeast



Photo 9: Sloped and wet area at boat launch, note disturbance, facing northwest



Photo 10: Permanently wet area, facing northeast



Photo 11: Steep slope at eastern limit of study area, facing northwest



Photo 12: Sloped (right) and permanently wet (right) areas, facing southwest



Photo 13: Flat area subject to test pit survey, facing east



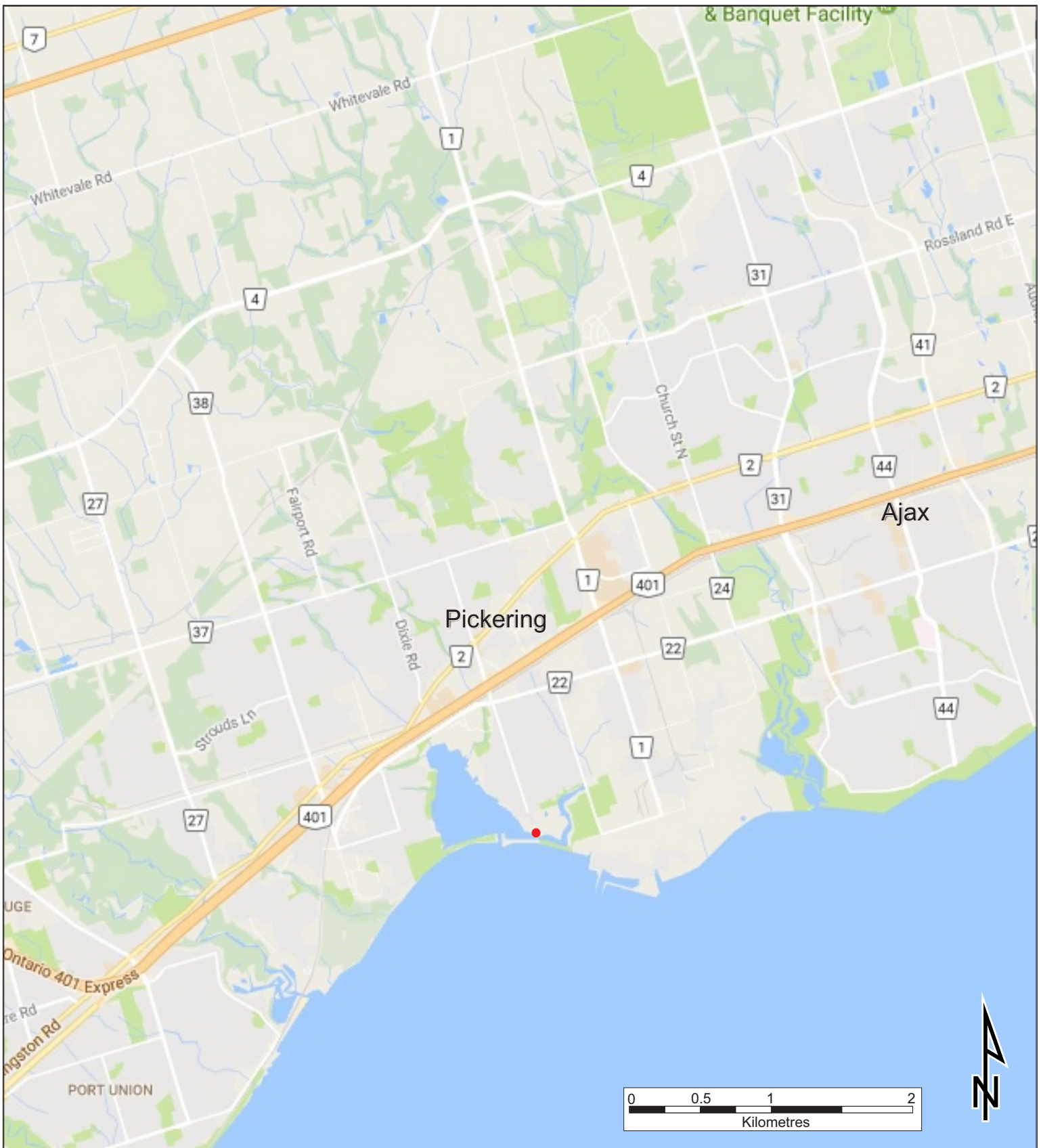
Photo 14: Typical test pit disturbance, note gravelly fill and mottling



Photo 15: Example of disturbance in flat area, note gravelly fill

9. Figures

All figures pertaining to the Stage 1-2 archaeological assessment for 591 Liverpool Road in the City of Pickering, Ontario are provided on the following pages.



Legend
 ● Approximate Location of the Study Area



Stage 1-2 Archaeological Assessment
 591 Liverpool Road
 City of Pickering, Ontario

Figure 1:
 Location of the Study Area

Source: www.bing.com/maps

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its clients, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent.

Date: June 2017

PN: 60540633

Scale: As Shown

Datum: NA



Legend

Study Area



Stage 1-2 Archaeological Assessment
591 Liverpool Road
City of Pickering, Ontario

Figure 2:
Study Area in Detail

Source: www.bing.com/maps

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its clients, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent.

Date: June 2017

PN: 60540633

Scale: As Shown

Datum: NA

Stage 1-2 Archaeological Assessment
591 Liverpool Road
City of Pickering, Ontario

Legend

- Study Area
- Water Body
- Watercourse
- Municipality Boundary - Upper
- Municipality Boundary - Lower
- Treaty Boundary

- A** Treaty No. 381, May 9th. 1781 (Mississauga and Chippewa)
- B** Crawford's Purchase, October 9th, 1783 (Algonquins and Iroquois)
- B(1)** Crawford's Purchase, October 9th, 1783 (Mississauga)
- B(2)** Crawford's Purchase's, 1784, 1787 and 1788 (Mississauga)
- A(2)** John Collins' Purchase, 1785 (Chippewa)
- C** Treaty No. 2, May 19th, 1790 (Odawa, Chippewa, Pottawatomi, and Huron)
- D** Treaty No. 3, December 2nd, 1792 (Mississauga)
- E** Haldimand Tract: from the Crown to the Mohawk, 1793
- F** Tyendingaga: from the Crown to the Mohawk, 1793
- G** Treaty No. 3 $\frac{3}{4}$: from the Crown to Joseph Brant, October 24th. 1795
- H** Treaty No. 5, May 22nd, 1798 (Chippewa)
- I** Treaty No. 6, September 7th, 1796 (Chippewa)
- J** Treaty No. 7, September 7th, 1796 (Chippewa)
- L** Treaty No. 13 August 1st, 1805 (Mississauga)
- M** Treaty No. 13A, August 2nd, 1805 (Mississauga)
- N** Treaty No. 16, November 18th, 1815 (Chippewa)
- O** Treaty No. 18, October 17th, 1818 (Chippewa)
- P** Treaty No. 19, October 28th, 1818 (Mississauga)
- Q** Treaty No. 20, November 5th, 1818 (Chippewa)
- R** Treaty No. 21, March 9th, 1819 (Chippewa)
- S** Treaty No. 27, May 31st, 1819 (Chippewa)
- T** Treaty No. 27 $\frac{1}{2}$, April 25th, 1825 (Ojibwa and Chippewa)
- U** Treaty No. 35, August 13th, 1833 (Wyandot or Huron)
- V** Treaty No. 45, August 9th, 1836 (Chippewa and Odawa), "For All Inidians To Reside Thereon"
- W** Treaty No. 45 $\frac{1}{2}$, August 9th, 1836 (Saugeen)
- X** Treaty No. 57, June 1st, 1847 (Iroquois of St. Regis)
- Z** Treaty No. 61, September 9th, 1850 (Robinson Treaty: Ojibwa)
- AA** Treaty No. 72, October 30th, 1854 (Chippewa)
- AB** Treaty No. 82 February 9th, 1857 (Chippewa)
- AF** Williams Treaty, October 31st and November 15th, 1923 (Chippewa and Mississauga)
- AG** Williams Treaty, October 31st, 1923 (Chippewa)

Approximate Location of Study Area

Source: OBM layers - Natural Resources Canada
Treaty Boundaries - Morris 1943

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its clients, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent.

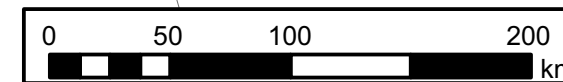
Figure 3:
Treaties and Purchases
Adapted from Morris (1943)

Date: June 2017

PN: 60540633

Scale: 1:3,000,000

Datum: NAD 83 CSRS Canada Atlas Lambert



48°00'N

46°00'N

44°00'N

42°00'N

86°00'W

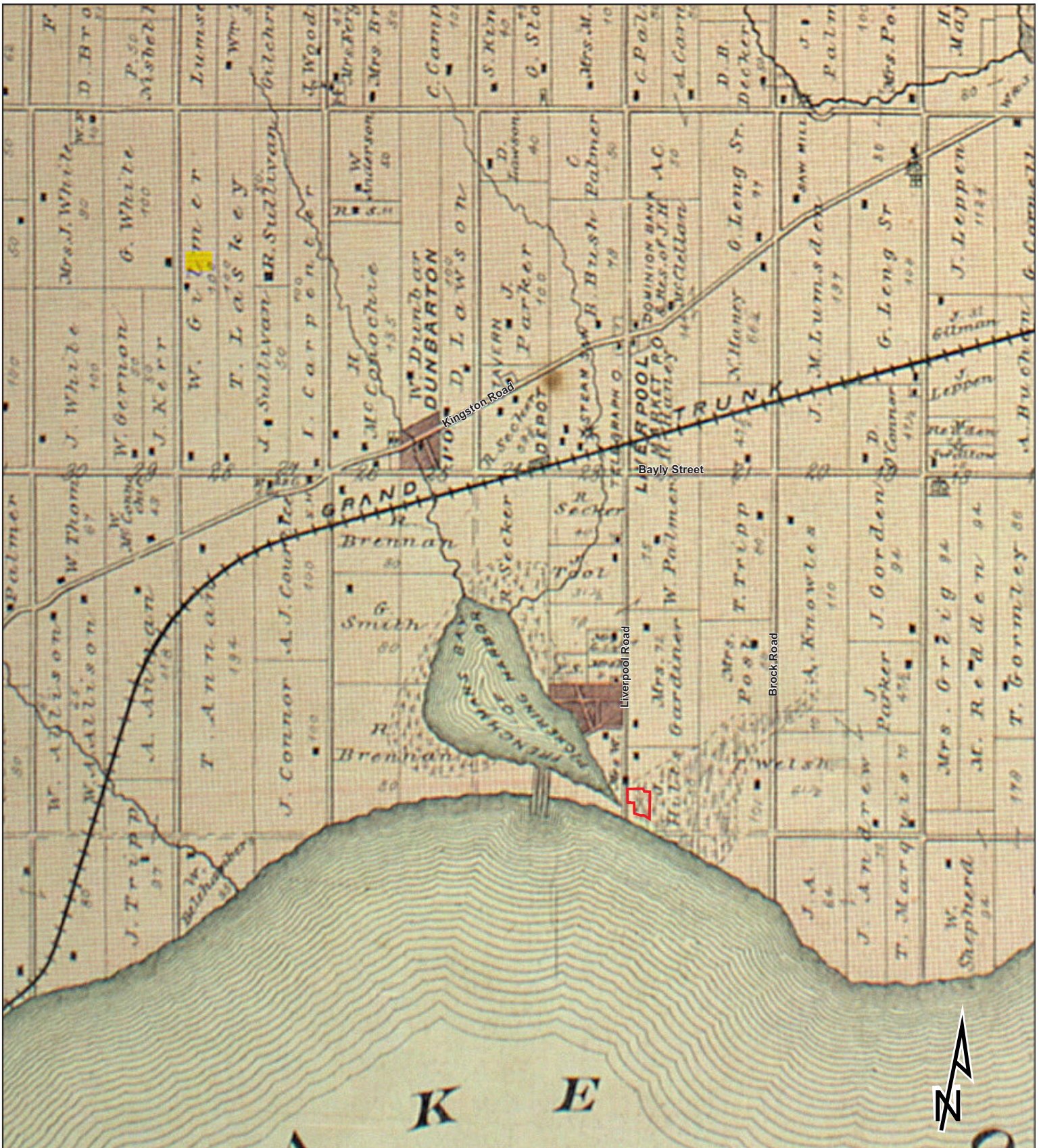
84°00'W

82°00'W

80°00'W

78°00'W

76°00'W



Legend
 Study Area



Stage 1-2 Archaeological Assessment
 591 Liverpool Road
 City of Pickering, Ontario

Figure 5:
 Portion of the 1877 Illustrated Historical Atlas of
 Ontario County

Source: J.H. Beers and Co. 1877

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its clients, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent.






Date: June 2017

PN: 60540633

Scale: NA

Datum: NA



Legend	
	Study Area
	Visually confirmed disturbance
	Test Pit Survey (5m intervals)
	Steeply sloped
	Permanently wet

AECOM

Source: www.bing.com/maps

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its clients, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent.

Stage 1-2 Archaeological Assessment 591 Liverpool Road City of Pickering, Ontario	
Figure 6: Results of the Stage 1-2 Archaeological Assessment	
Date: June 2017	PN: 60540633
Scale: As Shown	Datum: NA

About AECOM

AECOM (NYSE: ACM) is built to deliver a better world. We design, build, finance and operate infrastructure assets for governments, businesses and organizations in more than 150 countries.

As a fully integrated firm, we connect knowledge and experience across our global network of experts to help clients solve their most complex challenges.

From high-performance buildings and infrastructure, to resilient communities and environments, to stable and secure nations, our work is transformative, differentiated and vital. A Fortune 500 firm, AECOM companies had revenue of approximately US\$19 billion during the 12 months ended June 30, 2015.

See how we deliver what others can only imagine at aecom.com and [@AECOM](https://twitter.com/AECOM).

Contact

First name Surname

Job Role

T +xx (x)xx xxxx xxxx

E firstname.surname@aecom.com

First name Surname

Job Role

T +xx (x)xx xxxx xxxx

E firstname.surname@aecom.com