ORIGINAL 15 FEBRUARY 2023

STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT

Mamta Developments Inc, 645 Martin Street and a nearby vacant parcel bordering Cork Street in Mount Forest, Part of Lot 2, West Side of Owen Sound Road (Geographic Township of Arthur, County of Wellington), Regional Municipality of Wellington North (AMICK Corporate File #: 2022-955/MHSTCI File #: P058-2231-2022)

SUBMITTED TO:
Ontario Ministry of Citizenship and Multiculturalism
(MCM)

&

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EXECUTIVE SUMMARY

This report describes the results of the 2022 Stage 1-2 Archaeological Property Assessment of 645 Martin Street and a nearby vacant parcel bordering Cork Street in Mount Forest, Part of Lot 2, West Side of Owen Sound Road (Geographic Township of Arthur, County of Wellington), Regional Municipality of Wellington North, conducted by AMICK Consultants Limited. This assessment was undertaken as a requirement under the Planning Act (RSO 1990) and was conducted under Professional Archaeologist License #P058 issued to Michael Henry by the Minister of Citizenship and Multiculturalism (MCM) for the Province of Ontario. All work was conducted in conformity with Ontario Ministry of Tourism and Culture (MTC) Standards and Guidelines for Consultant Archaeologists (MTC 2011) and the Ontario Heritage Act (RSO 1990a).

The entirety of the study area is approximately 2.1 hectares (ha) in area and includes within it a farm complex consisting of a house and a barn. The study area is bounded on the north by existing residential structures, on the east by Martin Street, on the south by existing residential structures and lawn and on the west by Cork St. AMICK Consultants Limited was engaged by the proponent to undertake a Stage 1-2 Archaeological Property Assessment of lands potentially affected by the proposed undertaking and was granted permission to carry out archaeological fieldwork. Following the criteria outlined by MCM (2011) for determining archaeological potential, portions of the study area were determined as having archaeological potential for Pre-contact and Post-contact archaeological resources. Consequently, this report is being prepared in advance of the planning process for this property.

The entirety of the study area was subject to property inspection and photographic documentation concurrently with the Stage 2 Property Assessment which consisted of high intensity test pit methodology at a five-metre interval between individual test pits and test pit survey at a ten-metre interval to confirm disturbance on 26 September 2022. All records, documentation, field notes, photographs, and artifacts (as applicable) related to the conduct and findings of these investigations are held at the Lakelands District corporate offices of AMICK Consultants Limited until such time that they can be transferred to an agency or institution approved by the MCM on behalf of the government and citizens of Ontario.

As a result of the Stage 2 Property Assessment of the study area, no archaeological resources were encountered. Consequently, the following recommendations are made:

1. *No further archaeological assessment of the study area is warranted.*
2. *The Provincial interest in archaeological resources with respect to the proposed undertaking has been addressed.*
3. *The proposed undertaking is clear of any archaeological concern.*

1.0 PROJECT CONTEXT

1.1 DEVELOPMENT CONTEXT

This report describes the results of the 2022 Stage 1-2 Archaeological Property Assessment of 645 Martin Street and a nearby vacant parcel bordering Cork Street in Mount Forest, Part of Lot 2, West Side of Owen Sound Road (Geographic Township of Arthur, County of Wellington), Regional Municipality of Wellington North, conducted by AMICK Consultants Limited. This assessment was undertaken as a requirement under the Planning Act (RSO 1990) and was conducted under Professional Archaeologist License #P058 issued to Michael Henry by the Minister of Citizenship and Multiculturalism (MCM) for the Province of Ontario. All work was conducted in conformity with Ontario Ministry of Tourism and Culture (MTC) Standards and Guidelines for Consultant Archaeologists (MTC 2011) and the Ontario Heritage Act (RSO 1990a).

The entirety of the study area is approximately 2.1 hectares (ha) in area and includes within it a farm complex consisting of a house and a barn. The study area is bounded on the north by existing residential structures, on the east by Martin Street, on the south by existing residential structures and lawn and on the west by Cork St. AMICK Consultants Limited was engaged by the proponent to undertake a Stage 1-2 Archaeological Property Assessment of lands potentially affected by the proposed undertaking and was granted permission to carry out archaeological fieldwork. Following the criteria outlined by MCM (2011) for determining archaeological potential, portions of the study area were determined as having archaeological potential for Pre-contact and Post-contact archaeological resources. Consequently, this report is being prepared in advance of the planning process for this property.

The entirety of the study area was subject to property inspection and photographic documentation concurrently with the Stage 2 Property Assessment which consisted of high intensity test pit methodology at a five-metre interval between individual test pits and test pit survey at a ten-metre interval to confirm disturbance on 26 September 2022. All records, documentation, field notes, photographs, and artifacts (as applicable) related to the conduct and findings of these investigations are held at the Lakelands District corporate offices of AMICK Consultants Limited until such time that they can be transferred to an agency or institution approved by the MCM on behalf of the government and citizens of Ontario.

The proposed development of the study area includes 6 detached residences, 34 townhouses, and landscape modifications. A preliminary plan of the proposed development has been submitted together with this report to MCM for review and reproduced within this report as Map 4.

1.2 HISTORICAL CONTEXT

1.2.1 PRE-CONTACT LAND-USE OUTLINE

Table 1 illustrates the chronological development of cultures within southern Ontario prior to the arrival of European cultures to the area at the beginning of the 17th century. This general cultural outline is based on archaeological data and represents a synthesis and summary of research over a long period of time. It is necessarily generalizing and is not necessarily representative of the point of view of all researchers or stakeholders. It is offered here as a rough guideline and as a very broad outline to illustrate the relationships of broad cultural groups and time periods.

TABLE 1 PRE-CONTACT CULTURAL CHRONOLOGY FOR SOUTHERN ONTARIO

Years ago	Period	Southern Ontario
250	Terminal Woodland	Ontario and St. Lawrence Iroquois Cultures
1000 2000	Initial Woodland	Princess Point, Saugeen, Point Peninsula, and Meadowood Cultures
3000 4000 5000 6000	Archaic	Laurentian Culture
7000 8000 9000 10000 11000	Palaeo-Indian	Plano and Clovis Cultures
		(Wright 1972)

What follows is an outline of Aboriginal occupation in the area during the Pre-Contact Era from the earliest known period, about 9000 B.C. up to approximately 1650 AD.

1.2.1.1 PALEO-INDIAN PERIOD (APPROXIMATELY 9000-7500 B.C.)

North of Lake Ontario, evidence suggests that early occupation began around 9000 B.C. People probably began to move into this area as the glaciers retreated and glacial lake levels began to recede. The early occupation of the area probably occurred in conjunction with environmental conditions that would be comparable to modern Sub-Arctic conditions. Due to the great antiquity of these sites, and the relatively small populations likely involved, evidence of these early inhabitants is sparse and generally limited to tools produced from stone or to by-products of the manufacture of these implements.

1.2.1.2 ARCHAIC PERIOD (APPROXIMATELY 8000-1000 B.C.)

By about 8000 B.C. the gradual transition from a post glacial tundra-like environment to an essentially modern environment was largely complete. Prior to European clearance of the landscape for timber and cultivation, the area was characterized by forest. The Archaic Period is the longest and the most apparently stable of the cultural periods identified through

archaeology. The Archaic Period is divided into the Early, Middle and Late Sub-Periods, each represented by specific styles in projectile point manufacture. Many more sites of this period are found throughout Ontario, than of the Palaeo-Indian Period. This is probably a reflection of two factors: the longer period of time reflected in these sites, and a greater population density. The greater population was likely the result of a more diversified subsistence strategy carried out in an environment offering a greater variety of abundant resources (Smith 2002:58-59).

Current interpretations suggest that the Archaic Period populations followed a seasonal cycle of resource exploitation. Although similar in concept to the practices speculated for the big game hunters of the Palaeo-Indian Period, the Archaic populations utilized a much broader range of resources, particularly with respect to plants. It is suggested that in the spring and early summer, bands would gather at the mouths of rivers and at rapids to take advantage of fish spawning runs. Later in the summer and into the fall season, smaller groups would move to areas of wetlands to harvest nuts and wild rice. During the winter, they would break into yet smaller groups probably based on the nuclear family and perhaps some additional relatives to move into the interior for hunting. The result of such practices would be to create a distribution of sites across much of the landscape (Smith 2002: 59-60).

The material culture of this period is much more extensive than that of the Palaeo-Indians. Stylistic changes between Sub-Periods and cultural groups are apparent, although the overall quality in production of chipped lithic tools seems to decline. This period sees the introduction of ground stone technology in the form of celts (axes and adzes), manos and metates for grinding nuts and fibres, and decorative items like gorgets, pendants, birdstones, and bannerstones. Bone tools are also evident from this time period. Their presence may be a result of better preservation from these more recent sites rather than a lack of such items in earlier occupations. In addition, copper and exotic chert types appear during the period and are indicative of extensive trading (Smith 2002: 58-59).

1.2.1.3 WOODLAND PERIOD (APPROXIMATELY 1000 B.C.-1650 A.D.)

The primary difference in archaeological assemblages that differentiates the beginning of the Woodland Period from the Archaic Period is the introduction of ceramics to Ontario populations. This division is probably not a reflection of any substantive cultural changes, as the earliest sites of this period seem to be in all other respects a continuation of the Archaic mode of life with ceramics added as a novel technology. The seasonally based system of resource exploitation and associated population mobility persists for at least 1500 years into the Woodland Period (Smith 2002: 61-62).

The Early Woodland Sub-Period dates from about 1000-400 B.C. Many of the artifacts from this time are similar to the late Archaic and suggest a direct cultural continuity between these two temporal divisions. The introduction of pottery represents and entirely new technology that was probably acquired through contact with more southerly populations from which it likely originates (Smith 2002:62).

The Middle Woodland Sub-Period dates from about 400 B.C.-800 A.D. Within the region including the study area, a complex emerged at this time termed "Point Peninsula." Point Peninsula pottery reflects a greater sophistication in pottery manufacture compared with the earlier industry. The paste and temper of the new pottery is finer and new decorative techniques such as dentate and pseudo-scallop stamping appear. There is a noted Hopewellian influence in southern Ontario populations at this time. Hopewell influences from south of the Great Lakes include a widespread trade in exotic materials and the presence of distinct Hopewell style artifacts such as platform pipes, copper or silver panpipe covers and shark's teeth. The populations of the Middle Woodland participated in a trade network that extended well beyond the Great Lakes Region.

The Late Woodland Sub-Period dates from about 500-1650 A.D. The Late Woodland includes four separate phases: Princess Point, Early Ontario Iroquoian, Middle Ontario Iroquoian and Late Ontario Iroquoian.

The Princess Point phase dates to approximately 500-1000 A.D. Pottery of this phase is distinguished from earlier technology in that it is produced by the paddle method instead of coil and the decoration is characterized by the cord wrapped stick technique. Ceramic smoking pipes appear at this time in noticeable quantities. Princess Point sites cluster along major stream valleys and wetland areas. Maize cultivation is introduced by these people to Ontario. These people were not fully committed to horticulture and seemed to be experimenting with maize production. They generally adhere to the seasonal pattern of occupation practiced by earlier occupations, perhaps staying at certain locales repeatedly and for a larger portion of each year (Smith 2002: 65-66).

The Early Ontario Iroquoian stage dates to approximately 950-1050 A.D. This stage marks the beginning of a cultural development that led to the historically documented Ontario Iroquoian groups that were first contacted by Europeans during the early 1600s (Petun, Neutral, and Huron). At this stage formal semi-sedentary villages emerge. The Early stage of this cultural development is divided into two cultural groups in southern Ontario. The areas occupied by each being roughly divided by the Niagara Escarpment. To the west were located the Glen Meyer populations, and to the east were situated the Pickering people (Smith 2002: 67).

The Middle Ontario Iroquoian stage dates to approximately 1300-1400 A.D. This stage is divided into two sub-stages. The first is the Uren sub-stage lasting from approximately 1300-1350 A.D. The second of the two sub-stages is known as the Middleport sub-stage lasting from roughly 1350-1400 A.D. Villages tend to be larger throughout this stage than formerly (Smith 2002: 67).

The Late Ontario Iroquoian stage dates to approximately 1400-1650 A.D. During this time the cultural divisions identified by early European explorers are under development and the geographic distribution of these groups within southern Ontario begins to be defined.

1.2.2 POST-CONTACT LAND USE OUTLINE

In 1837 by Act of Parliament the new District of Wellington was formed and a courthouse and jail in the town of Guelph were authorized. The District was named after England's Duke of Wellington and initially included the counties of Wellington, Waterloo, Grey and parts of Dufferin (Wikipedia 2017).

By January 1854, Wellington County became an individual entity. At the time, it included the Townships and Towns of Amaranth, Arthur, Eramosa, Erin, Guelph, Guelph (Town), Garafraxa, Maryborough, Nichol, Peel, Pilkington, and Puslinch. Other municipalities were added between 1857 and 1881. Guelph separated in 1879 and was incorporated as a City; it lost representation on the County Council. Orangeville and Garafraxa East were annexed by Dufferin County (Wikipedia 2017).

The Township of Arthur was named after the Duke of Wellington, Arthur Wellesley. It was surveyed in 1841-1842, and the government laid out the Owen Sound Road.

Map 2 is a facsimile segment from Historical County Map of Wellington County (Leslie 1861). Map 2 illustrates the location of the study area and environs as of 1861. The study area is shown to belong to Isab Harsbourgh; no structures are shown to be within the study area. In addition, this map illustrates an unnamed river situated south of the study area and a settlement road is depicted as adjacent to the study area to the west. This road is the current Cork St, and the river is the South Saugeen River.

Map 3 is a facsimile segment of the Township of Arthur map reproduced from Illustrated Historical Atlas of Waterloo and Wellington Counties (Walker & Miles 1877). Map 3 illustrates the location of the study area and environs as of 1877. The study area is not shown to belong to anyone and no structures are shown to be within the study area. In addition, this map illustrates an unnamed river situated south of the study area and a settlement road is depicted as adjacent to the study area to the west. This road is the current Cork St and the river is the South Saugeen River. There is a railway depicted going through the study area in the Eastern portion going North to South.

A plan of the study area is included within this report as Map 4. Current conditions encountered during the Stage 1-2 Property Assessment are illustrated in Maps 5 & 6.

1.2.3 SUMMARY OF HISTORICAL CONTEXT

The brief overview of readily available documentary evidence indicates that the study area is situated within an area that was close to historic transportation routes and therefore has potential for sites relating to early Post-contact settlement in the region. However, it also appears that while the area was moving toward urban development by the fourth quarter of the 19th century, it was still predominantly rural in character and the likelihood of locating significant Post-contact archaeological deposits of cultural heritage value or interest (CHVI) on a very small parcel of the original township lot is not likely. Background research indicates the property has potential for significant archaeological resources of Native origins based on proximity to a natural source of potable water in the past.

1.3 ARCHAEOLOGICAL CONTEXT

The study area is located near Mount Forest and is bounded on the north by existing residential area, on the east by Martin St, on the south by existing residential structures and lawn and on the west by Cork St.

A farm complex consisting of a house and a barn are present within the study area, which heavily impact the eastern portion of the study area. The remainder of the study area appears to be lawn with planted trees. The study area does not contain any areas of steep slope. The study area does not contain any ploughable lands. There is a seasonal low lying wet land in the northwestern portion of the study area.

1.3.1 PHYSIOGRAPHIC REGION

The study area is situated within the Horseshoe Moraines physiographic region. The surface is composed of two chief landform components (a) the irregular stony knobs and ridges which are composed mostly of till with some sand and gravel deposits (kames) and (b) the more or less pitted sand and gravel terraces and swampy valley floors. Huron clay is the most representative soil type. The average depth is 18-20 inches and it is generally susceptible to erosion. The general elevation is from 800 to 1700 feet a.s.l. (Chapman and Putnam 1984: 127-129).

1.3.2 SURFACE WATER & VEGETATION

The South Saugeen River is located to the southeast of the study area. The study area is located approximately 170 metres northwest of the river that is shown on the Illustrated Historical Atlas of Waterloo and Wellington Counties. (Walker & Miles 1877). The natural vegetation of the area seems to have been removed, replaced with planted trees and lawn.

1.3.3 LITHIC SOURCES

The study area is located on/adjacent to the Fossil Hill Formation which has outcrops of Collingwood chert. Fossil Hill chert is a member of the Middle Silurian Fossil Hill Formation. This formation stretches south from the Beaver Valley in the Collingwood area to the Caledon area in Southern Ontario (Eley and von Bitter 1989:22). It is mainly found in poorly exposed outcrops, although sources in the Collingwood area provide excellent chert resources (Eley and von Bitter 1989:31). It consists of white to light-grey with red or tan to yellow inclusions with dull lustre and a rough texture (Armstrong 2018:70). Fossil Hill chert, particularly the Collingwood variant, was heavily used in Paleoindian sites from approximately 11000-8000 BCE (Ellis 2011; Ellis and Deller, 1990). The closest known outcrops of Collingwood are located approximately 50 kilometers east of the study area. In addition, there is cherty bois blanc limestone bed located 15 kilometers to the west of the study area. Bois Blanc chert is a member of the Early Devonian Bois Blanc Formation and occurs in thin beds or nodules located in several areas in the vicinity of Hagersville, Innerkip and Fort Erie Ontario (Eley and von Bitter 1989:29). This material is characterized by a diversity of texture, colour, and composition (Eley and von Bitter 1989:19), ranging from

light to dark grey, grey blue, or brown and sometimes exhibit mottling (Eley and von Bitter 1989:19). Types of chert within the Bois Blanc formation include Haldimand, Colbourne, and Saugeen (Armstrong 2018: 64). Bois Blanc and Onondaga cherts share similarities in their colours and since this study relied on macroscopic analysis of lithic materials, there may be an error in representative chert frequencies.

1.3.4 REGISTERED ARCHAEOLOGICAL SITES

The Archaeological Sites Database administered by the MCM indicates that there are no (0) previously documented sites within 1 kilometre of the study area. However, it must be noted that this assumes the accuracy of information compiled from numerous researchers using different methodologies over many years. AMICK Consultants Limited assumes no responsibility for the accuracy of site descriptions, interpretations such as cultural affiliation, or location information derived from the Archaeological Sites Database administered by MCM. In addition, it must also be noted that a lack of formerly documented sites does not indicate that there are no sites present as the documentation of any archaeological site is contingent upon prior research having been conducted within the study area.

1.3.4.1 PRE-CONTACT REGISTERED SITES

A summary of registered and/or known archaeological sites within a 1-kilometre radius of the study area was gathered from the Archaeological Sites Database, administered by MCM. As a result, it was determined that zero (0) archaeological sites relating directly to Pre-contact habitation/activity had been formally registered within the immediate vicinity of the study area. However, the lack of formally documented archaeological sites does not mean that Pre-contact people did not use the area; it more likely reflects a lack of systematic archaeological research in the immediate vicinity. Even in cases where one or more assessments may have been conducted in close proximity to a proposed landscape alteration, an extensive area of physical archaeological assessment coverage is required throughout the region to produce a representative sample of all potentially available archaeological data in order to provide any meaningful evidence to construct a pattern of land use and settlement in the past.

1.3.4.2 POST-CONTACT REGISTERED SITES

A summary of registered and/or known archaeological sites within a 1-kilometre radius of the study area was gathered from the Archaeological Sites Database, administered by MCM. As a result, it was determined that zero (0) archaeological sites relating directly to Post-contact habitation/activity had been formally registered within the immediate vicinity of the study area.

1.3.4.3 REGISTERED SITES OF UNKNOWN CULTURAL AFFILIATION

A summary of registered and/or known archaeological sites within a 1-kilometre radius of the study area was gathered from the Archaeological Sites Database, administered by MCM.

As a result, it was determined that zero (0) archaeological sites of unknown cultural affiliation have been formally registered within the immediate vicinity of the study area.

1.3.5 Previous Archaeological Assessments

On the basis of information supplied by MCM, no archaeological assessments have been conducted within 50 metres of the study area. AMICK Consultants Limited assumes no responsibility for the accuracy of previous assessments, interpretations such as cultural affiliation, or location information derived from the Archaeological Sites Database administered by MCM. In addition, it must also be noted that the lack of formerly documented previous assessments does not indicate that no assessments have been conducted.

1.3.5.2 Previous Regional Archaeological Potential Modelling

The study area is situated in area for which there is no archaeological master plan.

1.3.6 Historic Plaques

There are no relevant plaques associated with the study area, which would suggest an activity or occupation within, or near, the study area that may indicate potential for associated archaeological resources of significant CHVI.

1.3.7 Summary of Archaeological Context

A farm complex consisting of a house and a barn are present within the study area, which heavily impact the eastern portion of the study area. The remainder of the study area appears to be lawn with planted trees. The study area does not contain any areas of steep slope. The study area does not contain any ploughable lands. There is a seasonal low lying wet land in the northwestern portion of the study area.

Current conditions within the study area indicate that some areas of the property may have no or low archaeological potential and do not require Stage 2 Property Assessment or should be excluded from Stage 2 Property Assessment. These areas would include the footprint of existing structures, areas under pavement, and areas that are not accessible due to previously dumped soil covering the original surface of the ground. A significant proportion of the study area does exhibit archaeological potential and therefore a Stage 2 Property Assessment is required.
Horseshoe Moraines physiographic region. The surface is composed of two chief landform components (a) the irregular stony knobs and ridges which are composed mostly of till with some sand and gravel deposits (kames) and (b) the more or less pitted sand and gravel terraces and swampy valley floors
Background research also indicates that the study area is situated in the Horseshoe Moraines physiographic region, which is characterized by irregular stony knobs and till with sand and gravel deposits. In addition, the study area is located near the Fossil Hill Formation which has outcrops of Collingwood chert.

No previously registered archaeological sites have been documented within 1km of the study area.

The study area is situated in area for which there is no archaeological master plan. There are no relevant plaques associated with the study area.

The study area has potential for archaeological resources of Native origins based on proximity to a source of potable water that was also used as a means of waterborne trade and communication. Background research also suggests potential for archaeological resources of Post-contact origins based on proximity to a historic roadway, and proximity to areas of documented historic settlement.

2.0 FIELD WORK METHODS AND WEATHER CONDITIONS

2.1 INTRODUCTION

A property inspection was carried out in compliance with Standards and Guidelines for Consultant Archaeologists (MTC 2011) to document the existing conditions of the study area to facilitate the Stage 2 Property Assessment. All areas of the study area were visually inspected and select features were photographed as a representative sample of each area defined within Maps 5 & 6. Observations made of conditions within the study area at the time of the inspection were used to inform the requirement for Stage 2 Property Assessment for portions of the study area as well as to aid in the determination of appropriate Stage 2 Property Assessment strategies. The locations from which photographs were taken and the directions toward which the camera was aimed for each photograph are illustrated in Maps 5 & 6 of this report.

A property inspection or field reconnaissance is not required as part of a Stage 1 Background Study unless there is reason to believe that portions of the study area may be excluded from physical assessment on the basis of the conditions of the property or portions thereof and it is desired by the proponent to formally exclude any such areas from a Stage 2 Property Assessment. As this study was undertaken during winter conditions, a Stage 1 Property Inspection was not viable. Therefore, no part of the study area may be excluded from the Stage 2 Property Assessment. The Stage 1 Property Inspection will have to be undertaken concurrently with the Stage 2 Property Assessment.

The Stage 2 Assessment of the study area was carried out on 26 September 2022 and consisted of high intensity test pit methodology at a five-metre interval between individual test pits and test pit survey at a ten-metre interval to confirm disturbance which was conducted in compliance with the Standards and Guidelines for Consultant Archaeologists, section 2.1.2: Test Pit Survey and 2.1.8: Property Survey to Confirm Previous Disturbance (MTC 2011). Weather conditions were appropriate for the necessary fieldwork required to complete the Stage 2 Property Assessment and to create the documentation appropriate to this study.

2.3 TEST PIT SURVEY

Approximately 0.714 ha of the study area was lawn that cannot be strip ploughed and was subjected to test pit survey at 5m intervals per Section 2.1.2, Standard 1 (MTC 2011).

All test pits were excavated within 1m of all built structures, were at least 30cm in diameter and were excavated into the first 5cm of subsoil to examine stratigraphy, cultural features and evidence of fill. All soils were screen through mesh no greater than 6mm and all test pits were backfilled. All work was photo documented.

During the 5m test pit survey, no archaeological resources were encountered.

2.4 CONFIRMATION OF DISTURBANCE

Approximately 1.285 ha of the study area was subject to test pit survey at 10m intervals to confirm disturbance. Areas of suspected disturbance within the study area consists of an area identified as probable disturbance from the construction of the pavilion and associated features. AMICK Consultants Limited tested the suspected disturbed area at a 10-metre interval to confirm disturbance in a manner consistent with the objectives to ensure that the area is accurately delimited and properly identified. This procedure demonstrated that the entire disturbed portion of the study area consists of fill deposited within a deeply disturbed context. There is no archaeological potential within this area.

Approximately 35% of the study area consisted of lawn area that was test pit surveyed at an interval of 5 metres between individual test pits. Approximately 61% of the study area was disturbed lawn that was test pit surveyed at an interval of 10 metres between individual test pits. Approximately 4% of the study area was not assessable due to the presence of existing structures and disturbed gravel driveway. Maps 5 & 6 of this report illustrate the Stage 2 Assessment methodology within the study area.

3.0 RECORD OF FINDS

3.1 INTRODUCTION

As a result of the Stage 1-2 Assessment of the study area, no archaeological resources of any description were encountered.

The documentation produced during the field investigation conducted in support of this report includes: one sketch map, one page of photo log, one page of field notes, and 23 digital photographs.

4.0 ANALYSIS AND CONCLUSIONS

4.1 STAGE 1 ANALYSIS AND CONCLUSIONS

4.1.1 CHARACTERISTICS INDICATING ARCHAEOLOGICAL POTENTIAL

Section 1.3.1 of the Standards and Guidelines for Consultant Archaeologists specifies the property characteristics that indicate archaeological potential (MTC 2011). Factors that indicate archaeological potential are features of the local landscape and environment that may have attracted people to either occupy the land or to conduct activities within the study area. One or more of these characteristics found to apply to a study area would necessitate a Stage 2 Property Assessment to determine if archaeological resources are present. These characteristics include:

1) Within 300m of Previously Identified Archaeological Sites

2) Within 300m of Primary Water Sources (e.g., lakes, rivers, streams, and creeks)

3) Within 300m of Secondary Water Sources (e.g., intermittent streams and creeks, springs, marshes, and swamps)

4) Within 300 m of Features Indicating Past Water Sources (e.g., glacial lake shorelines indicated by the presence of raised sand or gravel beach ridges, relic river or stream channels indicated by clear dip or swale in the topography, shorelines of drained lakes or marshes, and cobble beaches)

5) Within 300m of an Accessible or Inaccessible Shoreline (e.g., high bluffs, swamp, or marsh fields by the edge of a lake, sandbars stretching into marsh)

6) Elevated Topography (e.g., eskers, drumlins, large knolls, and plateaux)

7) Pockets of Well-drained Sandy Soil, especially near areas of heavy soil or rocky ground.

8) Distinctive Land Formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases. There may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings.

9) Resource Areas, including:
   - food or medicinal plants (e.g., migratory routes, spawning areas, and prairie)
   - scarce raw materials (e.g., quartz, copper, ochre or outcrops of chert)
   - resources of importance to early Post-contact industry (e.g., logging, prospecting, and mining)

10) Within 300m of Areas of Early Post-contact Settlement, including:
   - military or pioneer settlement (e.g., pioneer homesteads, isolated cabins, and farmstead complexes)
   - early wharf or dock complexes, pioneer churches and early cemeteries

11) Within 100m of Early Historical Transportation Routes (e.g., trails, passes, roads, railways, portage routes)

12) Heritage Property – A property listed on a municipal register or designated under the Ontario Heritage Act or is a federal, provincial, or municipal historic landmark or site.

13) Documented Historical or Archaeological Sites – property that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations. These are properties which have not necessarily been formally recognized or for which there is additional evidence identifying possible archaeological resources associated with historic properties in addition to the rationale for formal recognition.

The study area is situated 170 metres north of the South Saugeen River which is a primary water source and a navigable waterway. The study area is situated within 100m of an early settlement road that appears on the historic atlas maps of 1861 and 1877. This historic road corresponds to the road presently known as Cork St which is directly adjacent to the study area on its western edge. The study area is situated within 100m of a railway line indicated on the historic atlas map of 1877.

4.1.2 CHARACTERISTICS INDICATING REMOVAL OF ARCHAEOLOGICAL POTENTIAL

Section 1.3.2 of the Standards and Guidelines for Consultant Archaeologists specifies the property characteristics which indicate no archaeological potential or for which archaeological potential has been removed (MTC 2011). These characteristics include:

1) Quarrying

2) Major Landscaping Involving Grading Below Topsoil

3) Building Footprints

4) Sewage and Infrastructure Development

The study area contains a farm complex consisting of a house, a bar and structural disturbance.

4.1.3 SUMMARY OF ARCHAEOLOGICAL POTENTIAL

Table 2 below summarizes the evaluation criteria of the Ministry of Citizenship and Multiculturalism (MCM) together with the results of the Stage 1 Background Study for the proposed undertaking. Based on the criteria, the property is deemed to have archaeological potential on the basis of proximity to water, proximity to historic settlement structures, and the location of early historic settlement roads adjacent to the study area.

TABLE 2 EVALUATION OF ARCHAEOLOGICAL POTENTIAL

FEATURE OF ARCHAEOLOGICAL POTENTIAL		YES	NO	N/A	COMMENT
1	Known archaeological sites within 300m		**N**		If Yes, potential determined
PHYSICAL FEATURES					
2	Is there water on or near the property?	**Y**			If Yes, what kind of water?
2a	Primary water source within 300 m. (lakeshore, river, large creek, etc.)	**Y**			If Yes, potential determined
2b	Secondary water source within 300 m. (stream, spring, marsh, swamp, etc.)		**N**		If Yes, potential determined
2c	Past water source within 300 m. (beach ridge, river bed, relic creek, etc.)		**N**		If Yes, potential determined
2d	Accessible or Inaccessible shoreline within 300 m. (high bluffs, marsh, swamp, sand bar, etc.)		**N**		If Yes, potential determined
3	Elevated topography (knolls, drumlins, eskers, plateaus, etc.)		**N**		If Yes, and Yes for any of 4-9, potential determined
4	Pockets of sandy soil in a clay or rocky area		**N**		If Yes and Yes for any of 3, 5-9, potential determined
5	Distinctive land formations (mounds, caverns, waterfalls, peninsulas, etc.)		**N**		If Yes and Yes for any of 3-4, 6-9, potential determined
HISTORIC/PREHISTORIC USE FEATURES					
6	Associated with food or scarce resource harvest areas (traditional fishing locations, agricultural/berry extraction areas, etc.)		**N**		If Yes, and Yes for any of 3-5, 7-9, potential determined.
7	Early Post-contact settlement area within 300 m.		**N**		If Yes, and Yes for any of 3-6, 8-9, potential determined
8	Historic Transportation route within 100 m. (historic road, trail, portage, rail corridors, etc.)	**Y**			If Yes, and Yes for any 3-7 or 9, potential determined
9	Contains property designated and/or listed under the Ontario Heritage Act (municipal heritage committee, municipal register, etc.)		**N**		If Yes and, Yes to any of 3-8, potential determined
APPLICATION-SPECIFIC INFORMATION					
10	Local knowledge (local heritage organizations, Pre-contact, etc.)		**N**		If Yes, potential determined
11	Recent disturbance not including agricultural cultivation (post-1960-confirmed extensive and intensive including industrial sites, aggregate areas, etc.)	**Y**			If Yes, no potential or low potential in affected part (s) of the study area.

If **YES** to any of 1, 2a-c, or 10 Archaeological Potential is **confirmed**
If **YES** to 2 or more of 3-9, Archaeological Potential is **confirmed**
If **YES** to 11 or No to 1-10 Low Archaeological Potential is **confirmed** for at least a portion of the study area.

4.2 STAGE 2 ANALYSIS AND CONCLUSIONS

No archaeological sites or resources were found during the Stage 2 survey of the study area.

5.0 RECOMMENDATIONS

5.1 STAGE 1-2 RECOMMENDATIONS

As a result of the Stage 2 Property Assessment of the study area, no archaeological resources were encountered. Consequently, the following recommendations are made:

4. *No further archaeological assessment of the study area is warranted;*
5. *The Provincial interest in archaeological resources with respect to the proposed undertaking has been addressed;*
6. *The proposed undertaking is clear of any archaeological concern.*

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

While not part of the archaeological record, this report must include the following standard advisory statements for the benefit of the proponent and the approval authority in the land use planning and development process:

a. *This report is submitted to the Minister of Tourism and Culture as a condition of licensing in accordance with Part VI of the Ontario Heritage Act, R.S.O. 1990, c. 0.18. The report is reviewed to ensure that it complies with the standards and guidelines 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 Tourism and Culture, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.*

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

c. *Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the Ontario Heritage Act. The proponent or person discovering the archaeological resources*

must cease alteration of the site immediately and engage a licensed archaeologist to carry out archaeological fieldwork, in compliance with sec. 48 (1) of the Ontario Heritage Act.

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

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

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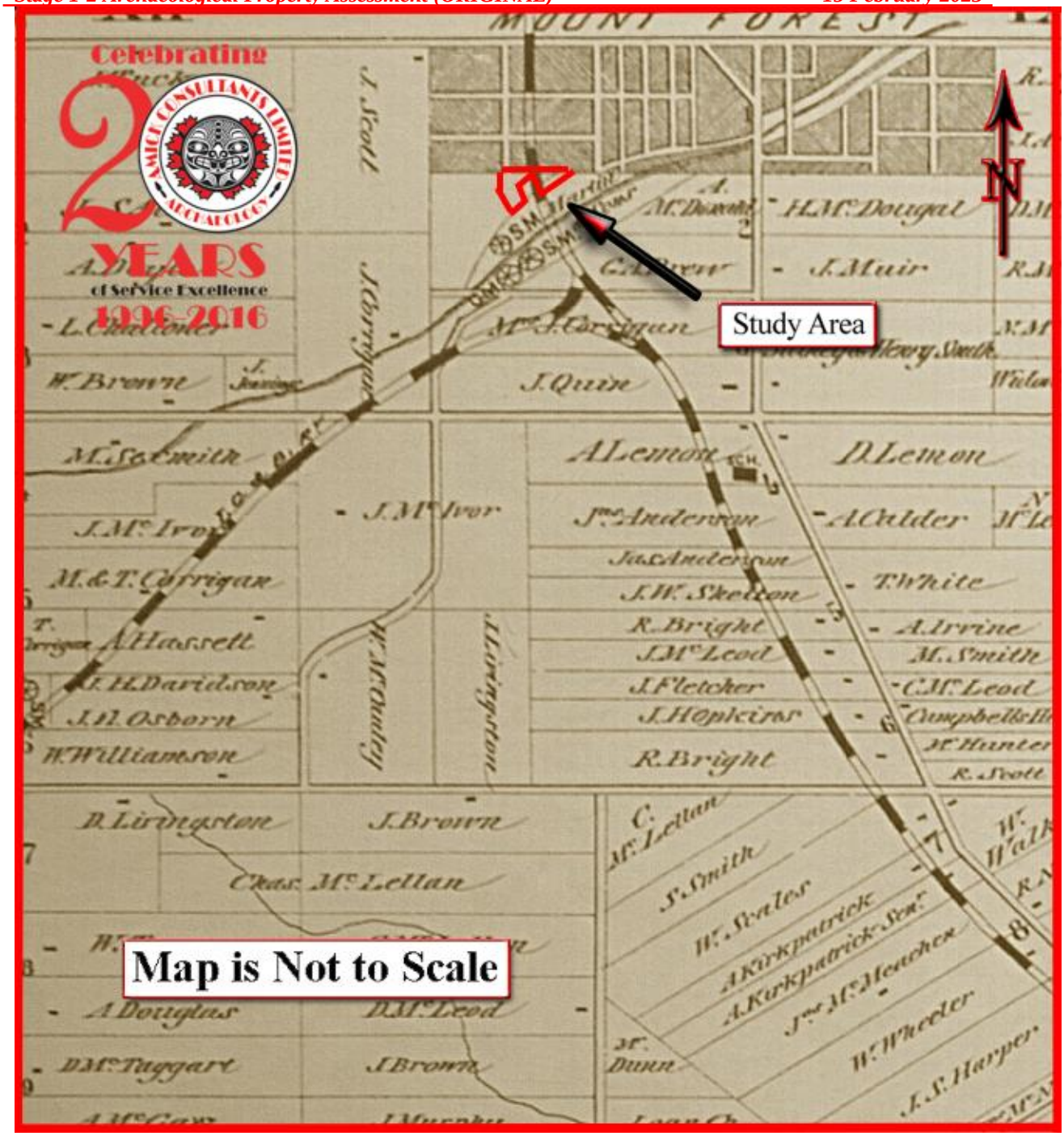
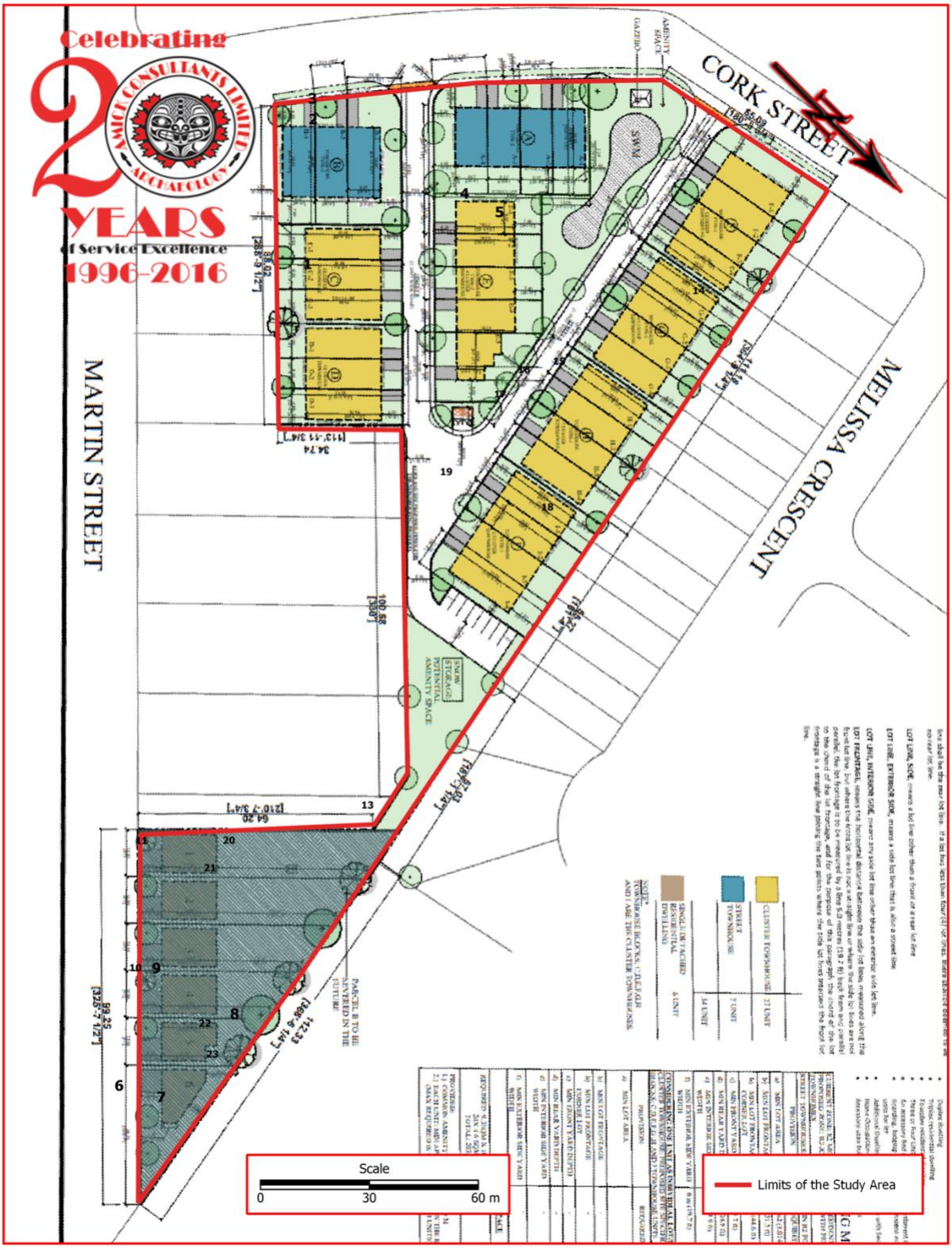
MAPS

MAP 1 LOCATION OF THE STUDY AREA (ESRI 2019)

MAP 2 FACSIMILE SEGMENT OF LESLIE HISTORICAL COUNTY MAP OF WELLINGTON COUNTY (TREMAINE 1861)

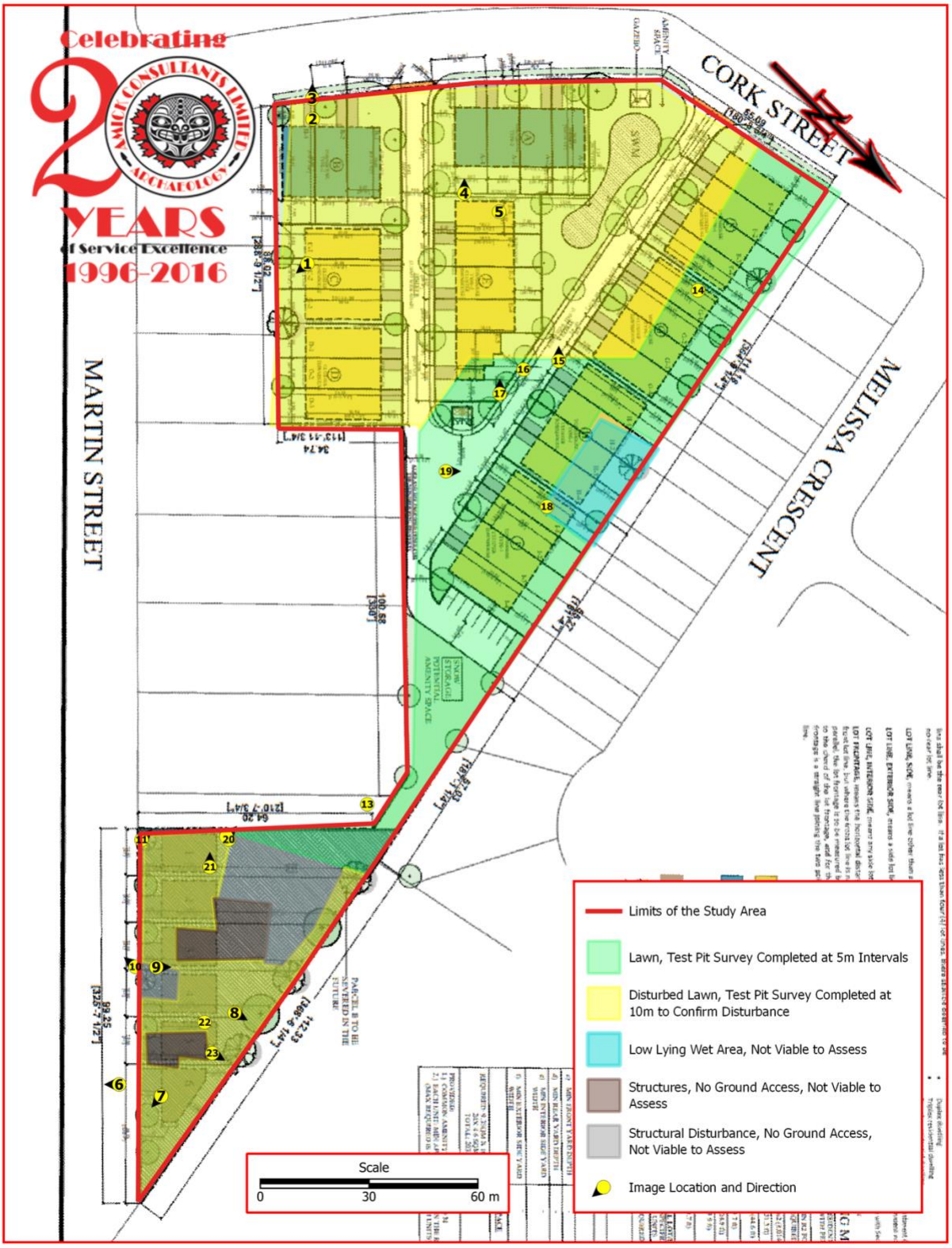


MAP 3 FACSIMILE SEGMENT OF THE HISTORIC ATLAS OF WATERLOO AND WELLINGTON COUNTIES (WALKER & MILES 1877)



MAP 4 SITE PLAN (MAMTA DEVELOPMENTS INC. 2022)

MAP 5 AERIAL PHOTO OF THE STUDY AREA (GOOGLE EARTH 2016)



MAP 6 DETAILED SITE PLAN (MAMTA DEVELOPMENTS INC. 2022)

IMAGES

IMAGE 1 CREW AT WORK 10M INTERVALS DISTURBED

IMAGE 2 DISTURBED TP GRAVEL FILL

IMAGE 3 PROPERTY CONDITIONS

IMAGE 4 CREW AT WORK- 10M TP SURVEY FOR DISTURBED

IMAGE 5 DISTURBED TP

IMAGE 6 HOUSE

IMAGE 7 SIDE YARD/HOUSE

IMAGE 8 HOUSE

IMAGE 9 GRAVEL DRIVEWAY

IMAGE 10 BARN

IMAGE 11 BARN AND YARD

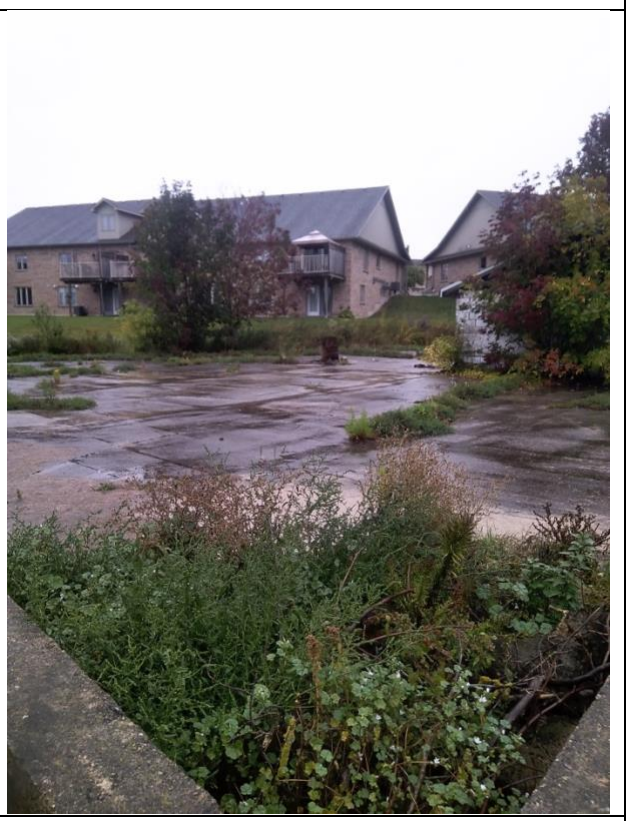


IMAGE 12 CONCRETE PAD

IMAGE 13 SURVEY STAKE

IMAGE 14 NATURAL TP- BROWN CLAY LOAM TOP, GOLD CLAY LOAM SUB

IMAGE 15 CREW AT WORK- 5M TP SURVEY

IMAGE 16 NATURAL TP- BROW SILTY LOAM TOP. GOLD SILTY LOAM SUB

IMAGE 17 CREW AT WORK- 5M TP SURVEY

IMAGE 18 WATERLOGGED TP

IMAGE 19 CREW AT WORK- 5M TP SURVEY

IMAGE 20 5M TO SURVEY

IMAGE 21 DISTURBED

IMAGE 22 DISTURBED TP

IMAGE 23 CREW AT WORK DISTURBED TP GRAVEL