March 7, 2018

REVISED REPORT

Stage 2 Archaeological Assessment, Minto Mahogany Phase 2 Lands, Part Lots 4 & 5, Concession A, Geographic Township of North Gower, Carleton County City of Ottawa

PIF Number: P385-0026-2016
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REPORT

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Executive Summary

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

Golder Associates Ltd. (Golder) was retained by Minto Communities - Canada (Minto) to conduct a Stage 2 archaeological assessment for the 75.5 hectare Mahogany Phase 2 lands located on Part Lots 4 and 5 Concession A Geographic township of North Gower, Carleton County, City of Ottawa.

This Stage 2 Archaeological Assessment was completed to identify possible archaeological resources in the study area as well as to determine if additional archaeological investigations are required. The objectives of the Stage 2 assessment generally flow from principles outlined in the *Ontario Heritage Act* (Consolidated 2007) and the Ontario Ministry of Tourism, Culture and Sports' *Standards and Guidelines for Consultant Archaeologists* (2011).

Human occupation in the area began at least 10,000 years before present (BP) when the Paleo-Indian groups began moving into the area as the last of the glaciers in Ontario began to retreat northwards. There are archaeological sites within the region dating from the Middle Archaic (circa 5,000 BP) through to Late Woodland Periods (1500 A.D.). Early Euro-Canadian settlers began moving into the area around 1842 A.D..

The Stage 2 was conducted over a period of seven days between October 31, 2016 and August 9, 2017 by the Licensee, Stephen Jarret, as well as Helen Moore (R359), Ibrahim Noureddine (P350), and Shan Ling (P340). The Stage 2 consisted of both wooded areas and agricultural fields. As such the field approach consisted of test pitting in the wooded areas and pedestrian survey for agricultural fields. Photographs were taken of the study area and represented on Map 5, p.43.

A Stone foundation was discovered in Operation 2 as well as artifacts. A possible modern sugar shack was also discovered in Operation 3 however the material culture found surrounding it was determined to be of modern origin and no further work was recommended. No other artifacts or archaeological features were found during the Stage 2.

On the basis of the above information, the following recommendations are made:

1) That a Stage 3 archaeological assessment be undertaken on the 19th century historic archaeological site (BhFw-122) found in Operation 2 following Section 3.2.2 and Table 3.1 Test Unit strategy for small post-contact sites where it is not yet evident that the site has further Cultural Heritage Value or Interest Map 6, p.44). This excavation will consist of the hand excavation of 1x1 m units placed at 5 m intervals around the stone foundation (where possible).

2) In Operations 1, 3 – 7 where significant no artifacts or features were found that no further archaeological assessment is required and as a consequence that the Ministry of Tourism, Culture and Sport issue a letter concurring that no additional archaeological investigations are required for these sections of the study area.

3) Any Stage 3 archaeological assessment will follow the requirements set out in the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

The Ontario Ministry of Tourism, Culture and Sport is asked to review the results and recommendations presented herein, accept this report into the Provincial Register of archaeological reports and issue a standard letter of concurrence with the findings presented herein.

Project Personnel

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1.0 PROJECT CONTEXT

Catherine Tremblay of Minto Communities - Canada (Minto) contacted Golder Associates Ltd. (Golder) on October 7, 2016 to conduct a Stage 2 archaeological assessment for the Minto Mahogany Subdivision Stage 2 Lands located in part Lots 4 and 5, Concession A (Broken Front), Geographic Township of North Gower. The total area to be assessed was approximately 75.5 hectares (ha) (Map 1-2, pp.39-40).

1.1 Development Context

This Stage 2 archaeological assessment was triggered by the Planning Act and will form part of Minto's overall Draft Plan of Subdivision and Zoning Amendment applications. The assessment took place in advance of Minto's planned development on the property.

Permission to access the property was provided by Catherine Tremblay of Minto.

1.2 Objectives

This Stage 2 Archaeological Assessment was completed to identify possible archaeological resources in the study area as well as to determine if additional archaeological investigations are required. The objectives of the Stage 2 generally flow from principles outlined in the *Ontario Heritage Act* (Consolidated 2007) and the Ontario Ministry of Tourism, Culture and Sports' *Standards and Guidelines for Consultant Archaeologists* (2011). More specifically, this investigation was completed with the following objectives:

- To document archaeological resources on the property;
- To determine whether the property contains archaeological resources requiring further assessment;
- To recommend appropriate Stage 3 assessment strategies for archaeological sites identified, if necessary.

2.0 HISTORICAL CONTEXT

2.1 Regional Aboriginal History

Human settlement in the Ottawa Valley became possible only after the effects of the last ice withdrew from the area. The Ottawa Valley, and the majority of Canada, was covered by the Laurentide Ice sheet until approximately 11,000 before present (BP). Following a period of deglaciation, the Ottawa Valley was inundated by the Champlain Sea which extended from the Rideau Lakes in the southwest, the Petawawa area to the northwest, along the Ottawa Valley and St. Lawrence lowlands and extended to the east where it met the Atlantic Ocean. The exact boundaries of the Champlain Sea are unknown as current elevation levels reflect the isostatic rebound of the land following the melting of the glaciers.

The earliest possible human settlement in the Ottawa area would have occurred following the recession of the Champlain Sea when vegetation and wildlife had become sufficiently established in the area to enable human occupation (Watson, 1999a). During the Early and Middle Paleo-Indian Periods (12,000–10,000 BP) Ottawa would have remained flooded by the Champlain Sea, but as this sea receded during the Late Paleo-Indian Period (10,000–9,000 BP) it is possible that people migrated along the changing waterfront eventually moving into the Ottawa Valley (Watson, 1999a).

Paleo-Indians were characterized by their nomadic lifestyle. These highly mobile hunters and gatherers relied on caribou, small game, fish and wild plants found in the sub-arctic environment of the time. Although evidence supports the Paleo-Indian occupation in Ontario as early as 11,000 years BP, little evidence exists for occupation within the Ottawa Valley. Evidence consists of two bi-facially fluted projectile points (stone tools) found near the Rideau Lakes. This location would have been near the shore of the Champlain Sea during the time fluted points were being used (Watson, 1999b). A Late Paleo-Dovetail point was recovered in Ottawa South sometime around 1918 (Pilon & Fox, 2015) and additional interpretations of Paleo-Indian material have been identified during archaeological investigations near Greenbank Road (Swayze, 2003) Albion Road and Rideau Road (Swayze, 2004).

Significant occupation of the Ottawa area did not occur until the succeeding Archaic Period (9,500–2,500 BP), when the lakes and rivers had assumed their approximate present locations and deciduous forests became established. Stone tool technologies changed during this time as a broader range of tool types were created, although the skill and workmanship declined from Paleo-Indian standards. Ground stone tools appeared, such as adzes and gouges, tool types which indicate increased wood working and adaptation to new environmental conditions. By 6,000 years BP, copper was being mined in the Upper Great Lakes and traded into southern Ontario influencing a trade network throughout the region.

During the Middle and Late Archaic Period, trading networks spanning east and west along the Ottawa River and south to the Great Lakes developed. Locations with Archaic components which demonstrate this expanding network include Morrison's Island and Allumette Island in the Outaouais region of the Ottawa River (Clermont, 1999) and sites identified at Lake Leamy near the junction of the Gatineau and Ottawa Rivers, as well as in the Rideau Lakes area (Watson, 1982). Other sites with Archaic Period components in the Ottawa Valley include Jessup Falls near the mouth of the South Nation River and at Spencerville near the source of the South Nation River (Daechsel, 1980).

The Archaic Period was followed by the Woodland Period, beginning around 2,500 years BP in Ontario. This period is distinguished by the first appearance of ceramics, in addition to evidence of ceremony including elaborate grave goods. Woodland subsistence strategies were still based on hunting and gathering. Although migratory routes followed seasonal patterns to proven hunting locations rather than following migrating herds.

Trade networks continued to flourish throughout the Woodland Period and reached their peak around 1,800 years ago when they covered much of North America.

Initial ceramic forms were crude and imitated vessels made in the Archaic Period out of steatite (stone). One example of this type of pot was located along the Ottawa River at registered site CaGi-1 in Hull, Quebec (Watson, 1999b). Over time, ceramics became more refined and began to include decorative patterns. These decorative styles are distinct for specific regional populations as well as specific date ranges (Laliberté, 1999).

Towards the end of the Middle Woodland Period (approximately 1,500 years ago) agriculture was introduced and began to take on a significant role in subsistence strategies. It began with the cultivation of corn, beans and tobacco and eventually led to the development of semi-permanent and permanent villages. Many of these villages were surrounded by palisades, indicating increased hostilities between neighbouring groups. This settlement pattern was more common in regions with arable land such as southern Ontario. The implications of these changes did not appear to have significant impacts in the areas north of the St. Lawrence Valley which continued to be used as a hunting area and trade route where many groups retained a semi-nomadic lifestyle. Middle Woodland sites have been identified in the South Nation Drainage Basin (Daechsel, 1980), within the City of Ottawa (Golder, 2014) and along the Ottawa River including Marshall's and Sawdust Bays (Daechsel, 1981).

During the Late Woodland Period, the South Nation River basin appears to have been a zone of interaction between Iroquoian speaking populations who relied primarily on domesticated crops to the south and Algonquian speaking groups who continued as hunter-gatherers to the north. The Huron peoples along the north shore of Lake Ontario had moved to the Lake Simcoe – Georgian Bay region, leaving the area of eastern Ontario, except for some small Algonquin groups, unoccupied by the time the first French explorers arrived in the beginning of the seventeenth century. Six St. Lawrence Iroquoian villages dating to circa 1400 AD have been found in the Spencerville area, while an Algonquian site has been investigated near Casselman (Clark, 1905).

2.2 European Contact and Initial Settlement in the Ottawa Valley

The St. Lawrence Iroquois disappeared in the sixteenth century not long after initial contact with French navigator Jacques Cartier in 1535. Étienne Brûlé is reported to have been the first European to pass through what is now the Ottawa area when he portaged at the Rideau Falls in 1610. Samuel de Champlain followed in 1613. The Ottawa River served as a major route for explorers, traders and missionaries throughout the seventeenth and eighteenth centuries, with a series of trading posts and forts being constructed by the French along the river in the early eighteenth century.

The French documented three Algonquin groups in the regional vicinity of the study area (Heidenreich & Wright, 1987). These included the Matouweskarini along the Madawaska River, the Onontchataronon in the Gananoque River Basin, and the Weskarini, the largest of the three, situated on the Petite Nation River Basin. It is likely that prolonged occupation in the Ottawa area was avoided at this time likely due to hostilities with Iroquoian speaking populations to the south, although it is suggested that at least the northern reaches of the South Nation River Basin were used as hunting territories by these groups.

Settlement in the Ottawa area was not actively encouraged by the colonial British government until the late eighteenth century after John Stegman, the deputy surveyor for Upper Canada, established four townships straddling the Rideau River in 1793.

Commonly acknowledged as the first permanent European resident in the area, Philemon Wright settled in Hull Township, on the north shore of the Ottawa river, with five families and thirty-three men in 1800 (Bond, 1984).

This community grew over the next few years and by 1805 Wright had initiated significant lumbering activity in the area. Settlement along the south shore was very slow through the early nineteenth century. In 1809, Jehiel Collins erected a store in an area which was to become known as Bellows and later Richmond Landing and in 1810 Ira Honeywell constructed a cabin west of the Chaudiere Rapids (Bond, 1984). Another early settler was Braddish Billings, who built a small cabin in Gloucester Township in 1812. Billings went into the lumbering business with Philemon Wright and developed his homestead into a large family estate along the banks of the Rideau River.

The scarcity of roads and poor state of transportation beyond the Ottawa River shoreline slowed settlement in many parts of the Ottawa Valley (Belden, 1879); although with the construction of the Rideau Canal (1827 – 1832) the new settlement of Bytown experienced its first major growth in population. This resulted in the development of two areas: Lower Bytown east of the Canal, primarily populated by French Canadian and Irish labourers and merchants, and Upper Bytown situated to the west with a predominantly white Anglo-Saxon Protestant population. Bytown was incorporated as the City of Ottawa on January 1, 1855, with a population of 10,000. The selection of Ottawa as the capital of Canada in 1857 was the major catalyst in the subsequent development of the city.

2.3 Geographic Township of North Gower

North Gower Township is bounded by the Rideau River to the east, Marlborough Township to the west, Nepean Township to the north and South Gower Township to the south. It was first surveyed in 1791 by John Steadman. The earliest settlers to the area arrived in 1820 and 1821. Stephen Blanchard settled on Lots 20 and 21, Concession 3, at the future site of the Village of North Gower. Sebra Beaman on Lot 16 and Lot 18, Concession 2. Richard Garlick acquired Lots 30 and 31, Concession 1, building a home on Lot 30 (Lindsay 2010: 28). These three men also took it upon themselves to “bush out” a road which began at the Rideau River, at the future site of Kars, and followed Stevens Creek northwest to the village of Richmond (Lindsay 2010: 29). A Methodist preacher, Peter Jones and his wife Anna Eastman settled Lot 18, Concession 4 in 1823. Here they built a log house, where they also held church services and taught a school. They became the parents of the first child born in North Gower (Lindsay 2010: 35).

2.4 The Community of Manotick

The settlement of the Manotick area dates back to early 19th century when the first settlers arrived on Lot 2 and Lot 3 Concession A; one of these settlers was John Clothier (Walker 1968:399).

Construction of dams, sluices and locks in support of the Rideau Canal brought a number of workmen to the area, who later also settled permanently (Walker 1968:399).

In 1860, a flour mill was established by entrepreneurs Moss Kent Dickenson and Joseph Currier. In the next few years, a sawmill and textile mill were also constructed on the banks of the Rideau River (Mika 1981:609). A tannery was later added. The village was surveyed and officially registered in 1862. Mitchell’s directory of 1864 to 1865 stated that a post office was established in these years, that the village population was about 100 people, and a private school was also being held. Dickenson also made Manotick known due to his fleet of steamers, barges and tugs which made Manotick their home base (Walker 1968:402, 403).

The first churches were constructed in the 1840s, one Presbyterian and one Methodist. A catholic church was built in 1858 and an Anglican one was added in 1877. The first official schooling took place on the Hicks farm, Lot 7, in 1856. A log school house was built there in 1858. A hotel was operated on Mill Street as early as 1864 (Walker 1968:405).

2.5 Property History, Part Lots 4 & 5, Concession A

Based on the Stage 1 archaeological assessment of the property by Adams Heritage (2007), the study area was settled fairly early and most landowners were present before 1851. Brothers John and Henry Williams emigrated from Wales and were the first to purchase the eastern ¾ of Lot 5, Concession A, sometime around 1842. A house was built fronting Rideau Valley Drive in the northeastern half of the Lot by Henry, however not part of the present study area. John Williams was identified as a tenant and lived with his brother Henry until building his own house on the east side of Rideau Valley, Lot 5. Later, Hazelton Webster, identified in the 1879 Belden map (Map 3, p.41) purchased Henry Williams' home and property, outside of the study area. Lot 4, Concession A was settled prior to the 1863 as Jorua (?) and Matthew Pettapiece appear on the 1863 Walling map (Map 3, p.41). It is unclear whether there was a structure located on the property at that time given the poor quality of the map reproduction available for analysis. Thomas Pettapiece and Montgomery lived along the Rideau Valley Roadway. Pettapiece's house is depicted on the 1879 Belden map on the southeastern corner of the Lot.

Two names are recorded on the east half of Lot 5 on the 1863 Walling Map; H. Williams to the north and J. Williams to the south (Map 3, p.41).

Three names fall within the study area of Lot 4; in the northeast Joshua G. Clothier, in the southeast Petapiece and in the west another Clothier (Map 3, p.41)

On the east half of Lot 5 in 1879, Jno (Johnathon) Williams is still to the south, but the north half is now recorded as H. Webster's (Map 3, p.41).

On Lot 4 Thos (Thomas) Petapiece is still noted on the east in 1879, while a long driveway extends to the centre of the Lot, where Joshua Clothier is recorded. The residence of Clothier is also clearly visible (Map 3, p.41).

3.0 ARCHAEOLOGICAL CONTEXT

3.1 Previous Archaeological Assessments

The most relevant archaeological assessment to the current project was the preceding Stage 1 archaeological assessment for the project: *An Archaeological Assessment (Stage 1) of the proposed "Mahogany Community in Manotick" Part Lots 4 & 5, Concession 'A' Geographic Township of North Gower*. (Adams Heritage 2007). The Stage 1 assessment was the impetus for further Stage 2 assessment due to the result that a moderate to high archaeological site potential was determined. The Stage 1 report completed by Nick Adams made the following recommendations: *Stage 2 investigation (field testing) of the property is recommended* (Adams 2007).

A separate Stage 1 was also completed as part of the Mahogany development to the west of the 2007 assessment, *An Archaeological Assessment (Stage 1) of the proposed "Manotick Manors" Part* ***Lot 4, Concession 'A'****, Geographic Township of North Gower, City of Ottawa*. (2008). This Stage 1 recommended Stage 2 assessment due to areas of high archaeological potential.

The easternmost area of Mahogany subdivision underwent Stage 2 assessment by Golder in 2012: *Stage 2 Archaeological Assessment of the Proposed Mahogany Subdivision Site, Part Lots 4 and 5, Concession A, Geographic Township North Gower, City of Ottawa, Ontario*. No archaeological sites were identified in the Golder 2012 Stage 2 archaeological assessment.

The MTCS's Pastport was then used to query the *Ontario Public Register of Archaeological Reports.* The following results were obtained by searching the Township field for "North Gower", and "Gower, North". Archaeological reports documenting assessments within the limits (Lot 4 and 5, Concession A) and adjacent to the study area (Lot 3 and 6, Concession A) are listed below:

- Stage 1 & 2 Archaeological Assessment of the Proposed "Manotick Estates Phase VI" NW 1/2 Lot 3, Concession A. Geographic Township of North Gower City of Ottawa. (Adams Heritage 2008)

  The Stage 1 portion of the assessment reported high archaeological potential, and therefore Stage 2 field testing. The Stage 2 testing did not find evidence of an archaeological site, therefore no further archaeological assessment was recommended.

- Stage 1 & 2 Archaeological Assessment of the proposed Watterson Place Development Property, South 1/2 Lot 3, Con. A., Geo. Twp. of North Gower, City of Ottawa. (Adams Heritage 2009)

  The Stage 1 portion of the assessment reported high archaeological potential, and therefore Stage 2 field testing. The Stage 2 testing did not find evidence of an archaeological site, therefore no further archaeological assessment was recommended.

3.2 Known Archaeological Sites

Archaeological sites within one kilometre of the Mahogany study area were requested from the MTCS's archaeological sites database, in October 2017, when the MTCS PIF number was requested. The results are summarized in Table 1.

Table 1: Archaeological Sites Within One Kilometre of the Mahogany Study Area, from the MTCS's Archaeological Sites Database

Borden No.	Site Name	Description	Cultural Heritage Value or Interest (CHVI)	Distance to Study Area
BhFw-118		Pre-Contact, Aboriginal	No Further CHVI	800 m
BhFw-117	Williams' Homestead	Post-Contact, Euro-Canadian, farmstead	Further CHVI	850 m
BhFw-116	Washkà Site	Middle Woodland, Aboriginal, camp/campsite, habitation	Further CHVI	822 m

3.3 Current Conditions

Current land use included a vacant woodlot and agricultural fields where corn is being cultivated (corn was cultivated in 2016 and soybeans in 2017). The wooded area of the study area, Operations 1, 2, 3, 4, and 8 consisted of an elevated sandy ridge, whose surficial geology was a "5b Till" (*Stone-poor, sandy silt to silty sand-textured till on Paleozoic terrain (Hills 1944)*). The majority of the rest of the property (operations 5-7) was a "10a Fine-textured glaciomarine deposits" (*silt and clay, minor sand and gravel, massive to well laminated*) (Hills 1944). Similarly, the wooded ridge is classed as a Kars gravelly sandy loam, while the majority of the property is a North Gower clay loam.

3.4 Dates of Archaeological Fieldwork

Fieldwork took place in two episodes. It was begun in the autumn of 2016, from October 31 to November 2, 2016. The 2016 work consisted of a test pit survey at 5 metre intervals within the wooded areas. In the summer of 2017, from June 21 to August 9, the ploughed fields were pedestrian surveyed at 5 metre intervals.

4.0 FIELD METHODS

Archaeological potential for the Mahogany study area was identified in the previous Stage 1 archaeological assessment completed in 2007, see Section 3.1.

Field methods are based on those outlined in the MTCS's *Standards and Guidelines for Consultant Archaeologists* (2011).

All Stage 2 fieldwork was completed under favourable weather conditions that did not hinder the archaeological fieldwork or recording of archaeological deposits. A table detailing the weather conditions for each field day is provided as Table 2 below.

Table 2: Weather Conditions during the Stage 2 Archaeological Assessment

Date of Stage 2 Fieldwork	Weather Conditions in Field	Temperature High (°C)
October 31, 2016	Sun, cloud	12
November 1, 2016	Frost first thing in the morning, overcast, sunny breaks throughout day	10
November 2, 2016	Sun, cloud	7 to 15
June 21, 2017	Sun, cloud	17
June 22, 2017	Sunny	15
July 13 2017	Cloudy	18
August 9 2017	Clear	20-25

A field log was maintained for the duration of the investigation detailing pertinent information and digital photographs were taken of the tested areas, representative test pits and general landscape and topography. A detailed photographic catalogue is included as Appendix A, with the location and direction of photographs taken as part of the Stage 2 field assessment represented on Map 5 (p.43).

All photo locations and features of topographic or archaeological significance were surveyed with Garmin GPS MAP62 units and documented with digital photographs. The Garmin MAP62 GPS unit is a 12 channel SiRFstar III high-sensitivity GPS receiver (WAAS-enabled), which continuously tracks and uses up to 12 satellites to compute and update plotted positons. The accuracy of the unit is <10 meters 95% typical. The positions recorded for this Stage 2 investigation were typically accurate to 3 meters or less. The projection used was Universal Transverse Mercator (UTM), Grid Zone 18, and referenced to the North American Datum (NAD) 1983.

Test Pit Survey

The wooded areas of the Mahogany study area (Operations 1, 2, 3, 4, and 8) were inspected by test pit survey following Section 2.1.1 and 2.1.3 of the MTCS's *Standards and Guidelines for Consultant Archaeologists (*2011). The survey employed the hand excavation of test pits excavated at least 30 cm in diameter at five meter intervals, with the excavated soil screened through six mm mesh, and each test pit backfilled upon completion. Each test pit was hand excavated at least five cm into subsoil, with each individual test pit examined for stratigraphy, cultural features and evidence of fill or previous disturbances. A total of approximately 6.6 hectares were tested using these methods (Map 4, p.42).

Pedestrian Survey

The ploughed fields of the Mahogany study area (Operations 5 and 6) were inspected by pedestrian survey following Section 2.1.2 of the MTCS's *Standards and Guidelines for Consultant Archaeologists (*2011). The survey consisted of the systematic survey of recently cultivated and weathered agricultural land. Survey transects were five meter intervals. A total of approximately 56.21 hectares were tested using these methods (Map 4 p.42). All fields that were pedestrian surveyed had surface visibility of at least 90% when field walked.

Exemptions

The remaining 12.69 ha was located in Operation 7 which consisted of previously disturbed lands. Upon inspecting this area it was clear that the area had undergone significant previous ground disturbance likely associated with the housing construction occurring on the east of the study area. The area is currently being used as a stockpile for gravel, and soil. This areas was recoded as being disturbed and not tested further as it was determined that there was no further intact archaeological potential in these areas.

5.0 RECORD OF FINDS

The Stage 2 archaeological fieldwork was conducted employing methods described in Section 4.0 of this report. An inventory of the documentary record generated from the fieldwork is provided in Table 3, and the results of the Stage 2 archaeological fieldwork are described below.

Table 3: Inventory of Documentary Record

Document Type	Current Location of Document	Additional Comments
Field Notes	Golder Associates Ltd. Ottawa Office	Original field note book with photocopies in project file October 31, 2016 to August 9, 2017. 9 pages total.
Maps Provided by Client	Golder Associates Ltd. Ottawa Office	Stored in the project file.
Digital Photographs	Golder Associates Ltd. Ottawa Office	A total of 25 photographs, stored electronically in the project file.

5.1 Operation 1

Operation 1 consisted of a wooded area, which was assessed by test pit survey (Image 1, p.22). Soils encountered consisted of approximately 20 cm of medium brown sandy loam topsoil, over a red-brown sandy loam subsoil (Image p 2, p.22.). There were no archaeological resources or sites found in Operation 1.

5.2 Operation 2

Operation 2 consisted of wooded areas as well as more open areas of shrubs entangled in grapevines and patches of raspberries (Image 3, p.23). Operation 2 was assessed by test pit survey. Soils encountered consisted of approximately 20 cm of medium brown sandy loam topsoil, over a red-brown sandy loam subsoil (Image 4 p, p.23.).

Both archaeological features and artifacts were found in Operation 2. The archaeological features consisted of a stone foundation, and a stone lined water well (Map 4 and 6, pp.42 and 44).

The Stone Foundation

The limestone foundation was located on the apex of the ridge, but was so well camouflaged by lilac tree sucker shoots entangled in both raspberry canes and wild grapevines, that a test pit was excavated just over one meter to the east before a field technician realized that there was a stone foundation directly in front of them. A great amount of large “modern” refuse had also been disposed of in the open foundation, including what appeared to be a pickup truck bed or trailer, mattress (iron springs), iron barrel/drum, iron basin bicycle and spool of wire fencing, among other things. A cursory opinion of the refuse determined that it was actually “older”, possibly discarded in the early 20th century as no plastic was observed, which was not commonplace until the late 1920s (Hillman 1986: 20). The refuse, as well as the thick vegetation was a hindrance to documenting and photographing the foundation (Images 5-6, p.24). All four walls appeared to be in decent condition under the vegetation. The foundations measured approximately six metres by six metres. There was an entranceway through the south wall, possibly a step down into the foundation, possibly into a root cellar.

The majority of the artifacts were found to the west of the foundation, on the downward slope. A total of 6 positive test pits were excavated, on the original five metre survey lines. The test pits produced a total of 82 historic artifacts. The artifacts are summarized by function in the following table:

Table 4: Artifacts summarized by function.

Function	# of Artifacts
arms/ammunition	1
fauna: indeterminate	1
food/beverage	16
furnishing	1
indeterminate	5
personal/societal	2
structural	55
tools/equipment	1
	82

The majority of artifacts were unsurprisingly structural, and consisted of nails, window pane glass and a sample of red brick. A total of 48 nails were recovered, 45 were machine cut, and three were wire. Machine cut nails were available after 1805 (Miller 2000:14) and were commonly used into until the 1890s, when wire nail production exceeded that of machine cut nails (Smith 1966).

Artifacts in the food/beverage function group were the next most abundant at 16. Artifacts included ceramic and two small fragments of calcined bone. The ceramic consisted of 12 sherds of vitrified white earthenware (vwe) tableware, only one sherd, a plate sherd, was decorated with moulded decoration, the other sherds were plain. VWE became an available ceramic option in the 1840s, and continues in use today (Jouppien 1980:26-27), although its peak popularity was in the 1880s and 1890s (Kenyon 1991:9). Three sherds of coarse red earthenware from a hollowware vessel were also inventoried. This vessel may have been of a food storage or food preparation function.

Indeterminate function artifacts included: a bolt, a piece of chain, two pieces of wire and an iron strap, possibly a piece of mechanical equipment.

Other artifacts included an ammunition cartridge, a small nail (likely from a piece of furniture), a fragment of iron bucket and two clothing buttons; one iron and one glass. The iron button was decorated with a piecrust design. The glass button had a “calico” or transfer printed design. This type of button generally dates to the 1840s and later (Sprague 2002:111). (Image 27, p.36).

The Water Well

Downslope and almost directly west of the stone foundation, a stone lined water well was discovered (Image 7 p.26). The well was at the edge of the woods, a few metres east of the fence line marking the boundary of the ploughed field, Operation 6. The approximate outside diameter of the well was one metre. A number of degraded wood timbers were scattered around the well. There were no artifacts recovered in the vicinity of the well.

5.3 Operation 3

Operation 3 consisted of a wooded area, which was assessed by test pit survey at 5 metre intervals (Image 8 p.27). The trees in this area consisted of a mature stand of Maple and Birch, with hardly any undergrowth capable to develop under the canopy. Soils encountered consisted of approximately 20 cm of medium brown sandy loam topsoil, over a red-brown sandy loam subsoil (Image 9 p.27). A mid 20th century scatter of material (based on the artifacts found on the surface) was discovered in Operation 3 Based on the material collected and the observations of the field lead, the scatter may represent a sugar shack (Image 10, p.28).

A total of 21 modern historic "artifacts" were collected from the surface. Eight sherds of glass were found from two machine made bottles. Machine production for narrow mouthed containers (bottles) began in 1889 (Miller & Sullivan 1991:110). One bottle was lime green in colour, a colour used almost exclusively in the 20th century (Lindsey 2016). This bottle was also embossed with "OZS" which suggests that it dates to 1913 or later (Lindsey 2016).

Other items included a sherd of amber glass hollowware, two fragments of cast iron, a fragment of sheet iron bucket and a fragment of leather strap with wire nails in situ. Wire nails were not commonplace until at least the 1890s (Smith 1966). (Image 28, p.37)

5.4 Operation 4

Operation 4 was a low-lying open area of a few trees and sparse undergrowth which consisted of grasses. The area was likely waterlogged throughout most of the year, judging from the lack of vegetation, as well as the high water marks seen at the bases of all of the trees (Image p 11, p.28). This area was also connected to Operation 5, which was the more defined creek bed to the northwest (see next section).

There was no standing water in November 2016, therefore the area was test pitted throughout the operation. Soils encountered consisted of a thin layer of dark brown-black loam, over a red-brown sandy loam subsoil (Image p 12, p.29). There were no archaeological resources or sites found in Operation 4.

5.5 Operation 5

Operation 5 consisted of open fields on the west side of the study area (west of Operations 1 – 3). This operation consisted of agricultural fields with brown sandy loam soils with surface visibility between 90-95% (Images 13-15, pp.29-30). A creek bed runs in a north south orientation in Operation 5. The creek was a narrow, deep ditch, mostly dry, but with some standing water even in the dry autumn of November 2016 when it was investigated (Image 16, p.31). Cat tails/bulrushes stood in a number of areas, indicating a wet environment. No artifacts or archaeological features were found in Operation 5.

5.6 Operation 6

Operation 6 was more open agricultural fields located on the east side of the study area (East of Operations 1 – 3 and west of Operations 7 and 8). Fields in this section consist of brown sandy loam with 90 = 95% surface visibility (Images 17 – 18, p.31). The fields are planed with soybeans and had a few sections which indicated permanent wetness (Images 19 – 22, pp.32-34). These areas were observed in June after some substantial and frequent rain periods. As such these areas were left to dry and returned to later in August to see if they would dry. As was observed in the images the areas were still wet after several weeks of no rain. As such it was determined that these areas were too wet to survey and were skipped. No artifacts or archaeological features were found in this Operation.

5.7 Operation 7

Operation 7 consisted of disturbed lands in the northeast corner of the study area (east of Operation 6 and north of Operation 8). The area was photographed to show disturbance but no further action was taken (Images 23-24, p.34). No artifacts or features were found in this operation.

5.8 Operation 8

Operation 8 consisted of a grassy field with some small trees at the south eastern edge of the study area south of Operation 7 and east of Operation 6. The area was fairly open but it was not ploughed due to the terrain. The soils showed some evidence of disturbance consisting of gravel inclusions throughout the test pit with soil depths averaging around 18 cm to subsoil. (Images 25, 26, p.35). No artifacts or archaeological features were found in this operation.

6.0 ANALYSIS AND CONCLUSIONS

The test pit survey of Operation 2 identified a late 19th century historic homestead, indicated by both the artifact assemblage, and historic documentation. The homestead likely belonged to Joshua Clothier, as noted on the 1879 Belden map. The inside foundations are filled in with a combination of modern debitage (i.e. rusted truck bed) as well as historic period artifacts. Further excavation is recommended (Stage 3) to determine the nature of this structure and the Cultural Heritage Value or Interest of the site. A stone lined well which is assumed to be associated with the structure was located directly west of the stone foundation. No artifacts were identified in the test pits excavated in the vicinity of the well. Based on the foundations and the historic artifacts associated with the stone foundation the site has been registered with MTCS and assigned Borden number BhFw-122.

A mid-20th century potential sugar shack was identified in Operation 3. The shack remains appear to be of modern construction material so no further action was taken. This conclusion was based off the material culture/modern refuse found in proximity to the remains of the structure.

No other artifacts or features were identified in Operations 1, 4 – 8.

7.0 RECOMMENDATIONS

This report provides the following recommendations:

1) That a Stage 3 archaeological assessment be undertaken on the 19th century historic archaeological site (BhFw-122) found in Operation 2 following Section 3.2.2 and Table 3.1 Test Unit strategy for small post-contact sites where it is not yet evident that the site has further Cultural Heritage Value or Interest Map 6, p.44). This excavation will consist of the hand excavation of 1x1 m units placed at 5 m intervals around the stone foundation (where possible). In Operations 1, 3-7 where significant no artifacts or features were found that no further archaeological assessment is required and as a consequence that the Ministry of Tourism, Culture and Sport issue a letter concurring that no additional archaeological investigations are required for these sections of the study area.

2) Any Stage 3 archaeological assessment will follow the requirements set out in the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

The Ontario Ministry of Tourism, Culture and Sport is asked to review the results and recommendations presented herein, accept this report into the Provincial Register of archaeological reports and issue a standard letter of concurrence with the findings presented herein.

8.0 ADVICE ON COMPLIANCE WITH LEGISLATION

This report is submitted to the Minister of Tourism, Culture and Sport as a condition of licensing in accordance with Part VI of the Ontario Heritage Act, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism, Culture and Sport, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

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

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

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.

The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33, 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 Ontario Ministry of Consumer Services is also immediately notified.

9.0 IMPORTANT INFORMATION AND LIMITATIONS OF THIS REPORT

Golder Associates Ltd. (“Golder”) has prepared this report in a manner consistent with that level of care and skill ordinarily exercised by members of the archaeological profession currently practicing under similar conditions in the jurisdiction in which the services are provided, subject to the time limits and physical constraints applicable to this report. No other warranty, expressed or implied, is made.

This report has been prepared for the specific site, design objective, developments and purpose described to Golder by Minto Communities - Canada (the “Client”). The factual data, interpretations and recommendations pertain to a specific project as described in this report and are not applicable to any other project or site location.

The information, recommendations and opinions expressed in this report are for the sole benefit of the Client. No other party may use or rely on this report or any portion thereof without Golder’s express written consent. If the report was prepared to be included for a specific permit application process, then upon the reasonable request of the client, Golder may authorize in writing the use of this report by the regulatory agency as an Approved User for the specific and identified purpose of the applicable permit review process. Any other use of this report by others is prohibited and is without responsibility to Golder. The report, all plans, data, drawings and other documents as well as all electronic media prepared by Golder are considered its professional work product and shall remain the copyright property of Golder, who authorizes only the Client and Approved Users to make copies of the report, but only in such quantities as are reasonably necessary for the use of the report by those parties. The Client and Approved Users may not give, lend, sell, or otherwise make available the report or any portion thereof to any other party without the express written permission of Golder. The Client acknowledges the electronic media is susceptible to unauthorized modification, deterioration and incompatibility and therefore the Client cannot rely upon the electronic media versions of Golder’s report or other work products.

Unless otherwise stated, the suggestions, recommendations and opinions given in this report are intended only for the guidance of the Client in the design of the specific project.

Special risks occur whenever archaeological investigations are applied to identify subsurface conditions and even a comprehensive investigation, sampling and testing program may fail to detect all or certain archaeological resources. The sampling strategies incorporated in this study comply with those identified in the MTCS’ *Standards and Guidelines for Consultant Archaeologists* (2011).

10.0 BIBLIOGRAPHY AND SOURCES

Adams Heritage

2007 **An Archaeological Assessment (Stage 1) of the proposed "Mahogany Community in Manotick" Part Lots 4 & 5, Concession 'A' Geographic Township of North Gower**. MTCS PIF No. P003-135-2007.

2009 **Stage 1 & 2 Archaeological Assessment of the proposed Watterson Place Development Property, South 1/2 Lot 3, Con. A., Geo. Twp. of North Gower, City of Ottawa**. MTCS PIF No. P003-254-2009.

2008 **An Archaeological Assessment (Stage 1) of the proposed "Manotick Manors" Part Lot 4, Concession 'A', Geographic Township of North Gower, City of Ottawa**. MTCS PIF No. P003-175-2008.

2008 **Stage 1 & 2 Archaeological Assessment of the Proposed "Manotick Estates Phase VI" NW 1/2 Lot 3, Concession A. Geographic Township of North Gower City of Ottawa**. MTCS PIF No. P003-206-2008.

Bond, C. C.

1984 **Where the Rivers Meet: An Illustrated History of Ottawa**. Ottawa: Windsor Publications (Canada) Ltd.

Daechsel, Hugh J.

1980 **An Archaeological Evaluation of the South Nation River Drainage Basin.** Report prepared for the South Nation Conservation Authority, Berwick, Ontario.

1981 **Sawdust Bay-2: The Identification of a Middle Woodland Site in the Ottawa Valley**. Unpublished M.A. Thesis, Department of Anthropology, McMaster University.

Golder Associates Ltd.

2012 **Stage 2 Archaeological Assessment of the Proposed Mahogany Subdivision Site, Part Lots 4 and 5, Concession A, Geographic Township North Gower, City of Ottawa, Ontario**. MTCS PIF P311-073-2011.

Heidenreich, Conrad and J.V. Wright

1987 **Population and Subsistence. Plate 18, Historical Atlas of Canada, Volume 1: From the Beginning to 1800**, edited by R. Cole Harris, University of Toronto Press, Toronto.

Hillman, David

1986 A Short History of Early Consumer Plastics. **Journal of the International Institute for Conservation - Canadian Group**, 1985/86, J.IIC-CG, Vol. 10 & 11.

Hills, Richards and Morwick

1944 **Soil Map of Carleton County**.

Jouppien, J.K.

1980 **The Application of South's Mean Ceramic Dating Formula to Ontario Historic Sites**. Arch Notes May/June 1980:24-29.

Kenyon, Ian
1991 **A History of Ceramic Tableware in Ontario: 1780 - 1890**. Unpublised paper.

Laliberté, M.
1999 "The Middle Woodland in the Ottawa Valley." In **Ottawa Valley Prehistory**, edited by J.-L. Pilon, pp. 70-81. Hull, Qc: Imprimerie Gauvin.

Lindsay, Coral
2010 **Kars on the Rideau**. Second Edition. Rideau Township Historical Society.

Lindsey, Bill
2016 **Bureau of Land Management and Society for Historical Archaeology, Historic Glass Bottle Identification & Information Website**, https://sha.org/bottle/

Mika, Nick and Helma
1981 **Places in Ontario**. Mika Publishing Company. Belleville, Ontario.

Miller, George L.
2000 Telling Time for Archaeologists. **Northeast Historical Archaeology**. Vol.29. p1-17.

Ontario Geological Survey
2010 **Surficial Geology of Southern Ontario**.

Pilon, Jean-Luc and Fox, William
2015 **"St. Charles or Dovetail Points in Eastern Ontario"** in Ontario Archaeological Society Arch Notes, 20(1): 5-9.

Smith, H.R. Bradley
1966 **Supplement to Blacksmiths' and Ferriers' Tools at Shelburne Museum**, Museum Pamphlet Series, Number 7

Sprague, R.
2002 China or Prosser Button Identification and Dating. **Historical Archaeology**, 36(2): 111-127.

Swayze, Ken
2008 **Stage 1 & 2 Archaeological Assessment of the Proposed "Manotick Estates Phase VI" NW 1/2 Lot 3, Concession A. Geographic Township of North Gower City of Ottawa.**. Summary report, on file, Ministry of Culture, Toronto.

2009 **Stage 1 & 2 Archaeological Assessment of the proposed Watterson Place Development Property, South 1/2 Lot 3, Con. A., Geo. Twp. of North Gower, City of Ottawa.** Consultant's report submitted to the Ontario Ministry of Tourism, Culture and Sport.

Walker, Harry and Olive
1968 **Carleton Saga**. The Runge Press Limited, Ottawa.

Watson, Gordon
1982 **"Prehistoric Peoples of the Rideau Waterway."** In Archaeological and Historical Symposium, October 2-3, 1982, Rideau Ferry, Ontario. F.C.L. Wyght, ed., Smiths Falls: Performance Printing.

1999a "The Paleo-Indian Period in the Ottawa Valley." In **Ottawa Valley Prehistory**, edited by J.-L. Pilon, pp. 28-41. Hull, QC: Imprimerie Gauvin.

1999b "The Early Woodland of the Ottawa Valley." In **Ottawa Valley Prehistory**, edited by J.-L. Pilon, pp. 56-76). Hull, QC: Imprimerie Gauvin.

Walling, H. F.
1863 **Map of the County of Carleton Canada West**. Published by D. P. Putnam.

Ontario Geological Survey
2010 **Surficial Geology of Southern Ontario**.

11.0 IMAGES

Image 1: Wooded areas being test pitted in Operation 1, view west.

Image 2: Test pit soil stratigraphy in Operation 1.

Image 3: Test pit survey in Operation 2, view southwest.

Image 4: Test pit soil stratigraphy in Operation 2.

Removed – Located in supplementary documentation

Image 5: Stone foundation with rusted truck bed in Operation 2, view northeast.

Removed – Located in supplementary documentation

Image 6: Stone foundation with debitage in Operation 2, vieweast.

Removed – Located in supplementary documentation

Image 7: Stone well west of stone foundation in Operation 2 facing, view southwest

Image 8: Test pitting in Operation 3, view southeast.

Image 9: Test pit soil stratigraphy in Operation 3.

Image 10: Sugar shack remains in Operation 3, view east.

Image 11: Landscape of Operation 4, view northeast.

Image 12: Test pit soil stratigraphy in Operation 4.

Image 13: Crew field walking in the northern section of Operation 5, view south.

Image 14: Crew field walking in the southern section of Operation 5, view south.

Image 15: Close up of soil conditions in Operation 5, view north.

Image 16: Small creek traversing north south in the middle of Operation 5, view north.

Image 17: Field crew field walking northern section of Operation 6, view south.

Image 18: Soil conditions of southern section of Operation 6, view north.

Image 19: Wet area in south section of Operation 6, view north.

Image 20: Wet areas central section in Operation 6, view northeast.

Image 21: Wet areas in northern section of Operation 6, view north.

Image 22: Wet areas in northern section of Operation 6, view west.

Image 23: Operation 7 disturbed, view west.

Image 24: Operation 7 disturbed, north west.

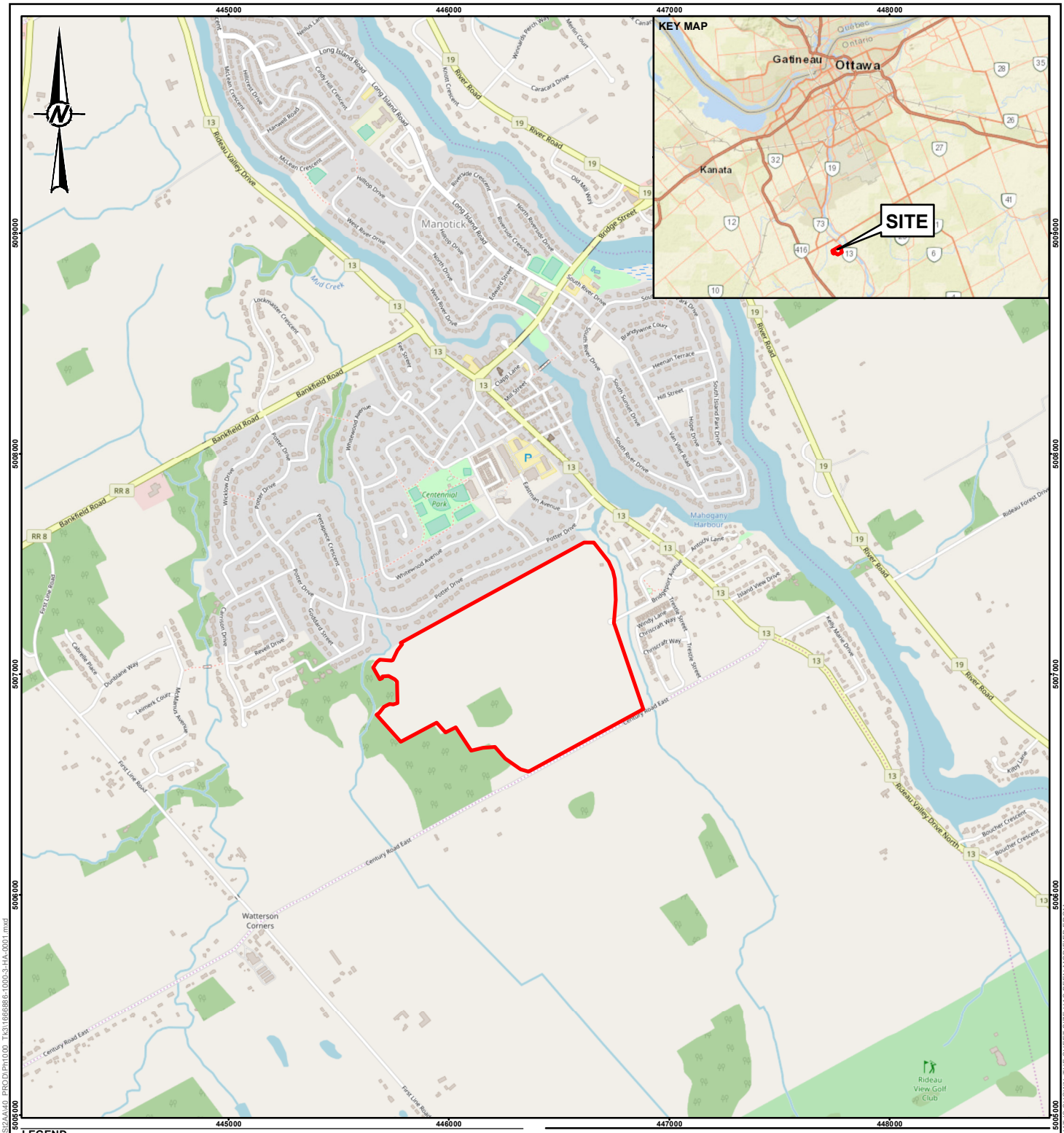
Image 25: Field Crew test pitting in Operation 8, view west.

Image 26: Test Pit soils stratigraphy in Operation 8.

Image 27: Artifacts from Operation 2: Moulded vitrified white earthenware plate rim, Coarse red earthenware hollowware, Ammunition cartridge, wire furniture nail, machine cut nail, iron button, calico button

Image 28: Artifacts from Operation 3: machine made alcohol bottle, with embossed "OZS", machine made wine bottle, leather strap with nails, bucket fragment.

12.0 MAPS



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NOTE(S)

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CLIENT
MINTO COMMUNITIES CANADA

PROJECT
STAGE 2 ARCHAEOLOGICAL ASSESSMENT OF MINTO MAHOGANY LANDS

TITLE
KEY PLAN

CONSULTANT
Golder Associates

YYYY-MM-DD	2017-10-16
DESIGNED	----
PREPARED	BR
REVIEWED	SL
APPROVED	BD

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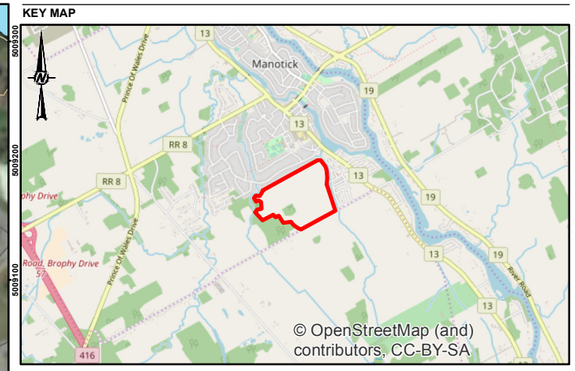

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LEGEND

- STUDY AREA
- OPERATION BOUNDARY
- ROADWAY
- TOPOGRAPHIC CONTOUR, metres
- WATERCOURSE
- WETLAND
- WATERBODY
- LOT FABRIC

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NOTE(S)

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MINTO COMMUNITIES CANADA

PROJECT
STAGE 2 ARCHAEOLOGICAL ASSESSMENT OF MINTO MAHOGANY LANDS

TITLE
STUDY AREA MAP

CONSULTANT
Golder Associates

YYYY-MM-DD	2017-10-16
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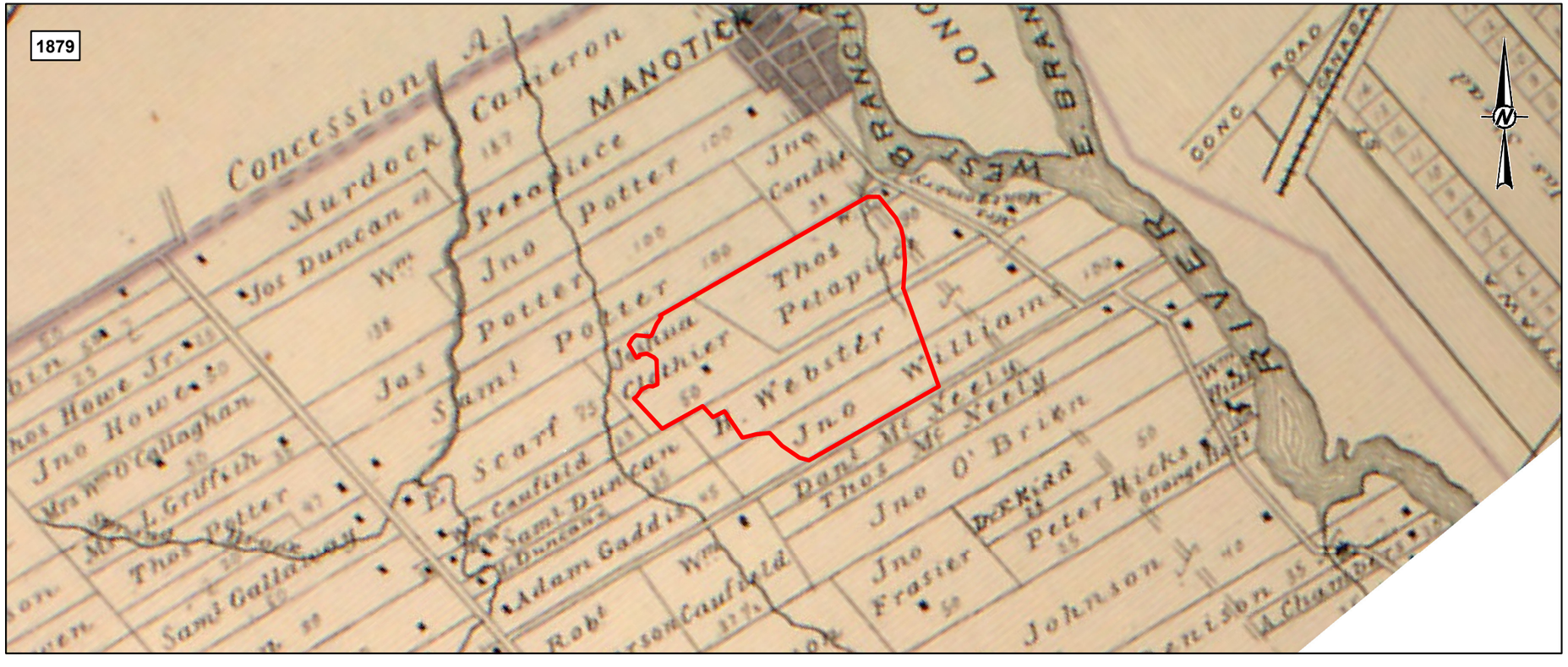

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1. 1863 WALLING MAP OF CARLETON COUNTY
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STAGE 2 ARCHAEOLOGICAL ASSESSMENT OF MINTO MAHOGANY LANDS

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HISTORICAL MAPS

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LEGEND

- STUDY AREA
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- PEDESTRIAN SURVEY
- TEST PITTED
- DISTURBED
- ROADWAY
- TOPOGRAPHIC CONTOUR, metres
- WATERCOURSE
- WETLAND
- WATERBODY
- LOT FABRIC

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1:5,000 METRES

NOTE(S)

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CLIENT
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PROJECT
STAGE 2 ARCHAEOLOGICAL ASSESSMENT OF MINTO MAHOGANY LANDS

TITLE
STAGE 2 ASSESSMENT

CONSULTANT
Golder Associates

YYYY-MM-DD	2017-10-16
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APPROVED	BD

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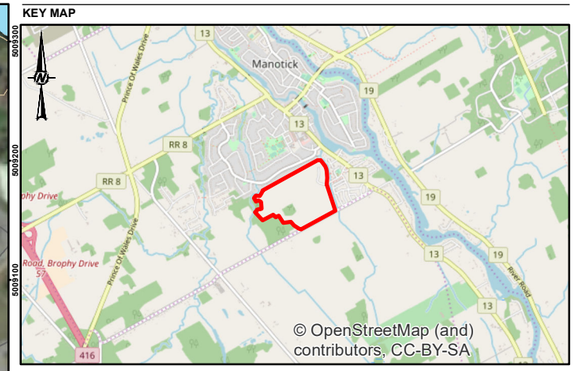

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- ROADWAY
- TOPOGRAPHIC CONTOUR, metres
- WATERCOURSE
- WETLAND
- WATERBODY
- LOT FABRIC

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NOTE(S)

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MINTO COMMUNITIES CANADA

PROJECT
STAGE 2 ARCHAEOLOGICAL ASSESSMENT OF MINTO MAHOGANY LANDS

TITLE
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Golder Associates

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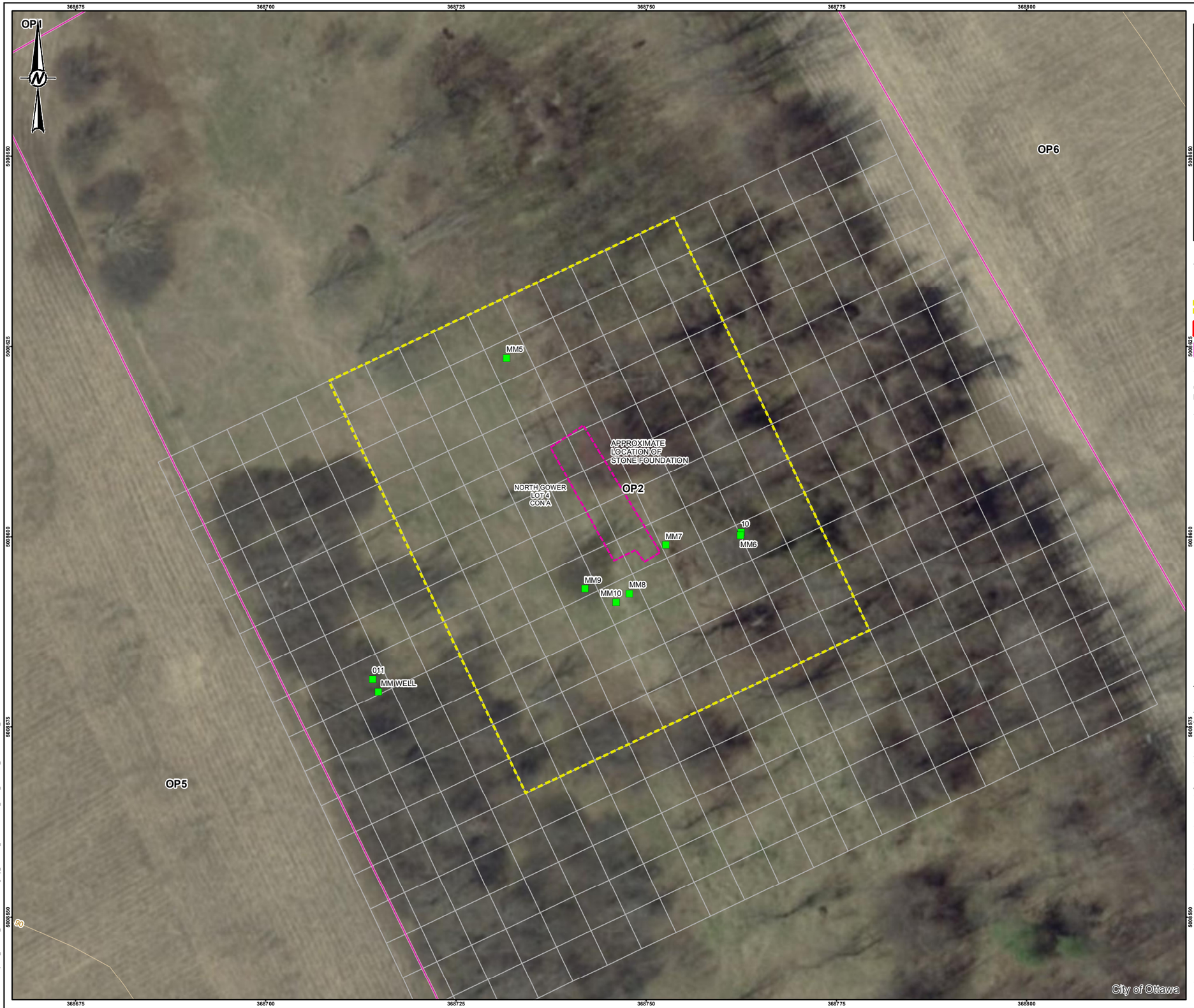

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- STUDY AREA
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- LOT FABRIC
- 5 METRE GRID

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PROJECT
STAGE 2 ARCHAEOLOGICAL ASSESSMENT OF MINTO MAHOGANY LANDS

TITLE
STAGE 3 RECOMMENDATION

CONSULTANT
Golder Associates

YYYY-MM-DD	2017-10-16
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CLOSURE

We trust that this report meets your current needs. If you have any questions, or if we may be of further assistance, please contact the undersigned.

GOLDER ASSOCIATES LTD.

Shan Ling, M.A.
Archaeologist

Bradley Drouin, M.A.
Associate, Senior Archaeologist

STWL/BD/ca

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APPENDIX A

Artifact Catalogue

ID	Borden #	Prov 1	Prov 2	Material 1	Material 2	Function 1	Function 2	Object	Fragment	Attribute 1	Attribute 2	Manufacture	Alteration	# of Artifacts	Note
551	BhFw-122	Op. 02	TP 01	ceramic	vitrified white earthenware	food/beverage	tableware	plate: indeterminate	rim	moulded	clear/colourless			1	
552	BhFw-122	Op. 02	TP 01	metal	iron	structural	hardware	nail: common	incomplete	rectangular head		cut		1	
553	BhFw-122	Op. 02	TP 01	metal	iron	structural	hardware	nail: common	incomplete	indeterminate		cut		2	
554	BhFw-122	Op. 02	TP 02	metal	iron	tools/equipment	indeterminate	indeterminate	blade			cast		1	possible tool blade
555	BhFw-122	Op. 02	TP 02	metal	iron	indeterminate	hardware	bolt: threaded	complete	round dome head				1	
556	BhFw-122	Op. 02	TP 02	metal	iron	indeterminate		wire	incomplete					1	
557	BhFw-122	Op. 02	TP 02	metal	iron	structural	hardware	nail: common	complete	round head		wire		2	
558	BhFw-122	Op. 02	TP 02	metal	iron	structural	hardware	nail: lath	complete	rectangular head		cut		1	
559	BhFw-122	Op. 02	TP 05	ceramic	coarse earthenware: red	food/beverage	indeterminate	holloware: cylindrical	body	glaze: brown				3	
560	BhFw-122	Op. 02	TP 03	metal	iron	indeterminate	hardware	chain	incomplete					1	
561	BhFw-122	Op. 02	TP 03	metal	iron	structural	hardware	nail: common	incomplete	indeterminate		cut		2	
562	BhFw-122	Op. 02	TP 03	metal	iron	structural	hardware	nail: lath	complete	rectangular head		cut		2	
563	BhFw-122	Op. 02	TP 03	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate		5	
564	BhFw-122	Op. 02	TP 04	fauna	bone	fauna: indeterminate		mammal	incomplete					1	
565	BhFw-122	Op. 02	TP 04	fauna	bone	food/beverage		mammal	incomplete				heat altered: calcined	1	
566	BhFw-122	Op. 02	TP 04	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate		1	
567	BhFw-122	Op. 02	TP 04	glass	indeterminate	personal/societal	clothing	button: 4 hole	complete	transfer printed	aqua	Prosser		1	
568	BhFw-122	Op. 02	TP 04	ceramic	coarse earthenware: red	structural	building component	brick	incomplete	indeterminate				1	
569	BhFw-122	Op. 02	TP 04	ceramic	vitrified white earthenware	food/beverage	tableware	indeterminate	body	indeterminate			heat altered: burnt	2	
570	BhFw-122	Op. 02	TP 04	metal	iron	indeterminate		wire	incomplete					1	
571	BhFw-122	Op. 02	TP 04	metal	iron	personal/societal	clothing	button: 4 hole	complete	piecrust				1	
572	BhFw-122	Op. 02	TP 04	metal	copper alloy	arms/ammunition	ammunition	cartridge: 22 short	incomplete	impressed: lettering				1	'D'

ID	Borden #	Prov 1	Prov 2	Material 1	Material 2	Function 1	Function 2	Object	Fragment	Attribute 1	Attribute 2	Manufacture	Alteration	# of Artifacts	Note
573	BhFw-122	Op. 02	TP 04	metal	iron/copper alloy	indeterminate		indeterminate	incomplete					1	iron strap with teeth at one end, copper alloy hook, mechanical?
574	BhFw-122	Op. 02	TP 04	metal	iron	structural	hardware	nail: common	incomplete	rectangular head		cut		11	
575	BhFw-122	Op. 02	TP 04	metal	iron	structural	hardware	nail: lath	complete	rectangular head		cut		2	
576	BhFw-122	Op. 02	TP 04	metal	iron	structural	hardware	nail: lath	incomplete	rectangular head		cut		3	
577	BhFw-122	Op. 02	TP 04	metal	iron	structural	hardware	nail: lath	complete	round head		wire		1	
578	BhFw-122	Op. 02	TP 04	metal	iron	structural	hardware	nail: indeterminate	incomplete	indeterminate		cut		21	
579	BhFw-122	Op. 02	TP 04	metal	iron	furnishing	hardware	nail: common	complete	round head		wire		1	
580	BhFw-122	Op. 02	TP 06	ceramic	vitrified white earthenware	food/beverage	tableware	holloware: cylindrical	footring/footrim	plain	clear/colourless			9	
581	BhFw-122	Op. 03	surface	glass	indeterminate	food/beverage	beverage container	bottle: wine	finish: crown	plain	green: dark olive	machine made		4	
582	BhFw-122	Op. 03	surface	composite	glass/iron	food/beverage	beverage container	bottle: alcohol	finish/body	embossed: lettering	green: lime	machine made		4	threaded cap, '..6 OZS'
583	BhFw-122	Op. 03	surface	glass	indeterminate	indeterminate		holloware: cylindrical	body	plain	amber	indeterminate		1	
584	BhFw-122	Op. 03	surface	ceramic	porcelain: hard paste	food/beverage	tableware	saucer	vessel portion	hand painted	rim line: gold			8	
585	BhFw-122	Op. 03	surface	composite	leather/iron	indeterminate		strap	incomplete					1	leather strap with 3 sm wire nails
586	BhFw-122	Op. 03	surface	metal	iron	indeterminate		indeterminate	incomplete			cast		1	
587	BhFw-122	Op. 03	surface	metal	iron	indeterminate		bar	incomplete			cast		1	
588	BhFw-122	Op. 03	surface	metal	iron	tools/equipment	indeterminate	bucket	rim					1	with handle attachment
														103	

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