Stage 1 Background Archaeological Assessment and Stage 2 Archaeological Property Assessment, 3064 Trafalgar Road, Part of Lot 13, Concession 1, Township of Trafalgar, Oakville, Ontario

Submitted to

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and

The Ontario Ministry of Tourism, Culture, and Sport

Prepared by

Bluestone Research

Report Type: Original
Archaeological License Number P229, Allan Morton
PIF P229-0061-2019

July 2019

BLUESTONE RESEARCH

Table of Contents

LIST OF FIGURES

Executive Summary

Bluestone Research (Bluestone) was retained by the property owner to complete a Stage 1-2 archaeological assessment of the proposed subdivision of 3064 Trafalgar Road, Part of Lot 13, Concession 1, Township of Trafalgar, Oakville, Ontario. The assessment was necessary to meet the requirements of the Planning Act in advance of municipal approval. The study area measures 71 metres wide by 112.5 metres long. It totals approximately 0.8 hectares in size.

This assessment was triggered by the Provincial Policy Statement that is informed by the *Planning Act* (Government of Ontario 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger *Ontario Heritage Act* (1990b). According to Section 2.6.2 of the PPS, "*development and site alteration* shall not be permitted on lands containing *archaeological resources* or *areas of archaeological potential* unless *significant archaeological resources* have been *conserved*."

In accordance with Section 1.3.1 of the Ministry of Tourism, Culture and Sport's (MTCS) 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the Stage 1 archaeological assessment of the study area has determined that the study area exhibits high potential for the identification and recovery of archaeological resources and a Stage 2 archaeological assessment is recommended.

The Stage 2 assessment was conducted on 23 July 2019 under archaeological consulting license P229 issued to Allan Morton, of Bluestone by the MTCS. The assessment consisted of test pit survey at 5 metre intervals for approximately 21.7% of the property (approximately 2.0% was not tested because of wet marshy conditions in the northeast corner of the property). The remainder of the property (76.3%) was subject to a pedestrian survey at 2.5 metre intervals. No archaeological resources were identified during the Stage 2 archaeological assessment of the study area.

The MTCS is asked to review the results presented and accept this report into the Ontario Public Register of Archaeological Reports.

Project Personnel

Licensed Archaeologist:	Allan Morton, PhD (P229)
Project Manager:	Allan Morton, PhD (P229)
Licensed Field Director:	Allan Morton, PhD (P229)
Field Technicians:	Allan Morton, PhD (P229)
	Lazlo Vogronics
	Marie Morton, MA (P188)
Report Writer:	Marie Morton, MA (P188)
Senior Review:	Allan Morton, PhD (P229)

Acknowledgements:

Proponent Contact:	Emil Toma, Distrikt Developments Inc.
Ministry of Tourism, Culture and Sport:	Robert von Bitter, Archaeological Sites Database Coordinator

1.0 PROJECT CONTEXT

1.1 DEVELOPMENT CONTEXT

Bluestone Research (Bluestone) was retained by the property owner to complete a Stage 1-2 archaeological assessment of the proposed subdivision of 3064 Trafalgar Road, Part of Lot 13, Concession 1, Township of Trafalgar, Oakville, Ontario. The assessment was necessary to meet the requirements of the Planning Act in advance of municipal approval. The study area measures 71 metres wide by 112.5 metres long. It totals approximately 0.8 hectares in size.

This assessment was triggered by the Provincial Policy Statement that is informed by the *Planning Act* (Government of Ontario 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger *Ontario Heritage Act* (1990b). According to Section 2.6.2 of the PPS, "*development* and *site alteration* shall not be permitted on lands containing *archaeological resources* or *areas of archaeological potential* unless *significant archaeological resources* have been *conserved*."

Permission to enter the study area and document archaeological resources was provided by the proponent, Emil Toma.

1.1.1 Objectives

In compliance with the provincial standards and guidelines set out in the Ministry of Tourism, Culture and Sport's (MTCS) 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the objectives of the Stage 1 Archaeological Overview/Background Study are as follows:

- To provide information about the study area's geography, history, previous archaeological fieldwork, and current land conditions;
- To evaluate in detail the study area's archaeological potential which will support recommendations for Stage 2 survey for all or parts of the property; and
- To recommend appropriate strategies for Stage 2 survey.

To meet these objectives Bluestone archaeologists employed the following research strategies:

- A review of relevant archaeological, historic and environmental literature pertaining to the study area;
- A review of the land use history, including pertinent historic maps;
- An examination of the Ontario Archaeological Sites Database (ASDB) to determine the presence of known archaeological sites in and around the project area.

The objective of the Stage 2 assessment was to provide an overview of archaeological resources on the property and to determine whether any of the resources might be archaeological sites with cultural heritage value or interest and to provide specific direction for the protection, management and/or recovery of these resources. In compliance with the provincial standards and guidelines set out in the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the objectives of the Stage 2 Property Assessment are as follows:

- To document all archaeological resources within the study area;
- To determine whether the study area contains archaeological resources requiring further assessment; and
- To recommend appropriate Stage 3 assessment strategies for archaeological sites identified.

1.2 HISTORICAL CONTEXT

The study area consists of approximately 0.19 hectares of residential yard and 0.61 hectares of ploughed agricultural field. The study area is located on part of Lot 13, Concession 1, Township of Trafalgar, Oakville, Ontario.

Pre and early Post-contact Aboriginal Resources

Our knowledge of past First Peoples settlement and land use in Regional Municipality of Halton is incomplete. Nonetheless, using province-wide (MCCR 1997) and region-specific archaeological data, a generalized cultural chronology for native settlement in the area can be proposed. The following paragraphs provide a basic textual summary of the known general cultural trends and a tabular summary appears in Table 1.

The Paleoindian Period

The first human populations to inhabit Ontario came to the region between 12,000 and 10,000 years ago, coincident with the end of the last period of glaciation. Climate and environmental conditions were significantly different then they are today; local environs would not have been welcoming to anything but short-term settlement. Termed Paleoindians by archaeologists, Ontario first peoples would have crossed the landscape in small groups (i.e., bands or family units) searching for food, particularly migratory game species. In the area, caribou may have provided the staple of the Paleoindian diet, supplemented by wild plants, small game, birds and fish. Given the low density of populations on the landscape at this time and their mobile nature, Paleoindian sites are small and ephemeral. They are usually identified by the presence of fluted projectile points and other finely made stone tools.

Table 1: Cultural Chronology for Native Settlement within Regional Municipality of Halton

Period			Time Range (circa)	Diagnostic Features	Complexes
Paleoindian	Early		9000 – 8400 B.C.	fluted projectile points	Gainey, Barnes, Crowfield
	Late		8400 – 8000 B.C.	non-fluted and lanceolate points	Holcombe, Hi-Lo, Lanceolate
Archaic	Early		8000 – 6000 B.C.	serrated, notched, bifurcate base points	Nettling, Bifurcate Base Horizon
	Middle		6000 – 2500 B.C.	stemmed, side & corner notched points	Brewerton, Otter Creek, Stanly/Neville
	Late		2000 – 1800 B.C.	narrow points	Lamoka
			1800 – 1500 B.C.	broad points	Genesee, Adder Orchard, Perkiomen
			1500 – 1100 B.C.	small points	Crawford Knoll
	Terminal		1100 – 850 B.C.	first true cemeteries	Hind
Woodland	Early		800 – 400 B.C.	expanding stemmed points, Vinette pottery	Meadowood
	Middle		400 B.C. – A.D. 600	thick coiled pottery, notched rims; cord marked	Couture
	Late	Western Basin	A.D. 600 – 900	Wayne ware, vertical cord marked ceramics	Riviere au Vase-Algonquin
			A.D. 900 – 1200	first corn; ceramics with multiple band impressions	Young- Algonquin
			A.D. 1200 – 1400	longhouses; bag shaped pots, ribbed paddle	Springwells-Algonquin
			A.D 1400-1600	villages with earthworks; Parker Festoon pots	Wolf- Algonquin
Contact		Aboriginal	A.D. 1600 – 1700	early historic native settlements	Neutral Huron, Odawa, Wenro
		Euro-Canadian	A.D. 1700-1760	fur trade, missionization, early military establishments	French
			A.D. 1760-1900	Military 1.3establishments, pioneer settlement	British colonials, UELs

Archaic

The archaeological record of early native life in Southern Ontario indicates a change in lifeways beginning circa 10,000 years ago at the start of what archaeologists call the Archaic Period. The Archaic populations are better known than their Paleoindian predecessors, with numerous sites found throughout the area. The characteristic projectile points of early Archaic populations appear similar in some respects to early varieties and are likely a continuation of early trends. Archaic populations continued to rely heavily on game, particularly caribou, but diversified their diet and exploitation patterns with changing environmental conditions. A seasonal pattern of warm season riverine or lakeshore settlements and interior cold weather occupations has been documented in the archaeological record. Since the large cold weather mammal species that formed the basis of the Paleoindian subsistence pattern became extinct or moved northward with the onset of warmer climate, Archaic populations had a more varied diet, exploiting a range of plant, bird, mammal and fish species. Reliance on specific food resources like fish, deer and nuts becomes more pronounced through time and the presence of more hospitable environs and resource abundance led to the expansion of band and family sizes. In the archaeological record, this is evident in the presence of larger sites and aggregation camps, where several families or bands would

come together in times of resource abundance. The change to more preferable environmental circumstances led to a rise in population density. As a result, Archaic sites are more abundant than those from the earlier period. Artifacts typical of these occupations include a variety of stemmed and notched projectile points, chipped stone scrapers, ground stone tools (e.g. celts, adzes) and ornaments (e.g. bannerstones, gorgets), bifaces or tool blanks, animal bone and waste flakes, a by-product of the tool making process.

Woodland Period

Significant changes in cultural and environmental patterns are witnessed in the Woodland Period (circa 950 B.C to historic times). The coniferous forests of earlier times were replaced by stands of mixed and deciduous species. Occupations became increasingly more permanent in this period, culminating in major semi-permanent villages by 1,000 years ago. Archaeologically, the most significant changes by Woodland times are the appearance of artifacts manufactured from modeled clay and the construction of house structures. The Woodland Period is often defined by the occurrence of pottery, storage facilities and residential areas similar to those that define the incipient agricultural or Neolithic period in Europe. The earliest pottery was rather crudely made by the coiling method and house structures were simple enclosures.

Iroquoian Period

The primary Late Woodland occupants of the area were the Neutral Nation, an Iroquoian speaking population described by European missionaries. Like other known Iroquoian groups including the Huron (Wendat) and Petun, the Neutral practiced a system of intensive horticulture based on three primary subsistence crops (corn, beans and squash). Neutral villages incorporated a number of longhouses, multi-family dwellings that contained several families related through the female line. The Jesuit Relations describe several Neutral centers in existence in the 17th century, including a number of sites where missions were later established. While precontact Neutral sites may be identified by a predominance of well-made pottery decorated with various simple and geometric motifs, triangular stone projectile points, clay pipes and ground stone implements, sites post-dating European contact are recognized through the appearance of various items of European manufacture. The latter include materials acquired by trade (e.g., glass beads, copper/brass kettles, iron axes, knives and other metal implements) in addition to the personal items of European visitors and Jesuit priests (e.g., finger rings, stoneware, rosaries, glassware). The Neutral were dispersed and their population decimated by the arrival of epidemic European diseases and inter-tribal warfare.

1.2.1 Historic Euro-Canadian Resources

European colonization of the region started in the late 18th century, with British colonists. Following survey of the area in the 1790's, it was opened to settlers. Deputy Superintendent of Indian Affairs (William Claus), on behalf of the British Crown, negotiations with the Mississauga people in 1805 to surrender 35,000 acres of the Mississauga Tract in what is referred to as the Head-of-the-Lake Purchase (Surtees, 1994: 109). This purchase included lands from Etobicoke Creek to Burlington Bay an extended inland

from Lake Ontario to five or six miles (Fix, 1967: 13). The study area is within this inland portion of the purchase being 4.2 miles northwest of Lake Ontario. The Mississauga per paid £1000 worth of items and continued their fishing sites at the mouths of the Credit River, Sixteen Mile Creek and Twelve Mile Creek (Surtees, 1994: 110).

Surveyor Samuel Wilmot mapped the Home District including Trafalgar Township in 1806. Portions of Dundas Street were surveyed in 1793 in order to provide a link for military personnel and supplies between Lake Ontario, Lake Erie and Lake Huron. The land was cleared in 1800 to also attract people to settle Upper Canada. Initial land patents were granted between 1807 and 1810 and clearing and land cultivation soon began. First crops tended to be wheat because of its ease of export from the Port of Oakville (Town of Oakville, 2010: 17). Mills were created at Fourteen Mile Creek, Sixteen Mile Creek and their tributaries and provided a source of wealth for settlers (Walker & Miles, 1877: 59). According to Canada Census records, 4,513 individuals resided in Trafalgar by 1851. The township hosted three grist mills and 19 saw mills. By the late 1800s the Trafalgar agriculture consisted of mixed crops, livestock, dairy-farming, and fruit orchards (Town of Oakville, 2010: 23).

The study area is located 200 metres from the intersection of Dundas Street and Trafalgar Road. According to the history written by the Town of Oakville Heritage Panning Services Department, the intersection was a…

> "…hamlet called Post's Corners from at least 1816 to 1851, named after Ephraim Post who opened a tavern on the southwest corner of the crossroads in 1816. The hamlet became known as Postville by 1857 and later in the 1900s it was renamed Trafalgar. This community once included a local store, inn, school, steam saw mill, drill shed for the local militia, and a post office. The post office was the first in Halton County and the only post office between York (now Toronto) and Dundas. The community was also a stagecoach stop along the busy Dundas Street. Most of the historic buildings were torn down in the 1960s and only a couple of residential buildings from the village remain. The log houses first constructed by the settlers were gradually replaced by houses constructed of frame and brick. The emergence of the railway as the primary overland transportation method in the late 19th century saw the use of Dundas Street decline, though it remained a significant route." (Town of Oakville, 2010: 22-23)

The Samuel Wilmot survey plan of Trafalgar Township, dated June 28th 1806 shows the study area's landowner as illegible (John Sol.…). No buildings are depicted on the plan. The Tremaine map of 1858 of Trafalgar Township shows the owner of Lot 13, Concession 1 as Benjamin Thompson. The Illustrated historical atlas of the county of Halton of 1877 shows the owner as James Applebe Esq. There are no individual structures indicated in the study area. Instead the portion of the study area closest to the road is depicted as solid black to suggest a near-urban hamlet. It must be noted that historic maps are not always accurate representations of historic land use. The study area was used for agricultural purposes in the past. It is currently partly residential and partly agricultural.

1.2.2 The Natural Environment

The study area is located within the South Slope physiographic region. This region covers approximately 2,400 square kilometres from the Niagara Escarpment to the Trent River, and is characterized by a smooth, clay till plain, sloping towards Lake Ontario. The soils in the west part of the South Slope Physiographic region - containing the study area lies, are developed upon more clay-like than sandy tills, and the slopes are less steep than in the east. (Chapman and Putnam, 1984: 172-174).

The native soil type within the study area is Oneida clay loam, a well drained clay loam till, and the topography is simple (2 to 5% slope) and stone-free (Gillespie et al., 1971). Soils more conducive to agriculture, such as those with good drainage or stone- free, have the potential for past settlement and can support greater population density; subsequently these characteristics contribute to elevated archaeological potential.

1.2.3 Previously Known Archaeological Sites and Surveys

In order to compile an inventory of archaeological resources, the registered archaeological site records kept by the MTCS were consulted. In Ontario, information concerning archaeological sites stored in the ASDB is maintained by the MTCS. This database contains archaeological sites registered according to the Borden system. Under the Borden system, Canada is divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13 kilometres east to west and approximately 18.5 kilometres north to south. Each Borden Block is referenced by a four-letter designator and sites within a block are numbered sequentially as they are found. The study area under review is within Borden Block AiGw.

Information concerning specific site locations is protected by provincial policy, and is not fully subject to the *Freedom of Information and Protection of Privacy 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.

An examination of the ASDB has shown that there are 20 archaeological sites registered within a one-kilometre radius of the study area (Sites Data Search, 24 October 2018; Government Ontario n.d.). Table 2 summarizes the registered archaeological sites within one-kilometre of the study area. The listed sites do not fall within the study area.

Table 2: Registered Archaeological Sites within One Kilometre of the Study Area

Borden Number	Site Name	Time Period	Affinity	Site Type
AiGw-998	H1	Post-Contact	Euro-Canadian	Homestead
AiGw-545	AiGw-545	Post-Contact	Euro-Canadian	Homestead
AiGw-523	Shieldbay Site 2	Pre-Contact	Aboriginal	Campsite

Borden Number	Site Name	Time Period	Affinity	Site Type
AiGw-522	Shieldbay Site 1	-	-	-
AiGw-498	-	Post-Contact	Euro-Canadian	Homestead
AiGw-497	-	Post-Contact	Euro-Canadian	Homestead
AiGw-454	-	-	-	-
AiGw-453	-	Archaic, Early	Aboriginal	Findspot
AiGw-434	-	Pre-Contact	Aboriginal	Findspot
AiGw-433	-	Pre-Contact	Aboriginal	Findspot
AiGw-432	-	Archaic, late; Pre-Contact	Aboriginal	Findspot
AiGw-431	-	Woodland, Middle	Aboriginal	Findspot
AiGw-430	-	Pre-Contact	Aboriginal	Findspot
AiGw-429	-	Pre-Contact	Aboriginal	Findspot
AiGw-428	Thompson	Post-Contact	Euro-Canadian	Homestead
AiGw-427	Landing	Archaic	Aboriginal	Campsite
AiGw-416		Other		Other, Findspot
AiGw-414		Archaic	Aboriginal	Campsite
AiGw-376	Lane	Post-Contact	Euro-Canadian	Homestead
AiGw-337	Iroquois Ridge #4	Archaic, Early	Aboriginal	Findspot
AiGw-261	Macoakville	Woodland, Late	Aboriginal	Findspot
AiGw-243	PenEquity 11	Archaic, Early	Aboriginal	Findspot
AiGw-242	PenEquity 10	Archaic, Middle	Aboriginal	Findspot
AiGw-241	PenEquity 9	Archaic, Late	Aboriginal	Findspot
AiGw-240	PenEquity 8	Woodland, Early	Aboriginal	Findspot
AiGw-239	PenEquity 6	Pre-Contact	Aboriginal	Unknown
AiGw-238	PenEquity 5	Archaic, Middle	Aboriginal	Findspot
AiGw-237	PenEquity 4	Woodland, Middle	Aboriginal	Findspot
AiGw-236	PenEquity 3	Pre-Contact	Aboriginal	Unknown
AiGw-235	PenEquity 2	Archaic, Middle	Aboriginal	Findspot
AiGw-231	Uptown Core Lands 5	Woodland, Early	Aboriginal	Findspot
AiGw-230	Daniel Munn Homestead	Post-Contact, Pre-Contact	Aboriginal, Euro-Canadian	Findspot, Homestead
AiGw-229	Uptown Core Lands 3	Post-Contact	Euro-Canadian	Midden, school
AiGw-228	Uptown Core Lands 2	Post-Contact, Pre-Contact	Aboriginal, Euro-Canadian	Unknown
AiGw-227	Abigail Post Homestead	Post-Contact, Pre-Contact	Aboriginal, Euro-Canadian	Findspot, Homestead

Borden Number	Site Name	Time Period	Affinity	Site Type
AiGw-202	Silwell	-	-	-
AiGw-182	-	-	-	-
AiGw-181	-	-	-	-
AiGw-180	-	-	-	-
AiGw-179	-	-	-	-
AiGw-177		-	-	-
AiGw-1003	Redoak H1	Post-Contact	Euro-Canadian	Homestead

1.2.4 Summary of Past Archaeological Investigations within 50m

There have been no documented archaeological investigations within 50 metres of the subject property. There was a nearby survey that identified site AiGw-998 (Named H1). No information is available on the extent of the survey, because the site record is awaiting Ministry review.

It should be noted that the Ministry of Tourism, Culture and Sport currently does not provide an inventory of archaeological assessments carried out within 50 metres of a property, so a complete inventory of assessments on lands adjacent to the subject property cannot be provided.

1.2.5 Archaeological Potential

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Bluestone applied archaeological potential criteria commonly used by MTCS (Government of Ontario 2011) to determine areas of archaeological potential within the region under study. These variables include proximity to previously identified archaeological sites, distance to various types of water sources, soil texture and drainage, glacial geomorphology, elevated topography and the general topographic variability of the area.

Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and, considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils or topographic variability, may also indicate archaeological potential. Finally, extensive land disturbance can eradicate archaeological potential (Wilson and Horne 1995).

As discussed above, distance to water is an essential factor in archaeological potential modeling. When evaluating distance to water it is important to distinguish between water and shoreline, as well as natural and artificial water sources, as these features affect sites locations and types to varying degrees. The MTCS categorizes water sources in the following manner:

- Primary water sources: lakes, rivers, streams, creeks;

- Secondary water sources: intermittent streams and creeks, springs, marshes and swamps;
- Past water sources: glacial lake shorelines, relic river or stream channels, cobble beaches, shorelines of drained lakes or marshes; and
- Accessible or inaccessible shorelines: high bluffs, swamp or marshy lake edges, sandbars stretching into marsh.

The closest potable water source to the study area is an unnamed tributary of Bronte Creek located approximately 30 metres to the west.

Soil texture can be an important determinant of past settlement, usually in combination with other factors such as topography. As indicated previously, the soils within the study area are Oneida clay loam. This soil is described as 0-5 inches of clay loam; very dark greyish brown (10YR3/2); fine granular structure; friable consistency. Then, 5-12 inches of clay loam; yellowish brown (10YR5/4). Then 12-15 inches of brownish yellow clay loam (10YR6/6) and a B horizon of 15-29 inches of dark brown clay (10YR4/3) (Gillespie et al., 1971) This series is considered well-drained and is well-suited for pre-contact Aboriginal agriculture.

An examination of the ASDB has shown that there are 42 archaeological sites registered within a one-kilometre radius of the study area.

For Euro-Canadian sites, archaeological potential can be extended to areas of early Euro-Canadian settlement, including places of military or pioneer settlements; early transportation routes; and properties listed on the municipal register or designated under the *Ontario Heritage Act* or property that local histories or informants have identified with possible historical events. The *Illustrated Historical Atlas of the* County of Halton, Toronto Walker & Miles 1877 demonstrates that the study area and its environs were densely occupied by Euro-Canadian settlers by the later 19th century. Much of the established road system and agricultural settlement from that time is still visible today.

When the above-listed criteria are applied to the study area, the archaeological potential for pre-contact Aboriginal, post-contact Aboriginal, and Euro-Canadian sites is deemed to be high. Thus, in accordance with Section 1.3.1 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the Stage 1 archaeological assessment of the project area at 3064 Trafalgar Road, Part of Lot 13, Concession 1, Township of Trafalgar, Oakville, Ontario has determined that the study area exhibits high potential for the identification and recovery of archaeological resources and a Stage 2 archaeological assessment is recommended. Figure 7 provides an illustration of the area of archaeological potential in the study area.

2.0 FIELD METHODS

The Stage 2 assessment of the 0.8 hectare lot at 3064 Trafalgar Road, Part of Lot 13, Concession 1, Township of Trafalgar, Oakville, Ontario was conducted on 23 July 2019 under PIF P229-0061-2019 issued to Allan Morton (P229), of Bluestone by the MTCS.

During the Stage 2 survey, assessment conditions were appropriate for field work and at no time were the field, weather, or lighting conditions detrimental to the recovery of archaeological material (Table 3). Test pitting at 5-metre intervals was employed for approximately 21.7% of the property (approximately 2.0% was not tested because of wet marshy conditions in the northeast corner of the property). The remainder of the property (76.3%) was subject to a pedestrian survey at 2.5 metre intervals. Photos 1 to 21 confirm that field conditions exceeded the requirements for a Stage 2 archaeological assessment, as per the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Section 7.8.6 Standard 1a; Government of Ontario 2011). Figure 7 provides an illustration of the Stage 2 assessment methods, and Figure 8 provides photograph locations and directions the photographs were taken.

Table 3: Field and Weather Conditions

Date	Activity	Weather	Field Conditions
23 July 2019	Test Pit survey, Pedestrian survey	Sunny, hot	Dry Soil

A total of 27 shovel test pits were excavated in the study area. Each test pit was approximately 30 centimeters in diameter and excavated five centimeters into sterile subsoil. The soils and test pits were then examined for stratigraphy, cultural features, or evidence of fill. All soil was screened through six-millimetre (mm) mesh hardware cloth to facilitate the recovery of small artifacts and then used to backfill the pit. The shovel test pits were excavated to within 1 metre off the residential structure – where applicable.

During the Stage 2 pedestrian survey, assessment conditions were appropriate for fieldwork and at no time were the field, weather, or lighting conditions detrimental to the identification and recovery of archaeological material. The study area was recently ploughed and weathered by several light rains to improve the visibility of archaeological resources. Pedestrian survey at 2.5-metre intervals was employed throughout the study area. Photos 1 to 21 confirm that field conditions met the requirements for a Stage 2 archaeological assessment, as per the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Section 7.8.6 Standard 1a; Government of Ontario 2011). Figure 7 provides an illustration of the Stage 2 assessment methods, and Figure 8 shows photograph locations and directions the photographs were taken. Small quantities of modern broken glass, metal agricultural objects, and fragmented plumbing fixtures were identified during the pedestrian survey. No artifacts were identified that would be considered historic or prehistoric.

No further archaeological methods were employed since no artifacts were recovered during the test pit survey or the pedestrian survey.

3.0 RECORD OF FINDS

The Stage 2 archaeological assessment was conducted employing the methods described in Section 2.0. An inventory of the documentary record generated by fieldwork is provided in Table 4 below. No archaeological resources were identified during the Stage 2 archaeological assessment of the study area.

Table 4: Inventory of Documentary Record

Document Type	Current Location of Document Type	Additional Comments
1 Pages of field notes	Bluestone office, York Region	In original field book and photocopied in project file
1 Hand drawn maps	Bluestone office, York Region	In original field book and photocopied in project file
1 map provided by Client	Bluestone office, York Region	Hard and digital copies in project file
109 Digital photographs	Bluestone office, York Region	Stored digitally in project file

4.0 ANALYSIS AND CONCLUSIONS

The Stage 1-2 archaeological assessment was carried out in accordance with the Ministry of Tourism, Culture, and Sport's *Standard's and Guidelines for Consultant Archaeologist's* (Government of Ontario 2011). The Stage 2 assessment consisted of test pit survey at 5-metre intervals for approximately 21.7% of the property (approximately 2.0% was not tested because of wet marshy conditions in the northeast corner of the property). The remainder of the property (76.3%) was subject to a pedestrian survey at 2.5 metre intervals.

The Stage 2 assessment did not result in the identification of any archaeological resources.

5.0 RECOMMENDATIONS

All work met provincial standards and no archaeological sites were identified during the Stage 2 assessment. If construction plans change to incorporate new areas that were not subject to a Stage 2 field survey, these must be assessed prior to the initiation of construction. In keeping with legislative stipulations, all construction and demolition-related impacts (including, for example, machine travel, material storage and stockpiling, earth moving) must be restricted to the areas that were archaeologically assessed and cleared by the Ministry of Tourism, Culture and Sport through acceptance of the assessment report into the provincial register.

The Stage 2 archaeological assessment was carried out in accordance with the Ministry of Tourism, Culture, and Sport's *Standard's and Guidelines for Consultant Archaeologist's* (Government of Ontario 2011). The Stage 2 assessment consisted of test pit survey at 5-metre intervals for approximately 21.7% of the property (approximately 2.0% was not tested because of wet marshy conditions in the northeast corner of the property). The remainder of the property (76.3%) was subject to a pedestrian survey at 2.5 metre intervals.

As no archaeological resources were found on the subject property, no further archaeological assessment of the property is required.

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

This report is submitted to the 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 Archaeological Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

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

The *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 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 license.

7.0 BIBLIOGRAPHY AND SOURCES

Adams, Nick. 1994. *Field Manual for Avocational Archaeologists in Ontario.* Ontario Archaeological Society Inc., Archaeological Stewardship Project.

Chapman, Lyman John and Donald F. Putnam. 1984. *The Physiography of Southern Ontario.* 3rd ed. Ontario Geological Survey Special Volume 2. Toronto: Ministry of Natural Resources.

Ellis, Chris J. and Neal Ferris (editors). 1990. *The Archaeology of Southern Ontario to A.D. 1650.* Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5.

Feest, Johanna E. and Christian F. Feest 1978. The Ottawa. 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*. Tucson: University of Arizona Press.

Fix, M. (1967). Unfurling the Banner: Part 1 – The First Mississauga Treaty, 1805. In A History of Peel County, 1867-1967. Brampton: Charters Publishing Company Limited.

Gentilcore, Louis R. and C. Grant Head. 1984. *Ontario's History in Maps*. Toronto: University of Toronto Press.

Government of Ontario.1990a. *Ontario Planning Act*, R.S.O. 1990, CHAPTER P.13. Last amendment: 2011, c. 6, Sched. 2.

Government of Ontario. 1990b. *Ontario Heritage Act*, R.S.O. 1990, CHAPTER O.18. Last amendment: 2009, c. 33, Sched. 11, s. 6.

Government of Ontario. 2011. *Standards and Guidelines for Consultant Archaeologists.* Toronto: Ministry of Tourism, Culture and Sport.

Government of Ontario.n.d. *Archaeological Sites Database Files*. Toronto: Archaeology Programs Unit, Ministry of Tourism, Culture and Sport.

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

Middleton, Jess Edgar and Fred Landon. 1927. *Province of Ontario – A History 1615 to 1927*. Toronto: Dominion Publishing Company.

Gillespie, J.E., R.E. Wicklund, and M.H. Miller, 1971.
Soils of Halton County, Report No. 43 of the Ontario Soil Survey

Morris, J.L. 1943. *Indians of Ontario.*1964 reprint. Toronto: Department of Lands and Forests.

Page, H.R. 1875. *Illustrated Historical Atlas of the Counties of Lincoln and Welland.*

Rayburn, Alan 1997. *Place names of Ontario.* Toronto: University of Toronto Press.

Rogers, Edward S. 1978. Southeastern Ojibwa. In *Handbook of North American Indians*, Vol. 15 Northeast, pp. 760-771. B.G. Trigger, ed. Washington: Smithsonian Institute Press.

Smith, D.B. 2013. Sacred Feathers: The Reverend Peter Jones (Kahkewaquonaby) and the Mississauga Indians. Toronto: University of Toronto Press.

Surtees, R.J. 1994. Land Cessions, 1763-1830. In E.S. Rogers, (Ed.). Aboriginal Ontario: Historical Perspectives on the First Nations. Toronto, Ontario: Dundurn Press Limited, pp. 92- 121.

Town of Oakville, 2010. North Oakville Heritage Resources Review and Strategy. Online: https://www.oakville.ca/assets/2011%20planning/hrtg-hps-northoakvillestudy.pdf (Accessed 22 July 2019).

Town of Oakville, 2019a. Explore Oakville Mapping Service: Heritage Areas. Online: https://maps.oakville.ca/gxmaps/?map=map07 (Accessed 22 July 2019)..

Town of Oakville, 2019b. Explore Oakville Mapping Service: Zoning. Online: https://maps.oakville.ca/gxmaps/?map=map05 (Accessed 22 July 2019).

Tremaine, George 1858 Map of Trafalgar Township, County of Halton, Upper Canada. Toronto.

Walker & Miles, 1877. Illustrated Historical Atlas of the County of Halton, Ontario. Toronto: Walker & Miles.

Webber, L.R., F.F. Morwick and N.R. Richards. 1936. Soil Survey of the County of Welland: Report No. 5 of the Ontario Soil Survey. Department of Chemistry, Ontario Agricultural College, Guelph, in co-operation with the Experimental Farms Service, Dominion Department of Agriculture, Ottawa.

8.0 IMAGES

All images will follow on succeeding pages.

Photo 1: Centre of study area at Trafalgar Road, facing southwest. Grassed area subject to 5-metre interval test pit survey, ploughed area subject to pedestrian survey at 2.5 metre intervals.

Photo 2: Northwest corner of study area, facing northwest. Note bulrushes indicating marshy area. Grassed area subject to 5-metre interval test pit survey.

Photo 3: Centre of study area, facing northeast. Grassed area subject to 5-metre interval test pit survey, ploughed area subject to pedestrian survey at 2.5 metre intervals.

Photo 4: Centre of study area, facing northwest. Grassed area subject to 5-metre interval test pit survey.

Photo 5: Centre of study area, facing northwest. Grassed area subject to 5-metre interval test pit survey.

Photo 6: Centre of study area, facing northeast. Grassed area subject to 5-metre interval test pit survey.

Photo 7: Centre of study area, facing northwest. Grassed area subject to 5-metre interval test pit survey.

Photo 8: Centre of study area, facing southwest. Grassed area subject to 5-metre interval test pit survey.

Photo 9: Southside of house, adjacent to septic tank and tile bed. Dumped piles of soil next to undisturbed area. Facing northwest. Grassed area subject to 5-metre interval test pit survey.

Photo 10: Example of shovel test pit from study area. Metre stick denotes north.

Photo 11: Centre of study area, northwest corner of ploughed area, facing southwest. Subject to pedestrian survey at 2.5 metre intervals.

Photo 12: Centre of study area, northwest corner of ploughed area, facing southeast. Subject to pedestrian survey at 2.5 metre intervals.

Photo 13: Centre of study area, northwest corner of ploughed area, facing southeast. Subject to pedestrian survey at 2.5 metre intervals.

Photo 14: Ploughed surface showing 99% visibility and rain weathering. Subject to pedestrian survey at 2.5 metre intervals.

Photo 15: Centre of study area, showing ploughed field from south of the house, facing southeast. Subject to pedestrian survey at 2.5 metre intervals.

Photo 16: South side of study area, northwest corner of ploughed area, facing southeast. Subject to pedestrian survey at 2.5 metre intervals.

Photo 17: South side of study area, no Photo 20: South side of study area, southeast corner of ploughed area, facing north. Subject to pedestrian survey at 2.5 metre intervals.

Photo 18: South side of study area, northwest corner of ploughed area, facing southwest. Subject to pedestrian survey at 2.5 metre intervals.

Photo 19: South side of study area, southeast corner of ploughed area, facing northwest. Subject to pedestrian survey at 2.5 metre intervals.

Photo 20: South side of study area, southeast corner of ploughed area, facing north. Subject to pedestrian survey at 2.5 metre intervals.

Photo 21: South side of study area, southeast corner of ploughed area, facing northeast. Subject to pedestrian survey at 2.5 metre intervals.

9.0 MAPS

All maps will follow on succeeding pages.

Figure 1: Topographic Map Depicting the Study Area and its surroundings (Government of Canada)

Figure 1: Study Area (Google Earth Pro)

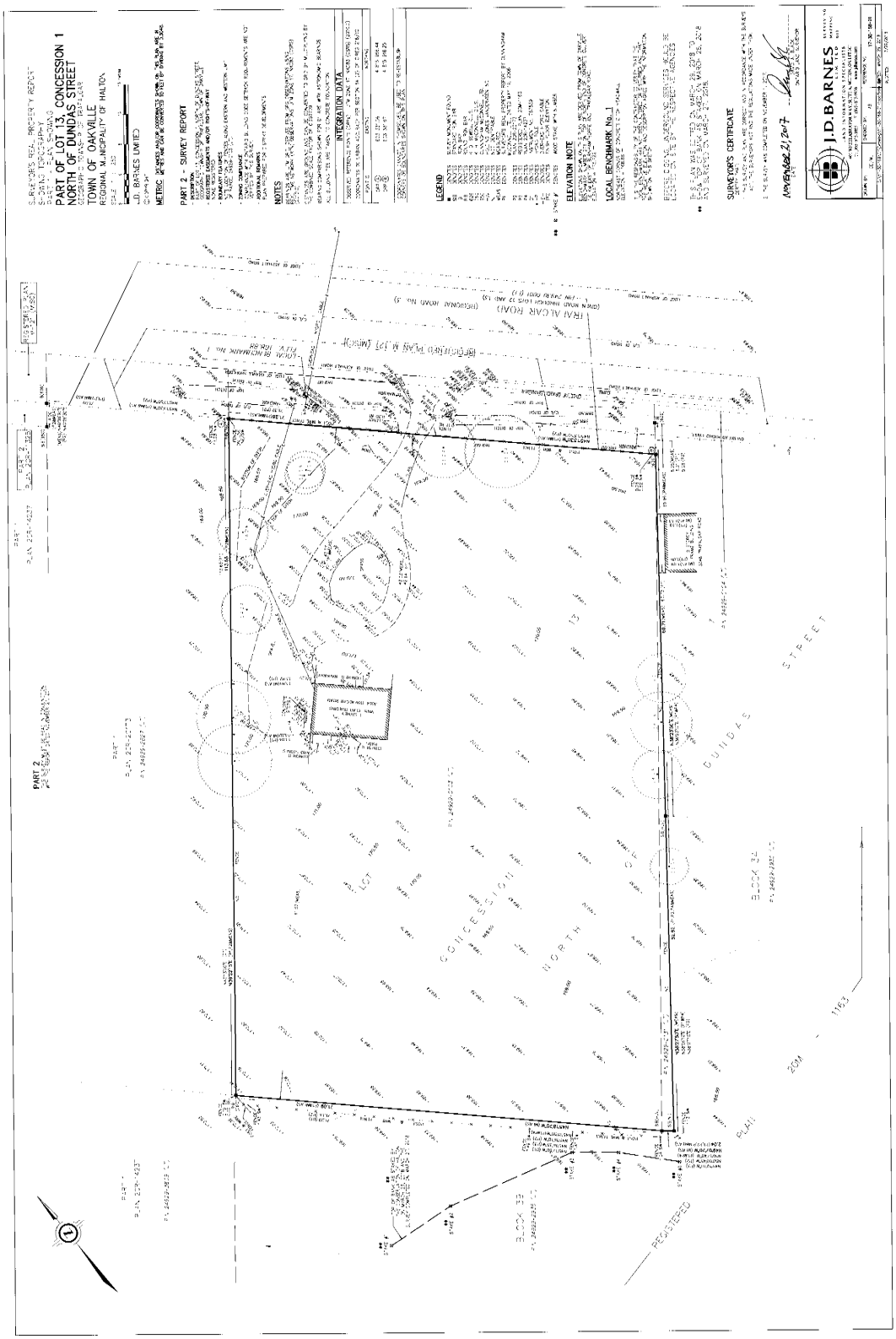

Figure 2: Property Survey (Proponent)

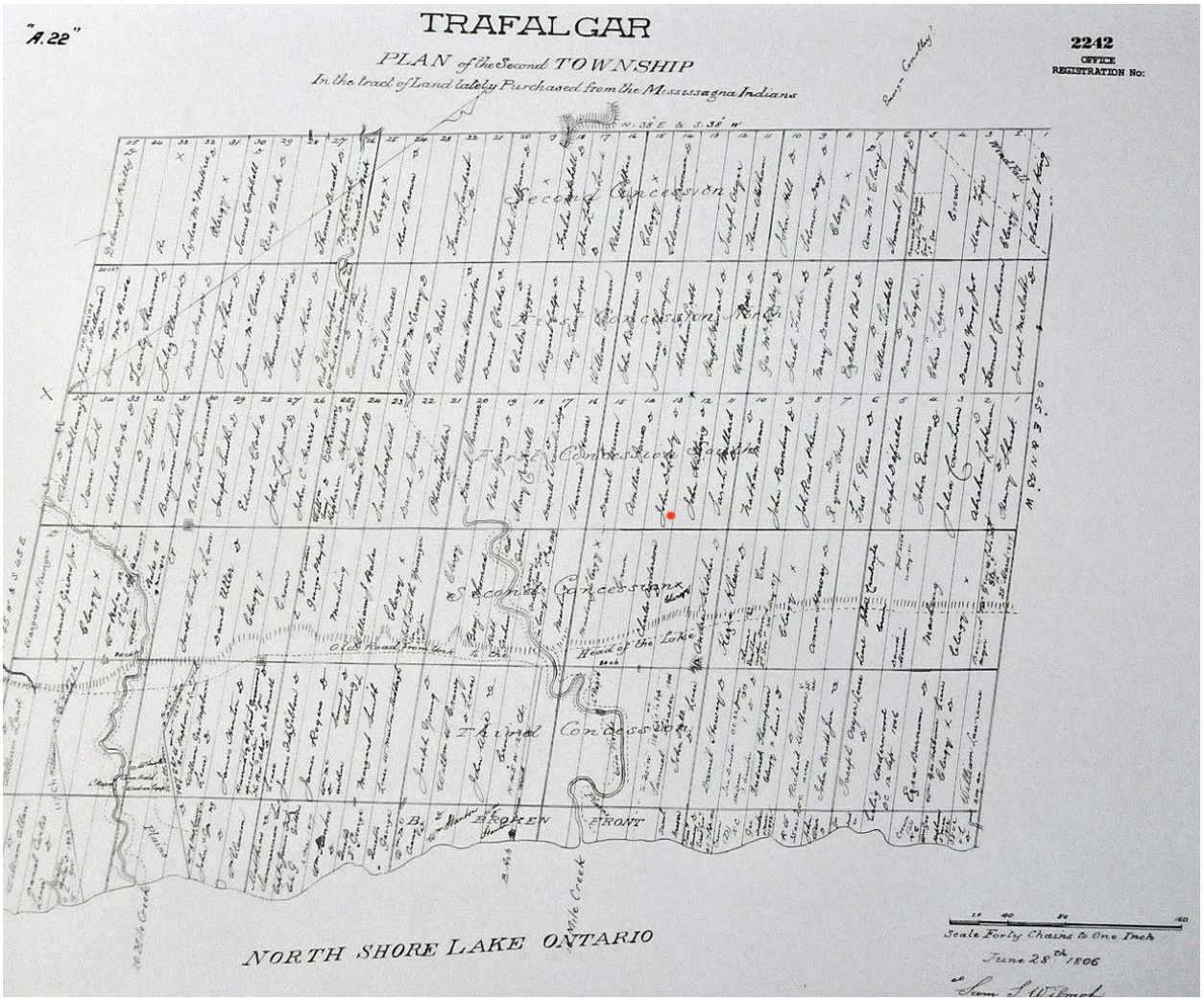

Figure 4: Samuel Wilmot Survey Map 1806 (Trafalgar Township Historical Society). Study Area is indicated with red circle.

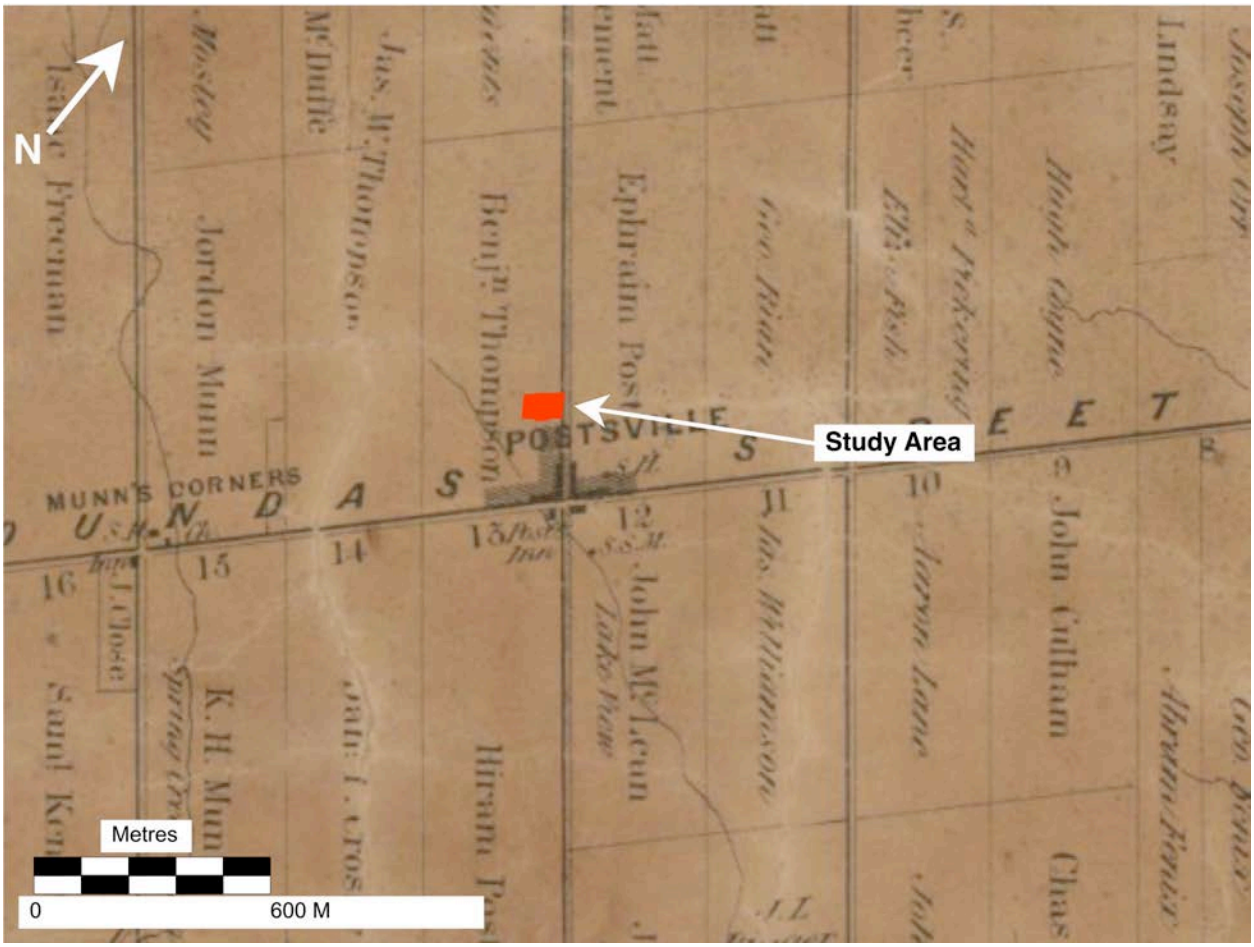

Figure 5: Portion of Halton County Map by Tremaine, 1858

Figure 6: Portion Township of Trafalgar Map from of 1877 Illustrated Historical Atlas of the Halton County, Ontario (Walker & Miles 1877)

Figure 7: Area of Archaeological Potential, Assessment Strategies. Red line indicates study area.

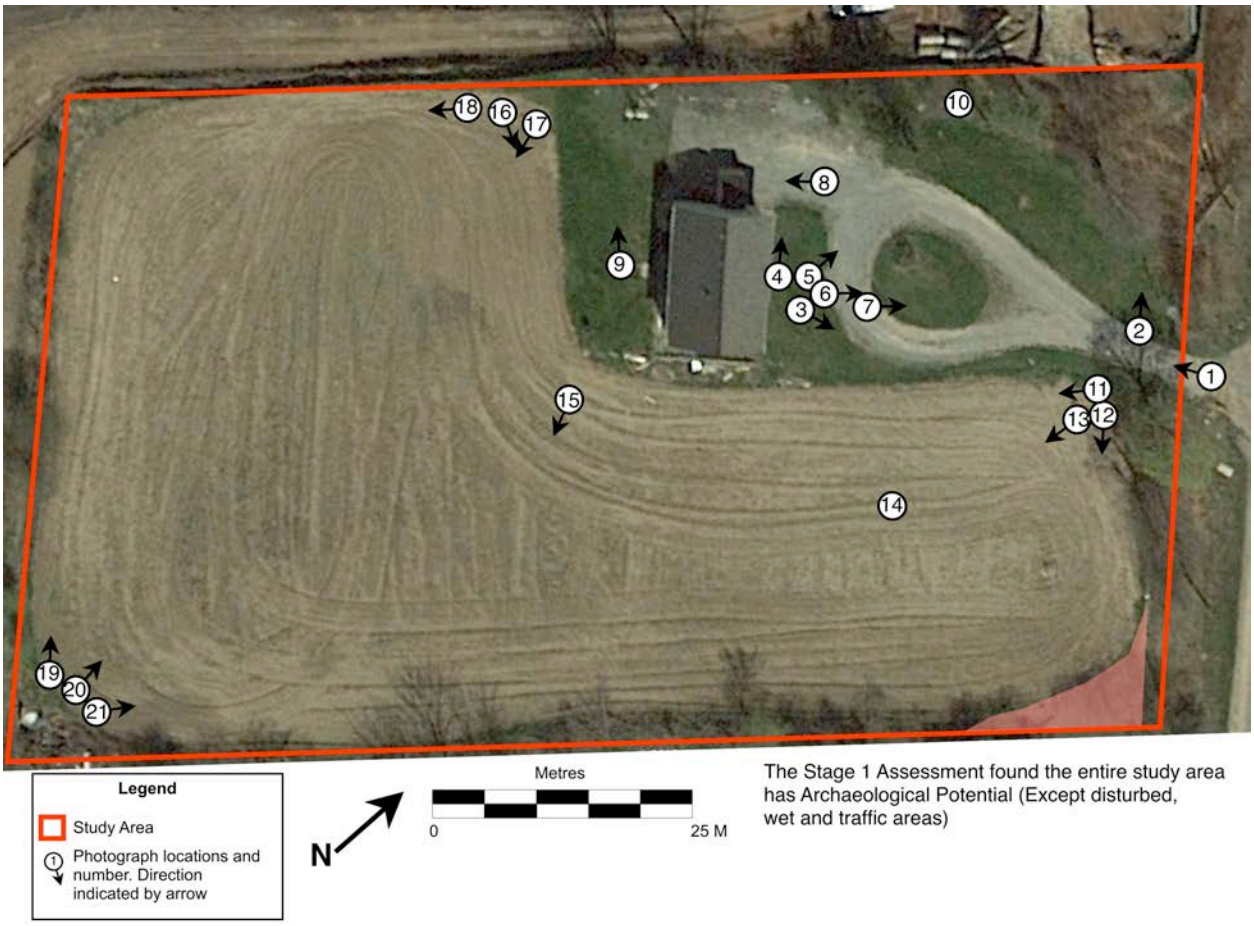

Figure 8: Photograph locations and directions.