

**Stage 1-2 Archaeological Assessment
10125 Oxbow Drive, Komoka**

Part of Lot 6 Concession 2, Geographic Township of Lobo, County of
Middlesex

Submitted to:

GSP Group Inc.
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and

Ontario's Ministry of Heritage, Sport, Tourism and Culture Industries

Submitted by:



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PIF Number: P017-0825-2020
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ORIGINAL REPORT

July 9th, 2020

Executive Summary

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Kevin Muir of GSP Group Inc. ('the Proponent') to conduct a Stage 1-2 archaeological assessment of 10125 Oxbow Drive, Part of Lot 6, Concession 2, Geographic Township of Lobo in the County of Middlesex, Ontario (Figure 1). This assessment was undertaken prior to the proposed construction of a residential subdivision at the subject property.

This assessment was triggered by the Provincial Policy Statement ('PPS') that is informed by the *Planning Act* (Government of Ontario 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger *Ontario Heritage Act* (Government of Ontario 1990b). According to Section 2.6.2 of the PPS, "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." To meet this condition, a Stage 1-2 assessment was conducted as part of the pre-approval phase of development archaeological consulting license PO17 issued to Mr. Garth Grimes by the Ministry of Heritage, Sport, Tourism and Culture Industries ('MHSTCI') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MHSTCI's *Standards and Guidelines for Consultant Archaeologists* ('Standards and Guidelines'; Government of Ontario 2011).

The Study Area is an irregularly shaped lot situated southeast of Oxbow Drive in the community of Komoka. It measures 7.54 hectares in surface area and had been part of a gravel pit operation until as recently as 2009. At the time of assessment the Study Area was composed of an open manicured field of grass over a primarily sand and gravel surface layer with irregular topography caused by mounds of sand and gravel deposited in berms in various areas throughout the property as well as a large pond where the deepest part of the gravel pit once existed.

The Stage 1 background research indicated that the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources notwithstanding major disturbance to most of the surface through gravel pit operation.

A Stage 2 field assessment was recommended for the maintained grass component of the Study Area and was conducted on June 26, 2020. Evidence of disturbance was found in satellite photos and visually confirmed at the Study Area. Nevertheless, some judgemental test pitting was done to confirm disturbance. Additional test pitting was conducted in areas along the fringe of the gravel pit and small areas of undisturbed ground were found. Test pitting in these areas proceeded at 5m intervals. This investigation resulted in the identification and documentation of no archaeological resources; therefore, **no further archaeological assessment of the Study Area is recommended.**

The Executive Summary highlights key points from the report only; for complete information and findings, the reader should examine the complete report.

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Acknowledgments

Generous contributions by the following individuals made this report possible.

- Mr. Kevin Muir, GSP Group Inc.
- Ms. Heather Ingliss, Ingliss Family

1.0 Project Context

1.1 Development Context

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Kevin Muir of GSP Group Inc. ('the Proponent') to conduct a Stage 1-2 archaeological assessment of 10125 Oxbow Drive, Part of Lot 6, Concession 2, Geographic Township of Lobo in the County of Middlesex, Ontario (Figure 1). This assessment was undertaken prior to the proposed construction of a residential subdivision at the subject property.

This assessment was triggered by the Provincial Policy Statement ('PPS') that is informed by the *Planning Act* (Government of Ontario 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger *Ontario Heritage Act* (Government of Ontario 1990b). According to Section 2.6.2 of the PPS, "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." To meet this condition, a Stage 1-2 assessment was conducted as part of the pre-approval phase of development archaeological consulting license P462 issued to Mr. Garth Grimes by the Ministry of Heritage, Sport, Tourism and Culture Industries ('MHSTCI') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MHSTCI's *Standards and Guidelines for Consultant Archaeologists* ('*Standards and Guidelines*'; Government of Ontario 2011).

The purpose of a Stage 1 Background Study is to compile all available information about the known and potential archaeological heritage resources within the Study Area and to provide specific direction for the protection, management and/or recovery of these resources. In compliance with the *Standards and Guidelines* (Government of Ontario 2011), the objectives of the following Stage 1 assessment are as follows:

- To provide information about the Study Area's geography, history, previous archaeological fieldwork and current land conditions;
- to evaluate in detail, the Study Area's archaeological potential which will support recommendations for Stage 2 survey for all or parts of the property; and
- to recommend appropriate strategies for Stage 2 survey.

To meet these objectives Detritus archaeologists employed the following research strategies:

- A review of relevant archaeological, historic and environmental literature pertaining to the Study Area;
- a review of the land use history, including pertinent historic maps; and
- an examination of the Ontario Archaeological Sites Database ('ASDB') to determine the presence of known archaeological sites in and around the Study Area.

The purpose of a Stage 2 Property Assessment is to provide an overview of any archaeological resources within the Study Area, and to determine whether any of the resources might be archaeological sites with cultural heritage value or interest ('CHVI'), and to provide specific direction for the protection, management and/or recovery of these resources. In compliance with the *Standards and Guidelines* (Government of Ontario 2011), the objectives of the following Stage 2 assessment are as follows:

- To document all archaeological resources within the Study Area;
- to determine whether the Study Area contains archaeological resources requiring further assessment; and
- to recommend appropriate Stage 3 assessment strategies for archaeological sites identified.

The licensee received permission from the Proponent to enter the land and conduct all required archaeological fieldwork activities, including the recovery of artifacts.

1.2 Historical Context

1.2.1 Post-Contact Aboriginal Resources

Prior to the arrival of European settlers, the region was occupied by the Neutral or Attawandaron tribe. The earliest recorded visit to the region was undertaken by Étienne Brûlé, who requested permission of Samuel de Champlain to live among the Algonquin people and to learn their language and customs. The purpose of this endeavour was to establish good relations with the Aboriginal communities in advance of future military and colonial enterprises. In 1615, Brûlé joined twelve Huron warriors during their visit to the Andaste people, allies of the Huron, to ask their assistance in an expedition being planned by Champlain. Brûlé arrived two days late, however, and the Hurons were already defeated by the Iroquois (Heidenreich 1990).

Throughout the middle of the 17th century, the Iroquois sought to expand upon their territory and to monopolise the fur trade as well as the trade between the European markets and the tribes of the western Great Lakes region. A series of bloody conflicts followed known as the Beaver Wars, or the French and Iroquois Wars, contested between the Iroquois confederacy and the Algonkian speaking communities of the Great Lakes region. Many communities were destroyed including the Huron, Neutral, Susquehannock and Shawnee leaving the Iroquois as the dominant group in the region. By 1653 after repeated attacks, the Niagara Peninsula and most of Southern Ontario had been vacated (Heidenreich 1990).

The late 17th and early 18th centuries represent a watershed moment in the evolution of the post-contact Aboriginal occupation of Southern Ontario. It was at this time that various Iroquoian-speaking communities began migrating into southern Ontario from New York State, followed by the arrival of Algonkian-speaking groups from northern Ontario (Konrad 1981; Schmalz 1991). More specifically, this period marks the arrival of the Mississaugas into Southern Ontario and, in particular, the watersheds of the lower Great Lakes. The oral traditions of the Mississaugas, as recounted by Chief Robert Paudash and recorded in 1904, suggest that the Mississaugas defeated the Mohawk Nation, who retreated to their homeland south of Lake Ontario. Following this conflict, a peace treaty was negotiated between the two groups and, at the end of the 17th century, the Mississaugas' settled permanently in Southern Ontario, including within the Niagara Peninsula (Praxis Research Associates n.d.). Around this same time, members of the Three Fires Confederacy (Chippewa, Ottawa, and Potawatomi) began immigrating from Ohio and Michigan into southwestern Ontario (Feest and Feest 1978:778-779).

The Study Area first entered the record as a result of Treaty No. 3, which...

...was made with the Mississa[ug]a Indians 7th December, 1792, though purchased as early as 1784. This purchase in 1784 was to procure for that part of the Six Nation Indians coming into Canada a permanent abode. The area included in this Treaty is, Lincoln County excepting Niagara Township; Saltfleet, Binbrook, Barton, Glanford and Ancaster Townships, in Wentworth County; Brantford, Onondaga, Tusc[a]r[o]ra, Oakland and Burford Townships in Brant County; East and West Oxford, North and South Norwich, and Dereham Townships in Oxford County; North Dorchester Township in Middlesex County; South Dorchester, Malahide and Bayham Township in Elgin County; all Norfolk and Haldimand Counties; Pelham, Wainfleet, Thorold, Cumberland and Humberstone Townships in Welland County.

Morris 1943:17-18

The size and nature of the pre-contact settlements and the subsequent spread and distribution of Aboriginal material culture in Southern Ontario began to shift with the establishment of European settlers. Lands in the Lower Grand River area were surrendered by the Six Nations to the British Government in 1832, at which point most Six Nations people moved into Tuscarora Township in Brant County and a narrow portion of Oneida Township (Page & Co. 1879:8; Tanner 1987:127; Weaver 1978:526). Despite the inevitable encroachment of European settlers on previously established Aboriginal territories, "written accounts of material life and livelihood, the correlation of historically recorded villages to their archaeological manifestations, and the

similarities of those sites to more ancient sites have revealed an antiquity to documented cultural expressions that confirms a deep historical continuity to Iroquoian systems of ideology and thought” (Ferris 2009:114). As Ferris observes, despite the arrival of a competing culture, First Nations communities throughout Southern Ontario have left behind archaeologically significant resources that demonstrate continuity with their pre-contact predecessors, even if they have not been recorded extensively in historical Euro-Canadian documentation.

1.2.2 Euro-Canadian Resources

The Study Area is located in Lobo Township within the County of Middlesex, Ontario.

The history of the area began on July 24, 1788, when Sir Guy Carleton, the Governor-General of British North America, divided the Province of Québec into the administrative districts of Hesse, Nassau, Mecklenburg and Lunenburg (Archives of Ontario 2012-2015). Further change came in December 1791 when the former Province of Quebec was rearranged into Upper Canada and Lower Canada under the *Constitutional Act*. Colonel John Graves Simcoe was appointed as Lieutenant-Governor of Upper Canada (Coyne 1895) and he introduced several initiatives to populate the province including the establishment of shoreline communities with effective transportation links between them.

In July 1792, Simcoe divided Upper Canada into 19 counties stretching from Essex in the west to Glengarry in the east. Later that year, the four districts originally established in 1788 were renamed as the Western, Home, Midland and Eastern Districts. The current Study Area is situated in the historic Western District, which comprised lands obtained in the 'Between the Lakes Purchases' of 1784 and 1792 (Archives of Ontario 2012-2015).

As population levels in Upper Canada increased, smaller and more manageable administrative bodies were needed resulting in the establishment of many new counties and townships. As part of this realignment, the boundaries of the Home and Western Districts were shifted and the London and Niagara Districts were established. Under this new territorial arrangement, the Study Area became part of the London District (Archives of Ontario 2012-2015).

Middlesex County was first settled in 1793 and initially comprised ten townships including the London Township. By 1842, the population of Middlesex County had reached over 31,000 inhabitants with approximately 7500 hectares. In just two more years that total would reach 52000 hectares. cleared for agriculture. and by 1844, the county's agricultural lands exceeded 52,000 hectares (Smith 1846).

Lobo Township was named by Governor Maitland in honour of his service in the Peninsular campaign during the Napoleonic wars, lobo being Spanish for Wolf. The first patents in the township were granted in 1820 Scots making up the majority of the earliest immigrants. Jesse E. Middleton, *The Province of Ontario: a History: 1615-1927*, published 1927.

The 1876 Illustrated Historical Atlas of Middlesex County, Lobo Township Map shows Robert Robinson as the owner of Lot 8, Concession 2 containing the Study Area. Robinson's homestead is depicted in the northeast corner of the lot, approximately 100m NNE of the Study Area. No features of interest are shown within the Study Area on this map.

Although significant and detailed landowner information is available on the current *Historical Atlas*, it should be recognized that historical county atlases were funded by subscriptions fees and were produced primarily to identify factories, offices, residences and landholdings of subscribers. Landowners who did not subscribe were not always listed on the maps (Caston 1997:100). Moreover, associated structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984).

1.3 Archaeological Context

1.3.1 Property Description and Physical Setting

The Study Area is an irregularly shaped lot situated southeast of Oxbow Drive in the community of Komoka. It measures 7.54 hectares in surface area and had been part of a gravel pit operation until as recently as 2009. At the time of assessment the Study Area was composed of an open manicured field of grass over a primarily sand and gravel surface layer with irregular topography caused by mounds of sand and gravel deposited in berms in various areas throughout the property as well as a large pond where the deepest part of the gravel pit once existed. Some areas of long grass and weed were present along the northern margins of the Study Area. Disturbance is evident throughout including the remnants of gravel trucking paths and berms along some of the margins of the property intended to shield the gravel pit from view from the golf course to the southeast and Oxbow Drive to the northwest. Elevations range in the vicinity of 245m a.s.l. while the surrounding landscape averages about 5-10m higher.

The majority of the region surrounding the Study Area has been subject to European-style agricultural practices for over 100 years, having been settled by Euro-Canadian farmers by the mid-19th century. Much of the region today continues to be used for agricultural purposes.

The study area is situated within the Caradoc Sand Plan physiographic region, as defined by (Chapman and Putnam 1986). This region is described as:

In the neighbourhood of London there is a series of small plains which differ from the adjacent moraines and clay plains in that they are covered with sand or other light-textured, waterlaid deposits. Together they comprise about 300 square miles or 192,000 acres in which the soils are conducive to specialized agriculture. (Chapman and Putnam 1984:146)

The region consists of a series of small, light-textured sandy plans that are waterlain deposits associated with former glacial spillways and deltas (Chapman and Putnam 1984). The soil is suitable for corn and soy beans in rotation with cereal grains as well as alfalfa and clover (Huffman and Dumanski 1986).

The closest source of potable water is a tributary of Twelve Mile Creek, located approximately 270 metres (m) to the northwest of the Study Area.

1.3.2 Pre-Contact Aboriginal Land Use

This portion of Southern Ontario has been demonstrated to have been occupied by people as far back as 11,000 years ago as the glaciers retreated. For the majority of this time, people were practicing hunter gatherer lifestyles with a gradual move towards more extensive farming practices. Table 1 provides a general outline of the cultural chronology of Thorold Township, based on Ellis and Ferris (1990).

Table 1: Cultural Chronology for Lobo Township

Time Period	Cultural Period	Comments
9500 – 7000 BC	Paleo Indian	first human occupation hunters of caribou and other extinct Pleistocene game nomadic, small band society
7500 - 1000 BC	Archaic	ceremonial burials increasing trade network hunter gatherers
1000 - 400 BC	Early Woodland	large and small camps spring congregation/fall dispersal introduction of pottery
400 BC – AD 800	Middle Woodland	kinship based political system incipient horticulture long distance trade network
AD 800 - 1300	Early Iroquoian (Late Woodland)	limited agriculture developing hamlets and villages
AD 1300 - 1400	Middle Iroquoian (Late Woodland)	shift to agriculture complete increasing political complexity large palisaded villages
AD 1400 - 1650	Late Iroquoian	regional warfare and political/tribal alliances destruction of Huron and Neutral

1.3.3 Previous Identified Archaeological Work

In order to compile an inventory of known archaeological resources in the vicinity of the Study Area, Detritus consulted the ASDB. The ASDB, which is maintained by the MHSTCI (Government of Ontario n.d.), contains information concerning archaeological sites that have been registered according to the Borden system. Under the Borden system, Canada is divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13 kilometres (km) east to west and approximately 18.5km north to 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 lies within block AfHi.

Information concerning specific site locations is protected by provincial policy and is not fully subject to the *Freedom of Information and Protection of Privacy Act* (Government of Ontario 1990c). The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to all media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The MHSTCI will provide information concerning site location to the party or an agent of the party holding title to a property, or to a licensed archaeologist with relevant cultural resource management interests.

According to the ASDB, 22 sites have been registered within a 1km radius of the Study Area (Table 2). Of these 22 sites 21 are Pre-contact Aboriginal with those that have been assigned a date ranging from the Late Archaic to the late Woodland. One site has unknown attributes.

Table 2: Registered Archaeological Sites within 1km of the Study Area

Borden Number	Site Name	Time Period	Affinity	Site Type
AfHi-338	Komoka Station 1	Pre-Contact, Woodland, Middle	Aboriginal	scatter
AfHi-301		Archaic, Late	Aboriginal	Other camp/campsite
AfHi-300		Archaic, Late	Aboriginal	findspot
AfHi-299		Pre-Contact	Aboriginal	Other camp/campsite
AfHi-298		Pre-Contact	Aboriginal	Other camp/campsite
AfHi-296		Pre-Contact	Aboriginal	Other camp/campsite
AfHi-295		Pre-Contact	Aboriginal	Other camp/campsite
AfHi-294		Pre-Contact	Aboriginal	Other camp/campsite
AfHi-293		Pre-Contact	Aboriginal	Other camp/campsite
AfHi-292		Woodland, Late	Aboriginal	
AfHi-291				
AfHi-290		Woodland	Aboriginal	
AfHi-289		Woodland	Aboriginal	Unknown
AfHi-229	Valleyview 8	Pre-Contact	Aboriginal	scatter
AfHi-228	Valleyview 7	Archaic, Late	Aboriginal	Other camp/campsite
AfHi-227	Valleyview 6	Pre-Contact	Aboriginal	camp / campsite
AfHi-226	Valleyview 5	Pre-Contact	Aboriginal	scatter
AfHi-225	Valleyview 4	Woodland, Late	Aboriginal, Iroquoian	scatter
AfHi-224	Valleyview 3	Pre-Contact	Aboriginal	findspot
AfHi-223	Valleyview 2	Pre-Contact	Aboriginal	scatter
AfHi-222	Valleyview 1	Pre-Contact	Aboriginal	scatter
AfHi-181	Renwick Village	Archaic, Late, Woodland, Middle	Aboriginal	Other camp/campsite, camp / campsite

To the best of Detritus' knowledge, no additional assessments have been conducted on adjacent properties, nor have sites been registered within 50m of the Study Area.

1.3.4 Archaeological Potential

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Detritus applied archaeological potential criteria commonly used by the MHSTCI (Government of Ontario 2011) to determine areas of archaeological potential within Study Area. These variables include proximity to previously identified archaeological sites, distance to various types of water sources, soil texture and drainage, glacial geomorphology, elevated topography, and the general topographic variability of the area.

Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and, when considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils or topographic variability, may also indicate archaeological potential. When evaluating distance to water it is important to distinguish between water and

shoreline, as well as natural and artificial water sources, as these features affect sites locations and types to varying degrees. The MHSTCI (Government of Ontario 2011) categorizes water sources in the following manner:

- Primary water sources: lakes, rivers, streams, creeks;
- secondary water sources: intermittent streams and creeks, springs, marshes and swamps;
- past water sources, glacial lake shorelines, relic river or stream channels, cobble beaches, shorelines of drained lakes or marshes; and
- accessible or inaccessible shorelines: high bluffs, swamp or marshy lake edges, sandbars stretching into marsh.

The closest source of potable water is the Oxbow River located 190m north of the Study Area.

Soil texture is also an important determinant of past settlement, usually in combination with other factors such as topography. The Study Area is situated within the Caradoc Sand Plain Physiographic Region. The soils within this region are suitable for pre-contact and post contact Aboriginal agricultural. Given the quality of the soil, the proximity of potable water, as well as the length of occupation of Lobo Township, prior to the arrival of Euro-Canadian settlers and considering the 21 Pre-contact Aboriginal sites present within 1km, and the Pre-contact and Post-contact Aboriginal archaeological potential of the Study Area is judged to be moderate to high.

For Euro-Canadian sites, archaeological potential can be extended to areas of early Euro-Canadian settlement, including places of military or pioneer settlements; early transportation routes; and properties listed on the municipal register or designated under the *Ontario Heritage Act* (Government of Ontario 1990b) or property that local histories or informants have identified with possible historical events.

The *Historical Atlas* (Page & Co. 1876) demonstrates the extent to which Lobo Township had been settled by 1876. Landowners are listed for every lot within the township, some of which had been subdivided into smaller parcels to accommodate an increasing population throughout the late 19th century. Structures and orchards are prevalent throughout the township, almost all of which front early roads and water bodies. The Study Area occupies the northwestern portion of Lot 8, Concession 3 which was owned by Robert Robinson as discussed earlier. The Robinson farmstead is depicted approximately 100m NNE of the Study Area. Considering this as well as the five Euro-Canadian and three multi-component sites registered within 1km of the Study Area, and the Euro-Canadian archaeological potential is judged to be moderate to high.

Finally, despite the factors mentioned above, extensive land disturbance can eradicate archaeological potential within a Study Area, as outlined in Section 1.3.2 of the *Standards and Guidelines* (Government of Ontario 2011). Aerial imagery from 2006-2018 was reviewed and indicate the Study Area was used as a gravel pit during this period. Extensive disturbance associated with this pit is visible with the only small marginal areas appearing to be possibly undisturbed. As per Section 2.1.8, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011), it is recommended that these areas be subject to a Stage 2 property inspection, conducted according to Section 1.2 of the *Standards and Guidelines* (Government of Ontario 2011), to confirm and document the disturbed areas.

2.0 Field Methods

The Stage 2 archaeological assessment of the Study Area was conducted on June 26, 2020 under archaeological consulting license P017 issued to Mr. Garth Grimes by the MHSTCI. The limits of the Study Area were visible by wire fencing and signage all along the property lines.

The weather during the assessment was mostly cloudy and 22°C. Assessment conditions were excellent and at no time were the field, weather, or lighting conditions detrimental to the recovery of archaeological material. Photos 1 to 8 demonstrate the land conditions throughout the Study Area, including areas that met the requirements for a Stage 2 archaeological assessment, as per Section 7.8.6, Standards 1a, 1b, and 1c of the *Standards and Guidelines* (Government of Ontario 2011). Figure 4 provides an illustration of the Stage 2 assessment methods, as well as all photograph locations and directions.

Approximately 27% of the Study Area is composed of a large pond created by the flooding of the deepest portion of the gravel pit. This area is completely inundated and could not be test pit assessed but was photo documented in accordance with Section 2.1 of the *Standards and Guidelines* (Government of Ontario 2011; Photos 1 to 6).

Approximately 0.07% of the Study Area comprised maintained or long grass and weed along the northern margin of the Study Area, which was inaccessible for ploughing; this area was subject to a test pit survey at 5m intervals in accordance with Section 2.1.2 of the *Standards and Guidelines* (Government of Ontario 2011; Photos 1 to 6). Furthermore, the maintained grass was being bushhogged during the assessment, however, it did not affect the assessment. Test pits were excavated until test pits showed evidence of recent ground disturbance as per Standard 4 of this section. All test pits were at least 30 centimetres (cm) in diameter and were excavated 5cm into sterile subsoil. The soils were then examined for stratigraphy, cultural features, or evidence of fill. A single soil layer was observed. All soil from the test pits was screened through six-millimetre (mm) hardware cloth to facilitate the recovery of small artifacts and then used to backfill the pit. No further archaeological methods were employed since no artifacts were identified during the test pit survey.

The remaining 72.93% of the Study Area comprised the possible disturbance areas identified on past aerial imagery of the Study Area (see Section 1.3.4 above). Following a Stage 2 property inspection, conducted according to Section 2.1.8, Standards 1 and 2 of the *Standards and Guidelines* (Government of Ontario 2011), the surface of the property which is now composed of a mix of sand and gravel fill was documented and judgementally test pitted to physically confirm disturbance. This area was evaluated as having no potential based on the identification of extensive and deep land alteration that has severely damaged the integrity of archaeological resources, as per Section 2.1, Standard 2b of the *Standards and Guidelines* (Government of Ontario 2011). The previously disturbed area within the Study Area was mapped and photo documented in accordance with Section 2.1, Standards 5 and 6 and Section 7.8.1, Standard 1b and 1c of the *Standards and Guidelines* (Government of Ontario 2011).

3.0 Record of Finds

The Stage 2 archaeological assessment of the Study Area was conducted employing the methods described in Section 2.0 above. An inventory of the documentary record generated by fieldwork is provided in Table 3 below.

Table 3: Inventory of Document Record

Document Type	Current Location of Document Type	Additional Comments
1 Page of Field Notes	Detritus office	Stored digitally in project file
1 Map Package provided by the Proponent	Detritus office	Stored digitally in project file
1 Field Map	Detritus office	Stored digitally in project file
64 Digital Photographs	Detritus office	Stored digitally in project file

No material culture was encountered during the Stage 2 survey of the Study Area; therefore, no storage arrangements were necessary.

4.0 Analysis and Conclusions

Detritus Consulting Ltd. ('Detritus') was retained to conduct a Stage 1-2 archaeological assessment at 10125 Oxbow Drive, Part of Lot 6, Concession 2, Geographic Township of Lobo in the County of Middlesex, Ontario (Figure 1). This assessment was undertaken prior to the proposed construction of a residential subdivision at the subject property.

The Study Area is an irregularly shaped lot situated southeast of Oxbow Drive in the community of Komoka. It measures 7.54 hectares in surface area and had been part of a gravel pit operation until as recently as 2009. At the time of assessment the Study Area was composed mostly of an open manicured field of grass over a primarily sand and gravel surface layer with irregular topography caused by mounds of sand and gravel deposited in berms in various areas throughout the property as well as a large pond where the deepest part of the gravel pit once existed.

The Stage 1 background research indicated that the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources notwithstanding major disturbance to most of the surface through gravel pit operation.

A Stage 2 field assessment was recommended for the maintained grass component of the Study Area and was conducted on June 26, 2020. Evidence of disturbance was found in satellite photos and visually confirmed at the Study Area. Nevertheless, some judgemental test pitting was done to confirm disturbance. Additional test pitting was conducted in areas along the fringe of the gravel pit and small areas of undisturbed ground were found. Test pitting in these areas proceeded at 5m intervals. This investigation resulted in the identification and documentation of no archaeological resources; therefore, **no further archaeological assessment of the Study Area is recommended.**

5.0 Recommendations

The Stage 2 assessment of the Study Area resulted in the identification and documentation of no archaeological resources; therefore, **no further archaeological assessment of the Study Area is recommended.**

6.0 Advice on Compliance with Legislation

This report is submitted to the Minister of Heritage, Sport, Tourism and Culture Industries 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 project area of a development proposal have been addressed to the satisfaction of the Ministry of Heritage, Sport, Tourism and Culture Industries, 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 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*.

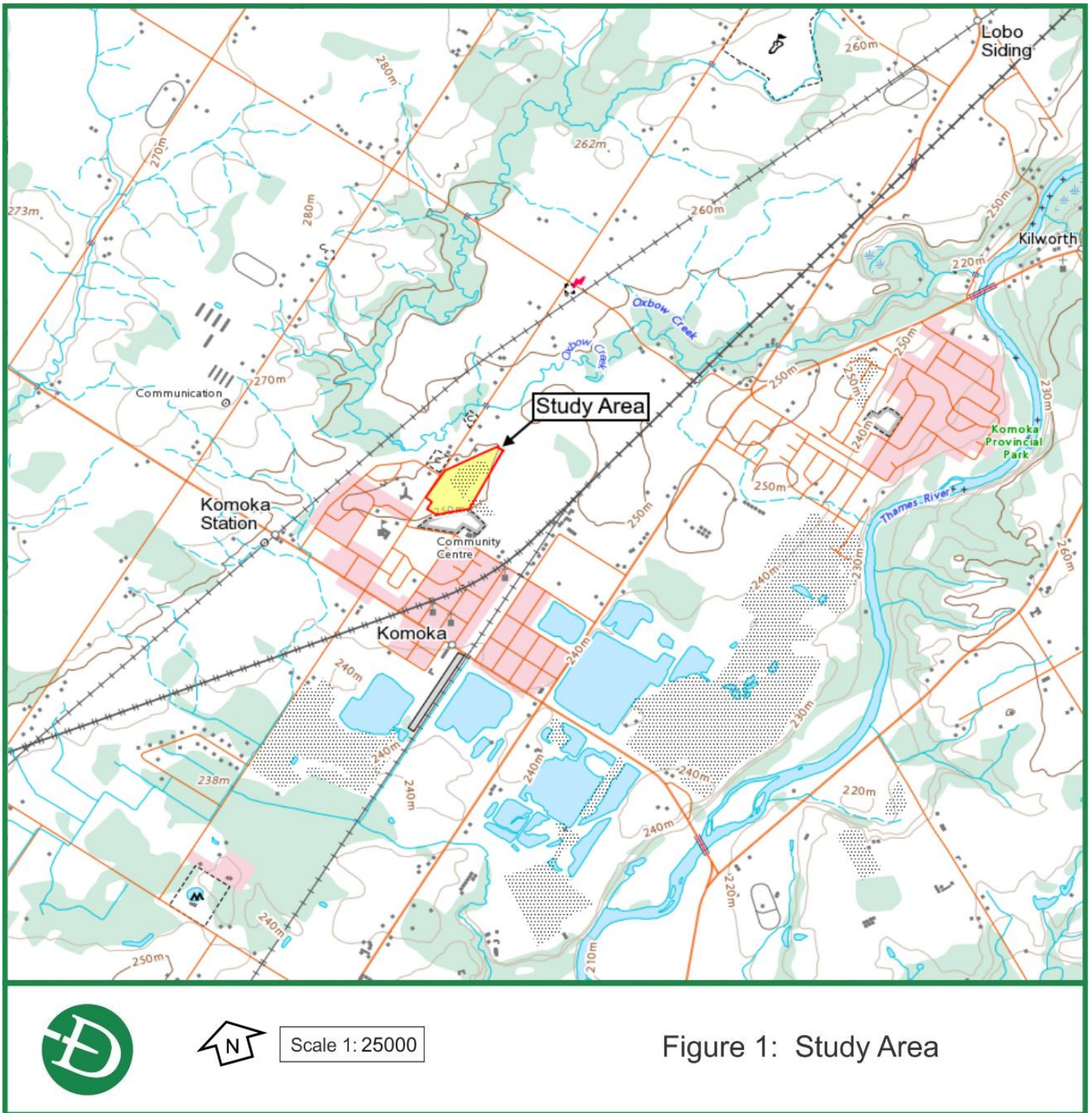
The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

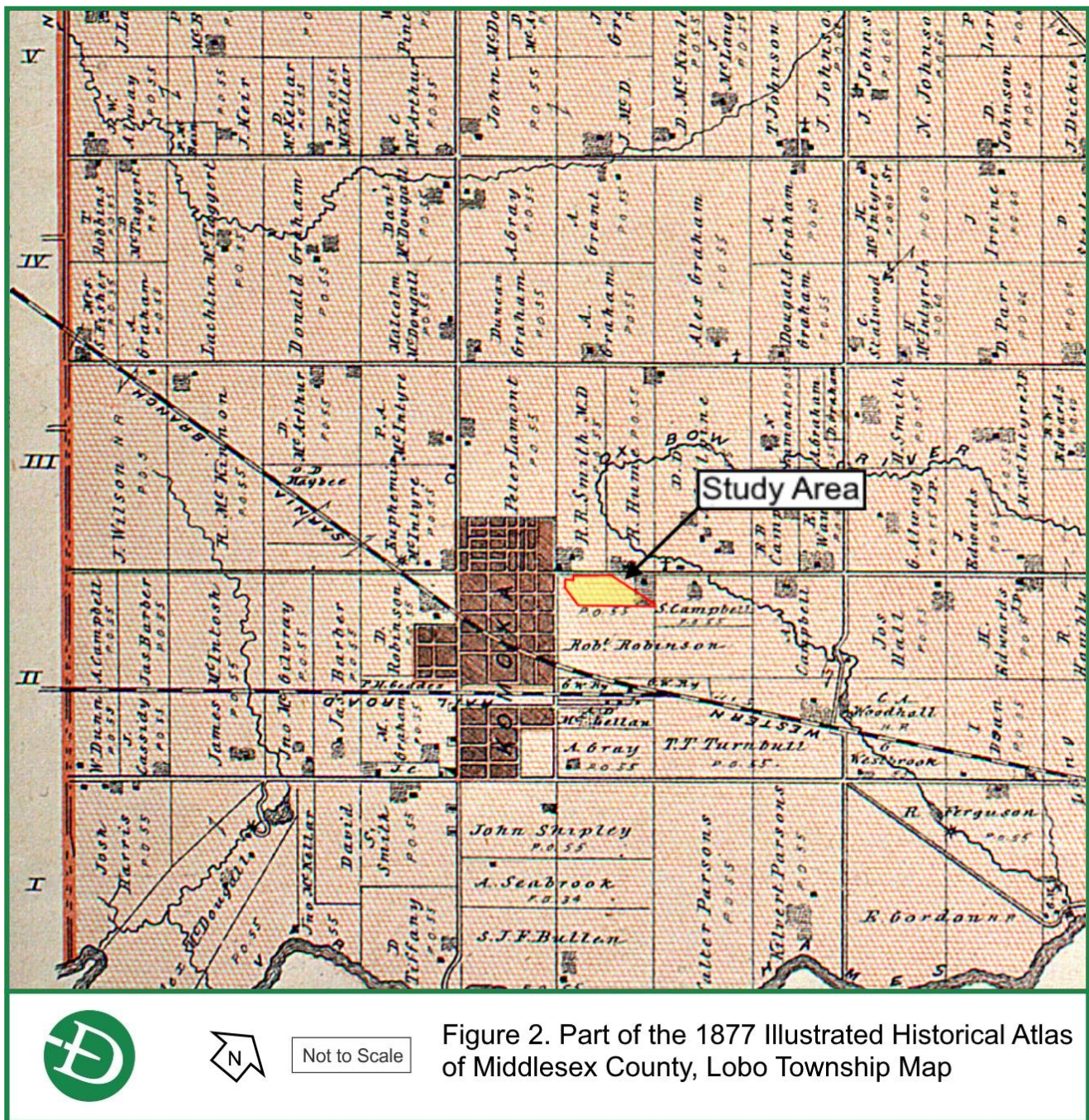
7.0 Bibliography and Sources

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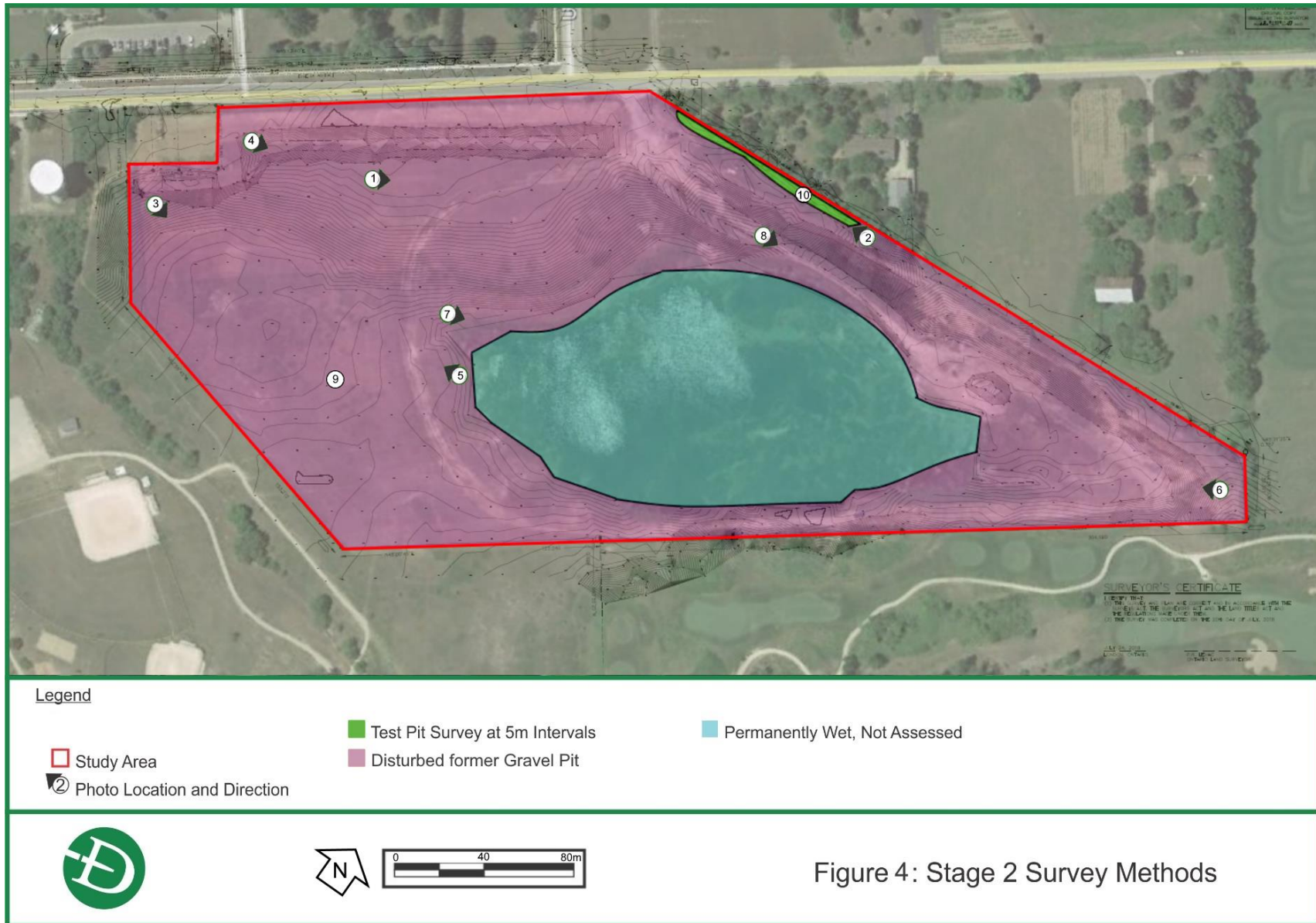
8.0 Maps





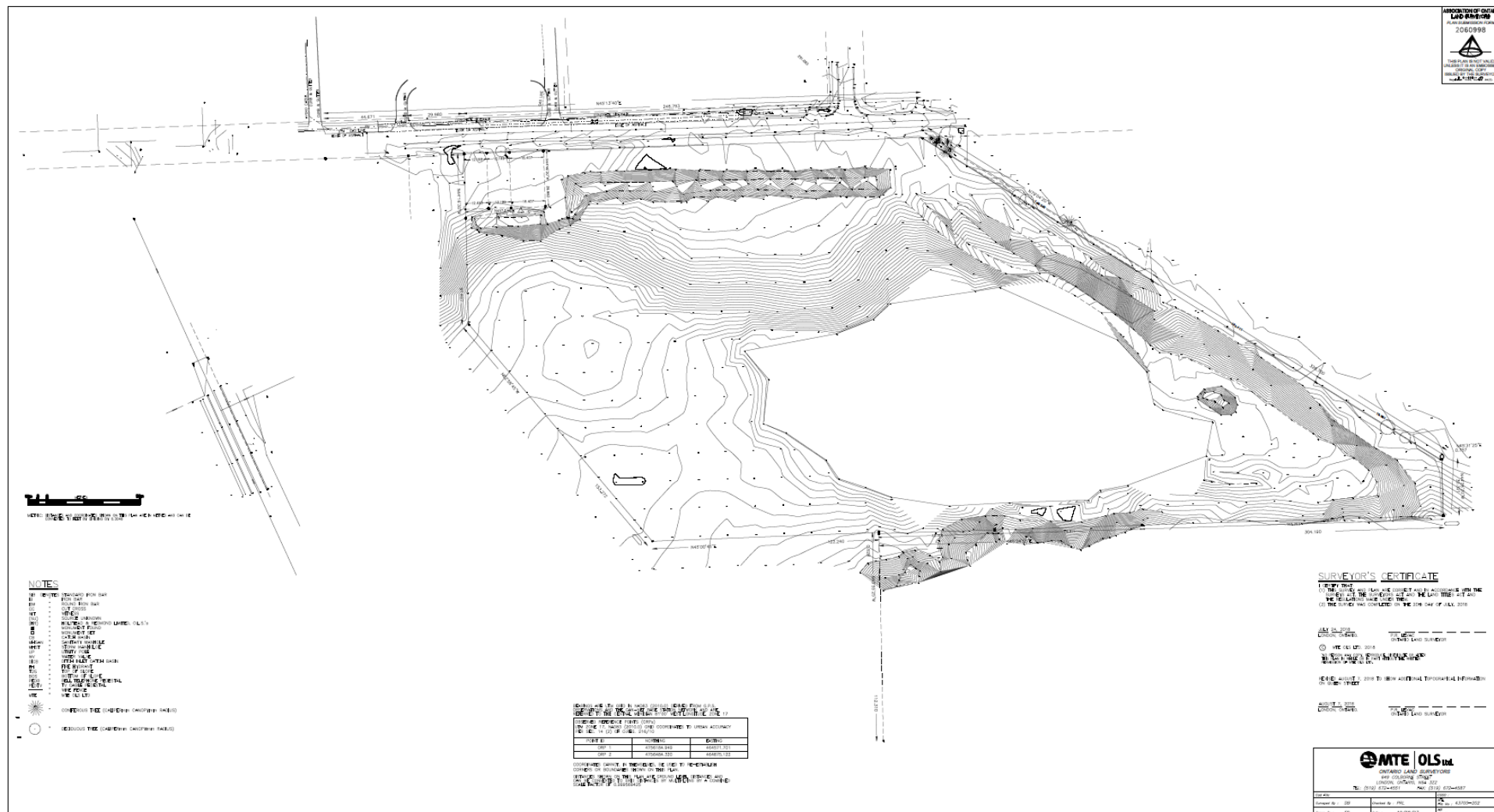


Stage 1-2 Archaeological Assessment, 10125 Oxbow Drive, Komoka



Stage 1-2 Archaeological Assessment, 10125 Oxbow Drive, Komoka

Figure 5: Development Map



9.0 Images

9.1 Photos

**Photo 1: Maintained Grass Test Pit
Surveyed judgements; Disturbed sand,
facing north-northeast**



**Photo 2: Maintained Grass Test Pit
Surveyed at 5m intervals; facing southwest**



**Photo 3: Maintained Grass Test Pit
Surveyed judgements; Disturbed sand,
facing east**



**Photo 4: Maintained Grass Test Pit
Surveyed judgements; Disturbed sand,
facing northeast**



**Photo 5: Maintained Grass Test Pit
Surveyed judgements; Disturbed sand,
facing southwest**



**Photo 6: Gravel and sand artificial berms
with flooded pit in distance, disturbed
sand surface in foreground (facing
northeast)**



Photo 7: Flooded gravel pit pond, disturbed surface in foreground, facing northeast



Photo 8: Disturbed Sand and Gravel Surface, Facing east



Photo 9: Disturbed test pit



Photo 10: Undisturbed test pit

