

STAGE 1 ARCHAEOLOGICAL ASSESSMENT OF
CLAIR-MALTBY SECONDARY PLAN
PART OF LOTS 11-15, CONCESSIONS 7-8
GEOGRAPHIC TOWNSHIP OF PUSLINCH, WELLINGTON COUNTY,
NOW THE CITY OF GUELPH

ORIGINAL REPORT

Prepared for:

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EXECUTIVE SUMMARY

ASI was contracted by Macaulay Shiomi Howson Ltd. to undertake a Stage 1 Archaeological Assessment for the Clair-Maltby Secondary Plan, Geographic Township of Puslinch, Wellington County, now in the City of Guelph. The study area is over 520 hectares in size. Permission to carry out all activities necessary for the completion of the assessment was granted by the proponent on June 2, 2016.

The Stage 1 background review entailed consideration of the proximity of previously registered archaeological sites, the original environmental setting of the property and nineteenth and twentieth-century settlement trends, the extent of previous archaeological assessments carried out within portions of the study area, and determinants of archaeological potential as derived from the Archaeological Master Plan for the City of Guelph. This research has led to the conclusion that there is potential for the presence of significant pre-contact Indigenous and Euro-Canadian archaeological resources throughout the vast majority of the study area.

Based on the application of modeling criteria developed for the Archaeological Master Plan for the City of Guelph, approximately 61.3% or 328 hectares of the study area exhibits high potential for the presence of pre-contact Indigenous and/or Euro-Canadian archaeological resources.

In light of these results the following recommendations are made:

1. Any future developments within the study area, beyond those portions that have already been assessed and cleared of any further archaeological concern, must be preceded by Stage 2 Archaeological Assessment. Such assessment(s) must be conducted in accordance with the Ministry of Tourism, Culture and Sport's 2011 Standards and Guidelines for Consultant Archaeologists. All active or formerly worked agricultural lands must be assessed through pedestrian survey. Wood lots and other non-arable lands must be assessed by means of test pit survey. Areas deemed to be disturbed or of no potential due to factors of slope or drainage during the Stage 2 assessment process must be appropriately documented.

This work is required prior to any land disturbing activities in order to identify any archaeological remains that may be present.

It should be noted that the archaeological assessment of any proposed development (e.g., a draft plan of subdivision) must be carried out on **all** lands within that particular subject property, not simply those lands identified as exhibiting high potential in this study.



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1.0 PROJECT CONTEXT

ASI was contracted by Macaulay Shiomi Howson Ltd. (MSH) to undertake a Stage 1 Archaeological Assessment for the Clair-Maltby Secondary Plan, Geographic Township of Puslinch, Wellington County, now in the City of Guelph (Figure 1). The study area is over 520 hectares (ha) in size.

1.1 Development Context

This assessment was conducted under the project management of Ms. Beverly Garner and project direction of Mr. Andrew Clish (MTCS PIF P046-0274-2016). All activities carried out during this assessment were completed as part of the Clair-Maltby Master Environmental Servicing Plan (MESP) and Secondary Plan City as required by the *Ontario Planning Act* and *Ontario Environmental Assessment Act*. The Clair-Maltby Secondary Plan Study will help the City of Guelph plan the last greenfield area within the city limits. The Secondary Plan will establish an appropriate range and mix of land use designations to help achieve the City's vision to plan a complete and healthy community and support future urban growth.

All work was completed in accordance with the *Ontario Heritage Act* (1990) and the Ministry of Tourism, Culture and Sport's 2011 *Standards and Guidelines for Consultant Archaeologists* (S & G). All work carried out for this assessment is also guided by the Archaeological Master Plan for the City of Guelph (Detritus Consulting 2001), which provides further refinement with regards to potential buffers surrounding any noted features or characteristics which affect archaeological potential.

Permission to access the study area and to carry out all activities necessary for the completion of the assessment was granted by the proponent on June 2, 2016.

1.2 Historical Context

The purpose of this section, according to the S & G, Section 7.5.7, Standard 1, is to describe the past and present land use and the settlement history and any other relevant historical information pertaining to the study area. A summary is first presented of the current understanding of the Indigenous land use of the study area. This is then followed by a review of the historical Euro-Canadian settlement history.

The study area is located within part of Lots 11-15, Concessions 7 and 8, Geographic Township of Puslinch, Wellington County, now in the City of Guelph. The study area is situated within the last greenfield area within the City of Guelph, and is currently comprised of a rural landscape.

1.2.1 Indigenous Overview

Southern Ontario has a cultural history that begins thousands of 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.

The City of Guelph has a long cultural historical that begins approximately 11,000 years ago. Table 1 provides a general summary of the pre-contact Indigenous settlement of the study area and surrounding area.



Table 1: Outline of Southern Ontario Prehistory

Period	Archaeological/ Material Culture	Date Range	Lifeways/ Attributes
PALEO-IN	<u> </u>	2 4.0 1.490	
Early	Gainey, Barnes, Crowfield	9000-8500 BC	Big game hunters
Late	Holcombe, Hi-Lo, lanceolate	8500-7500 BC	Small nomadic groups
ARCHAIC			
Early	Nettling, Bifurcate-base	7800-6000 BC	Nomadic hunters and gatherers
Middle	Kirk, Stanly, Brewerton, Laurentian	6000-2000 BC	Transition to territorial settlements
Late	Lamoka, Genesee, Crawford Knoll, Innes	2500-500 BC	Polished/ground stone tools (small
			stemmed)
WOODLA	ND		
Early	Meadowood	800-400 BC	Introduction of pottery
Middle	Point Peninsula, Saugeen	400 BC-AD 800	Incipient horticulture
Late	Algonkian, Iroquoian	AD 800-1300	Transition to village life and agriculture
	Algonkian, Iroquoian	AD 1300-1400	Establishment of large palisaded
			villages
	Algonkian, Iroquoian	AD 1400-1600	Tribal differentiation and warfare
HISTORIC		·	
Early	Huron, Neutral, Petun, Odawa, Ojibwa	AD 1600-1650	Tribal displacements
Late	Six Nations Iroquois, Ojibwa	AD 1650-1800's	
	Euro-Canadian	AD 1800-present	European settlement

1.2.2 Historical Overview

Wellington County

Prior to 1849, Wellington County was part of the much larger Wellington District, which was formed in 1838 and comprised all of contemporary Wellington, Waterloo and Grey Counties, as well as a portion of Dufferin County. In 1854, the County of Wellington was formed. Wellington County was named after Arthur Wellesley, the First Duke of Wellington, England. Between 1849 and 1854, it was a part of Waterloo County with the Village of Guelph as the county seat. Shortly thereafter it was separated out; the original townships in the county were Amaranth, Arthur, Eramosa, Erin, Garafaxa, Guelph, Maryborough, Nichol, Peel, Pilkington and Puslinch (Mika and Mika 1977a; Historical Atlas Publishing Co. 1906).

Puslinch Township

The Township of Puslinch was surveyed between 1828 and 1831 and was named for Puslinch in Devonshire, England. The township is reported to have once been mostly a Clergy Reserve. Settlement begun in or around 1828, and the first clergy reserve lot was sold in 1829. Township lands were not offered for sale until the survey was completed, two years later. Rowland Wingfield was the first to receive a patent in the township in 1832 for Lot 8, Concession 5. He was the first importer of thoroughbred cattle into Canada. Other early settlers included John MacFarlane, John and William Gordon, Peter Byrn, John Arkell, Thomas Arkell, and F. W. Stone. The townships first school was held in the early 1830's on Lot 18, Concession 8. It was later moved to a log building which also served as a church on Lot 17, Concession 7. From 1840 to 1849, Puslinch was represented on the Wellington District Council. After which its representatives sat on the Waterloo County Council until 1852, when the township was included in the United Counties of Wellington, Waterloo and Grey. In 1853, Puslinch officially became a part of the United Counties of Wellington and Grey. Finally, in 1854, Puslinch became one of the townships that formed the newly independent County of Wellington. During these changes Puslinch elected their first township council in 1849. Until a township hall was built in 1867, the



council met at McMeekin's tavern, occasionally meeting at one of the other fifteen or so taverns operating in the township at that time (Mika and Mika 1977b:264-265).

In 1994, the City of Guelph annexed 4,420 acres from County of Wellington, and 3,678 acres came from Puslinch Township. The annexation greatly expanded the Guelph's southern and northern borders, providing additional lands for industrial, commercial and residential expansion (County of Wellington 1994:1).

Guelph Township

Guelph Township is named after the Royal House of Brunswick, family of the English monarch, George IV. Guelph Township was surveyed by John MacDonald in 1830, and the land in the township was purchased by the Canada Company, which consisted of a group of British speculators who acquired more than two million acres of land in Upper Canada for colonization purposes (Mika and Mika 1977b:186). A large number of settlers arrived in the township before it was surveyed. The first settler in the township was Samuel Rife, who squatted near the western limits of the township around the year 1825. Waterloo Road, formerly Broad Road, was built by Absalom Shade and was finished around 1827, the year the Town of Guelph was founded (Mika and Mika 1977b:186). Many settlers arrived in the township between the years 1827 and 1830.

City of Guelph

While the present boundaries for the City of Guelph fall within the former Townships of Puslinch and Guelph, the historic community of Guelph was situated on the River Speed in Guelph Township. Guelph was first laid out by a novelist named John Galt, head of the Canada Company, in 1827. The original plan for the town depicted lots reserved for the company offices, a saw mill, a market square, two churches and a burial ground. Registered plans of subdivision for this village date from 1847-1865. The first settlers were attracted here in the next few years. By the late 1840s, the population of Guelph had reached 1,480, and it was incorporated as a town in 1850. It was also selected as the capital of Wellington County, and it was also deemed to be an inland port of entry. The population had reached 6, 878 by 1873. By April 1879, the population exceeded 10,000 and Guelph was incorporated as a city. Guelph contained a wide variety of trades and professions by the 1840s (see Johnson 1977:83). By the 1870s, Guelph contained churches, banks, insurance agencies, a library, two newspapers, telegraph offices, hotels, stores, flour, saw, and planing mills, woollen factories, foundries, machinery works, sewing machine works, musical instrument manufacturers, tanneries, soap and candle factories, shoemakers, wooden ware manufacturers, and two breweries. It was a station for both the Grand Trunk and Canadian Pacific Railways. Guelph was built on a number of hills which gives it a picturesque appearance, and a number of fine heritage structures in the city were built out of native limestone (Cameron 1967; Crossby 1873:134; Fischer & Harris 2007:132; Rayburn 1997:145; Scott 1997:94-95; Winearls 1991:680-684).

1.2.3 Review of Nineteenth and Twentieth Century Historical Mapping

A review of nineteenth and early twentieth century mapping was completed in order to determine if these sources depict any nineteenth-century Euro-Canadian settlement features that may represent potential historical archaeological sites on the property (Figures 2-7). It should be noted that 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 regard to the level of detail



provided. Moreover, not every feature of interest from the perspective of archaeological resource management would have been within the scope of these sources.

Historic mapping confirmed that the study area was a rural, agricultural landscape in the mid-nineteenth century. In addition, historic map analysis demonstrates that that St. Claire Road, Maltby Road, Gordon Street, and Victoria Road were surveyed prior to 1861. The maps reviewed record the names of owners/occupants of properties within the study area, as well as the location and arrangement of residences, farmhouses, churches, schools and other key resources.

The 1861 map (Figure 2) indicates that St. Claire Road, Maltby Road, Gordon Street, and Victoria Road were established thoroughfares at this time. Historically, the study area is located in the former Township of Puslinch, Wellington County. No historical features are depicted on the atlas map (Table 2).

The 1877 and 1906 mapping (Figures 3-4) indicate that several properties have changed hands over the years, however, the area is still a predominantly rural agricultural area on both maps. Farmsteads exist on many of the properties within the study area (Table 2).

Table 2: Nineteenth-Century Property Owners and Historical Features in the Study Area

Loca	ition	1861		187	1877		
Conc	Lot	Owner(s)/ Tenant(s)	Historical Feature(s)	Owner(s)/ Tenant(s)	Historical Feature(s)	Owner(s)/ Tenant(s)	Historical Feature(s)
7	11	Simon Eustees		S. Eustace		G. Maltby	
	12	Andw. Kennedy		J. C. Chadwick	Farmstead	Thomas Weir	Farmstead
	13	Adm. Weir		A. Weir	Farmstead	Thomas Weir	Farmstead
	14	James Kidd		M. Woods		Edward Taylor	
				J. Kidd	Farmstead		
	15	Wm. Scott		J. Scott		James R. Earon	Farmstead
8	11	John Hanlin		J. Hanlon	Farmstead	James Hanlon Est.	Farmstead
	12	Wm Graham		R. Graham		John R. Dickson	
		Jas. Maroney		A. Mulrooney		Mrs. Helen Mulvaney	
	13	Wm Graham		W. Graham		John R. Dickson	Farmstead
		Peter Mooney		J. Mooney	Farmstead	Jasson Alderson	
	14	Fras. Beaty		_ Willon		C & W.G. Blair	Farmstead
		Thos. Baley		A. & T. Amos		Thomas Amos	Farmstead
	15	Arthur Lamb		W. Laycock	Farmstead	Mrs. George Laycock	Farmstead
		Jno. Grattan		G. McGill		William Cassin	
		Phil Grimons		P. Gumlick			

Twentieth century mapping and aerial photography illustrates the development of the study area over the course of the twentieth century. Generally, this mapping demonstrates a period of minimal growth until the final decades of the twentieth century, when growth began to encroach from the north, around Gordon Street. The study area mostly retains its rural agricultural character.

On the 1935 National Topographic Survey (NTS) mapping (Figure 5) several farmsteads continue to be depicted within the study area.

In the Digital Aerial Photograph of Southern Ontario, 1954 (Figure 6) the area retains its rural agricultural character. The majority of the study area is seen to be divided into active agricultural fields and pastures, with few areas remaining wooded. Gordon Street is labeled as Guelph Highway No. 6. Very little development has occurred beyond the historic agricultural and rural hamlet settlement patterns.

In the 1994 and 1998 NTS mapping (Figure 7) the area again retains its rural agricultural character; however, development can be seen increasing along Gordon Street from the City of Guelph to the north. Clusters of buildings are illustrated along this roadway, including a Senior Citizens Home, and a driving



range, as well as a section of telephone which is line illustrated. Maltby Road is labeled as the 'Guelph City Limits'.

1.3 Archaeological Context

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the study area, its environmental characteristics (including drainage, soils or surficial geology and topography, etc.), and current land use and field conditions. Three sources of information were consulted to provide information about previous archaeological research: the site record forms for registered sites available online from the MTCS through "Ontario's Past Portal"; published and unpublished documentary sources; and the files of ASI.

1.3.1 Registered Archaeological Sites

In order that an inventory of archaeological resources could be compiled for the study area, three sources of information were consulted: the site record forms for registered sites housed at the Ministry of Tourism, Culture and Sport, published and unpublished documentary sources, and the files of ASI.

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

While no archaeological sites have been registered within the study area, 63 sites have been registered within a one km radius (MTCS 2016). All of the sites have been in summarized in Table 3 below. Refer to Table 1 for the cultural/temporal categories.

Table 3: Registered Archaeological Sites within 1 km of the Study Area

Borden Number	Site Name	Time Period	Site Type	Researcher
AjHb-9	William F. Clare	Archaic, Late	campsite	n/a
AjHb-82	S. Walsh	Post-Contact	homestead	G. Grimes, 1987
AjHb-8	Gordon Street	Archaic, Early	findspot	ASI 1988
AjHb-74	Golf	Pre-Contact	campsite	B. Parker 2006
AjHb-73	Wolf	Woodland, Early	campsite	B. Parker 2006
AjHb-70		Pre-Contact	findspot	ASI 2004
AjHb-69		Pre-Contact	findspot	ASI 2004
AjHb-64		Post-Contact	homestead	ASI 2002
AjHb-63	Godwin	Pre-Contact	findspot	ASI 2002
AjHb-62	Blair	Woodland, Middle	scatter	ASI 2002, 2004
AjHb-61	Hanley	Pre-Contact Archaic, Late,	findspot	ASI 2002
AiHb-60	McGarr	Archaic, Middle	campsite	ASI 2002, 2004
AjHb-59	Farley	Pre-Contact	findspot	ASI 2002
AjHb-58	Victoria	Archaic, Middle	findspot	ASI 2002
AjHb-57	Mooney	Pre-Contact Archaic, Late,	findspot	ASI 2002
AjHb-56	Kowall	Woodland, Early	findspot	B. Parker 2002
AjHb-48	Kortright 2	Post-Contact	homestead	B. Parker 1999



Borden Number	Site Name	Time Period	Site Type	Researcher
AjHb-47	Kortright	Woodland, Late	findspot	B. Parker 1999
AjHb-41	Fyfe	Post-Contact	homestead	ASI 1998
AjHb-40	McLaren	Post-Contact	homestead	ASI 1997
AjHb-36	Steffler	Post-Contact	homestead	E. Alder 1995
AjHb-35	Clairfields #18	Post-Contact	homestead	D.R Poulton 1996
AjHb-34	Clairfields #17	Archaic, Early	campsite	D.R Poulton 1996
AjHb-32	Southcreek V	Archaic, Late	findspot	E. Alder 1995
ÁiHb-31	Southcreek IV	Archaic, Late	findspot	E. Alder 1995
AjHb-30	Southcreek III	Archaic, Middle	findspot	E. Alder 1995
AjHb-29	Southcreek II	Archaic, Late	findspot	E. Alder 1995
AjHb-28	Southcreek 1	Pre-Contact	findspot	E. Alder 1995
ÁiHb-329	Southgate 9	Post-Contact	homestead	D.R. Poulton 2006
AiHb-328	Southgate 4	Pre-Contact	findspot	D.R. Poulton 2006
AiHb-327	Southgate 12	Archaic, Middle	findspot	D.R. Poulton 2006
AiHb-326	Southgate 17	Pre-Contact	campsite	D.R. Poulton 2006
AiHb-325	Southgate 14	Pre-Contact	campsite	D.R. Poulton 2006
AiHb-324	Southgate 11	Pre-Contact	campsite	D.R. Poulton 2006
AiHb-323	Southgate 8	Archaic, Middle	campsite	D.R. Poulton 2006
AiHb-322	Southgate 6	Post-Contact	homestead	D.R. Poulton 2006
AiHb-321	Southgate 19	Pre-Contact	campsite	D.R. Poulton 2006
AiHb-320	Southgate 18 a+b	Pre-Contact	campsite	D.R. Poulton 2006
AiHb-319	Southgate 16	Pre-Contact	campsite	D.R. Poulton 2006
AiHb-318	Southgate 2	Pre-Contact	findspot	D.R. Poulton 2006
AiHb-293		Pre-Contact	findspot	J. Wilson 2003
AiHb-290	Hanlon: Field 11, Site1	Post-Contact	homestead	D.R. Poulton 2003
AiHb-288	Hanlon: Field E, Site 3	Archaic, Early	findspot	D.R. Poulton 2003
AiHb-287	Hanlon: Field J, Site 7	Paleo-Indian, Late	findspot	D.R. Poulton 2003
AiHb-189	Gosling	Paleo-Indian, Early	campsite	D.R. Poulton 1996
AiHb-188	Clairfields #22	Archaic, Late	campsite	D.R. Poulton 1996
AiHb-187	Clairfields #21	Pre-Contact	scatter	D.R. Poulton 1996
AiHb-186	Clairfields #15	Pre-Contact	campsite	K. Powers 1996
AiHb-185	Clairfields #13	Pre-Contact	scatter	D.R. Poulton 1996
AiHb-184	Clairfields #12	Pre-Contact	findspot	D.R. Poulton 1996
AiHb-183	Clairfields#11	Pre-Contact	findspot	D.R. Poulton 1996
AiHb-182	Clairfields #8	Post-Contact	homestead	D.R. Poulton 1996
AiHb-181	Clairfields #6	Archaic, Early Archaic, Archaic,	findspot	D.R. Poulton 1996
AiHb-180	Clairfields #4	Late	campsite	D.R. Poulton 1996
AiHb-179	Clairfields #3		findspot	D.R. Poulton 1996
AiHb-178	Clairfields #1	Archaic, Late	findspot	D.R. Poulton 1996
AiHa-47	Audrey Meadows		scatter	AMICK 2006
AiHa-46	Cock Burn	Post-Contact	homestead	AMICK 2006
AiHa-44	Canin	Pre-Contact	campsite	J. Fisher 2005
AiHa-42	Tikal 4	Archaic, Middle	scatter	L.R. Parker 1998
AiHa-41	Gillespie Site	Pre-Contact	scatter	L.R. Parker 1998
AiHa-40	Hughson H1	Pre-Contact	scatter	L.R. Parker 1998
AiHa-39	Tikal 1	Pre-Contact	scatter	L.R. Parker 1998

1.3.2 Previous Archaeological Assessments

According to the background research, numerous archaeological assessments have been conducted both within the limits of the study area, and within a 50 m radius. These assessments are review below.



Assessments within the Study Area

In 2012, Scarlett Janusas Archaeological and Heritage Consulting and Education (SJAHCE) conducted a Stage 1 and 2 Archaeological Resource Assessment on the southwest half of Lot 14, Concession 8 for the Hall's Pond Solar Farm under MTCS PIF P027-162-2012. The property was approximately 23 ha is size and was comprised entirely of agricultural fields. During the course of the assessment two pre-contact findspots were encountered. Findspot 1 consisted of an end scraper and a utilized flake, 4 m apart from one another. Findspot 2 consisted of a two-sided scraper and a primary flake, 12 m apart from one another. Given the isolated and undiagnostic nature of both pre-contact findspots, these locations did not exhibit cultural heritage value or interest. As such, it was recommended that no further archaeological assessment of the property be required (SJAHCE 2012).

Assessments Adjacent to the Study Area

In 2002, ASI conducted a Stage 1 and 2 Archaeological Assessment on part of Lots 9 and 10, Concession 8 for the proposed Westminster Woods East subdivision under MTCS PIF 2002-015-001 (ASI 2002). During the course of the assessment 16 pre-contact findspots, two pre-contact sites and one historical Euro-Canadian site were recovered. One site is situated within 200 m of the current study area. Site AjHb-64 was encountered around an existing historical homestead 200 m northwest of the study area. A total of eight historical artifacts were recovered from six positive test pits. Four additional test pits were excavated within 1 m of each positive test pit, however, no additional artifacts were encountered. The recovered artifacts are diagnostic of the late nineteenth through early twentieth century. No further work was recommended and the site was considered free of further archaeological concern (ASI 2002).

In 2004, while investigating additional sites on the Westminster Woods East property (MTCS PIF P117-007), two additional findspots were encountered; one of which is within 200 m of the current study area. Site AjHb-70 was situated in an agricultural field approximately 175 m northwest of the study area. The site is comprised of a large biface manufactured of Onondaga chert and a small flake scraper, also of Onondaga chert, found within 10 m of each other. No further work was recommended and the site was considered free of further archaeological concern (ASI 2004).

In 2006, D.R. Poulton conducted a Stage 1-3 Archaeological Assessment of the Southgate Development just west of the study area. A copy of the report was unavailable, however, according to the OASD results 12 archaeological sites were encountered during the course of the assessment. One site is situated within 200 m of the current study area. The Southgate 8 site (AiHb-323) is situated approximately 150 m west of the study area in an agricultural field. During the course of the pedestrian survey four flake fragments and an Otter Creek projectile point (ca. 6000 BC to 2000 BC) were recovered. Further archaeological assessment was recommended (MTCS 2016). It should be noted that since the report was unavailable, additional unregistered findspots may have been encountered in close proximity to the study area.

In 2012, Detritus Consulting Ltd. conducted a Stage 1 and 2 Archaeological Assessment on the southwest part of Lot 11, Concession 8 for a proposed subdivision under MTCS PIF P017-248-2012. During the course of the assessment on pre-contact findspot, a single piece of Onondaga shatter, was encountered. The isolated findspot was not considered to exhibit cultural heritage value or interest and no further work was recommended (Detritus 2012).



1.3.3 Geography

The study area is situated within the Guelph Drumlin Field physiographic region of southern Ontario in a former spillway (Chapman and Putnam 1984). The Guelph Drumlin Field physiographic region (Chapman and Putnam 1984:137-139) centres upon the City of Guelph and Guelph Township and occupies roughly 830 km². Within the Guelph Drumlin Field, there are approximately 300 drumlins of varying sizes. For the most part these hills are of the broad oval type with slopes less steep than those of the Peterborough drumlins and are not as closely grouped as those in some other areas. The till in these drumlins is loamy and calcareous, and was derived mostly from dolostone of the Amabel Formation that can be found exposed below the Niagara Escarpment. Spillways are the former glacial meltwater channels. They are often found in association with moraines but in opposition are entrenched rather than elevated landforms. They are often, though not always, occupied by stream courses, the fact of which raises the debate of their glacial origin. Spillways are typically broad troughs floored wholly or in part by gravel beds and are typically vegetated by cedar swamps in the lowest beds (Chapman and Putnam 1984:15).

The study area is situated within the Grand River watershed. Three subwatersheds traverse across the study area and are under the jurisdiction of the Grand River Conservation Authority. These include the Hanlon Creek subwatershed, Mill Creek subwatershed, and Torrance Creek subwatershed. While no watercourses are situated within the study area, a number of small lakes and ponds are present. Part of the Clair-Maltby Secondary Plan Area has been recognized as an important headwater and recharge area that supports Hanlon Creek (City of Guelph 2015).

Soil drainage for the study area is presented in Figure 8. Soils within the study area are primarily well-drained Dumfries loam. The southwest corner of the study area consists of poorly drained muck (Hoffman, D.W. et. al. 1963).

Surficial geology information for the study area is presented in Figure 9. This information is summarized in Table 4 (OGS 2010).

Table 4: Registered Detailed Descriptions of Surficial Geology

Primary deposits	Secondary deposits	Characteristics
Gravel	sand and gravel, minor silt, clay and till	Ice-contact stratified deposits
Diamicton	sand and silt	Stone-poor, sandy silt to silty sand-textured till on Paleozoic terrain
Organic Deposits	peat, muck, marl	

1.3.4 The Predevelopment Landscape and Modelling Indigenous Archaeological Resource Potential

Water is arguably the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in southern Ontario after the Pleistocene era, proximity to water can be regarded as the primary indicator of archaeological site potential. Accordingly, distance from water is one of the most commonly used variables for predictive modelling of archaeological site location.

The S & G (MTCS 2011:4-5, 7) stipulates that undisturbed lands within 300 m of primary water sources (lakes, rivers, streams, creeks, etc)., secondary water sources (intermittent streams and creeks, springs, marshes, swamps, etc)., ancient water sources, and the shorelines of extant or former waterbodies are



considered, at a generic level, to exhibit archaeological potential. Geographic characteristics also indicate archaeological potential and include distinct topographic features and soils.

The generic MTCS distance to water potential model has been refined for the City of Guelph, as part of the Archaeological Master Plan (Detritus Consulting 2001). The analysis of the distribution of known archaeological resources indicated that 85% of all registered pre-contact sites in the region are found within 200 m of water, which suggested that a buffer zone extending 200 m from any water source constitutes an acceptable characterization of pre-contact archaeological site potential. Other characteristics including previously registered and unregistered archaeological sites, sandy soils, topographical features and ancient beach ridges were included in the pre-contact layer as trigger features for pre-contact archaeological potential.

1.3.5 Existing Conditions

The study area is irregular in shape, is over 520 ha in size and is generally located in the southeast corner of Guelph. It is bound by Clair Road to the north, Victoria Road to the east, Maltby Road to the south and the eastern limits of the Southgate Business Park to the west (Figure 10). The study area is largely rural in nature and dominated by existing agricultural fields. The area includes residential estate lots, residential properties fronting onto Maltby Road and Victoria Road South, and additional rural residential lots.

2.0 ANALYSIS AND CONCLUSION

The historical and archaeological contexts have been analyzed to help determine the archaeological potential of the study area and these data are presented below. Detailed mapping is located in the Supplementary Documentation (SD) associated with this project.

2.1 Indigenous Archaeological Resource Potential

As noted in Section 1.3.4, the 200 m distance to water threshold is considered to be the primary criterion on which pre-contact archaeological potential is defined by the Archaeological Master Plan (Detritus Consulting 2001), and so all identified sources of water within the study area have been buffered accordingly (SD Figure 1). Additionally, a 200 m buffer was placed around all registered pre-contact sites.

Approximately 54.2% of the study area (290 ha) is considered to exhibit high potential for the presence of pre-contact archaeological resources. Aside from areas of localized disturbance surrounding the existing farm complexes and residences, there are no apparent factors related to integrity that negate potential within these generally defined zones.

2.2 Euro-Canadian Archaeological Resource Potential

The S & G (MTC 2011:18) stipulates that areas of early Euro-Canadian settlement, including places of early military 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. Early historical transportation routes (trails, passes, roads, railways, portage routes), properties listed on a municipal register or designated under the *Ontario Heritage Act* or a

federal, provincial, or municipal historic landmark or site, and properties that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations are also considered to have archaeological potential. Ten properties within the study area are listed on the City of Guelph's register of properties of heritage interest (ASI 2016). Intention to designated Morcolongo Farm at 2162 Gordon Street was approved by council on June 27, 2011; however, it is under further staff review at the owners request to add additional heritage attributes (City of Guelph 2013).

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

The City of Guelph potential model for Euro-Canadian archaeological resources (Detritus Consulting 2001) indicates that in additional to the basic proximity to the water model, early settlement roads and early railways were buffered by zones of 50-100 m on either side. Significant historic structures were mapped individually as points buffered by a radius of 100 m, if their locations were shown on maps dating to the nineteenth century. These included schools, places of worship and commercial buildings, such as inns, industrial features such as mills, manufactories, lime kilns, quarries and mines. Given the vast number of rural farmsteads they were not viewed as being significant enough to investigate as an archaeological theme and were therefore not included in the historic layer. The majority of these sites would be captured within the other potential buffer zones. Cemeteries and family burial grounds were included in the historic theme layer due to their particularly sensitive nature and the fact that these sites may become invisible in the modern landscape.

Euro-Canadian archaeological potential zones within the study area, encompassing 16.5% or 88 ha of the land mass (SD Figure 2) have been defined on the basis of these criteria, which is in keeping with the factors/features indicative of Euro-Canadian archaeological site potential identified in the S & G (MTC 2011). The concession roads that define the majority of the study area limits have been buffered by 100 m, as have the locations of all of the mapped 1861, 1877 and 1907 farmsteads. Additionally, a 200 m buffer was placed around all of the registered historical sites. There is one registered historical site within 100 m of the study area and the intention to designate one property at 2162 Gordon Street has been approved.

2.3 Composite Archaeological Potential

Combining the pre-contact and Euro-Canadian potential layers (SD Figure 3) results in 61.3% or 328 ha of the of the study area land mass being identified as exhibiting high archaeological potential.

2.4 Summary

ASI was contracted by MSH to undertake a Stage 1 Archaeological Assessment for the Clair-Maltby Secondary Plan, Geographic Township of Puslinch, Wellington County, now in the City of Guelph. The study area is over 520 ha in size.



The Stage 1 background review entailed consideration of the proximity of previously registered archaeological sites, the original environmental setting of the property and nineteenth and twentieth-century settlement trends, the extent of previous archaeological assessments carried out within portions of the study area, and determinants of archaeological potential as derived from the Archaeological Master Plan for the City of Guelph. This research has led to the conclusion that there is potential for the presence of significant pre-contact and Euro-Canadian archaeological resources throughout the vast majority of the study area.

Based on application of the modelling criteria developed for the Archaeological Master Plan for the City of Guelph (Detritus Consulting 2001), approximately 61.3% of the study area exhibits high archaeological potential for the presence of pre-contact Indigenous and/or Euro-Canadian archaeological resources.

3.0 RECOMMENDATIONS

Given the findings of the Stage 1 Archaeological Assessment research, the following recommendations are made:

1. Any future developments within the study area, beyond those portions that have already been assessed and cleared of any further archaeological concern, must be preceded by Stage 2 Archaeological Assessment (SD Figure 3). Such assessment(s) must be conducted in accordance with the Ministry of Tourism, Culture and Sport's 2011 Standards and Guidelines for Consultant Archaeologists. All active or formerly worked agricultural lands must be assessed through pedestrian survey. Wood lots and other non-arable lands must be assessed by means of test pit survey. Areas deemed to be disturbed or of no potential due to factors of slope or drainage during the Stage 2 assessment process must be appropriately documented.

This work is required prior to any land disturbing activities in order to identify any archaeological remains that may be present.

It should be noted that the archaeological assessment of any proposed development (e.g., a draft plan of subdivision) must be carried out on **all** lands within that particular subject property, not simply those lands identified as exhibiting potential in this study.

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

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



4.0 ADVICE ON COMPLIANCE WITH LEGISLATION

- This report is submitted to the Minister of Tourism, Culture and Sport as a condition of licensing in accordance with Part VI of the Ontario Heritage Act, RSO 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological field work and report recommendations ensure the conservation, preservation and protection of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism, Culture and Sport, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.
- It is an offence under Sections 48 and 69 of the Ontario Heritage Act for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological field work on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the Ontario Heritage Act.
- Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the Ontario Heritage Act. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with sec. 48 (1) of the Ontario Heritage Act.
- The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33, requires that any person discovering or having knowledge of a burial site shall immediately notify the police or coroner. It is recommended that the Registrar of Cemeteries at the Ministry of Consumer Services is also immediately notified.
- Archaeological sites recommended for further archaeological 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.

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6.0 MAPS

See the following pages for detailed assessment maps and figures.



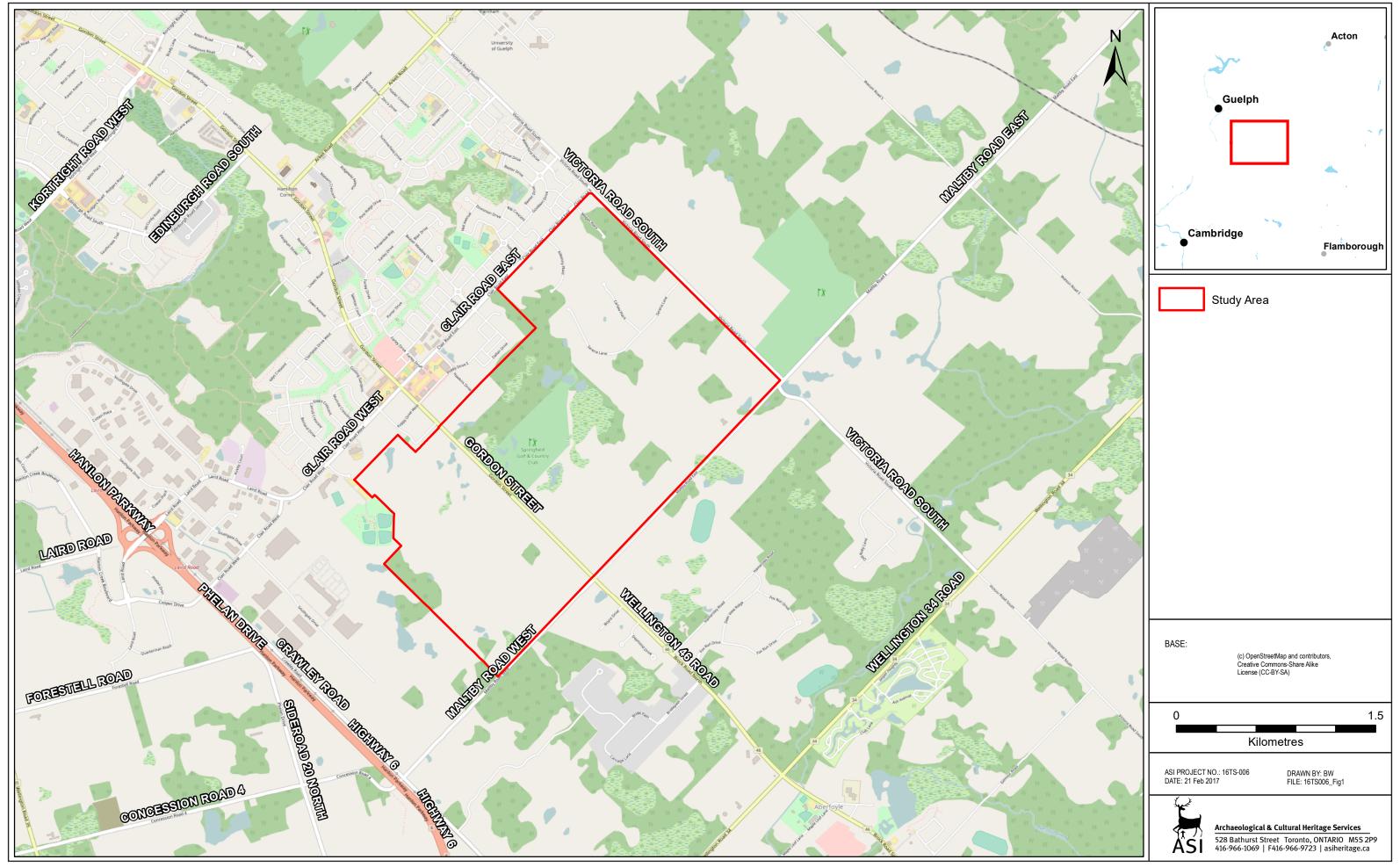


Figure 1: Location of the Study Area.

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Figure 2: Study Area located on the 1861 Map of the County of Wellington.

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Figure 3: Study Area located on the 1877 Illustrated Historical Atlas of the County of Wellington.

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Figure 3: Study Area located on the 1906 Illustrated Historical Atlas of the County of Wellington.



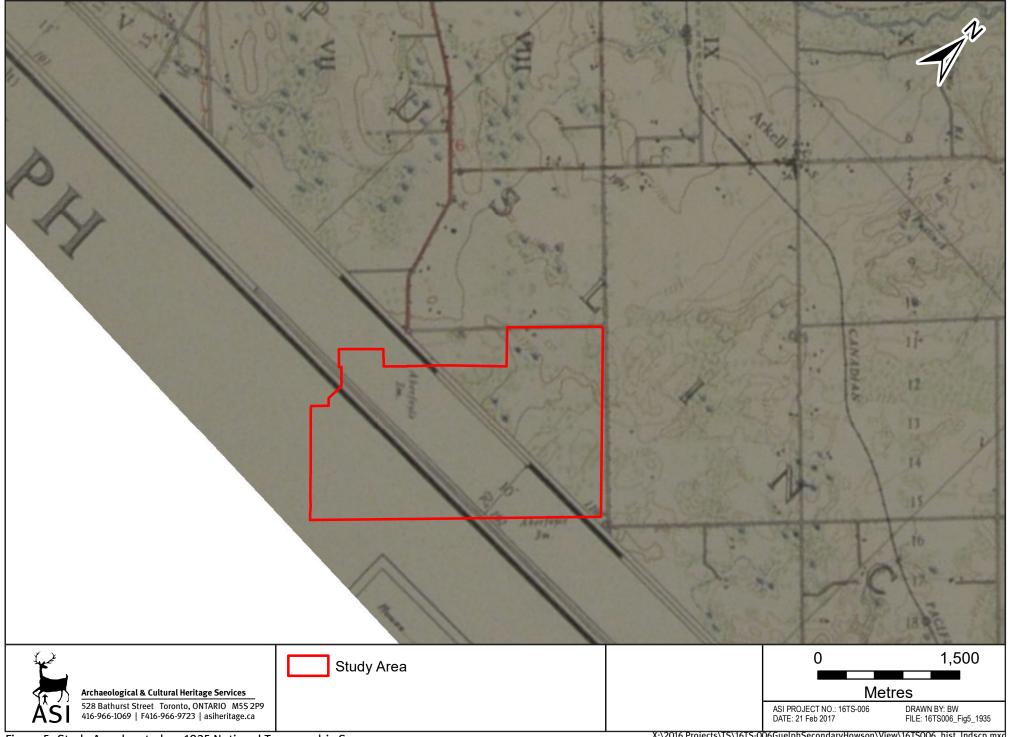


Figure 5: Study Area located on 1935 National Topographic Survey

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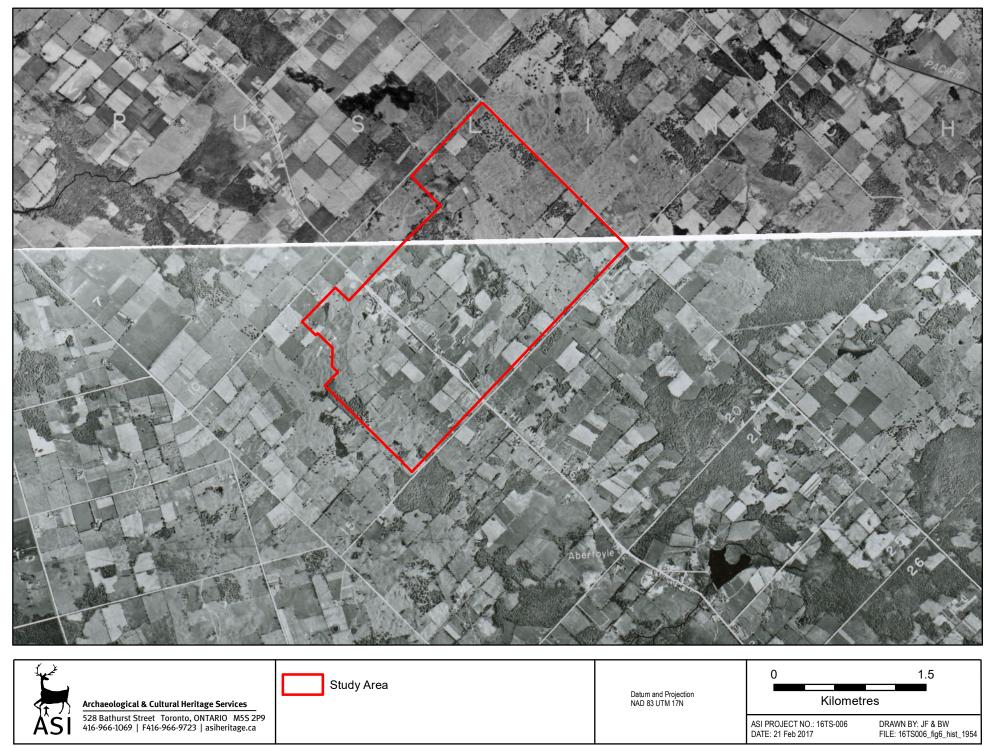


Figure 6: Study Area located on 1954 Aerial Photography.

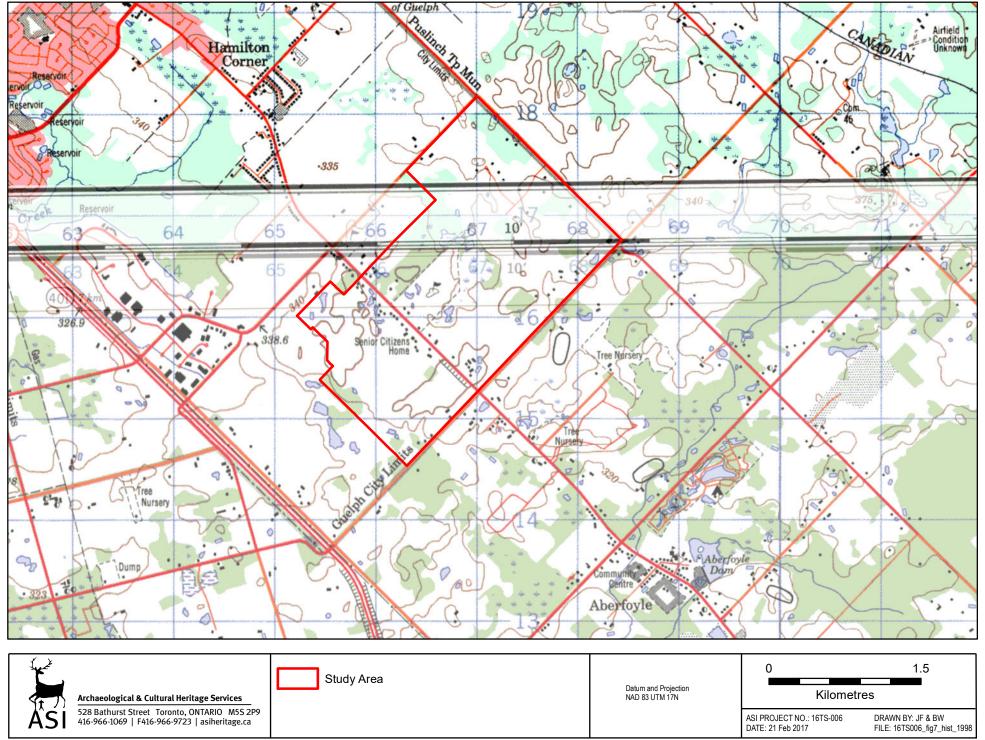
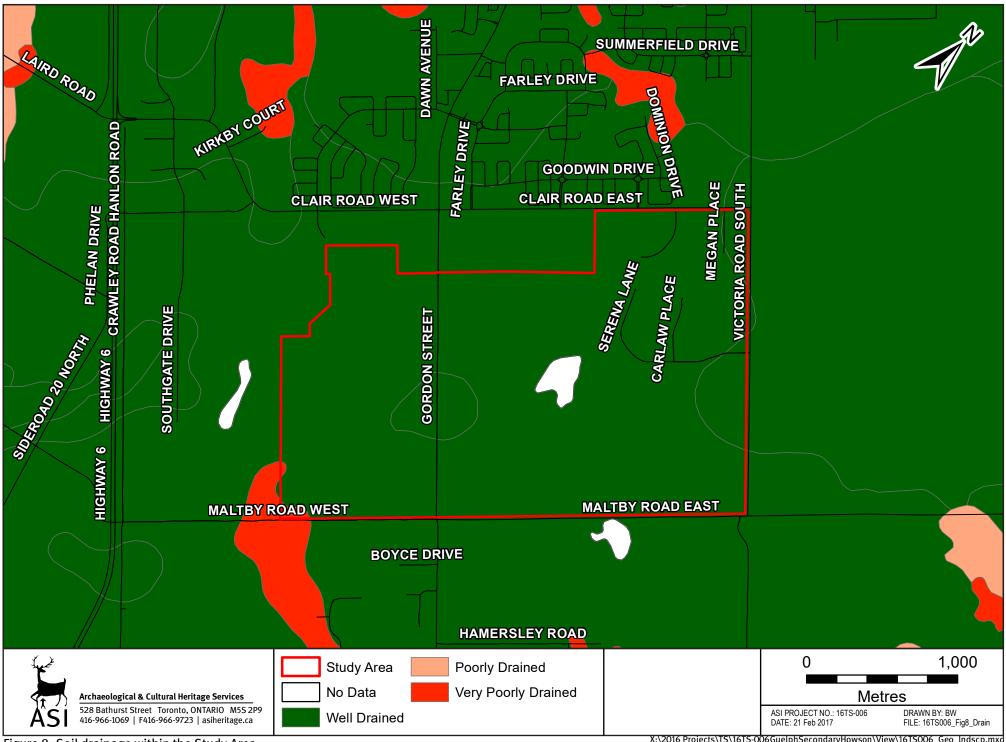


Figure 7: Study Area located on 1994 Guelph and 1998 Cambridge NTS Sheets.



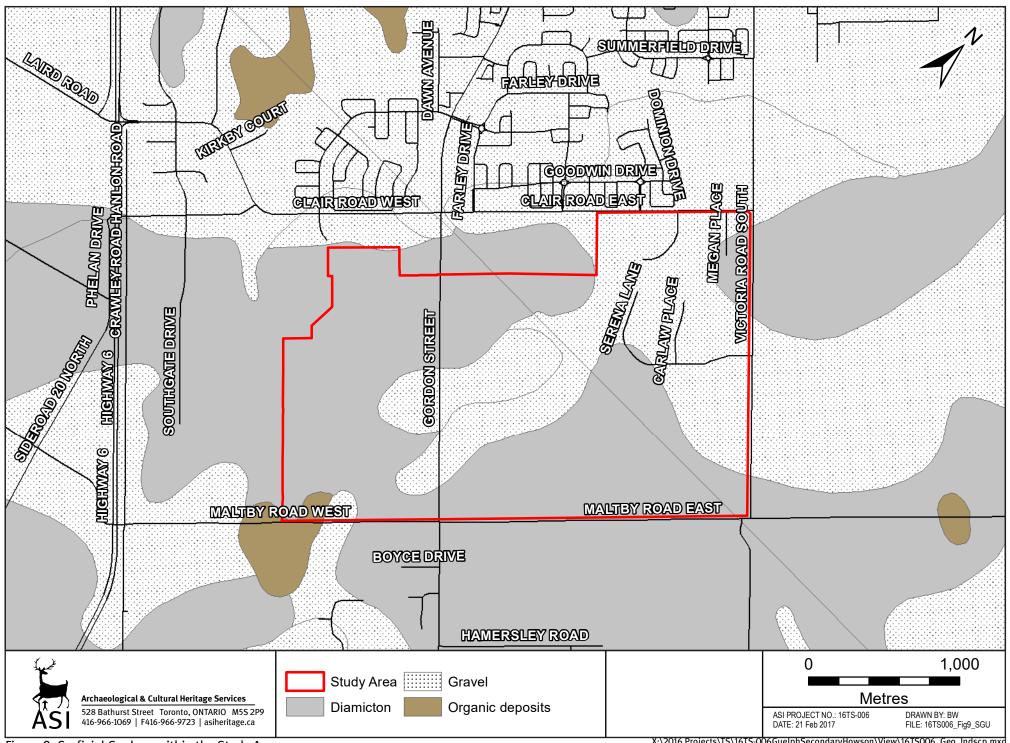


Figure 9: Surficial Geology within the Study Area

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Figure 10: Existing conditions of the Study Area.