Stage 1 Archaeological Assessment of Part of Lot 187, Geographic Township of Stamford, County of Welland, Now in the City of Niagara Falls, Regional Municipality of Niagara

Original Report

Prepared for:

Branthaven Belmont Oakwood Inc.

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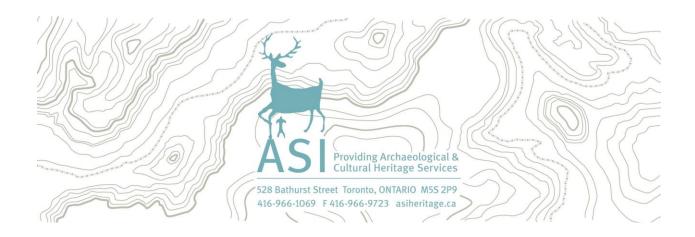
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Executive Summary

Archaeological Services Inc. was contracted by Branthaven Belmont Oakwood Inc. to undertake a Stage 1 Archaeological Assessment of part of Lot 187 in the Geographic Township of Stamford, County of Welland, now in the City of Niagara Falls, Regional Municipality of Niagara. The subject property is approximately six hectares and fronts the east and south sides of Oakwood Drive. Permission to access the subject property and to carry out all activities necessary for the completion of the assessment was granted by the proponent on June 2, 2021.

The Stage 1 background research entailed consideration of the proximity of previously registered archaeological sites and the original environmental setting of the subject property, along with nineteenth- and twentieth-century settlement trends. This research has determined that approximately 90% of the subject property has no archaeological potential due to deep and extensive land disturbance and does not require further assessment. However, the southwest corner of the subject property, comprising the remaining 10% of the total area, retains archaeological potential and will require a Stage 2 Archaeological Assessment in accordance with the 2011 Standards and Guidelines for Consultant Archaeologists prior to development.



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- Project Manager: Jamie Houston-Dickson, Master of Arts (P398), Associate Archaeologist, Project Manager, Planning Assessment Division
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Table of Contents

Exec	utive Su	ummary	1
Proje	ect Pers	onnel	2
1.0	Projec	t Context	5
1.	1 Dev	elopment Context	5
1.	2 Hist	orical Context	5
	1.2.1	Pre-Contact Settlement	5
	1.2.2	Post-Contact Settlement	7
	1.2.3	Review of Map Sources	g
	1.2.4	Review of Twentieth-Century Aerial Imagery	12
	1.2.5	Review of Twenty-First-Century Satellite Imagery	13
1.	3 Arch	naeological Context	14
	1.3.1	Registered Archaeological Sites	14
	1.3.2	Previous Assessments	15
	1.3.3	Physiography	16
	1.3.4	Existing Conditions	17
	1.3.5	Review of Archaeological Potential	17
2.0	Field N	Methods	19
2.	1 Find	ings	20
3.0	Analys	sis and Conclusions	20
4.0	Recon	nmendations	21
5.0	Advice	e on Compliance with Legislation	22
5.0	Biblio	graphy and Sources	23
7.0	Maps		27
Арр	endix A		36



List of Tables

Table 1: Pre-contact Indigenous Temporal Culture Periods in Southern Ontario 6

List of Maps

Figure 1: Location of the Subject Property	28
Figure 2: Subject Property located on the 1862 Tremaine Map of the Counties of	f
Lincoln and Welland	29
Figure 3: Subject Property located on the 1876 Illustrated Historical Atlas of the	•
Counties of Lincoln and Welland	29
Figure 4: Subject Property located on the 1907, 1938, 1973, and 1996 Niagara	
Topographic Maps	30
Figure 5: Subject Property located on 1934, 1954, 1965, and 1995 Aerial Imager	Ύ
	31
Figure 6: Subject Property located on 2002, 2010, 2015, and 2016 Aerial Imager	Ύ
	32
Figure 7: Existing Conditions of the Subject Property	33
Figure 8: Stage 1 Archaeological Assessment Results	34
Figure 9: Stage 1 Archaeological Assessment Results on Survey Plan	35



1.0 Project Context

Archaeological Services Inc. was contracted by Branthaven Belmont Oakwood Inc. to undertake a Stage 1 Archaeological Assessment of part of Lot 187 in the Geographic Township of Stamford, County of Welland, now in the City of Niagara Falls, Regional Municipality of Niagara (Figure 1). The subject property is approximately six hectares and fronts the east and south sides of Oakwood Drive.

1.1 Development Context

This assessment was conducted under the senior project management of Jennifer Ley (R376), the project management of Jamie Houston-Dickson (P398), and the project direction of Robb Bhardwaj (P449); the work was completed under Ministry of Citizenship and Multiculturalism (hereafter the referred to as the Ministry) Project Information Form P449-0704-2023. All activities carried out during this assessment were completed prior to a development application, as required by the City of Niagara Falls and the *Planning Act* (Ministry of Municipal Affairs and Housing, 1990). All work was completed in accordance with the *Ontario Heritage Act* (Ministry of Culture [now the Ministry], 1990) and the *Standards and Guidelines for Consultant Archaeologists* (hereafter referred to as the Standards) (the Ministry of Tourism and Culture [now the Ministry], 2011).

Permission to access the subject property and to carry out all activities necessary for the completion of the assessment was granted by the proponent June 2, 2021.

1.2 Historical Context

The purpose of this section is to describe the past and present land use and settlement history of the subject property, and any other relevant historical information gathered through the Stage 1 background research.

1.2.1 Pre-Contact Settlement

Southern Ontario has a cultural history that begins approximately 13,500 years ago and continues to the present. As there tends to be less widespread awareness of the depth of this pre-contact settlement history, or general knowledge of the societies that inhabited Ontario prior to the onset of Euro-Canadian settlement, a



brief review of the prehistory of the area is necessary in order to provide an understanding of the various natural and cultural forces that have operated to create the archaeological sites that are found today.

Table 1 provides a general summary of the pre-contact Indigenous settlement history of southern Ontario from approximately 11,500 Before Common Era (B.C.E.) to the year 1650 Common Era (C.E.).

Table 1: Pre-contact Indigenous Temporal Culture Periods in Southern Ontario

Period	Description		
Paleo > 11,500 – 8,500 B.C.E.	 First human occupation of Ontario Astronomers/ Artists/ Hunters/ Gatherers/ Foragers Language Unknown Small occupations Non-stratified populations 		
Archaic 8,500 – 1,000 B.C.E.	 Astronomers/ Artists/ Hunters/ Gatherers/ Foragers Small occupations Non-stratified populations Mortuary ceremonialism Extensive trade networks for raw materials and finished objects 		
Early Woodland 1,000 – 450 B.C.E.	 Astronomers/ Artists/ Hunters/ Gatherers/ Foragers General trend in spring/summer congregation and fall/winter dispersal Small and large occupations First evidence of community identity Mortuary ceremonialism Extensive trade networks for raw materials and finished objects 		



Period	Description		
Middle Woodland 450 B.C.E. – 750 C.E. Transitional Woodland 600 – 900 C.E.	 Astronomers/ Artists/ Hunters/ Gatherers/ Foragers A general trend in spring/summer congregation and fall/winter dispersal into large and small settlements Kin-based political system Increasingly elaborate mortuary ceremonialism Incipient agriculture in some regions Longer term settlement occupation and reuse 		
Late Woodland (Early) 900 – 1300 C.E.	 Foraging with locally defined dependence on agriculture Villages, specific and special purpose sites Socio-political system strongly kinship based 		
Late Woodland (Middle) 1300 – 1400 C.E.	 Major shift to agricultural dependency Villages, specific and special purpose sites Development of socio-political complexity 		
Late Woodland (Late) 1400 – 1650 C.E.	 Complex agricultural society Villages, specific and special purpose sites Politically allied regional populations 		

1.2.2 Post-Contact Settlement

The Niagara Purchase (Treaty 381)

Following the 1764 Niagara Peace Treaty and the follow-up treaties with Pontiac, the English colonial government considered the Mississaugas to be their allies since they had accepted the Covenant Chain. The English administrators followed the terms of the Royal Proclamation and insured that no settlements were made in the hunting grounds that had been reserved for their use (Johnston, 2004; Lytwyn, 2005). The subject property is within Treaty 381, the Niagara Purchase, signed in 1781 between the Crown and the Chippewa and Mississaugas for the



tract of land which had not been agreed upon in the 1764 Niagara Peace Treaty on the west side of "the Straits" that lead from Lake Erie to Lake Ontario at Niagara Falls (Crown-Indigenous Relations and Northern Affairs, 2016).

County of Welland

The County of Welland is a 226,970-acre area located in the southern Niagara region between Lake Erie and the County of Lincoln. It is bounded by Lincoln and Haldimand Counties to the west and the United States to the east (Archives of Ontario, 2022). The Welland River flows through the centre of the county to empty into the Niagara River between Niagara Falls and Fort Erie. Originally called the Chippewa River, it was renamed by Governor John Graves Simcoe after a river by the same name in Lincolnshire, England (Murphey, 1887). Many of the early place names in Welland County were also named for places in Lincolnshire.

Welland County was originally part of the Niagara District, which was established from the Home District in 1798. Beginning in 1783, the first settlers to the county were mainly United Empire Loyalists from New Jersey, New York, and Pennsylvania, and comprised of Quakers, Mennonites, and Tunkers (Murphey, 1887:33). By 1797, the population had increased to a level requiring the area to be divided into four ridings. The War of 1812, followed by the Rebellion of 1837 and the Fenian Raids of 1866, made early settlement in Welland County tumultuous (Page, 1876; Grodzinski and Vronsky, 2021). Indeed, military personnel comprised nearly a quarter of the population through this period, particularly in the east of the county, and the important forts at Niagara (now Niagara-on-the-Lake) and Fort Erie were positioned at the north and south limits on the Niagara River to protect the border with the United States.

As settlement of the region grew, the impracticality of governing such a large territory from Niagara-on-the-Lake, in the northeast corner of the region, became increasingly apparent, and in 1851, the County of Welland was separated from the County of Lincoln. The reeves and deputy-reeves were granted five years to organize the administration of the county, and on April 21, 1856, an Act of Parliament officially dissolved the union of the two counties and established the County of Welland with the county seat at the Town of Welland (Murphey, 1887:140-141). Over the next century, the population grew modestly, mainly



centred around the towns and cities and along the Welland Canal. Areas near the north shore of Lake Erie, in particular, became a focus for cottagers and summer holidaymakers.

In 1970, the County of Welland was superseded to the Regional Municipality of Niagara.

Township of Stamford

During the 1780s and early 1790s, Stamford Township was referred to variously as "Township No. 2," the "Mountain Township," and "Mount Dorchester." The name "Stamford" officially came into common use after Governor Simcoe renamed the townships in the Niagara Region in 1792. This name was selected in honour of a very old town by the same name located in Lincolnshire in England (Gardiner, 1899:277).

The first township survey was undertaken shortly after the Treaty of 1784, and the first permanent settlers took up their land holdings around that same time (Armstrong, 1985:147). Stamford was initially settled by disbanded soldiers, mainly Butler's Rangers, following the end of the American Revolutionary War. By 1846, the population stood at 2,636 and was a mixture of "Canadians, English, Irish, Scotch and Americans" (Smith, 1846:176). During the late eighteenth and nineteenth centuries, several notable settlements were established within Stamford Township. Many of these still exist as communities or neighbourhoods within the City of Niagara Falls, including Chippawa, which was first settled in the early 1790s and had a post office by 1801. Other early settlements in Stamford Township include Clifton (1832), Elgin (1840s), and Drummondville (1831). In 1970, Stamford Township was amalgamated into the Regional Municipality of Niagara (Armstrong, 1985:147; Boulton, 1805:89; Crossby, 1873:86; Mika and Mika, 1983; Rayburn, 1997:68, 328; Scott, 1997:48–49; Smith, 1975:176; Winearls, 1991:640).

1.2.3 Review of Map Sources

A review of nineteenth- and early twentieth-century mapping was completed to determine if these sources depict any nineteenth-century Euro-Canadian



settlement features that may represent potential historical archaeological sites within or adjacent to the subject property. Historic map sources are used to reconstruct/predict the location of former features within the modern landscape by cross-referencing points between the various sources and then georeferencing them in order to provide the most accurate determination of the location of any property from historic mapping sources. The results can be imprecise (or even contradictory) because sources of error, such as the vagaries of map production, differences in scale or resolution, and distortions caused by the reproduction of the sources, introduce error into the process. The impacts of this error are dependent on the size of the feature in question, the constancy of reference points on mapping, the distances between them, and the consistency with which both are depicted on historic mapping.

In addition, not all settlement features were depicted systematically in the compilation of these historical map sources, given that they were financed by subscription, and subscribers were given preference with regards to the level of detail provided. Thus, not every feature of interest from the perspective of archaeological resource management would have been within the scope of these sources.

The subject property, as overlaid on the 1862 *Tremaine Map of the Counties of Lincoln and Welland* (Tremaine and Tremaine, 1862) (Figure 2) and the 1876 *Illustrated Historical Atlas of the Counties of Lincoln and Welland* (Page, 1876) (Figure 3), is shown in the west of Lot 187 within a parcel owned by Everat De Witt; a smaller parcel comprising the north end of the lot just beyond the subject property limits was owned by John Malone. A settlement road is illustrated approximately 60 metres west of the subject property and a tributary, formed from two separate watercourses depicted just beyond the north limit, is shown crossing south through the west half of the property. No structures are depicted on or immediately adjacent to the subject property on the 1862 map, but the later 1876 map shows a single structure on Lot 187 just inside the north limit of the property along the east side of the watercourse.



Twentieth-century topographic mapping from 1907, 1938, 1973, and 1996 was also reviewed for the presence of potential historical features and modern developments (Figure 4). Land features, such as waterways, wetlands, woodlots, and elevation, are clearly illustrated on this series of mapping, along with roads and structure locations. On the 1907 Niagara Sheet (Department of Militia and Defence, 1907), the subject property is depicted just below the 594-foot (181-metre) elevation contour on cleared land just east of a north-south road. The confluence of the watercourses depicted north of the property on the nineteenth-century maps is now shown just south of the property's southeast corner and the westerly tributary is depicted flowing south through the east end of the property. The structure previously illustrated within the north boundary of the property on the 1876 map does not appear on the 1907 map, nor are there any other structures depicted on or in the immediate vicinity of the property. A hydroelectrical corridor belonging to the Niagara Power Company is illustrated aligning with the southern boundary of the property.

On the 1938 Niagara Sheet (Department of National Defence, 1938), the settlement road west of the property is now illustrated as a paved, secondary road and the hydroelectrical corridor that aligns with the subject property's southern limit is labelled as a two-line corridor. The Chippawa Power Canal has been constructed approximately 100 metres east of the subject property running north-south, while the watercourses previously shown on and in proximity to the property on earlier mapping have been diverted to empty into the canal north of the subject property.

On the 1973 Niagara Sheet (Department of Energy, Mines and Resources, 1973), the Queen Elizabeth Way is now depicted on a diagonal course north of the property, merging with the historic north-south road approximately 100 metres west of the subject property. A new, smaller corridor, Montrose Road, is illustrated southwest of the property adjacent to the highway and terminates approximately 75 metres from the property's southwest corner; there are four buildings illustrated at the terminus. The adjacent canal to the east is now identified as the Queenston Chippewa Power Canal.



On the 1996 Niagara Sheet (Department of Natural Resources, 1996), the subject property now fronts the south and west sides of the curved portion of Oakwood Drive, a modern extension of the former Montrose Road that previously terminated south of the property on the 1973 map; present-day Montrose Road now runs parallel to the west side of the Queen Elizabeth Way. A smaller access road is also illustrated parallel to the nearby canal east of the property, and there is a small building identified along the west side of the road just beyond the subject property's southeast corner.

1.2.4 Review of Twentieth-Century Aerial Imagery

A series of available aerial images from 1934 through 1995 was consulted to understand the twentieth-century land use of the subject property (Figure 5). On the image from 1934, the centre of the subject property appears as though it may comprise fill, likely from the adjacent canal construction, or perhaps poorly drained lands, also a likely result from the adjacent construction and diverted watercourse to the immediate north—it is unclear. There is what appears to be a narrow access lane extending north between the west property limit and the nearby road before bending eastward into the northwest corner of the property.

In the 1954 image, the subject property comprises part of a larger field with what appears to be poorly drained sections in the centre. To the west of the property, the new Queen Elizabeth Way highway corridor can be viewed between 50-100 metres from the property limit as it branches northeastward off the previous north-south road allotment.

The image from 1965 depicts the subject property as part of a larger open field east of the Queen Elizabeth Way. Just as it appears on the later 1973 topographic map (Figure 4), the original stretch of Montrose Road can be seen ending southwest of the subject property and there are four buildings with laneways on the east side of this terminus. The earthworks related to the redirected course of the tributary of the Welland River are visible north of the subject property and the power canal can be seen aligning with the property's eastern boundary, approximately 120 metres away. The hydroelectrical corridor indicated on topographical mapping aligns with the southern limit of the property.



The image from 1995 shows the property comprising a vacant scrub field. Reflecting the 1996 topographic map (Figure 4), present-day Oakwood Drive now extends north from the former terminus of the original Montrose Road south of the property, bending eastward to align with the subject property's western and northern boundaries before turning north again just beyond the property's northeast corner. A smaller access road branches south from Oakwood Drive at the northeast corner of the property and follows the length of the property's eastern limit, ending at a building approximately 40 metres east of the property's southeast corner.

1.2.5 Review of Twenty-First-Century Satellite Imagery

Twenty-first century satellite imagery shows clear evidence of repeated and extensive ground impacts throughout the majority of the subject property between 2002 and 2016 which was a direct result of the large commercial plaza development to the immediate north (Figure 6). In the 2002 image, the property has been cleared of the previous scrub vegetation and widespread grading has affected large sections of the central and southern portions of the property, and a substantial access lane from Oakwood Drive has been cut through the southwest part of the property. In the 2010 image, the extensive grading and soil displacement is visible in all but the southwest corner of the property, on the south side of the previous access lane cut. Grading and soil displacement activities continued, and by 2015, the property was a mix of level graded areas, scrub, and large soil heaps, including a very large mound in the northwest corner off Oakwood Drive. The soil displacement was the result of both the grading activities within the subject property itself as well as dumping of large quantities of soil removed from the land on the north side of Oakwood Drive opposite the property during construction of a large commercial plaza. On the 2016 image, the property remains vacant and the majority is covered scrub, however further grading appears to have occurred in parts of the west and south sections of the subject property. It should be noted that, as with the 2002 and 2010 images, there is no clear evidence on these later images of any significant ground impacts from grading or other activities in the southwest corner, south of where the large access lane was cut on the 2002 image.



The most recent images of the property indicate there has been minimal, if any, additional activity on the subject property since 2016 (see Figure 7).

1.3 Archaeological Context

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the subject property, its environment characteristics (including drainage, soils, surficial geology, and topography), 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 property, three sources of information were consulted: the site record forms for registered sites housed at the Ministry, published and unpublished documentary sources, and the files of Archaeological Services Inc.

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

According to the Ontario Archaeological Sites Database, 13 archaeological sites have been registered within a one-kilometre radius of the subject property (Ministry of Citizenship and Multiculturalism, 2023). A detailed summary of the sites is displayed in Appendix A. None of these sites are located within the limits of the subject property, and the nearest site, AgGs-298, is an Early Archaic campsite located approximately 275 metres west of the subject property.



1.3.2 Previous Assessments

Two archaeological assessments are known to have been completed on the subject property and one archaeological assessment was completed within 50 metres of the property limits.

In 2007, Archaeological Services Inc. was retained to conduct a Stage 1 Archaeological Assessment for the Queen Elizabeth Way Highway assessment (Archaeological Services Inc., 2009). The 2007 assessment evaluated the right-of-way of the Queen Elizabeth Way as well as adjacent lands; the north end of Part C of the study area overlapped the west part of the current subject property under review. The 2007 assessment determined that the right-of-way of the Queen Elizabeth Way showed disturbance caused by previous highway construction, but a Stage 2 Archaeological Assessment was recommended for areas beyond the corridor, including the portion of the current subject property that falls within the study corridor. It should be noted, however, that the 2007 assessment was conducted prior to various widespread disturbance activities conducted within the west part of the current subject property after 2007 (see Figure 6 and Section 1.2.5 above).

In 2019 and 2020, Golder Associates Ltd. conducted a Stage 1 Archaeological Assessment as part of the South Niagara Falls Wastewater Solutions Schedule "C" Class Environmental Assessment (Golder Associates Limited, 2021). The broad Stage 1 project area was divided into 10 distinct "Areas" (Areas 1-10) encompassing multiple lots and concessions that collectively comprised approximately 371.65 hectares in the City of Niagara, stretching out from Garner Road along the banks of the Welland River, and to the east approximately 675 metres west of the intersection of Stanley Avenue and Lyons Creek Road, and south to north from Reixinger Road to Oakwood Drive south of the Queen Elizabeth Way. The entire current subject property under review falls within a portion of the Area 4 lands. The Stage 1 assessment, which consisted of a desktop (background) review and did not include an on-site visual inspection, determined that the overall project area had high archaeological potential requiring Stage 2 Archaeological Assessment, but that pockets of extensive below-grade disturbance had previously impacted some portions of the project area, thus removing the archaeological potential from those locations. The Stage 1



assessment report, however, acknowledged the lack of an on-site inspection, and stated that areas of possible disturbance would require additional on-site visual review and documentation before determining whether they warranted Stage 2 survey. It should be noted that while the project area for this Stage 1 assessment included the current subject property, it was not conducted at an individual property level, and is of little use for the current assessment.

In 2021, Wood Environment and Infrastructure Solutions conducted a Stage 1 Archaeological Assessment as part of the Schedule "C" Municipal Class Environmental Assessment for a proposed wastewater treatment plant and associated infrastructure (Wood Environment and Infrastructure Solutions, 2022). The study area, which covered an area of 11.2 hectares, consisted of a narrow corridor that extended westward from the canal to present-day Montrose Road on the west side of the Queen Elizabeth Way, then continued south along Montrose Road to Reixinger Road. The westward segment extending from the canal at the north end of the study area ran immediately adjacent to the south limit of the current subject property. It was determined that several parts of the study area, including the entire section bordering the south limit of the current subject property, retained archaeological potential and would require a Stage 2 Archaeological Assessment ahead of future development.

1.3.3 Physiography

The subject property is located in the clay plains landform of the Haldimand Clay Plain physiographic region of southern Ontario, which, at approximately 3,500 square kilometres, is among the largest of the 53 defined physiographic regions in southern Ontario (MacDonald 1980:3; Chapman and Putnam 1984:156-159). Extending from the Niagara Escarpment to Lake Erie, the clay plain was submerged in glacial Lake Warren around 12,500 years ago. As a result of the heavy lacustrine clay soils and low gradient, drainage is poor over most of the area, although it includes several distinctive landforms, including dunes, cobble, clay, and sand beaches, limestone pavements, and back-shore wetland basins.

Within this part of the Niagara peninsula, a number of environmental sub-regions have been described, including the Niagara Slough Clay Plain, the Fort Erie Clay Plain, the Calcareous Rock Plain (Onondaga Escarpment), the Buried Moraines,



the Lake Erie Coast, and the Niagara River Valley (MacDonald, 1980). The distribution and nature of these sub-regions, and the specific environmental features they contain, have influenced land use in the region throughout history and pre-history.

The subject property is located within the Welland River watershed (Ministry of Natural Resources and Forestry, 2020). Unnamed watercourses formerly flowed through and in proximity to the subject property but have undergone significant alteration due to modern developments in the immediate vicinity. According to the data made available by the Ontario Geological Survey (2018), the surficial geology of the subject property is comprised of areas of artificial deposits of fill, sewage lagoon, landfill, and urban development.

1.3.4 Existing Conditions

The subject property is approximately six hectares and consists of vacant scrubland (Figure 7). Oakwood Drive bounds the property to the north and west, a fence and paved lane aligns with the eastern boundary that ends at a building associated with the adjacent canal, and a hydroelectrical corridor is along the south. Past aerial imagery indicates the majority of the property has been heavily disturbed from repeated grading and other ground impacts, including activities conducted within the last decade (Figure 6; see Section 1.2.5 above).

1.3.5 Review of Archaeological Potential

The Standards, Section 1.3.1 stipulates that undisturbed lands within 300 metres of primary water sources (such as, lakes, rivers, streams, and creeks), secondary water sources (intermittent streams and creeks, springs, marshes, and swamps), 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, and cobble beaches), and accessible and inaccessible shorelines (bluffs, swamps or marsh fields by the edge of a lake, sandbars stretching into marsh) are considered, at a generic level, to exhibit potential for Indigenous archaeological sites.



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 common variables used for predictive modelling of site location. Historical mapping indicates that watercourse once flowed south through the property before being diverted eastward during construction of the Chippewa Power Canal in the early twentieth century.

Other geographic characteristics can indicate pre-contact archaeological potential, including elevated topography (eskers, drumlins, large knolls, plateaux), pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground, and distinctive land formations that might have been special or spiritual places for Indigenous populations, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases. There may be physical indicators of their use by Indigenous peoples, 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 pre-contact archaeological potential.

For the post-contact period, Section 1.3.1 of the Standards stipulates that those areas of early Euro-Canadian settlement, including places of early military or pioneer 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. Also considered to have archaeological potential are 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 historical landmark or site, and properties that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations.



The majority of early nineteenth century farmsteads, 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 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, the Standards considers undisturbed lands within 100 metres of early settlement roads or railroads to have potential for the presence of Euro-Canadian archaeological sites.

The Standards, Section 1.4.1. also defines buffers of 300 metres around previously identified archaeological sites as having both Indigenous and Euro-Canadian archaeological potential. Currently, only one registered Indigenous site is within this catchment, located approximately 275 metres from the property.

In addition to the proximity of historical water and a registered Indigenous site, historical mapping places the property adjacent to a nineteenth-century road and a structure appears inside the property limits by 1876. Accordingly, the subject property meets the criteria for both Indigenous and historical archaeological potential. However, given the extent of modern grading and other ground impacts throughout most of the property, only a small portion of the southwest corner retains potential for the presence of Indigenous or historical archaeological potential.

2.0 Field Methods

The optional field review was not required as part of this assessment, as per the Standards, Section 1.2. The Stage 1 evaluation of the archaeological potential of the subject property instead relied on the information garnered from the review of the historical background research, historical and modern mapping and aerial imagery, and general physiography.



2.1 Findings

The subject property is comprised mainly of scrublands bounded by Oakwood Drive to the west and north. Modern aerial imagery indicates all but the southwest corner has been heavily graded, and there are large spoil heaps overlying the grading in the north and centre of the property.

Approximately 90% of the subject property has been heavily impacted from past grading and other soil disturbances. In accordance with the Standards, Section 1.3.2 and Section 2.1, Standard 2b, these areas are considered too deep and extensive to warrant further survey (Figures 8 and 9).

The remaining 10% of the subject property, located in the southwest corner, is an area of scrub where evidence of ground disturbance from the aerial photography is inconclusive. Therefore, this area is considered to retain archaeological potential and will require a Stage 2 Archaeological Assessment (Figures 8 and 9).

3.0 Analysis and Conclusions

Archaeological Services Inc. was contracted by Branthaven Belmont Oakwood Inc. to undertake a Stage 1 Archaeological Assessment of part of Lot 187, in the Geographic Township of Stamford, County of Welland, now in the City of Niagara Falls, Regional Municipality of Niagara. The subject property is approximately six hectares and fronts the east and south sides of Oakwood Drive.

The Stage 1 background assessment entailed consideration of the proximity of previously registered archaeological sites, the original environmental setting of the property, along with nineteenth- and twentieth-century settlement trends and a review of available aerial imagery. This research has determined that approximately 90% of the subject property has been heavily and repeatedly impacted by extensive grading and other widespread soil displacement activities over the past several decades. The balance of the subject property consists of an area of scrub in the southwest corner that may remain intact and will require a Stage 2 Archaeological Assessment prior to development.



4.0 Recommendations

In light of these results, the following recommendations are made:

- Prior to any land-disturbing activities within the subject property, a Stage 2
 Archaeological Assessment must be conducted in accordance with the
 Ministry of Citizenship and Multiculturalism's 2011 Standards and
 Guidelines for Consultant Archaeologists on the 10% of the subject property
 identified as having archaeological potential.
 - a) The Stage 2 Archaeological Assessment of the portion of the subject property with archaeological potential must be carried out by means of a test pit survey. All test pits must be excavated at least five centimetres into sterile subsoil, with all soils being screened through six-millimeter mesh to facilitate artifact recovery. All test pits must be at least 30 centimetres in diameter and backfilled upon completion. Test pit excavation must be initiated at five-metre transect intervals, but intervals may be adjusted in light of considerations of disturbance, topography, and drainage, as outlined in the Standards, Section 2.1.2.

NOTWITHSTANDING the results and recommendations presented in this study, Archaeological Services Inc. 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 Citizenship and Multiculturalism must be immediately notified.

The above recommendations are subject to Ministry approval, and it is an offence to alter any archaeological site without Ministry of Citizenship and Multiculturalism concurrence. No grading or other activities that may result in the destruction or disturbance of any archaeological sites are permitted until notice of Ministry approval has been received.



The documentation and materials related to this project will be curated by Archaeological Services Inc. until such a time that arrangements for their ultimate transfer to His Majesty the King in right of Ontario, or other public institution, can be made to the satisfaction of the project owner(s), the Ontario Ministry of Citizenship and Multiculturalism, and any other legitimate interest groups.

5.0 Advice on Compliance with Legislation

Archaeological Services Inc. advises compliance with the following legislation:

- This report is submitted to the Ministry of Citizenship and Multiculturalism as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 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 subject property of a development proposal have been addressed to the satisfaction of the Ministry of Citizenship and Multiculturalism, a letter will be issued by the Ministry stating that there are no further concerns with regards 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 Archaeological Reports referred to in Section 65.1 of the *Ontario Heritage Act*.
- Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48

 (1) of the Ontario Heritage Act. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and



engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.

- The 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, Funeral, Burial and Cremation Services Act, Ministry of Public and Business Services Delivery 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.

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7.0 Maps

See following pages for detailed assessment mapping and figures



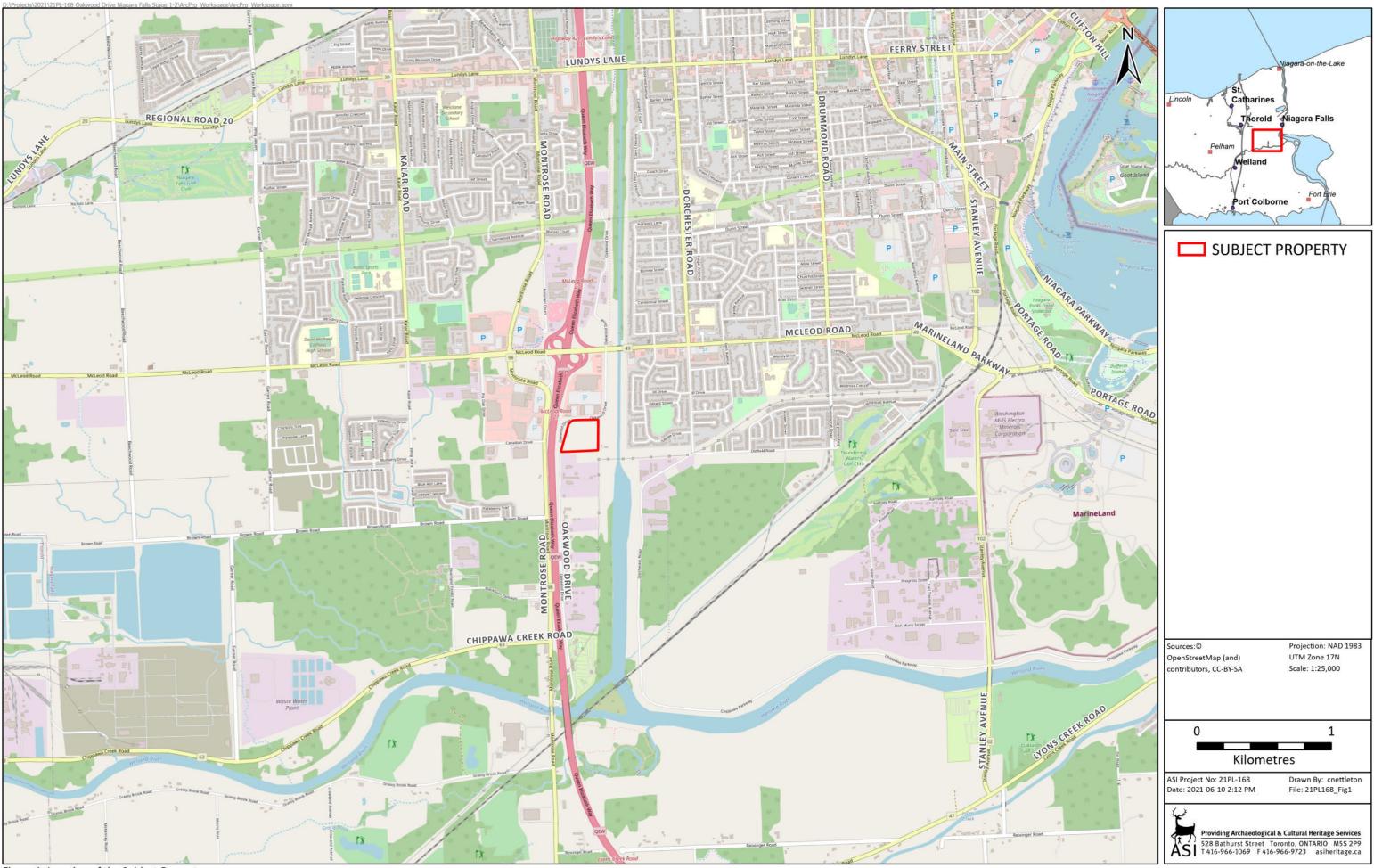


Figure 1: Location of the Subject Property

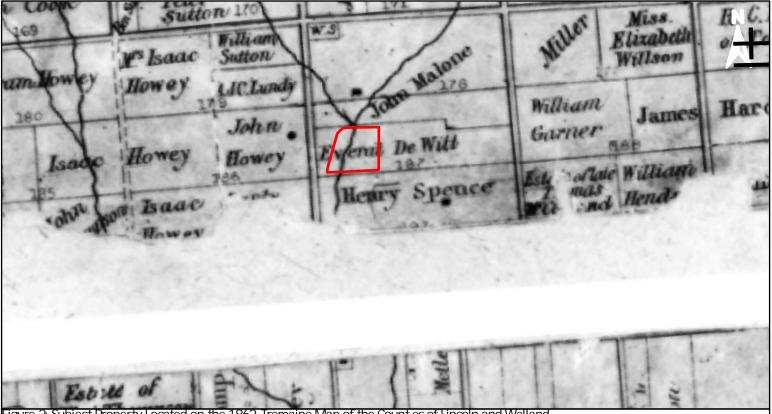


Figure 2: Subject Property Located on the 1862 Tremaine Map of the Count es of Lincoln and Welland

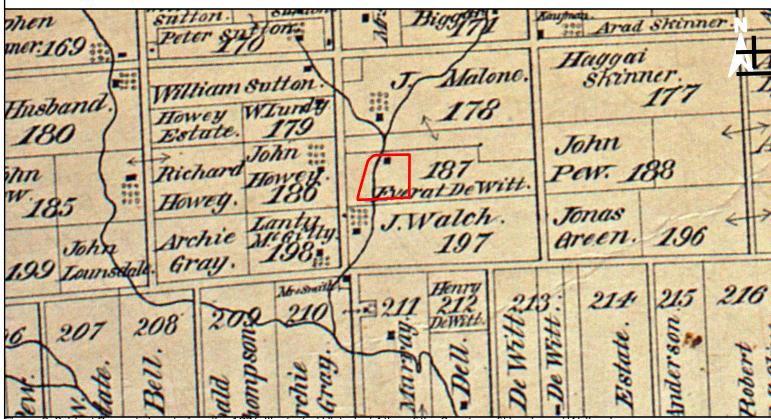


Figure 3: Subject Property Located on the 1876 Illustrated Historical Atlas of the Count es of Lincoln and Welland



SUBJECT PROPERTY

Sources: 1862 Tremaine Map of the Count es of Lincoln and Welland

1876 Illustrated Historical Atlas of the Count es of Lincoln and Welland

0 500 Metres

Project on: NAD 1983 UTM Zone 17N Scale: 1:20,000 Page Size: 8.5 x 11

ASI Project No.: 21PL-168 Date: 2021-06-14

Drawn By: cnet leton File: 21PL168_Fig2-3

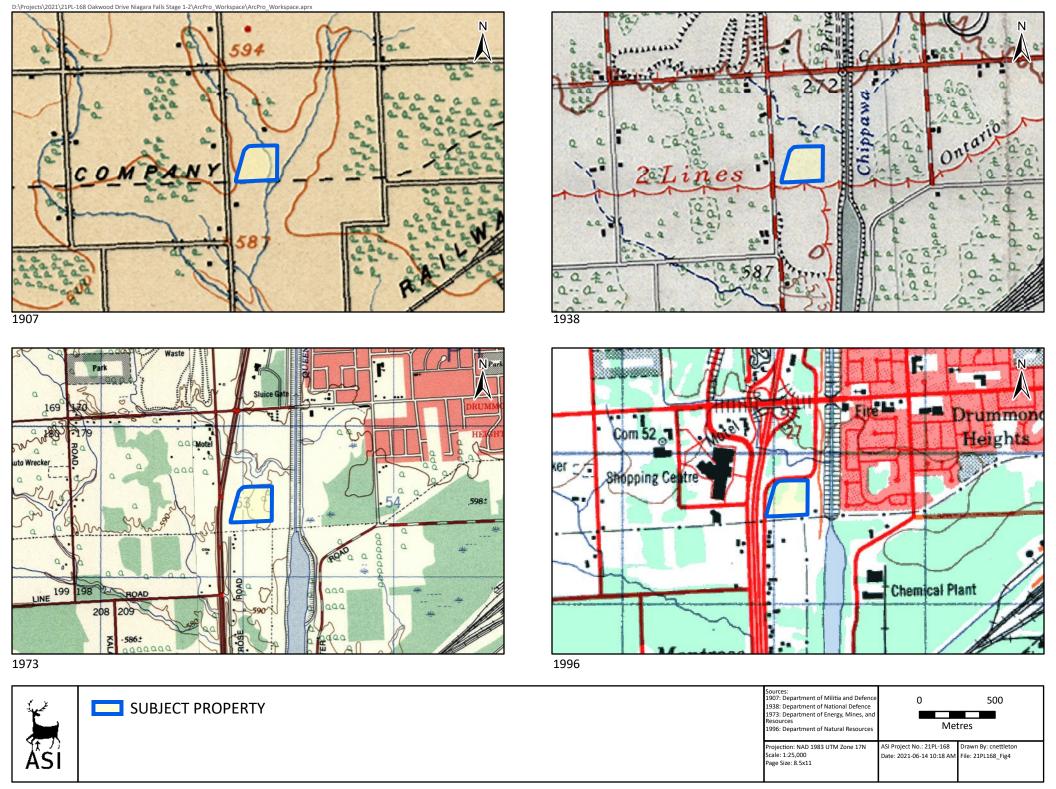
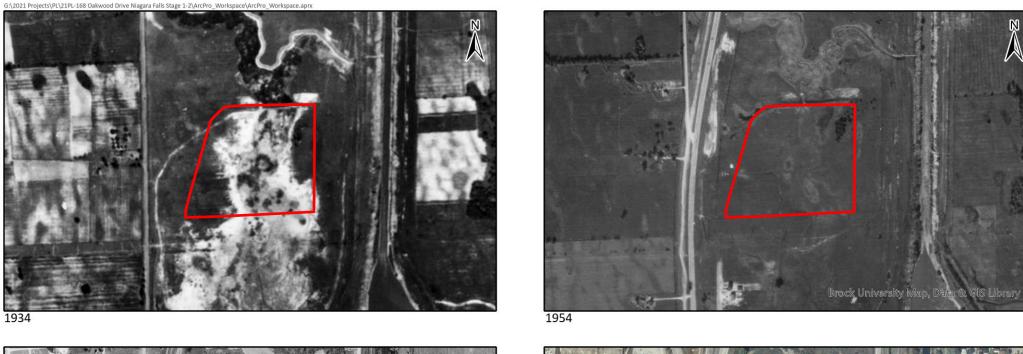


Figure 4: Subject Property located on the 1907, 1938, 1973, and 1996 Niagara Topographic Maps







1965



SUBJECT PROPERTY

Sources: Brock University Maps, Data and GIS Niagara Air Photo Mosaics

Niagara Region

Metres

Projection: NAD 1983 UTM Zone 17N Scale: 1:8,000
Page Size: 8.5x11

ASI Project No.: 21PL-168 Drawn By: cnettleton File: 21PL168_Fig5

Figure 5: Subject Property located on 1934, 1954, 1965, and 1995 Aerial Imagery









SUBJECT PROPERTY

Sources: Google Earth, 2002 and 2016

Brock University Maps, Data and GIS
Niagara Air Photo Mosaics, 2010 and 2015

Projection: NAD 1983 UTM Zone 17N
Scale: 1:4,000
Page Size: 8.5x11

O 100

Metres

Date: 2/7/2023 12:27 PM
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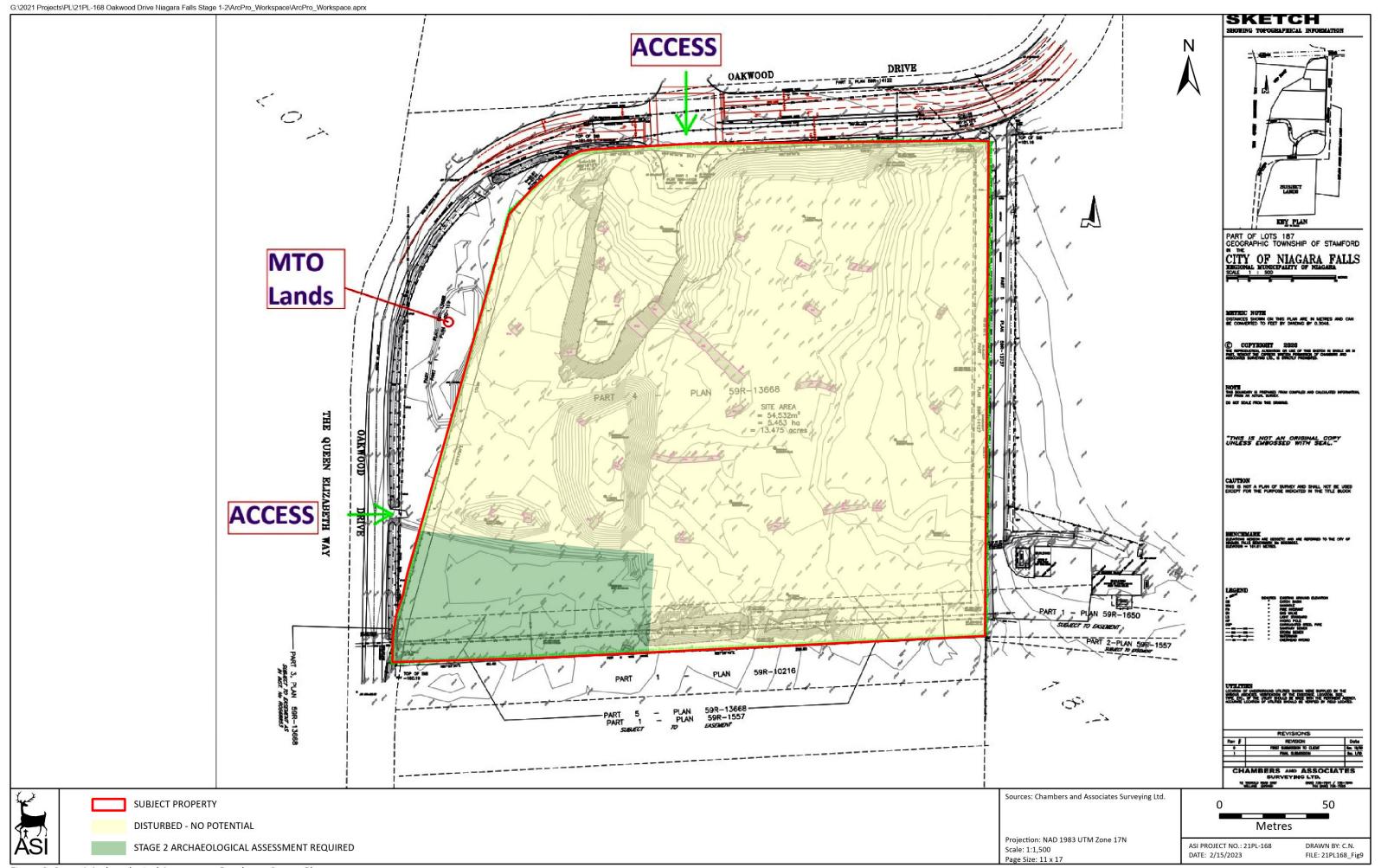
Figure 6: Subject Property located on 2002, 2010, 2015, and 2016 Aerial Imagery



Figure 7: Existing Conditions of the Subject Property



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Appendix A

Registered Sites within a One-kilometre Radius of the Subject Property

Borden Number	Site Name	Temporal/Cultural Affiliation	Site Type	Researcher
AgGs-116	Garner Estates	Euro-Canadian	Homestead	DR Poulton and Associates, 1998
AgGs-292	n/a	Late Woodland	Findspot	Archaeological Services Inc., 2006
AgGs-293	P23	Early Archaic	Findspot	Archaeological Services Inc., 2006; Detritus Consulting Limited, 2014
AgGs-294	n/a	Pre-contact	Scatter	Archaeological Services Inc., 2006; Detritus Consulting Limited, 2014
AgGs-295	n/a	Late Woodland	Findspot	Archaeological Services Inc., 2006
AgGs-296	n/a	Pre-contact	Campsite	Archaeological Services Inc., 2006; Detritus Consulting Limited, 2016
AgGs-298	n/a	Early Archaic	Campsite	Archaeological Services Inc., 2006; Detritus Consulting Limited, 2016

Borden Number	Site Name	Temporal/Cultural Affiliation	Site Type	Researcher
AgGs-299	n/a	Pre-contact	Campsite	Archaeological Services Inc., 2006; Detritus Consulting Limited, 2016
AgGs-300	n/a	Middle Archaic	Findspot	Archaeological Services Inc., 2006
AgGs-301	n/a	Late Archaic	Findspot	Archaeological Services Inc., 2006
AgGs-302	n/a	Early Archaic	Findspot	Archaeological Services Inc., 2006
AgGs-303	n/a	Late Archaic	Findspot	Archaeological Services Inc., 2006
AgGs-387	n/a	Euro-Canadian	Homestead	AMEC Foster Wheeler, 2015, 2016