APPENDIX C:
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Stage 1 Archaeological Assessment: Malden Road Transportation, Public Safety & Urban Design Improvements Class Environmental Assessment Addendum

Parts of Various Lots and Concessions,
Geographic Township of Sandwich West,
now Town of LaSalle, Essex County, Ontario

July 9, 2020

Prepared for:

Town of LaSalle
5950 Malden Road
LaSalle, Ontario N9H 1S4

Prepared by:

Stantec Consulting Ltd
600-171 Queens Avenue
London, Ontario N6A 5J7

Licensee: Parker Dickson, MA
License Number: P256
Project Information Form #: P256-0603-2020
Project Number: 165001141

ORIGINAL REPORT

Table of Contents

LIST OF TABLES

LIST OF FIGURES

Executive Summary

Stantec Consulting Ltd. (Stantec) was retained by the Town of LaSalle and the County of Essex (the Client) to conduct a Stage 1 archaeological assessment for the Malden Road Transportation, Public Safety & Urban Design Improvements Environmental Assessment (EA) Addendum (the Project). The Project will include the re-evaluation of the original proposed recommended solution from the 2009 EA (Dillon *et al.* 2009) in conjunction with the changes that have occurred over the last ten years, including changes in land-use, social-economic conditions, cultural environment, legislation, County Wide Active Transportation Route (CWATS) Masterplan and the Town of LaSalle and Essex County's Official Plans. The archaeology study area for the Project encompasses approximately 10.10 hectares in total, with approximately 7.48 hectares within the municipal road right-of-way (ROW), and approximately 2.62 hectares of non-ROW (public and private land), for portions Malden Road and portions of ancillary roads off of Malden Road, adjacent to parts of various Lots and Concessions, Geographic Township of Sandwich West, now Town of LaSalle, Essex County, Ontario.

The Stage 1 archaeological assessment was completed under Project Information Form number P256-0603-2020 issued to Parker Dickson, MA by the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI). A property inspection of the study area was conducted on January 15, 2020.

The Stage 1 archaeological assessment, involving background research and a property inspection, resulted in the determination that much of the study area, approximately 77.6%, retains low to no archaeological potential as it includes: extensive land disturbance, low and permanently wet areas, and previously assessed areas. In accordance with Section 1.3.2 and Section 7.7.4 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is not required for any portion of the Project's anticipated construction which impacts an area of low to no archaeological potential.**

However, the remaining portion of the study area, approximately 22.4%, retains potential for the identification and documentation of archaeological resources. Thus, in accordance with Section 1.3 and Section 7.7.4 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is required for any portion of the Project's anticipated construction which impacts an area of archaeological potential.**

The MHSTCI is asked to review the results presented and accept this report into the *Ontario Public Register of Archaeological Reports*.

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

Project Personnel

Licensed Archaeologist:	Parker Dickson, MA (P256)
Project Manager:	Kevin Welker, P. Eng., ENV SP
Task Manager:	Darren Kipping, MA (R422)
Licensed Field Director:	Darren Kipping, MA (R422)
Report Writer:	Darren Kipping, MA (R422)
GIS Specialist:	Alexander Brown
Quality Review:	Colin Varley, MA, RPA (P002)
Independent Review:	Parker Dickson, MA (P256)

Acknowledgements

Proponent Contact:	Peter Marra, P. Eng. – Director of Public Works, Town of LaSalle
Ministry of Heritage, Sport, Tourism and Culture Industries:	Robert von Bitter – Archaeological Sites Database Coordinator

1.0 PROJECT CONTEXT

1.1 DEVELOPMENT CONTEXT

Stantec Consulting Ltd. (Stantec) was retained by the Town of LaSalle and the County of Essex (the Client) to conduct a Stage 1 archaeological assessment for the Malden Road Transportation, Public Safety & Urban Design Improvements Environmental Assessment (EA) Addendum (the Project) (Figure 1). The Project will include the re-evaluation of the original proposed recommended solution from the 2009 EA (Dillon *et al.* 2009) in conjunction with the changes that have occurred over the last ten years, including changes in land-use, social-economic conditions, cultural environment, legislation, County Wide Active Transportation Route (CWATS) Masterplan and the Town of LaSalle's and Essex County's Official Plans. Overall, the archaeology study area for the Project comprises 10.10 hectares, and includes approximately 7.48 hectares within the municipal road right-of-way (ROW) of Malden Road and various intersecting roads, and approximately 2.62 hectares of non-ROW lands, adjacent to and including parts of various Lots and Concessions, Geographic Township of Sandwich West, now Town of LaSalle, Essex County, Ontario (Figure 2). The Stage 1 archaeological assessment was completed as part of the Detailed Design and Class EA Study, in accordance with the Municipal Engineers Association Municipal Class EA as a Schedule "C" undertaking under the *Environmental Assessment Act* (Government of Ontario 1990a).

1.1.1 Objectives

In compliance with the provincial standards and guidelines set out in the Ministry of Heritage, Sport, Tourism and Culture Industries' (MHSTCI) 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the objectives of the Stage 1 archaeological assessment are as follows:

- To provide information about the study area's geography, history, previous archaeological fieldwork, and current land conditions;
- To evaluate 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, Stantec 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;
- An examination of the *Ontario Archaeological Sites Database* to determine the presence of known archaeological sites in and around the study area;
- An examination of The City of Windsor's *Archaeological Master Plan Study Report* to determine archaeological potential in the study area; and,
- A property inspection of the study area.

Permission to conduct the Stage 1 visual assessment of the study area was provided by the Town of LaSalle. However, access to private lands for the purposes of the archaeological assessment was not obtained. Thus, photo documentation completed during the Stage 1 visual assessment was completed from the municipal road ROW and public lands.

1.2 HISTORICAL CONTEXT

1.2.1 Post-contact Indigenous Resources

"Contact" is typically used as a chronological benchmark in discussing Indigenous archaeology in Canada and describes the contact between Indigenous and European cultures. The precise moment of contact is a constant matter of discussion. Contact in what is now the province of Ontario is broadly assigned to the 16th century (Loewen and Chapdelaine 2016).

At the turn of the 16th century, the study area is documented to have been occupied by the Western Basin Tradition archaeological culture (see Section 1.3.2). Following the turn of the 17th century, the region of the study area is understood to have been within the territory of the historic Fire Nation, an Algonkian group occupying the western end of Lake Erie. It is argued, however, that the Attiwandaron (Neutral) expanded extensively westward, displacing the Fire Nation (Lennox and Fitzgerald 1990:418-419). It is debated whether the Fire Nation was descendent from the archaeologically described Western Basin Tradition, or if they migrated into the western part of Lake Erie, displacing a previous Indigenous culture (Murphy and Ferris 1990:193-194). Historians understand that the displaced Fire Nation moved across the St. Clair and Detroit Rivers into what is modern-day lower Michigan and their populations are synonymous with the later historic Kickapoo, Miami, Potawatomi, Fox, and Sauk (Heidenreich 1990: Figure 15.1). Bkejwanong (Walpole Island) First Nation oral tradition states that Nations of the Three Fires (a political confederacy constituted of the Potawatomi, Ojibwa, and Ottawa) have occupied the delta of the St. Clair River and the surrounding region continually for thousands of years (Walpole Island First Nation [WIFN] n.d.). In 1649, the Seneca, with the Mohawk, led a campaign into southern Ontario and dispersed the resident populations and the Seneca used the lower Great Lakes basin as a prolific hinterland for beaver hunting (Heidenreich 1978; Trigger 1978:345).

By 1690, Ojibwa-speaking people had begun to displace the Seneca from southern Ontario. The Indigenous economy, since the turn of the 18th century, focused on fishing and the fur trade, supplemented by agriculture and hunting (Konrad 1981; Rogers 1978). The study area falls within the traditional territory of the WIFN, the Aamjiwnaang (Sarnia) First Nation (Aamjiwnaang First Nation), the Wiiwkwedong and Aazhoodena (Kettle Point and Stony Point) First Nation (Lytwyn 2009), and the Deshkaan Ziibing Anishnaabeg (Chippewas of the Thames First Nation). Some populations of Wyandot (an Indigenous population of historically amalgamated Petun and Huron-Wendat individuals) also had moved to the region of Lake St. Clair at the turn of the 18th century and resided with the Three Fires Nations (Tooker 1978:398).

In Essex County, and specifically in the Windsor region, a splinter group of Ottawa settled in the area (Cultural Resource Management Group Limited *et al*. 2005:2-14 to 2-15). Also, the surviving remnants of the Huron and Petun were settling in the Windsor region as the Wyandot, exhibiting continuities with their 16th and 17th century predecessors from the Midland and Blue Mountain regions (Garrad 2014; Steckley 2014). Given the amalgamated nature of the Wyandot people (sometimes one of the contributing Indigenous peoples was recognized over another) the Wyandot were known as Huron in the Windsor region (Garrad 2014:16-54). Therefore, the Wyandot settlement in the Windsor region is commonly referred to as the "Huron Village" and related place names survive in Windsor today, such as Huron Church Road (but also note Wyandotte Street). A 1749 French map of the Detroit River region (Chaussegros de Léry 1752) depicts both the Ottawa and the Huron villages on the waterfront of the Windsor region. The 1749 map identifies the Ottawa village as "B" and the Huron village as "C" north of the study area (see Figure 3).

Despite the dispersal and movement of Indigenous groups throughout southern Ontario during the 17th and 18th centuries, archaeologically they can be characterized by continuity with their pre-contact Indigenous counterparts. These peoples still maintained a Terminal Woodland archaeological culture, albeit with some features of European material culture. While there was cultural and social change occurring due to contact with European immigrants, there was equally a definite persistence of Indigenous socio-cultural practices since these groups were not so profoundly affected by European contact that they left their former lifeways behind (Ferris 2009).

Indigenous peoples and their communities continue to play a large role in the occupation of the study area and its environs. Under British administration in the 19th century, the various Indigenous groups were divided into separate bands. The Anishinaabe included the western Algonquian peoples, among them the Chippewa and the Ottawa. Until the 18th century, the central Algonquian-speaking peoples, including the Potawatomi, were located in the Michigan Peninsula (Blackbird 1887).

Following the American Revolutionary War, Britain focused on the settlement of European immigrants into what became the province of Upper Canada in 1791. To enable widespread settlement, the British government negotiated a series of treaties with the Indigenous peoples. One of the earliest treaties involving lands located in close proximity to the study area was made on May 19, 1790 (Figure 4). Originally identified as the Detroit Treaty, the chiefs of the Ottawa, Chippewa, Potawatomi, and Huron Nations and representatives of the British Crown established a vast tract of land "…from the Detroit River easterly to Catfish Creek and south of the river La Tranche [now Thames River] and Chenail Ecarte [now St. Clair River], and contains Essex County except Anderdon Township and Part of West Sandwich; Kent County except Zone Township, and Gores of Camden and Chatham; Elgin County except Bayham Township and parts of South Dorchester and Malahide…[i]n Middlesex County, Del[a]ware and Westminster Township and part of North Dorchester" (Morris 1943:17). Today, this treaty is identified as Treaty Number 2, illustrated by the letter "C" on Figure 5. A plaque erected by the Historic Sites and Monuments Board of Canada further identifies this treaty as *McKee's Purchase*. A commemorative plaque located in Blenheim Memorial Park in Blenheim, Ontario reads (Brown 2019):

> *In May 1790 Alexander McKee, Deputy Agent of the British Indian Department, and the principal chiefs of the Ottawa, Potawatomi, Chippewa and Wyandot negotiated a treaty whereby the British Crown acquired title to what is now southwestern Ontario. This treaty completed the process begun with Niagara treaties of 1781 and 1784, with the result that most of the Ontario peninsula was soon opened to British and Loyalist settlement.*

In addition to the above, Figure 6 reproduces a map from the *History of the Windsor Border Region* (Lajeunesse 1960) which depicts several Indigenous sites and trails documented in Essex County during the late 18th century. The study area is illustrated east of "Trail F", identified as the River Shore path, now Highway 18. Trail A represents an Indigenous path, depicted running from Wheatly to Sandwich (now, the City of Windsor), identified as Talbot Road. The study area is also illustrated southwest of an Indigenous burial mound (identified as "15" on the map) which was excavated by W.J. Wintermberg for the National Museum of Canada in 1936 (Lajeunesse 1960).

The nature of Indigenous settlement size, population distribution, and material culture shifted as European settlers encroached upon Indigenous territory. However, despite this shift, "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…systems of ideology and thought" (Ferris 2009:114). As a result, Indigenous peoples have left behind archaeological resources throughout the region which show continuity with past peoples, even if they have not been explicitly recorded in Euro-Canadian documentation.

1.2.2 Euro-Canadian Resources

The first French settlers arrived in the Detroit-Windsor area in 1701 when the Sieur De Lamothe Cadillac and roughly 100 military and civilian personnel established Fort Pontchartrain on the Detroit side of the Detroit River (Fuller 1972:6-8). The French settlement remained on the Detroit side until 1748 when the Jesuit mission to the Huron (or Wyandot) was established on the south shore near the foot of the present-day Huron Church Road and the Ambassador Bridge. Fort Pontchartrain surrendered to the British in 1760 and remained under British control until 1796, although it was officially a part of the United States from 1783 onwards.

In 1783, the Township of Sandwich was created from land that had been previously known as the Parish L'Assumption during French rule (Neal 1909:12). The township was named after the English borough Sandwich in Kent County (Gardiner 1899:347). During this period, the settlement continued to grow, but remained predominantly French. The area (now in present-day Windsor) across the river from Fort Pontchartrain (later to become Detroit) was called "Petite côte" and served the agricultural needs of the fort (Archives of Ontario 2014). The street pattern of the City of Windsor still reflects the French method of agricultural land division; for example, the long narrow parcels fronting the river where the "Petite côte" was located (Morrison 1954:3-4). In 1796, the original townsite of Sandwich was established to accommodate new immigrants of both French and British origin from the United States who wished to

remain under British rule following American occupation of Detroit. This constituted the first urban settlement in what is now the City of Windsor and the first significant migration of English-speaking people into the Windsor area (Neal 1909:86-87).

Essex County was originally part of the of the District of Hesse, and in 1792 was renamed the Western District. On January 1, 1800, in the *Act for the Better Division of the Province*, the Townships of Rochester, Mersea, Gosfield, Maidstone, Sandwich, and Malden were created as part of the County of Essex. The townships of Essex County were surveyed by Patrick McNiff, Abraham Iredell, and Thomas Smith (Clarke 2010:60, 70).

As the area began to attract more Euro-Canadian interest, Patrick McNiff was assigned to survey and organize the area into a township, also to be named Sandwich. His survey of the township was completed in 1793. The form of the concessions noted as “Petite côte” were dictated by the land divisions already used by the French farmers in the “Petite côte” area, in what was to become Concession 1 Petite Côte. In fact, on his original township map where he measured the Concession 1 lots, Patrick McNiff notes that “on my measuring the farms in front from No. 1 to No. 154 found their division Lines to run in the very irregular manner they appear on the Plan” (McNiff 1956). Present-day Malden Road was established during the survey of Sandwich Township by Patrick McNiff in 1793. McNiff placed a road allowance between Concessions 1 and 2 of Petite Côte, which ran from just south of the River Canard north to the town plot of Sandwich. Both Concessions 1 and 2 are surveyed in the long narrow French-Canadian style to accommodate the property owners who held land along the Detroit River prior to the completion of McNiff’s survey. The lots in Concessions 1 and 2 are not uniform in size due to the varying sizes of the farms that existed along the Detroit River in Petite Côte. The most accurate map produced of the township at this time was completed by Abraham Iredell in 1797, who resurveyed the area and renumbered the lots from Lot 82 onwards in Concessions 1 to 3 Petite Côte, reproduced here as Figure 7 (Iredell 1797).

Although the road allowance for Malden Road was surveyed, that does not mean the entire roadway was cleared or used as a transportation corridor during the early 19th century. The main north to south roadway in Sandwich West Township was present-day Front Road along the Detroit River (Clarke 1983:79). In general, road conditions in Ontario during the 19th century were treacherous and even the best roads in the province were frequently impassable during certain times of the year (McCalla 1993:132). Road maintenance and building through much of the 19th century relied on statute labour, which tasked settlers with setting aside time each year to clear the road allowance in front of their lot. This meant that unoccupied lots, or lots set aside as a Crown or Clergy reserve, sometimes had an uncleared road allowance, further hampering road conditions (Moorman 1997:71).

The 1815 Royal Navy survey of the Detroit River by Captain W.F.W. Owen, published in 1828 (Owen 1828), depicts a relatively developed township and illustrates various structures/buildings, windmills, and roads/trails focused along the river’s edge (Figure 8). The study area is illustrated east of the structures fronting the river and east of the row of trees which is likely depicting the edge of cleared land. However, the map was created as a nautical chart of the Detroit River and it is hard to determine if the row of trees

is in fact the edge of cleared land or added for aesthetic purposes (Owen 1828). A map of the Western District from 1847 (Billyard and Parr 1847) depicts a more developed township and road system, with the study area illustrated along what is now Malden Road (Figure 9). A Grist Mill is illustrated to the northwest of the study area along Turkey Creek and Talbot Road is depicted as surveyed, roughly following the old "Trail A" from the Lajeunesse 1960 map (see Figure 6).

The township continued to prosper during the 1840s and 1850s. In 1853, the Great Western Railway (GWR) was constructed through the township, with the line terminating at the hamlet of Windsor (Andreae 1997:126). The railway brought increased economic prosperity and in 1854 Windsor was incorporated as a Village. Four years later, Windsor became a town and the village of Sandwich was incorporated as a town. In 1861, the remaining parts of Sandwich Township were divided into Sandwich East Township and Sandwich West Township (Neal 1909:12; Belden and Co. 1881:7). The Census of 1871 listed the population of Sandwich West Township as 2,228. Of that population, 1,606 were of French ancestry, showing that the French presence within the township remained substantial. The Census of 1871 lists that 10,831 acres of land in Sandwich West Township were under cultivation. Of that acreage, 7,413 were under crops, 2,779 under pasture, and 639 were used for gardens and orchards. The main crops grown in the township included spring wheat, winter wheat, oats, buckwheat, corn, and potatoes (Census of Canada 1871).

The 1877 *Map of Essex County, Ontario* (Walling 1877) lists various landowners, illustrates major structures near the study area, depicts that Malden Road was opened and ran roughly along its present alignment, and provides a general idea of the township as it would have appeared in the mid-to-late 19th century (Figure 10). While the study area is largely situated within modern municipal ROWs, it is adjacent to and includes small portions of various Lots and Concessions in Sandwich West Township. Table 1 summarizes illustrated features from the 1877 map in close proximity to the study area.

Table 1: Illustrated Features on 1877 Map of Sandwich West Township within Close Proximity to the Study Area

Lot	Concession	Landowner / Tennant	Structure
41	1 Petite Côte	J. Jolley	Unknown, obscured by "E" print
40	1 Petite Côte	S. Berkhiaum B. Corillou L. Corillou E. Wilkinson R. Simms	Unknown, obscured by "E" print
39	1 Petite Côte	J.B. Dufour	Unknown, obscured by "E" print
38	1 Petite Côte	Geo. Wilson	Unknown, obscured by "E" print
37	1 Petite Côte	Sorell M. Moore Reuben Noble	Unknown, obscured by "E" print None None
36	1 Petite Côte	Noi Reaume	None

Lot	Concession	Landowner / Tennant	Structure
		Pat Reaume A. Reaume	
35	1 Petite Côte	C. Smith R.P. Blonger	Three structures depicted on the east portion of the lot, adjacent to Malden Road
37	2 Petite Côte	Geo. Wells W. Wells	Two structures depicted on the western portion of the lot, adjacent to Malden Road
36	2 Petite Côte	O. Fletcher	Two structures depicted on the western portion of the lot, adjacent to Malden Road
34	2 Petite Côte	E. Tourangit A. Tourangit	None
33	2 Petite Côte	A. Tourangit	None
32	2 Petite Côte	Stephen Moore	One structure depicted on the western portion of the lot, adjacent to Malden Road
31	2 Petite Côte		
30	2 Petite Côte	M. Mahoney	None
29	2 Petite Côte	Pat Connor	None
28	2 Petite Côte	J. White O. Buckner	None
27	2 Petite Côte	S. Bouffard	None
26	2 Petite Côte	L. Lafferty	None
25	2 Petite Côte	Jos. Durocher	None
24	2 Petite Côte	Baptist Lapoint	None
23	2 Petite Côte	Maynard	One structure depicted on the western portion of the lot, adjacent to Malden Road
22	2 Petite Côte		None

The 1881 Essex Supplement in the *Illustrated Atlas of the Dominion of Canada* (Belden & Co. 1881) also depicts the township as it would have generally appeared in the mid-to-late 19th century (Figure 11). However, fewer structures and landowners are depicted than the 1877 map, since on this map only subscribers to the atlas were identified. The Essex County historical atlas of 1881 documents a total population of 36,258 for Essex County at that time (Belden & Co. 1881:8). Of the total population, 25,303 settlers lived in rural settings, while 10,955 lived in urban settings (Belden & Co. 1881:8). Table 2 summarizes illustrated features from the 1881 map in close proximity to the study area.

Table 2: Illustrated Features on 1881 Map of Sandwich West Township within Close Proximity to the Study Area

Lot	Concession	Landowner	Structure
32	2 Petite Côte	T. Drouillard	One structure depicted on the north western portion of the lot, adjacent to Malden Road
31	2 Petite Côte		
30	2 Petite Côte		
21	2 Petite Côte	Luke Biaber	None

In discussing 19th century historical mapping it must be remembered that many historical county atlases were produced primarily to identify factories, offices, residences, and landholdings of subscribers and were funded by subscription fees. Landowners who did not subscribe were not always listed on the maps (Caston 1997:100). As such, structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984). Further, review of historic mapping has inherent accuracy difficulties due to potential error in georeferencing. Georeferencing is conducted by assigning spatial coordinates to fixed locations and using these points to spatially reference the remainder of the map. Due to changes in "fixed" locations over time (e.g., road intersections, road alignments, water course, etc.), errors/difficulties of scale and the relative idealism of the historic cartography, historic maps may not translate accurately into real space points. This may provide obvious inconsistencies during the historic map review.

1.2.3 Aerial Photography

By the mid-20th century, Malden Road had become one of the three main north-south roads within Sandwich West Township and the Town of LaSalle, along with King's Highway 18 (Front Road) and King's Highway 3. However, unlike King's Highway 18 to the west and King's Highway 3 to the east, Malden Road was not a provincially maintained road. Aerial photography from 1954 shows Malden Road lined with farmsteads and residences backing onto agricultural areas (Figure 12). Between 1955 and 1974, the study area began to be further subdivided for suburban residential development.

1.3 ARCHAEOLOGICAL CONTEXT

1.3.1 The Natural Environment

The study area is situated in the St. Clair Clay Plains physiographic region, as identified by Chapman and Putnam (1984). This region is described as:

> *Adjoining Lake St. Clair in Essex and Kent County Counties and the St. Clair River in Lambton County are extensive clay plains covering 2,270 square miles. The region is one of little relief, lying between 575 and 700 feet a.s.l., except for the moraine at Ridgetown and Blenheim which rises 50 to 500 feet higher….Glacial Lake Whittlesey, which deeply covered all of these lands, and Lake Warren which subsequently covered nearly the whole area, failed to leave deep stratified beds of sediment on the underlying clay till except around Chatham, between*

> *Blenheim and the Rondeau marshes, and in a few other smaller areas. Most of Lambton and Essex Counties, therefore, are essentially till plains smoothed by shallow deposits of lacustrine clay which settled in the depressions while the knolls were being lowered by wave action.*
>
> (Chapman and Putnam 1984:147)

The closest potable water source is an unnamed tributary of Turkey Creek, which runs east to west through the northern portion of the study area, although its natural drainage pattern has been anthropogenically altered. Turkey Creek proper is located approximately 740 metres west-northwest of the study area. Additionally, the Detroit River is approximately 3,700 metres west of the study area. Use of the Detroit River has evolved over time from being a transportation route used by early Indigenous inhabitants and Euro-Canadian explorers and settlers, to an industrial power source to support the early mills of the area, to a commercial shipping route, and finally to a water course used for recreational purposes throughout the 20th and 21st centuries.

The study area consists of Bottom Land, Berrien Sand, Colwood Fine Sandy Loam, and Toledo Silt Loam. Bottom Land refers to areas adjacent to stream courses and are subject to flooding. Berrien Sand is stone free brown sand over yellow brown sand and then mottled sand and clay. Berrien sand is well-suited for agriculture, especially high value cash crops. Colwood Fine Sandy Loam is poorly drained grey fine sandy loam over mottled grey loam and is only well suited to agriculture when artificially drained. Toledo Silt Loam consists of dark grey to black clay and silt loam over mottled heavy grey clay. Toledo Silt Loam has poor drainage and would only be satisfactory for agriculture with proper drainage improvements (Richards *et al*. 1949:29-55).

1.3.2 Pre-contact Indigenous Resources

This portion of southwestern Ontario has been occupied by Indigenous peoples since the retreat of the Wisconsin glacier approximately 11,000 years ago. Much of what is understood about the lifeways of Indigenous peoples is derived from archaeological evidence and ethnographic analogy. In Ontario, Indigenous culture prior to the period of contact with European peoples has been distinguished into cultural periods based on observed changes in material culture. These cultural periods are largely based in observed changes in formal lithic tools, and separated into the Early Paleo-Indian, Late Paleo-Indian, Early Archaic, Middle Archaic, and Late Archaic periods. Following the advent of ceramic technology in the Indigenous archaeological record, cultural periods are separated into the Early Woodland, Middle Woodland, and Late Woodland periods, based primarily on observed changes in formal ceramic decoration. It should be noted that these cultural periods do not necessarily represent specific cultural identities but are a useful paradigm for understanding changes in Indigenous culture through time. The current understanding of Indigenous archaeological culture is summarized in Table 3, based on Ellis and Ferris (1990). The provided time periods are based on the “Common Era” calendar notation system: Before Common Era (BCE) and Common Era (CE).

Table 3: Cultural Chronology for Essex County

Period	Characteristics	Time Period	Comments
Early Paleo-Indian	Fluted Projectiles	9,000 – 8,400 BCE	spruce parkland/caribou hunters
Late Paleo-Indian	Hi-Lo Projectiles	8,400 – 8,000 BCE	smaller but more numerous sites
Early Archaic	Kirk and Bifurcate Base Points	8,000 – 6,000 BCE	slow population growth
Middle Archaic	Brewerton-like Points	6,000 – 2,500 BCE	environment similar to present
Late Archaic	Narrow Point	2,500 – 1,800 BCE	increasing site size
	Broad Point	1,800 – 1,500 BCE	large chipped lithic tools
	Small Point	1,500 – 1,100 BCE	introduction of bow hunting
Terminal Archaic	Hind Points	1,100 – 950 BCE	emergence of true cemeteries
Early Woodland	Meadowood Points	950 – 400 BCE	introduction of pottery
Middle Woodland	Couture Corded Pottery	400 BCE – 500 CE	increased sedentism
	Riviere au Vase Phase	500 – 800 CE	seasonal hunting and gathering
Late Woodland	Younge Phase	800 – 1200 CE	incipient agriculture
	Springwells Phase	1200 – 1400 CE	agricultural villages
	Wolf Phase	1400 – 1550 CE	earth worked villages, warfare
Contact Indigenous	Various Algonkian and Iroquoian Groups	1600 – 1875 CE	early written records and treaties
Historic	French/Euro-Canadian	1749 CE – present	European settlement

Between 9000 and 8000 BCE, Indigenous populations were sustained by hunting, fishing and foraging and lived a relatively mobile existence across an extensive geographic territory. Despite these wide territories, social ties were maintained between groups. One method in particular was through gift exchange, evident through exotic lithic material documented on many sites (Ellis 2013:35-40).

By approximately 8000 BCE, evidence exists and becomes more common for the production of ground-stone tools such as axes, chisels and adzes. These tools themselves are believed to be indicative specifically of woodworking. This evidence can be extended to indicate an increase in craft production and arguably craft specialization. This latter statement is also supported by evidence, dating to approximately 7000 BCE, of ornately carved stone objects which would be laborious to produce and have explicit aesthetic qualities (Ellis 2013:41). This is indirectly indicative of changes in social organization which permitted individuals to devote time and effort to craft specialization. Since 8000 BCE, the Great Lakes basin experienced a low-water phase, with shorelines significantly below modern lake levels (Stewart 2013: Figure 1.1.C). It is presumed that the majority of human settlements would have been focused along these former shorelines. At approximately 6500 BCE the climate had warmed considerably since the recession of the glaciers and the environment had grown more similar to the present day. By approximately 4500 BCE, evidence exists from southern Ontario for the utilization of native copper (naturally occurring pure copper metal) (Ellis 2013:42). The known origin of this material along the north

shore of Lake Superior indicates the existence of extensive exchange networks across the Great Lakes basin.

At approximately 3500 BCE, the isostatic rebound of the North American plate following the melt of the Laurentide glacier had reached a point which significantly affected the watershed of the Great Lakes basin. Prior to this, the Upper Great Lakes had drained down the Ottawa Valley via the French-Mattawa river valleys. Following this shift in the watershed, the drainage course of the Great Lakes basin had changed to its present course. This also prompted a significant increase in water-level to approximately modern levels (with a brief high-water period); this change in water levels is believed to have occurred catastrophically (Stewart 2013:28-30). This change in geography coincides with the earliest evidence for cemeteries (Ellis 2013:46). By 2500 BCE, the earliest evidence exists for the construction of fishing weirs (Ellis *et al*. 1990: Figure 4.1). Construction of these weirs would have required a large amount of communal labour and are indicative of the continued development of social organization and communal identity. The large-scale procurement of food at a single location also has significant implications for permanence of settlement within the landscape. This period is also marked by further population increase and by 1500 BCE evidence exists for substantial permanent structures (Ellis 2013:45-46).

By approximately 950 BCE, the earliest evidence exists for populations using ceramics. Populations are understood to have continued to seasonally exploit natural resources. This advent of ceramic technology correlated, however, with the intensive exploitation of seed foods such as goosefoot and knotweed as well as mast such as nuts (Williamson 2013:48). The use of ceramics implies changes in the social organization of food storage as well as in the cooking of food and changes in diet. Fish also continued to be an important facet of the economy at this time. Evidence continues to exist for the expansion of social organization (including hierarchy), group identity, ceremonialism (particularly in burial), interregional exchange throughout the Great Lakes basin and beyond, and craft production (Williamson 2013:48-54).

By approximately 550 CE, evidence emergences for the introduction of maize into southern Ontario. This crop would have initially only supplemented the Indigenous diet and economy (Birch and Williamson 2013:13-14). Maize-based agriculture gradually became more important to societies and by approximately 900 CE permanent communities emerge which are primarily focused on agriculture and the storage of crops, with satellite locations oriented toward the procurement of other resources such as hunting, fishing and foraging. By approximately 1250 CE, evidence exists for the common cultivation of historic Indigenous cultigens, including maize, beans, squash, sunflower and tobacco. The cultural affiliation of populations within the region of the study area at this time period is debated, whether they may have spoken a form of Iroquoian language or Algonquian (Murphy and Ferris 1990). The extant archaeological record demonstrates many cultural traits similar to historic Indigenous nations (Williamson 2013:55).

By the Late Woodland period there was a distinctive cultural occupation in southwestern Ontario, including Essex, Kent, and Lambton counties. The primary Late Woodland occupants of the Windsor area were populations described by archaeologists as belonging to the Western Basin Tradition. Murphy and Ferris (1990:189) indicate that these people had ties with populations in southeastern Michigan and

northwestern Ohio and represent an *in situ* cultural development from the earlier Middle Woodland groups. The Western Basin Tradition seems to have been centered in the territory comprising the eastern drainage basin of Lake Erie, Lake St. Clair, and the southern end of Lake Huron. The Western Basin Tradition is divided into four phases based on differences in settlement and subsistence strategies and pottery attributes. By the time of increased European interaction in the last half of the 16th century and early 17th century, there were no Western Basin Tradition sites in the Essex County area, their inhabitants having moved west into Michigan (Ferris 2009:32-33).

1.3.3 Registered Archaeological Sites and Surveys

In Canada, archaeological sites are registered within the Borden system, a national grid system designed by Charles Borden in 1952 (Borden 1952). The grid covers the entire surface area of Canada and is divided into major units containing an area that is two degrees in latitude by four degrees in longitude. Major units are designated by upper case letters. Each major unit is subdivided into 288 basic unit areas, each containing an area of 10 minutes in latitude by 10 minutes in longitude. The width of basic units reduces as one moves north due to the curvature of the earth. In southern Ontario, each basic unit measures approximately 13.5 kilometres east-west by 18.5 kilometres north-south. In northern Ontario, adjacent to Hudson Bay, each basic unit measures approximately 10.2 kilometres east-west by 18.5 kilometres north-south. Basic units are designated by lower case letters. Individual sites are assigned a unique, sequential number as they are registered. These sequential numbers are issued by the MHSTCI who maintain the *Ontario Archaeological Sites Database*. The study area under review is within Borden Block AbHs.

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 1990b). The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to 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.

An examination of the *Ontario Archaeological Sites Database* has shown that there are no archaeological sites registered within a one-kilometre radius of the study area (Government of Ontario 2020a). A query of the *Ontario Public Register of Archaeological Reports* (Government of Ontario 2020b) has identified four archaeological assessments which may document work within 50 metres of the study area. A summary of previous archaeological assessments is presented in Table 4.

Table 4: Archaeological Assessments within 50 metres of the Study Area

Company	Report	Project Information Form (PIF) Number	Year
Fisher Archaeological Consulting	*Stage 1 Archaeological Background Research, Laurier Parkway Realignment Project, LaSalle, Essex County*	P042-0181-2009	2009
Fisher Archaeological Consulting	*Stage 2 Archaeological Assessment of Laurier Parkway – Malden Road to Howard Avenue, LaSalle, Essex County, Ontario*	P042-0195-2009	2010
Cultural Resource Management Group Limited (CRM Group)	*Stage 1: Archaeological Assessment Report Former Klingbyle Property Subdivision Part of Lot 31, Concession 2, Geographic Township of Sandwich West, Town of LaSalle, Essex County, Ontario*	P109-0090-2019	2019a
CRM Group	*Stage 1: Archaeological Assessment Report Tuscany II Subdivision Part of Lot 26, Concession 2, Geographic Township of Sandwich West, Town of LaSalle, Essex County, Ontario*	P109-0094-2019	2019b

In 2009, Fisher Archaeological Consulting (Fisher) conducted a Stage 1 archaeological assessment for a proposed re-alignment of Laurier Parkway (Fisher 2009). Fisher (2009) assessed a 30-metre wide ROW of approximately 5.5 kilometres between Malden Road and Huron Church Line in the Town of LaSalle. A portion of Fisher's (2009) Stage 1 study area overlaps with the current Project and was determined to retain archaeological potential (see Figure 13.2). Fisher (2009) determined that portions of the proposed ROW retained low to no archaeological potential due to previous disturbance from ditches, landscaping, paved roads, nearby buildings, and parking lots. However, Fisher (2009) identified that large portions of the proposed ROW retained archaeological potential and recommended Stage 2 archaeological assessment.

Following the Stage 1 archaeological assessment (Fisher 2009), Fisher conducted a Stage 2 archaeological assessment for the proposed re-alignment of Laurier Parkway on the areas identified as retaining archaeological potential (Fisher 2010). A portion of Fisher's (2010) Stage 2 study area overlaps with the study area for the current Project (see Figure 13.2). No archaeological resources were identified during the Stage 2 archaeological assessment completed by Fisher (2010).

In 2019, CRM Group conducted a Stage 1 archaeological assessment for a proposed subdivision on a part of Lot 31, Concession 2 Petite Côte in the Town of LaSalle, adjacent to the study area for the current Project (CRM Group 2019a). CRM Group determined that the entire study area retained archaeological potential due to proximity to primary water sources and early historical transportation routes and recommended Stage 2 archaeological assessment (CRM Group 2019a).

Also in 2019, CRM Group conducted a Stage 1 archaeological assessment for a proposed subdivision on a part of Lot 27, Concession 2 Petite Côte in the Town of LaSalle, adjacent to the study area for the current Project (CRM Group 2019b). CRM Group determined that the entire study area retained

archaeological potential due to proximity to primary water sources and early historical transportation routes and recommended Stage 2 archaeological assessment (CRM Group 2019b).

1.3.4 City of Windsor's Archaeological Master Plan

The City of Windsor's *Archaeological Master Plan Study Report* (CRM Group *et al*. 2005) discusses the City of Windsor's and the northern portion of the Town of LaSalle's archaeological context in general. As of 2005, only 23 archaeological sites had been registered within the city limits or within the immediate vicinity (CRM Group *et al*. 2005). However, the authors of the archaeological management plan recognized that a number of poorly documented sites exist and there are many sites still to be documented, especially since the majority of the archaeological studies discussed in the archaeological management plan maps are concentrated along the Detroit River or in southwest Windsor (CRM Group *et al*. 2005: 3-1 to 3-23). Additionally, a number of newly identified archaeological sites have been registered within the city limits since the time of the study report. The study area for the Project is just south of the limits of the archaeological master plan's archaeological potential mapping (CRM Group *et al*. 2005:Figure 4). The northern portions of Malden Road (north of Todd Lane) are depicted on the archaeological potential mapping and identify Malden Road itself as having low archaeological potential but the ancillary roads and areas east and west of Malden Road as having high archaeological potential (CRM Group *et al*. 2005:Figure 4).

1.3.5 Existing Conditions

The Stage 1 archaeological assessment of the study area was conducted under PIF number P256-0603-2020 issued to Parker Dickson, MA by the MHSTCI. The study area for the Project comprises approximately 10.10 hectares, with approximately 7.48 hectares within municipal road ROWs and approximately 2.62 hectares of non-ROW lands, located adjacent to and within parts of various Lots and Concessions, Geographic Township of Sandwich West, now Town of LaSalle, Essex County, Ontario. The study area comprises the existing municipal road ROW for Malden Road, non-ROW, and parts of ancillary roads off of Malden Road, including the existing paved road, paved and gravel road shoulders, engineered foreslope and backslope for existing road and ditching, manicured lawns within the ROW, gravel and paved driveways/laneways, buried utilities and municipal infrastructure, and low and permanently wet areas.

2.0 FIELD METHODS

Initial background research compiled the available information concerning known and/or potential archaeological resources within the study area. A property inspection was conducted on January 15, 2020 under PIF P256-0603-2020 issued to Parker Dickson, MA by the MSTCI in accordance with Section 1.2 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The property inspection involved examining the entirety of the study area to identify the presence or absence of any features of archaeological potential. However, specific access to private lands was not obtained for the property inspection. As such, photo documentation completed during the Stage 1 visual assessment was completed from the municipal road ROW and public lands. During the property inspection the weather was sunny and cool, and visibility of land features was excellent. At no time were field, lighting, or weather conditions detrimental to the identification of features of archaeological potential.

The photography from the property inspection conducted on January 15, 2020 is presented in Section 7.1 and confirm that the requirements for a Stage 1 property inspection were met, as per Section 1.2 and Section 7.7.2 Standard 1 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Figures 13.1 to 13.4 illustrate photo locations and the archaeological potential of the study area.

As noted elsewhere, the study area involves a stretch of Malden Road extending from just north of an unnamed tributary of Turkey Creek in the north to approximately 55 metres south of the Meagan Drive and Malden Road intersection in the south and includes the existing road, its existing shoulders, and municipal ROW. Portions of numerous ancillary roads off of Malden Road and their municipal ROW are also included as part of the study area. Approximately 76.6% of the study area consists of modern disturbances from the existing paved roads, paved and gravel road shoulders, engineered foreslope and backslope for existing roads and ditching, gravel and paved driveways/laneways, buried utilities and municipal infrastructure (e.g., sewers, pipelines, telecommunication cables, etc.), as well as disturbance from existing commercial and residential frontages. Photos 1 to 48 illustrate typical examples of disturbance identified throughout the study area.

A small portion of the study area consists of low and permanently wet areas (approximately 0.3%). Photos 49 to 51 illustrate typical examples of low and permanently wet areas.

Additionally, a portion of the study area consists of manicured lawn within the municipal road ROW and non-ROW lands (approximately 22.4%). Photos 52 to 63 illustrate typical examples of manicured lawn.

The remaining portion of the study area (approximately 0.7%), consists of an area which was previously assessed (Fisher 2009, 2010). This area was not photo documented.

3.0 ANALYSIS AND CONCLUSIONS

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Stantec applied archaeological potential criteria commonly used by the MHSTCI (Government of Ontario 2011) to determine areas of archaeological potential within the region under study. 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. However, it is worth noting that extensive land disturbance can eradicate archaeological potential (Government of Ontario 2011).

Potable water is the single most important resource for any extended human occupation or settlement and since water sources in Ontario have remained relatively stable over time, proximity to drinkable water is regarded as a useful index for the evaluation of archaeological site potential. In fact, distance to water is one of the most commonly used variables for predictive modeling of archaeological site locations. Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and, 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.

As discussed above, distance to water is an essential factor in archaeological potential modeling. 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 site location and type to varying degrees. The MHSTCI 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.

As stated in Section 1.3.1, the closest primary water source is an unnamed tributary of Turkey Creek which runs east to west through the northern portion of the study area. Turkey Creek proper is located approximately 740 metres west-northwest of the study area and the Detroit River is approximately 3,700 metres west of the study area. Ancient and/or relic tributaries of other primary and secondary water sources may have existed but are not identifiable today and are not indicated on historic mapping. Further examination of the study area's natural environment identified soil conditions suitable for Indigenous and Euro-Canadian agriculture. There are no registered Indigenous archaeological sites within one kilometre of the study area.

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* or property that local histories or informants have identified with possible historical events, activities or occupations. As noted earlier, Malden Road was originally laid out during the survey of Sandwich Township by Patrick McNiff in 1793. Historical mapping demonstrates that the study area follows the early road with many farmsteads illustrated as fronting the study area on the 1877 map of the township (see Figure 10). Much of the established road and agricultural settlement from that time is still visible today. There are no registered Euro-Canadian archaeological sites within one kilometre of the study area.

The City of Windsor's *Archaeological Master Plan Study Report* (CRM Group *et al*. 2005) does not cover the study area for the Project. However, the northern portions of Malden Road (north of Todd Lane) are depicted on the archaeological potential mapping and identify Malden Road itself as having low archaeological potential but the ancillary roads and areas east and west of Malden Road as having high archaeological potential (CRM Group *et al*. 2005:Figure 4).

Considering these factors, the study area retains potential for the identification of Indigenous and Euro-Canadian archaeological resources. However, as noted above, extensive and deep land alteration can eradicate archaeological potential. The Stage 1 property inspection has determined that a large portion of the study area has been subject to extensive land disturbance. This portion retains low to no potential for archaeological resources. Large portions of the municipal road ROW for Malden Road include modern disturbance such as the existing paved roads, paved and gravel road shoulders, engineered foreslope and backslope for existing roads and ditching, gravel and paved driveways/laneways, buried utilities and municipal infrastructure (e.g., sewers, pipelines, telecommunication cables, etc.), as well as disturbance from existing commercial and residential frontages. Many of these disturbances extend into the ROW on either side of the road and also include additional disturbance from existing construction activities and grading. Low to no archaeological potential has also been determined for low and permanently wet areas within the study area. A small portion of the study area has been subject to previous archaeological assessment (Fisher 2009; 2010) and retains no further cultural heritage value or interest. Thus, these areas retain low to no archaeological potential. Figures 13.1 to 13.4 illustrate the areas of low to no archaeological potential, including previous modern disturbance, low and permanently wet areas, and the portion of the study area previously assessed.

The Stage 1 property inspection has also determined that areas of archaeological potential remain within the study area. These areas include manicured lawn within the municipal road ROW and non-ROW lands not visually identified to be previously disturbed from any of the above-mentioned land disturbances. Thus, these areas are considered to retain archaeological potential. Figures 13.1 to 13.4 illustrate the areas that retain archaeological potential.

In summary, while the entire study area was determined to retain archaeological potential based on historical documentation, background research, and natural topographic landforms, the Stage 1 property inspection has determined that most of the study area, approximately 77.6%, retains low to no

archaeological potential as it includes: areas of extensive land disturbance, low and permanently wet areas, and previously assessed areas. However, the remaining portion of the study area, approximately 22.4%, retains potential for the identification and documentation of archaeological resources. The results of the Stage 1 assessment are illustrated on Figures 13.1 to 13.4.

4.0 RECOMMENDATIONS

The Stage 1 archaeological assessment, involving background research and a property inspection, resulted in the determination that much of the study area, approximately 77.6%, retains low to no archaeological potential as it includes: extensive land disturbance, low and permanently wet areas, and previously assessed areas. In accordance with Section 1.3.2 and Section 7.7.4 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is not required for any portion of the Project's anticipated construction which impacts an area of low to no archaeological potential (Figures 13.1 to 13.4).**

However, the remaining portion of the study area, approximately 22.4%, retains potential for the identification and documentation of archaeological resources. Thus, in accordance with Section 1.3 and Section 7.7.4 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is required for any portion of the Project's anticipated construction which impacts an area of archaeological potential (Figures 13.1 to 13.4).**

The objective of the Stage 2 archaeological assessment will be to document archaeological resources within the study area and to determine whether these archaeological resources require further assessment. The Stage 2 archaeological assessment of the study area may consist of a combination of pedestrian survey and test pit survey. The pedestrian survey of agricultural fields and accessible lands will entail the systematic walking of open ploughed fields at five metre intervals as outlined in Section 2.1.1 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Areas to be subjected to test pit survey that are within manicured lawn, or areas that cannot be ploughed will be assessed according to Section 2.1.2 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). If the archaeological field team judges any lands to be low and wet, steeply sloped, or disturbed during the course of the Stage 2 field work, those areas will not require physical survey, but will be photographically documented instead in accordance with Section 2.1 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

The MHSTCI is asked to review the results presented and to accept this report into the *Ontario Public Register of Archaeological Reports*.

5.0 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 O.18 (Government of Ontario 1990c). 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* (Government of Ontario 1990c) 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 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* (Government of Ontario 1990c).

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* (Government of Ontario 1990c). 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* (Government of Ontario 1990c).

The *Funeral, Burial and Cremation Services Act,* 2002, S.O. 2002, c.33 (Government of Ontario 2002), requires that any person discovering or having knowledge of a burial site shall immediately notify the police or coroner. It is recommended that the Registrar of Cemeteries at the Ministry of Government and Consumer Services is also immediately notified.

Archaeological sites recommended for further archaeological fieldwork remain subject to Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990c) and may not be altered, or have artifacts removed, except by a person holding an archaeological license.

6.0 BIBLIOGRAPHY AND SOURCES

Andreae, Christopher. 1997. *Lines of Country: An Atlas of Railway and Waterway History in Canada.* Erin: Boston Mills Press.

Archives of Ontario. 2014. Detroit. In *French Ontario in the 17th and 18th Centuries*. Electronic document: http://www.archives.gov.on.ca/en/explore/online/franco_ontarian/detroit.aspx. Last accessed January 9, 2020.

Belden, H. & Co. 1881. Essex Supplement. In *Illustrated Atlas of the Dominion of Canada.* Toronto: H. Belden and Co.

Billyard, William and Richard Parr. 1847. *Map of the Western District in the Province of Canada*. Toronto: Scobie and Balfour.

Birch, Jennifer and Ronald F. Williamson. 2013. *The Mantle Site: An Archaeological History of an Ancestral Huron Wendat Community*. Lanham: Altamira Press.

Blackbird, Andrew J. 1887. *History of the Ottawa and Chippewa Indians of Michigan*. Ypsilanti: The Ypsilantian Job Print House. Electronic document: http://eco.canadiana.ca/view/oocihm.00429#oocihm.00429/3?r=0&s=1&_suid=142558197786609233669627186604. Last accessed January 9, 2020.

Borden, Charles E. 1952. A Uniform Site Designation Scheme for Canada. *Anthropology in British Columbia* 3:44-48.

Brown, Alan L. 2019. *McKee's Purchase / L'achat de McKee*. Erected by the Historic Sites and Monuments Board of Canada. Electronic document: http://ontarioplaques.com/Plaques/Plaque_ChathamKent29.html. Last accessed January 9, 2020.

Caston, Wayne A. 1997. Evolution in the Mapping of Southern Ontario and Wellington County. *Wellington County History* 10:91-106.

Census of Canada. 1871. *Census of Canada 1871.* Ottawa: I.B. Taylor.

Chapman, L.J. and D.F. Putnam. 1984. *The Physiography of Southern Ontario*. Third edition. Ontario Geological Survey. Special Volume 2. Toronto: Ontario Ministry of Natural Resources.

Chaussegros de Léry, Gaspard-Joseph. 1752. *Carte de La Rivière du Detroit*. Paris: Department of Marine.

Clarke, John. 1983. McKee, Thomas. In *Dictionary of Canadian Biography, Volume 5.* Toronto: University of Toronto.

Clarke, John. 2010. *The Ordinary People of Essex: Environment, Culture, and Economy on the Frontier of Upper Canada.* Montreal and Kingston: McGill-Queen's University Press.

Cultural Resource Management Group Limited. 2019a. *Stage 1: Archaeological Assessment Report Former Klingbyle Property Subdivision Part of Lot 31, Concession 2, Geographic Township of Sandwich West, Town of LaSalle, Essex County, Ontario.* Report on file, Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto PIF #: P109-0090-2019.

Cultural Resource Management Group Limited. 2019b. *Stage 1: Archaeological Assessment Report Tuscany II Subdivision Part of Lot 26, Concession 2, Geographic Township of Sandwich West, Town of LaSalle, Essex County, Ontario.* Report on file, Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto PIF #: P109-0094-2019.

Cultural Resource Management Group Limited, Fisher Archaeological Consulting, Historic Horizon Inc., and Dillon Consulting Limited. 2005. *Archaeological Master Plan Study Report for the City of Windsor*. Report submitted to the City of Windsor, Windsor.

Dillon Consulting Ltd., Envision, and Victor Ford and Associates. 2009. *Malden Road Transportation, Public Safety & Urban Design Improvements Class Environmental Assessment*. On file with the Corporation of the Town of LaSalle.

Ellis, Christopher J. 2013. Before Pottery: Paleoindian and Archaic Hunter-Gatherers. In *Before Ontario: The Archaeology of a Province, e*dited by Marit K. Munson and Susan M. Jamieson, pp. 35-47. Montreal and Kingston: McGill-Queen's University Press.

Ellis, Chris J. and Neal Ferris (editors). 1990. *The Archaeology of Southern Ontario to A.D. 1650.* Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5.

Ellis, Chris J., Ian T. Kenyon, and Michael W. Spence. 1990. The Archaic. In Ellis and Ferris 1990, pp. 65-124.

Ferris, Neal. 2009. *The Archaeology of Native-Lived Colonialism: Challenging History in the Great Lakes*. Tucson: University of Arizona Press.

Fisher Archaeological Consulting. 2009. *Stage 1 Archaeological Background Research, Laurier Parkway Realignment Project, LaSalle, Essex County*. Report on file, Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto PIF #: P042-0181-2009.

Fisher Archaeological Consulting. 2010. *Stage 2 Archaeological Assessment of Laurier Parkway – Malden Road to Howard Avenue, LaSalle, Essex County, Ontario*. Report on file, Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto PIF #: P042-0195-2009.

Fuller, R.M. 1972. *Windsor Heritage.* Windsor: Herald Press Limited.

Gardiner, Herbert F. 1899. *Nothing but Names: An Inquiry Into the Origin of the Names of the Counties and Townships of Ontario*. Toronto: George N. Morang and Company, Limited.

Garrad, Charles. 2014. *Petun to Wyandot: The Ontario Petun from the Sixteenth Century*. Edited by Jean-Luc Pilon and William Fox. Mercury Series, Archaeology Paper 174. Ottawa: University of Ottawa Press and Canadian Museum of History.

Gentilcore, Louis R. and C. Grant Head. 1984. *Ontario's History in Maps*. Toronto: University of Toronto Press.

Government of Ontario. 1990a. *Environmental Assessment Act,* R.S.O. 1990, c. E.18. Last amendment: 2010, c. 16, Sched. 7, s. 1. Electronic Document: https://www.ontario.ca/laws/statute/90e18. Last accessed January 15, 2020.

Government of Ontario. 1990b. *Freedom of Information and Protection of Privacy Act*, R.S.O. 1990, c. F.31. Electronic document: https://www.ontario.ca/laws/statute/90f31. Last accessed January 15, 2020.

Government of Ontario. 1990c. *Ontario Heritage Act*, R.S.O. 1990, CHAPTER O.18. Electronic document: https://www.ontario.ca/laws/statute/90o18. Last accessed January 15, 2020.

Government of Ontario. 2002. *Funeral, Burial and Cremation Services Act, 2002,* S.O. 2002, c. 33. Electronic document: https://www.ontario.ca/laws/statute/02f33. Last accessed January 15, 2020.

Government of Ontario. 2011. *Standards and Guidelines for Consultant Archaeologists*. Toronto: Ministry of Heritage, Sport, Tourism and Culture Industries.

Government of Ontario 2020a. *Ontario Archaeological Sites Database*. Electronic database. Last accessed January 15, 2020.

Government of Ontario 2020b. *Ontario Public Register of Archaeological Reports*. Electronic database. Last accessed January 15, 2020.

Heidenreich, Conrad E. 1978. Huron. In *Handbook of North American Indians. Volume 15, Northeast*, edited by Bruce G. Trigger, pp. 368-388. Washington: Smithsonian Institution Press.

Heidenreich, Conrad E. 1990. History of the St. Lawrence-Great Lakes Area to A.D. 1650. In Ellis and Ferris 1990, pp.475-492.

Iredell, Abraham. 1797. *Sandwich*. Map A36. Map on file with the Ministry of Natural Resources Crown Land Survey Records Office, Peterborough.

Konrad, Victor. 1981. An Iroquois Frontier: The North Shore of Lake Ontario during the Late Seventeenth Century. *Journal of Historical Geography* 7(2):129-144.

Lajeunesse, Ernest. 1960. *The Windsor Border Region: Canada's Southernmost Frontier.* Toronto: University of Toronto Press.

Lennox, Paul A. and William R. Fitzgerald. 1990. The Culture History and Archaeology of the Neutral Iroquoians. In Ellis and Ferris 1990, pp. 405-456.

Loewen, Brad and Claude Chapdelaine (editors). 2016. *Contact in the 16th Century: Networks among Fishers, Foragers and Farmers*. Mercury Series Archaeology Paper 176. Ottawa: University of Ottawa Press.

Lytwyn, Victor P. 2009. *Walpole Island First Nation: Traditional Ecological Knowledge Study: Dawn Gateway Project*. Walpole Island First Nation: Walpole Island Heritage Centre.

McCalla, Douglas. 1993. *Planting the Province: The Economic History of Upper Canada,1784-1870*. Toronto: University of Toronto Press.

McNiff, Patrick. 1956. *Patrick McNiff's Plan of the Settlements at Detroit, 1796*. Ann Arbor: University of Michigan Press.

Morris, J.L. 1943. *Indians of Ontario*. 1964 reprint. Toronto: Department of Lands and Forests.

Moorman, David. 1997. *The First Business of Government: The Land Granting Admiration of Upper Canada.* Ottawa: University of Ottawa.

Morrison, Neil F. 1954. *Garden Gateway to Canada: One Hundred Years of Windsor and Essex County*. Toronto: Ryerson Press.

Murphy, Carl and Neil Ferris. 1990. The Late Woodland Western Basin Tradition in Southwestern Ontario. In Ellis and Ferris 1990, pp. 189-278.

Neal, Frederick. 1909. *The Township of Sandwich, Past and Present*. Windsor: The Record Printing Co.

Owen, W.F.W.. 1828. *A Survey of the River Detroit: From Lake Erie to Lake St. Clair by Capt. W. F. W. Owen & Assistants in 1815*. London: J. & C. Sculpt.

Richards, N.R., A.G. Caldwell, and F.F, Morwick. 1949. *Soil Survey of Essex County*. Report No.11 of the Ontario Soils Survey. Guelph: Experimental Farms Service, Dominion Department of Agriculture and the Ontario Agricultural College.

Rogers, Edward S. 1978. Southeastern Ojibwa. In *Handbook of North American Indians, Volume 15 Northeast*. Edited by Bruce G. Trigger, pp. 760-771. Washington: Smithsonian Institution Press.

Steckley, John. 2014. *The Eighteenth Century Wyandot: A Clan-Based Study*. Waterloo: Wilfrid Laurier University Press.

Stewart, Andrew M. 2013. Water and Land. In *Before Ontario: The Archaeology of a Province,* edited by Marit K. Munson and Susan M. Jamieson, pp. 24-34. Montreal and Kingston: McGill-Queen's University Press.

Tooker, Elisabeth. 1978. Wyandot. In *Handbook of North American Indians. Volume 15, Northeast*, edited by Bruce G. Trigger, pp.418-441. Washington: Smithsonian Institution Press.

Trigger, Bruce G. 1978. Early Iroquoian Contacts with Europeans. In *Handbook of North American Indians*. *Volume 15, Northeast*, edited by Bruce G. Trigger, pp. 344-356. Washington: Smithsonian Institution Press.

Walling, H.F. 1877. *Map of Essex County, Ontario*. Toronto: R.M. Tackabury.

Williamson, Ronald F. 2013. The Woodland Period, 900 BCE to 1700 CE. In *Before Ontario: The Archaeology of a Province,* edited by Marit K. Munson and Susan M. Jamieson, pp. 48-61. Montreal and Kingston: McGill-Queen's University Press.

7.0 IMAGES

7.1 PHOTOGRAPHS

Photo 1: Previously disturbed - buried and above-ground infrastructure, facing north

Photo 2: Previously disturbed - road, road shoulder, buried and above-ground infrastructure, facing north

Photo 3: Previously disturbed - road, buried and above-ground infrastructure, facing west-northwest

Photo 4: Previously disturbed - road, above-ground infrastructure, ditching, facing north

Photo 5: Previously disturbed - sidewalk, road, buried and above-ground infrastructure, facing west

Photo 6: Previously disturbed - road and sidewalk, facing west

Photo 7: Previously disturbed - road, above-ground infrastructure, and ditching, facing north

Photo 8: Previously disturbed - buried and above-ground infrastructure, facing northeast

Photo 9: Previously disturbed - road, sidewalk, and buried and above-ground infrastructure, facing east

Photo 10: Previously disturbed - buried and above-ground infrastructure, facing east

Photo 11: Previously disturbed - road, ditching, and above-ground infrastructure, facing west

Photo 12: Previously disturbed - road and ditching, facing west

Photo 13: Previously disturbed - road, ditching, and above-ground infrastructure, facing west

Photo 14: Previously disturbed – road, ditching, and gravel laneway, facing west

Photo 15: Previously disturbed - road, facing east

Photo 16: Previously disturbed - road, facing west

Photo 17: Previously disturbed – ditching, gravel laneway, and garage construction, facing northwest

Photo 18: Previously disturbed – road, paved laneway, sidewalk, and buried and above-ground infrastructure, facing east-southeast

Photo 19: Previously disturbed – road, ditching, buried and above-ground infrastructure, facing east-southeast

Photo 20: Previously disturbed – road, ditching, gravel laneway, and buried and above-ground infrastructure, facing south

Photo 21: Previously disturbed – road, ditching, and buried and above-ground infrastructure, facing west

Photo 22: Previously disturbed - ditching, facing west-northwest

Photo 23: Previously disturbed – road, gravel ROW, ditching, and buried and above-ground infrastructure, facing north

Photo 24: Previously disturbed – road, sidewalk, paved entranceway, and buried and above-ground infrastructure, facing north

Photo 25: Previously disturbed – road, sidewalk, and buried and above-ground infrastructure, facing north

Photo 26: Previously disturbed – road, paved shoulder, paved entranceway, and buried and above-ground infrastructure, facing north

Photo 27: Previously disturbed – road, paved entranceway, ditching, and buried and above-ground infrastructure, facing east-southeast

Photo 28: Previously disturbed – sidewalk, and buried and above-ground infrastructure, facing east-southeast

Photo 29: Previously disturbed – paved entranceway, and buried and above ground infrastructure, facing south

Photo 30: Previously disturbed – road, commercial entranceway, and buried and above-ground infrastructure, facing south

Photo 31: Previously disturbed – road, and buried infrastructure, facing east-southeast

Photo 32: Previously disturbed – road, gravel shoulder, paved entranceway, and buried and above-ground infrastructure, facing north

Photo 33: Previously disturbed – road, paved entranceway, and buried and above-ground infrastructure, facing east-southeast

Photo 34: Previously disturbed, - road, ditching, and buried and above-ground infrastructure, facing west

Photo 35: Previously disturbed road and ditching, facing east-northeast

Photo 36: Previously disturbed – road, paved shoulder, and buried and above-ground infrastructure, facing south

Photo 37: Previously disturbed – road, ditching, and buried infrastructure, facing west

Photo 38: Previously disturbed – road, gravel shoulder, buried and above-ground infrastructure, and grading, facing south

Photo 39: Previously disturbed – buried and above-ground infrastructure, facing west-northwest

Photo 40: Previously disturbed – road, sidewalk, and buried and above-ground infrastructure, facing south

Photo 41: Previously disturbed – buried and above-ground infrastructure, facing north-northeast

Photo 42: Previously disturbed – road, buried and above-ground infrastructure, and ditching, facing west

Photo 43: Previously disturbed – construction, and buried and above-ground infrastructure, facing south

Photo 44: Previously disturbed – road, sidewalk, and buried and above-ground infrastructure, facing north

Photo 45: Previously disturbed – buried and above-ground infrastructure, facing east-southeast

Photo 46: Previously disturbed – road, and buried infrastructure, facing west-southwest

Photo 47: Previously disturbed – road, and buried and above-ground infrastructure, facing north

Photo 48: Previously disturbed – road, sidewalk, and buried and above-ground infrastructure, facing south

Photo 49: Low and permanently wet, facing east

Photo 50: Low and permanently wet, facing west-northwest

Photo 51: Low and permanently wet, facing east-southeast

Photo 52: Area retaining archaeological potential, facing northeast

Photo 53: Area retaining archaeological potential, facing north

Photo 54: Area retaining archaeological potential, facing north-northwest

Photo 55: Area retaining archaeological potential, facing east

Photo 56: Area retaining archaeological potential, facing northwest

Photo 57: Area retaining archaeological potential, facing southeast

Photo 58: Area retaining archaeological potential, facing northeast

Photo 59: Area retaining archaeological potential – manicured lawn east of sidewalk and south of buried infrastructure, facing northeast

Photo 60: Area retaining archaeological potential, facing northeast

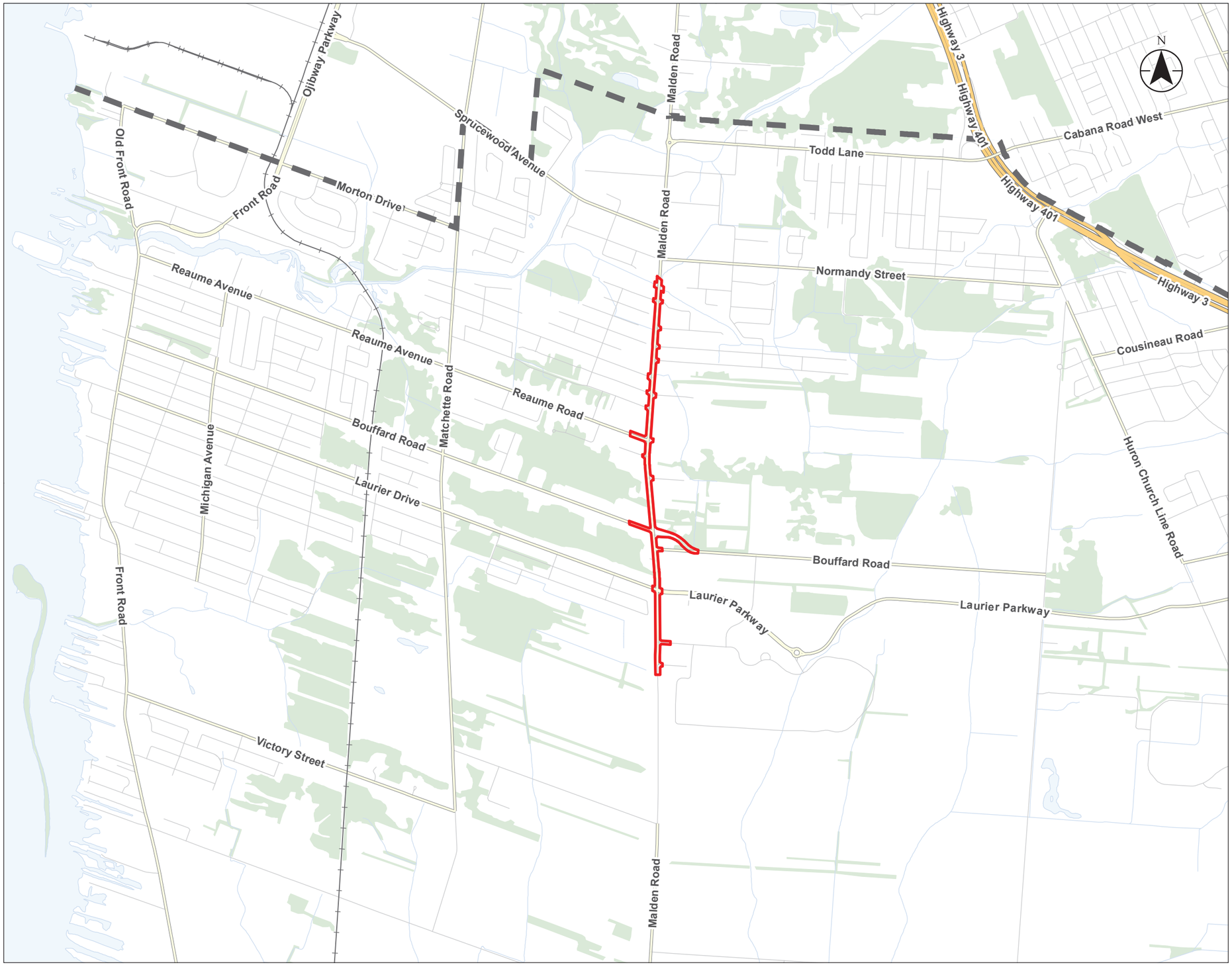
Photo 61: Area retaining archaeological potential, facing northwest

Photo 62: Area retaining archaeological potential, facing southeast

Photo 63: Area retaining archaeological potential, facing southwest

8.0 MAPS

General maps of the study area will follow on succeeding pages.



Legend

- Study Area
- Wooded Area
- Waterbody
- Watercourse
- Municipal Limit

Transportation:

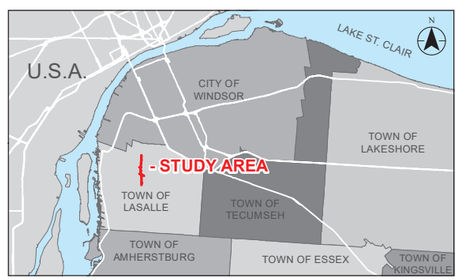
- Highway
- Major Road
- Local Road
- Railway

0 500 1,000 1,500 Meters

1:25,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 CSRS UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.
3. Orthoimagery © First Base Solutions, 2018. Imagery Date, 2019.



Project Location
Essex County

165001141 REVA
Prepared by ASB on 2020-01-20
Independent Review by PD on 2020-01-20

Client/Project
Town of LaSalle
Stage 1 Archaeological Assessment
Malden Road, LaSalle Ontario

Figure No.
1

Title
Location of the Project

Stantec

LaSalle

Legend

Study Area

0 50 100 150 Meters

1:2,500 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 CSRS UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.
3. Orthoimagery © First Base Solutions, 2018. Imagery Date, 2019.

Project Location
Essex County

165001141 REVA
Prepared by ASB on 2020-01-20
Independent Review by PD on 2020-01-20

Client/Project
Town of LaSalle
Stage 1 Archaeological Assessment
Malden Road, LaSalle Ontario

Figure No.
2.1

Title
Location of Study Area

Stantec

LaSalle

Legend

Study Area

0 50 100 150 Meters

1:2,500 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 CSRS UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.
3. Orthoimagery © First Base Solutions, 2018. Imagery Date, 2019.

Project Location
Essex County

165001141 REVA
Prepared by ASB on 2020-01-20
Independent Review by PD on 2020-01-20

Client/Project
Town of LaSalle
Stage 1 Archaeological Assessment
Malden Road, LaSalle Ontario

Figure No.
2.2

Title
Location of Study Area

Stantec

LaSalle

Legend

Study Area

0 50 100 150 Meters

1:2,500 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 CSRS UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.
3. Orthoimagery © First Base Solutions, 2018. Imagery Date, 2019.

Project Location
Essex County

165001141 REVA
Prepared by ASB on 2020-01-20
Independent Review by PD on 2020-01-20

Client/Project
Town of LaSalle
Stage 1 Archaeological Assessment
Malden Road, LaSalle Ontario

Figure No.
2.3

Title
Location of Study Area

Stantec

Legend

Study Area

0 50 100 150 Meters

1:2,500 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 CSRS UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.
3. Orthoimagery © First Base Solutions, 2018. Imagery Date, 2019.

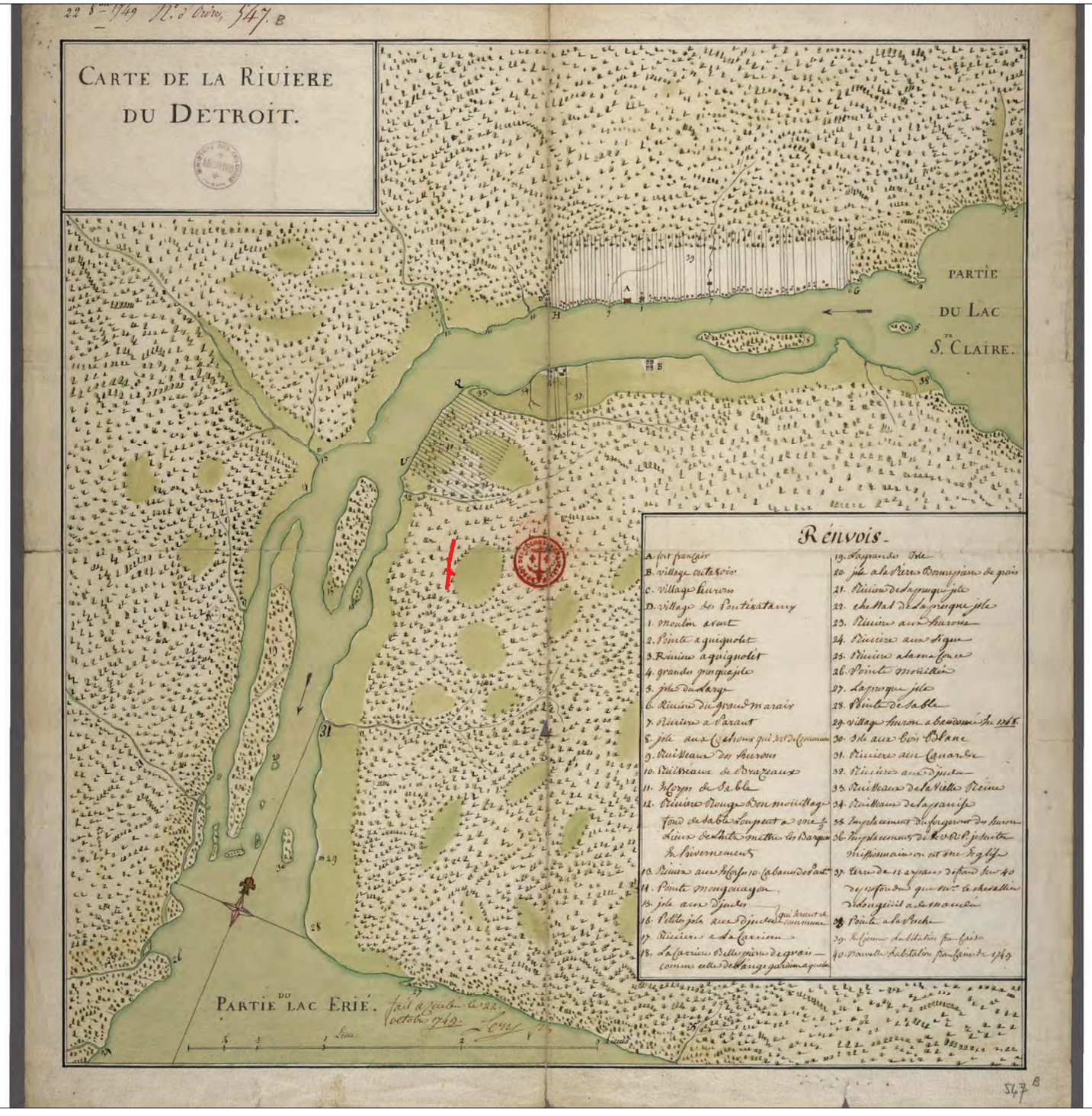
Project Location
Essex County

165001141 REVA
Prepared by ASB on 2020-01-20
Independent Review by PD on 2020-01-20

Client/Project
Town of LaSalle
Stage 1 Archaeological Assessment
Malden Road, LaSalle Ontario

Figure No.
2.4

Title
Location of Study Area



N

Stantec

Legend

Study Area - Approximate Location

Notes

1. Historical information not to scale
2. Source: Chaussegros de Lery, Gaspar-Joseph. 1752. Carte de La Riviere du Detroit depuis de le Lac Erie jusques au Lac S. Claire. Department of Marine, Paris.

Project Location
Essex County

165001141 REVA
Prepared by ASB on 2020-01-30
Independent Review by PD on 2020-01-30

Client/Project
Town of LaSalle
Stage 1 Archaeological Assessment
Malden Road, LaSalle Ontario

Figure No.
3

Title
The 1749 Map of the Detroit River

Stantec

LaSalle

Legend

Study Area - Approximate Location

Notes

1. Historical information not to scale
2. Source: Government of Canda. n.d.a. Map of Treaty Areas in Upper Canada. Ottawa: Department of Indian Affairs. Survey Branch.

Project Location
Essex County

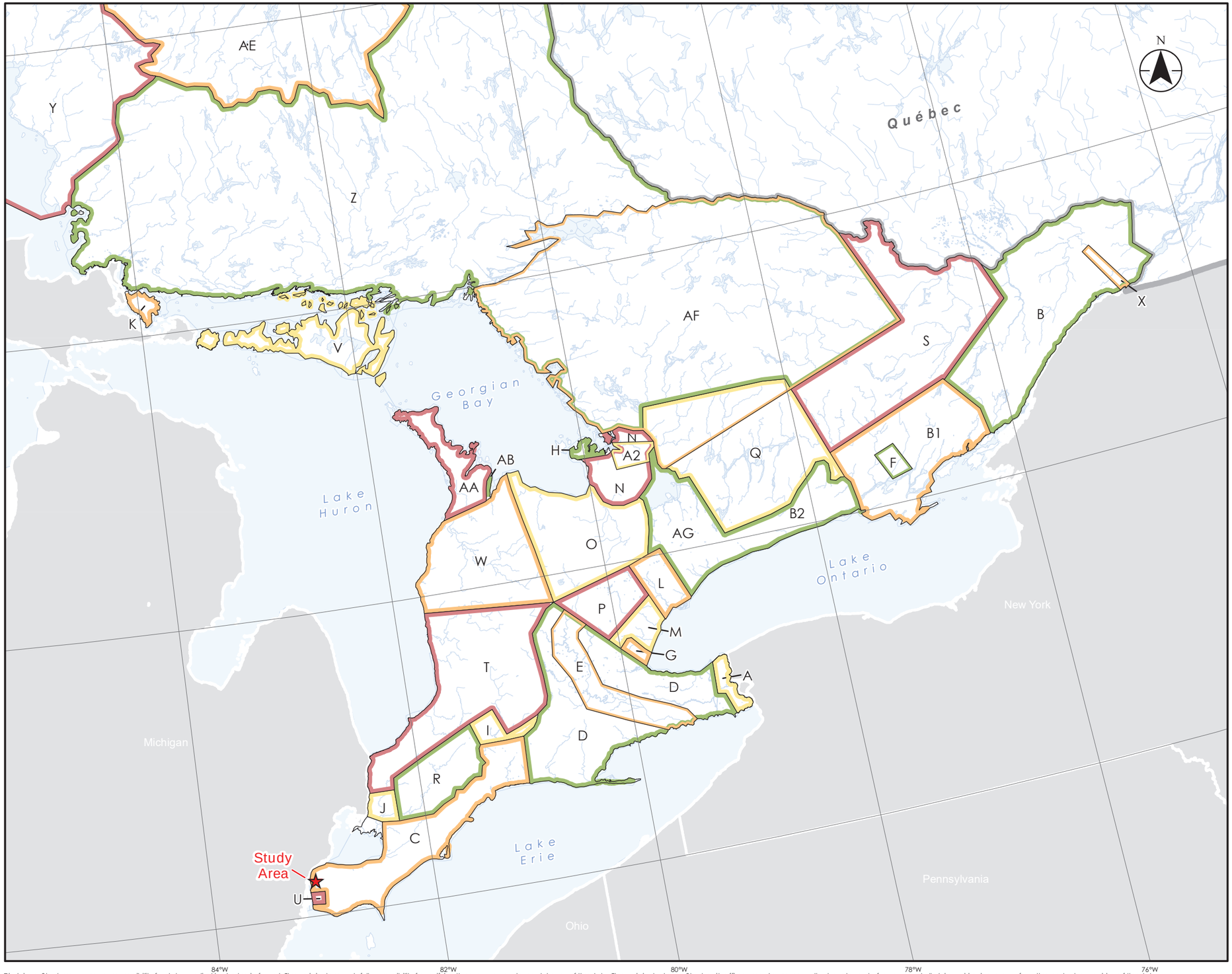
165001141 REVA
Prepared by ASB on 2020-01-21
Independent Review by PD on 2020-01-21

Client/Project
Town of LaSalle
Stage 1 Archaeological Assessment
Malden Road, LaSalle Ontario

Figure No.
4

Title
Map of the Treaty Areas in Upper Canada

\\CA0217-PPFSS01\work_group\01650\active\165001141\planning\GIS\MXD\Archaeology\Stage1\165001141_Arch_St1_4_UpperCanadaTreaties.mxd Revised: 2020-01-21 By: albrown



Stantec

LaSalle

Legend

- Waterbody
- Study Area

A	Treaty No. 381, May 9th, 1781 (Mississauga and Chippewa)
AA	Treaty No. 72, October 30th, 1854 (Chippewa)
AB	Treaty No. 82, February 9th, 1857 (Chippewa)
AE	Treaty No. 9, James Bay 1905, 1906 (Ojibway and Cree)
AF	Williams Treaty, October 31st and November 15th, 1923 (Chippewa and Mississauga)
AG	Williams Treaty, October 31st, 1923 (Chippewa)
A2	John Collins' Purchase, 1785 (Chippewa)
B	Crawford's Purchase, October 9th, 1783 (Algonquin and Iroquois)
B1	Crawford's Purchase, October 9th, 1783 (Mississauga)
B2	Crawford's Purchase, 1783, 1787, 1788 (Mississauga)
C	Treaty No. 2, May 19th, 1790 (Odawa, Chippewa, Pottawatomi, and Huron)
D	Treaty No. 3, December 2nd, 1792 (Mississauga)
E	Haldimand Tract: from the Crown to the Mohawk, 1793
F	Tyendinaga: from the Crown to the Mohawk, 1793
G	Treaty No. 3 3/4: from the Crown to Joseph Brant, October 24th, 1795
H	Treaty No. 5, May 22nd, 1798 (Chippewa)
I	Treaty No. 6, September 7th, 1796 (Chippewa)
J	Treaty No. 7, September 7th, 1796 (Chippewa)
K	Treaty No. 11, June 30th, 1798 (Chippewa)
L	Treaty No. 13, August 1st, 1805 (Mississauga)
M	Treaty No. 13A, August 2nd, 1805 (Mississauga)
N	Treaty No. 16, November 18th, 1815 (Chippewa)
O	Treaty No. 18, October 17th, 1818 (Chippewa)
P	Treaty No. 19, October 28th 1818 (Chippewa)
Q	Treaty No. 20, November 5th, 1818 (Chippewa)
R	Treaty No. 21, March 9th, 1819 (Chippewa)
S	Treaty No. 27, May 31st, 1819 (Mississauga)
T	Treaty No. 27½, April 25th, 1825 (Ojibwa and Chippewa)
U	Treaty No. 35, August 13th, 1833 (Wyandot or Huron)
V	Treaty No. 45, August 9th, 1836 (Chippewa and Odawa, "For All Indians To Reside Thereon")
W	Treaty No. 45½, August 9th, 1836 (Saugeen)
X	Treaty No. 57, June 1st, 1847 (Iroquois of St. Regis)
Y	Treaty No. 60, Robinson, Superior, September 7th, 1850 (Ojibwa)
Z	Treaty No. 61, Robinson, Huron, September 9th, 1850 (Ojibwa)

0 50 100 150 Km

1:3,000,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 Statistics Canada Lambert
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.
3. Treaty boundaries adapted from Morris 1943 (1964 reprint). For cartographic representation only.

Project Location
Essex County

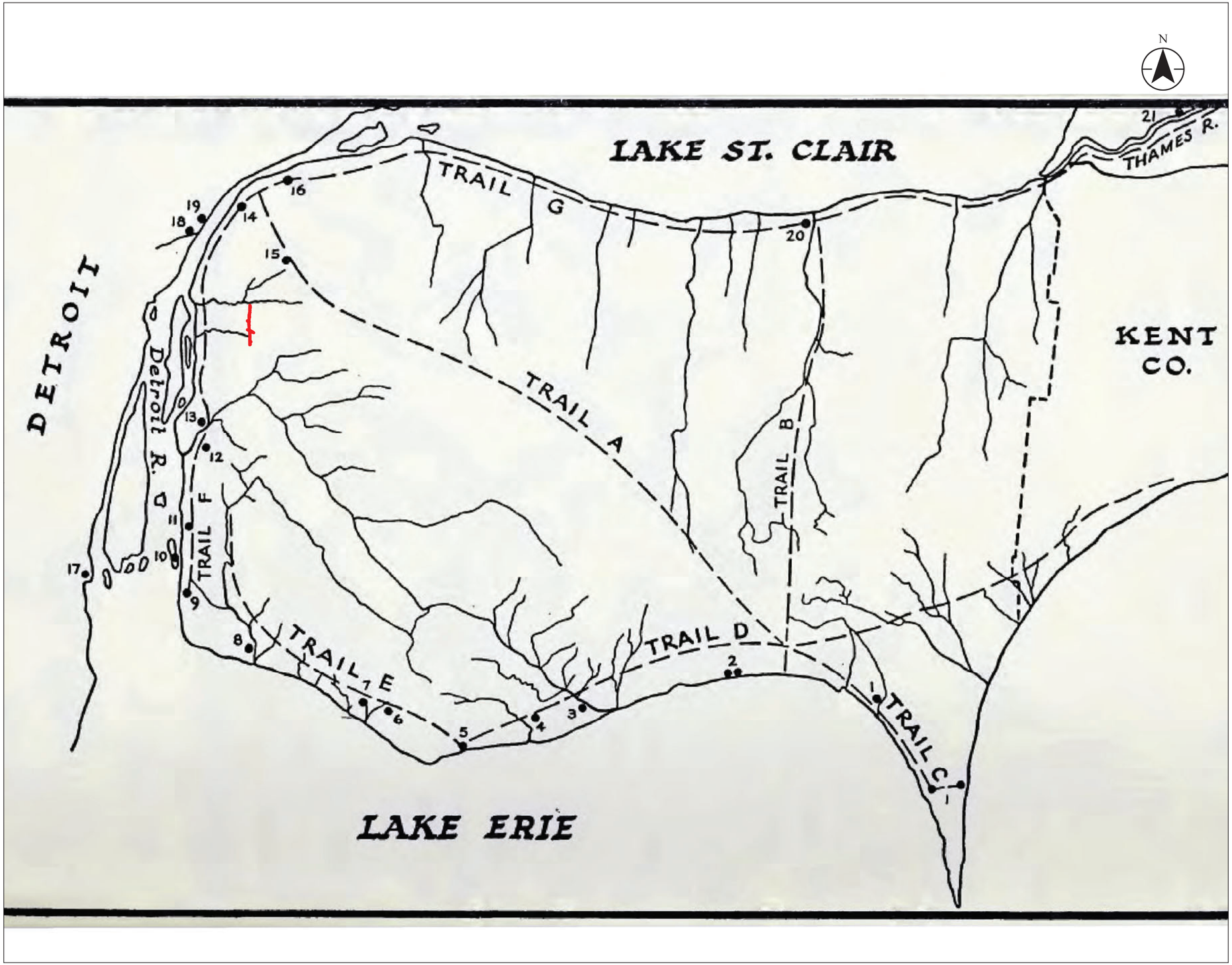
165001141 REVA
Prepared by AB on 2020-01-20
Independent Review by PD on 2020-01-20

Client/Project
Town of LaSalle
Stage 1 Archaeological Assessment
Malden Road, LaSalle Ontario

Figure No.
5

Title
Treaties and Purchases (Adapted from Morris 1943)

\\CA0217-PFPS01\work_group\01650\active\165001141\planning\GIS\MXD\Archaeology\Stage1\165001141_Arch_S1-5_Treaties.mxd Revised: 2020-01-20 By: dbrown



Stantec

Legend

Study Area - Approximate Location

Notes

1. Historical information not to scale
2. Source: Lajeunesse, Ernest J. 1960. The Windsor Border Region: Canada's Southernmost Frontier. The Champlain Society. Toronto: University of Toronto Press.

Project Location
Essex County

165001141 REVA
Prepared by ASB on 2020-01-21
Independent Review by PD on 2020-01-21

Client/Project
Town of LaSalle
Stage 1 Archaeological Assessment
Malden Road, LaSalle Ontario

Figure No.
6

Title
Documented Indigenous Activity in Essex County

Stantec

Legend

Study Area - Approximate Location

Notes

1. Historical information not to scale
2. Source: Iredell, Abraham. 1797. Sandwich. Unpublished map, on file with the Ministry of Natural Resources Crown Land Survey Records Office, Peterborough, Ontario.

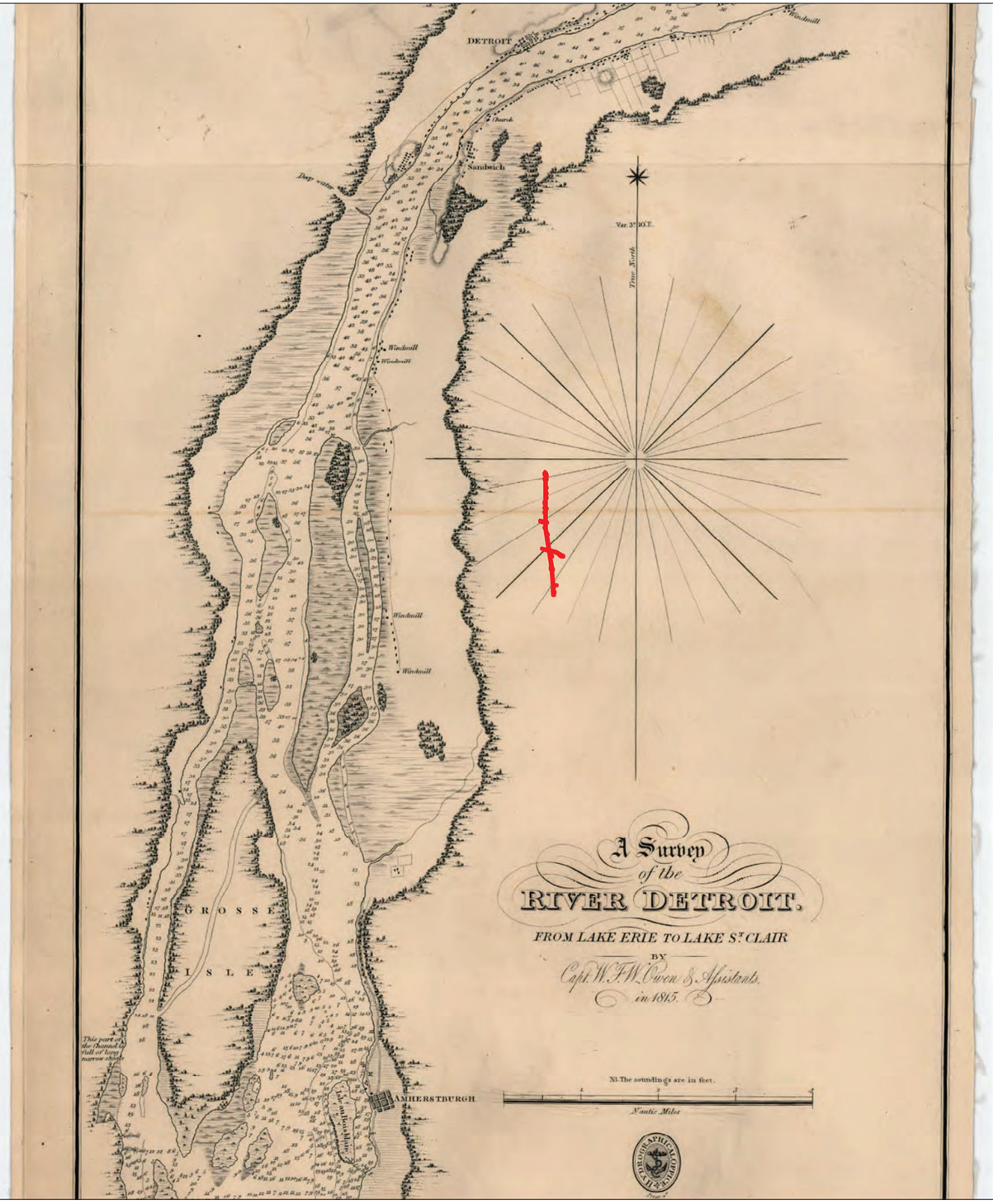
Project Location
Essex County

165001141 REVA
Prepared by ASB on 2020-01-21
Independent Review by PD on 2020-01-21

Client/Project
Town of LaSalle
Stage 1 Archaeological Assessment
Malden Road, LaSalle Ontario

Figure No.
7

Title
Portion of the 1797 Plan of a Portion of Sandwich Township



Stantec

LaSalle

Legend

Study Area - Approximate Location

Notes

1. Historical information not to scale
2. Source: Owen, W.F.W., Capatin R.N. 1815 A Survey of the River Detroit: From Lake Erie to Lake St. Clair. J and C Walker. Library and Archives Canada.

Project Location
Essex County

165001141 REVA
Prepared by ASB on 2020-01-30
Independent Review by PD on 2020-01-30

Client/Project
Town of LaSalle
Stage 1 Archaeological Assessment
Malden Road, LaSalle Ontario

Figure No.
8

Title
Portion of the 1815 Survey of the Detroit River

Stantec

LaSalle

Legend

Study Area - Approximate Location

Notes

1. Historical information not to scale
2. Source: Billyard, William and Richard Parr. 1847. Map of the Western District in the Province of Canada. Toronto: Scobie and Balfour.

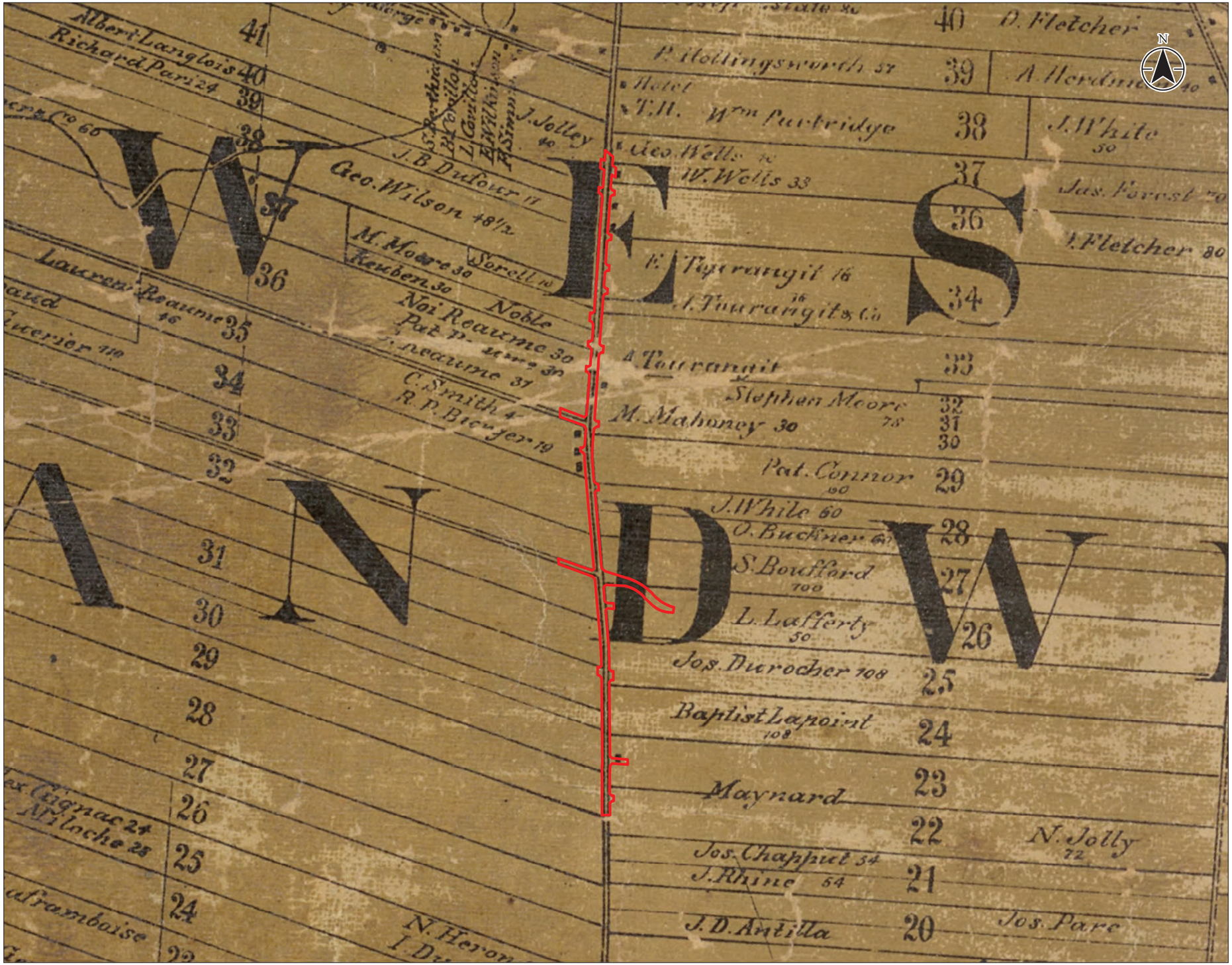
Project Location
Essex County

165001141 REVA
Prepared by ASB on 2020-01-30
Independent Review by PD on 2020-01-30

Client/Project
Town of LaSalle
Stage 1 Archaeological Assessment
Malden Road, LaSalle Ontario

Figure No.
9

Title
Portion of the 1847 Historical Map of the Western District



Stantec

La Salle

Legend

Study Area - Approximate Location

Notes

1. Historical information not to scale
2. Source: Walling, H.F. 1877. Map of Essex County, Ontario. R.M. Tackabury.

Project Location Essex County	165001141 REVA Prepared by ASB on 2020-01-23 Independent Review by PD on 2020-01-23

Client/Project

Town of LaSalle
Stage 1 Archaeological Assessment
Malden Road, LaSalle Ontario

Figure No.

10

Title

Portion of the 1877 Historical Map of Essex County

Stantec

LaSalle

Legend

Study Area - Approximate Location

Notes

1. Historical information not to scale
2. Source: Belden, H. and Co. 1881. Essex Supplement in Illustrated Historical Atlas of the Dominion of Canada. Toronto: Belden and Co.

Project Location
Essex County

165001141 REVA
Prepared by ASB on 2020-01-21
Independent Review by PD on 2020-01-21

Client/Project
Town of LaSalle
Stage 1 Archaeological Assessment
Malden Road, LaSalle Ontario

Figure No.
11

Title
Portion of the 1881 Historical Map of Sandwich West Township

\\CA0217-PPFSS01\work_group\01650\active\165001141\planning\GIS\MXD\Archaeology\Stage1\165001141_Arch_St1_11_1881.mxd Revised: 2020-01-21 By: albrown

Stantec

Legend

Study Area - Approximate Location

Notes

1. Historical information not to scale
2. Source: Hunter Survey Corporation Limited. 1954. Aerial Photographs, Southern Ontario. Photo 422.831.

Project Location
Essex County

165001141 REVA
Prepared by ASB on 2020-01-21
Independent Review by PD on 2020-01-21

Client/Project
Town of LaSalle
Stage 1 Archaeological Assessment
Malden Road, LaSalle Ontario

Figure No.
12

Title
1954 Aerial Photography

Stantec

Legend

- Study Area
- Photo Location

Stage 1 Archaeological Potential:

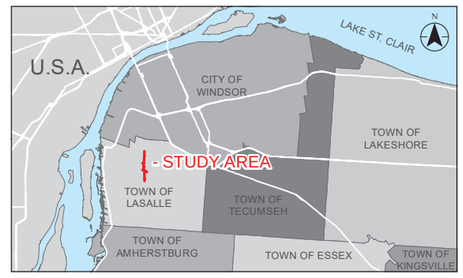
- Area of Archaeological Potential – Stage 2 Archaeological Assessment Required
- Low and Permanently Wet Area, Low to No Archaeological Potential – No Further Archaeological Work Required
- Previously Disturbed, Low to No Archaeological Potential – No Further Archaeological Work Required
- Previously Assessed (Fisher 2009; Fisher 2010)

0 50 100 150 Meters

1:2,500 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 CSRS UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.
3. Orthoimagery © First Base Solutions, 2018. Imagery Date, 2019.



Project Location
Essex County

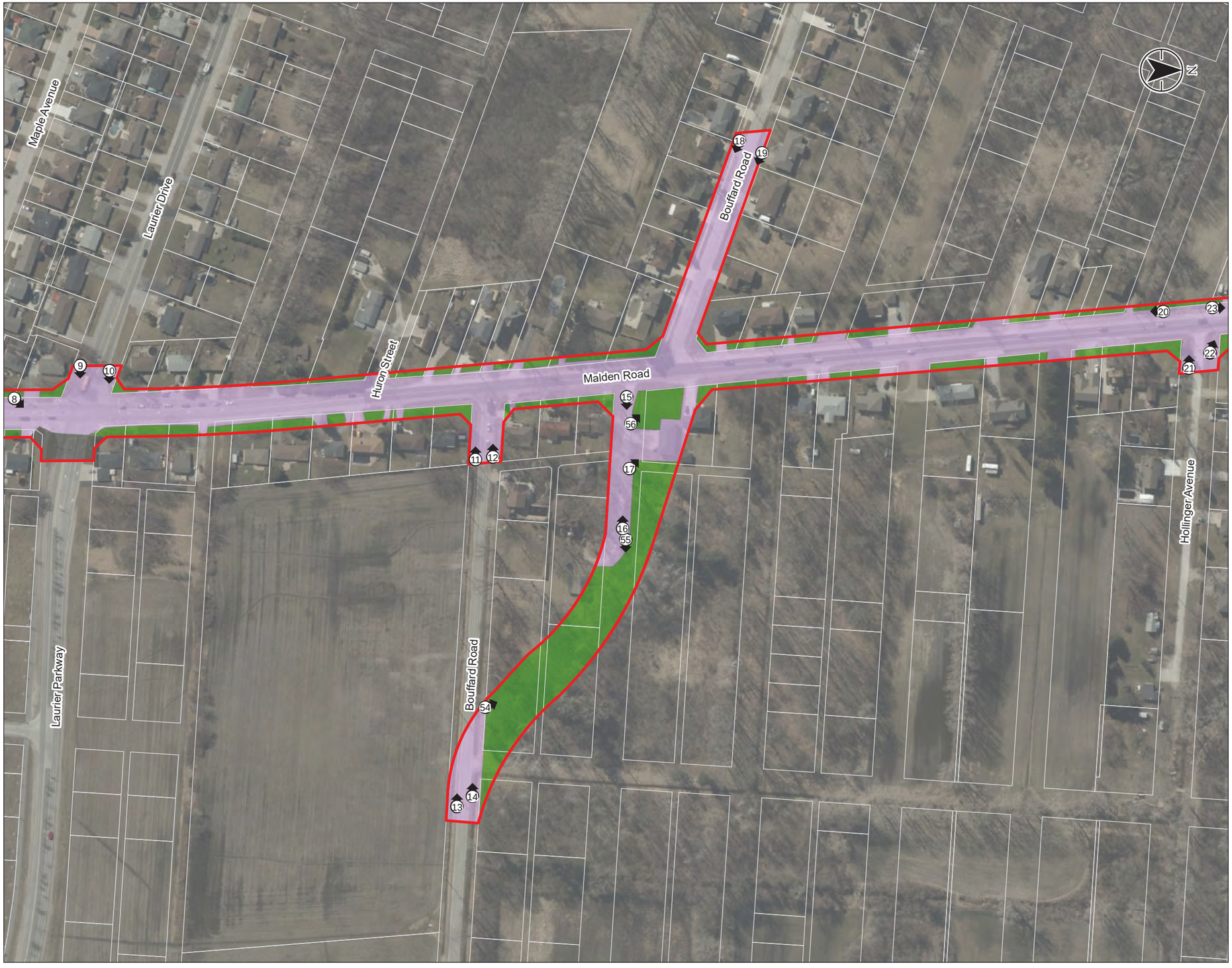
165001141 REVA
Prepared by ASB on 2020-02-13
Independent Review by PD on 2020-02-13

Client/Project
Town of LaSalle
Stage 1 Archaeological Assessment
Malden Road, LaSalle Ontario

Figure No.
13.1

Title
Stage 1 Results

\\CA027-FPFS01\work_group\01650\active\165001141\planning\GIS\MXD\Archaeology\Stage1\165001141_Arch_S1_13_Results.mxd Revised: 2020-02-13 By: cabrown



Stantec

Legend

- Study Area
- Photo Location

Stage 1 Archaeological Potential:

- Area of Archaeological Potential – Stage 2 Archaeological Assessment Required
- Previously Disturbed, Low to No Archaeological Potential – No Further Archaeological Work Required
- Previously Assessed (Fisher 2009; Fisher 2010)

0 50 100 150 Meters

1:2,500 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 CSRS UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.
3. Orthoimagery © First Base Solutions, 2018. Imagery Date, 2019.

Project Location
Essex County

165001141 REVA
Prepared by ASB on 2020-02-13
Independent Review by PD on 2020-02-13

Client/Project
Town of LaSalle
Stage 1 Archaeological Assessment
Malden Road, LaSalle Ontario

Figure No.
13.2

Title
Stage 1 Results

Stantec

Legend

- Study Area
- Photo Location

Stage 1 Archaeological Potential:

- Area of Archaeological Potential – Stage 2 Archaeological Assessment Required
- Previously Disturbed, Low to No Archaeological Potential – No Further Archaeological Work Required

0 50 100 150 Meters

1:2,500 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 CSRS UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.
3. Orthoimagery © First Base Solutions, 2018. Imagery Date, 2019.

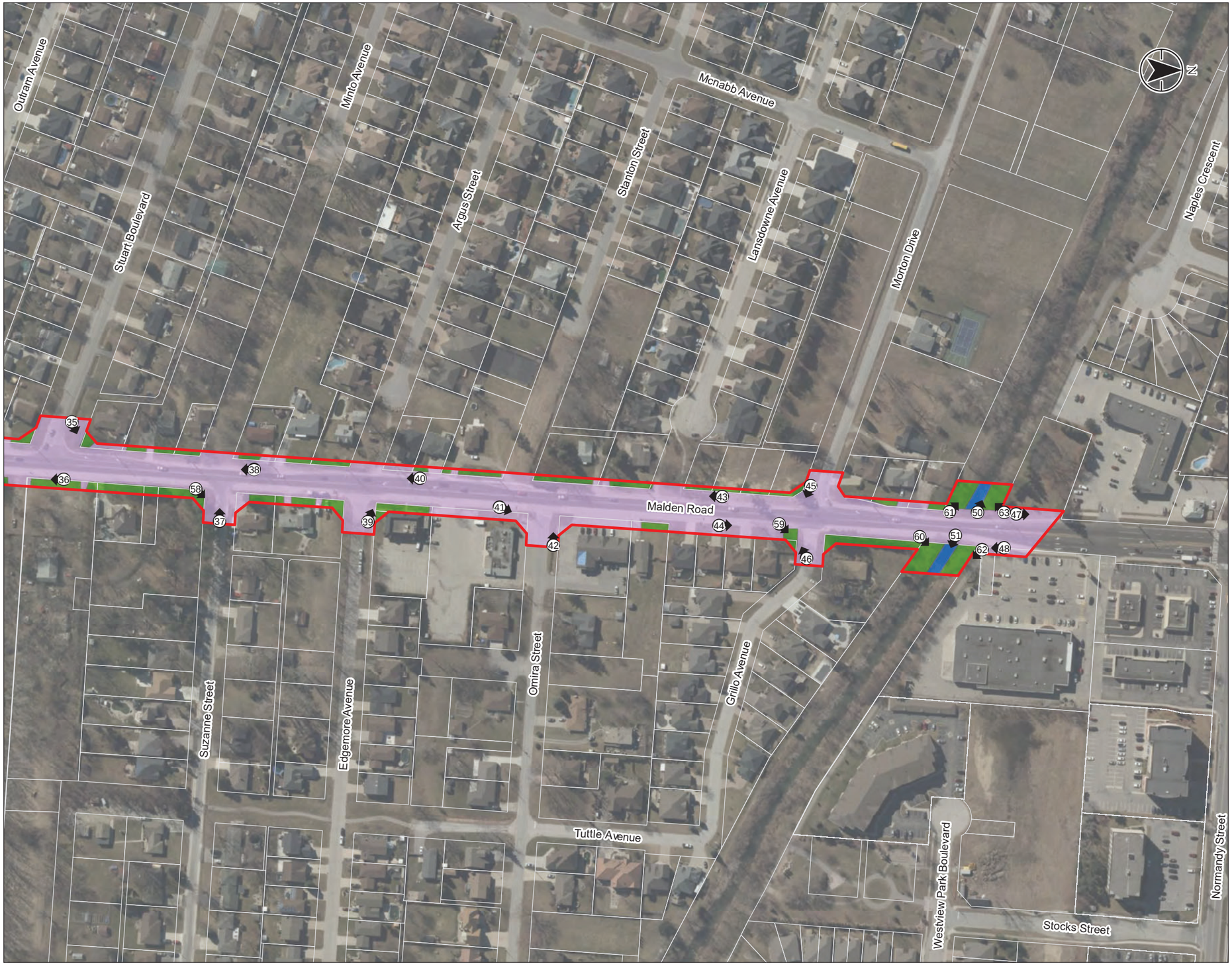
Project Location
Essex County

165001141 REVA
Prepared by ASB on 2020-02-13
Independent Review by PD on 2020-02-13

Client/Project
Town of LaSalle
Stage 1 Archaeological Assessment
Malden Road, LaSalle Ontario

Figure No.
13.3

Title
Stage 1 Results



Stantec

Legend

- Study Area
- Photo Location

Stage 1 Archaeological Potential:

- Area of Archaeological Potential – Stage 2 Archaeological Assessment Required
- Low and Permanently Wet Area, Low to No Archaeological Potential – No Further Archaeological Work Required
- Previously Disturbed, Low to No Archaeological Potential – No Further Archaeological Work Required

0 50 100 150 Meters

1:2,500 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 CSRS UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.
3. Orthoimagery © First Base Solutions, 2018. Imagery Date, 2019.

Project Location
Essex County

165001141 REVA
Prepared by ASB on 2020-02-13
Independent Review by PD on 2020-02-13

Client/Project
Town of LaSalle
Stage 1 Archaeological Assessment
Malden Road, LaSalle Ontario

Figure No.
13.4

Title
Stage 1 Results

9.0 CLOSURE

This report documents work that was performed in accordance with generally accepted professional standards at the time and location in which the services were provided. No other representations, warranties or guarantees are made concerning the accuracy or completeness of the data or conclusions contained within this report, including no assurance that this work has uncovered all potential archaeological resources associated with the identified property.

All information received from the client or third parties in the preparation of this report has been assumed by Stantec to be correct. Stantec assumes no responsibility for any deficiency or inaccuracy in information received from others.

Conclusions made within this report consist of Stantec's professional opinion as of the time of the writing of this report and are based solely on the scope of work described in the report, the limited data available and the results of the work. The conclusions are based on the conditions encountered by Stantec at the time the work was performed. Due to the nature of archaeological assessment, which consists of systematic sampling, Stantec does not warrant against undiscovered environmental liabilities nor that the sampling results are indicative of the condition of the entire property.

This report has been prepared for the exclusive use of the client identified herein and any use by any third party is prohibited. Stantec assumes no responsibility for losses, damages, liabilities, or claims, howsoever arising, from third party use of this report. We trust this report meets your current requirements. Please do not hesitate to contact us should you require further information or have additional questions about any facet of this report.

Quality Review _____

Colin Varley - Senior Associate, Senior Archaeologist

Independent Review _____

Parker Dickson – Associate, Senior Archaeologist