



1.0 PROJECT REPORT COVER PAGE

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PROJECT INFORMATION:

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18524

MTCS Project Number:

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Investigation Type:

Stage 1-2 Archaeological Assessment

Project Name:

Argo Joshua Creek

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Part of Lot 8 Concession 1 North of Dundas Street
(Geographic Township of Trafalgar, County of Halton)
Town of Oakville, Regional Municipality of Halton

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2.0 EXECUTIVE SUMMARY

This report describes the results of the 2018 Stage 1-2 Archaeological Assessment of Part of Lot 8, Concession 1 North of Dundas Street, Geographic Township of Trafalgar, County of Halton, Town of Oakville, Regional Municipality of Halton, conducted by AMICK Consultants Limited. This study was conducted under Professional Archaeologist License #P038 issued to Marilyn E. Cornies by the Minister of Tourism, Culture and Sport for the Province of Ontario. This assessment was undertaken as a requirement under the Planning Act (RSO 1990b) and the Provincial Policy Statement (2014) in order to support a Draft Plan of Subdivision application and companion Zoning By-law Amendment application as part of the pre-submission process. Within the land use planning and development context, Ontario Regulation 544/06 under the Planning Act (1990b) requires an evaluation of archaeological potential and, where applicable, an archaeological assessment report completed by an archaeologist licensed by the Ministry of Tourism, Culture and Sport (MTCS). Policy 2.6 of the Provincial Policy Statement (PPS 2014) addresses archaeological resources. All work was conducted in conformity with Ontario Ministry of Tourism and Culture (MTC) Standards and Guidelines for Consultant Archaeologists (MTC 2011), the Ontario Heritage Act (RSO 1990a).

AMICK Consultants Limited was engaged by the proponent to undertake a Stage 1-2 Archaeological Assessment of lands potentially affected by the proposed undertaking and was granted permission to carry out archaeological fieldwork. The entirety of the study area was subject to property inspection and photographic documentation concurrently with the Stage 2 Property Assessment on December 8, 9, 10 2018 consisting of high-intensity test pit survey and pedestrian survey at an interval of five metres between individual test pits. All records, documentation, field notes, photographs and artifacts (as applicable) related to the conduct and findings of these investigations are held at the Lakelands District corporate offices of AMICK Consultants Limited until such time that they can be transferred to an agency or institution approved by the Ontario Ministry of Tourism, Culture and Sport (MTCS) on behalf of the government and citizens of Ontario.

As a result of the property Assessment of the study area, three (3) pre-contact isolated findspot archaeological resources were encountered. These are identified as Findspots P1, P2 and P3. In consideration of the above, the following recommendations are made:

Consequently, the following recommendations are made:

- *Given the undiagnostic isolated finds, no further archaeological assessment of Findspot P1, P2, and P3 is warranted*
- *It is recommended that the study area be cleared of archaeological concern and that development activity be permitted to proceed.*

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5.0 PROJECT BACKGROUND

5.1 DEVELOPMENT CONTEXT

This report describes the results of the 2018 Stage 1-2 Archaeological Assessment of Part of Lot 8, Concession 1 North of Dundas Street, Geographic Township of Trafalgar, County of Halton, Town of Oakville, Regional Municipality of Halton, conducted by AMICK Consultants Limited. This study was conducted under Professional Archaeologist License #P038 issued to Marilyn E. Cornies by the Minister of Tourism, Culture and Sport for the Province of Ontario. This assessment was undertaken as a requirement under the Planning Act (RSO 1990b) and the Provincial Policy Statement (2014) in order to support a Draft Plan of Subdivision application and companion Zoning By-law Amendment application as part of the pre-submission process. Within the land use planning and development context, Ontario Regulation 544/06 under the Planning Act (1990b) requires an evaluation of archaeological potential and, where applicable, an archaeological assessment report completed by an archaeologist licensed by the Ministry of Tourism, Culture and Sport (MTCS). Policy 2.6 of the Provincial Policy Statement (PPS 2014) addresses archaeological resources. All work was conducted in conformity with Ontario Ministry of Tourism and Culture (MTC) Standards and Guidelines for Consultant Archaeologists (MTC 2011), the Ontario Heritage Act (RSO 1990a).

AMICK Consultants Limited was engaged by the proponent to undertake a Stage 1-2 Archaeological Assessment of lands potentially affected by the proposed undertaking and was granted permission to carry out archaeological fieldwork. The entirety of the study area was subject to property inspection and photographic documentation concurrently with the Stage 2 Property Assessment on December 8, 9, 10 2018 consisting of high-intensity test pit survey and pedestrian survey at an interval of five metres between individual test pits. All records, documentation, field notes, photographs and artifacts (as applicable) related to the conduct and findings of these investigations are held at the Lakelands District corporate offices of AMICK Consultants Limited until such time that they can be transferred to an agency or institution approved by the Ontario Ministry of Tourism, Culture and Sport (MTCS) on behalf of the government and citizens of Ontario.

The subject property is located on the north side of Dundas Street, approximately 1.8 km east of Trafalgar Road and one kilometre west of Ninth Line. The property is approximately 38 hectares in size.

5.2 HISTORICAL CONTEXT

As part of the present study, background research was conducted in order to determine the archaeological potential of the proposed project area.

“A Stage 1 background study provides the consulting archaeologist and Ministry report reviewer with information about the known and potential cultural heritage resources within a particular study area, prior to the start of the field assessment.” (OMCzCR 1993)

The evaluation of potential is further elaborated Section 1.3 of the Standards and Guidelines for Consultant Archaeologist (2011) prepared by the Ontario Ministry of Tourism and Culture:

“The Stage 1 background study (and, where undertaken, property inspection) leads to an evaluation of the property’s archaeological potential. If the evaluation indicates that there is archaeological potential anywhere on the property, the next step is a Stage 2 assessment.” (MTC 2011: 17)

Features or characteristics that indicate archaeological potential when documented within the study area, or within close proximity to the study area (as applicable), include:

- “ - previously identified archaeological sites
 - water sources (It is important to distinguish types of water and shoreline, and to distinguish natural from artificial water sources, as these features affect site locations and types to varying degrees.):
 - primary water sources (lakes, rivers, streams, creeks)
 - secondary water sources (intermittent streams and creeks, springs, marshes, swamps)
 - features indicating past water sources (e.g., 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)
 - accessible or inaccessible shoreline (e.g., high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh)
 - elevated topography (e.g., 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 (e.g., migratory routes, spawning areas, prairie)
 - scarce raw materials (e.g., quartz, copper, ochre or outcrops of chert)
 - early Euro-Canadian industry (e.g., fur trade, logging, prospecting, mining)

- *areas of early Euro-Canadian settlement. These include places of early military or pioneer settlement (e.g., pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches and early cemeteries. There may be commemorative markers of their history, such as local, provincial, or federal monuments or heritage parks.*
- *Early historical transportation routes (e.g., trails, passes, roads, railways, portage routes)*
- *property listed on a municipal register or designated under the Ontario Heritage Act that is a federal, provincial or municipal historic landmark or site*
- *property that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations”*

(MTC 2011: 17-18)

The evaluation of potential does not indicate that sites are present within areas affected by proposed development. Evaluation of potential considers the possibility for as yet undocumented sites to be found in areas that have not been subject to systematic archaeological investigation in the past. Potential for archaeological resources is used to determine if property assessment of a study area or portions of a study area is required.

“Archaeological resources not previously documented may also be present in the affected area. If the alternative areas being considered, or the preferred alternative selected, exhibit either high or medium potential for the discovery of archaeological remains an archaeological assessment will be required.”

(MCC & MOE 1992: 6-7)

“The Stage 1 background study (and, where undertaken, property inspection) leads to an evaluation of the property’s archaeological potential. If the evaluation indicates that there is archaeological potential anywhere on the property, the next step is a Stage 2 assessment.”

(MTC 2011: 17)

In addition, archaeological sites data is also used to determine if any archaeological resources had been formerly documented within or in close proximity to the study area and if these same resources might be subject to impacts from the proposed undertaking. This data was also collected in order to establish the relative significance of any resources that might be encountered during the conduct of the present study. For example, the relative rarity of a site can be used to assign an elevated level of significance to a site that is atypical for the immediate vicinity. The requisite archaeological sites data of previously registered archaeological sites was collected from the Programs and Services Branch, Culture Programs Unit, MTCS and the corporate research library of AMICK Consultants Limited. The Stage 1 Background Research methodology also includes a review of the most detailed available topographic maps, historical settlement maps, archaeological management plans (where applicable) and commemorative plaques or monuments. When previous archaeological research documents lands to be impacted by the proposed undertaking or archaeological sites within 50 metres of the study area, the reports documenting this earlier work are reviewed for

pertinent information. AMICK Consultants Limited will often modify this basic methodology based on professional judgment to include additional research (such as, local historical works or documents and knowledgeable informants).

5.2.1 CURRENT CONDITIONS

The present use of the study area is vacant agricultural. The study area is roughly 38 hectares in area. At the time of the Stage 2 assessment the conditions consisted of recently ploughed field, low and wet areas, treed area, and woodlot. Current conditions encountered during the Stage 1-2 Property Assessment are illustrated in the Maps section of the report, and photographs of the conditions are included in the Images section of the report.

5.2.2 GENERAL HISTORICAL OUTLINE

The County of Halton, was named after Major William Mathew Halton, who was the Secretary to the Upper Canada provincial Lieutenant-Governor Sir Francis Gore in 1805. United Empire Loyalists were the first settlers in the area and arrived in the early 1780s. The United Empire Loyalists chose to settle in the southern part of the county and the northern part was settled by immigrants from the British Isles. The area was officially designated a county in 1816 and was originally part of Gore District and consisted of 4 townships; Esquesing, Nassageweya, Nelson and Trafalgar Township.

The Township of Trafalgar was opened to settlers in 1806 after the lands from the Mississauga Purchase were surveyed. Samuel Wilmot surveyed the Township and a segment of his original survey is included in this report (see Figure 2). The Township was named after the Battle of Trafalgar, where the British defeated the Spanish and French fleets. Within 4 years settlers within the area had already constructed schools and churches within villages (Oakville Fine Homes 2011).

Merchant and shipbuilder Colonel William Chisholm founded the Village of Oakville in 1827. Chisholm purchased 960 acres of Crown Land at the mouth of Sixteen Mile Creek and he then established the first privately owned harbor in Upper Canada. This harbor created a hub for trade between Hamilton, Toronto and foreign cities. In 1834, Oakville was declared a Port of Entry into Canada where William Chisholm was the first Customs Inspector. When incorporated as a town in 1857, his son George Chisholm became Oakville's first mayor. The current Town of Oakville includes the surrounding townships of Trafalgar and Bronte, which were amalgamated in 1962 (Town of Oakville 2011).

Robert Gourlay's *Statistical Account of Upper Canada* (Gourlay 1974) originally published in 2 volumes in 1822, includes the following description of Trafalgar Township from 1817. Item the 31st provides a particularly vivid description of the hardships of early settlement.

“At a meeting of the inhabitants of our township, holden on the 27th November, 1817, at the house of Daniel Munn, innkeeper, the following answers were framed in reply to your queries, as they appeared to us in the Niagara Spectator.

"9th. The surface of the land is level; the topsoil is clay, mixed with loam and a little gravel; under that is clay, mostly of a red colour.

"10th. Our timber consists of oak, two kinds, white and red; pine, very large, of the white kind; beech; maple, two kinds; sugar maple, and soft maple; ash, two kinds, the black or swamp ash, and white ash; basswood; hickory; elm; white and red; hemlock; ironwood; chestnut; some birch; quaking asp; some cedar; some butternut, and a little tamarask: the timber mostly large, and stands thick on the land.

"11th. Respecting minerals, there is a considerable quantity of the mineral of iron, called bog ore; also a few salt springs of an inferior kind.

"12th. Building stones, none, excepting a few, which may be found over the land of a very indifferent kind.

"15th. Blacksmiths most generally work by the pound; that is, 7½ d. per lb. when the iron and steel are found, and is 1s. 3d. when the blacksmith finds the materials; to this there are some exceptions, but not many.

"18th. The common custom of our township is to cut down no more at first than the timber which is a foot in diameter, measured about two feet and a half from the root of the tree, and all under that size; and the rest they girdle and kill with the axe. In this state it will produce nearly as good a crop as if all were cut down, and this only costs 1 lb. 10 s. per acre; the rest of the timber is cut down by degrees, for fencing and for fire wood, &c.

"21st. Beasts are turned out about the first of May, and taken in about the first of December.

"22nd. Sleighing lasts about three months, that is, beginning about the first of January, and ends about the last of March. Ploughing begins about the 20th of April.

"23rd. Season of sowing wheat is from the 25th of August till the 1st of October; the time of harvesting of said grain is from the twentieth of July till the end of August.

"25th. Respecting pasture, as the wild woods constitute our principal pasture lands, we have not yet made sufficient experiments to enable us to answer your query; but our meadow lands will generally produce one ton per acre.

"26th. The ordinary course of cropping in new land, is wheat the first year, harrowed in, and sometimes a crop of oats are harrowed in, in the spring, on the stubble; then it is sown down with Timothy or clover, or both together, and is used for meadow for three or four years, till the roots rot in the ground, and then ploughed up, after which peas or buckwheat are generally sown first, and then wheat, perhaps the same season; and then peas or buckwheat, or oats, and then wheat, and so on alternately; little or no manure is used, but corn land and orchards require it most.

“27th. Land is frequently let on shares on the following terms: if new, the leaser finds the leasee in team, in boarding, in farming utensils, and in half the seed, and then receives half the produce. If old land, and the leasee finds every thing, the leasee has one third of the produce. Enough of land can be had on either of these ways.

“28th. A farm of two hundred acres, with a log house, and a barn upon it, with 40 acres, cleared in the customary way, may be had for 375 l. If frame buildings are upon it, a greater price; but seldom in proportion to the buildings.

“29th. The quantity of land for sale we cannot justly describe, but we suppose 3 or 4,000 acres; and there are but few farmers in our township, who would not even sell their improved farms, if they had the offer of a good price.

“30th. The state of public roads at present is but indifferent; but they are capable of improvement at a very moderate expense. As the face of our country is generally level, great improvement might be made by means of canals and locks. Respecting our navigation, we are situated on the coast of lake Ontario, and thence we have benefit of all the adjoining waters. Besides we have two very fine streams, called the Twelve and Sixteen Mile Creeks; these can be made navigable for boats, some part of the year, four miles from the mouth, to communicate with our mills on Dundas Street. The mouth of the Sixteen, where it empties into lake Ontario, is navigable for vessels of a considerable burden, and forms a safe and commodious harbour.

“31st. The causes which retard the improvement of our township and the province are large and various. The first and principal cause you have already justly observed, that is, the want of capital; this may perhaps be best illustrated by facts: know then, that the greater number of our farmers, when they first settled in the wild woods, have little more property than a cow, a yoke of oxen, a log chain, and an axe; and some have little or no property at all but their axe alone. The family generally consist of a man and his wife, and a number of young children, unable to hire hands; the whole of the labour naturally devolves upon the man, and hence it is, that for six or seven years, till such time as the roots of the timber begin to rot in the ground, so that he can use the plough, and until the eldest of his children grows up to help him, his toil is incessant; four or five acres are all that he is able to clear and sow in a season, and that is generally put in so late, that it produces but little; so that the whole of his crop will scarcely support him through the year; but many times he has to work out for a part of his bread. Clothes he must have for himself and his family, and these must be got out of the store; and merchant's goods are very dear in this province; and as he hath nothing to pay with, he is obliged to go on credit. These in a few years soon run up high, so that by the time he gets his farm in such a state of improvement, as might enable him to live comfortable, he is frequently obliged to sell it, in order to pay off his debts. Such is the consequence of beginning poor. But this, you will observe, is only the gloomy side of things; for those who are so fortunate as to weather out the storm the first ten years, without sinking their plantations, are generally enabled to spend the remainder of their days in comfort. The scarcity of labourers, and the very high price of labour, so that the produce will scarcely pay pay the hands, forms another hindrance to the improvement of our township, and the province at large. Another hindrance is, that in many places of this province, large tracts of land

been granted to certain individuals, and these being generally men of fortune, are under no necessity of selling their lands, but hold them to so high a price, that poor people are not able to buy them; again, there are many of these gentlemen gone out of the province, so that there is no opportunity to purchase from them; so it still remains a wilderness, and the poor people who are settled around such tracts, have roads to make, and every other public duty to perform, at their own expense, which greatly enhances to value of such land, to the great injury of the inhabitants.

“Another hindrance respecting our township, is that a great number of lots are reserved for the crown and the clergy, and notwithstanding that these lots might be rented for 21 years, for a very small sum of money, yet the land, in this province, has hitherto been so plenty and cheap, that no one cares for renting the land, who can have it in fee simple: hence it is, that the greater number of them still remain unsettled; but when settlers become numerous, this evil will soon be done away.

“What, in our opinion, would contribute to the improvement of our township and the province at large, would be to encourage men of property into the country, to purchase the waste lands of our province, which if sold even at a moderate price, would introduce such a flow of capitol into our province, as would not only encourage a respectable race of settlers of every description, to come in and cultivate the face of the country, and turn the wilderness into fruitful fields, but it would also make trade and manufactures of all kinds flourish; then would our province no longer remain poor, neglected, and unknown to the world; but would become a respectable colony, not only able to support herself, but she would add a large revenue to the British Crown and her redundancies would contribute to feed the hungry, and clothe the poor of other nations.” (Gourlay 1974: 179-182)

Further on in the same work, Gourlay provides a summary chart for the returns from the Gore District. His summary of Trafalgar Township notes that there are 97 inhabited houses, a population of 548 residents, no churches, 2 Methodist preachers, no medical practitioners, 3 schools, 0 stores, 4 taverns, 1 grist mill, and 4 saw mills. He also provides costs to hire various trades and prices paid for various agricultural products in the same chart (Gourlay 1974: 206).

HISTORIC ATLAS MAP (1877)

Map 3 illustrates the location of the study area and environs as of 1877 according to the Township Map included in the Illustrated Historical Atlas of the County of Halton (1877). Lot 8 is shown to belong to Mrs. A. E. Turner. The study area is located within the south and east half of the lot. The Atlas depicts a structure and orchard within the lot but they appear to be outside of the study area.

It must be borne in mind that inclusion of names of property owners and depictions of structures within properties on these maps were sold by subscription. While information included within these maps may provide information about occupation of the property at a specific point in time, the absence of such information does not indicate that the property was not occupied.

5.2.3 SUMMARY OF HISTORICAL CONTEXT

The brief overview of documentary evidence readily available indicates that the study area is situated within an area that was close to the historic transportation routes and in an area well populated during the nineteenth century and as such has potential for sites relating to early Euro-Canadian settlement in the region.

5.3 ARCHAEOLOGICAL CONTEXT

The Archaeological Sites Database administered by the Ministry of Tourism, Culture and Sport (MTCS) indicates that there are 36 previously documented sites within 1 kilometre of the study area.

However, it must be noted that this is based on the assumption of the accuracy of information compiled from numerous researchers using different methodologies over many years. AMICK Consultants Limited assumes no responsibility for the accuracy of site descriptions, interpretations such as cultural affiliation, or location information derived from the Archaeological Sites Database administered by MTCS. In addition, it must also be noted that a lack of formerly documented sites does not indicate that there are no sites present as the documentation of any archaeological site is contingent upon prior research having been conducted within the study area.

On the basis of information supplied by MTCS, archaeological assessments have not been conducted within 50 metres of the study area. AMICK Consultants Limited assumes no responsibility for the accuracy of previous assessments, interpretations such as cultural affiliation, or location information derived from the Archaeological Sites Database administered by MTCS. Data contained in previous archaeological reports in close proximity to the study area that is relevant to Stage 1 Background Study is defined within the Standards and Guidelines for Consultant Archaeologists in Section 7.5.8 Standard 4 as follows:

“Provide descriptions of previous archaeological fieldwork carried out within the limits of, or immediately adjacent to the project area, as documented by all available reports that include archaeological fieldwork carried out on the lands to be impacted by this project, or where reports document archaeological sites immediately adjacent (i.e., within 50 m) to those lands.”

(MTCS 2011: 126 Emphasis Added)

In accordance with data supplied by MTCS for the purposes of completing this study, there are no previous reports detailing, “archaeological fieldwork carried out on the lands to be impacted by this project”, nor do any previous reports document known archaeological sites within 50 metres of the study area.

The Standards and Guidelines for Consultant Archaeologists stipulates that the necessity to summarize the results of previous archaeological assessment reports, or to cite MTCS File

Numbers in references to other archaeological reports, is reserved for reports that are directly relevant to the fieldwork and recommendations for the study area (S & Gs 7.5.7, Standard 2, MTC 2011: 125). This is further refined and elaborated upon in Section 7.5.8, Standards 4 & 5, MTC 2011:

“4. Provide descriptions of previous archaeological fieldwork carried out within the limits of, or immediately adjacent to the project area, as documented by all available reports that include archaeological fieldwork carried out on the lands to be impacted by this project, or where reports document archaeological sites immediately adjacent (i.e., within 50m) to those lands.”

“5. If previous findings and recommendations are relevant to the current stage of work, provide the following:

- a. *a brief summary of previous findings and recommendations*
- b. *documentation of any differences in the current work from the previously recommended work*
- c. *rationale for the differences from the previously recommended work”*
(Emphasis Added)

5.3.1 FIRST NATIONS REGISTERED SITES

A summary of registered and/or known archaeological sites within a 1-kilometre radius of the study area was gathered from the Archaeological Sites Database, administered by MTCS. As a result, it was determined that 14 archaeological sites relating directly to First Nations habitation/activity had been formally registered within the immediate vicinity of the study area.

TABLE 1 FIRST NATIONS SITES WITHIN 1KM

Borden Number	Site Name	Time Period	Affinity	Site Type
AjGw-484	P8	Archaic, Late	Aboriginal	findspot
AjGw-483	P7	Archaic, Late	Aboriginal	findspot
AjGw-466		Woodland, Early	Aboriginal	findspot
AjGw-462		Archaic, Paleo-Indian, Paleo-Indian, Late	Aboriginal	findspot
AjGw-43				
AjGw-428		Other		Other findspot_
AjGw-427	P3	Pre-Contact	Aboriginal	scatter
AjGw-426	-	Pre-Contact	Aboriginal	findspot
AjGw-42				
AjGw-41				

Stage 1&2 Archaeological Assessment of Part of Lot 8 Concession 1 North of Dundas Street (Geographic Township of Trafalgar, County of Halton) Town of Oakville, Regional Municipality of Halton (AMICK File #18524/MTCS File #P038-0954-2018)

Borden Number	Site Name	Time Period	Affinity	Site Type
AjGw-388				
AjGw-387				
AjGw-308	Raptor	Pre-Contact	Aboriginal	Othercamp/campsite
AjGw-25	Adle	Pre-Contact	Aboriginal	Othercamp/campsite
AjGw-102	Stellar			
AiGw-523	Shieldbay Site 2	Pre-Contact	Aboriginal	camp / campsite
AiGw-522	Shieldbay 1 site			
AiGw-427	Landing	Archaic	Aboriginal	Othercamp/campsite
AiGw-415		Pre-Contact, Woodland, Early	Aboriginal	findspot
AiGw-413	-	Pre-Contact	Aboriginal	findspot
AiGw-335	Iroquois Ridge #2	Archaic, Middle	Aboriginal	findspot
AiGw-334	Iroquois Ridge #1	Pre-Contact	Aboriginal	findspot
AiGw-182				
AiGw-181				
AiGw-180				
AiGw-179				

Table 2 illustrates the chronological development of cultures within southern Ontario prior to the arrival of European cultures to the area at the beginning of the 17th century. This general cultural outline is based on archaeological data and represents a synthesis and summary of research over a long period of time. It is necessarily generalizing and is not necessarily representative of the point of view of all researchers or stakeholders. It is offered here as a rough guideline and outline to illustrate the relationships of broad cultural groups and time periods.

TABLE 2 CULTURAL CHRONOLOGY FOR SOUTHERN ONTARIO

Years ago	Period	Southern Ontario
250	Terminal Woodland	Ontario and St. Lawrence Iroquois Cultures
1000 2000	Initial Woodland	Princess Point, Saugeen, Point Peninsula, and Meadowood Cultures
3000 4000 5000 6000	Archaic	Laurentian Culture
7000 8000 9000 10000 11000	Palaeo-Indian	Plano and Clovis Cultures

Years ago	Period	Southern Ontario
		(Wright 1972)

5.3.2 EURO-CANADIAN REGISTERED SITES

A summary of registered and/or known archaeological sites within a 1-kilometre radius of the study area was gathered from the Archaeological Sites Database, administered by MTCS. As a result it was determined that 10 archaeological sites relating directly to Euro-Canadian habitation/activity had been formally registered within the immediate vicinity of the study area (see Table 3).

TABLE 3 EURO-CANADIAN SITES WITHIN 1KM

Borden Number	Site Name	Time Period	Affinity	Site Type
AjGw-573		Post-Contact	Euro-Canadian	homestead
AjGw-501	McDuffe Site	Post-Contact	Euro-Canadian	
AjGw-44	Fish Homestead	Post-Contact	Euro-Canadian	house
AjGw-43				
AjGw-428		Other		Other findspot_
AjGw-42				
AjGw-41				
AjGw-388				
AjGw-387				
AjGw-386	Sullivan Site	Post-Contact	Euro-Canadian	cabin
AjGw-307	Albertson 1	Post-Contact	Euro-Canadian	homestead
AjGw-306	Albertson II	Post-Contact	Euro-Canadian	homestead
AjGw-305	Phoenix	Post-Contact	Euro-Canadian	Otherbuilding, homestead
AjGw-227	Lernan	Post-Contact	Euro-Canadian	homestead
AjGw-102	Stellar			
AiGw-545	AiGw-545	Post-Contact	Euro-Canadian	farmstead, homestead, house
AiGw-522	Shieldbay 1 site			
AiGw-376	Lane	Post-Contact	Euro-Canadian	homestead, midden

Borden Number	Site Name	Time Period	Affinity	Site Type
AiGw-182				
AiGw-181				
AiGw-180				
AiGw-179				

Four of the above noted archaeological sites are situated within 300 metres of the study area. These include sites AjGw-427, AjGw-426, AjGw-484, and AjGw-483. The first of these is a lithic scatter while the remaining three are isolated lithic findspots. These four sites within 300 metres help to determine archaeological potential with respect to the archaeological assessment of the proposed undertaking.

A total of 12 sites located within a one-kilometre radius have no additional information attached to them in the MTCS database provided.

5.3.3 LOCATION AND CURRENT CONDITIONS

The study area is described as Part of Lot 8, Concession 1 N.D.S, Geographic Township of Trafalgar, County of Halton, Town of Oakville, Regional Municipality of Halton, conducted by AMICK Consultants Limited.

The present use of the study area is vacant agricultural. The study area is roughly 38 hectares in area. At the time of the Stage 2 assessment the conditions consisted of recently ploughed field, low and wet areas (including a pond), and woodlot. Current conditions encountered during the Stage 1-2 Property Assessment are illustrated in the Maps section of the report, and photographs of the conditions are included in the Images section of the report.

5.3.4 PHYSIOGRAPHIC REGION

The study area is situated within the South Slope physiographic region that extends from the Niagara Escarpment to the Trent River. Conditions in the region vary greatly. The area in which the study area lies is described as a ground moraine with irregular knolls and hollows. The South Slope lies across the limestones of the Verulam and Lindsay Formations, the grey shales of the Georgian Bay Formation and the reddish shales of the Queenston Formation. A till consisting nearly of red and grey shale is reached west of the Credit River. The soil is only slightly acidic, ranging from sandy in the east to clayey in the west (Chapman and Putnam 1984: 172-174).

5.3.5 SURFACE WATER

Sources of potable water, access to waterborne transportation routes, and resources associated with watersheds are each considered, both individually and collectively to be the highest criteria for determination of the potential of any location to support extended human

activity, land use, or occupation. Accordingly, proximity to water is regarded as the primary indicator of archaeological site potential. The Standards and Guidelines for Consultant Archaeologists stipulates that undisturbed lands within 300 metres of a water source are considered to have archaeological potential (MTC 2011: 21).

There are low lying wet areas within the study area, including seasonal creeks.

5.3.6 CURRENT PROPERTY CONDITIONS CONTEXT

Current characteristics encountered within an archaeological research study area determine if property Assessment of specific portions of the study area will be necessary and in what manner a Stage 2 Property Assessment should be conducted, if necessary. Conventional assessment methodologies include pedestrian survey on ploughable lands and test pit methodology within areas that cannot be ploughed. For the purpose of determining where property Assessment is necessary and feasible, general categories of current landscape conditions have been established as archaeological conventions. These include:

5.3.6.1 BUILDINGS AND STRUCTURAL FOOTPRINTS

A building, in archaeological terms, is a structure that exists currently or has existed in the past in a given location. The footprint of a building is the area of the building formed by the perimeter of the foundation. Although the interior area of building foundations would often be subject to property Assessment when the foundation may represent a potentially significant historic archaeological site, the footprints of existing structures are not typically assessed. Existing structures commonly encountered during archaeological assessments are often residential-associated buildings (houses, garages, sheds), and/or component buildings of farm complexes (barns, silos, greenhouses). In many cases, even though the disturbance to the land may be relatively shallow and archaeological resources may be situated below the disturbed layer (e.g. a concrete garage pad), there is no practical means of assessing the area beneath the disturbed layer. However, if there were evidence to suggest that there are likely archaeological resources situated beneath the disturbance, alternative methodologies may be recommended to study such areas.

There are no buildings or structural footprints within the study area.

5.3.6.2 DISTURBANCE

Areas that have been subjected to extensive and deep land alteration that has severely damaged the integrity of archaeological resources are known as land disturbances. Examples of land disturbances are areas of “past quarrying, major landscaping, recent built and industrial uses, sewage and infrastructure development, etc.” (MCL 2005: 15), as well as driveways made of gravel or asphalt or concrete, in-ground pools, and wells or cisterns. Surfaces paved with interlocking brick, concrete, asphalt, gravel and other surfaces meant to support heavy loads or to be long wearing hard surfaces in high traffic areas, must be prepared by the excavation and removal of topsoil, grading, and the addition of aggregate

material to ensure appropriate engineering values for the supporting matrix and also to ensure that the installations shed water to avoid flooding or moisture damage. All hard surfaced areas are prepared in this fashion and therefore have no or low archaeological potential. Major utility lines are conduits that provide services such as water, natural gas, hydro, communications, sewage, and others. These major installations should not be confused with minor below ground service installations not considered to represent significant disturbances removing archaeological potential, such as services leading to individual structures which tend to be comparatively very shallow and vary narrow corridors. Areas containing substantial and deeply buried services or clusters of below ground utilities are considered areas of disturbance, and may be excluded from Stage 2 Property Assessment. Disturbed areas are excluded from Stage 2 Property Assessment due to no or low archaeological potential and often because they are also not viable to assess using conventional methodology.

*“Earthwork is one of the major works involved in road construction. This process includes excavation, material removal, filling, compaction, and construction. Moisture content is controlled, and compaction is done according to standard design procedures. Normally, rock explosion at the road bed is not encouraged. While filling a depression to reach the road level, **the original bed is flattened after the removal of the topsoil.** The fill layer is distributed and compacted to the designed specifications. This procedure is repeated until the compaction desired is reached. **The fill material should not contain organic elements,** and possess a low index of plasticity. Fill material can include gravel and decomposed rocks of a particular size, but should not consist of huge clay lumps. Sand clay can be used. The area is considered to be adequately compacted when the roller movement does not create a noticeable deformation. **The road surface finish is reliant on the economic aspects, and the estimated usage.**” [Emphasis Added]*

(Goel 2013)

The supporting matrix of a hard paved surface cannot contain organic material which is subject to significant compression, decay and moisture retention. Topsoil has no engineering value and must be removed in any construction application where the surface finish at grade requires underlying support.

Installation of sewer lines and other below ground services associated with infrastructure development often involves deep excavation that can remove archaeological potential. This consideration does not apply to relatively minor below ground services that connect structures and facilities to services that support their operation and use. Major servicing corridors will be situated within adjacent road allowances with only minor, narrow and relatively shallow underground services entering into the study area to connect existing structures to servicing mainlines. The relatively minor, narrow and shallow services buried within a residential property do not require such extensive ground disturbance to remove or minimize archaeological potential within affected areas.

The study area does not contain any disturbed areas.

5.3.6.3 LOW-LYING AND WET AREAS

Landscape features that are covered by permanently wet areas, such as marshes, swamps, or bodies of water like streams or lakes, are known as low-lying and wet areas. Low-lying and wet areas are excluded from Stage 2 Property Assessment due to inaccessibility.

The study area does contain low-lying wet areas.

5.3.6.4 STEEP SLOPE

Landscape which slopes at a greater than ($>$) 20 degree change in elevation, is known as steep slope. Areas of steep slope are considered uninhabitable, and are excluded from Stage 2 Property Assessment.

The study area does not contain areas of steep slope.

5.3.6.5 WOODED AREAS

Areas of the property that cannot be ploughed, such as natural forest or woodlot, are known as wooded areas. These wooded areas qualify for Stage 2 Property Assessment, and are required to be assessed using test pit survey methodology.

The study area does contain wooded areas and woodlot.

5.3.6.6 PLOUGHABLE AGRICULTURAL LANDS

Areas of current or former agricultural lands that have been ploughed in the past are considered ploughable agricultural lands. Ploughing these lands regularly turns the soil, which in turn brings previously buried artifacts to the surface, which are then easily identified during visual inspection. Furthermore, by allowing the ploughed area to weather sufficiently through rainfall, soil is washed off of exposed artifacts at the surface and the visibility of artifacts at the surface of recently worked field areas is enhanced markedly. Pedestrian survey of ploughed agricultural lands is the preferred method of physical assessment because of the greater potential for finding evidence of archaeological resources if present.

The study area does contain ploughable lands in the form of former agricultural fields.

5.3.6.7 LAWN, PASTURE, MEADOW

Landscape features consisting of former agricultural land covered in low growth, such as lawns, pastures, meadows, shrubbery, and immature trees. These are areas that may be considered too small to warrant ploughing, (i.e. less than one hectare in area), such as yard

areas surrounding existing structures, and land-locked open areas that are technically workable by a plough but inaccessible to agricultural machinery. These areas may also include open area within urban contexts that do not allow agricultural tillage within municipal or city limits or the use of urban roadways by agricultural machinery. These areas are required to be assessed using test pit survey methodology.

The study area does not contain areas of landscaped lawn.

5.3.7 SUMMARY

Background research indicates the vicinity of the study area has potential for archaeological resources of Euro-Canadian origins based on proximity to a historic roadway and documented historic settlement.

Current conditions within the study area indicate that some areas of the property may have no or low archaeological potential and do not require Stage 2 Property Assessment or should be excluded from Stage 2 Property Assessment. A significant proportion of the study area does exhibit archaeological potential and therefore a Stage 2 Property Assessment is required.

Archaeological potential does not indicate that there are necessarily sites present, but that environmental and historical factors suggest that there may be as yet undocumented archaeological sites within lands that have not been subject to systematic archaeological research in the past.

6.0 FIELD WORK METHODS AND WEATHER CONDITIONS

This report confirms that the study area was subject to Stage 2 Property Assessment by test pit and pedestrian survey methodology on December 8, 9, 10 2018. Weather conditions were overcast and cool on each day. Visibility was excellent and no rain occurred. All fieldwork was conducted according to the archaeological fieldwork standards and guidelines, including weather and lighting conditions. Weather conditions were appropriate for the necessary fieldwork required to complete the Stage 2 Property Assessment and to create the documentation appropriate to this study.

6.1 PROPERTY INSPECTION

A detailed examination and photo documentation was carried out on the study area in order to document the existing conditions of the study area to facilitate the Stage 2 Property Assessment. All areas of the study area were visually inspected and photographed. This component of the study was completed concurrently with the Stage 2 Property Assessment.

6.2 PEDESTRIAN SURVEY

In accordance with the Standards and Guidelines for Consultant Archaeologists, pedestrian survey is required for all portions of the study area that are ploughable or can be subject to cultivation. This is the preferred method to utilize while conducting an assessment. This report confirms that the conduct of pedestrian survey within the study area conformed to the following standards:

1. *Actively or recently cultivated agricultural land must be subject to pedestrian survey.*
[All actively or recently cultivated agricultural land was subject to pedestrian survey]
2. *Land to be surveyed must be recently ploughed. Use of chisel ploughs is not acceptable. In heavy clay soils ensure furrows are disked after ploughing to break them up further.*
[All land was recently ploughed]
3. *Land to be surveyed must be weathered by one heavy rainfall or several light rains to improve visibility of archaeological resources.*
[All land was weathered by rainfall]
4. *Provide direction to the contractor undertaking the ploughing to plough deep enough to provide total topsoil exposure, but not deeper than previous ploughing.*
[Direction was given to the contractor undertaking the ploughing to plough deep enough to provide total topsoil exposure, but not deeper than previous ploughing]
5. *At least 80 % of the ploughed ground surface must be visible. If surface visibility is below 80% (e.g. due to crop stubble, weeds, young crop growth), ensure the land is re-ploughed before surveying.*
[Roughly 95% of the ploughed field surface was exposed and visible]
6. *Space survey transects at maximum intervals of 5m (20 survey transects per hectare)*
[All transects were conducted at an interval of 5m between individual transects]
7. *When archaeological resources are found, decrease survey transects to 1m intervals over a minimum of a 20m radius around the find to determine whether it is an isolated find or part of a larger scatter. Continue working outward at this interval until full extent of the surface scatter has been defined.*
[Transects were decreased to 1m intervals over a minimum of a 20m radius around discovered archaeological resources]
8. *Collect all formal artifact types and diagnostic categories. For 19th century archaeological sites, collect all refined ceramic sherds (or, for larger sites collect a sufficient sample to form the basis for dating).*
[All artifacts were collected]

9. *Based on professional judgment, strike a balance between gathering enough artifacts to document the archaeological site and leaving enough in place to relocate the site if it is necessary to conduct further assessment.*

[Given that all resources encountered were isolated findspots, we collected everything]

(MTC 2011: 30-31)

6.3 TEST PIT SURVEY

In accordance with the Standards and Guidelines for Consultant Archaeologists, test pit survey is required to be undertaken for those portions of the study area where deep prior disturbance had not occurred prior to assessment or which were accessible to survey. Test pit survey is only used in areas that cannot be subject to ploughing or cultivation. This report confirms that the conduct of test pit survey within the study area conformed to the following standards:

1. *Test pit survey only on terrain where ploughing is not possible or viable, as in the following examples:*

a. *wooded areas*

The study area contained wooded areas.

b. *pasture with high rock content*

[Not Applicable - The study area does not contain any pastures with high rock content]

c. *abandoned farmland with heavy brush and weed growth*

[Not Applicable - The study area does not contain any abandoned farmland with heavy brush and weed growth]

d. *orchards and vineyards that cannot be strip ploughed (planted in rows 5 m apart or less), gardens, parkland or lawns, any of which will remain in use for several years after the survey*

[Not applicable – The study area does not contain either although it does contain treed and bushed areas but these were not dense and were test pit surveyed at five metre intervals.]

e. *properties where existing landscaping or infrastructure would be damaged. The presence of such obstacles must be documented in sufficient detail to demonstrate that ploughing or cultivation is not viable.*

[The study area does not contain the above-mentioned circumstances]

f. *narrow (10 m or less) linear survey corridors (e.g., water or gas pipelines, road widening). This includes situations where there are planned impacts 10 m or less beyond the previously impacted limits on both sides of an existing*

linear corridor (e.g., two linear survey corridors on either side of an existing roadway). Where at the time of fieldwork the lands within the linear corridor meet the standards as stated under the above section on pedestrian survey land preparation, pedestrian survey must be carried out. Space test pits at maximum intervals of 5 m (400 test pits per hectare) in areas less than 300 m from any feature of archaeological potential.

[Not Applicable – The study area does not contain any linear corridors]

2. *Space test pits at maximum intervals of 5 m (400 test pits per hectare) in areas less than 300 m from any feature of archaeological potential.*
[All test pits were spaced at an interval of 5m between individual test pits]
3. *Space test pits at maximum intervals of 10 m (100 test pits per hectare) in areas more than 300 m from any feature of archaeological potential.*
[The entirety of the test pitted areas of the study area were assessed using high intensity test pit methodology at an interval of 5 metres between individual test pits]
4. *Test pit to within 1 m of built structures (both intact and ruins), or until test pits show evidence of recent ground disturbance.*
[Not applicable]
5. *Ensure that test pits are at least 30 cm in diameter.*
[All test pits were at least 30 cm in diameter]
6. *Excavate each test pit, by hand, into the first 5 cm of subsoil and examine the pit for stratigraphy, cultural features, or evidence of fill.*
[All test pits were excavated by hand into the first 5 cm of subsoil and examined for stratigraphy, cultural features, or evidence of fill]
7. *Screen soil through mesh no greater than 6 mm.*
[All soil was screened through mesh no greater than 6 mm]
8. *Collect all artifacts according to their associated test pit.*
[Not applicable – No archaeological resources were encountered]
9. *Backfill all test pits unless instructed not to by the landowner.*
[All test pits were backfilled]

(MTC 2011: 31-32)

7.0 RECORD OF FINDS

Section 7.8.2 of the Standards and Guidelines for Consultant Archaeologists (MTC 2011: 137-138) outlines the requirements of the Record of Finds component of a Stage 2 report:

1. *For all archaeological resources and sites that are identified in Stage 2, provide the following:*
 - a. *a general description of the types of artifacts and features that were identified*
 - b. *a general description of the area within which artifacts and features were identified, including the spatial extent of the area and any relative variations in density*
 - c. *a catalogue and description of all artifacts retained*
 - d. *a description of the artifacts and features left in the field (nature of material, frequency, other notable traits).*
2. *Provide an inventory of the documentary record generated in the field (e.g. photographs, maps, field notes).*
3. *Submit information detailing exact site locations on the property separately from the project report, as specified in section 7.6. Information on exact site locations includes the following:*
 - a. *table of GPS readings for locations of all archaeological sites*
 - b. *maps showing detailed site location information.*

7.1 ARCHAEOLOGICAL RESOURCES

Three isolated pre-contact lithic findspots were encountered or discovered during pedestrian survey as a result of the Stage 2 assessment of the study area.

Isolated Findspot P1 – this is a single non-diagnostic piece of secondary thinning flake manufactured from Onondaga chert.

Isolated Findspot P2 – this is a single non-diagnostic piece of secondary thinning flake manufactured from Onondaga chert.

Isolated Findspot P2 – this is a single non-diagnostic piece of secondary thinning flake manufactured from Onondaga chert.

Table 4: Stage 2 Artifact Catalogue				
Cat#	Findspot/Location	Description	Easting	Northing
L001	P1	Secondary thinning flake; Onondaga chert	603710	4818262
L002	P2	Secondary thinning flake; Onondaga chert	604015	4817954
L003	P3	Secondary thinning flake; Onondaga chert	604378	4817313
	Fixed Landmark (Hydro Pole at Entrance to Property)		604649	4817283

All GPS coordinates are to UTM 17N NAD83 using a Garmin etrex 20 unit.

7.2 ARCHAEOLOGICAL FIELDWORK DOCUMENTATION

The documentation produced during the field investigation conducted in support of this report includes: one sketch map, one page of field notes, and 51 digital photographs.

8.0 ANALYSIS AND CONCLUSIONS

AMICK Consultants Limited was engaged by the proponent to undertake a Stage 1-2 Archaeological Assessment of lands potentially affected by the proposed undertaking and was granted permission to carry out archaeological fieldwork. The entirety of the study area was subject to property inspection and photographic documentation concurrently with the Stage 2 Property Assessment on December 8, 9, 10 2018 consisting of high-intensity test pit survey and pedestrian survey at an interval of five metres between individual test pits. All records, documentation, field notes, photographs and artifacts (as applicable) related to the conduct and findings of these investigations are held at the Lakelands District corporate offices of AMICK Consultants Limited until such time that they can be transferred to an agency or institution approved by the Ontario Ministry of Tourism, Culture and Sport (MTCS) on behalf of the government and citizens of Ontario.

Section 7.7.3 of the Standards and Guidelines for Consultant Archaeologists (MTC 2011: 132) outlines the requirements of the Analysis and Conclusions component of a Stage 1 Background Study.

- 1) *“Identify and describe areas of archaeological potential within the project area.*
- 2) *Identify and describe areas that have been subject to extensive and deep land alterations. Describe the nature of alterations (e.g., development or other activity) that have severely damaged the integrity of archaeological resources and have removed archaeological potential.”*

8.1 CHARACTERISTICS INDICATING ARCHAEOLOGICAL POTENTIAL

Section 1.3.1 of the Standards and Guidelines for Consultant Archaeologists specifies the property characteristics that indicate archaeological potential (MTC 2011: 17-18). Factors that indicate archaeological potential are features of the local landscape and environment that may have attracted people to either occupy the land or to conduct activities within the study area. One or more of these characteristics found to apply to a study area would necessitate a Stage 2 Property Assessment to determine if archaeological resources are present. These characteristics are listed below together with considerations derived from the conduct of this study.

- 1) *Previously Identified Archaeological Sites*

Previously registered archaeological sites (n=36) have been documented within 1-km of the study area.

2) Water Sources

There are water sources within the subject property and water sources within a 300-metre area of the study area.

3) Features Indicating Past Water Sources

Features indicating past water resources are described as including 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, and cobble beaches. Close proximity (300 metres) to features indicating past water sources indicates that people had access to readily available sources of potable water, at least on a seasonal basis, and in some cases seasonal access to routes of waterborne trade and communication should the study area have been used or occupied in the past.

There are no identified features indicating past water sources within 300 metres of the study area other than those present today.

4) Accessible or Inaccessible Shoreline

This form of landscape feature would include high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh, etc.

There are no shorelines within 300 metres of the study area.

5) Elevated Topography

Features of elevated topography that indicate archaeological potential include eskers, drumlins, large knolls, and plateaux.

There are no identified features of elevated topography within the study area.

6) Pockets of Well-drained Sandy Soil

Pockets of sandy soil are considered to be especially important near areas of heavy soil or rocky ground.

The soil throughout the study area is dark brown sandy loam, which is consistent with the wider area surrounding the property. Therefore, the presence of this soil has no impact on potential within the study area, as the wider area is not known for clay soils or exposed bedrock.

7) Distinctive Land Formations

These are landscape features 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.

There are no identified distinctive land formations within the study area.

8) Resource Areas

Resource areas that indicate archaeological potential include food or medicinal plants (e.g., migratory routes, spawning areas, and prairie), scarce raw materials (e.g., quartz, copper, ochre or outcrops of chert) and resources of importance to early Euro-Canadian industry (e.g., logging, prospecting, and mining).

There are no identified resource areas within the study area.

9) Areas of Early Euro-Canadian Settlement

These include places of early military or pioneer settlement (e.g., pioneer homesteads, isolated cabins, and farmstead complexes), early wharf or dock complexes, pioneer churches and early cemeteries. There may be commemorative markers of their history, such as local, provincial, or federal monuments or heritage parks.

The study area is located adjacent to an historic transportation route (i.e. Dundas Street). There are no historic structures depicted within the study area on historic mapping as reference in this report. However, the Atlas does depict an historic structure and orchard located within the lot adjacent to the study area.

10) Early Historical Transportation Routes

This includes evidence of trails, passes, roads, railways, portage routes.

The study area is adjacent to early settlement roads that appears on the Historic Atlas Map of the Township of Trafalgar. This historic road corresponds to the road presently known as Dundas Street which is adjacent to the study area.

11) Heritage Property

Property listed on a municipal register or designated under the *Ontario Heritage Act* or is a federal, provincial or municipal historic landmark or site.

There are no listed or designated heritage buildings or properties that form a part of the study area. There are no listed or designated heritage buildings or properties that are adjacent to the study area.

12) Documented Historical or Archaeological Sites

This includes property that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations. These are properties which have not necessarily been formally recognized or for which there is additional evidence identifying possible archaeological resources associated with historic properties in addition to the rationale for formal recognition.

There are no known heritage features, or known historic sites, or known archaeological sites within the study area in addition to those formally documented with the appropriate agencies or previously noted under a different criterion.

8.2 CHARACTERISTICS INDICATING REMOVAL OF ARCHAEOLOGICAL POTENTIAL

Section 1.3.2 of the Standards and Guidelines for Consultant Archaeologists specifies the property characteristics which indicate no archaeological potential or for which archaeological potential has been removed (MTC 2011: 18-19). These characteristics are listed below together with considerations derived from the conduct of this study.

The introduction of Section 1.3.2 (MTC 2011: 18) notes that “*Archaeological potential can be determined not to be present for either the entire property or a part(s) of it when the area under consideration has been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. This is commonly referred to as ‘disturbed’ or ‘disturbance’, and may include:*”

1) Quarrying

There is no evidence to suggest that quarrying operations were ever carried out within the study area.

2) Building Footprints

Typically, the construction of buildings involves the deep excavation of foundations, footings and cellars that often obliterate archaeological deposits situated close to the surface.

There are no building footprints within the study area.

3) Sewage and Infrastructure Development

Installation of sewer lines and other below ground services associated with infrastructure development often involves deep excavation that can remove archaeological potential.

There is no evidence to suggest that substantial below ground services of any kind have resulted in significant impacts to any significant portion of the study area. Major utility lines are conduits that provide services such as water, natural gas, hydro, communications, sewage, and others. These major installations should not be confused with minor below ground service installations not considered to represent significant disturbances removing archaeological potential, such as services leading to individual structures which tend to be comparatively very shallow and vary narrow corridors. Areas containing substantial and deeply buried services or clusters of below ground utilities are considered areas of disturbance, and may be excluded from Stage 2 Property Assessment.

“Activities such as agricultural cultivation, gardening, minor grading and landscaping do not necessarily affect archaeological potential.”

(MTC 2011: 18)

“Archaeological potential is not removed where there is documented potential for deeply buried intact archaeological resources beneath land alterations, or where it cannot be clearly demonstrated through background research and property inspection that there has been complete and intensive disturbance of an area. Where complete disturbance cannot be demonstrated in Stage 1, it will be necessary to undertake Stage 2 assessment.”

(MTC 2011: 18)

8.3 STAGE 1 ANALYSIS AND CONCLUSIONS

As a result of the Stage 1 portion of the study it was determined that the study area has archaeological potential on the basis of proximity to historic settlement structures, and the location of an early historic settlement road adjacent to the study area.

8.4 STAGE 2 ANALYSIS AND CONCLUSIONS

Section 7.8.3 of the Standards and Guidelines for Consultant Archaeologists (MTC 2011: 138-139) outlines the requirements of the Analysis and Conclusions component of a Stage 2 Property Assessment.

1. *Summarize all finding from the Stage 2 survey, or state that no archaeological sites were identified.*
2. *For each archaeological site, provide the following analysis and conclusions:*
 - a. *A preliminary determination, to the degree possible, of the age and cultural affiliation of any archaeological sites identified.*
 - b. *A comparison against the criteria in 2 Stage 2: Property Assessment to determine whether further assessment is required*
 - c. *A preliminary determination regarding whether any archaeological sites identified in Stage 2 show evidence of a high level cultural heritage value or interest and will thus require Stage 4 mitigation.*

Three isolated pre-contact lithic findspots were encountered or discovered as a result of the Stage 2 assessment of the study area.

Isolated Findspot P1 – this is a single non-diagnostic piece of secondary thinning flake manufactured from Onondaga chert.

Isolated Findspot P2 – this is a single non-diagnostic piece of secondary thinning flake manufactured from Onondaga chert.

Isolated Findspot P2 – this is a single non-diagnostic piece of secondary thinning flake manufactured from Onondaga chert.

9.0 RECOMMENDATIONS

9.1 STAGE 1 RECOMMENDATIONS

Under Section 7.7.4 of the Standards and Guidelines for Consultant Archaeologists (MTC 2011: 133) the recommendations to be made as a result of a Stage 1 Background Study are described.

- 1) *Make recommendations regarding the potential for the property, as follows:*
 - a. *if some or all of the property has archaeological potential, identify areas recommended for further assessment (Stage 2) and areas not recommended for further assessment. Any exemptions from further assessment must be consistent with the archaeological fieldwork standards and guidelines.*
 - b. *if no part of the property has archaeological potential, recommend that the property does not require further archaeological assessment.*
- 2) *Recommend appropriate Stage 2 assessment strategies.*

The study area has been identified as an area of archaeological potential. The conditions of the study area indicated that a systematic test pit and pedestrian survey was the appropriate survey technique.

9.2 STAGE 2 RECOMMENDATIONS

Under Section 7.8.4 of the Standards and Guidelines for Consultant Archaeologists (MTC 2011: 139) the recommendations to be made as a result of a Stage 2 Property Assessment are described.

- 1) *For each archaeological site, provide a statement of the following:*
 - a. *Borden number or other identifying number*
 - b. *Whether or not it is of further cultural heritage value or interest*
 - c. *Where it is of further cultural heritage value or interest, appropriate Stage 3 assessment strategies*
- 2) *Make recommendations only regarding archaeological matters. Recommendations regarding built heritage or cultural heritage landscapes should not be included.*
- 3) *If the Stage 2 survey did not identify any archaeological sites requiring further assessment or mitigation of impacts, recommend that no further archaeological assessment of the property be required.*

As a result of the property Assessment of the study area, three (3) pre-contact isolated findspot archaeological resources were encountered. These are identified as Findspots P1, P2 and P3. In consideration of the above, the following recommendations are made:

Consequently, the following recommendations are made:

- *Given the undiagnostic isolated finds, no further archaeological assessment of Findspot P1, P2, and P3 is warranted*
- *It is recommended that the study area be cleared of archaeological concern and that development activity be permitted to proceed.*

10.0 ADVICE ON COMPLIANCE WITH LEGISLATION

While not part of the archaeological record, this report must include the following standard advisory statements for the benefit of the proponent and the approval authority in the land use planning and development process:

- a. *This report is submitted to the Minister 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 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 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.*
- b. *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 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.*
- c. *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 archaeologist to carry out archaeological fieldwork, in compliance with sec. 48 (1) of the Ontario Heritage Act.*
- d. *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.*
- e. *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.*

11.0 BIBLIOGRAPHY AND SOURCES

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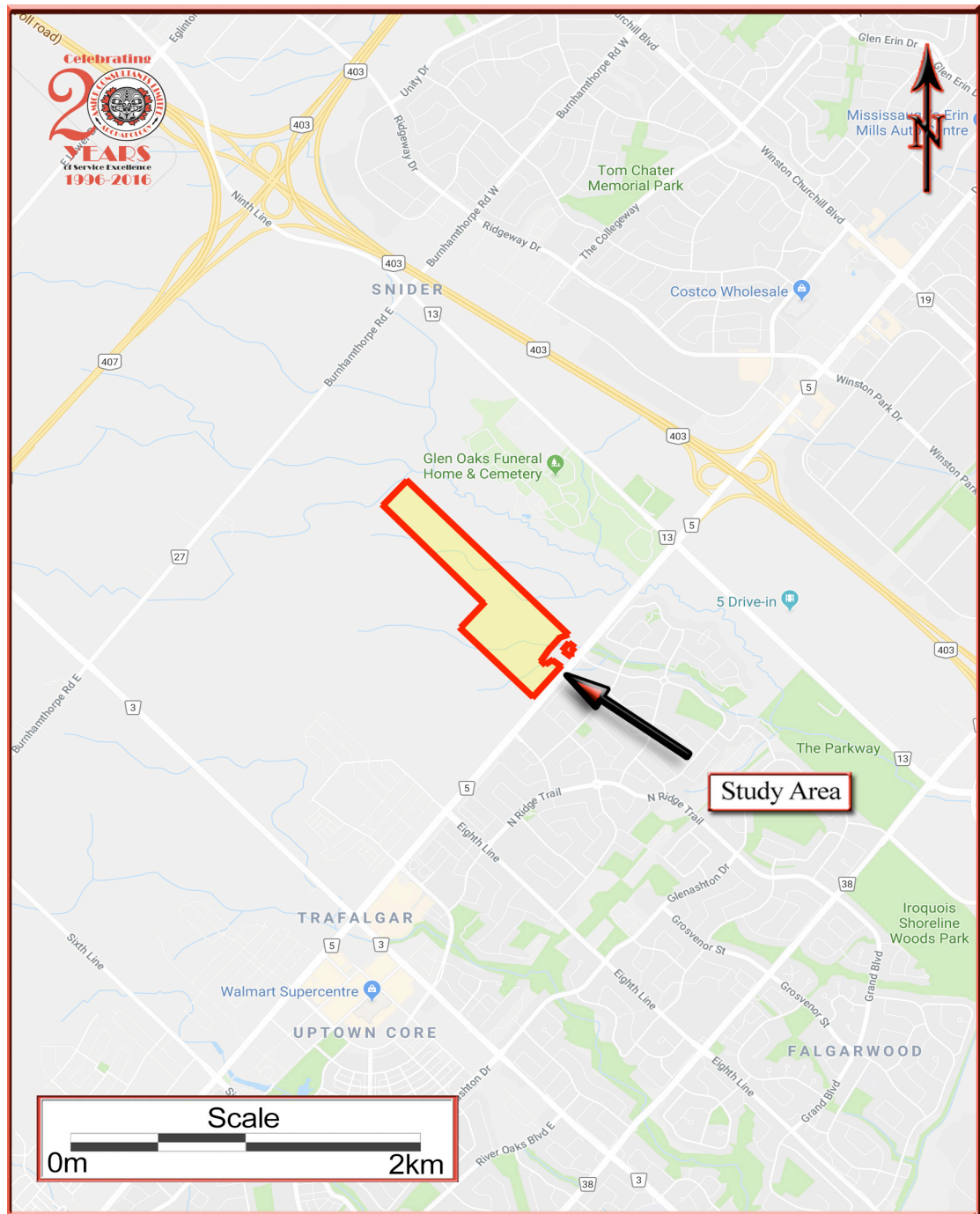
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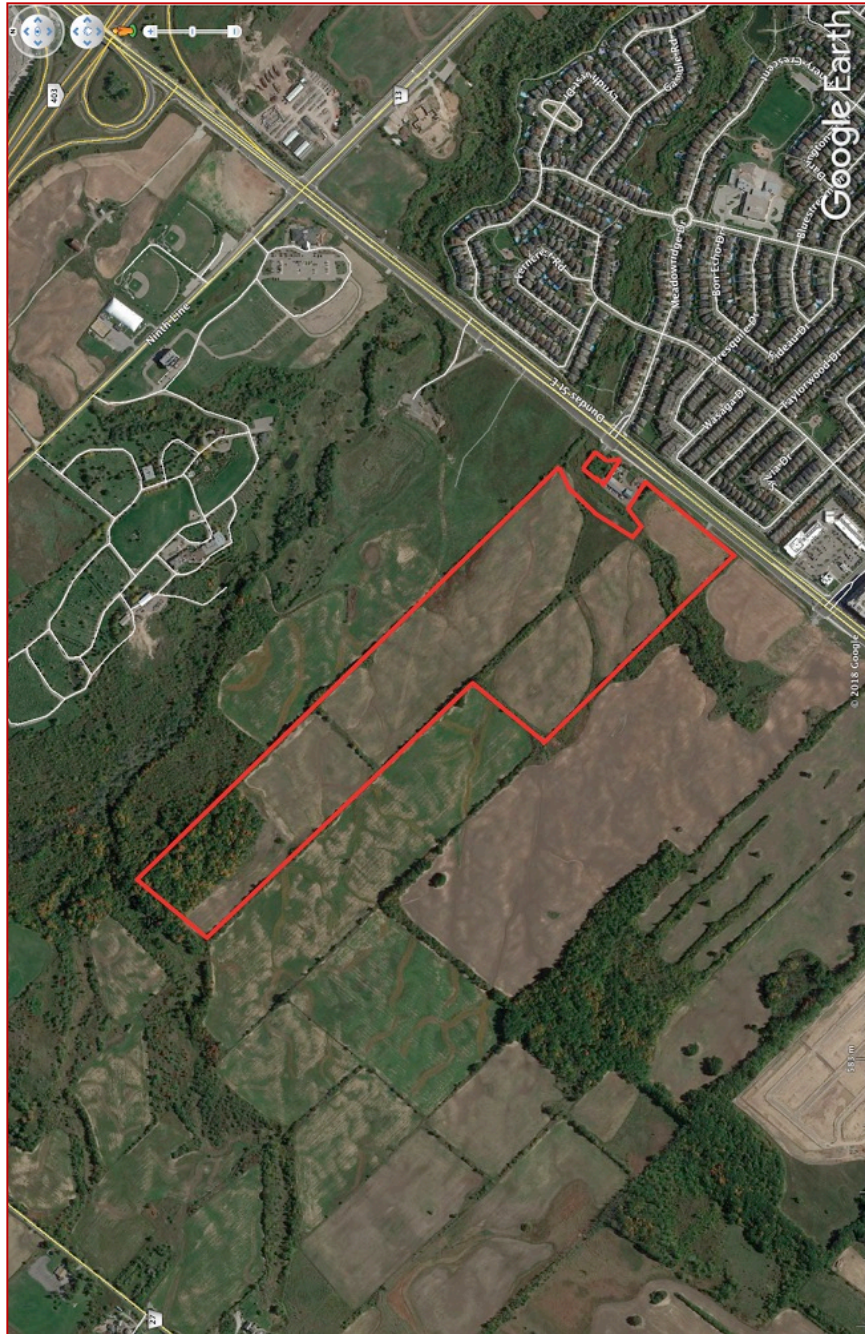
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12.0 MAPS

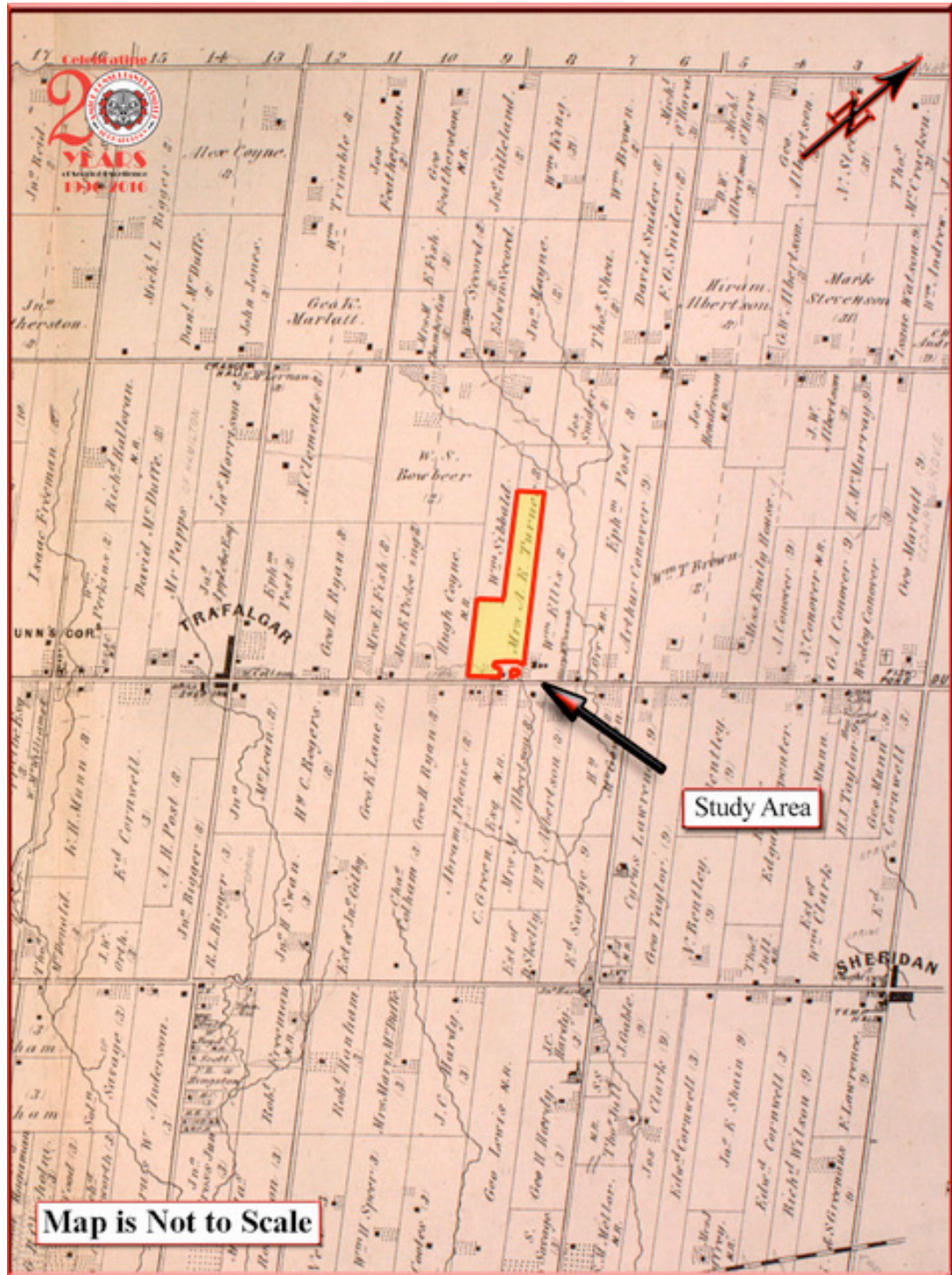


Map 1: Location of the study area.



Map 2: Limits of Study Area overlaid on recent aerial imagery (after Google Earth 2018).

Stage 1&2 Archaeological Assessment of Part of Lot 8 Concession 1 North of Dundas Street (Geographic Township of Trafalgar, County of Halton) Town of Oakville, Regional Municipality of Halton (AMICK File #18524/MTCS File #P038-0954-2018)



MAP 3 FACSIMILE SEGMENT OF THE HISTORIC ATLAS MAP OF THE TOWNSHIP OF TRAFALGAR (WALKER & MILES 1877)

Stage 1&2 Archaeological Assessment of Part of Lot 8 Concession 1 North of Dundas Street (Geographic Township of Trafalgar, County of Halton) Town of Oakville, Regional Municipality of Halton (AMICK File #18524/MTCS File #P038-0954-2018)

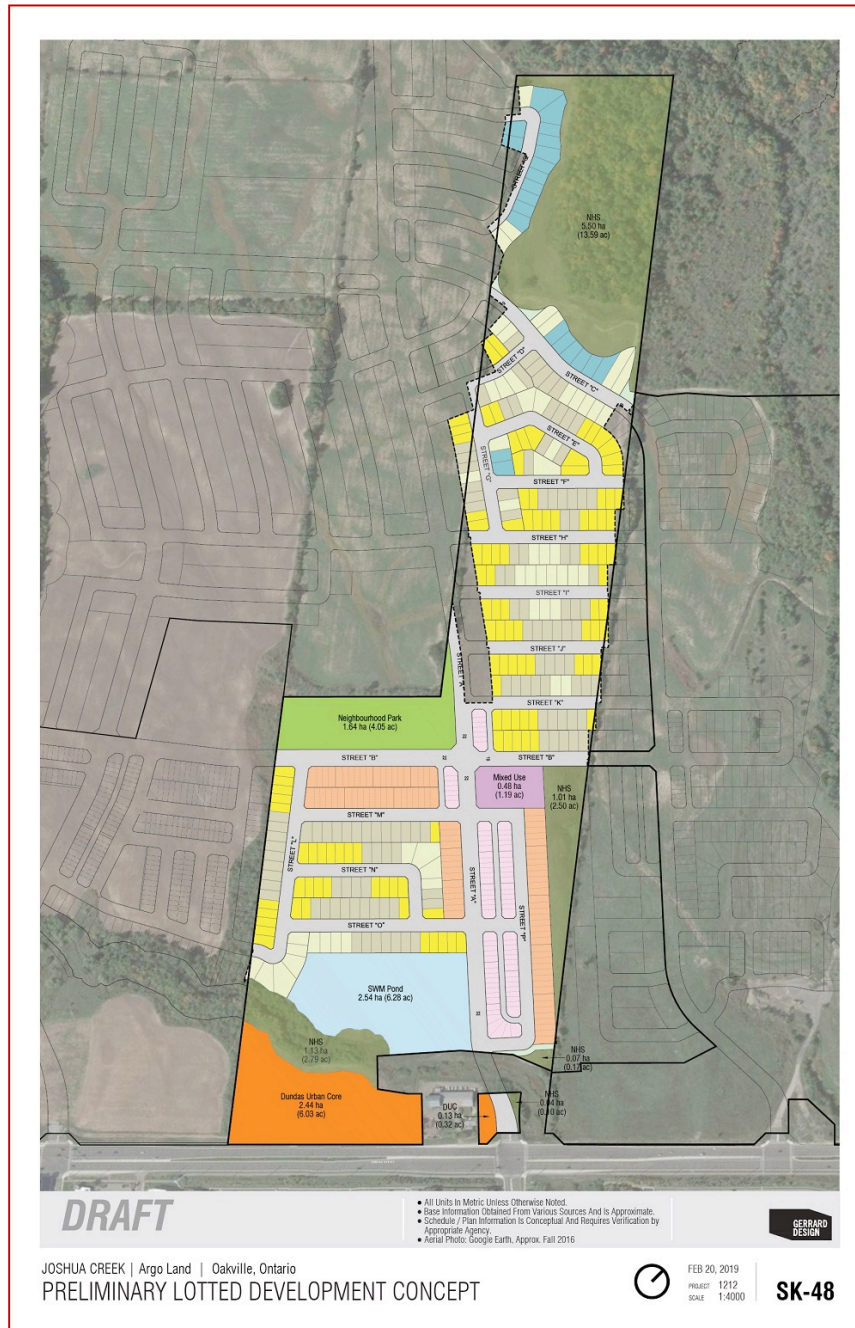


Map 4: Results of the Stage 2 Archaeological Assessment.



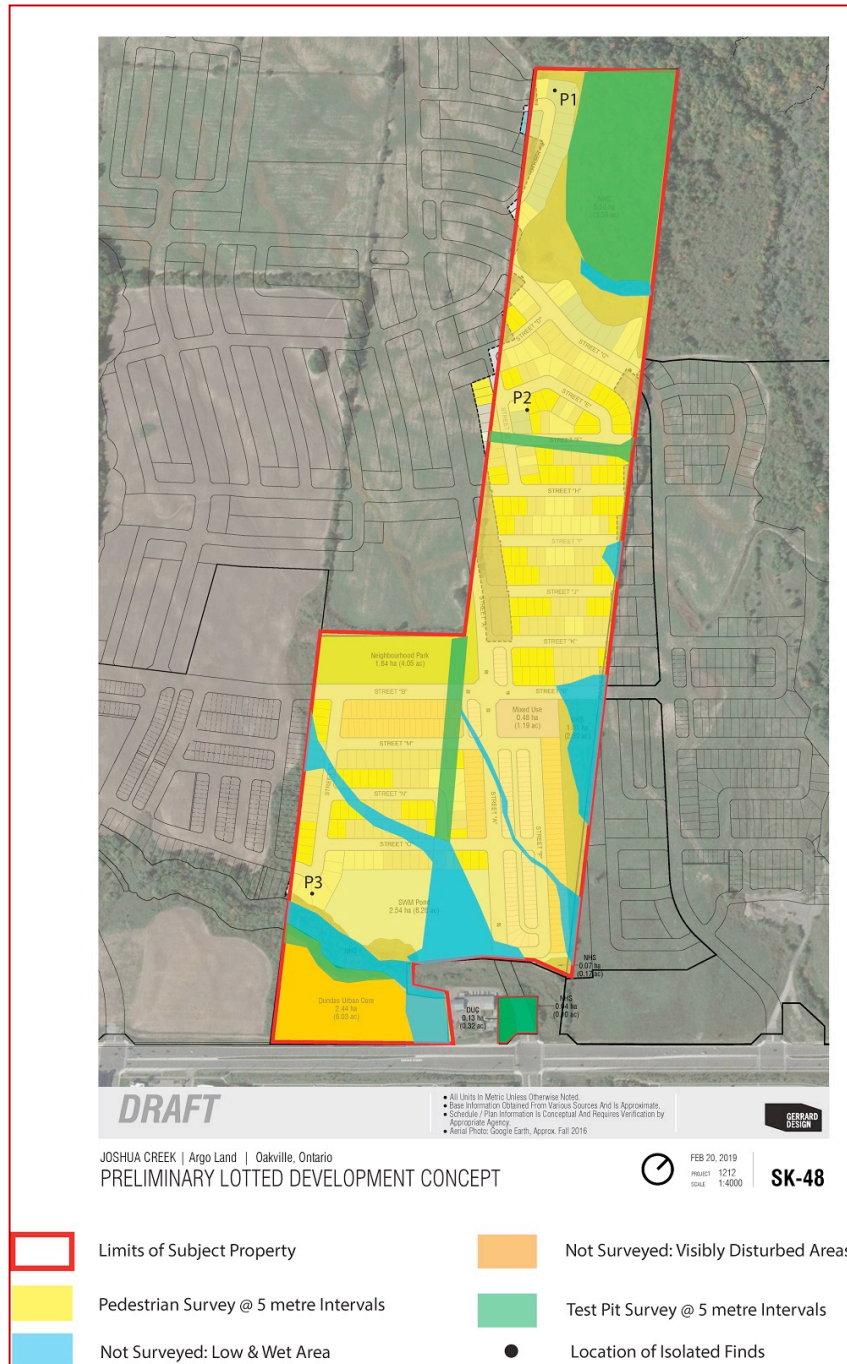
Map 5: Shows locations of isolated findspots mapped in relation to a fixed datum.

Stage 1&2 Archaeological Assessment of Part of Lot 8 Concession 1 North of Dundas Street (Geographic Township of Trafalgar, County of Halton) Town of Oakville, Regional Municipality of Halton (AMICK File #18524/MTCS File #P038-0954-2018)



Map 6: Clear copy of development mapping provided by proponent.

Stage 1&2 Archaeological Assessment of Part of Lot 8 Concession 1 North of Dundas Street (Geographic Township of Trafalgar, County of Halton) Town of Oakville, Regional Municipality of Halton (AMICK File #18524/MTCS File #P038-0954-2018)



Map 7: Stage 2 Results Overlaid on Development Mapping.

13.0 IMAGES



Image 1: Shows low and wet area.



Image 2: Conditions for pedestrian survey.



Image 3: Conditions for pedestrian survey. Note low and wet area in background.



Image 4: Shows low and wet area.



Image 5: Conditions for test pit survey.



Image 6: Conditions for pedestrian survey.



Image 7: Conditions for pedestrian survey.



Image 8: Shows woodlot, conditions for pedestrian survey, and low and wet area.



Image 9: Conditions for pedestrian survey.



Image 10: Conditions for test pit survey.



Image 11: Conditions for test pit survey.



Image 12: Conditions for pedestrian survey.



Image 13: Conditions for pedestrian survey. Note low and wet area in background.



Image 14: Conditions for pedestrian survey and low and wet area (at right).



Image 15: Conditions for pedestrian survey.



Image 16: Conditions for pedestrian survey and test pit survey (in background).



Image 17: Conditions for test pit survey.



Image 18: Isolated finds P1, P2 and P3.