APPENDIX

B

Stage 1 Archaeological Assessment Report – Ojibway Parkway Wildlife Crossing

Ministry of Heritage, Sport, Tourism, and Culture Industries

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Ontario

Nov 17, 2020

Barbara Slim (P348)
Wood Environment &Infrastructure Solutions
11865 Country Road 42 Windsor ON N8N 2M1

RE: Entry into the Ontario Public Register of Archaeological Reports: Archaeological Assessment Report Entitled, "Original Report: Stage 1 Archaeological Assessment Class Environmental Assessment for the Ojibway Parkway Wildlife Overpass, Ojibway Parkway South of Broadway Boulevard, in the City of Windsor, Part of Lots 48 to 55, Concession 1 Petite Côte, Township of Sandwich, County of Essex, Ontario ", Dated Aug 14, 2020, Filed with MHSTCI Toronto Office on N/A, MHSTCI Project Information Form Number P348-0102-2020, MHSTCI File Number 0012914

Dear Ms. Slim:

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.[1]

Please note that the ministry makes no representation or warranty as to the completeness, accuracy or quality of reports in the register.

Should you require further information, please do not hesitate to send your inquiry to Archaeology@Ontario.ca

cc. Archaeology Licensing Officer
Elaine Castellan,Corporation of the City of Windsor
Elaine Castellan,Corporation of the City of Windsor

1*In no way will the ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report(s) or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.*

Original Report:
Stage 1 Archaeological Assessment

Class Environmental Assessment for the Ojibway Parkway Wildlife Overpass, Ojibway Parkway South of Broadway Boulevard, in the City of Windsor, Part of Lots 48 to 55, Concession 1 Petite Côte, Township of Sandwich, County of Essex, Ontario

Project # IM20104013

Archaeological Consulting License # P348 (Slim)
PIF # P348-0102-2020 (Stage 1)

Prepared for:

The Corporation of the City of Windsor
400 City Hall Square East, Windsor, Ontario N9A 7K6

14-Aug-20

Stage 1 Archaeological Assessment

Class Environmental Assessment for the Ojibway Parkway Wildlife Overpass, Ojibway Parkway South of Broadway Boulevard, in the City of Windsor, Part of Lots 48 to 55, Concession 1 Petite Côte, Township of Sandwich, County of Essex, Ontario

Project # IM20104013

Prepared for:
The Corporation of the City of Windsor
400 City Hall Square East, Windsor, Ontario N9A 7K6

Prepared by:
Wood Environment & Infrastructure Solutions,
a Division of Wood Canada Limited

14-Aug-20

Executive Summary

Wood Environment & Infrastructure ("Wood") was retained by the City of Windsor (the "Client") to conduct a Stage 1 archaeological assessment for the Class Environmental Assessment for the Ojibway Parkway Wildlife Overpass. The Stage 1 archaeological assessment was conducted on a piece of land approximately 19.6 hectares ("ha") in size located on Ojibway Parkway south of Broadway Boulevard, in the City of Windsor ("the study area"). The study area is legally described as Part of Lots 48, 49, 50, 51, 52, 53, 54, and 55 Concession 1 Petite Côte, in the Geographic Township of West Sandwich, Essex County (Appendix A: Figures 1, 2 and 3).

The Stage 1 archaeological assessment was carried out in accordance with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' ("MHSTCI") 2011 *Standards and Guidelines for Consultant Archaeologists*, under an Ontario Professional Licence to Conduct Archaeological Fieldwork (P348) held by Barbara Slim, Associate Archaeologist at Wood. The project information was acknowledged by the MHSTCI on 24 June 2020 with the issuance of PIF number P348-0102-2020 (Stage 1). Permission to enter the study area for the purposes of the Stage 1 assessment was granted to Wood by the Client on 31 March 2020. This permission extended to all required archaeological fieldwork activities as applicable.

The Stage 1 property inspection was conducted by Krista Lane (R382) of Wood on 25 June 2020. The weather that day was sunny and warm with an approximate temperature of 26 degrees Celsius, which did not impede the inspection in any way.

The study area includes portions of two existing roads, Ojibway Parkway and Broadway Boulevard, as well as recreational trails, landscaped areas, and a portion of Ojibway Tom Joy Woods park. To the north of the study area is an industrial area, while to the west is the Essex Terminal Railway and Black Oak Heritage Park. Additional parkland is located to the east and south of the study area.

The Stage 1 background study indicated that the study area has general archaeological potential for two principal reasons: 1) the area was identified as having high archaeological potential in the City of Windsor's archaeological master plan; and, 2) eight registered archaeological sites are situated within 1 km of the study area, including two Euro-Canadian sites within 250 m.

Based on the Stage 1 property inspection and a review of recent land-use history of the study area, Wood has identified that 46% (9.0 ha) of the study area has been deeply and extensively disturbed through recent road and ditch construction activities and the placement of underground utility trenches. This disturbance has removed archaeological potential from this portion of the study area and therefore this portion of the study area does not require Stage 2 archaeological assessment. This conclusion is consistent with Section 1.3.2 and Section 1.4.1, Standard 1.f of the *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011). The remaining 54% (10.6 ha) is a forested parkland that retains archaeological potential.

In light of the results presented above, the following recommendation is made, subject to the conditions outlined below and in Section 5.0:

1) 9.0 ha (4.6%) of the study area has low archaeological potential due to disturbance and requires no further archaeological assessment.

2) 10.6 ha (54%) of the study area is forested parkland that has archaeological potential but cannot be accessed by plough, meeting the requirements of Section 2.1.2 Standard 1a, that ploughing or cultivation is not viable. This land is recommended for assessment by means of hand shovel test pitting at 5 m grid intervals. All test pits should be a minimum of 30 centimetres ("cm") in diameter and dug to a minimum of 5 cm into the subsoil. Soil fills should be screened through 6 millimetre ("mm") mesh screens in order to facilitate artifact recovery. Test pit profiles should be examined for cultural deposits prior to being backfilled. Test pitting should be conducted to within 1 m of all disturbances. All test pits should be backfilled to level grade, and any sod caps replaced and tamped down by foot.

The above recommendations are subject to Ministry of Heritage, Sport, Tourism and Culture Industries' approval, and it is an offence to alter any portion of the study area without Ministry of Heritage, Sport, Tourism and Culture Industries' concurrence.

No development or site alteration (including, but not limited to, grading, excavation or the placement of fill that would change the landform characteristics) is permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved (Government of Ontario 2020:31).

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Project Personnel

Project Director:	Barbara Slim, M.A. (P348)
Project Manager:	Barbara Slim, M.A.
Field Director:	Krista Lane, B.A. (R382)
Report Preparation:	Kristy O'Neal, M.A. (P066)
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Report Reviewers:	Barbara Slim, M.A. Peter Popkin, Ph.D., CAHP, MCIfA (P362)

1.0 Project Context

1.1 Development Context

Wood Environment & Infrastructure ("Wood") was retained by the City of Windsor (the "Client") to conduct a Stage 1 archaeological assessment for the Class Environmental Assessment for the Ojibway Parkway Wildlife Overpass. The Stage 1 archaeological assessment was conducted on a piece of land approximately 19.6 hectares ("ha") in size located on Ojibway Parkway south of Broadway Boulevard, in the City of Windsor ("the study area"). The study area is legally described as Part of Lots 48, 49, 50, 51, 52, 53, 54, and 55, Concession 1 Petite Côte, in the Geographic Township of West Sandwich, Essex County (Appendix A: Figures 1, 2 and 3).

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This report presents the results of the Stage 1 background study and property inspection and makes pertinent recommendations.

1.2 Scope of Work

This Stage 1 archaeological assessment was carried out in accordance with the Terms of Reference provided in Wood's work agreement dated 27 February 2020.

A Stage 1 archaeological assessment is a systematic qualitative process executed in order to assess the archaeological potential of a study area based on its historical use and its potential for early Euro-Canadian (early settler) and pre-contact Indigenous occupation. The objectives of a Stage 1 background study are: 1) to provide information about the study area's geography, history, previous archaeological fieldwork and current land condition; 2) to evaluate in detail the study area's archaeological potential which will support recommendations for Stage 2 property assessment for all or parts of the study area if warranted; and, 3) to recommend appropriate strategies for Stage 2 property assessment if warranted.

The scope of work for the Stage 1 background study consisted of the following tasks:

- Contacting the MHSTCI to determine if recorded archaeological sites exist in the vicinity (1 kilometre ["km"] radius) of the study area, through a search of the *Ontario Archaeological Sites Database* maintained by that Ministry;
- Contacting the MHSTCI to determine if there are any known reports of previous archaeological field work within the study area or within a radius of 50 metres ("m") around the study area, through a search of the *Ontario Public Register of Archaeological Reports* maintained by that Ministry;

- A desktop review of the study area's physical setting to determine its potential for both pre-contact and post-contact period human occupation, including its topography, hydrology, soils, and proximity to important resources and historical transportation routes and settlements;
- A review of the potential for post-contact period human occupation as documented in historical atlases and other archival sources;
- A visual inspection of the study area to gather first-hand and current evidence of the its physical setting, and to aid in delineating areas where archaeological potential may have been impacted or removed by recent land-use practices;
- Review of any available geotechnical or environmental boreholes to understand the stratigraphy of the study area;
- A review of historical land-use practices that may have impacted the preservation of potential archaeological resources;
- Mapping, photography and the production of other relevant graphics;
- Formulate appropriate field testing strategies for areas of general archaeological potential, if any; and,
- Preparing a report of findings with recommendations regarding the need for further archaeological work if deemed necessary.

The Stage 1 background study was conducted in accordance with the *Standards and Guidelines for Consultant Archaeologists* set out by the MHSTCI (2011) pursuant to the Ontario Heritage Act, R.S.O. 1990, c. O.18.

2.0 Stage 1 Background Study

As part of the Stage 1 archaeological assessment, Wood queried the *Ontario Archaeological Sites Database,* maintained by the MHSTCI to determine if archaeological sites have been registered within 1 km of the study area (Section 2.1.1) (MHSTCI 2020a). The *Ontario Public Register of Archaeological Reports* was also queried to determine whether previous archaeological assessments have been carried out within the study area, or within a 50 m radius of the study area (Section 2.1.2) (MHSTCI 2020b). Secondly, the principal determinants of archaeological potential, namely proximity to water, topography, drainage, soils, and proximity to important resources and historical transportation routes and settlements, were examined to evaluate the study area's general archaeological potential (Sections 2.1, 2.1.3, 2.2, and 2.2.1). Thirdly, the specific potential for post-contact period archaeological resources was assessed through an examination of available historical maps and other archival sources (Section 2.2). And fourthly, a property inspection was conducted to confirm the desktop evaluation of archaeological potential and identify areas where recent land use has impacted or removed that potential.

2.1 Archaeological Context

2.1.1 Registered Archaeological Sites

Wood conducted the requisite Stage 1 background research. First, Wood queried the *Ontario Archaeological Sites Database* maintained by the MHSTCI to ascertain whether archaeological sites have been registered in close proximity (within 1 km) to the study area (MHSTCI 2020a).

In Ontario, information concerning archaeology sites is stored in the *Ontario Archaeological Sites Database* maintained by the MHSTCI. This database contains archaeological sites registered within the Borden system (Borden 1952). Under the Borden system, Canada has been divided into grid blocks based on longitude and latitude. A Borden block is approximately 13 km east to west, and approximately 18.5 km north to south. Each Borden block is referred to by a four-letter designation and sites located within the block are numbered sequentially as they are found. The study area is located within the *AbHs* Borden block.

On the basis of a search of the *Ontario Archaeological Sites Database* on 24 June 2020, there are no registered sites within the study area, but there are eight registered archaeological sites located within a 1 km radius of the study area. Included in the registered sites are a burial, five homesteads, a findspot and an unknown type site (Table 1).

Table 1: Registered Archaeological Sites within a 1 km Radius of the Study area

Borden Number	Site Name	Cultural Affiliation	Site Type	Distance from Study area	Researcher	Development Review Status
AbHs-17	Ojibway 1	Euro-Canadian	Homestead	230 m	Stewart (1992)	No further CHVI[1]

[1] CHVI – Cultural Heritage Value or Interest

Table 1: Registered Archaeological Sites within a 1 km Radius of the Study area						
Borden Number	**Site Name**	**Cultural Affiliation**	**Site Type**	**Distance from Study area**	**Researcher**	**Development Review Status**
AbHs-18	Ojibway 2	Late Archaic, Euro-Canadian	Unknown	845 m	Stewart (1992)	Further CHVI
AbHs-19	Ojibway 3	Euro-Canadian	Homestead	1,370 m	Stewart (1992)	Unknown
AbHs-20	Ojibway 4	Late Archaic	Burial	1,460 m	Stewart (1992)	Unknown
AbHs-38	DRIC H14	Euro-Canadian	Findspot	915 m	Pihl (2006)	Further CHVI
AbHs-5	---	Euro-Canadian	Homestead	1,070 m	I. Kenyon (1982)	Unknown
AbHs-58	Sideline	Euro-Canadian	Homestead	250m	Murray (2012)	No further CHVI
AbHs-6	Morton Terminal 2	Euro-Canadian	Homestead, Midden	1,510 m	I. Kenyon (1982)	Unknown

One of the sites, a Euro-Canadian homestead identified as AbHs-17, is located 230 m from the study area. The site consists of a deposit of nineteenth century domestic artifacts mixed with brick rubble that were found scattered over a ridge. The surrounding area was heavily disturbed, and no further fieldwork was recommended for the site (MHSTCI 2020a).

Site AbHs-58 is located 250 m from the study area. The site dates to between AD 1900 and 2000 and has been subject to Stage 2 to 4 excavations. No further fieldwork is recommended for the site (MHSTCI 2020a).

2.1.2 History of Archaeological Investigations

Wood completed a search for archaeological reports within 50 m of the study area within the *Ontario Register of Archaeological Reports* administered by the MHSTCI on 22 July 2020. Based on this search (by address, lot and concession and above-mentioned archaeological sites), no archaeological assessments have been conducted within 50 m of the study area (MHSTCI 2020b).

2.1.3 Environmental Context

The study area (Appendix A: Figures 1 to 3) is situated in the St. Clair Clay Plains physiographic region of Ontario (Chapman and Putnam 1984:113). This region consists of an extensive clay plain that covers an area of approximately 5,879 km^2 and lies at an elevation of 175 to 214 m above sea level (Chapman and Putnam 1984:147). The study area is located within the Essex Clay Plain sub-region and consists of a till plain overlying a low swell in the bedrock (Chapman and Putnam 1984:149). The soils within the study area consist of Brookston clay loam comprised of silty clay soils, with few stones, level topography and poor natural drainage (Richards et al. 1949).

The study area is also within 50 m of Black Oak Heritage Park, significant because the park supports one of Canada's most endangered ecosystems, the Black Oak Savanna. Many native plants in this grassland habitat are extremely rare elsewhere in Canada (City of Windsor 2020).

It is crucial to consider the proximity of water sources in any evaluation of archaeological potential because the availability of water is arguably the single most important determinant of human land use, past and present. The *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011) lists proximity to water as one of the prime indicators of potential for the presence of archaeological sites. Distance from potable water has been one of the most commonly used variables for predictive modeling of archaeological site location. Water, both potable and non-potable, also facilitated the transportation of people and goods and served to focus animal and plant resources. Lands within 300 m of an extant or formerly mapped river or creek have potential for the presence of early Indigenous and Euro-Canadian archaeological sites. The nearest water source to the study area is the Detroit River located approximately 1.5 km to the west (see Appendix A: Figure 3). A modern drainage canal bisects the study area from east to west indicating that historically there may have been water sources nearby, although these are not illustrated on historical atlas mapping (Appendix A: Figures 6 and 7).

Minor tributaries of the Detroit River are shown within 150 m of the study area on 1877 historical atlas mapping indicating that historically there was a closer source of water (Page 1877; see Appendix A: Figure 6).

2.2 Historical Context

2.2.1 A Cultural History of Southern Ontario

The majority of interpretations of pre-contact Indigenous adaptations in Ontario derive from the analysis and interpretation of stone tools. Stone tools are made from specific types of rocks that fracture in ways that can be controlled, so that they are easily shaped into useful forms. These rocks include chert, chalcedony, quartzite, petrified wood, and volcanic glass, known as obsidian. Most stone tools found in southern Ontario are formed from types of chert that outcrop in local limestone formations, such as: Onondaga and Haldimand cherts, found near the north shore of Lake Erie; Kettle Point chert, which outcrops near Lake Huron; and Collingwood chert, which outcrops along the Niagara Escarpment near Georgian Bay.

Stone tools used as spear tips and arrowheads are the most commonly studied tool type. These are referred to as projectile points. As projectile point technology changed over time, styles and shapes of points changed also. Studying these changing point types has resulted in the development of a chronological framework for pre-contact times prior to 3,000 years ago, when First Nations groups began to make clay pottery. Later periods are defined both by point types and pottery characteristics. Radiocarbon dating of archaeological sites can only be done when organic materials are collected from those sites, so the dating of most sites is done by comparing the artifacts from dated sites to those from undated sites. The following is an overview of the pre-contact history of southern Ontario as understood by archaeologists.

The cultural history of southern Ontario began approximately 11,000 years ago when the glaciers had melted, and the land was re-exposed. The land was quickly settled by bands of hunters and

gatherers who are thought to have been large game hunters. These people used large spear points that are distinctively shaped with long central grooves, called "flutes". Archaeologists have defined a number of point types that date to this time, including Gainey, Barnes, Crowfield, and Hi-Lo types. This period is referred to as the Paleo-Indian Period and it is thought to have lasted until approximately 9,000 years ago.

After 9,500 years ago, there was a long period when the climate was variable and the bare lands left by the glaciers were becoming re-forested, resulting in patchier, more diverse ecozones. During this time, which lasted until 3,000 years ago, people were adapting to diverse environmental settings. There appears to have been more reliance on local stone for making tools and more variable tool manufacturing technologies. The adoption of a spear-throwing board, known as an atlatl, was an important innovation, resulting in the ability to throw smaller darts with more force. Projectile points from this period, called the Archaic Period, are commonly side or corner-notched and are smaller than those of the preceding period. The Archaic adaptation is generally thought to have centred on localized resources, often forest resources, and groups of people are thought to have been less mobile, an adaptation that continued to develop until the arrival of Europeans.

In southern Ontario, the Archaic Period is divided into the Early, Middle and Late Archaic. Early point types include serrated Nettling and Bifurcate Base points. Middle types include Brewerton Corner Notched and Otter Creek, and Late types include Lamoka, Genesee, Crawford Knoll, and Innes. Most of these point types are named after archaeological sites where they were first identified.

The Archaic Period is followed by the Woodland Period. The major technological change in the Early Woodland Period is the introduction of pottery. During this time, people are thought to have developed more community organization and the manufacture of clay pottery is thought to indicate less residential mobility. Burial sites dating to this time often display evidence of ceremonial activities. Projectile points made at this time include much smaller types, probably used as arrow tips. Point types include Meadowood and Kramer and early ceramics were crudely-made vessels with conoidal (pointed) bases. The Early Woodland Period transitioned into the Middle Woodland Period approximately 2,400 years ago.

During the Middle Woodland Period in southern Ontario community and kin identity became more deeply entrenched, and more sedentary communities developed. Point types made at this time include Saugeen, Vanport, and Snyders. Ceramic vessels were conoidal in shape but were decorated with stamped designs in the soft clay. The Middle Woodland Period transitioned into the Late Woodland Period A.D. 500–900 with the earliest direct evidence for agriculture.

The Late Woodland Period saw the development of recognizable Iroquoian and Algonkian cultures in southern Ontario, characterized by the intensification of agriculture and the increased utilization of corn. Greater sedentism led to increasing settlement populations and greater complexity of settlement organization. Sites dating to this time are often found on terraces overlooking the floodplains of large rivers. Iroquoian villages tended to be small, palisaded compounds with longhouses occupied by families. As the Late Woodland Period progressed, more intercommunity communication and integration became necessary to maintain the

sedentary agricultural way of life. Later Iroquoian villages were larger and more heavily palisaded, and longhouses were larger also.

When European explorers and missionaries arrived in southern Ontario in the early seventeenth century, they described the local Iroquoian social organization as being under the direction of elected chiefs. Tribal confederacies and allegiances resulted in intertribal warfare, which was only made worse by the European presence. Three Ontario Iroquoian confederacies, the Huron, Petun, and Neutral, were driven from their traditional territories before the middle of the seventeenth century.

Archaeologists tend to describe a period of transition from Late Woodland to post-contact contact times as "proto-historic". The dating of this period is variable and may be different from site to site within a region as it describes a time when local Indigenous peoples were acquiring European trade goods indirectly through other Indigenous middlemen rather than directly from European traders. This period was generally very short and is often difficult to differentiate archaeologically from later post-contact times, when trade goods were widely available, but it usually is identified by evidence of an intact traditional cultural adaptation with occasional European items used in traditional ways.

Table 2: Simplified Cultural Chronology of Southern Ontario

Period	Complexes/Cultures, Some Diagnostic Artifacts
Early Paleo-Indian (9000–8500 B.C.)	Small nomadic hunter-gatherer bands. Early Paleo-Indian (EPI) rarely found in eastern Ontario. Gainey, Barnes, Crowfield fluted points.
Late Paleo-Indian (8500–7500 B.C.)	Small nomadic hunter-gatherer bands. Hi-Lo, Holcombe points, Lanceolate Bifaces.
Early Archaic (7500–6000/4500 B.C.)	Small nomadic hunter-gatherer bands. Nettling, Stanley/Neville points.
Middle Archaic (6000/4500–2500 B.C.)	Transition to territorial settlements. Seasonal round of subsistence introduced. Thebes (6000–5000 B.C.), Otter Creek points (4500–3000 B.C.). **Brewerton Complex (3000–2500 B.C.).** Brewerton points. **Laurentian Complex (6000–2500 B.C.)** (Eastern Ontario)
Late Archaic (2500–1000 B.C.)	More numerous territorial hunter- gatherer bands, increasing use of exotic materials and artistic items for grave offerings, regional trade networks. **Narrowpoint Complex (2500–1850 B.C.).** Lamoka points. **Broadpoint Complex (1850–1650 B.C.).** Adder Orchard, Genesee points. **Smallpoint Complex (1650–1000 B.C.).** Crawford Knoll, Innes points. **Terminal Archaic (1100–1000 B.C.) Glacial Kame Complex.** Hind points.
Early Woodland (1000–400 B.C.)	Pottery introduced. Meadowood Notched points, Meadowood Cache Blades, Kramer, Adena points. **Meadowood Complex (1000–400 B.C.).** **Middlesex Complex (650–400 B.C.).** Introduction of true cemeteries.
Middle Woodland (400 B.C.–A.D. 500/900)	Saugeen, Snyders, Vanport, Port Maitland points. **Point Peninsula Complex** (Southcentral and eastern Ontario) **Saugeen Complex** (Southeast of Lake Huron and the Bruce Peninsula, London area, and possibly as far east as the Grand River) **Couture Complex** (Lake St. Clair and the western end of Lake Erie). Burial ceremonialism.

Table 2: Simplified Cultural Chronology of Southern Ontario	
Period	**Complexes/Cultures, Some Diagnostic Artifacts**
Transitional Woodland (A.D. 500–900)	Agriculture introduced. Levanna, Jacks Reef points. **Princess Point Complex** (Eastern end of Lake Erie and the western end of Lake Ontario). **Rivière au Vase Phase of the Younge / Western Basin Tradition** (Lake St. Clair and western end of Lake Erie) **Sandbanks Complex** (Kingston area).
Late Woodland (A.D. 900–1650)	Tribal differentiation. Transition to settled village life. Dewaele, Glen Meyer Tanged, Triangular Nanticoke, Notched Nanticoke, Triangular Daniels/Madison points. **Ontario Iroquoian and St. Lawrence Iroquoian Traditions** (Southcentral and eastern Ontario, respectively). **Algonkian Western Basin Tradition** (Lake St. Clair and the western end of Lake Erie).
Early Post-Contact (A.D. 1650–1763)	Iroquoian, Algonkian migrations and resettlement. French exploration and colonization
Late Post-Contact (A.D. 1763–1867)	Iroquoian, Algonkian migrations and resettlement. British and other European immigration increases.

In southern Ontario, significant post-contact archaeological sites are those that have an affiliation with an important historic event, figure, or family, but can also be anything dating to the original European settlement of a region. Often, these archaeological sites date to before A.D. 1830, but archaeologically significant Euro-Canadian sites can date into the twentieth century.

2.2.2 Review of Historical Records

The study area is located within the Township of Sandwich, County of Essex. As early as the 1670s, two Sulpician priests, François Dollier de Casson and René de Bréhant de Galinée, and later the adventurer René-Robert Cavelier, Sieur de LaSalle, made their way up the Detroit River to Lake St. Clair to document the region that is now Essex County (Morrison 1954:3). The first European settlement around the study area took place in the early 1700's when Antoine Laumet de la Mothe, Sieur de Cadillac built Fort Pontchartrain on what is now Detroit. The fort originally started out as a fur trading centre but was converted into a military post (Mika & Mika 1977). In 1748, a Jesuit mission to the Huron was established on the south shore of the Detroit River, in what is now the Windsor area (ECTA 1947). After that, French agriculturalists quickly settled in the area (Mika & Mika 1977).

At the close of the War of 1812, United Empire Loyalists began seeking land and settling in the area (ETCA, 1947). The inland areas of the township were not settled until the nineteenth century, as the land was poorly drained. However, by 1824, Essex had a population of 4,274, which quickly grew upon completion of the Erie Canal and Talbot Road a few years later (Carter 1984a).

Sandwich Township was incorporated in 1850, and in 1861 was divided into three townships, Sandwich East, West and South (Carter 1984b). Sandwich East was annexed in part by the City of Windsor and in part by the Township of Sandwich South in 1966 (Carter 1984b). The Town of Sandwich is the earliest settlement in the area. In 1796, lots were given to fur traders from Detroit who wished to remain under British Rule. Sandwich was the county seat for many years (Mika &

Mika 1983). An ex-slave community existed in Sandwich as early as 1820, when they founded the first Baptist congregation there (ECTA 1947). After slavery was outlawed by Britain, the influx of fugitive slaves to Canada increased, with Sandwich and Windsor serving as major border crossings for the Underground Railroad.

The City of Windsor was first established near ferries run by French to carry goods across the river to Detroit and was originally known as South Detroit. Windsor now encompasses three nineteenth century communities, Sandwich, Windsor, and Walkerville. Windsor was slow to grow and develop until the construction of the Great Western Railway in 1854, after which it experienced rapid growth (Mika & Mika 1983).

Historical records and mapping were examined for evidence of early Euro-Canadian use on the study area, which was then described as Part of Lots 48 to 55, Concession 1 Petite Côte, in the Geographic Township of Sandwich, Essex County.

The 1877 *H.R. Page & Co.'s Map of the County of Essex* was examined in an effort to determine the potential for historic archaeological evidence within the study area (Page 1877; Appendix A: Figure 6). Property owners within the study area at that time are listed in Table 3. The lots at this time are divided at the approximate location of Ojibway Parkway although the road is not shown. There are no historic structures within the current study area, but there are several along the historical Matchette Road and Front Road at either end of each lot.

Table 3: Listed Property Owners within the Study Area As Shown on H.R Page & Co.'s 1877 Historical Atlas Map of Sandwich Township, Essex County

Lot	Owner	Comment
48	Mrs. Weaver	-n/a
49	Daniel Miloche	-n/a
50	R.H. Titcomb	-n/a
51	G.W. Lloyd	-n/a
52	G.W. Lloyd	-n/a
53	A.H. West	-n/a
54	W. W. Wright	-n/a
55	Charles Jones	-n/a

In addition, the 1881 *Illustrated Atlas of Essex County* (Belden 1881; Appendix A: Figure 7) was examined. At that time, no owners were identified within Lots 48, 50, 51, 52, 53, 54 or 55, Concession 1 Petite Côte, but Lot 49 is shown under the ownership of Christopher Clark (eastern half) and D. Meloche (western half). Two structures are shown on Lot 49, both well outside the study area, along Matchette Road and the historic Front Road, respectively.

The Essex Terminal Railway runs adjacent to the study area on the west. This railway was founded in 1902, with construction taking place between 1902 and 1918. During World War II the railway was used to haul military and industrial equipment (Gervais 2012).

2.2.3 Historic Plaques

The MHSTCI's *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011:18) stipulates that areas of early Euro-Canadian settlement, including places of early military pioneer settlement (pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches and early cemeteries, are considered to have archaeological potential. There may be commemorative markers of their history, such as local, provincial, or federal monuments or heritage parks. Early historical transportation routes (trails, passes, roads, railways, portage routes), properties listed on a municipal register or designated under the *Ontario Heritage Act* or a federal, provincial, or municipal historic landmark or site, and properties that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations are also considered to have archaeological potential.

There is one historic plaque located near the study area (Brown 2020). The plaque, located 1.4 km to the northwest of the study area, documents the capture of Detroit. The plaque reads:

> *Confident of victory, General Hull had invaded Canada in July 1812, but failed to take advantage of his early success and the demoralization of the defenders. Fear of the Indians then rallying to the British cause and an inability to maintain supply lines dictated Hull's withdrawal to Detroit. In a daring move on 16 August General Brock embarked his troops at McKee's Point, crossed the river and forced the surrender of the Americans. This important victory raised the spirits of the Canadians and ensured the continuing support of their Indian allies.*

2.3 Additional Information

2.3.1 Subsurface Conditions

Geotechnical investigations of the study area were conducted by Golder Associates Ltd. ("Golder") in 2007 and in 2011 in advance of sanitary sewer replacement on Ojibway Parkway. Golder's 2007 report indicates that a 675 millimetre diameter sewer was to be installed within the existing road at a depth of between 2.5 and 4.5 m below the road surface (Golder 2007:2). This investigation consisted of the advancement of six boreholes ("BHs") four of which are located within the current study area (Appendix A: Figure 5). Intact topsoil was encountered in BH 5 only, located to the south of the study area, with BHs 1 to 4 and BH 6 containing fills to subsoil (Golder 2007).

Golder's 2011 investigation consisted of the advancement of eight BHs five of which are located within the current study area (Appendix A: Figure 5). No intact topsoil was present above subsoil in any of the eight BHs (Golder 2011, Appendix A).

A review of these boreholes concluded that any natural soils present within Ojibway Parkway right-of-way in the current study area have been disturbed by grading and construction activities.

2.4 Archaeological Master Plans

The City of Windsor maintains a Master Plan of Archaeological Resources to be used as part of their development review process (City of Windsor 2005). Generally, where land development applications are submitted for properties that are adjacent to, or on, known archaeological sites or where any portion of the study area is located within an area of archaeological potential, as

identified in the Master Plan of Archaeological Resources, an archaeological resource assessment must be undertaken to determine an appropriate method to protect and manage the resource.

According to the Windsor Archaeological Master Plan, the land within the study area was identified as having archaeological potential and an archaeological resource assessment was required as part of this development (City of Windsor 2005: Figure 4).

2.5 Potential for Archaeological Resources

Archaeological potential is defined as the likelihood of finding archaeological sites within a study area. For planning purposes, determining archaeological potential provides a preliminary indication that archaeological sites might be found within the study area, and consequently, that it may be necessary to allocate time and resources for archaeological survey and mitigation.

The framework for determining the presence of archaeological potential within a study area is drawn from provincial standards found in the *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011, Sections 1.3.1 and 1.3.2). The following are features or characteristics that can indicate archaeological potential:

- previously identified archaeological sites;
- water sources (it is important to distinguish types of water and shoreline, and to distinguish natural from artificial water sources, as these features affect site locations and types to varying degrees):
    - primary water sources (e.g. lakes, rivers, streams, creeks);
    - secondary water sources (e.g. intermittent streams and creeks, springs, marshes, swamps);
    - features indicating past water sources (e.g. glacial lake shorelines indicated by the presence of raised sand or gravel beach ridges, relic river or stream channels indicated by clear dip or swale in the topography, shorelines of drained lakes or marshes, cobble beaches); and,
    - 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, plateaus);
- pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground;
- distinctive land formation 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); and,

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

Archaeological potential can be determined to not be present for either the entire study area or parts of it when the area under consideration has been subjected to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. This is commonly referred to as "disturbed" or "disturbance" and may include:

- quarrying;
- major landscaping involving grading below topsoil;
- building footprints;
- sewage and infrastructure development; and,
- activities such as agricultural cultivation, gardening, minor grading, and landscaping do not necessarily affect archaeological potential.

The study area consists of a 19.6 ha urban area. The study area includes portions of two existing roads, Ojibway Parkway and Broadway Boulevard, as well as recreational trails, landscaped areas, and a portion of Ojibway Tom Joy Woods park. To the north of the study area is an industrial area, while to the west is the Essex Terminal Railway and Black Oak Heritage Park. Additional parkland is located to the east and south of the study area.

Several factors can be used to assess the potential for recovery of Indigenous archaeological resources within a study area. The study area is largely comprised of well-drained land that is suitable for human habitation. There are currently no water sources within 300 m of the study area, but a modern drainage canal bisects the study area indicating that historically there may have been nearby water sources. However, there is direct evidence that this general area has been intensively utilized by Indigenous people. Although no Indigenous sites have been registered within the study area, an Indigenous site and a multi-component site have been registered within a 1 km radius of the study area.

As per the MHSTCI's *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011), any areas within 100 m of early transportation routes and 300 m of early Euro-Canadian settlement have archaeological potential. A structure is shown within 150 m of the study area on the 1877 historic atlas mapping. Moreover, there is direct evidence that this general area had been intensively utilized by Euro-Canadian people. Although no Euro-Canadian sites have been registered within the study area, six Euro-Canadian sites and the above-mentioned multi-

component site have been registered within a 1 km radius of the study area. Two of these, AbHs-17 and AbHs-38, are located within 250 m of the study area.

The City of Windsor Master Plan indicates that the study area is within an area of archaeological potential.

Given the above, background archival research supports the conclusion that the study area has general archaeological potential for the presence of both Indigenous and Euro-Canadian archaeological resources.

However, recent land use, geotechnical studies, and previous archaeological investigations indicate that portions of the study area have been disturbed by modern activities, both extensive and intensive, including construction of roads, ditches, walking trails and installation of underground utilities.

3.0 Stage 1 Property Inspection

3.1 Methods

The Stage 1 property inspection was conducted by Krista Lane (R382) of Wood on 25 June 2020 to confirm archaeological site potential and to determine the degree to which development and landscape alteration have affected that potential. The weather that day was sunny a high temperature of 26 degrees Celsius and did not impede the inspection in any way.

The Stage 1 property inspection included a walk-through of the entire 19.6 ha study area and its periphery, which is located along Ojibway Parkway to the south of Broadway Boulevard. The property inspection was thoroughly photo-documented. Field observations were recorded on aerial maps and field forms. All land conditions were recorded as shown in Appendix A: Figure 8 and Appendix B: Photographs 1 to 8).

3.2 Results

The study area is approximately 19.6 ha in area and consists of portions of Ojibway Parkway and Broadway Boulevard. The archaeological potential of much of the western portion of the study area (9.0 ha, 46%) has been compromised during construction of the paved roadways and walking trails, as well as for ditches alongside Ojibway Parkway and the Essex Terminal Railway (Appendix B: Photographs 1 to 7). Underground servicing was observed along Ojibway Parkway, including a 32 inch diameter sewer that runs parallel to Ojibway Parkway on the west side of the road.

The remaining 10.6 ha (54%) of the study area is forested parkland that appears undisturbed and retains archaeological potential (Appendix B: Photographs 6 and 8).

3.3 Record of Finds

The following table provides the inventory of documentary records accumulated as part of this assessment.

Table 4: Inventory of Documentary Record

Study area	Map and Photo(s)	Field Notes
Ojibway Parkway, south of Broadway Boulevard, City of Windsor, Part of Lots 48 to 55, Concession 1 Petite Côte, Township of Sandwich, Essex County	Copies of two historical maps, eight Stage 1 photographs, and one aerial photograph	Stage 1 photo logs and field notes

Documentation related to the archaeological assessment of this project will be curated by Wood until such time that arrangements for their ultimate transfer to Her Majesty the Queen in right of Ontario, or other public institution, can be made to the satisfaction of the project owner, the MHSTCI and any other legitimate interest groups.

3.4 Stage 1 Analysis and Conclusions

The Stage 1 background study indicated that the study area has general archaeological potential for two principal reasons: 1) the area was identified as having high archaeological potential in the City of Windsor's archaeological master plan; and, 2) eight registered archaeological sites are situated within 1 km of the study area, including two Euro-Canadian sites within 250 m. Furthermore, although there are currently no water sources within 300 m of the study area, a modern drainage canal bisects the study area indicating that historically there may have been nearby water sources.

Based on the Stage 1 property inspection and a review of recent land-use history of the study area, Wood has identified that 9.0 ha (46%) of the study area has been deeply and extensively disturbed through recent road and ditch construction activities and the placement of underground utility trenches. This disturbance has removed archaeological potential from the study area and therefore the study area does not require Stage 2 archaeological assessment. This conclusion is consistent with Section 1.3.2 and Section 1.4.1, Standard 1.f of the *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011).

The remaining 10.6 ha (54%) is forested parkland that retains archaeological potential. As the land contains mature trees ploughing is not viable, and the forested land should be assessed by test pit survey at 5 m intervals.

4.0 Recommendations

In light of the findings of the Stage 1 archaeological assessment of the study area, the following recommendation is made, subject to the conditions outlined below and in Section 5.0:

1) 9.0 ha (46%) of the study area has low archaeological potential due to disturbance and requires no further archaeological assessment.

2) 10.6 ha (54%) of the study area is forested parkland that has archaeological potential but cannot be accessed by plough, meeting the requirements of Section 2.1.2 Standard 1a, that ploughing or cultivation is not viable. This land is recommended for assessment by means of hand shovel test pitting at 5 m grid intervals. All test pits should be a minimum of 30 centimetres ("cm") in diameter and dug to a minimum of 5 cm into the subsoil. Soil fills should be screened through 6 millimetre ("mm") mesh screens in order to facilitate artifact recovery. Test pit profiles should be examined for cultural deposits prior to being backfilled. Test pitting should be conducted to within 1 m of all disturbances. All test pits should be backfilled to level grade, and any sod caps replaced and tamped down by foot.

The above recommendations are subject to Ministry of Heritage, Sport, Tourism and Culture Industries' approval, and it is an offence to alter any portion of the study area without Ministry of Heritage, Sport, Tourism and Culture Industries' concurrence.

No development or site alteration (including, but not limited to, grading, excavation or the placement of fill that would change the landform characteristics) is permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved (Government of Ontario 2020:31).

5.0 Advice on Compliance with Legislation

a) This report is submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries as a condition of licensing in accordance with Part IV of the *Ontario Heritage Act, R.S.O. 1990, c. O.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.

b) It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such a time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeological Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

c) Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.

d) 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 corner and the Registrar of Cemeteries at the Ministry of Consumer Services.

6.0 Assessor Qualifications

This report was prepared and reviewed by the undersigned, employees of Wood. Wood is one of North America's leading engineering firms, with more than 50 years of experience in the earth and environmental consulting industry. The qualifications of the assessors involved in the preparation of this report are provided in Appendix C.

7.0 Closure

This report was prepared for the exclusive use of the City of Windsor and is intended to provide a Stage 1 archaeological assessment of the study area. The property is located on Ojibway Parkway south of Broadway Boulevard, in the City of Windsor. The property is legally described as Part of Lots 48 to 55, Concession 1 Petite Côte, in the Geographic Township of Sandwich, Essex County, Ontario.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of the third party. Should additional parties require reliance on this report, written authorization from Wood will be required. With respect to third parties, Wood has no liability or responsibility for losses of any kind whatsoever, including direct or consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

The report is based on data and information collected during the Stage 1 archaeological assessment conducted by Wood. It is based solely a review of historical information, a property reconnaissance conducted on 25 June 2020 and data obtained by Wood as described in this report. Except as otherwise maybe specified, Wood disclaims any obligation to update this report for events taking place, or with respect to information that becomes available to Wood after the time during which Wood conducted the archaeological assessment. In evaluating the property, Wood has relied in good faith on information provided by other individuals noted in this report. Wood has assumed that the information provided is factual and accurate. In addition, the findings in this report are based, to a large degree, upon information provided by the current owner/occupant. Wood accepts no responsibility for any deficiency, misstatement or inaccuracy contained in this report as a result of omissions, misinterpretations or fraudulent acts of persons interviewed or contacted.

Wood makes no other representations whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation and change. Such interpretations and regulatory changes should be reviewed with legal counsel.

This report is also subject to the further Standard Limitations contained in Appendix D.

We trust that the information presented in this report meets your current requirements. Should you have any questions, or concerns, please do not hesitate to contact the undersigned.

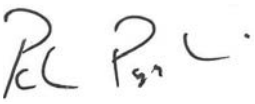
Respectfully Submitted,

Wood Environment & Infrastructure Solutions,
a Division of Wood Canada Limited

Prepared by,

Kristy O'Neal, M.A. (P066)
Senior Archaeologist

Reviewed by,



Peter Popkin, Ph.D. (P362)
Associate Archaeologist

Barbara Slim, M.A. (P348)
Associate Archaeologist

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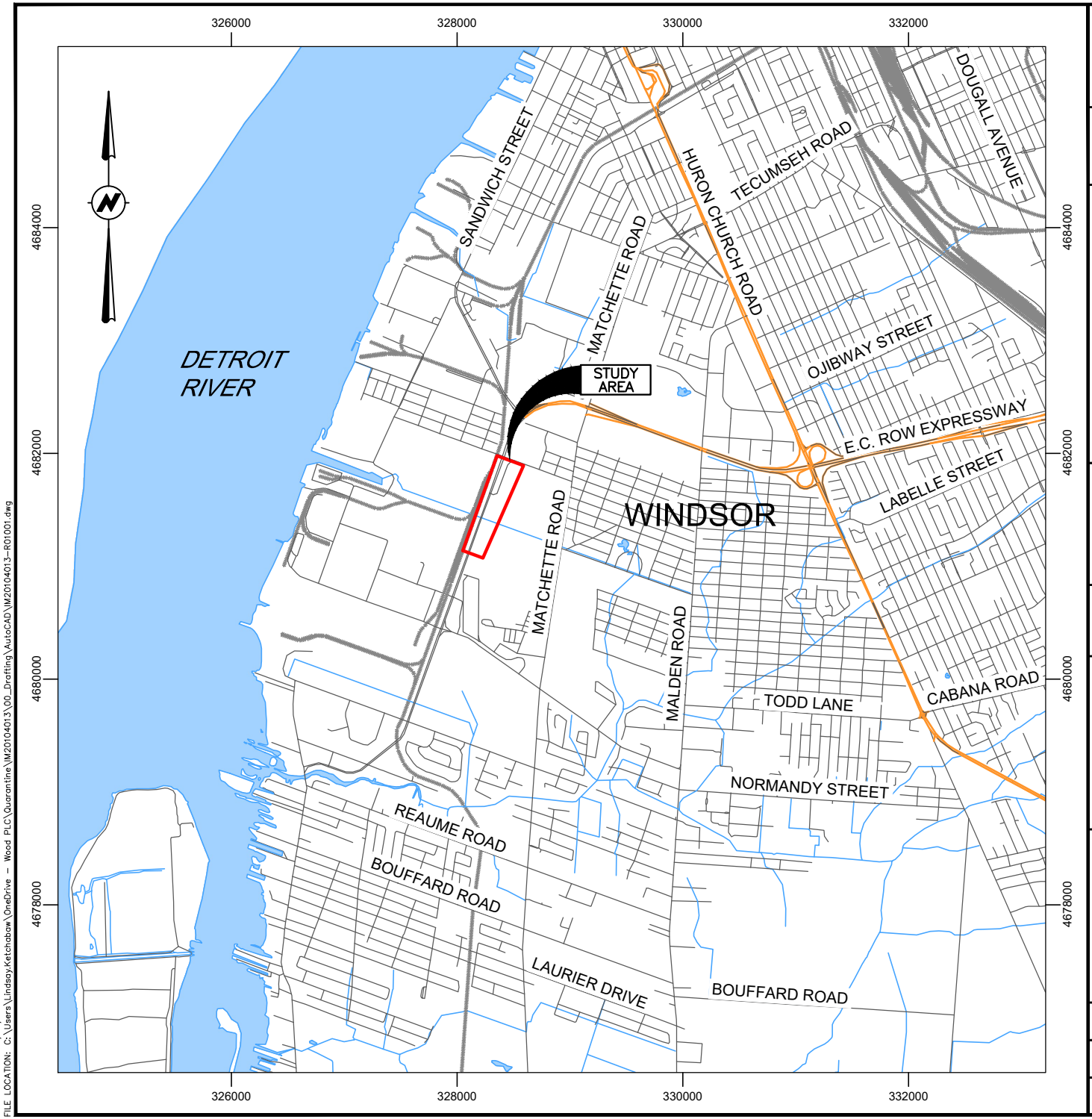
Appendix A

Figures



PROJECT:
STAGE 1 ARCHAEOLOGICAL ASSESSMENT
CLASS ENVIRONMENTAL ASSESSMENT FOR THE OJIBWAY PARKWAY WILDLIFE OVERPASS, OJIBWAY PARKWAY SOUTH OF BROADWAY BOULEVARD, IN THE CITY OF WINDSOR, PART OF LOTS 48 TO 55, CONCESSION 1 PETITE CÔTE, TOWNSHIP OF SANDWICH, COUNTY OF ESSEX, ONTARIO

TITLE:
LOCATION OF THE STUDY AREA

LEGEND:
STUDY AREA

NOTES:
THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS REPORT No. IM20104013.

ALL LOCATIONS ARE APPROXIMATE.

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CITY OF WINDSOR
PARKS AND FACILITIES OPERATIONS
352450 MCDOUGALL AVENUE
WINDSOR, ONTARIO, N8X 3N6

Wood Environment & Infrastructure Solutions
201 KING STREET
LONDON, ONTARIO
N6A 1C3
519-681-2400

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CLASS ENVIRONMENTAL ASSESSMENT FOR THE OJIBWAY PARKWAY WILDLIFE OVERPASS, OJIBWAY PARKWAY SOUTH OF BROADWAY BOULEVARD, IN THE CITY OF WINDSOR, PART OF LOTS 48 TO 55, CONCESSION 1 PETITE CÔTE, TOWNSHIP OF SANDWICH, COUNTY OF ESSEX, ONTARIO

TITLE:
AERIAL PHOTOGRAPH SHOWING THE LOCATION OF THE STUDY AREA

LEGEND:
STUDY AREA

NOTES:
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ALL LOCATIONS ARE APPROXIMATE.

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CITY OF WINDSOR
PARKS AND FACILITIES OPERATIONS
352450 MCDOUGALL AVENUE
WINDSOR, ONTARIO, N8X 3N6

wood.
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CLASS ENVIRONMENTAL ASSESSMENT FOR THE OJIBWAY PARKWAY WILDLIFE OVERPASS, OJIBWAY PARKWAY SOUTH OF BROADWAY BOULEVARD, IN THE CITY OF WINDSOR, PART OF LOTS 48 TO 55, CONCESSION 1 PETITE CÔTE, TOWNSHIP OF SANDWICH, COUNTY OF ESSEX, ONTARIO

TITLE:
TOPOGRAPHIC MAP SHOWING THE LOCATION OF THE STUDY AREA

LEGEND:
STUDY AREA

NOTES:
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ALL LOCATIONS ARE APPROXIMATE.

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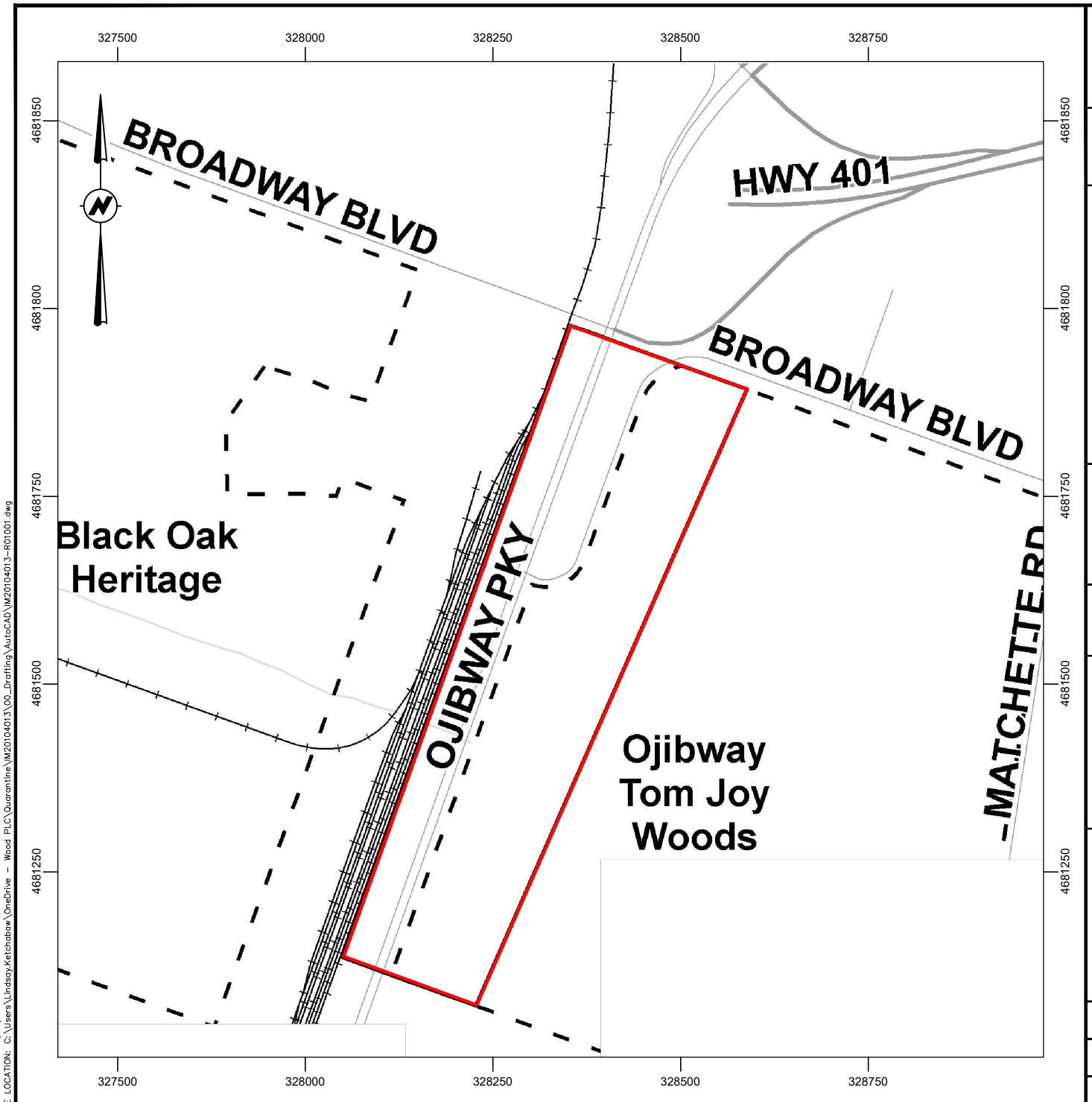

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TITLE:
DEVELOPMENT PLAN

LEGEND:
STUDY AREA

NOTES:
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WINDSOR, ONTARIO, N8X 3N6

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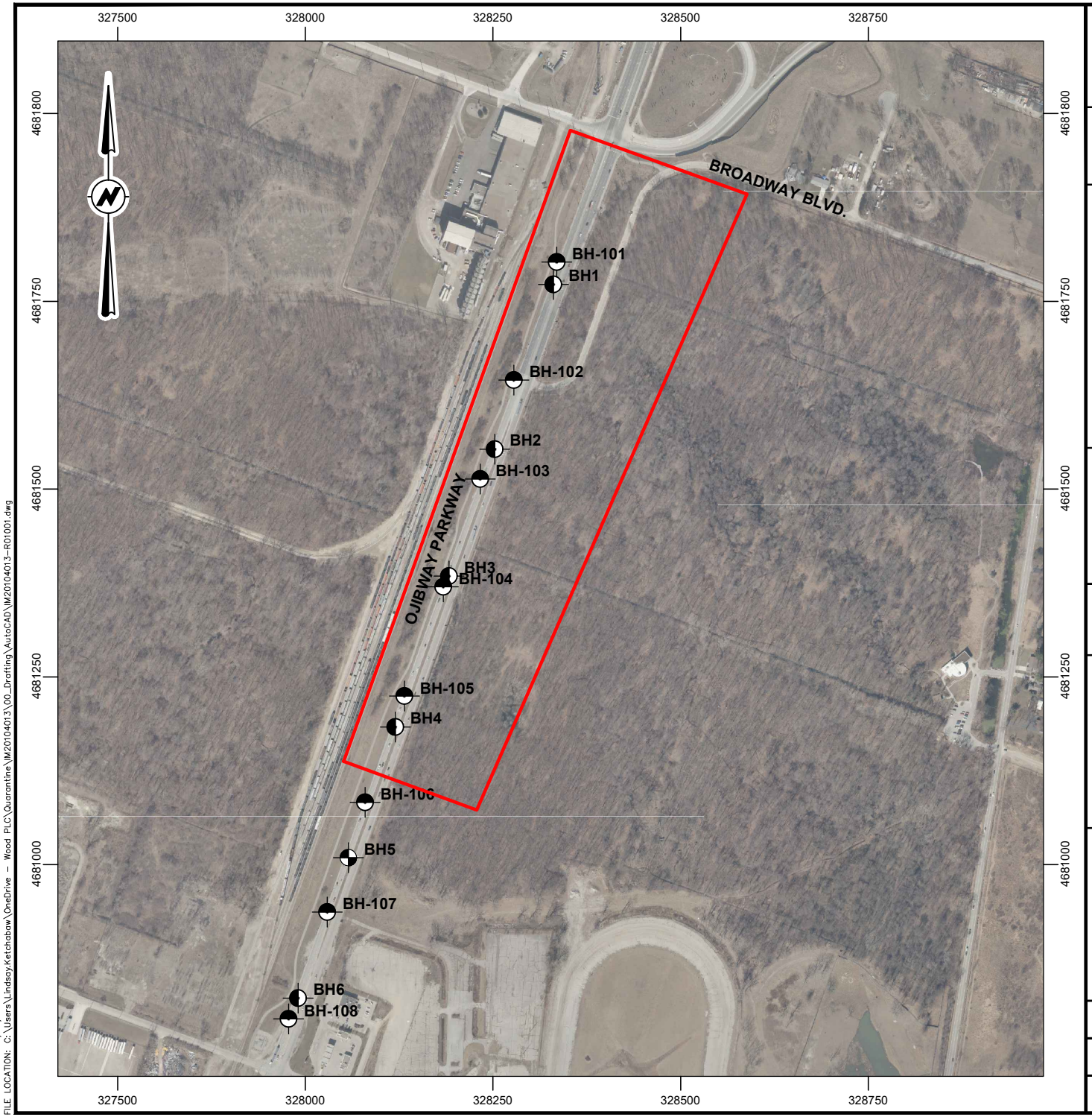

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TITLE:
AERIAL PHOTOGRAPH SHOWING BOREHOLE LOCATIONS FROM GEOTECHNICAL INVESTIGATIONS COMPLETED BY GOLDER (2007, 2011)

LEGEND:
- STUDY AREA
- FILL SOILS TO SUBSOIL (GOLDER 2007)
- INTACT TOPSOIL PRESENT IN BOREHOLE (GOLDER 2007)
- FILL SOILS TO SUBSOIL (GOLDER 2011)

NOTES:
THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS REPORT No. IM20104013.
ALL LOCATIONS ARE APPROXIMATE.

REFERENCES:
2019 AERIAL IMAGE FROM THE COUNTY OF ESSEX INTERACTIVE WEB MAPPING SITE, BY PERMISSION.

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SCALE 1:7,500

CLIENT:
CITY OF WINDSOR
PARKS AND FACILITIES OPERATIONS
352450 MCDOUGALL AVENUE
WINDSOR, ONTARIO, N8X 3N6

Wood Environment & Infrastructure Solutions
201 KING STREET
LONDON, ONTARIO
N6A 1C3
519-681-2400

DWN BY:	CHK'D BY:	DATE:
LMK	KO	AUG. 14, 2020
DATUM:	PROJECTION:	PROJECT No:
NAD83	UTM Zone 17	IM20104013
REV No:		FIGURE No:
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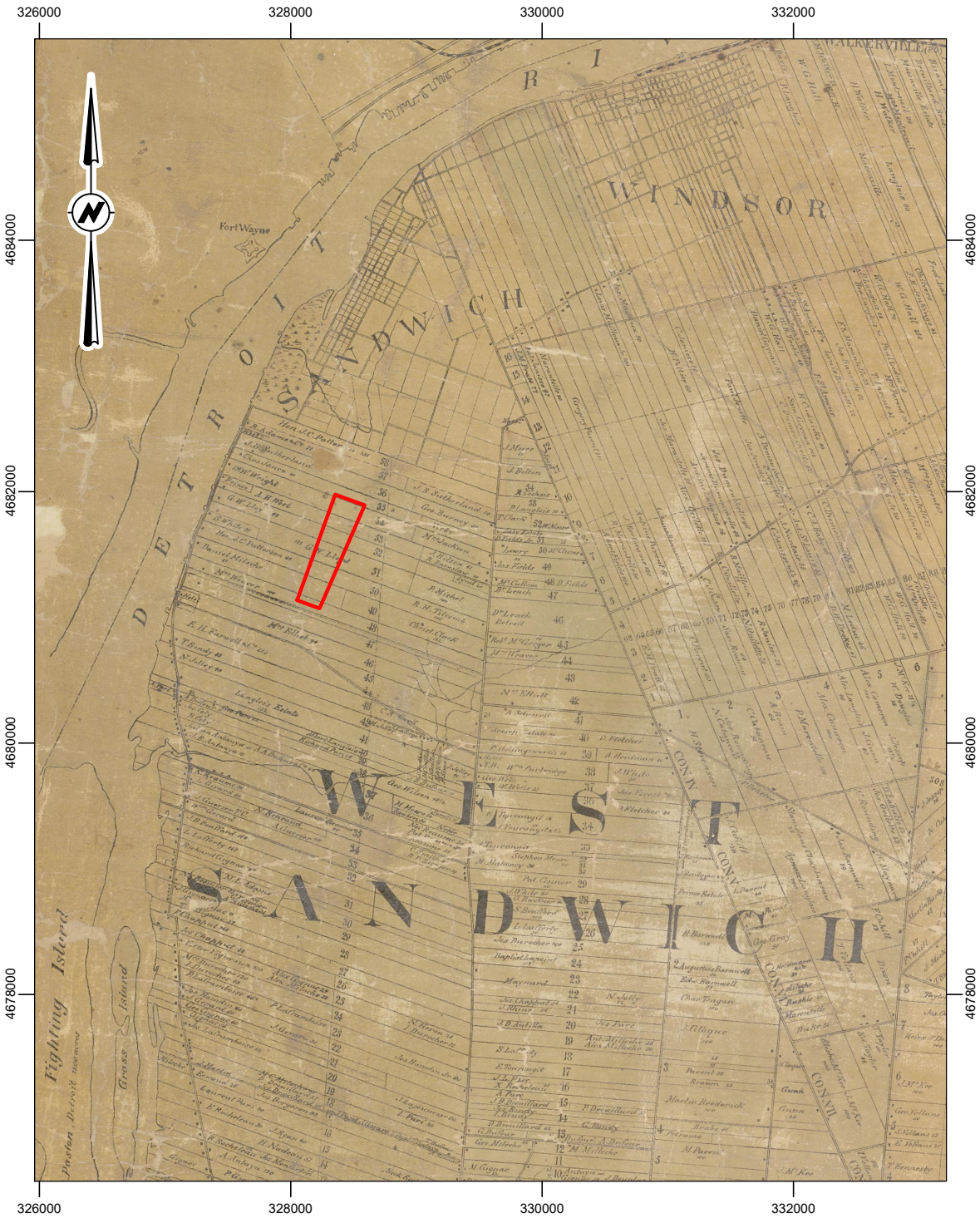

PROJECT:
STAGE 1 ARCHAEOLOGICAL ASSESSMENT
CLASS ENVIRONMENTAL ASSESSMENT FOR THE OJIBWAY PARKWAY WILDLIFE OVERPASS, OJIBWAY PARKWAY SOUTH OF BROADWAY BOULEVARD, IN THE CITY OF WINDSOR, PART OF LOTS 48 TO 55, CONCESSION 1 PETITE CÔTE, TOWNSHIP OF SANDWICH, COUNTY OF ESSEX, ONTARIO

TITLE:
1877 H.R. PAGE & CO.'S ILLUSTRATED HISTORICAL ATLAS MAP OF THE COUNTY OF ESSEX SHOWING THE LOCATION OF THE STUDY AREA

LEGEND:
STUDY AREA

NOTES:
THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS REPORT No. IM20104013.

ALL LOCATIONS ARE APPROXIMATE.

MAP SHOWN AT BEST AVAILABLE RESOLUTION.

ORIGINAL PAPER SIZE: $8\frac{1}{2}$ x 11

REFERENCES:
TREMAINE ESSEX COUNTY MAP (1877).

0 500 1,500 2,500m
SCALE 1:50,000

CLIENT:
CITY OF WINDSOR
PARKS AND FACILITIES OPERATIONS
352450 MCDOUGALL AVENUE
WINDSOR, ONTARIO, N8X 3N6

Wood Environment & Infrastructure Solutions
201 KING STREET
LONDON, ONTARIO
N6A 1C3
519-681-2400

DWN BY:	CHK'D BY:	DATE:
LMK	KO	AUG. 14, 2020
DATUM:	PROJECTION:	PROJECT No:
NAD83	UTM Zone 17	IM20104013
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PROJECT:
STAGE 1 ARCHAEOLOGICAL ASSESSMENT
CLASS ENVIRONMENTAL ASSESSMENT FOR THE OJIBWAY PARKWAY WILDLIFE OVERPASS, OJIBWAY PARKWAY SOUTH OF BROADWAY BOULEVARD, IN THE CITY OF WINDSOR, PART OF LOTS 48 TO 55, CONCESSION 1 PETITE CÔTE, TOWNSHIP OF SANDWICH, COUNTY OF ESSEX, ONTARIO

TITLE:
1881 BELDEN'S ILLUSTRATED HISTORICAL ATLAS MAP OF SANDWICH TOWNSHIP, COUNTY OF ESSEX, SHOWING THE LOCATION OF THE STUDY

LEGEND:

STUDY AREA

NOTES:
THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS REPORT No. IM20104013.

ALL LOCATIONS ARE APPROXIMATE.

MAP SHOWN AT BEST AVAILABLE RESOLUTION.

ORIGINAL PAPER SIZE: 8½ x 11

REFERENCES:
ESSEX COUNTY (ONTARIO MAP REF #1), ESSEX SUPPLEMENT IN ILLUSTRATED ATLAS OF THE DOMINION OF CANADA, TORONTO : H. BELDEN & CO., 1881.

0 500 1,500 2,500m

SCALE 1:50,000

CLIENT:

CITY OF WINDSOR
PARKS AND FACILITIES OPERATIONS
352450 MCDOUGALL AVENUE
WINDSOR, ONTARIO, N8X 3N6

wood.
Wood Environment & Infrastructure Solutions
201 KING STREET
LONDON, ONTARIO
N6A 1C3
519-681-2400

DWN BY:	CHK'D BY:	DATE:
LMK	KO	AUG. 14, 2020
DATUM:	PROJECTION:	PROJECT No:
NAD83	UTM Zone 17	IM20104013
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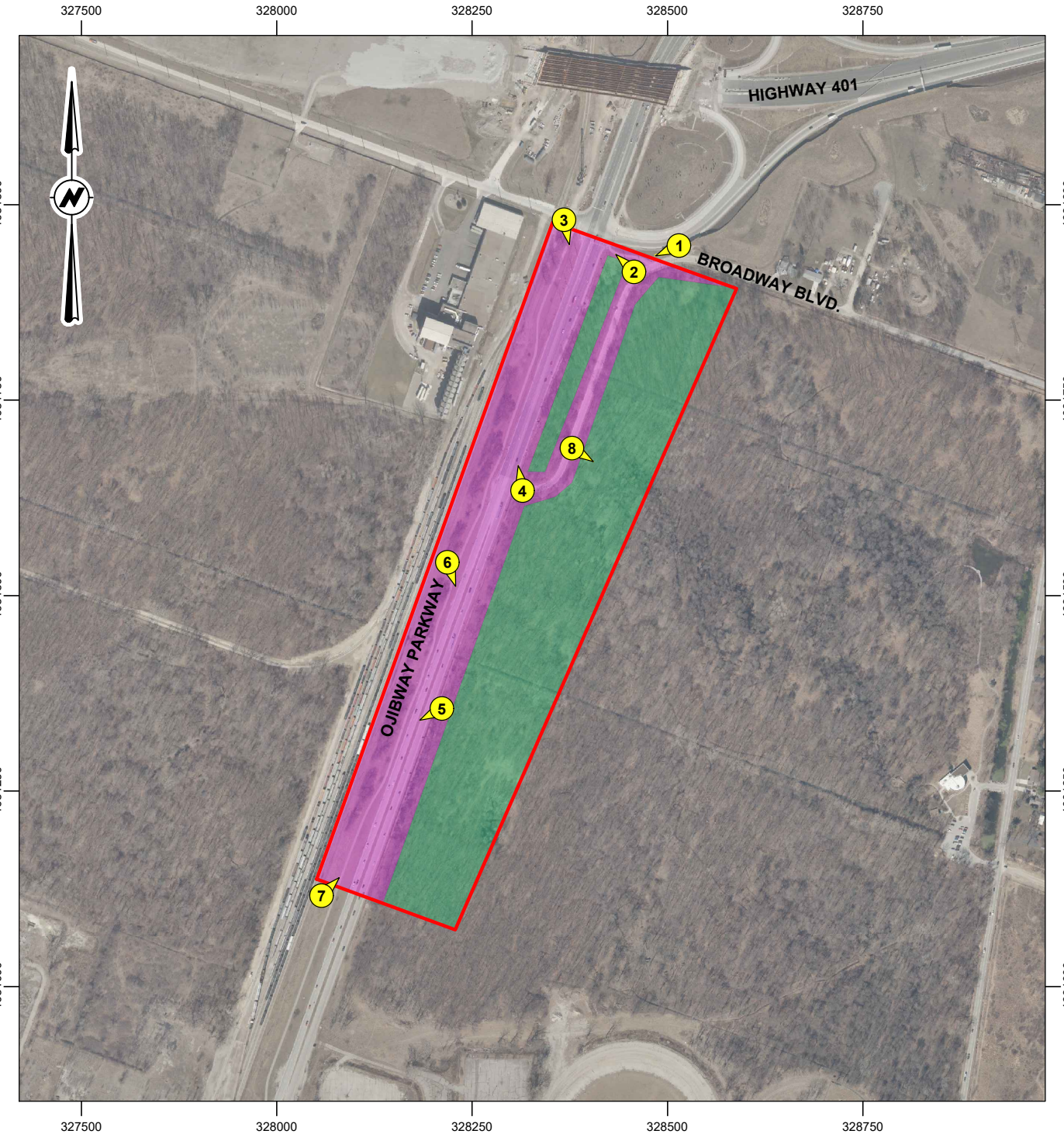

PROJECT:
STAGE 1 ARCHAEOLOGICAL ASSESSMENT
CLASS ENVIRONMENTAL ASSESSMENT FOR THE OJIBWAY PARKWAY WILDLIFE OVERPASS, OJIBWAY PARKWAY SOUTH OF BROADWAY BOULEVARD, IN THE CITY OF WINDSOR, PART OF LOTS 48 TO 55, CONCESSION 1 PETITE CÔTE, TOWNSHIP OF SANDWICH, COUNTY OF ESSEX, ONTARIO

TITLE:
STAGE 1 RESULTS WITH PHOTOGRAPH LOCATIONS AND DIRECTIONS

LEGEND:
- STUDY AREA
- AREA OF ARCHAEOLOGICAL POTENTIAL:
  - UNPLOUGHABLE LAND – TO BE TEST PIT SURVEYED AT 5 m INTERVALS
- AREA OF NO OR LOW ARCHAEOLOGICAL POTENTIAL:
  - DISTURBED: NO FURTHER ASSESSMENT REQUIRED
- 2 PHOTOGRAPH LOCATION, VIEWING DIRECTION, AND PLATE NUMBER

NOTES:
THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS REPORT No. IM20104013.

ALL LOCATIONS ARE APPROXIMATE.

REFERENCES:
2019 AERIAL IMAGE FROM THE COUNTY OF ESSEX INTERACTIVE WEB MAPPING SITE, BY PERMISSION.

0 100 200 300m
SCALE 1:7,500

CLIENT:
CITY OF WINDSOR
PARKS AND FACILITIES OPERATIONS
352450 MCDOUGALL AVENUE
WINDSOR, ONTARIO, N8X 3N6

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201 KING STREET
LONDON, ONTARIO
N6A 1C3
519-681-2400

DWN BY:	CHK'D BY:	DATE:
LMK	KO	AUG. 14, 2020
DATUM: NAD83	PROJECTION: UTM Zone 17	PROJECT No: IM20104013
REV No: 0		FIGURE No: 8

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Appendix B

Photographs

APPENDIX B - PHOTOGRAPHIC RECORD

PROJECT NO. IM20104013

PROJECT Stage 1 Archaeological Assessment

LOCATION Part of Lots 48 to 55, Concession 1 Petite Cote, Township of Sandwich, Essex County

PHOTOGRAPH	1

Description
View of Broadway Boulevard and surrounding disturbance, facing southwest.

PHOTOGRAPH	2

Description
North edge of study area, looking northwest toward Ojibway Parkway. Note utilities and walking trail.

APPENDIX B - PHOTOGRAPHIC RECORD

PROJECT NO. IM20104013

PROJECT Stage 1 Archaeological Assessment

LOCATION Part of Lots 48 to 55, Concession 1 Petite Cote, Township of Sandwich, Essex County

PHOTOGRAPH	3

Description
Northwest corner of study area, showing utilities and ground disturbance, facing southeast.

PHOTOGRAPH	4

Description
Intersection of Ojibway Parkway and Broadway Boulevard, facing northwest. Note paved road and ditch filled with phragmites.

APPENDIX B - PHOTOGRAPHIC RECORD

PROJECT NO. IM20104013

PROJECT Stage 1 Archaeological Assessment

LOCATION Part of Lots 48 to 55, Concession 1 Petite Cote, Township of Sandwich, Essex County

PHOTOGRAPH	5

Description
Study area west of Ojibway Parkway showing ground disturbance and underground utilities, including a 32 inch diameter sewer pipe. Facing southwest. Note Essex Terminal Railway in background.

PHOTOGRAPH	6

Description
View of disturbance along Ojibway parkway, facing southeast. Note paved walking trails and underground utilities as well as undisturbed forested parkland in the background.

APPENDIX B - PHOTOGRAPHIC RECORD

PROJECT NO. IM20104013

PROJECT Stage 1 Archaeological Assessment

LOCATION Part of Lots 48 to 55, Concession 1 Petite Cote, Township of Sandwich, Essex County

PHOTOGRAPH	7

Description
From south end of study area, facing northeast. Note naturalized ditch area to west of walking trail.

PHOTOGRAPH	8

Description
View from Broadway Boulevard, facing southeast to undisturbed forested parkland.

Appendix C

Assessor Qualifications

Assessor Qualifications

Peter Popkin, Ph.D., CAHP, MCIfA – Associate Archaeologist

Dr. Popkin is an Associate Archaeologist at Wood. Peter has over 20 years of professional experience in both consulting and academic archaeology within Canada and internationally. In Ontario he has successfully undertaken consultant archaeology projects triggered by: the Planning Act (subdivisions, site plans, re-zoning, official plan amendments, consent), the Environmental Assessment Act (individual and Class EAs, provincial and federal EAs), the Environmental Protection Act (Renewable Energy Approvals O.Reg 359/09), as well as the Aggregates Resources Act (aggregate pit extensions), and has managed projects under the National Energy Board Act (now the Canadian Energy Regulator Act). Dr. Popkin has lectured in archaeology at York University, the University of Toronto and Wilfrid Laurier University in Ontario, as well as University College London, King's College London, and Birkbeck College, in the UK. Dr. Popkin holds a **Professional Archaeological Licence (P362)** from the MHSTCI, is a Professional Member of the Canadian Association of Heritage Professionals (CAHP) and is a full Member of the Chartered Institute for Archaeologists (MCIfA). Dr. Popkin received his Ph.D. from the Institute of Archaeology, University College London, London, UK (2009).

Barbara Slim, M.A., Associate Archaeologist, Ontario Archaeology Disicpline Lead

Ms. Slim is a professionally licensed archaeologist with over 15 years of experience in the archaeology and environmental consulting industry. Ms. Slim has conducted all aspects of Stage 1 to 4 archaeological assessments for provincial agencies, municipalities, and land developers in support of infrastructure developments, financial real estate transactions, environmental remediation and private developments. As a founding member of the Wood Ontario archaeology team, Ms. Slim has performed every aspect of project execution, from client relations, project design to MHSTCI clearance. Through her project experience, Ms. Slim has gained an in-depth understanding of the Heritage Act and legislations & standards associated with cultural heritage management. Ms. Slim holds a Master's Degree in Anthropology from Trent University and an Honours Bachelor's Degree in Environmental Studies and Anthropology from Trent University. Ms. Slim currently holds a **Professional Archaeology Licence (P348)** issued by the Ministry of Heritage, Sport, Tourism and Culture Industries, is MTO RAQs certified in Archaeology/Heritage and is a member of the Ontario Association of Professional Archaeologists.

Kristy O'Neal, M.A. - Senior Archaeologist

Ms. O'Neal is a Senior Archaeologist at Wood with over 20 years of archaeology consulting experience in Ontario. Ms. O'Neal has supervised a wide variety of Stage 1 through 4 archaeological assessments throughout Ontario, with a focus on both pre-contact and Euro-Canadian settlements. Pre-Contact projects have involved First Nations consultation. Ms. O'Neal has a strong background in cultural material analysis and has extensive experience with large complex stratified Aboriginal sites situated within often compromised urban context. She holds a Master's Degree in Bioarchaeology and a Bachelor of Arts Degree in Anthropology from the University of Western Ontario, where she received a Gold Medal Award. Ms. O'Neal's areas of interest and expertise include the archaeological prehistory and history of southwestern Ontario, with focus on the Middle Woodland period and changes in Aboriginal weapon technology. Ms.

O'Neal holds a **Professional Archaeology Licence** (**P066**) issued by the MHSTCI and is a member of the Ontario Archaeology Society.

Krista Lane, B.A. – Intermediate Archaeologist

Ms. Lane holds a Bachelors Degree in Bioarchaeology and has worked across Ontario as a field archaeologist since 2006. She has conducted numerous Stage 1 to 4 archaeological assessments including background searches, field surveys, archaeological excavations, analysis of archaeological resources, laboratory work, reporting, and monitoring construction projects for public and private development proponents. Ms. Lane is experienced on large scale energy projects (wind, solar, and oil), urban environments, wood lots, parks, and farm fields context archaeological projects. Ms. Lane holds a **Research Archaeology Licence** (**R382** and is a member of the Canadian Archaeological Association as well as the Ontario Archaeological Association.

Appendix D

Limitations

Limitations

1. The work performed in the preparation of this report and the conclusions presented are subject to the following:

   (a) The Standard Terms and Conditions which form a part of our Professional Services Contract;

   (b) The Scope of Services;

   (c) Time and Budgetary limitations as described in our Contract; and,

   (d) The Limitations stated herein.

2. No other warranties or representations, either expressed or implied, are made as to the professional services provided under the terms of our Contract, or the conclusions presented.

3. The conclusions presented in this report were based, in part, on visual observations of the study area. Our conclusions cannot and are not extended to include those portions of the study area which were not reasonably available, in Wood Environment & Infrastructure's opinion, for direct observation.

4. The potential for archaeological resources, and any actual archaeological resources encountered, at the study area were assessed, within the limitations set out above, having due regard for applicable heritage regulations as of the date of the inspection.

5. Services including a background study and fieldwork were performed. Wood Environment & Infrastructure's work, including archival studies and fieldwork, were completed in a professional manner and in accordance with the Ministry of Tourism, Culture and Sport's guidelines. It is possible that unforeseen and undiscovered archaeological resources may be present at the study area.

6. The utilization of Wood Environment & Infrastructure's services during the implementation of any further archaeological work recommended will allow Wood Environment & Infrastructure to observe compliance with the conclusions and recommendations contained in the report. Wood Environment & Infrastructure's involvement will also allow for changes to be made as necessary to suit field conditions as they are encountered.

7. This report is for the sole use of the parties to whom it is addressed unless expressly stated otherwise in the report or contract. Any use which any third party makes of the report, in whole or in part, or any reliance thereon, or decisions made based on any information of conclusions in the report, is the sole responsibility of such third party. Wood Environment & Infrastructure accepts no responsibility whatsoever for damages or loss of any nature or kind suffered by any such third party as a result of actions taken or not taken or decisions made in reliance on the report or anything set out therein.

8. This report is not to be given over to any third-party other than a governmental entity, for any purpose whatsoever without the written permission of Wood Environment & Infrastructure, which shall not be unreasonably withheld.