

**STAGE 1 ARCHAEOLOGICAL ASSESSMENT OF
6314 AND 6302 NINTH LINE,
PART OF LOT 7, CONCESSION 9 NEW SURVEY,
GEOGRAPHIC TOWNSHIP OF TRAFALGAR, HALTON COUNTY,
CITY OF MISSISSAUGA, REGIONAL MUNICIPALITY OF PEEL, ONTARIO**

ORIGINAL REPORT

Prepared for:

Derry Britannia Developments Limited
7880 Keele St.
Vaughan, ON L4K 4G7
T 905-907-8888

Archaeological Licence P449 (Bhardwaj)
Ministry of Tourism, Culture and Sport PIF P449-0249-2018
ASI File: 18PL-202

16 November 2018



Providing Archaeological &
Cultural Heritage Services

528 Bathurst Street Toronto, ONTARIO M5S 2P9
416-966-1069 F 416-966-9723 asiheritage.ca

**STAGE 1 ARCHAEOLOGICAL ASSESSMENT OF
6314 AND 6302 NINTH LINE,
PART OF LOT 7, CONCESSION 9 NEW SURVEY,
GEOGRAPHIC TOWNSHIP OF TRAFALGAR, HALTON COUNTY,
CITY OF MISSISSAUGA, REGIONAL MUNICIPALITY OF PEEL, ONTARIO**

EXECUTIVE SUMMARY

The Stage 1 Archaeological Assessment of 6314 and 6302 Ninth Line, part of Lot 7, Concession 9 New Survey, Geographic Township of Trafalgar, County of Halton, now in the City of Mississauga, Regional Municipality of Peel, has been carried out as part of the proponent's due diligence in advance of a development application. The subject properties together are approximately 2.85 hectares in size.

The Stage 1 assessment entailed consideration of the proximity of previously registered archaeological sites and the original environmental setting of the properties, along with nineteenth and twentieth-century settlement trends. This research has concluded that there is potential of encountering pre-contact Indigenous and historical Euro-Canadian historical material within the subject property.

The Stage 1 field review has determined that much of the subject property has been disturbed by existing land use. The remaining 54% of the subject property is found to contain the potential for encountering archaeological resources. Therefore, a Stage 2 Archaeological Assessment is required on all undisturbed lands in accordance with the Ministry of Tourism, Culture and Sport's 2011 Standards and Guidelines for Consultant Archaeologists.



PROJECT PERSONNEL

Project Managers:

Beverly Garner, Hons. BA
Senior Archaeologist | Manager - Planning Assessment
Division

Jennifer Ley, Hons. BA (R376)
Associate Archaeologist | Project Manager - Planning
Assessment Division

Project Director:

Robb Bhardwaj, MA (P449)
Associate Archaeologist | Field Director - Planning Assessment
Division

Field Director:

Robb Bhardwaj, MA (P449)

Report Preparation:

Deborah Pihl, BA (R130)
Lead Archaeologist | Technical Writer, Planning Assessment
Division

Graphics:

Robin Latour, MPhil, PDip
Associate Archaeologist | Geomatics Specialist, Operations
Division

Report Reviewers:

Beverly Garner
Jennifer Ley



TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
PROJECT PERSONNEL	ii
TABLE OF CONTENTS	iii
1.0 PROJECT CONTEXT	1
1.1 Development Context	1
1.2 Historical Context	1
1.2.1 <i>Indigenous Overview</i>	1
1.2.2 <i>Historical Overview</i>	2
1.2.3 <i>Review of Nineteenth and Twentieth Century Historical Mapping</i>	3
1.2.4 <i>Review of Aerial Imagery</i>	4
1.2.5 <i>Review of Historical Archaeological Potential</i>	4
1.3 Archaeological Context	4
1.3.1 <i>Registered Archaeological Sites</i>	5
1.3.2 <i>Previous Assessments</i>	5
1.3.3 <i>Physiography</i>	6
1.3.4 <i>Review of Pre-contact Archaeological Potential</i>	6
1.3.5 <i>Subject Property Description</i>	7
2.0 FIELD METHODS	8
2.1 Findings	8
2.2 Inventory of Documentary and Material Record	8
3.0 ANALYSIS AND CONCLUSIONS	9
4.0 RECOMMENDATIONS	9
5.0 LEGISLATION COMPLIANCE ADVICE	9
6.0 BIBLIOGRAPHY	10
7.0 IMAGES	12
8.0 MAPS	15

List of Tables

Table 1: Outline of Southern Ontario Prehistory	2
Table 2: Registered Sites within a 1 km Radius of the Subject Property	5

List of Plates

Plate 1: Extant house at 6314 Ninth Line on landscaped residential lot.	12
Plate 2: View to southwest, structure on gravel pad.	12
Plate 3: View to northwest, structures on gravel pad.	12
Plate 4: View to southwest, gravel laneway.	12
Plate 5: View to southwest, large gravel pad used for vehicle storage.	13
Plate 6: View to northeast, base of communications tower.	13
Plate 7: View to northwest, extant house at 6302 Ninth Line.	13
Plate 8: View to west, office structure comprising house trailer with frame addition.	13
Plate 9: View to south, structure and large gravel pad.	13
Plate 10: View to northeast, filled in pool and patio.	13
Plate 11: View to northeast, laneway from Ninth Line to sawmill operation.	14
Plate 12: View to southwest, shed for vehicle storage on gravel pad.	14
Plate 13: View to southeast, wood chip-covered area around sawmill, wood piles, and chip piles.	14
Plate 14: View to west, shed for lumber storage and drying.	14
Plate 15: View to southwest, pond at 6314 Ninth Line.	14
Plate 16: View to northwest, pond at 6302 Ninth Line.	14
Plate 17: View to north, lawn and landscaping on residential yard surrounding house at 6314 Ninth Line.	15



Plate 18: View to northwest, yard surrounding house at 6302 Ninth Line.	15
Plate 19: View to southwest, thick undergrowth in deciduous woods.	15
Plate 20: View to west, stack of drying lumber in spruce plantation.	15

List of Figures

Figure 1: Location of the Subject Property.....	16
Figure 2: Subject Property located on the 1859 <i>Tremaine Map of the County of Halton</i>	17
Figure 3: Subject Property located on the 1877 <i>Illustrated Historical Atlas of the County of Halton</i>	17
Figure 4: Subject Property located on the 1909 <i>NTS Sheet Brampton</i>	18
Figure 5: Subject Property located on 1954 aerial image.	19
Figure 6: Existing Conditions of Subject Property	20
Figure 7: Results of Stage 1 Archaeological Assessment	21



1.0 PROJECT CONTEXT

ASI was contracted by Derry Britannia Developments Limited to complete a Stage 1 Archaeological Assessment of 6314 and 6302 Ninth Line, part of Lot 7, Concession 9 New Survey, Geographic Township of Trafalgar, County of Halton, now in the City of Mississauga, Regional Municipality of Peel (Figure 1). The subject property comprises approximately 2.85 hectares.

1.1 Development Context

This assessment was conducted under the project management of Ms. Beverly Garner and Ms. Jennifer Ley (R376) and under the project direction of Mr. Robb Bhardwaj (MTCS P449-0249-2018). All activities carried out during this assessment were completed as part of the proponent's due diligence in advance of development applications. Assessment activities were completed in accordance with the *Ontario Heritage Act* (Ministry of Culture [MCL] 1990) and the *Standards and Guidelines for Consultant Archaeologists (S & G)* (Ministry of Tourism, Culture [MTC] 2011; now administered by the Ministry of Tourism, Culture, and Sport [MTCS]).

All work carried out for this assessment is also guided by the *Master Plan of Archaeological Resources of the Regional Municipality of Halton* (ASI 1998, 2008), which provides further refinement with regards to potential buffers surrounding any noted features or characteristics which affect archaeological potential.

Permission to access the subject properties and to carry out all activities necessary for the completion of the assessment was granted by the proponent on July 30, 2018.

1.2 Historical Context

The purpose of this section is to describe the past and present land use and the settlement history, and any other relevant historical information gathered through the Stage 1 background research. First, a summary is presented of the current understanding of the Indigenous land use of the subject properties. This is followed by a review of historic Euro-Canadian settlement history.

Historically, the subject property is located within part of Lot 7, Concession 9 New Survey (NS), in the former Township of Trafalgar, County of Halton. The two parcels at 6314 and 6302 Ninth Line are approximately 1200 metres northwest of the intersection of Ninth Line and Britannia Road West and 200 metres northwest of the Foxwood Avenue's junction at Ninth Line. The property is situated at what is now the western boundary of the City of Mississauga. The subject property is currently used for residential and storage purposes.

1.2.1 Indigenous Overview

Southern Ontario has a cultural history that begins approximately 11,000 years ago and continues to the present. Table 1 provides a general summary of the pre-contact Indigenous settlement of the subject property and surrounding area.



Table 1: Outline of Southern Ontario Prehistory

Period	Archaeological/ Material Culture	Date Range	Lifeways/ Attributes
PALEO-INDIAN			
Early	Gainey, Barnes, Crowfield	9000-8500 BC	Big game hunters
Late	Holcombe, Hi-Lo, lanceolate	8500-7500 BC	Small nomadic groups
ARCHAIC			
Early	Nettling, Bifurcate-base	7800-6000 BC	Nomadic hunters and gatherers
Middle	Kirk, Stanly, Brewerton, Laurentian	6000-2500 BC	Transition to territorial settlements
Late	Lamoka, Genesee, Crawford Knoll, Innes	2500-500 BC	Polished/ground stone tools (small stemmed)
WOODLAND			
Early	Meadowood	800-400 BC	Introduction of pottery
Middle	Point Peninsula, Saugeen	400 BC-AD 800	Incipient horticulture
Transitional		AD 600-900	Introduction of new food crops
Late	Algonkian, Iroquoian	AD 800-1300	Transition to village life and agriculture
	Algonkian, Iroquoian	AD 1300-1400	Establishment of large palisaded villages
	Algonkian, Iroquoian	AD 1400-1600	Tribal differentiation and warfare
HISTORIC			
Early	Huron, Neutral, Petun, Odawa, Ojibwa	AD 1600-1650	Tribal displacements
Late	6 Nations, Ojibway	AD 1650-1800's	
	Euro/Canadian	AD 1800-present	European settlement

1.2.2 Historical Overview

Township of Trafalgar

While other lands in the “Golden Horseshoe” at the western end of Lake Ontario were acquired by the British government for settlement by the United Empire Loyalist refugees during the 1780’s, Halton County (including Trafalgar Township) remained in the hands of the native Mississaugas until August 1805, when the lands were acquired under the terms of the Mississauga Purchase (Armstrong 1985:148). D’Arcy Boulton in 1805 (1961:48) noted that “the tract between the Tobicoake and the head of the lake is frequented only by wandering tribes of Missassagues.” The concessions lying on either side of Dundas Street were formally surveyed in 1806 and are known as the Old Survey. Additional lands were purchased from the Mississaugas in 1818 extending the boundaries of Trafalgar Township, and this portion of the Township became known as the New Survey.

Dundas Street, the baseline survey road in Trafalgar Township had been surveyed in 1793, as a military road connecting Lake Ontario, Lake Erie, Lake St. Clair and Lake Huron, as well as a road to aid Loyalist settlement and deter expansionist claims in Upper Canada. After the two concessions south of Dundas St. were opened up, two new east-west concession line access roads, the Upper Middle Road and the Lower Middle Road, were surveyed. These early east-west roads were later complemented in 1832, by the Lakeshore Road, which was constructed nearby and parallel to an aboriginal pathway skirting Lake Ontario. The concession roads of the 1806 survey, and the line roads running perpendicular, blocked out the township in areas a mile and quarter square with five 200-acre lots to a square. Between every five lots ran a line road (Mathews 1953:45).

Trafalgar was simply known as Township Number 2 when it was first surveyed by Samuel S. Wilmot and was subsequently renamed Alexander Township in honour of Alexander Grant, who was President and Administrator of the Province of Upper Canada (Mathews 1953:6). Shortly thereafter, when news reached Upper Canada of Lord Nelson’s victorious sea battle off the coast of Spain, the names of two townships in the county were changed to Nelson and Trafalgar.



The New Survey of Trafalgar was undertaken by Richard Bristol between April and June 1819. His Survey Diaries and Notes are still extant on microfilm. The survey of the township proceeded westward from Concession 11 along the Peel County line towards Milton. The crew encountered wet snow “nearly an inch deep” on May 17th, and by May 22 Bristol noted “the musquetoos beginning their hostilities against us.” On June 6, while in the vicinities of Concessions 1 and 2, the crew was inundated by a thunderstorm: “we necessiated [sic] to grin and bear it...no sleep this night for us,” and a few days later “mosquitoes rather too many for us.” The survey of Concession 2 was completed between June 5-7, 1819, and Bristol dismissed his men on June 10, 1819. Bristol noted that the timber was primarily elm, beech, maple, white oak, “black ash” and pine.

Trafalgar Township originally formed part of the West Riding of York in the Home District and following 1816, it became part of the Gore District, with Hamilton as the administrative District seat. Although the old Districts of Upper Canada were abolished by legislation in May 1849, the area which was to subsequently become Halton remained as part of the United Counties of Wentworth and Hamilton until it was finally separated and elevated to independent County status by an act of legislature in June 1853.

Smith (1850:261) noted that the settlement of Trafalgar commenced about 1807, and the price for wild land at the time was valued at 7/6- per acre. The first wave of settlers included the children of Loyalists, soldiers who served during the War of 1812, and immigrants from England, Scotland and Ireland. Some of the earliest families to settle within the township included those of Sovereign, Proudfoot, Katting, Freeman, Post, Biggar, Mulholland, Kenney, Chalmer, Albertson, Chisholms, Sproat, Brown and Hagar. By 1817, the population had increased to 548, and the township contained one grist mill and four saw mills. The value of land had increased to 22 shillings per acre. In 1846, the township was described as “well settled... containing numerous well cleared and cultivated farms, most which have good orchards” (Smith 1846:198-199). By 1850, the population had increased to 4,513, and the township contained three grist and nineteen saw mills (Smith 1850:261).

1.2.3 Review of Nineteenth and Twentieth Century Historical Mapping

A review of the 1858 *Tremaine Map of the County of Halton* and the 1877 *Illustrated Historical Atlas of the County of Halton* was completed to determine if these sources depict any nineteenth-century Euro-Canadian settlement features that may represent potential historical archaeological sites within the properties (Figures 2-3). It should be noted that not all features of interest were mapped systematically in the Ontario series of historical atlases, given that they were financed by subscription, and subscribers were given preference with regard to the level of detail provided on the maps. Moreover, not every feature of interest would have been within the scope of the atlases.

The 1858 *Tremaine Map* indicates the northeastern corner of the east half of Lot 7 under the ownership of Philip Triller (Figure 2). No structures are indicated on the east half of the lot. The subject property fronts onto the historically important transportation corridor of Ninth Line. The nearest stream is illustrated approximately 500 metres to the east of the subject properties.

The 1877 *Historical Atlas* now indicates that the east half of Lot 7 is owned by Mrs. I. Kelby, a non-resident (Figure 3). The nearest illustrated stream is situated well to the east.

The early topographic map series clearly shows features such as structures, streams, roads, and woodlots. The 1909 *NTS Sheet Brampton* (Figure 4) indicates the same road system as the nineteenth century maps. No structures are illustrated on the subject property, and the vicinities are cleared of trees. A tributary of Sixteen Mile Creek is now indicated approximately 50 metres to the west of the property.



1.2.4 Review of Aerial Imagery

In order to further assess the previous land use of the subject property, available aerial imagery was reviewed. Figure 5 shows a 1954 image illustrating the property as part of an open field and intersected by a tributary of Sixteen Mile Creek (HSCL 1954).

1.2.5 Review of Historical Archaeological Potential

The S & G, Section 1.3.1 stipulates that areas of early Euro-Canadian settlement (pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches and early cemeteries, are considered to have archaeological potential. There may be commemorative markers of their history, such as local, provincial, or federal monuments or heritage parks. Early historical transportation routes (trails, passes, roads, railways, portage routes), properties listed on a municipal register or designated under the *Ontario Heritage Act* or a federal, provincial, or municipal historic landmark or site, and properties that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations are also considered to have archaeological potential. No such historical locations are known in the vicinity of the subject property (Brown 2018).

For the Euro-Canadian period, the majority of early nineteenth century farmsteads (i.e., those which are arguably the most potentially significant resources and whose locations are rarely recorded on nineteenth century maps) are likely to be captured by the basic proximity to the water model, since these occupations were subject to similar environmental constraints. An added factor, however, is the development of the network of concession roads and railroads through the course of the nineteenth century. These transportation routes frequently influenced the siting of farmsteads and businesses. Accordingly, undisturbed lands within 100 metres of an early historical transportation route are also considered to have potential for the presence of Euro-Canadian archaeological sites.

The S & G also defines buffers of 300 metres around registered historical sites or designated properties, areas of early historic settlement, and locations identified through local knowledge or informants (MTC 2011). There are no registered historical sites within 300 metres of the subject properties.

The *Master Plan of Archaeological Resources of the Regional Municipality of Halton* (ASI 1998, 2008) considers a similar suite of criteria. There is potential for historical sites within 50-100 metres of historical features, settlement centres, and transportation routes. Homestead/farmstead locations are likely captured by the model's buffer within 200 metres of water sources.

Given the proximity to the historically important transportation corridor of present-day Ninth Line and to water sources, there is the potential of encountering nineteenth-century historical material within the subject property, depending on the degree of more recent land disturbances.

1.3 Archaeological Context

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the subject properties, the environmental characteristics (including drainage, soils, surficial geology, topography, etc.), and current land use and field conditions.



1.3.1 Registered Archaeological Sites

In order that an inventory of archaeological resources could be compiled for the subject properties, three sources of information were consulted: the site record forms for registered sites housed at the MTCS; published and unpublished documentary sources; and the files of ASI.

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (OASD) which is maintained by the MTCS. This database contains archaeological sites registered within the Borden system. The Borden system was first proposed by Dr. Charles E. Borden and is based on a block of latitude and longitude. Each Borden block measures approximately 13 km east-west by 18.5 km north-south. Each Borden block is referenced by a four-letter designator, and sites within a block are numbered sequentially as they are found. The subject property under review are located within the AjGw Borden block.

Eleven archaeological sites have been registered within a one km radius of the subject property (MTCS 2018). A summary of the registered sites is presented in Table 1 below. The seven pre-contact Indigenous sites include findspots and campsites of Middle Archaic, Late Archaic, Middle Woodland and undetermined cultural affiliation. The three post-contact Euro-Canadian sites are homestead locations. One registered site included no information on the temporal nature or site type. The nearest of the sites is more 350 metres from the subject property.

Table 2: Registered Sites within a 1 km Radius of the Subject Property

Borden No.	Name	Temporal/ Cultural Affiliation	Type	Researcher
AjGw-199	Venturon 5	Undetermined pre-contact	Findspot	ASI 1989
AjGw-223	Break	Archaic, Late	Findspot	ASI 1991
AjGw-224	Wheel	Woodland, Middle	Findspot	ASI 1991
AjGw-270	Boot Sucker	Undetermined pre-contact	Camp/campsite	MHCI 1996, MS 1996
AjGw-277		Archaic, Middle	Findspot	MHCI 1996
AjGw-278		Undetermined pre-contact	Camp/campsite	MHCI 1996
AjGw-431		--	--	AAL 2005
AjGw-448		Post-contact	House	Hossack 2006
AjGw-449		Post-contact	House	AAL 2005
AjGw-559	Douglas	Post-contact	Homestead	ASI 2016
AjGw-560		Archaic, Late	Findspot	ASI 2016

AAL = Archaeological Assessments Limited; ASI = Archaeological Services Inc.; MHCI = Mayer Heritage Consultants Inc.; MPP = Mayer, Pihl, Poulton and Associates Inc.; MS = J. MacDonald and W.B. Stewart

1.3.2 Previous Assessments

A Stage 2 Archaeological Assessment was conducted by ASI under Licence 96-019 on lands on the northeast side of Ninth Line, opposite the subject property (ASI 1996). The ten-hectare property was assessed by pedestrian and test pit survey conducted at five metre intervals, and no archaeological resources were identified.

Several additional Stage 2 Archaeological Assessments may have included lands within 50 metres of the subject property. The Stage 2 assessments of various sections of Highway 407 right-of-way were conducted in 1996 under a number of MTCS PIFs granted to MHCI. As well, on the northeast side of Ninth Line, Stage 2 Archaeological Assessments of two subdivisions were conducted by MIA under PIF 96-09 and 96-10. The MHCI and MIA assessments registered no archaeological sites within 100 metres of the subject property, and no Woodland villages were registered within 200 metres. The project reports



and mapping for the Highway 407 sections and the subdivisions were not available, but the report references are included in Section 6 of this report (cf. MHCI 1999a-f; MIA 1996a,b).

1.3.3 Physiography

The subject property is situated within the Peel Plain physiographic region of southern Ontario (Chapman and Putnam 1984: 174-176). The Peel Plain covers a large area across the central portions of the Regional Municipalities of York, Peel, and Halton, and the northern portion of Toronto. The surface of the plain is characterized by level to gently rolling topography, with a consistent, gradual slope toward Lake Ontario. The plain is made up of deep deposits of dense limestone and shale imbued till, often covered by a shallow layer of clay sediment. While the clay soils of the plain may be imperfectly drained in inter-stream areas, the region is without large swamps or bogs. Several major rivers cut across the plain, draining southward into Lake Ontario. The subject property is located within an area of bevelled till plain, approximately eight km northwest of an old shoreline and 14 km from the current Lake Ontario shoreline.

The subject property is situated on the boundary of an area of two soil groups, both formed on a parent material of clay loam till. To the north is imperfectly drained Chinguacousy clay loam and to the south poorly drained Jeddo clay loam (Gillespie et al 1970).

The subject property is situated within the Sixteen Mile Creek watershed, and, according to the conservation authority mapping, the property is within 50 metres of a tributary of the Creek (Conservation Halton 2018). With the exceptions of a small area of higher ground adjacent to Ninth Line and another near the centre of the subject property, it is within floodplain (Conservation Halton 2018).

1.3.4 Review of Pre-contact Archaeological Potential

The S & G, Section 1.3.1 stipulates that undisturbed lands within 300 metres of primary water sources (lakes, rivers, streams, creeks, etc.), secondary water sources (intermittent streams and creeks, springs, marshes, swamps, etc.), ancient water sources (glacial lake shorelines indicated by the presence of raised sand or gravel beach ridges, relic river or stream channels indicated by clear dip or swale in the topography, shorelines of drained lakes or marshes, cobble beaches, etc.), as well as accessible or inaccessible shorelines (high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh, etc.) are characteristics that indicate archaeological potential.

Potable water is the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in south central Ontario after the Pleistocene era, proximity to water can be regarded as a useful index for the evaluation of archaeological site potential. Indeed, distance from water has been one of the most commonly used variables for predictive modelling of site location.

Several mapping sources were reviewed to determine the nearest source of water to the subject property. According to the conservation authority mapping, the property is presently within 50 metres of a tributary of Sixteen Mile Creek, and a small tributary intersects the southwestern end of the property (Conservation Halton 2018). The present tributary location to the west of the subject property is similar to the depiction on the 1909 topographic mapping (Figures 4 and 6). By 1954, the tributary is further east, intersecting the subject property in a linear stream course that parallels a modern tree line (Figures 5). Thus, the observed variation in stream courses within the very wide and level floodplain likely reflects actual fluctuations



over time. As such, the tributaries have at times intersected the property, while at other times they may have been at least 250 metres distant.

Other geographic characteristics that can indicate archaeological potential include elevated topography (eskers, drumlins, large knolls, plateaux), pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground, distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases. There may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings. Resource areas including food or medicinal plants (migratory routes, spawning areas, prairie) and scarce raw materials (quartz, copper, ochre, or outcrops of chert) are also considered characteristics that indicate archaeological potential. None of these special features are known to be located in the immediate vicinity of the subject property.

The S & G Section 1.4.1, Standard 1 also defines buffers of 300 metres around registered pre-contact sites. In addition, based on current modelling, there is a high potential for ossuary locations within 1000 metres around Late Woodland villages and within 300 metres of a water source.

The *Master Plan of Archaeological Resources of the Regional Municipality of Halton* (ASI 1998, 2008). considers a similar suite of criteria and the model defines buffer zones extending 200 metres from any water source, 200 metres from a registered Late Woodland village, or 100 metres from any other pre-contact archaeological site as acceptable characterizations of pre-contact archaeological site potential within Halton Region. Presently, there are no pre-contact sites registered within 100 metres of the subject property and no Late Woodland villages within 200 metres.

Therefore, based on the proximity to tributaries of Sixteen Mile Creek, there is the potential for the identification of Indigenous sites, depending on the degree of later developments or soil alterations.

1.3.5 Subject Property Description

The subject property comprises approximately 2.85 hectares and is situated on the margin of an area of suburban development (Figure 6). The property is bounded on the northeast by Ninth Line and on the southwest by the Highway 407 right-of-way. To the northwest is an agricultural field, and to the southeast is a residential property with associated lands used for storage (Figure 6).

The northwestern of the two lots, at 6314 Ninth Line, includes a modern vinyl sided house surrounded by yard with mature trees, landscaping and a small pond. The rear portion of the parcel is largely covered by a gravel pad used for the vehicle storage. Along the margin of the gravel pad are several sheds and a communications tower.

The southeastern of the two lots, at 6302 Ninth Line, includes a one-storey house surrounded by a naturalized yard with mature trees and a filled-in pool. A short gravel lane provides access to the house, and another longer lane along the southeastern property boundary provides access to an arborist business with associated sawmill operation that occupies the centre and rear of the property, including lands to the southwest of the 6314 Ninth Line property. The arborist/sawmill business includes various buildings that house vehicles, equipment and the sawmill, and are also used for equipment and lumber drying/storage. Most of the buildings surround a large gravel area. At the southwestern end of the property, piles of uncut trees and wood chips surround open areas that are thickly covered by wood chips. Deciduous trees and scrub cover the margins of the property as well as areas not occupied by buildings or work areas. A



plantation of mature spruce trees is located along the southwestern margin of the property. The terrain over the subject property is level with the exception of the two ponds.

2.0 FIELD METHODS

A Stage 1 property inspection was conducted on August 24 and 28, 2018 to gain first-hand knowledge of the geography, topography and current conditions, and to evaluate and map archaeological potential of the subject property prior to development. All fieldwork was conducted under the field direction of Mr. Robb Bhardwaj (P449). The weather conditions and lighting were appropriate for the completion of fieldwork as they permitted good visibility of the land features.

The property inspection was conducted means of a visual review of the subject property that involved random spot-checking across all accessible portions of the property. The strategy is consistent with S & G, Section 1.2 Property Inspection, Standard 1. Photo locations and field observations have been compiled on project mapping (Figure 7). Representative photos documenting the field conditions during the Stage 1 property inspection are presented in Section 7.0 of this report.

2.1 Findings

The subject property includes areas that are disturbed. These areas on the 6314 Ninth Line property include the footprints of the extant house and various structures, the gravel laneway and large storage area, and the base of the communications tower (Plates 1-6). Disturbed areas on the 6302 Ninth Line property includes the footprints of the extant house and various structures, the pool, the gravel lanes and work areas, and the wood chip-covered work areas (Plates 7-14). According to S & G, Section 2.1, Standard 2b the disturbances noted at these locations are considered too deep and extensive to warrant further survey. The disturbed areas account for approximately 44% of the subject property and are considered to have no archaeological potential.

The subject property also includes two small ponds (Plates 15-16). According to S & G, Section 2.1, Standard 2 a (i) permanently wet areas are considered to have no or low potential. The two small ponds have no apparent inlets or outlets, and both may be dugout ponds that utilize the shallow water table on the floodplain. The ponds account for 2% of the subject property. No evidence was observed of the presence of a small stream along the treeline in the southwestern portion of the property, as indicated on the Conservation Halton mapping.

The remaining lands include both residential yards and areas covered by deciduous woods and scrub or by spruce plantation (Plates 17-20). Based on these findings, 54% of the subject property is found to contain the potential for encountering archaeological resources.

2.2 Inventory of Documentary and Material Record

The documentation and materials related to this project will be curated by ASI until such a time that arrangements for their ultimate transfer to Her Majesty the Queen in right of Ontario, or other public institution, can be made to the satisfaction of the project owner(s), the Ontario Ministry of Tourism, Culture and Sport, and any other legitimate interest groups.



3.0 ANALYSIS AND CONCLUSIONS

ASI was contracted by Derry Britannia Developments Limited to undertake a Stage 1 Archaeological Assessment of 6314 and 6302 Ninth Line, part of Lot 7, Concession 9 NS, in the Geographic Township of Trafalgar, County of Halton, now in the City of Mississauga, Regional Municipality of Peel. The overall size of the subject property is 2.85 hectares.

The Stage 1 background research has determined that, in view of the proximity to the historical transportation corridor of Ninth Line and to a tributary of Sixteen Mile Creek, there is the potential for pre-contact Indigenous and historical Euro-Canadian archaeological resources.

The field review determined that much of the property has been disturbed by the existing land use. The remaining 54% of the subject property is found to contain the potential for encountering archaeological resources.

4.0 RECOMMENDATIONS

In light of these results, the following recommendation is made:

1. Prior to any land-disturbing activities within the subject properties, a Stage 2 Archaeological Assessment must be conducted in accordance with the S & G.
 - a. The Stage 2 Archaeological Assessment must be carried out on all undisturbed lands within the subject properties by means of a test pit survey. All test pits should be excavated at least five cm into sterile subsoil, with all soils being screened through six mm mesh to facilitate artifact recovery. All test pits should be at least 30 cm in diameter and backfilled upon completion. Test pits should be excavated within one metre of all built structures. Test pits should be excavated at five metre transect intervals as outlined in the S & G.

NOTWITHSTANDING the results and recommendations presented in this study, ASI notes that no archaeological assessment, no matter how thorough or carefully completed, can necessarily predict, account for, or identify every form of isolated or deeply buried archaeological deposit. In the event that archaeological remains are found during subsequent construction activities, the consultant archaeologist, approval authority, and the Cultural Programs Unit of the Ministry of Tourism Culture and Sport should be immediately notified.

5.0 LEGISLATION COMPLIANCE ADVICE

ASI advises compliance with the following legislation:

- This report is submitted to the Minister of Tourism and Culture and Sport as a condition of licensing in accordance with Part VI of the Ontario Heritage Act, RSO 2005, 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, preservation and protection 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 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 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 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 sec. 48 (1) of the Ontario Heritage Act.
- The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33, requires that any person discovering or having knowledge of a burial site shall immediately notify the police or coroner. It is recommended that the Registrar of Cemeteries at the Ministry of Consumer Services is also immediately notified.
- Archaeological sites recommended for further archaeological field work or protection remain subject to Section 48(1) of the Ontario Heritage Act and may not be altered, nor may artifacts be removed from them, except by a person holding an archaeological license.

6.0 BIBLIOGRAPHY

ASI (Archaeological Services Inc.)

1998 The Master Plan of Archaeological Resources of the Regional Municipality of Halton, Technical Report. ASI: Toronto.

2008 Master Plan of Archaeological Resources of the Regional Municipality of Halton, 2008 Update.

Armstrong, F.H.

1985 *Handbook of Upper Canadian Chronology*. Dundurn Press, Toronto.

Boulton, D'A.

1805 *Sketch of His Majesty's Province of Upper Canada*. C. Rickaby, London (reprinted in Toronto by the Baxter Publishing Company, 1961).

Bristol, Richard

1819 Diary Trafalgar, 26 April-10 June 1819. In *Survey Diaries and Notes*. Archives of Ontario, RG1 CB1, box 39, microfilm MS924 reel 26.



- Brown, A.
2018 Ontario's Historical Plaques. <http://www.ontarioplaques.com/Menu_Map.html>
- Chapman, L.J. and D.F. Putman
1984 *The Physiography of Southern Ontario*. Second Edition. University of Toronto Press, Toronto.
- Conservation Halton
2018 Planning and Permits Map. <<http://camaps.maps.arcgis.com/apps/webappviewer/index.html?id=a2928bf280194294a4027111f8ff284a>>
- DMD (Department of Militia and Defence)
1909 *NTS Sheet Brampton*.
- Gillespie, J.E., R.E. Wicklund and M. Miller
1970 The Soils of Halton County. *The Ontario Soil Survey Report* No. 43. Canada Department of Agriculture, Ottawa and Ontario Department of Agriculture, Toronto.
- HSCL (Hunting Survey Corporation Limited)
1954 Digital Aerial Photographs. Southern Ontario 1954. University of Toronto Map & Data Library. <maps.library.utoronto.ca/data/on/AP_1954/index.html>
- Mathews, H.C.
1953 *Oakville and the Sixteen*. University of Toronto Press. Toronto. Reprinted 1971.
- Ministry of Consumer Services
2002 *Funeral, Burial and Cremation Services Act*.
- MCL (Ministry of Culture, now Ministry of Tourism, Culture and Sport)
1990 Ontario Heritage Act.
- Ministry of Municipal Affairs
1990 *The Planning Act*, R.S.O. 1990, c. P.13.
- MTC/MTCS (Ministry of Tourism and Culture, now the Ministry of Tourism, Culture and Sport)
2011 *Standards and Guidelines for Consultant Archaeologists*. Cultural Programs Branch, Archaeology and Planning Unit, Toronto.
- 2018 Sites within a 1 km Radius of the Project Provided from the Ontario Archaeological Sites Database. <<http://www.pastport.mtc.gov.on.ca>>
- Smith, W.H.
1846 Smith's Canadian Gazetteer. H. & W. Rowsell, Toronto.
- 1851 Canada: Past, Present and Future Being a Historical, Geographical, Geological and Statistical Account of Canada West (volume II). Thomas Maclear, Toronto.
- Tremaine, G.C.
1858 *Tremaine's Map of the County of Halton, Ont.* George C. Tremaine, Toronto.



Walker & Miles, Toronto.

1877 *Illustrated Historical Atlas of the County of Halton, Ont.* Toronto.

7.0 IMAGES



Plate 1: Extant house at 6314 Ninth Line on landscaped residential lot.



Plate 2: View to southwest, structure on gravel pad.



Plate 3: View to northwest, structures on gravel pad.



Plate 4: View to southwest, gravel laneway.



Plate 5: View to southwest, large gravel pad used for vehicle storage.



Plate 6: View to northeast, base of communications tower.



Plate 7: View to northwest, extant house at 6302 Ninth Line.



Plate 8: View to west, office structure comprising house trailer with frame addition.



Plate 9: View to south, structure and large gravel pad.



Plate 10: View to northeast, filled in pool and patio.



Plate 11: View to northeast, laneway from Ninth Line to sawmill operation.



Plate 12: View to southwest, shed for vehicle storage on gravel pad.



Plate 13: View to southeast, wood chip-covered area around sawmill, wood piles, and chip piles.



Plate 14: View to west, shed for lumber storage and drying.



Plate 15: View to southwest, pond at 6314 Ninth Line.



Plate 16: View to northwest, pond at 6302 Ninth Line.



Plate 17: View to north, lawn and landscaping on residential yard surrounding house at 6314 Ninth Line.



Plate 18: View to northwest, yard surrounding house at 6302 Ninth Line.



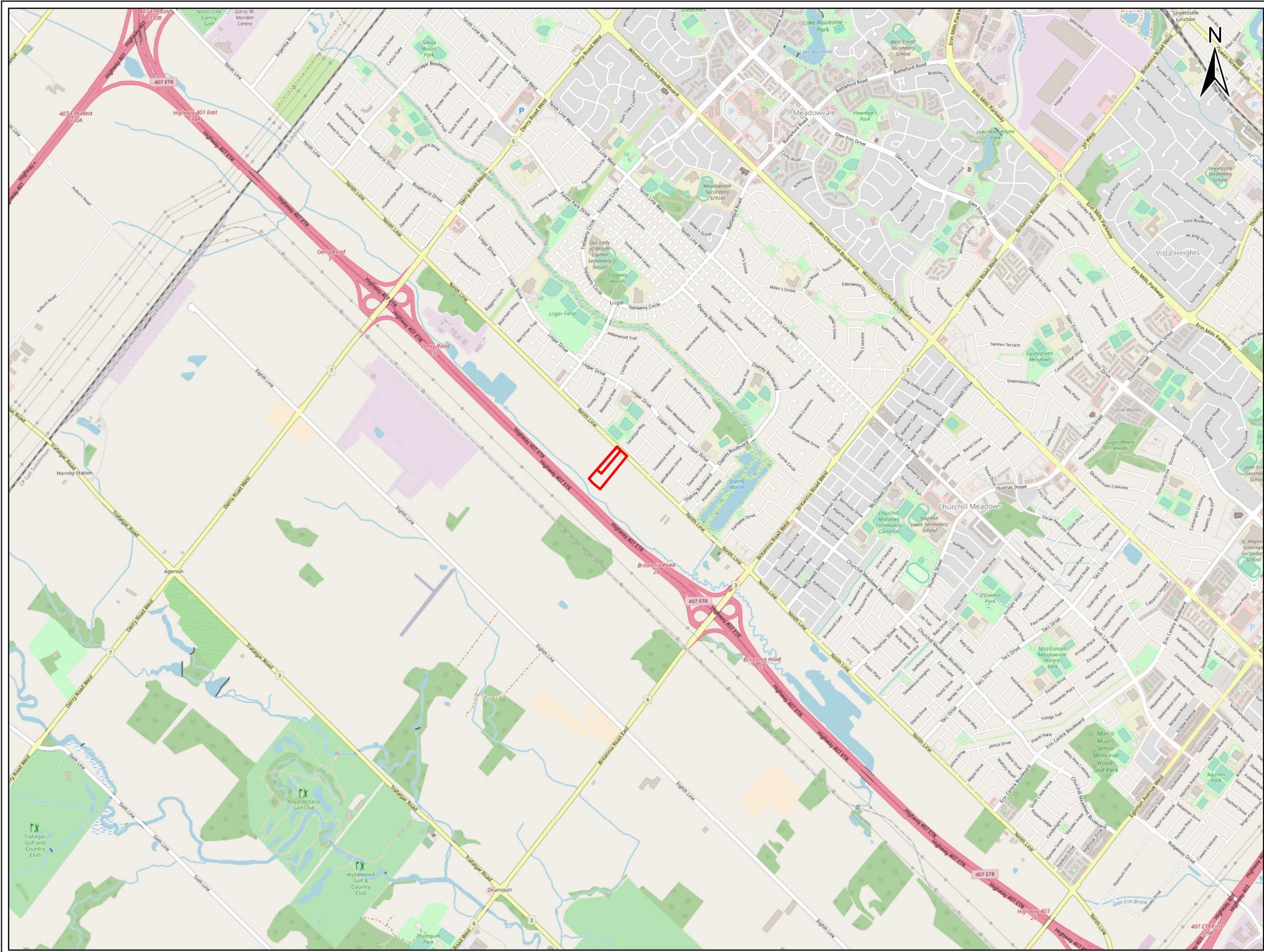
Plate 19: View to southwest, thick undergrowth in deciduous woods.



Plate 20: View to west, stack of drying lumber in spruce plantation.

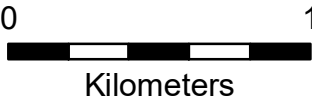
8.0 MAPS

See following pages for detailed assessment mapping and figures.



 SUBJECT PROPERTY

BASE: Ortho
Esri, DigitalGlobe, GeoEye, i-cubed, USDA,
USGS, AEX, Getmapping, Aerogrid, IGN,
IGP, swisstopo, and the GIS User Community



ASI PROJECT NO.: 18PL-202
DATE: 8/23/2018
DRAWN BY: AB
FILE: 18PL202_Fig1

 **Archaeological & Cultural Heritage Services**
528 Bathurst Street Toronto, ONTARIO M5S 2P9
416-966-1069 | 416-966-9723 | asiheritage.ca

Figure 1: Location of the Subject Property

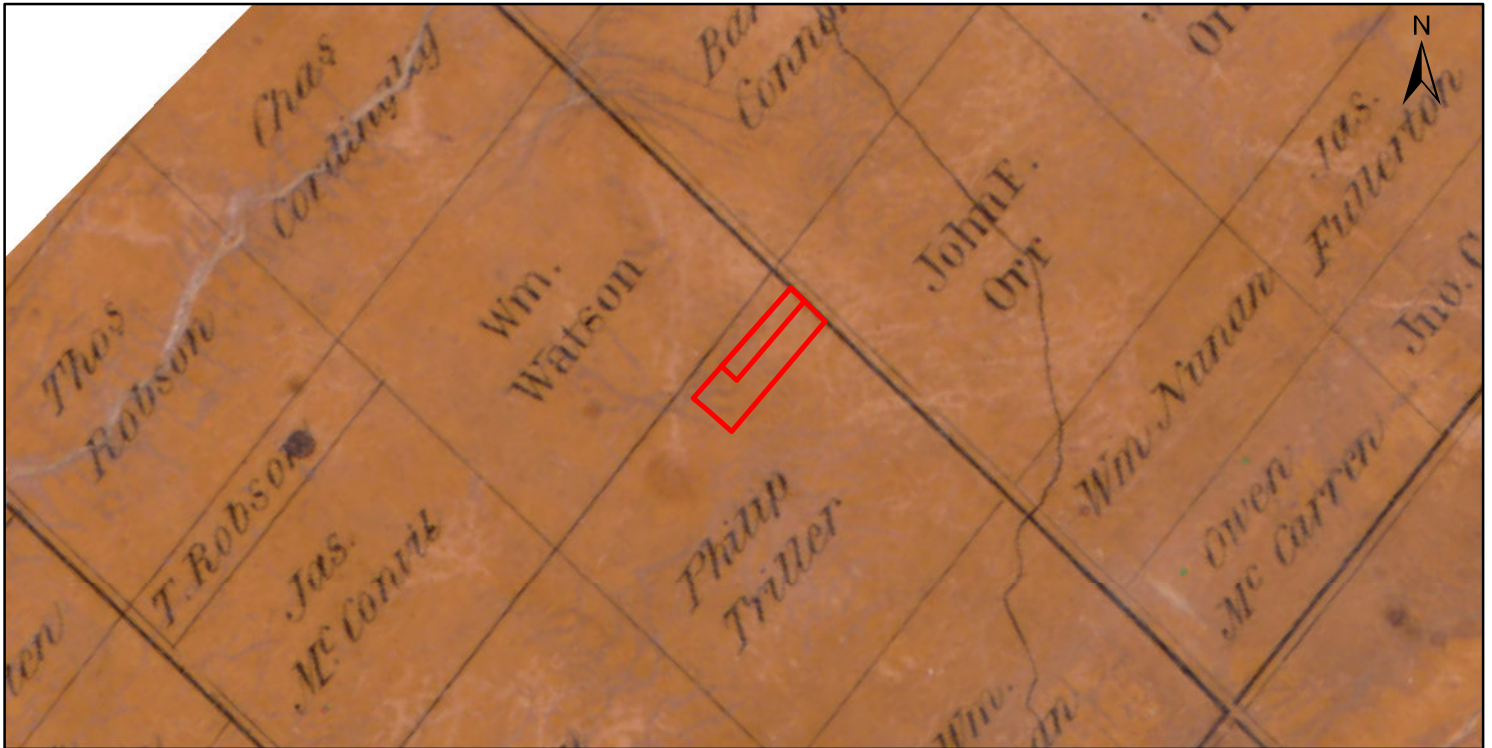
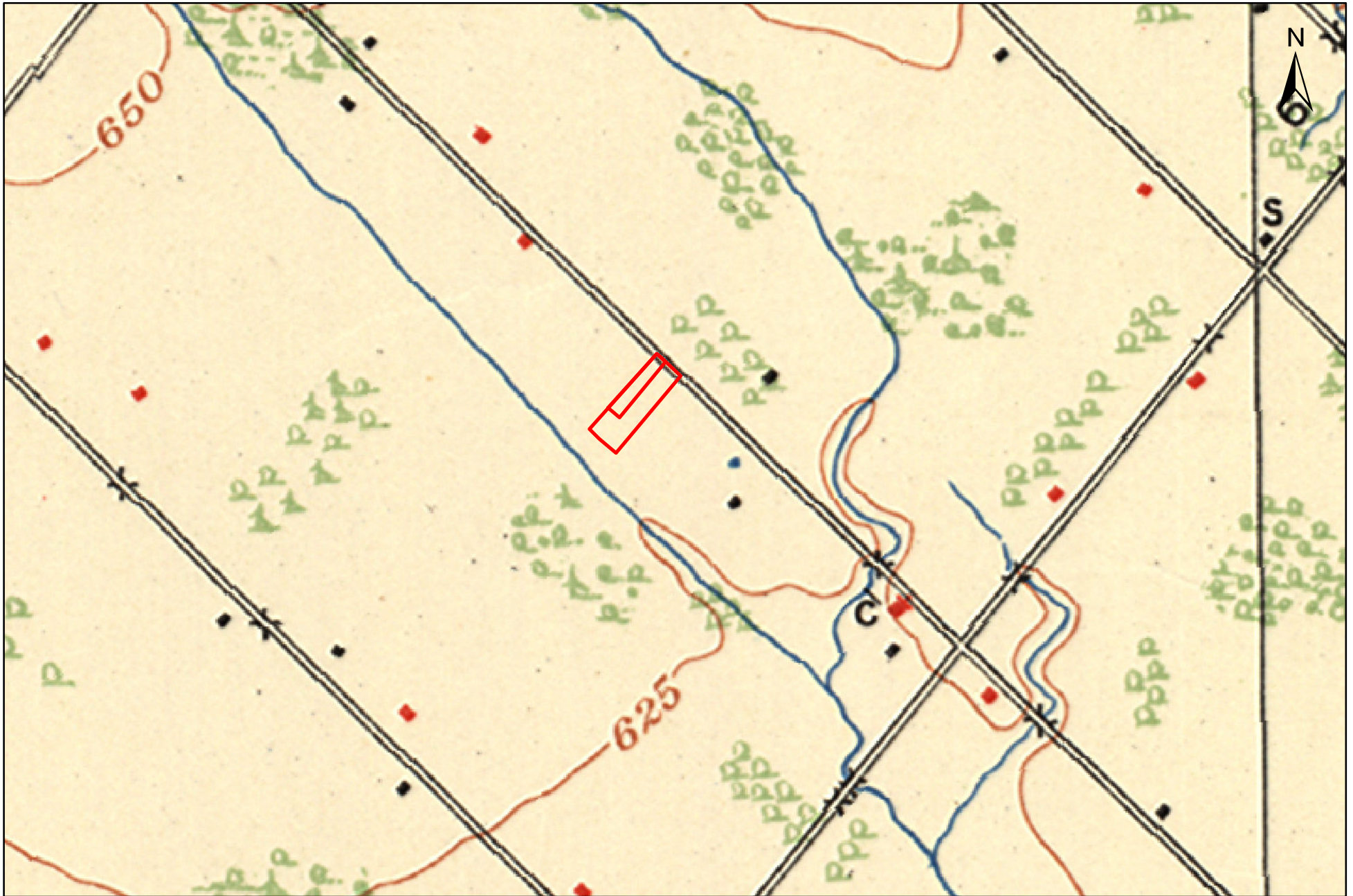


Figure 2: Subject Property located on the 1858 Tremaine Map of the County of Halton



Figure 3: Subject Property located on the 1877 Illustrated Historical Atlas of the County of Halton



Archaeological & Cultural Heritage Services
528 Bathurst Street Toronto, ONTARIO M5S 2P9
416-966-1069 | F416-966-9723 | asiheritage.ca



SUBJECT PROPERTY

Base:
1909 NTS Map
Brampton Sheet

0 500



Meters

ASI PROJECT NO.: 18PL-202
DATE: 8/23/2018

DRAWN BY: AB
FILE: 18PL202_Hist

Figure 4: Subject Property located on the 1909 NTS Sheet Brampton



 <p>Archaeological & Cultural Heritage Services 528 Bathurst Street Toronto, ONTARIO M5S 2P9 416-966-1069 F416-966-9723 asiheritage.ca</p>	 Subject Property	BASE: Map & Data Library U. of Toronto (1954)	<div>0  200 Meters</div> <div>ASI PROJECT NO.: 18PL-202 DATE: 9/25/2018</div> <div>DRAWN BY: RL FILE: 18PL202_1954</div>
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------	-----------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Figure 5: Subject Property located on 1954 aerial image




 SUBJECT PROPERTY



Archaeological & Cultural Heritage Services
528 Bathurst Street Toronto, ONTARIO M5S 2P9
416-966-1069 | F416-966-9723 | asiheritage.ca

BASE:
DigitalGlobe, 2017

0 50

Meters

ASI PROJECT NO.: 18PL-202
DATE: 8/23/2018

DRAWN BY: AB
FILE: 18PL202_Field

Figure 6: Existing Conditions of the Subject Property



 Archaeological & Cultural Heritage Services 528 Bathurst Street Toronto, ONTARIO M5S 2P9 416-966-1069 F416-966-9723 asih heritage.ca	 Subject Property	 Low and Wet	 Photo Location and Direction	BASE: DigitalGlobe, 2017	0  25 Meters
	 Stage 2 Assessment Recommended	 Disturbed: No Potential			ASI PROJECT NO.: 18PL-202 DATE: 10/3/2018

Figure 7: Results of Stage 1 Archaeological Assessment