

# Appendix C

## **Archaeological Assessment (Stage 1 and 2)**

*Timmins Martelle Heritage Consultants Inc.*



**Stage 1 & 2 Archaeological Assessment  
Proposed MacPherson Aggregate Pit  
43371 Truman Line  
Part of Lot 6, Concession 12  
Geographic Township of Yarmouth  
Now in the Municipality of Central Elgin  
Elgin County, Ontario**

Submitted to

**Harrington McAvan Ltd.**  
41 Main Street, Unit 102, Unionville, Ontario

and

**The Ontario Ministry of Heritage, Sport, Tourism and Culture Industries**

Prepared by



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PIF Number: P324-0479-2020

January 2021  
Report submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries  
14 January 2021

## Executive Summary

In 2020, Timmins Martelle Heritage Consultants Inc. (TMHC) undertook a Stage 1 and 2 archaeological assessment of a roughly 23.46 hectare (57.97 acres) rural agricultural parcel at 43371 Truman Line, near St. Thomas, Ontario. The property falls within Lot 6, Concession 12 of the Geographic Township of Yarmouth, now in the Municipality of Central Elgin, Elgin County, Ontario. Harrington McAvan Ltd. hired TMHC to carry out an archaeological assessment on behalf of Talbot Sand and Gravel for the licence application for the proposed MacPherson Pit, a Class A, Category 1 pit to be located on the property. The work was undertaken as a standard condition under the *Aggregate Resources Act*, R.S.O. 1990, with the purpose being to evaluate potential for archaeological resources on the property and undertake a field survey to establish if any were present that would be negatively affected by the proposed change in land use.

The Stage 1 background project included a review of current land use, historic and modern maps, past settlement history for the area and a consideration of topographic and physiographic features, soils, and drainage. It also involved a review of previously registered archaeological resources within 1 km of the subject property, and previous archaeological assessments within 50 m. The background study indicated that the property had potential for the recovery of archaeological resources due to the proximity (i.e., within 300 m) to several features that signal archaeological potential, namely:

- 1) 19<sup>th</sup> century travel routes (Truman Line);
- 2) mapped 19<sup>th</sup> century structures (house depicted within subject property);
- 3) primary water source (tributary of Kettle Creek); and
- 4) secondary water source (wetland).

A Stage 2 field assessment was subsequently undertaken. Roughly 21.19 ha (90.3%) of the subject property consisted of ploughed agricultural fields that were subject to pedestrian survey at a 5 m transect interval. Another 1.54 ha (6.6 %) of the property was test pitted at a 5 m transect interval. Steeply sloped land was noted in the remaining 0.73 ha (3.1%) of the property, these areas were not surveyed due to low archaeological potential.

The Stage 2 survey resulted in the discovery of one archaeological location. Our recommendations with respect to this location and the overall property are presented below.

- 1) *Location 1* is a findspot of an isolated Indigenous artifact consisting of a piece of chipping detritus for which a more specific cultural or temporal affiliation cannot be assigned. This findspot does not meet provincial criteria for Stage 3 assessment and no further work is recommended as it is considered fully documented.

Given these findings, the subject property should be considered free of archaeological concern and no further assessment work is recommended. If the project boundaries are changed to incorporate lands not addressed in this report, further assessment will be required.

**Our recommendations are subject to the conditions laid out in Section 5.0 of this report and to MHSTCI' review and acceptance of this report into the provincial register.**



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### **Acknowledgements**

TMHC would like to acknowledge the assistance of the following individuals:

<b><i>Jean Macpherson</i></b>	Talbot Sand and Gravel
<b><i>Bernie Janssen</i></b>	Harrington McAvan Ltd.
<b><i>Al Day</i></b>	<i>Haudenosaunee Council of Chiefs</i> Onyota'a:ka – Oneida of the Thames First Nation
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**1.0 PROJECT CONTEXT**

**1.1 Development Context**

**1.1.1 Introduction**

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All archaeological assessment activities were performed under the professional archaeological license of Matthew Beaudoin, Ph.D. (P324) and in accordance with the 2011 *Standards and Guidelines for Consultant Archaeologists* (MTC 2011). Permission to commence the study was given by Bernie Janssen of Harrington McAvan Ltd.





### ***1.1.2 Purpose and Legislative Context***

The *Ontario Heritage Act* makes provisions for the protection and conservation of heritage resources in the Province of Ontario. Heritage concerns are recognized as a matter of provincial interest in Section 2.6.2 of the *Provincial Policy Statement* (PPS) which states:

*development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved.*

In the PPS, the term *conserved* means:

the identification, protection, management and use of *built heritage resources, cultural heritage landscapes and archaeological resources* in a manner that ensures their cultural heritage value or interest is retained. This may be achieved by the implementation of recommendations set out in a conservation plan, archaeological assessment and/or heritage impact assessment that has been approved, accepted or adopted by the relevant planning authority and/or decision-maker. Mitigative measures and/or alternative development approaches can be included in these plans and assessments.

The *Aggregate Resources Act*, R.S.O. 1990, also calls for the conservation of heritage resources and all class-specific license applications filed with the Ministry of Natural Resources must provide technical reports that outline measures for the identification and mitigation of archaeological resources within proposed extraction areas. Thus, cultural heritage resources must be considered within the licensing approval process. Aggregate extraction may only take place on properties that have been cleared of archaeological concern. The purpose of a Stage 1 background study is to determine if there is potential for archaeological resources to be found within a proposed licensed area. If a property demonstrates archaeological potential, a Stage 2 field survey must be carried out. If potentially significant sites are found during the field review, subsequent Stage 3 and Stage 4 assessments may be required.



## **2.0 STAGE 1 BACKGROUND REVIEW**

### **2.1 Research Methods and Sources**

A Stage 1 background study was conducted to gather information about known and potential archaeological resources within the subject property. According to the Province of Ontario's 2011 *Standards and Guidelines for Consultant Archaeologists*, a Stage 1 background study must include a review of:

- an up-to-date listing of sites from the Ontario Archaeological Sites Database (OASD) of archaeological sites with 1 km of the property;
- reports of previous archaeological fieldwork within a radius of 50 m;
- topographic maps at 1:10,000 (recent and historical) or the most detailed scale available;
- historic settlement maps (e.g., historical atlas, surveys);
- archaeological management plans or other archaeological potential mapping (when available); and
- commemorative plaques or monuments on or near the subject property.

For this project, the following activities were carried out to satisfy or exceed the above requirements:

- a database search of registered archaeological sites within 1 km of the subject property was carried out with the MHSTCI' Past Portal system (completed November 4<sup>th</sup>, 2020);
- a review of known prior archaeological reports for the subject property and adjacent lands (note the MHSTCI currently does not keep a publicly accessible record of archaeological assessments carried out in the Province of Ontario, so a complete inventory of prior assessment work nearby is not available);
- Ontario Base Mapping (1:10,000) was reviewed through ArcGIS and mapping layers provided by geographynetwork.ca; detailed mapping provided by the client was also reviewed; and,
- a series of historic maps was reviewed related to pre- and post-1800 land settlement.

There are no applicable archaeological management plans for the area nor are there any commemorative plaques or monuments on or near the subject property.

Additional sources of information were also consulted, including modern aerial photographs, local history accounts, soils and physiography data provided by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), and both 1:50,000 (Natural Resources Canada) and finer scale topographic mapping.

When compiled, background information was used to create a summary of the characteristics of the subject property, in an effort to evaluate its archaeological potential.



The Province of Ontario (MTC 2011 – Section 1.3.1) has defined the criteria that identify archaeological potential as:

- previously identified archaeological sites;
- water sources;
  - primary water sources (lakes, rivers, streams, creeks);
  - secondary water courses (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 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, plateau);
- 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 19<sup>th</sup> century 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* or that is a federal, provincial, or municipal historic landmark or site; and
- property that local histories or informants have identified with possible archaeological sites, historical events, activities or occupations.

In Southern Ontario (south of the Canadian Shield), any lands within 300 m of any of the features listed above are considered to have potential for the discovery of archaeological resources.

Typically, a Stage 1 assessment will determine potential for precontact Indigenous and historic era sites independently. This is due to the fact that lifeways varied considerably during these eras so that criteria used to evaluate potential for each type of site also varies.



It should be noted that some factors can also negate the potential for discovery of intact archaeological deposits. Subsection 1.3.2 of the 2011 *Standards and Guidelines for Consultant Archaeologists* indicates that archaeological potential can be removed in instances where land has been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. Major disturbances indicating removal of archaeological potential include, but are not limited to:

- quarrying;
- major landscaping involving grading below topsoil;
- building footprints; and
- sewage and infrastructure development.

Some activities (agricultural cultivation, surface landscaping, installation of gravel trails, etc.) may result in minor alterations to the surface topsoil but do not necessarily affect or remove archaeological potential. It is not uncommon for archaeological sites, including structural foundations, subsurface features and burials, to be found intact beneath major surface features like roadways and parking lots. Archaeological potential is, therefore, not removed in cases where there is a chance of deeply buried deposits, as in a developed or urban context or floodplain where modern features or alluvial soils can effectively cap and preserve archaeological resources.



## 2.2 Project Context: Archaeological Context

### 2.2.1 Subject Property: Overview and Physical Setting

The subject property is a roughly 23.46 ha rural agricultural parcel located at 43371 Truman Line north of St. Thomas, Ontario (Maps 1 and 2). It comprises part of Lot 6, Concession 12 in the Geographic Township of Yarmouth, Elgin County, Ontario. It is bounded to the north by Truman Line, to the east by a field edge, to the south by a field edge and woodlot and to the west by a field edge and the existing aggregate pit. The subject property consists primarily of two cultivated agricultural fields, a section of sparsely treed, grassed and manicured lawn along the western edge of the northern agricultural field and a treed area within the southern agricultural field. The most current aerial photography depicts an area in the northeastern corner of the southern field as treed (Map 1); however, these lands were recently ploughed and converted for active cultivation.

The subject property falls within the physiographic region known as the Mount Elgin Ridges (Chapman and Putnam 1984:144-145; **Error! Reference source not found.**). The Mount Elgin Ridges lie between the Thames River valley and the Norfolk Sand Plain. This area is characterized by ridges comprised of moraines of pale brown calcareous clay or silty clay and valleys filled with alluvium, gravel, sand and silt. The subject property is situated on an area of undrumlinized till plains.

The soils within the northern half of the subject property are Caledon Sandy Loam, a well to imperfectly draining soil (Map 4). Caledon series soils are generally associated with spillways, river terraces, glaciofluvial deltas and abandoned shorelines; these consist of a veneer of sand over gravelly and cobbly fluvial outwash deposits (Schut 1992:32). The soils within the southern half of the subject property are Tavistock Silt Loam, an imperfectly drained soil. Tavistock series soils were formed from medium textured lacustrine materials and typically occur in raised areas (Schut 1992:47).

The subject property falls within the Kettle Creek watershed (Map 5). The natural drainage of the area is through an unnamed tributary of Kettle Creek, located approximately 125 m to the west of the subject property. This tributary provides drainage for a large wetland which is located immediately to the west of the active aggregate pit. This wetland is one of a series of wetlands found in the upper reaches of this tributary. Kettle Creek itself is located approximately 2,500 m to the south.

### 2.2.2 Summary of Registered or Known Archaeological Sites

According to the Ontario Archaeological Sites Database (OASD), there are no registered archaeological sites within 1 km of the subject property. It should be noted that the dearth of Indigenous sites within the immediate area of the subject property is likely related to the lack of archaeological investigation in the area and does not necessarily indicate a lack of Indigenous settlement in the area.



### ***2.2.3 Summary of Past Archaeological Investigations within 50m***

No previous archaeological assessments were identified for lands within 50 m of the subject property. As the Province does not currently maintain an accessible database of archaeological assessment areas *per se*, it is not known whether this is a complete inventory of archaeological assessment activities undertaken within 50 m of the subject property.

### ***2.2.4 Dates of Archaeological Fieldwork***

The Stage 2 fieldwork was conducted on November 26<sup>th</sup> and 27<sup>th</sup>, 2020 under overcast and cool weather conditions. No conditions were encountered that would hinder the identification or recovery of archaeological resources. The field director for the fieldwork was Marya D'Alessio, M.A. (R1163).



## 2.3 Project Context: Historical Context

### 2.3.1 Indigenous Settlement in Elgin County

Previous archaeological research has indicated that the vicinity of St. Thomas and particularly the Kettle Creek drainage were areas of extensive Indigenous settlement in the past. In recent years, our archaeological knowledge of the area has improved greatly, at the hands of various cultural resource management surveys and archaeological research projects. Using existing data and regional syntheses, it is possible to propose a generalized model of Indigenous settlement in Elgin County. The general themes, time periods and cultural traditions of Indigenous settlement, based on archaeological evidence, are provided below and in Table 1.

**Table 1: Cultural Chronology for Indigenous Settlement in Elgin County**

Period			Time Range (circa)	Diagnostic Features	Complexes
Paleo	Early		9000 - 8400 B.C.	fluted projectile points	Gainey, Barnes, Crowfield
	Late		8400 - 8000 B.C.	non-fluted and lanceolate points	Holcombe, Hi-Lo, Lanceolate
Archaic	Early		8000 - 6000 B.C.	serrated, notched, bifurcate base points	Nettling, Bifurcate Base Horizon
	Middle		6000 - 2500 B.C.	stemmed, side & corner notched points	Brewerton, Otter Creek, Stanly/Neville
	Late		2000 - 1800 B.C.	narrow points	Lamoka
			1800 - 1500 B.C.	broad points	Genesee, Adder Orchard, Perkiomen
			1500 - 1100 B.C.	small points	Crawford Knoll
	Terminal		1100 - 950 B.C.	first true cemeteries	Hind
Woodland	Early		950 - 400 B.C.	expanding stemmed points, Vinette pottery	Meadowood
	Middle		400 B.C. - A.D. 500	dentate, pseudo-scallop pottery	Saugeen/Couture
Transitional			A.D. 500 - 900	first corn, cord-wrapped stick pottery	Princess Point/Riviere au Vase
	Late	Early	A.D. 900 - 1300	first villages, corn horticulture, longhouses	Glen Meyer/Younge
		Middle	A.D. 1300 - 1400	large villages and houses	Uren, Middleport/Springwells
		Late	A.D. 1400 - 1650	tribal emergence, territoriality	Neutral Iroquois/Wolf
Contact		Indigenous	A.D. 1700 - present	treaties, mixture of Indigenous & European items	Ojibwa, Oneida, Delaware
		Settler	A.D. 1796 - present	English goods, homesteads	European settlement, pioneer life

#### *Paleo Period*

The first human populations to inhabit the Elgin County area arrived between 12,000 and 10,000 years ago, coincident with the end of the last period of glaciation. Climate and environmental conditions were significantly different then they are today; local environs would not have been welcoming to anything but short-term settlement. Termed Paleo by archaeologists, Ontario's first peoples would have crossed the landscape in small groups (i.e., bands or family units) searching for food, particularly migratory game species. In this area, caribou may have provided the staple of Paleo diet, supplemented by wild plants, small game, birds and fish.

Given the low density of populations on the landscape at this time and their mobile nature, Paleo sites are small and ephemeral. They are sometimes identified by the presence of fluted projectile points manufactured on a highly distinctive whitish-grey chert named "Fossil Hill" (after the formation) or "Collingwood." This material was acquired from sources near the edge of the escarpment on Blue Mountain. It was exploited by populations from as far south as the London area, who would have traveled to the source as part of their seasonal round.



### *Archaic Period*

Settlement and subsistence patterns changed significantly during the Archaic Period as both the landscape and ecosystem adjusted to the retreat of the glaciers. Building on earlier patterns, early Archaic populations continued the mobile lifestyle of their predecessors. Through time and with the development of more resource rich local environments, these groups gradually reduced the size of the territories they exploited on a regular basis. A seasonal pattern of warm season riverine or lakeshore settlements and interior cold weather occupations has been documented in the archaeological record.

Since the large cold weather mammal species that formed the basis of the Paleo subsistence pattern became extinct or moved northward with the onset of warmer climate conditions, Archaic populations had a more varied diet, exploiting a range of plant, bird, mammal and fish species. Reliance on specific food resources like fish, deer and nuts becomes more pronounced through time and the presence of more hospitable environments and resource abundance led to the expansion of band and family sizes. In the archaeological record, this is evident in the presence of larger sites and aggregation camps, where several families or bands would come together in times of plenty. The change to more preferable environmental circumstances led to a rise in population density. As a result, Archaic sites are more plentiful than those from the earlier period. Artifacts typical of these occupations include a variety of stemmed and notched projectile points, chipped stone scrapers, ground stone tools (e.g., celts, adzes) and ornaments (e.g., bannerstones, gorgets), bifaces or tool blanks, animal bone (where and when preserved) and waste flakes, a by-product of the tool making process.

### *Early, Middle and Transitional Woodland Periods*

Significant changes in cultural and environmental patterns are witnessed in the Woodland Period (circa 3,000 to historic times). By this time, the coniferous forests of earlier times were replaced by stands of mixed and deciduous species. Occupations became increasingly more substantial in this period, culminating in major semi-permanent villages by 1,000 years ago. Archaeologically, the most significant changes by Woodland times are the appearance of artifacts manufactured from modeled clay and the construction of house structures. The Woodland Period is often defined by the occurrence of pottery, storage facilities and residential areas similar to those that define the incipient agricultural or Neolithic period in Europe.

Early and Middle Woodland peoples are also known for a well-developed burial complex and ground stone tool industry. Unique Early Woodland ground stone items include pop-eyed birdstones and gorgets. In addition, there is evidence of the development of widespread trading with groups throughout the northeast. The recovery of marine shells from the Lake Superior area indicates that exchanges of exotic materials and finished items from distant places were common place.





### *Late Woodland Period*

During the Late Woodland Period, much of Southwestern Ontario was occupied by two groups: Iroquoians and what are thought by archaeologists to be Algonquin speaking populations (the term “Western Basin Tradition” has been used to describe this cultural complex). In the east, the Iroquoian occupants were the Attawandaron or Neutral Nation, a tribal group described by European missionaries and whose historic homeland was significantly further east. Like other known Iroquoian groups including the Huron (Wendat) and Petun (Tionontati), the Attawandaron practiced a system of intensive horticulture based on three primary subsistence crops (corn, beans and squash). Their villages incorporated a number of longhouses, multi-family dwellings that contained several families related through the female line. *The Jesuit Relations* describe several Neutral centres in existence in the 17<sup>th</sup> century, including a number of sites where missions were later established. While precontact Neutral sites may be identified by a predominance of well-made pottery decorated with various simple and geometric motifs, triangular stone projectile points, clay pipes and ground stone implements, sites post-dating European contact are recognized through the appearance of various items of European manufacture. The latter include materials acquired by trade (e.g., glass beads, copper/brass kettles, iron axes, knives and other metal implements) in addition to the personal items of European visitors and Jesuit priests (e.g., finger rings, stoneware, rosaries, glassware). The Neutral were dispersed and their population decimated by the arrival of epidemic European diseases and inter-tribal warfare. Many were adopted into other Iroquoian communities.

Archaeologists have also documented the *in situ* development of Late Woodland archaeological traditions from Middle Woodland precedents that are believed to have an Algonquin cultural origin, quite distinct from Iroquoian populations who lived to the east. The archaeological record of these groups has been labeled the “Western Basin Tradition.” During the Late Woodland period complex settlements are characteristic of these people and, at their peak, are characterized by fortified villages containing large, likely extended family, structures. Some of the villages are surrounded by earthworks. There is evidence for the cultivation of corn and beans by roughly A.D. 900. The pottery traditions of these people varied significantly from those of their Iroquoian neighbors. Early vessels, called Wayne ware, are small, thin walled pots covered with vertical cord marking and tool impressions. Vessels become more elaborate through time, incorporating multiple bands of tool impressions, castellated rims and incised decoration. Late pottery is characteristically bag-shaped and often incorporates dentate stamping as well as appliqué strips and strap handles, similar to some Mississippian tradition pottery. As was not the case with much Iroquoian pottery, clay fabrics were mixed with shell temper.

By the late 16<sup>th</sup> century, there is little archaeological evidence of permanent Indigenous settlements within the area until the 19<sup>th</sup> century. This should not be interpreted to mean that the area was not used by Indigenous people for hunting, fishing and gathering of resources. In addition, the Thames River continued to be an important transportation route throughout this period. These activities leave more ephemeral archaeological evidence.



### ***2.3.2 Crown – Indigenous Peoples Treaty Context***

The subject property is encompassed by the McKee Purchase (Treaty No. 2). The treaty was signed May 19, 1790 between the Deputy Agent of Indian Affairs—Alexander McKee, and 27 chiefs of local Ojibwa, Odawa, Pottawatomie, and Wendat nations (Canada 1891; Surtees 1984). The treaty covered a significant area including what became Elgin, Kent, and Essex counties along the north shore of Lake Erie including the entirety of West Tilbury and Rochester Townships in Essex County, and East Tilbury, Raleigh, and Harwich Townships in Kent County. At the time of signing, only two reserves were created. What became known as the Huron and the Huron Church Reserves near Windsor were the domain of all signatories (Surtees 1984). During the 19<sup>th</sup>-century, the reserves ostensibly became Wendat territory and were gradually sold off until the Anderdon Wendat nation dissolved its Canadian status (Canada 1891).

The traditional territories of several contemporary Anishinaabe First Nations encompass the subject area including Aamjiwnaang First Nation, Chippewas of the Thames First Nation and Walpole Island First Nation (Bkejwanong). The traditional territory of Caldwell First Nation, a Chippewa nation who did not sign Treaty No. 2, also encompasses the subject property. Caldwell First Nation settled their outstanding land claim with the federal government in 2010-11 (Canada 2020).

### ***2.3.3 18<sup>th</sup> and 19<sup>th</sup> Century and Municipal Settlement***

The subject property is situated within Lot 6, Concession 12 in the Geographic Township of Yarmouth, now in the Municipality of Central Elgin, Elgin County, Ontario. It falls north of St. Thomas, Elgin County's largest population centre. A brief discussion of early municipal settlement in Elgin County and the Geographic Township of Yarmouth is provided below, together with a consideration of features that would otherwise indicate 19<sup>th</sup> century archaeological potential.

The settlement of Yarmouth Township and Elgin County really began after the survey of the Talbot Road in 1809. Mahlon Burwell was given the task of surveying the road from Port Talbot through the townships of Southwold, Yarmouth, Malahide and Bayham (Paddon et al. 1981:2). The Township of Yarmouth was settled around 1810 when several families (including the Drakes, Mandevilles, and Rapeljes) established homesteads on Talbot Street in what would become the City of St. Thomas (H.R. Page & Co. 1877:ix). Many of the earliest township families were headed by ex-military officers, including Captain David Secord who arrived in 1810 and operated a school house out of his home. Daniel Rapelje and David Mandeville are credited with being the first settlers in St. Thomas and established homes near the intersection of the Talbot Road and Kettle Creek (Paddon et al. 1981:2). Justin Wilcox arrived in 1812 and is credited with building the first frame house in the township, a building at Yarmouth Heights out of which he also ran a tavern (H.R. Page & Co. 1877:ix). Settlement was slowed by the onset of war in 1812 but commercial growth resumed following the declaration of peace in 1814. Daniel Rapelje constructed a mill around that time, situated at the bottom of “the hill” (Paddon et al.



1981:2). James Hamilton opened the community's first store in 1817 (Paddon et al. 1981:2). By 1820, Rapelje had divided his landholdings at the top of "the hill" so that building lots could be established. By 1833 the community also contained two shoe factories, a cabinet warehouse, a saddle and harness factory as well as other businesses (Paddon et al. 1981:3). By 1837 St. Thomas had a population of seven hundred people and by 1846 this number had grown to 1,000 (Paddon et al. 1981:4). With improvements to transportation routes St. Thomas continued to witness commercial and industrial growth.

The London and Port Stanley Railway was constructed through St. Thomas in 1856 with substantial financial support from the community. Rather than attracting commercial success, the railway brought an economic depression to the community and growth was quite slow thereafter. Despite this, promoter William A. Thomson was able to convince the community of the potential fortunes of a new railroad. In the late 1860s, Thomson lobbied for the construction of the Canada Southern Railway that would connect Amherstburg to Fort Erie. The St. Thomas section of the railway was completed in 1872 and Great Western was forced to counter that effort with an extension of their line between St. Thomas and Glencoe (Paddon et al. 1981:6). The arrival of these railway lines made St. Thomas a major shipping centre and provided an economic impetus for renewed growth. Before the arrival of the Canadian Southern Railway the community's population was roughly 2,300. By 1880 it had grown to 10,000 (Paddon et al. 1981:6).

#### ***2.3.4 Review of Historic Maps and Imagery***

The subject property is located within the northern half of Lot 6, Concession 12, Geographic Township of Yarmouth, Elgin County, Ontario. The Crown Patent for Lot 6 was first granted in 1820 to Mahlon Burwell. Burwell was the principal land surveyor for the Talbot Settlement. He was frequently compensated for his services in land, rather than cash and became a large landholder and major land speculator in Southwestern Ontario.

The 1864 Tremaine map identifies Lot 6 as divided in half with the northern half identified as belonging to a non-resident (Map 6). No structures are depicted within the subject property or within 300 m. David Ferguson is shown as the occupant of the entirety of Lot 5 immediately to the west. Truman Line and is depicted as open at this time

The 1877 map (Map 7) depicts D. Ferguson as associated with both the entirety of Lot 5 as well as the northern half of Lot 6. This is likely to be the same David Ferguson depicted on the 1864 map. A structure and orchard are shown in the northern half of Lot 6 set back a distance from Truman Line. This structure is located at the far western edge of the subject property within an area of sparsely treed manicured lawn (Map 1). Lot 5 is shown to contain a structure which fronts Ferguson Line. Given David Ferguson's previous association with Lot 5 it is likely that Ferguson's primary residence was on Lot 5 rather than on Lot 6. It is possible that the Lot 6 home was occupied by a Ferguson family member or a tenant at this time. The general area where the house would have stood has been significantly impacted by the development of the aggregate pit immediately to the west (Maps 5, 7, 9 and 10).



## **2.4 Analysis and Conclusions**

As noted in Section 2.1, the Province of Ontario has identified numerous factors that signal the potential of a property to contain archaeological resources. Based on the archaeological and historical context reviewed above, the subject property is in proximity (i.e., within 300 m) to several features that signal archaeological potential, namely:

- 1) 19<sup>th</sup> century travel routes (Truman Line);
- 2) mapped 19<sup>th</sup> century structures (house depicted within subject property);
- 3) primary water source (tributary of Kettle Creek); and
- 4) secondary water source (wetland).



## **2.5 Recommendations**

Given that the subject property demonstrated potential for the discovery of archaeological resources, a Stage 2 archaeological assessment was recommended. In keeping with provincial standards, the portions of the subject property that consist of unploughable land are recommended for assessment by a standard test pit survey at a 5 m transect interval while the active agricultural fields are recommended for assessment by a standard pedestrian pit survey at a 5 m transect interval. As the subject property is considered to have archaeological potential pending Stage 2 field inspection, a separate map detailing zones of archaeological potential is not provided herein (as per Section 7.7.4 Standard 1 and 7.7.6 Standards 1 and 2 of 2011 *Standards and Guidelines for Consultant Archaeologists*).



### **3.0 STAGE 2 ARCHAEOLOGICAL ASSESSMENT**

#### **3.1 Field Methods**

All fieldwork was undertaken in good weather and lighting. No conditions were encountered that would hinder the identification or recovery of artifacts. The property boundaries were determined in the field based on proponent mapping, landscape features and GPS co-ordinates.

The ploughed lands within the subject property (90.3%; 21.19 ha) were subject to pedestrian survey (Images 1 and 2) employing a 5 m transect intervals following ploughing and soil weathering under heavy rains (Images 3 and 4). Surface visibility was good to excellent (80% or greater). It was anticipated that if cultural material were identified the survey transects would be reduced to 1 m or less and a minimum of 20 m radius around each find would be intensively examined to determine the spatial extent of each site.

The grassed, manicured lawn and sparsely treed areas to the west of the northern agricultural field and the treed area within the southern agricultural field (6.6%; 1.54 ha) were subject to a test pit survey employing a 5 m transect interval (Images 5 to 7). Test pits measuring at least 30 cm (shovel-width) were excavated through the first 5 cm of subsoil with all fill screened through 6 mm hardware cloth. Once screening was finished, the stratigraphy in the test pits was examined and then the pits were backfilled as best as possible, tamped down by foot and shovel and re-capped with sod. Test pitting extended up to 1 m from all standing features, including trees, when present. Typical test pits contained roughly 20 cm to 35 cm of brown sandy loam topsoil over brownish yellow silty sand subsoil (Images 8 and 10). When cultural material was found, the test pit survey was intensified (reduced to 2.5 m) to determine the size of the site (Image 11). If not enough archaeological materials were recovered from the intensification test pits, a 1 m<sup>2</sup> test unit was excavated atop the positive test pit to gather additional information (Images 12 and 13). The location of all artifacts recovered were mapped with a Topcon GRS-1 RTK GPS/Glonass Network Rover, a high precision survey unit that advertises subcentimetre accuracy.

As per Section 2.1, Standard 2 of the *Standards and Guidelines* (MTC 2011:28-29), certain physical features and deep land alterations are considered as having low archaeological potential and are thus exempt from the standard test pit survey. Approximately 3.1% (0.73 ha) of the subject property consisted of the steep slope leading down to the existing aggregate pit (Images 14 and 15). Sloped areas were confined to the western edge of subject property adjacent to the existing aggregate pit.

Map 8 illustrates the Stage 2 field conditions and assessment methods; the locations and orientations of all photographs appearing in this report are also shown on this map. Map 9 presents the Stage 2 results on the proponent mapping. An unaltered proponent map is provided as Map 10.



## 3.2 Record of Finds

One archaeological site was discovered during the Stage 2 assessment. This site has been designated Location 1. A general description of our findings at this site is provided below and more specific site location details appear in the Supplementary Documentation portion this report.

### 3.2.1 Location 1 (no Borden number assigned)

Location 1 was an isolated Indigenous findspot identified during the test pit survey of the grassed area to the west of the northern agricultural field (SD Map 1). It consists of one positive test pit that generated a single piece of chipping detritus (Test Pit 1). As not enough artifacts were recovered from the test pit excavation and intensification to determine that a Stage 3 archaeological assessment would be required, a Stage 2 test unit was excavated on top of the original positive test pit to gather further information (Images 10 and 11). The soils within the test unit consisted of 24 cm of brown sandy loam on top of yellow silty sand subsoil (Image 12). All artifacts were collected according to their associated test pit or test unit.

One secondary flake of an indeterminate chert type was collected from the positive test pit but no additional artifacts were recovered during the excavation of the test unit (Image 13).

**Table 2: Location 1 Stage 2 Artifact Catalogue**

Cat.	Context	Layer/Depth	Artifact	n	Comments
1	Test Pit 1 Station # 26,000	0-24	chipping detritus	1	unknown; secondary
			<b>Total</b>	<b>1</b>	

**Table 3: Documentary Records**

<b>Field Notes and Field Maps</b>	Dated November 26 <sup>th</sup> and 27 <sup>th</sup> , 2020
<b>Photo Catalogue</b>	Dated November 26 <sup>th</sup> (94 digital photos), November 27 <sup>th</sup> (6 digital photos)
<b>Artifact Collection</b>	Artifacts are bagged individually with paper labels, sorted into larger bags according to context and organized by catalogue number. All within a large project bag with project label: Large Bag: 43371 Truman Line, 2019-284, Stage 2, Location 1, All Artifacts
<b>Location of Records</b>	1600 Attawandaron Road, London, Ontario N6G 3M6



### **3.3 Analysis and Conclusions**

The Stage 2 field assessment resulted in the discovery of one archaeological location. Section 2.2 of the *Standards and Guidelines* establishes criteria whereby the cultural heritage value of archaeological finds can be evaluated and the need for follow up Stage 3 testing and/or Stage 4 mitigation of construction impacts established. The archaeological location is evaluated below.

*Location 1* is an isolated find of a single undiagnostic Indigenous artifact. Given the isolated nature of the find, it does not meet provincial criteria for further testing based on Section 2.2 of the *Standards and Guidelines* and the find has been sufficiently documented.





### 3.4 Recommendations

All work met provincial standards and one archaeological location was identified during the Stage 2 assessment. Our recommendations with respect to this location and the overall property are presented below.

- 1) *Location 1* is a findspot of an isolated Indigenous artifact consisting of a single piece of chipping detritus for which a more specific cultural or temporal affiliation cannot be assigned. This findspot does not meet provincial criteria for Stage 3 assessment and no further work is recommended as it is considered fully documented.

Given these findings, the subject property should be considered free of archaeological concern and no further assessment work is recommended. If the project boundaries are changed to incorporate lands not addressed in this report, further assessment will be required.

**Our recommendations are subject to the conditions laid out in Section 5.0 of this report and to MHSTCI' review and acceptance of this report into the provincial register.**



## **4.0 SUMMARY**

A Stage 1 and 2 archaeological assessment was conducted for a roughly 23.46 hectare (57.97 acres) rural agricultural parcel at 43371 Truman Line, near St. Thomas, Ontario. The property falls within Lot 6, Concession 12 in the Geographic Township of Yarmouth, now in the Municipality of Central Elgin, Elgin County, Ontario. Harrington McAvan Ltd. hired TMHC to carry out an archaeological assessment on behalf of Talbot Sand and Gravel for the licence application for the proposed MacPherson Pit, a Class A, Category 1 pit to be located on the property. The Stage 1 archaeological assessment determined that the subject property had potential for the discovery of archaeological resources. As such, a Stage 2 archaeological assessment was recommended and carried out, consisting of a standard test pit survey at a 5 m interval and a standard pedestrian survey at a 5 m interval. The Stage 2 assessment resulted in the identification of one Indigenous findspot which does not qualify for Stage 3 testing based on provincial standards. As such, the subject property should be considered free of archaeological concern and no further assessment is recommended.



## **5.0 ADVICE ON COMPLIANCE WITH LEGISLATION**

This report is submitted to the MHSTCI as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the subject property of a development proposal have been addressed to the satisfaction of the MHSTCI, 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 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 Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

Should previously undocumented (i.e., unknown or deeply buried) 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 human remains must notify the police or coroner and the Registrar of Burial Sites, War Graves, Abandoned Cemeteries and Cemetery Closures, Ontario Ministry of Government and Consumer Services. As of December 2020, Crystal Forrest is serving as A/Registrar, Burial Sites, replacing Nancy Watkins in this role. The new Registrar's contact information is: 416-212-7499, Crystal.Forrest@ontario.ca.



## **6.0 BIBLIOGRAPHY**

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Ministry of Northern Development and Mines (MNDM)

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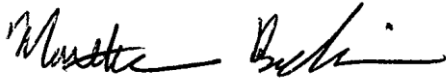
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Respectfully submitted,



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Liam Browne, M.A  
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## **7.0 IMAGES**



**Image 1: Pedestrian Survey at 5 m Transect Intervals (looking west)**



**Image 2: Pedestrian Survey at 5 m Transect Intervals (looking east)**





**Image 3: Surface Visibility in Southeastern End of Ploughed Field**



**Image 4: Surface Visibility in Ploughed Field South of Existing Aggregate Pit**





**Image 5: Test Pit Survey at 5 m Transect Intervals West of Northern Agricultural Field (looking south)**



**Image 6: Test Pit Survey at 5 m Transect Intervals West of Northern Agricultural Field (looking north)**





**Image 7: Test Pit Survey at 5 m Transect Intervals in Treed Area within Southern Agricultural Field (looking west)**



**Image 8: Typical Test Pit West of Northern Agricultural Field**





**Image 9: Typical Test Pit West of Northern Agricultural Field**



**Image 10: Typical Test Pit in Treed Area within Southern Agricultural Field**





**Image 11: Location 1, Intensified Test Pit Survey (looking southwest)**



**Image 12: Location 1, Test Unit Excavation (looking west)**





**Image 13: Location 1, Test Unit (looking north)**



**Image 14: Steep Slope Leading Down to Existing Aggregate Pit (looking north)**





**Image 15: Steep Slope Leading Down to Existing Aggregate Pit (looking south)**



**Image 16: Location 1, Chert Flake**

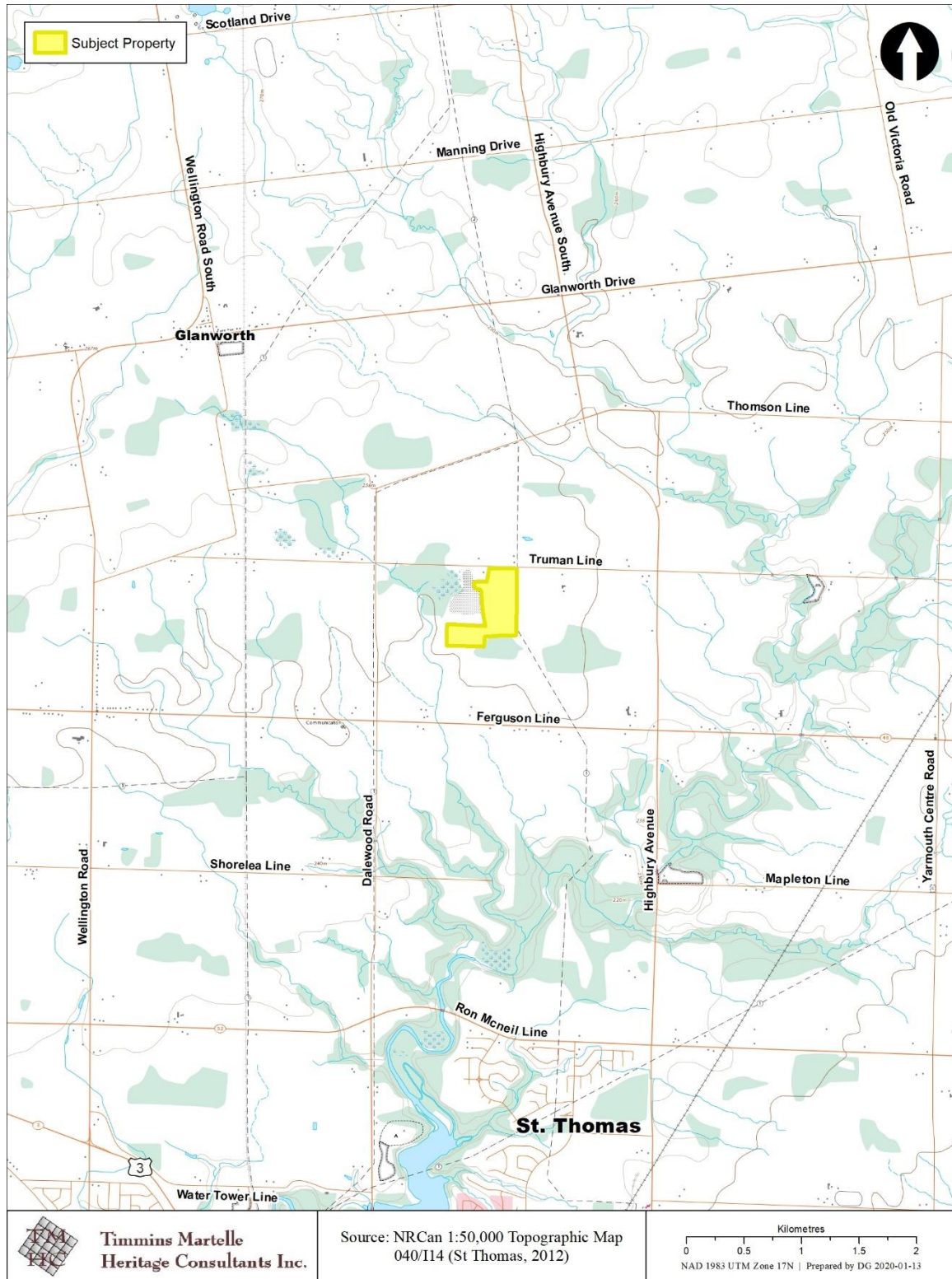


*Secondary flake, unknown chert, cat.1*

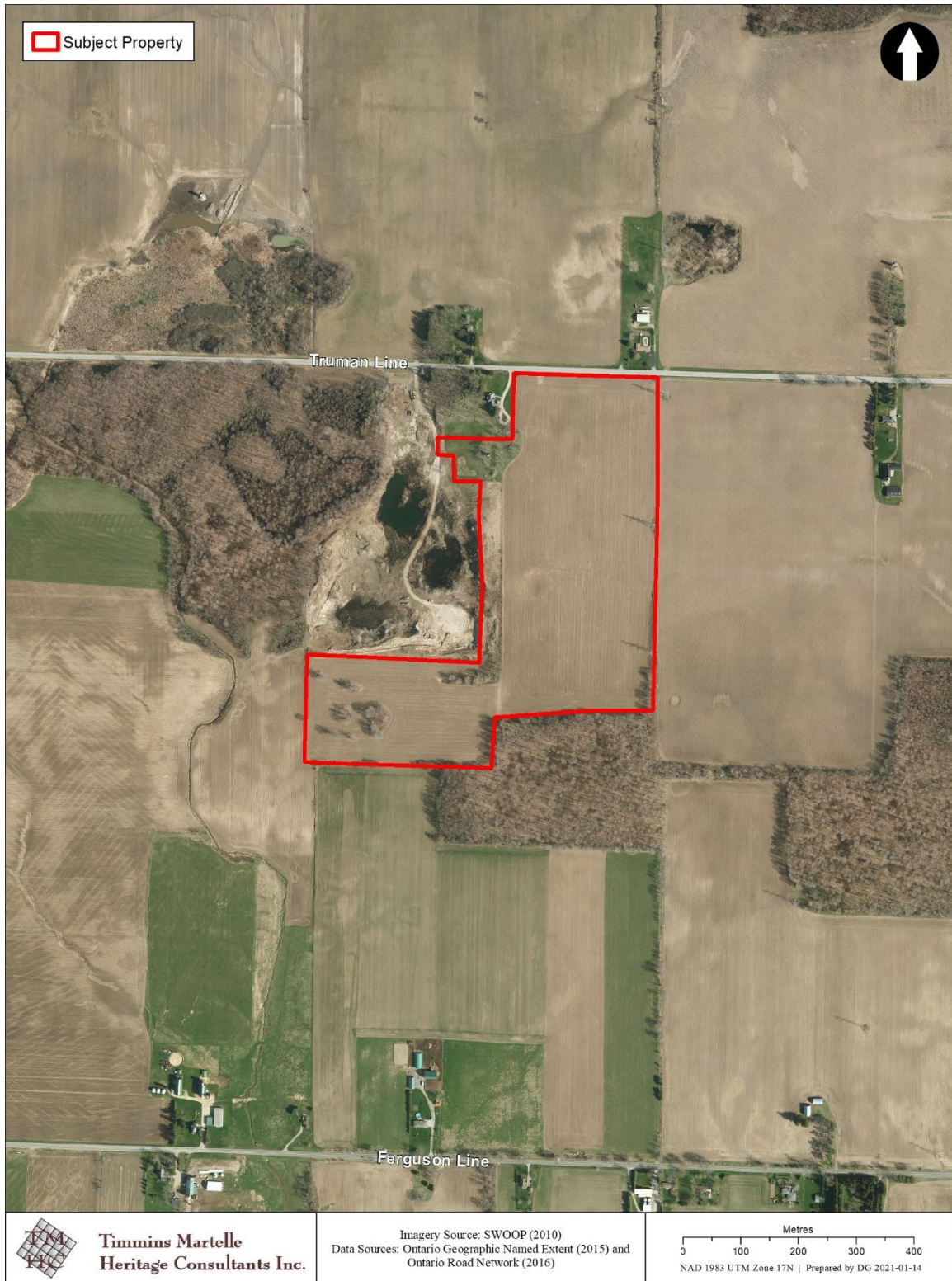
## **8.0 MAPS**







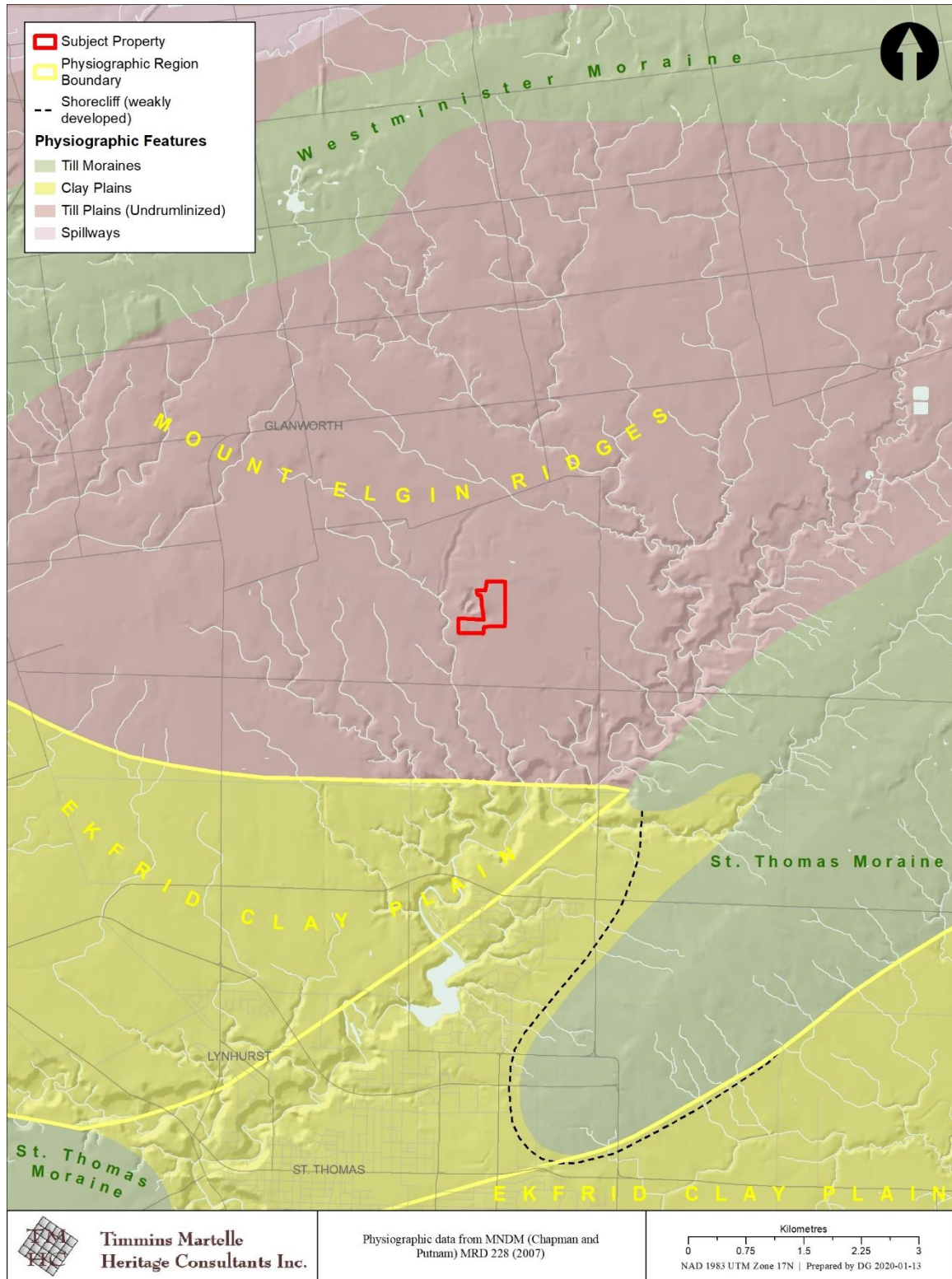
**Map 1: Location of the Subject Property in the Municipality of Central Elgin, ON**



**Map 2: Aerial Photograph Showing the Location of the Subject Property in the  
Municipality of Central Elgin, ON**

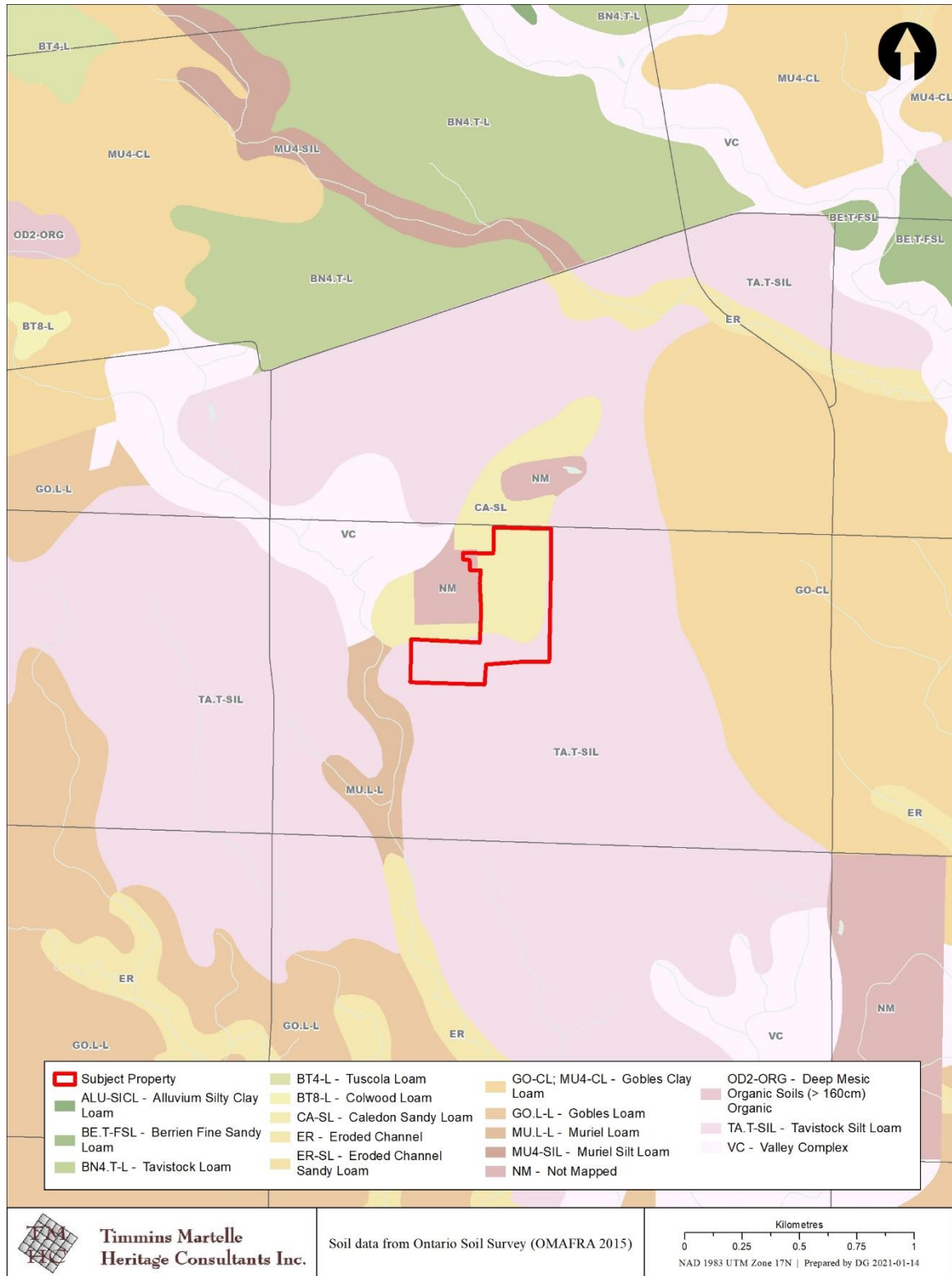




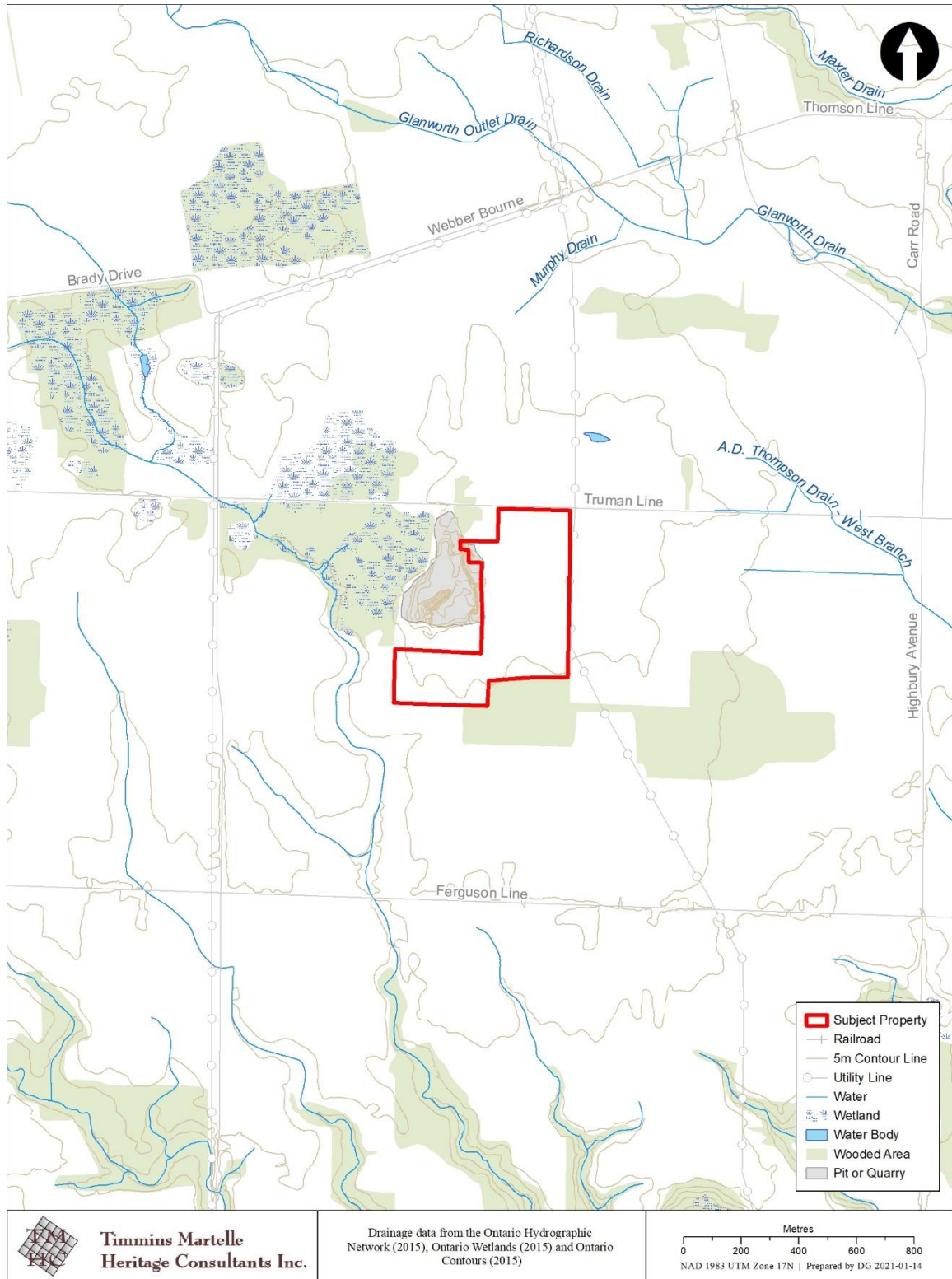


**Map 3: Physiography Within the Vicinity of the Subject Property**





**Map 4: Soils Within the Vicinity of the Subject Property**

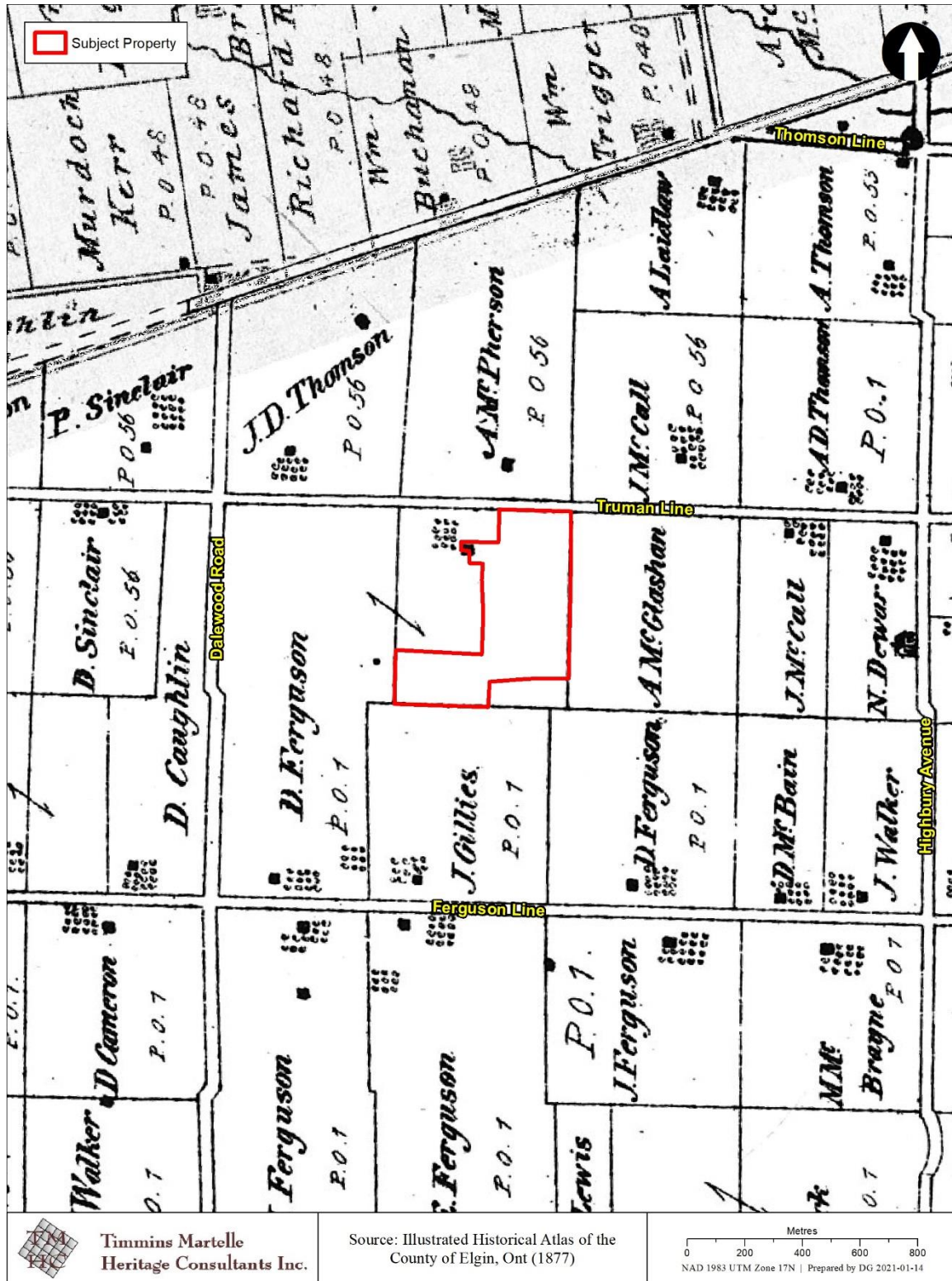


**Map 5: Drainage Within the Vicinity of the Subject Property**



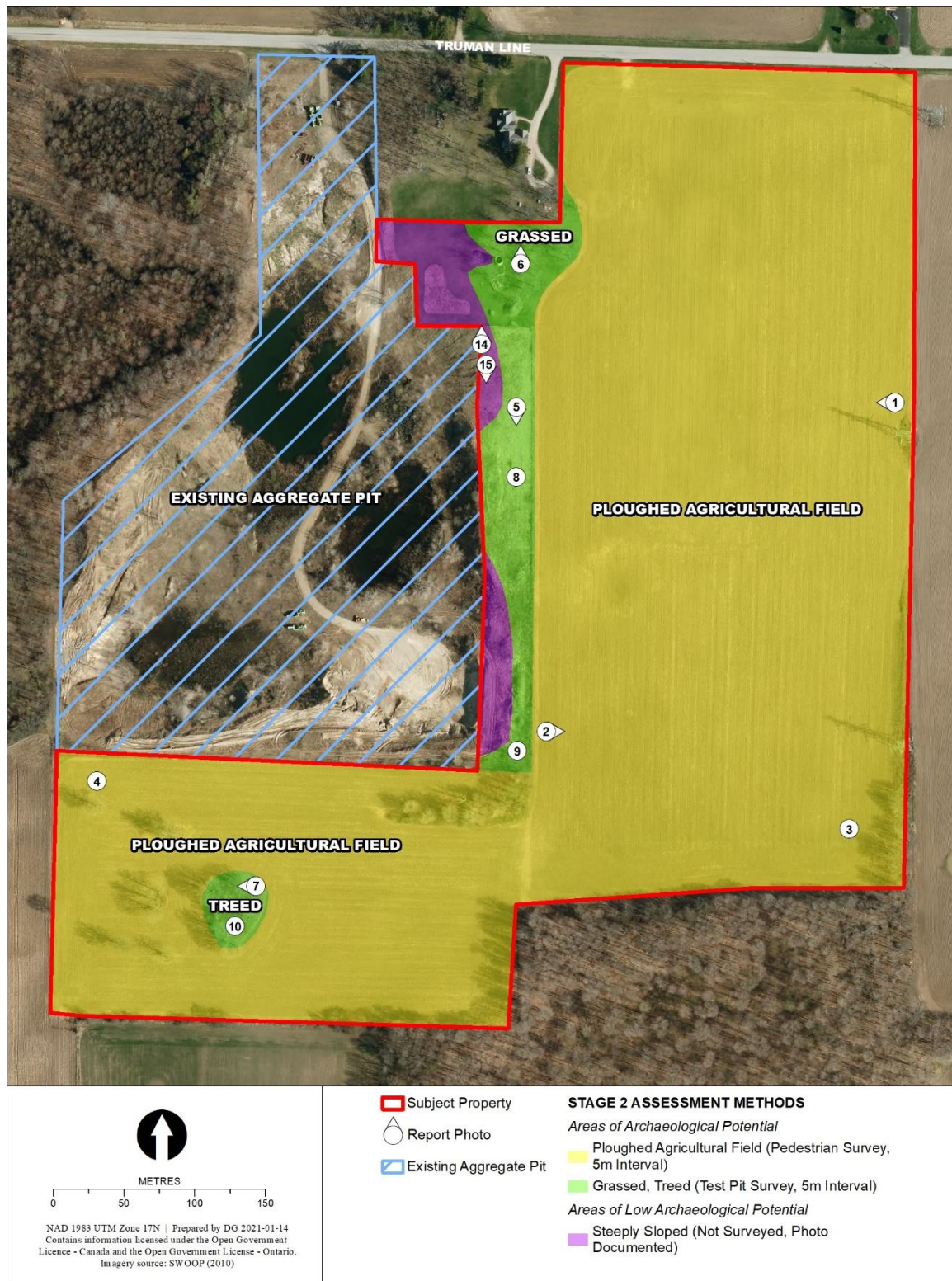


**Map 6: Subject Property Shown on the 1864 Tremaine Map of Elgin County, ON**



Map 7: Subject Property Shown on the 1877 Map of Elgin County, ON





**Map 8: Stage 2 Field Conditions and Assessment Methods**













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B.A., Memorial University, 2005

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## MATTHEW BEAUDOIN

Principal, Manager of Archaeological Assessments

Matthew has conducted extensive field research and artifact analysis on pre- and post-contact sites from Labrador and Ontario. Matthew's role at TMHC has involved background research, community consultation, report production, project management, and corporate management. Matthew's speciality is focused on finding solutions for large and complex projects that have a large number of stakeholders, interest groups, and descendent communities.

## HIGHLIGHT OF RECENT PROJECTS

Supervised over **600** archaeological assessments (Stages 1 through 4) throughout Ontario. Work completed under *Planning Act*, *Green Energy Act*, *Environmental Assessment Act* and as due diligence processes.

### Ministry of Transportation

Highway 3 Widening and Safety Enhancements, Kingsville,  
Stage 1 and Stage 2

### Hydro One Networks Inc. Retainer

B5C/B6C Refurbishment, Hamilton, Stage 1-4

B3/B4 Refurbishment, Hamilton, Stage 1-4

N21/N22 Refurbishment, London, Stage 1-2

### Other Linear Infrastructure

Imperial Oil Limited – Waterdown to Finch, Stage 1-4

Enbridge Line 10 – Westover Segment, Hamilton, Stage 1-4

### Municipal EA Projects

NW Sanitary Services, St. Thomas, Stage 1

North Street Widening, Tillsonburg, Stage 1-2

Blackbridge Road, Cambridge, Stage 1-3

Bishopsgate Road, Brant County, Stage 1

Rapids Parkway Expansion, Sarnia, Stage 1

Cleaver Rd and Governors Rd, Brantford, Stage 1

Riverside Dam, Cambridge, Stage 1-3

### City of London Projects

Victoria St Pumping Station, London, Stage 1-2

Thames Valley Parkway Richmond to Adelaide Stage 2 and 4

Hyde Park and Sunningdale Roundabout Stage 1-2

7 Annabel Drive Stage 1-2

Kiwanis and Pottersburg Park St 1

BRT Archaeological Assessments Stage 2

Southdale and Wickerson Stage 2-4

Topping Farm, Pack Road, Stage 1-4

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2010-2016

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TMHC Inc.  
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Association (CAA)

Ontario Archaeological Society  
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Society for American Archaeology  
(SAA)

Society for Historical Archaeology  
(SHA)

Ontario Historical Society (OHS)

Council for Northeast Historical  
Archaeology (CNEHA)

World Archaeology Congress  
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## STAKEHOLDER CONSULTATION AND COMMUNITY SERVICE

### **Ontario Archaeological Society**

- |      |   |
|------|---|
| 2017 | Current Volunteer for Indigenous Community Monitor Training Programs                      |
| 2017 | Organizer, Ontario Archaeological Society Conference on Indigenous Issues: Nations United |
| 2016 | Director  |

### **Museum of Ontario Archaeology**

- |           |  |
|-----------|--|
| 2014-2016 | Preservation of the Lawson Iroquoian Village Committee |
|-----------|--|

### **Canadian Archaeological Association**

- |           |   |
|-----------|---|
| 2014      | National Conference Organizing Co-Chair |
| 2012-2014 | Student Committee                       |

### **Various**

- |      |  |
|------|--|
| 2014 | Public Guide, War of 1812 Celebrations, Tecumseh Park, Chatham |
|------|--|

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| 2019 | <i>Challenging Colonial Narratives: Nineteenth-Century Great Lakes Archaeology</i> . University of Arizona Press.   |
| 2017 | A Tale of Two Settlements: Consumption and the Historical Archaeology of Native and Newcomers in the 19 <sup>th</sup> -Century Great Lakes Region. In <i>Indigenous Peoples and Foreign Things: Archaeologies of Consumption in the Americas</i> , edited by C. Cipolla. University of Arizona Press. |
| 2016 | Archaeologists Colonizing Canada: The Effects of Unquestioned Categories. <i>Archaeologies</i> , 12(1):7-37.  |



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Liam holds a Masters degree in Anthropology from Trent University specializing in late Paleoindian projectile points in Ontario and New York. With over 10 years in the field, Liam has conducted extensive field research and artifact analysis on Indigenous and 19<sup>th</sup> Century sites in Ontario. Liam's role at TMHC has involved background research, support for Indigenous engagement for archaeological projects, report production and project management. He also served as archival assistant at the Trent Valley Archives. Liam has volunteered on both the Dutton Burial Salvage excavation project and the Fugitive Slave Chapel project in London, and is a member of the Ontario Archaeological Society.

## HIGHLIGHT OF RECENT PROJECTS

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### Infrastructure Ontario

York Road Property (N73716), Hamilton, Stage 1  
Assumption Street (N85706), Windsor, Stage 2  
Lakeside Drive (N72054), Amherstburg, Stage 1-2  
Kent Street West (N00610), Lindsay, Stage 1-2  
Vaughan Grove Sports Park (D65561), Vaughan, Stage 4

### Other Linear Infrastructure

Imperial Oil – Waterdown to Finch, Stage 1-4  
Enbridge Line 10 – Westover Segment Stage 1-4

### Municipal EA, Aggregate Act, and Planning Act Projects

Waterwater Treatment Plant, Drumbo, Stage 1  
Hardrock Mine Property, Geraldton, Stage 2 and 3  
Cleaver Rd and Governors Rd, Brantford, Stage 1  
247 Brock Street, Amherstburg, Stage 1-3  
Queens Street Subdivision, Plympton-Wyoming, Stage 1-2  
672 Hamilton Road, London, Stage 1-2  
Wallace Pit, Thamesford, Stage 1-4  
North Dorchester Pit, Thamesford, Stage 1-3  
Dundas Street Reconstruction, London, Stage 1-2  
Genevieve Park, London, Stage 1-2  
Waldorf Park, London, Stage 1-2

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### **Field Director/Field Technician**

Various  
2012-2016

## PROFESSIONAL AFFILIATIONS

Canadian Archaeological  
Association (CAA)

Ontario Archaeological Society  
(OAS)

## STAKEHOLDER CONSULTATION AND COMMUNITY SERVICE

### **Mississaugas of the Credit First Nation**

2020 Building Relationships between Archaeologists  
and Indigenous Monitors – Discussion Facilitator

### **Dutton Burial Salvage Excavation Project**

2020 Volunteer Excavator

### **Fugitive Slave Chapel Preservation Project**

2013 Volunteer Excavator

## PRESENTATIONS

2019 Timmins, Peter and Liam Browne. "Gurney 3  
(AhHc-137) A Multi-Component Site on the  
Grand River." Canadian Archaeological  
Association Annual Meeting, Quebec City, QC.

2016 Browne, Liam. "Hi-Lo Projectile Point Variability  
in Ontario and New York" Peterborough  
Chapter of the Ontario Archaeology Society,  
Peterborough, ON.

2014 Browne, Liam. "Gathering a Sample: Ontario Hi-Lo  
Biface Variability through Academic and CRM  
Collections" Ontario Archaeology Society Annual  
Symposium, Peterborough, ON.

**Ministry of Heritage, Sport, Tourism, and  
Culture Industries**

Archaeology Program Unit  
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tourisme et de la culture**

Unité des programme d'archéologie  
Direction des programmes et des services  
Division du patrimoine, du tourisme et de la culture  
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Jan 21, 2021

Matthew Beaudoin (P324)  
Timmins Martelle Heritage Consultants Inc.  
1600 Attawandaron London ON N6G 3M6

**RE: Entry into the Ontario Public Register of Archaeological Reports: Archaeological Assessment Report Entitled, "Stage 1 & 2 Archaeological Assessment Proposed MacPherson Aggregate Pit 43371 Truman Line Part of Lot 6, Concession 12 Geographic Township of Yarmouth Now in the Municipality of Central Elgin Elgin County, Ontario", Dated Jan 14, 2021, Filed with MHSTCI Toronto Office on N/A, MHSTCI Project Information Form Number P324-0479-2020, MHSTCI File Number 0011980**

Dear Dr. Beaudoin:

The above-mentioned report, which has been submitted to this ministry as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18, has been entered into the Ontario Public Register of Archaeological Reports without technical review.<sup>1</sup>

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cc. Archaeology Licensing Officer  
Bernie Janssen, Harrington McAvan  
Bernie Janssen, Harrington McAvan

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