May 7, 2018

Stage 1-2 Archaeological Assessment
On Lot 13, Concession 2 and the road allowance between Concessions 1 and 2,
Municipal Address:
1497, 1499, 1505 and1511 Old Plains Rd. West,
City of Burlington,
Geographic Township of East Flamborough
Regional Municipality of Halton,
Historic County of Halton,
Ontario

Submitted to: *1511 Old Plains Road West Inc.*

And to: *The Ministry of Tourism, Culture and Sport*

Licensee: *Thomas Irvin, Licence Number P379*

PIF Number: *P379-0191-2017*

Report Type: Original

THIS LAND ARCHAEOLOGY INC.

Executive Summary

This Land Archaeology Inc. was contracted by 1511 Old Plains Road West Inc., to conduct a Stage 1 and 2 Archaeological Assessment of their land, located on Lot 13, Concession 2 and the road allowance between Concessions 1 and 2, in the city of Burlington, Ontario.

The Stage 1 study provided background information on the property's geography, history, previous archaeological fieldwork and current land conditions. The background information indicates high Aboriginal and Euro-Canadian archaeological potential. As such, a Stage 2 archaeological assessment of the property is required in accordance with the *2011 Standards and Guidelines* for Consultant Archaeologists.

This report details the Stage 2 assessment, conducted as recommended at the conclusion of the Stage 1 assessment.

The Stage 2 assessment involved a test pit assessment across the extent of the Study Area; and the identification of portions of the property which held low archaeological potential as they were comprised of structures (extant and demolished), driveways, parking areas, and a concrete pad.

No archaeological resources were uncovered.

Since the Stage 2 archaeological assessment did not result in the discovery of any archaeological resources, recommendations are as follows:

- There are no further archaeological concerns associated with the Study Area subject to archaeological assessment. No further archaeological work is required.

It is recommended that this report be entered into the Ontario Public Register of Archaeological Reports and a letter of confirmation be issued by the Ministry of Tourism, Culture and Sport supporting these recommendations.

Project Personnel

Project Director:	Thomas Irvin (P379)
Field Directors:	Colin Yu (R1104)
Field Crew:	Alison Juras Andrew Manners Bob White Brad Bidmead Brianne McDonald Colleen Tamblyn David Finlayson Gwynne Carlos Heather Balvert James Wright Jessie Woodrow Kathleen McGowa Logan Churchill Lon Oldfield Sajeev Bhagowtee Shane Riley Taylor Baxter Terry Sallows Victoria Tesan
Photographs:	Colin Yu
Graphics:	Leslie Town
Report Production:	Thomas Irvin Colin Yu Janine Stroud Victoria Tesan Leslie Town

Table of Contents

Select Table of Contents to jump to subject.

Executive Summary i
Project Personnel ii
Table of Contents iii
1.0 Location and Environment 1
2.0 Project Context 1
2.1 Development Context 1
2.2 Study Area Access & Limitations 1
2.3 Historical Context 2
2.3.1 Pre-Contact History 2
Table 1: Occupation of South-Central Ontario Summary 2
2.3.2 Post-Contact History 2
2.3.3 Project Context: History of the Study Area 3
2.4 Archaeological Context 4
Table 2: Registered sites within a minimum of 1 KM from the Study Area 4
2.5 Stage 1: Analysis and Conclusions 5
2.5.1 Archaeological Potential 5
2.6 Stage 1: Recommendations 6
3.0 Stage 2 Archaeological Assessment 6
3.1 Stage 2: Study Area 6
3.2 Stage 2: Field Methods 6
3.3 Stage 2: Results of Assessment 7
Table 3: Inventory of Stage 2 Records 7
Table 4: UTM Coordinates 8
3.4 Stage 2: Analysis and Conclusions 8
Table 5: Summary of Land Assessed 8
3.5 Stage 2: Recommendations 8
4.0 Advice on Compliance of Legislation 8
5.0 Bibliography 9
Figure 1: Location of Study Area. 1
Figure 2: 1859 Hardy Gregory Illustrated Historical Atlas of the County of Wentworth. 2
Figure 3: 1877 Walker & Miles Illustrated Atlas of the County of Halton. 3
Figure 4: Current Land Use of the Study Area. 4
Figure 5: Archaeological Potential. 5
Figure 6: Results of Assessment with location and direction of photographs. 6
Figure 7: Results of Assessment with survey overlay. 7
Plate 1: Area subject to 5m test pit assessment. 8
Plate 2: Area subject to 5m test pit assessment. 8

Plate 3: Area subject to 5m test pit assessment; and areas of disturbance. 8
Plate 4: Areas subject to 5m test pit assessment; and areas of disturbance. 8
Plate 5: Sample test pit to subsoil. 9
Plate 6: Extant structures and gravel driveway. 9
Plate 7: Test pit with disturbance. 9
Plate 8: Demolished structure with rubble. 9

1.0 Location and Environment

The Study Area is approximately 1.15 hectares in size located at the municipal address of 1497, 1499, 1505 and 1511 Old Plains Road West, City of Burlington, Regional Municipality of Halton, Ontario. The Study Area is predominantly situated within a portion of Lot 13, Concession 2 and small portion of the legal Road Allowance between Concessions 1 and 2, City of Burlington. The Study Area is bordered on the Northwest by an existing parking lot, to the Northeast by the legal easement of Plains Rd. West to the Southeast by legal property limits fronting Old Plains Rd. West, the Southwest by legal easement of Highway 6.

The property is a residential lot containing extant and demolished structures, driveways, parking areas and concrete pads, areas of scrub and manicured lawns are also present. It is located in the Iroquois Plain physiographic region.

2.0 Project Context

2.1 Development Context

This Land Archaeology Inc. was contracted by 1511 Old Plain Road West Inc. to conduct a Stage 1 and 2 Archaeological Assessment of their land, located on Lot 13, Concession 2 and the road allowance between Concessions 1 and 2, City of Burlington, Ontario (Figure 1).

The Stage 1-2 Archaeological Assessment was required by the approval authority for development approval. The proponent is planning on developing the Study Area for residential purposes. The development of residential lands is listed under the Planning Act (R.S.O. 1990) and the Ontario Heritage Act (R.S.O. 1990).

The proponent provided TLA with the property limits and verified the Study Area via the maps provided within this report.

2.2 Study Area Access & Limitations

This Land Archaeology Inc. has been contracted by the proponent to archaeologically assess specific land areas. These areas consist of the lands subject to an archaeological assessment within the current Study.

Permission to enter the property, conduct archaeological assessment, and collect/curate artifacts was given by the proponent. This assessment has been limited by the proponent to the land area, specifically subject to Stage 2 archaeological assessment as reported herein.

2.3 Historical Context

2.3.1 Pre-Contact History

A general summary of the pre-contact and post-contact settlement of South Central Ontario is presented below in Table 1.

Table 1: Occupation of South-Central Ontario Summary

Date	Period	Sub-Period	Culture	Peoples	Diagnostic Traits/Actions
Present A.D. 1780	Historic		Euro-Canadian Algonquian	Europeans Mississaugas	Euro-Canadian Settlement of the land Tribal Displacements and Re-locations
A.D. 1650 A.D. 1400	Terminal Woodland	Late	Ontario	Historic Huron Prehistoric Huron	Dispersal by Five Nations Iroquoians Introduction of European trade goods Village planning for defense Tribal Differentiation and warfare Large palisaded villages common
A.D. 1300		Middle	Iroquoians	Middleport Uren	Elaboration of smoking pipes Introduction of beans Expansion into SW Ontario
A.D. 800		Early		Pickering	Conquest of Glen Meyer peoples by Pickering Peoples from SE Ontario Settled village life
A.D. 800 A.D. 0 1000 B.C	Initial Woodland		Princess Point Saugeen Meadowood		Incipient horticulture Trade with Hopwellian peoples in Ohio Introduction of Bow and Arrow Introduction of Pottery
	Archaic	Late Middle Early			Mortuary ceremonialism Long distance trade Ground stone and copper tools Hunters and gathers Introduction of spear thrower
8000 B.C. 8900 B.C.	Paleo-Indian	Late Early			Big game hunters Occupation of tundra environment Glaciers retreat

2.3.2 General Post-Contact History

John Graves Simcoe, the first Lieutenant Governor of Upper Canada, designated the western portion of Lake Ontario as "Burlington Bay," in 1792. The name originated from the English town of Bridlington, in the East Riding of Yorkshire (Rayburn, 1995). The name "Burlington" was already being used when the land next to the bay was contracted to Captain Joseph Brant, at the end of the 19th century. Local survey of the land was finalized after the War of 1812 and was available for farmers to inhabit. The land possessed fertile soil and moderate temperatures, which made farmers successful. The produce that farmers cultivated was sent to the docks of the small port villages of Port Nelson, Wellington Square,

and Brown's Wharf in Port Flamborough, and shipped out. Lumber was another export sent to the docks, and it was taken from the local forests in the Burlington area. There was an increase in wheat production from Western Canada, which caused competition, and therefore farmers from the Burlington area began to grow fruits and vegetables instead (Conservation Halton Foundation Staff, 1998).

Local ports, Wellington Square and Port Nelson, were amalgamated into the Village of Burlington in 1874. When large steamships appeared on the Great Lakes, the small docks of these local ports became outdated and unnecessary. Railways became another way utilized to export goods, eventually making docks obsolete (Conservation Halton Foundation Staff, 1998).

Farming continued to be a prosperous activity. In 1906, Burlington had a newspaper (*The Burlington Gazette)*, a library, and a rail line that linked Burlington to Hamilton. By 1915, Burlington was included as a town (Conservation Halton Foundation Staff, 1998). As time went on, more farmers came to the Burlington area to settle and farm the land and cash crops displaced subsistence farming (Conservation Halton Foundation Staff, 1998). During the 20th century, Burlington was named the *Garden of Canada*, as mixed farming and market gardens had become the leading method of cultivation. The first peaches that were produced in Canada were farmed in the Grindstone Creek watershed in the southwest part of Burlington. Currently, the Grindstone Creek watershed still allocated over forty percent of its land to farms, orchards, and nurseries (Conservation Halton Foundation Staff, 1998).

2.3.3 Project Context: History of the Study Area

A review of historic resources for this assessment resulted in the discovery of the following relevant maps as follows:

- **1859 Hardy Gregory Illustrated Historical Atlas of the County of Wentworth** (Figure 2): Lot 13 Concession 2 is shown as being owned by a Mrs. Biglow, with the Study Area situated within a subdivision of the lot under ownership of Isaias Hopkins. The legal road allowance between Concession 1 and 2 is also depicted. An unopened road allowance is depicted adjacent to the western edge of the Study Area, and an opened road allowance (the legal right of way between Concession 1 and 2) is also depicted. The Toronto Branch of the Great Western railway is depicted approximately 1km south of the Study Area.

- **1877 Walker & Miles Illustrated Historical Atlas of the County of Halton** (Figure 3): Lot 13 Concession 2 is shown as being subdivided into 11 legal properties. The Study Area is located in a portion of land owned by J. Biglow and within two distinct legal properties with no ownership indicated. These two small properties both have structures depicted, this may suggest that J. Biglow has subdivided his land holdings and sold them off, or erected tenanted properties. The Study Area is adjacent to open road allowances on the western and southern limits. The Toronto Branch of the Great Western railway is depicted approximately 1km south of the Study Area. According to the Index to the 1871 Census of Ontario of Hamilton and Wentworth, there was a 31year old farmer named J. Bigelow *[sic]* born in Ontario but was of

> English heritage. However, there is not a lot or concession provided to compare J. Biglow [*sic*], owner of Lot 13, Concession 2 (Ontario Genealogical Society, 1987).

It should be noted that some historic atlas maps charged land owners subscription fees to have their properties mapped. As such a lack of depicted structures should not be interpreted as a historic lack of any such structures or occupation.

As per a search conducted with the Ministry of Consumer Services on December 12, 2017 the Study Area contains no registered cemeteries. Nor did it contain any structures designated under Section IV of the Ontario Heritage Act.

A search of commemorative plaques in the Ontario Historical Plaques inventory indicated that no commemorative plaques or monuments to exist within or in close proximity to the Study Area.

According to the historical sources consulted, the current Study Area has been used for agricultural purposes since the onset of settlement in the area.

2.4 Archaeological Context

A review of the Ontario Sites Database was conducted to determine the nature of any known archaeological sites within a 1 km radius of the Study Area. A centroid of the Study Area was selected at UTM 17T 589546.24 E; 4794471.96 N, in conjunction with the property dimensions along a cardinal axis from this centroid was used to conduct the search in the Sites Module.

This search established that there are currently 4 known archaeological sites within 1 km of the Study Area. These sites are shown below.

A review of the information provided from the Ontario Sites Database indicates that there are no registered archaeological resources within the current Study Area, or within 50m.

Table 2: Registered sites within a minimum of 1 KM from the Study Area

Borden Number	Site Name	Time Period	Site Type
AhGx-640	Broman	Post-Contact, Pre-Contact	Scatter
AhGx-505	-	-	-
AhGx-504	-	Archaic, Late	Other camp/campsite
AhGx-503	-	Pre-contact	Other camp/campsite

The field director was conscious and mindful of these sites; however, they did not impact the methods used for the assessment.

There is no documentation readily available for the Study Area which would indicate that previous archaeological assessments have been conducted on or within 50m of the Study Area.

The Study Area appears to be comprised predominantly of a residential lot containing extant and demolished structures, driveways, parking areas, concrete pad development, with areas of scrub and manicured lawns (Figure 4).

The surficial geology of the Study Area indicates the land is solely comprised of diamicton (poorly sorted materials). The topography is relatively flat sitting at 130 metres a.s.l.

2.5 Stage 1: Analysis and Conclusions

2.5.1 Archaeological Potential

As per the *2011 Standards and Guidelines* for Consultant Archaeologists, a Study Area with high archaeological potential requires assessment, whereas one with low potential does not. Several factors are employed in determining a property's archaeological potential, which includes both Euro-Canadian and Aboriginal potential. Criteria include physiographic variables such as a property's distance from a water source, as well as geographic characteristics such as distinct topographic features and soils which may also indicate archaeological potential. Also, considered in determining archaeological potential is the presence of known archaeological sites within or in the vicinity of the Study Area. Since water sources have remained relatively stable in Southern Ontario since the post-glacial period, proximity to water is regarded as a useful index for the evaluation of archaeological site potential for both the Aboriginal and Euro-Canadian periods of occupation. Furthermore, areas of early Euro-Canadian settlement and proximity to historic transportation corridors such as roads and railways also affect a property's historic archaeological potential.

According to the background information sources consulted, the following characteristics indicate high Pre-Contact and high Euro-Canadian archaeological potential for the property as per the *2011 Standards and Guidelines* for Consultant Archaeologists:

- There are 4 known archaeological sites located within 1 km of the Study Area;
- The Study Area is in close proximity to early historic transportation route as depicted on the 1859 and 1877 atlas maps;
- Historic structures are depicted within the limits of the Study Area per the 1877 historic atlas map.

The Regional Municipality of Halton, 2008 Archaeological Master Plan, was also consulted, it does not show archaeological potential for the Current Study Area.

2.6 Stage 1: Recommendations

Given the archaeological potential indicators, a Stage 2 Archaeological Assessment of portions of the Study Area is recommended in accordance with the *2011 Standards and Guidelines* for Consultant Archaeologists (Figure 5). This includes:

- A test pit assessment of areas where a visual pedestrian survey cannot be undertaken. This involves systematically excavating test pits, 30 cm in diameter, by hand at 5 metre intervals, screening the soil through a 6 mm mesh to recover artifacts and examining the profiles of the test pit for cultural stratigraphy. Test pits are dug 5 cm into subsoil and are then backfilled.

- Portions of the property that are found to hold low/no archaeological potential during the Stage 2 assessment will be identified during fieldwork; recorded, photographed, mapped and shown on the results of assessment.

3.0 Stage 2 Archaeological Assessment

3.1 Stage 2: Study Area

This report documents the Stage 2 assessment of the Study Area, 1.15 hectares as recommended at the conclusion of the Stage 1 assessment.

3.2 Stage 2: Field Methods

The Stage 2 Archaeological Assessment of the Study Area was conducted as recommended at the conclusion of the Stage 1 assessment (Figure 5).

The Stage 2 assessment was conducted on May 1, 2018. Weather was cold and cloudy however lighting conditions were acceptable for the identification of cultural and land features, as well as artifacts.

The Study Area boundary was Georeferenced using a Geo-7X Trimble Differential GPS accurate to 10cm to ensure all areas requiring assessment were assessed.

A total of 1.15 hectares was subject to assessment. Table 5 summarizes the assessment methods and percentages of land assessed by each method.

Fieldwork involved a Test Pit assessment of lands not viable for ploughing as they were comprised of lawn and scrub brush and the identification of areas of low potential.

The Test Pit assessment was conducted at 5m intervals on 1.04 hectares of land.

Test Pits were 30 cm in diameter and were dug within 1 m of all structures, both intact and ruins where present. Each test pit was dug by hand into the first 5 cm of subsoil and examined for stratigraphy, cultural features and evidence of fill. Soil was screened through 6

mm mesh to facilitate the recovery of artifacts before backfilling. The soil was damp but not wet which allowed for the examination of profiles. Test pits were then backfilled.

The majority of the Study Area, 1.04 hectares was subject to a test pit assessment, conducted at 5 m transects and within 1 m of structures, gravel driveways, areas of disturbance (Plates 1-4). While trees were located on the property, this did not impede the 5 m transect survey.

The top soil was a brown-red clay, subsoil was comprised of a red clay (Plate 5).

Approximately 0.11 hectares were assessed as holding low archaeological potential. They were comprised of extant structures, a demolished structure with concrete pad, driveway, and parking illustrated in Plates 6 to 8. Within the area surrounding the demolished structure, judgmental test pits showed evidence of gravel disturbance (Plate 7).

No artifacts or evidence of any archaeological resources were identified in any of the test pits.

3.3 Stage 2: Results of Assessment

No archaeological resources were found during the Stage 2 assessment.

Figures illustrating the assessment are presented as follows:

Figure 6:	Results of Assessment with location and direction of photographs.
Figure 7:	Results of Assessment with survey overlay.

Table 3 below is an inventory of the documentary records that were generated in the field for Stage 2; and the background research conducted. All records are stored at the TLA Head Office, 372 Moonstone Road East, Moonstone, Ontario.

Table 3: Inventory of Stage 2 Records

- Field notes, drawings and paper records are in a file titled "Stage 2 Archaeological Assessment of 1511 Old Plains Road West Inc.'s Property, Burlington, Ontario";
- Field photography, digital images, research; analysis; reporting materials are stored on TLA computers and external back-up media.

Permanent reference points are shown below in Table 4.

Table 4: UTM Coordinates

Two Permanent Reference Points		
Figure 6		
Point	UTM X	UTM Y
1	589460.35	4794471.72
2	589530.32	4794535.00

3.4 Stage 2: Analysis and Conclusions

The Study Area was subject to a Stage 2 assessment which included a test pit assessment at 5m transects of 1.04 hectares of property; the identification of areas of low potential totaling .11 hectares (comprised of structures, driveways and parking areas).

No archaeological resources were found.

Table 5: Summary of Land Assessed

Stage 2 Assessment	Hectares
Test Pit Survey @ 5m intervals	1.04
Sub Total	**1.04**
Low Potential	
Structures, Driveway, Parking Area	0.11
Sub Total	**0.11**
Total Study Area	**1.15**

3.5 Stage 2: Recommendations

Since the Stage 2 archaeological assessment did not result in the discovery of any archaeological resources, recommendations are as follows:

- There are no further archaeological concerns associated with the Study Area subject to archaeological assessment. No further archaeological work is required.

4.0 Advice on Compliance of Legislation

This report is submitted to the Ministry of Tourism and Culture 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 field work 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 and Culture, 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 archaeological field work 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 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 field work, in compliance with Section 48 (1) of the Ontario Heritage Act.

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 any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

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 licence.

5.0 Bibliography

Archaeological Services Inc. (2008). Regional Municipality of Halton Archaeological Master Plan, SustainableHalton_P3_Report-3-06%20(1).pdf

Conservation Halton Foundation Staff. (1998). *Halton: Rising, Wild and Beckoning*. Conservation Halton.

Crossby and Lovell, 1873. *Lovell's Gazetteer of British North America.* Montreal and Rouse's Point: Lovell Printing and Publishing Company. Retrieved from https://babel.hathitrust.org/cgi/pt?id=hvd.hn2nhb;view=1up;seq=9

ESRI Canada. (2015). Digital Globe, GeoEye, I-Cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS user Community [software]. Available from http://www.esri.ca/en

First Base Solutions. (2015). Ontario Base Mapping [software]. Available from http://www.firstbasesolutions.com/

Government of Ontario
Funeral, Burial and Cremation Services Act (2002). http://www.search.e-laws.gov.on.ca/en/isysquery/4df81715-b-552-4fa4-8098-d72607430cdb/1/doc/?search=browseStatutes&context=hit1

Ministry of Tourism, Culture and Sport. (2011). *Standards and Guidelines for Consultant Archaeologists.* Toronto: Queen's Printer.

Ontario Geological Survey. (n.d.). Surficial Geology Data for Southern Ontario [Computer software]. Sudbury: Ontario Ministry of Northern Development and Mines.

Ontario Heritage Act (1990a). http://www.search.elaws.gov.on.ca/en/isysquery/22cb421e-c632-498a-a9d8-Ofe5ff80454f/1/doc/?search=browseStatutes&context=hit1

Ontario Heritage Trust (2018). http://www.heritagetrust.on.ca/en/index.php/online-plaque-guide

Hardy Gregory, (1859). Illustrated Historical Atlas of the County of Wentworth.

Ontario Genealogical Society. (1987). *Index to the 1871 Census of Ontario: Hamilton-Wentworth*. Toronto, ON.

Rayburn, A. (1995). *Place Names of Ontario*. Toronto, ON: University of Toronto Press.

Smith, W. H. (1846) *Canadian Gazetteer*. Retrieved from https://archive.org/details/smithscanadianga00smit

Walker & Miles (1877). [Historical Mapping] *Illustrated Historical Atlas for Halton County*. Retrieved from http://digital.library.mcgill.ca/countyatlas/searchmap frames.php

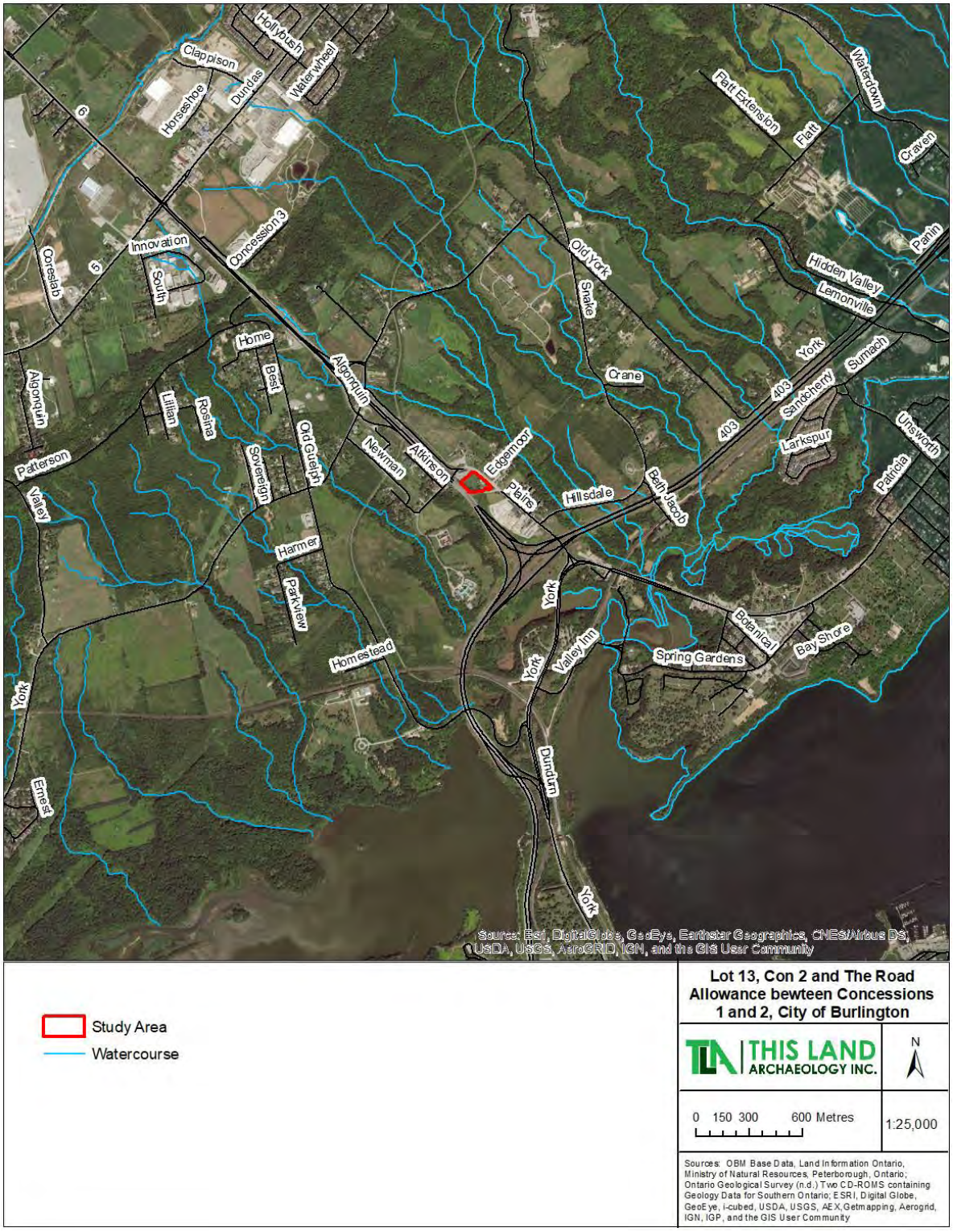


Figure 1: Location of Study Area.

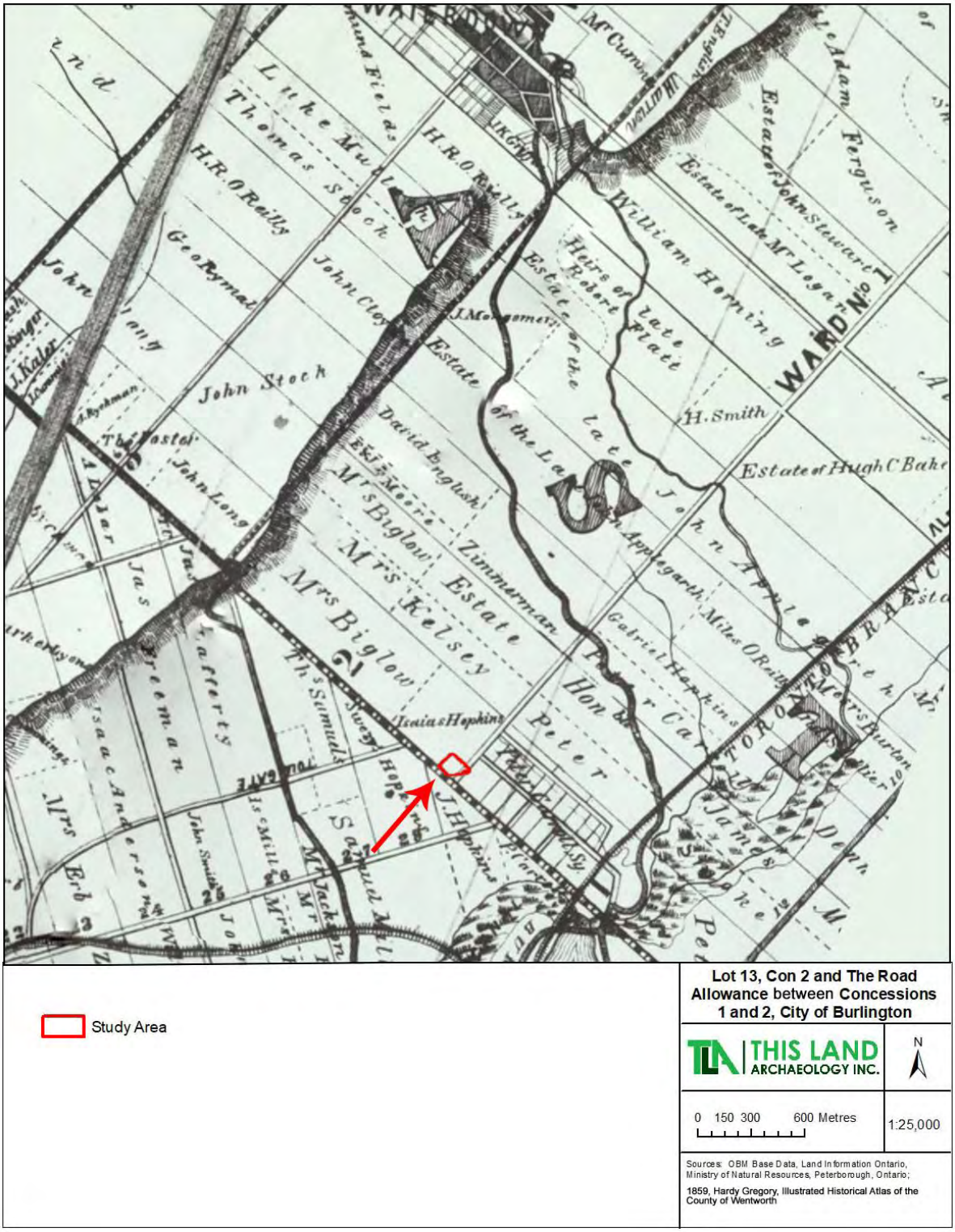


Figure 2: 1859 Hardy Gregory Illustrated Historical Atlas of the County of Wentworth.



Figure 3: 1877 Walker & Miles Illustrated Atlas of the County of Halton.



Figure 4: Current Land Use of the Study Area.



Figure 5: Archaeological Potential.



Figure 6: Results of Assessment with location and direction of photographs.



Figure 7: Results of Assessment with survey overlay.



Plate 1: Area subject to 5m test pit assessment.

-



Plate 2: Area subject to 5m test pit assessment.



Plate 3: Area subject to 5m test pit assessment; and areas of disturbance.



Plate 4: Areas subject to 5m test pit assessment; and areas of disturbance.



Plate 5: Sample test pit to subsoil.

-



Plate 6: Extant structures and gravel driveway.



Plate 7: Test pit with disturbance.



Plate 8: Demolished structure with rubble.