

Stage 1 Archaeological Assessment: 3856/3866/3876 Navan Road, City of Ottawa, Ontario

Part Lot 7, Concession 11, Former Township of Cumberland, Russell Township, now City of Ottawa, Ontario

November 28, 2018

Prepared for:

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ORIGINAL REPORT

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Executive Summary

Stantec Consulting Ltd. (Stantec) was retained by St. Georges and St. Anthony Coptic Orthodox Church of Ottawa to complete a Stage 1 archaeological assessment for a proposed new church building at municipal addresses 3856, 3866, and 3876 Navan Road in the City of Ottawa, Ontario. The proposed development is located on a roughly rectangular parcel of approximately 1.5 hectares, measuring 150 metres by 100 metres, along the south side of Navan Road.

The Stage 1 archaeological assessment is triggered by Provincial Policy Statement (PPS) which has been issued under section 3 of the *Planning Act*. The PPS states that decisions affecting planning matters may be affected by other legislation; for archaeological work that would include the *Ontario Heritage Act*. According to Section 2.6.2 of the PPS, "development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved".

A property inspection was conducted under archaeological consulting license P415 issued to Patrick Hoskins, MA, of Stantec by the Ministry of Tourism, Culture and Sport (MTCS). The property inspection was completed on November 8, 2018 under PIF P415-0173-2018 in accordance with Section 1.2 of the MTCS' 2011 Standards and Guidelines for Consultant Archaeologists. In summary, the archaeological potential for pre-contact Indigenous, post-contact Indigenous, and Euro-Canadian sites is deemed to be moderate to high within the study area based on historical documentation. The property inspection confirmed that there had been minimal ground disturbance and that the study area retains archaeological potential.

The Stage 1 archaeological assessment, involving background research and a property inspection, resulted in the determination that most of the study area retains archaeological potential and is recommended for Stage 2 archaeological assessment prior to construction related activities. It has also been determined that a small portion of the study area does not retain archaeological potential and no further archaeological assessment is recommended for that area.

The objective of the Stage 2 archaeological assessment will be to document archaeological resources within the study area and to determine whether these archaeological resources require further assessment. The Stage 2 archaeological assessment of the study area will consist of a test pit survey.

The MTCS is asked to review the results presented and to accept this report into the Ontario Public Register of Archaeological Reports. Additional archaeological assessment is still required for portions of the study area and so these portions recommended for further archaeological fieldwork remain subject to Section 48(1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed, except by a person holding an archaeological license.

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



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Project Personnel

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Acknowledgements

Ministry of Tourism, Culture and Sport Robert von Bitter



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1.0 PROJECT CONTEXT

1.1 DEVELOPMENT CONTEXT

Stantec Consulting Ltd. (Stantec) was retained by St. Georges and St. Anthony Coptic Orthodox Church of Ottawa to complete a Stage 1 archaeological assessment for a proposed new church building at municipal addresses 3856, 3866, and 3876 Navan Road in the City of Ottawa (Figure 1). The proposed development is located on a roughly rectangular parcel of approximately 1.5 hectares, measuring 150 metres by 100 metres, along the south side of Navan Road (Figure 2).

The Stage 1 archaeological assessment is triggered by Provincial Policy Statement (PPS) which has been issued under section 3 of the *Planning Act* (Government of Ontario 1990a). The PPS states that decisions affecting planning matters may be affected by other legislation; for archaeological work that would include the *Ontario Heritage Act* (Government of Ontario 1990b). According to Section 2.6.2 of the PPS, "development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved" (Government of Ontario 2014).

1.1.1 Objectives

For the purposes of this Stage 1 archaeological assessment, the Ministry of Tourism, Culture and Sport's (MTCS) 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011) were followed. The objectives of the Stage 1 assessment were to compile available information about the known and potential archaeological heritage resources within the study area and to provide specific direction for the protection, management and/or recovery of these resources. In compliance with the provincial standards and guidelines set out in the MTCS' 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), the objectives of the Stage 1 Archaeological Overview/Background Study are as follows:

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

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

- A review of relevant archaeological, historic, and environmental literature pertaining to the study area;
- A review of the land use history, including pertinent historic maps;
- A review of GeoOttawa (City of Ottawa n.d.) to identify predetermined areas of archaeological potential;
- An examination of the Ontario Archaeological Sites Database (ASDB) to determine the presence of known archaeological sites in and around the project area; and
- A site visit to the property to identify or confirm areas of archaeological potential or areas of previous disturbance where archaeological potential has been removed.

Permission to enter lands associated with the study area for the purposes of the Stage 1 assessment was arranged and provided to Stantec by Magdi Farid.

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1.2 HISTORICAL CONTEXT

1.2.1 Post-contact Indigenous Resources

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

The Ottawa River and most of its major drainage tributaries were controlled by the various Algonquin bands that occupied the Ottawa River Valley (Day and Trigger 1978; Whiteduck 2002) (Figure 3). The Algonquin homeland is traditionally identified as the portion of the Ottawa River drainage between the Long Sault Rapids (or Point d'Orignal) at present day Hawkesbury in the south, and Lake Nipissing in the north (Holmes 1993). Major tributary rivers and their respective drainage basins were occupied and controlled by identified Algonquin bands (Morrison 2005). However, the Rideau and Gatineau rivers appear to have been major exceptions to that generality. While the study area is located closest to the Rideau and Ottawa rivers, it is also potentially connected to the drainage area of the South Nation River through an outlet of Mer Bleue bog and through McKinnon Creek (a tributary of Bear Brook which is tributary to the South Nation River), located approximately two kilometres to the east. The South Nation River valley is the traditional homeland of the historical Algonquin Weskarini band (Hessel 1993). Also known by an Iroquoian name, the Onontchataronon, the Weskarini were also referred to by the French as the "People of Iroquet" (Hessel 1993; Day and Trigger 1978). They appear to have been an Algonquin band which had adopted and amalgamated a number of Iroquoians who had been driven from their home territory at the Island of Montréal (Trigger 1985; Fox and Pilon 2016). The Rideau River watershed was undoubtedly used in the early Contact period (Fox and Pilon 2016) as Champlain mentions Indigenous use of the river, even though he himself did not travel along it (Bourne and Bourne 2000).

Even before direct contact had been made with Europeans the Algonquin had been active in the fur trade, acting as intermediaries between Indigenous procurers of furs in the north and west and those Indigenous groups that were in direct contact with European traders (Holmes 1993). This role was one that was already in place before the European fur trade was initiated, given their position along, and control over, a major water transportation route (Morrison 2005). The Huron traded corn, cornmeal, and fishing nets in exchange for dried fish and furs, the latter of which the Algonquin secured from Ojibway and Cree living further north (Morrison 2005). The growing fur trade and the designation of animal skins as money led to changes in economic and social organization patterns. After the initial excursions of Samuel de Champlain into the Algonquin territory in 1613 until 1615 the Algonquin played a major role in the trade between the Huron and the French, and actively worked against Champlain making a trip to the Huron territory (Day and Trigger 1978). When direct trade between the Huron and French eventually occurred, and the Huron and French were permitted to use the Ottawa River as a travel route, they were subject to tolls by the Kichesippirini, who occupied the region around present-day Morrison Island and controlled water traffic up and down the river from their position at that narrows in the river (Hessel 1993; Morrison 2005).

Increased trade along the Ottawa River also brought attention from other Iroquois groups from south of the St. Lawrence River. However, the alliance of Algonquin, Huron, and French minimized Iroquois raiding, and various treaties were enacted between the Algonquin and the Mohawk during the 1620s and 1630s (Day and Trigger 1978). In the latter part of the 1630s, however, the Algonquin attempted to trade directly with the Dutch, who had been

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trading partners with the Mohawk, and this led to a new outbreak of hostilities between Mohawk and Algonquin (Day and Trigger 1978). After 1639, the Mohawk began accumulating English, and then Dutch, firearms that gave them considerable advantage over the Algonquin, whose French trade partners had initially determined to trade no firearms, except to those who had been baptized (Trigger 1985). Conflict continued to greater and lesser degrees throughout the 1640s, but by the early 1650s most of the Ottawa River Valley Algonquin had either sought refuge in Quebec, such as at Trois Rivières, or had removed themselves to the upper parts of their territory, in present day Algonquin Park (Hessel 1987).

In 1649, the Huron-French fur trade collapsed, and the Five Nations Iroquois raided and destroyed the French Mission at Ste. Marie and several Huron villages. Huronia was abandoned, with the surviving Huron destroying their own remaining villages and moving further inland, now located within the province of Quebec. The Algonkian-speaking communities were briefly dispersed from the Ottawa Valley from 1650 to 1675, and were replaced as middlemen by the Odawa people, who were later in turn replaced by the French *coureurs de bois*. Further colonization of eastern Ontario and Quebec led to more changes in the fur trade. However, after the merger of the Northwest Company and Hudson's Bay Company in 1821, the fur trade routes were diverted north to Hudson's Bay (Kennedy 1961:6).

At the turn of the 18th century the French interests in the fur trade had been sufficiently disrupted to a level that a conclusion of a treaty with the Iroquois was required, and Algonquin and Nipissing representatives were on hand in Montreal when that treaty was made (Holmes 1993). While this should have allowed for the resumption of Algonquin occupation of the whole of the Ottawa River again, the protected hostilities with the Iroquois and the effects of the European based disease epidemics had resulted in a population decline that had caused significant changes to social organization (Morrison 2005). During the first part of the 1700s there were Algonquin settlements along the Gatineau River and there were seasonal occupants around Lake of Two Mountains, near Montreal (Holmes 1993). By 1740 a map of Indigenous peoples in the known Canada identified the Nipissings on their namesake lake, Algonquins on the Liéve River in present day Quebec, and Algonquins, Nipissings, and Mohawks at Lake of Two Mountains (Holmes 1993). No other Indigenous groups, Algonquin or otherwise, were identified as living in the Ottawa River valley (Holmes 1993).

At the conclusion of the Seven Years War in 1763 the sphere of European influence in the Algonquin homeland passed from the French to the British, and they imposed restrictions on travel along the Ottawa River above Carillon (Morrison 2005). Nevertheless, the Algonquin continued to consider the river their territory and claims and petitions to that regard were made to the British colonial government (Holmes 1993).

The land within the current study area is governed by the Crawford's Purchases, which were enacted on October 9, 1783 (marked "B" on Figure 4). The first treaty, identified as "B", was made between the Crown and the Iroquois. It included lands "reaching from Point Baudet on the north side of Lake St. Francis, up to the mouth of Gananoque River...includes the Counties of Leeds, Grenville, Dundas, Stormont, and Glengarry, Russell, Prescott, the eastern part of Carleton and the southern part of Lanark" (Morris 1943:16-17). The second treaty, identified as "B1", was made between the Crown and the Mississaugas. It included lands "from the mouth of the Gananoque River to the mouth of the Trent River...includes the southern portions of the Counties of Hastings, Lennox and Addington, and Frontenac" (Morris 1943:16-17). The third treaty, identified as "B2", was made between the Crown and the Mississaugas. It included lands "from the mouth of the Trent River to Toronto Purchase and back from Lake Ontario to Lake Simcoe and Rice Lake...included the County of Northumberland, excepting the northeast corner, Durham,

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the southern part of Ontario, and the east part of York" (Morris 1943:16-17). However, there is an outstanding Algonquin land claim for the traditional Algonquin territory within those lands that remain unceded as the Algonquin were not consulted during the treaty negotiations (Anonymous n.d.).

1.2.2 Historic Period Resources

Cumberland Township was first surveyed in 1820 (McDonnell 1820a). Notes from the initial survey of Lot 7 Concession 11 noted that a brook and ravine ran through the lot and that elm, ash and spruce were the predominant forest cover (McDonnell 1820a). Although there were settlers already present along the Ottawa River in Cumberland Township, and who are identified on those lots on the initial survey map, no settlers are identified south of Concession 1 From the Ottawa River along the Cumberland–Gloucester townships border (McDonnell 1820b). The surveyed line north of Lot 6 and south of Lot 7 is indicated as being poorly drained; however, Lots 6 and 7 appear to be better drained than their neighbouring lots (Figure 5).

The 1862 Walling map of Cumberland Township shows that the present-day Navan Road had been constructed by that time (Walling 1863). However, there are no names indicating settlement of Lot 7, Concession 11, or in any of the lots near the study area (Figure 6). The portion of Gloucester Township just west of the study area was also sparsely populated at this time.

The 200 acres of Lot 7, Concession 11 of Cumberland was first patented from the Crown to George G. Dunning on October 21, 1871 (ONLand 2018). Since a patent was usually granted after someone had been resident on the property and fulfilled certain obligations, it is likely that Dunning had occupied the land prior to 1871, but after 1863.

The map of Cumberland Township in the 1881 *Prescott and Russell supplement in Illustrated atlas of the Dominion of Canada* gives no details regarding Lot 7, Concession 11, nor of almost any lot in the township (Belden and Co. 1881). However, county maps prepared after 1879 were produced primarily to identify factories, offices, residences and landholdings of subscribers and were funded by subscriptions fees. Therefore, landowners who did not subscribe were not always listed on the maps (Caston 1997:100). Moreover, associated structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984). There are no public buildings shown in close proximity to the study area, the closest being a school in Lot 3, Concession 10 (Belden 1881).

Topographic maps from the early part of the 20th century give a more accurate representation of the level of settlement along the Navan Road. The 1908 topographic map shows that there was a house located immediately west of the study area, and that the study area had been cleared (Figure 7). Several other houses on both sides of Navan Road, east and west of the study area, are also shown. Also indicated are the two small streams east and west of the study area that drain into the Mer Bleue. A major development in the study area was the construction of the Ottawa and New York Railway (ONYR) line. The ONYR began construction from Cornwall to Ottawa in 1897 and was completed in 1898. The railway operated until 1957, when the company was dissolved (Canada Rail n.d.).

The 1936 topographic map indicates that a residence was constructed immediately east of the study area (Figure 8). There are also several more houses evident along Navan Road, indicating that this area was increasingly becoming a suburban residential area.

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1.3 ARCHAEOLOGICAL CONTEXT

1.3.1 The Natural Environment

The study area is located on the Ottawa Valley Clay Plain physiographic region, a large region of clay plains interrupted by ridges of rock and sand and divided into two areas, east and west of Ottawa. The region to the east of Ottawa consists of clay soils that are more acidic than to the west of Ottawa (Chapman and Putnam 1984). The soil in the study area is composed of a combined soil complex of Rubicon fine sand and St. Samuel fine sand (Wicklund and Richards 1962). These soils demonstrate imperfect to poor drainage characteristics and are considered to be poor crop land but suitable for hay, grain, and pasture (Wicklund and Richards 1962).

The closest source of potable water is a small unnamed stream approximately 170 metres east of the study area. This stream flows into the Mer Bleue, located approximately 680 metres to the south. The Mer Bleue bog represents the remnants of the south channel of the immediately post-glacial Ottawa River. During the Nipissing Great Lakes phase of the recession of the Wisconsin Glacier, the Champlain Sea receded eastward from Ottawa causing two main channels, three cross channels and four elevated landmasses to be formed. The Ottawa River currently occupies the northern channel while the other channels have since been drained (Chapman and Putnam 1984). The elevation relief map (Figure 9) shows that the study area is located along an elevated terrace above the current Mer Bleue, and which would have been fronted the much larger Ottawa River in the immediately post-glacial era. This would have been one of the first areas exposed as the glacier receded and the water levels dropped, and thus be among the first areas available for human occupation in the Ottawa region (Chapman and Putnam 1984).

1.3.2 Pre-contact Indigenous Resources

It has been demonstrated that Indigenous people began occupying Ontario as soon as the Laurentide glacier receded, as early as 11,000 years before present (BP) (Ferris 2013:13). Much of what is understood about the lifeways of these Indigenous peoples is derived from archaeological evidence and ethnographic analogy. In Ontario, Indigenous culture prior to the period of contact with European peoples has been distinguished into cultural periods based on observed changes in material culture. These cultural periods are largely based in observed changes in formal lithic tools, and separated into the Early Palaeo, Late Palaeo, Early Archaic, Middle Archaic, Late Archaic and Terminal Archaic periods. Following the advent of ceramic technology in the Indigenous archaeological record, cultural periods are separated into the Early Woodland, Middle Woodland, Transitional Woodland and Late Woodland periods, based primarily on observed changes in formal ceramic decoration. It should be noted that these cultural periods do not necessarily represent specific cultural identities but are a useful paradigm for understanding changes in Indigenous culture through time.

Overall, archaeological research in many parts of Eastern Ontario has been fairly limited, at least compared to adjoining areas in Southern Ontario and northern New York State, resulting in only a limited understanding of the cultural processes that occurred in this part of the province. The following summary of the pre-contact occupation of Eastern Ontario (see Table 30 for chronological chart) is based on syntheses in Archaeologix Inc. (2008), Ellis and Ferris (1990), Jacques Whitford (2008), Pilon (1999), St-Pierre (2009), and Wright (1995).

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Table 1: Eastern Ontario Cultural Chronology, Years Before Present (BP)

Archaeological Period	Time	Characteristics
Early Palaeo-Indian	11,000-10,400 BP	Caribou and extinct Pleistocene mammal hunters, small camps
Late Palaeo-Indian	10,400-10,000 BP	Smaller but more numerous sites
Early Archaic	10,000-8,000 BP	Slow population growth, emergence of woodworking industry, development of specialized tools
Middle Archaic	8,000-4,500 BP	Environment similar to present, fishing becomes important component of subsistence, wide trade networks for exotic goods
Late Archaic	4,500-3,100 BP	Increasing site size, large chipped lithic tools, introduction of bow hunting
Terminal Archaic	3,100-2,950 BP	Emergence of true cemeteries with inclusion of exotic trade goods
Early Woodland	2,950-2,400 BP	Introduction of pottery, continuation of Terminal Archaic settlement and subsistence patterns
Middle Woodland	2,400-1,400 BP	Increased sedentism, larger settlements in spring and summer, dispersed smaller settlement in fall and winter, some elaborate mortuary ceremonialism
Transitional Woodland	1,400-1,100 BP	Incipient agriculture in some locations, seasonal hunting & gathering
Late Woodland (Early Iroquoian)	1,100-700 BP	Limited agriculture, development of small village settlement, small communal longhouses
Late Woodland (Middle Iroquoian)	700-600 BP	Shift to agriculture as major component of subsistence, larger villages with large longhouses, increasing political complexity
Late Woodland (Late Iroquoian)	600- 350 BP	Very large villages with smaller houses, politically allied regional populations, increasing trading network

Identifiable human occupation of Ontario begins just after the end of the Wisconsin Glacial period. The first human settlement can be traced back 11,000 years, when this area was settled by Native groups that had been living to the south of the emerging Great Lakes. This initial occupation is referred to as the "Palaeo-Indian" archaeological culture.

Early Palaeo-Indian (EPI) (11,000-10,400 before present (BP)) settlement patterns suggest that small groups, or "bands", followed a pattern of seasonal mobility extending over large territories. Many (although by no means all) of the EPI sites were located on former beach ridges associated with Lake Algonquin and along the margins of the Champlain Sea and research/evidence indicates that the vegetative cover of these areas would have consisted of open spruce parkland, given the cool climatic conditions. Sites tend to be located on well-drained loamy soils, and on elevations in the landscape, such as knolls. The fact that assemblages of artifacts recovered from EPI sites are composed exclusively of stone skews our understanding of the general patterns of resource extraction and use. However, the taking of large game, such as caribou, mastodon and mammoth, appears to be of central importance to the sustenance of these early inhabitants as EPI site location often appears to be located in areas which would have intersected with migratory caribou herds. Moreover, site location evidence in Vermont also suggests that the taking of marine mammals and other resources from the Champlain Sea may have been important in the seasonal economy (Loring 1980; Robinson 2012). In the Ottawa Valley it appears that the palaeo-environment may not have recovered sufficiently from the former glaciations to have allowed an EPI occupation. There is, however, some evidence of EPI incursion to the Rideau Lakes area.

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The Late Palaeo-Indian (LPI) period (10,400-10,000 BP) is poorly understood compared to the EPI, the result of less research focus than the EPI. As the climate warmed the spruce parkland was gradually replaced and the vegetation of Southern Ontario began to be dominated by closed coniferous forests. As a result, many of the large game species that had been hunted in the EPI period moved north with the more open vegetation or became locally extinct. Like the EPI, LPI peoples covered large territories as they moved around to exploit different resources. After the recession of the post-glacial Champlain Sea, environmental conditions in Eastern Ontario and the Ottawa Valley were sufficient to allow for a Late Palaeo-Indian occupation, although the evidence of such is still very limited. There is some evidence of LPI occupation on Thompson Island, in the St. Lawrence River near the junction of Ontario, Québec and New York State.

The transition from the Palaeo-Indian period to the Archaic archaeological culture of Ontario prehistory is evidenced in the archaeological record by the development of new tool technologies, the result of utilizing an increasing number of resources as compared to peoples from earlier archaeological cultures and developing a broader based series of tools to more intensively exploit those resources. During the Early Archaic period (10,000-8,000 BP), the jack and red pine forests that characterized the LPI environment were replaced by forests dominated by white pine with some associated deciduous elements. Early Archaic projectile points differ from Palaeo-Indian forms most notably by the presence of side and corner notching on their bases. A ground stone tool industry, including celts and axes, also emerges, indicating that woodworking was an important component of the technological development of Archaic peoples. Although there may have been some reduction in the degree of seasonal mobility, it is still likely that population density during the Early Archaic was low, and band territories large.

The development of more diversified tool technology continued into the Middle Archaic period (8,000-4,500 BP). The presence of grooved stone net-sinkers suggests an increase in the importance of fishing in subsistence activities. Another new tool, the bannerstone, also made its first appearance during this period. Bannerstones are ground stone weights that served as counterbalance for "atlatls" or spear-throwers, again indicating the emergence of a new technology. The increased reliance on local, often poor-quality chert resources for chipped stone tools suggests that in the Middle Archaic groups inhabited smaller territories lacking high quality raw materials. In these instances, lower quality materials which had been glacially deposited in local tills and river gravels were used.

This reduction in territory size appears to have been the result of gradual region-wide population growth, which forced a reorganization of subsistence patterns, as a larger population had to be supported from the resources of a smaller area. Stone tools designed specifically for the preparation of wild plant foods suggest that subsistence catchment was being widened and new resources being more intensively exploited. A major development of the later part of the Middle Archaic period was the initiation of long-distance trade. In particular, native copper tools manufactured from sources near Lake Superior were being widely traded. Two of the most notable sites in Ontario are approximately 125 kilometres northwest of the study area along the Ottawa River. What makes these sites notable is the large concentration of copper artifacts that have been recovered. The Morrison's Island and Allumette Island sites have produced over 1,000 copper artifacts. The copper artifacts consisted of fishhooks, awls, gorges, socketed axes, knives, and spear points. The source of the copper has been traced to Lake Superior, approximately 1,000 kilometres away. In addition to the copper artifacts, other lithic sources from over 500 kilometres to the south have been found indicating participation in a large interaction network.

During the late part of the Middle Archaic (5,500-4,500 BP) a distinctive occupation, or tradition, known as the Laurentian Archaic, appears in southeastern Ontario, western Quebec, northern New York and Vermont. Laurentian

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Archaic sites are found only within the transitional zone between the deciduous forests to the south and coniferous forests to the north known as the Canadian Biotic Province and are identifiable through the association of certain diagnostic tool types, including ground slate semi-lunar knives (or "ulus"), plummets for use in fishing, ground slate points and knives, and ground stone gouges, adzes and grooved axes. It is thought that there was less reliance on plant foods and a greater reliance on hunting and fishing in this region than for Archaic peoples in southern and south-western Ontario. Laurentian Archaic sites have been found in the middle Ottawa River valley, along the Petawawa River and Trent River watersheds and at Brockville.

The trend towards decreased territory size and a broadening subsistence base continued during the Late Archaic (4,500-2,900 BP). Late Archaic sites are far more numerous than either Early or Middle Archaic sites. It appears that the increase in numbers of sites at least partly represents an increase in population. However, around 4,500 BP water levels in the Great Lakes began to rise, taking their modern form. It is likely that the relative paucity of earlier Archaic sites is due to their being inundated under the rising lake levels.

The appearance of the first true cemeteries occurs during the Late Archaic. Prior to this period, individuals were interred close to the location where they died. However, with the advent of the Late Archaic and local cemeteries individuals who died at a distance from the cemetery would be returned for final burial at the group cemetery often resulting in disarticulated skeletons, occasionally missing minor bone elements (e.g. finger bones). The emergence of local group cemeteries has been interpreted as being a response to both increased population densities and competition between local groups for access to resources, in that cemeteries would have provided symbolic claims over a local territory and its resources.

Increased territoriality and more limited movement are also consistent with the development of distinct local styles of projectile points. The trade networks which began in the Middle Archaic expand during this period and begin to include marine shell artifacts (such as beads and gorgets) from as far away as the Mid-Atlantic coast. These marine shell artifacts and native copper implements show up as grave goods, indicating the value of the items. Other artifacts such as polished stone pipes and slate gorgets also appear on Late Archaic sites. One of the more unusual of the Late Archaic artifacts is the "birdstone", small, bird-like effigies usually manufactured from green banded slate.

The Early Woodland period (2,900-2,200 BP) is distinguished from the Late Archaic period primarily by the addition of ceramic technology. While the introduction of pottery provides a useful demarcation point for archaeologists, it may have made less difference in the lives of the Early Woodland peoples. The first pots were very crudely constructed, thick walled, and friable. It has been suggested that they were used in the processing of nut oils by boiling crushed nut fragments in water and skimming off the oil. These vessels were not easily portable, and individual pots must not have enjoyed a long use life. There have also been numerous Early Woodland sites located at which no pottery was found, suggesting that these poorly constructed, undecorated vessels had yet to assume a central position in the day-to-day lives of Early Woodland peoples.

Other than the introduction of this rather limited ceramic technology, the life-ways of Early Woodland peoples show a great deal of continuity with the preceding Late Archaic period. For instance, birdstones continue to be manufactured, although the Early Woodland varieties have "pop-eyes" which protrude from the sides of their heads. Likewise, the thin, well-made projectile points which were produced during the terminal part of the Archaic period continue in use. However, the Early Woodland variants were side-notched rather than corner-notched, giving them a slightly altered and distinctive appearance. The trade networks which were established in the Middle and Late Archaic also continued to function, although there does not appear to have been as much traffic in marine shell during the Early

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Woodland period. These trade items were included in increasingly sophisticated burial ceremonies, some of which involved construction of burial mounds.

In terms of settlement and subsistence patterns, the Middle Woodland (2,200 B.C.-1,100 BP) provides a major point of departure from the Archaic and Early Woodland periods and includes an archaeological complex that has been identified as composed of a generalized Algonquin/Cree/Ojibway culture (Holmes 1993). While Middle Woodland peoples still relied on hunting and gathering to meet their subsistence requirements, fish were becoming an even more important part of the diet. Middle Woodland vessels are often heavily decorated with hastily impressed designs covering the entire exterior surface and upper portion of the vessel interior. Consequently, even very small fragments of Middle Woodland vessels are easily identifiable.

It is also at the beginning of the Middle Woodland period that rich, densely occupied sites appear along the margins of major rivers and lakes. While these areas had been utilized by earlier peoples, Middle Woodland sites are significantly different in that the same location was occupied off and on for as long as several hundred years. Because this is the case, rich deposits of artifacts often accumulated. Unlike earlier seasonally utilized locations, these Middle Woodland sites appear to have functioned as base camps, occupied off and on throughout the course of the year. There are also numerous small upland Middle Woodland sites, many of which can be interpreted as special purpose camps from which localized resource patches were exploited. This shift towards a greater degree of sedentism continues the trend witnessed from the Middle Archaic and provides a prelude to the developments that follow during the Late Woodland period.

There are three complexes of Middle Woodland culture in Ontario. The complex specific to eastern Ontario is known as "Point Peninsula", most notably represented by ceramics decorated with a stamped zigzag pattern applied at various angles to the exterior of the vessel, known as "pseudo scallop shell". Another common decorative style is the dentate stamp, a comb-like tool creating square impressions. Middle Woodland components have been identified in Vincent Massey Park along the Rideau River in the City of Ottawa, at the confluence of the Ottawa and Gatineau Rivers at Lac Leamy Park in Gatineau, Quebec and there is evidence for a widespread Woodland occupation along the Rideau River and Rideau Lakes system (Jacques Whitford 2004; Laliberté 1999; Watson 1991, 1992, 1999).

The relatively brief period of the Transitional Woodland period is marked by the acquisition of cultivar plants species, such as maize and squash, from communities living south of the Great Lakes. The appearance of these plants began a transition to food production, which consequently led to a much reduced need to acquire naturally occurring food resources. Sites were thus occupied for longer periods and by larger populations. Transitional Woodland sites have not been discovered in eastern Ontario.

The Late Woodland period in southern Ontario is traditionally associated with societies referred to as the Ontario Iroquois Tradition. This period is often divided into three temporal components: Early, Middle and Late Iroquoian (see Table 1). In eastern Ontario, especially in the Ottawa River Valley, there is considerable overlap of people continuing to practice a hunting and gathering economy and those using limited horticulture as a supplement to gathered plants. For the most part, however, classic Late Woodland sites in eastern Ontario are limited to an area at the east end of Lake Ontario and along the St. Lawrence River valley. Early Iroquoian components have been identified near Pembroke on the Muskrat River; however, there is evidence for only limited use of cultivated plants. Middle Iroquoian sites have not been identified east of the Kingston area.

Project Context November 27, 2018

During the Late Iroquoian period a distinctive material culture emerges at the east end of Lake Ontario and along the St. Lawrence River up to Québec City, known as the St. Lawrence Iroquois (SLI). SLI sites are characterized by large semi-permanent villages and associated satellite settlements. The inhabitants of these villages and satellites practiced horticulture of staple crops which made up the bulk of their diet. Other food resources were hunted, fished, and gathered. SLI village sites can be extensive, up to 3 hectares or more in size and composed of a number of longhouse structures. Special purpose satellite settlements, such as hunting and fishing camps, are smaller in area and in the number and size of structures within the settlement. While the early contact period descendants of the Late Woodland SLI and Huron used the Ottawa River and its tributaries as transportation routes between the St. Lawrence River and the interior, Late Woodland village sites have not been identified.

In the Late and Terminal Woodland (immediately prior to the early contact period) there are several instances of Late Woodland pottery types typically associated with Iroquoian groups (e.g., the Middle Iroquoian Middleport archaeological culture and Late Woodland/contact period Huron and Onondaga) on what would otherwise be considered Algonquian archaeological sites throughout the Ottawa River valley (cf. Mitchell 1975, 1990, 1996; Saint-Germain 1999; von Gernet 1992, 1993). There has been some debate about what the presence of these purportedly Iroquoian ceramic artifacts in an Algonquin context might indicate. Interpretations include: incursion of Iroquoian peoples into Algonquin territory; ceramics as trade items between Iroquoian and Algonquins; the presence of Iroquoian women in Algonquin societies, either as wives or captives, who continued to manufacture ceramics according to their ethnic traditions; or Algonquin manufacture of ceramics that simulate Iroquoian ceramic types (Pendergast 1999). Each of these possible interpretations suggests a close interaction sphere between Algonquin and Iroquoian peoples, which is further supported by evidence of Iroquoian and Algonquin trade relationships in the early contact period. It has also been suggested that Algonquin and Iroquoian peoples may have "shared in a common Late Woodland cultural stratum" which included common elements such as ceramics (von Gernet 1992). Taking the point further, Fox and Garrad (2004) suggest that Huron and Algonquin shared not only a territory in the southern Georgian Bay area (traditional "Huronia"), but also shared a material culture, and may have cohabited in settlements to a greater degree than as simply visitors.

In general, the nature of Indigenous settlement size, population distribution, and material culture shifted as European settlers encroached upon their territory. However, despite this shift, "written accounts of material life and livelihood, the correlation of historically recorded villages to their archaeological manifestations, and the similarities of those sites to more ancient sites have revealed an antiquity to documented cultural expressions that confirms a deep historical continuity to...systems of ideology and thought" (Ferris 2009:114). As a result, Indigenous peoples have left behind archaeologically significant resources throughout the region which show continuity with past peoples, even if they have not been recorded in Euro-Canadian documentation.

1.3.3 Previously Known Archaeological Sites and Surveys

The City of Ottawa maintains an Archaeological Potential GIS layer on its web-based GeoOttawa site (City of Ottawa n.d.). This layer is based on the 1999 Archaeological Resource Potential Mapping Study that was completed for the Regional Municipality of Ottawa-Carleton (now the City of Ottawa) in 1999 (ASI 1999). This potential model identifies the study area as having elevated potential for the presence of archaeological resources (Figure 10). s part of the City of Ottawa's Planning Policy any proposed Project that contains even a portion of an archaeological potential zone requires the entire Project Area to be subject to archaeological assessment.

Project Context November 27, 2018

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

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

An examination of the ASDB has shown that there are no registered archaeological sites within a one-kilometre radius of the study area (Government of Ontario 2018a). No other archaeological assessments have occurred within 50 metres of the study area (Government of Ontario 2018b).

1.3.4 Existing Conditions

The study area is a roughly rectangular parcel of approximately 1.5 hectares, measuring 150 metres by 100 metres, along the south side of Navan Road (Figure 2). The study area is composed of overgrown former agricultural field and is undeveloped. The study area is bordered to the west by a subdivision development, to the south by woodlot and agricultural field, and to the east by a residential property.

Field Methods November 27, 2018

2.0 FIELD METHODS

Initial background research compiled the available information concerning any known and/or potential archaeological resources within the study area. A property inspection was conducted under archaeological consulting license P415 issued to Patrick Hoskins, MA, of Stantec, by the MTCS. The property inspection was completed on November 8, 2018 under PIF P415-0173-2018 in accordance with Section 1.2 of the MTCS' 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

The property inspection involved visual examination of the study area to identify the presence or absence of any features of archaeological potential. During the property inspection the weather was overcast and cool, and visibility of land features was excellent. At no time were field, lighting, or weather conditions detrimental to the identification of features of archaeological potential. The photography from the property inspection conducted on November 8, 2018 is presented in Section 7 and confirms that the requirements for a Stage 1 property inspection were met, as per Section 1.2 and Section 7.7.2 Standard 1 of the MTCS' 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

At the north end of the property, along Navan Road, there is an existing excavated ditch and a small graveled access drive (Photos 1 and 2). The remainder of the property is level and covered in weedy overgrowth and some small trees (Photos 3-6). Aerial photography indicates that the property was used as agricultural land throughout the 20th century but has been fallow and covered with regenerating meadow and forest flora for the last several years (City of Ottawa 2018). Although the property does not reach the terrace edge above Mer Bleue, the terrace edge is visible from the property (Photo 5).

Overall the property inspection identified that almost all of the study area has been subject only to agricultural ground disturbances, and that only a small portion along the Navan Road right of way has undergone any significant ground disturbance.

Analysis and Conclusions November 27, 2018

3.0 ANALYSIS AND CONCLUSIONS

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

Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and, considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils or topographic variability, may also indicate archaeological potential. Finally, extensive land disturbance can eradicate archaeological potential (Wilson and Horne 1995).

As discussed above, distance to water is an essential factor in archaeological potential modeling. When evaluating distance to water it is important to distinguish between water and shoreline, as well as natural and artificial water sources, as these features affect site location and type to varying degrees. The MTCS categorizes water sources in the following manner:

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

The closest source of potable water is a small unnamed stream approximately 170 metres east of the study area. This stream flows into the Mer Bleue, located approximately 680 metres to the south.

The soil in the study area is composed of a combined soil complex of Rubicon fine sand and St. Samuel fine sand (Wicklund and Richards 1962). These soils demonstrate imperfect to poor drainage characteristics and are considered to be poor crop land but suitable for hay, grain and pasture (Wicklund and Richards 1962).

The study area is located on an elevated landmass that was formed around an enlarged Ottawa River during the recession of the Wisconsin Glacier. As the water levels dropped and the surface was exposed, the study area would have been among the early areas of exposed land available. The major contour line for the early exposed post-glacial shoreline in the general area is approximately 72 metres above sea level (masl), located roughly 170 metres south of the study area. However, the study area is only 80 metres north of the 80 masl contour, which would have provided a good vantage point overlooking the present-day Mer Bleue bog, which in the early post-glacial period was a wide channel of the Ottawa River (Figure 9). There is potential for the presence of Late Palaeo-Indian or Early Archaic archaeological resources. Sites from both periods are rare in the Ottawa Valley and any such sites discovered would have a high degree of significance for interpreting the pre-contact Indigenous history of the Ottawa region.

Analysis and Conclusions November 27, 2018

Based on these considerations, along with the background research presented in Sections 1.2.1 and 1.3.2, the precontact and post-contact Indigenous archaeological potential of portions of the study area is judged to be moderate to high.

For Euro-Canadian sites, archaeological potential can be extended to areas of early Euro-Canadian settlement, including places of military or pioneer settlements; early transportation routes; and properties listed on the municipal register or designated under the *Ontario Heritage Act* or property that local histories or informants have identified with possible historical events, activities, or occupations. Although none of the historical maps indicate any 19th century period buildings or other specific resources, the property is adjacent to an early roadway (Navan Road) and there were nearby buildings by at least 1908. Considering the above, the Euro-Canadian archaeological potential of portions of the study area is judged to be moderate.

The property inspection has determined that a small portion of the property immediately along Navan Road has been disturbed through ditching along the road and from the creation of a gravel access to the property (Figure 11 and Photos 1 and 2). These areas retain no to low archaeological potential.

In summary, the archaeological potential for pre-contact Indigenous, post-contact Indigenous, and Euro-Canadian sites is deemed to be moderate to high within the study area based on historical documentation. The Stage 1 property inspection has determined that most of the study area retains potential for the identification and documentation of archaeological resources.

Recommendations November 27, 2018

4.0 RECOMMENDATIONS

Stantec was retained by St. Georges and St. Anthony Coptic Orthodox Church of Ottawa to complete a Stage 1 archaeological assessment for a proposed new church building at municipal addresses 3856, 3866, and 3876 Navan Road in the City of Ottawa (Figure 1). The proposed development is located on a roughly rectangular parcel of approximately 1.5 ha, measuring 150 metres by 100 metres, along the south side of Navan Road (Figure 2).

The Stage 1 archaeological assessment, involving background research and a property inspection, resulted in the determination that most of the study area retains archaeological potential and is recommended for Stage 2 archaeological assessment prior to construction related activities (Figure 11). It has also been determined that a small portion of the study area does not retain archaeological potential and no further archaeological assessment is recommended for that area.

The objective of the Stage 2 archaeological assessment will be to document archaeological resources within the study area and to determine whether these archaeological resources require further assessment. The Stage 2 archaeological assessment will include test pit survey at five metre intervals in areas not accessible for ploughing (i.e. woodlot, meadow), as outlined in Section 2.1.2 Standard 1f of the MTCS' 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). The MTCS standards require that each test pit be approximately 30 centimetres in diameter, excavated to at least five centimeters into subsoil, and have all soil screened through six millimetre hardware cloth to facilitate the recovery of any cultural material that may be present. Prior to backfilling, each test pit will be examined for stratigraphy, cultural features, or evidence of fill.

If the archaeological field team determines any lands to be disturbed during the course of the Stage 2 field work, those areas will not require assessment, but will be photographically documented, in accordance with Section 2.1 of the MTCS' 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

The MTCS is asked to review the results presented and to accept this report into the Ontario Public Register of Archaeological Reports. Additional archaeological assessment is still required for portions of the study area and so these portions recommended for further archaeological fieldwork remain subject to Section 48(1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed, except by a person holding an archaeological license.

Advice on Compliance with Legislation November 27, 2018

5.0 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. O.18 (Government of Ontario 1990b). 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* (Government of Ontario 1990b) for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeological Reports referred to in Section 65.1 of the *Ontario Heritage Act* (Government of Ontario 1990b).

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990b). The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990b).

The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33 (Government of Ontario 2002) requires that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Government and Consumer Services.

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

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Images November 27, 2018

7.0 IMAGES

7.1 PHOTOGRAPHS

Photo 1: View of study area, facing south; note end of graveled access from Navan Road at bottom



Photo 2: Facing west along Navan Road and north end of property, showing excavated ditch



Images November 27, 2018

Photo 3: View from west edge of study area, looking east, showing overgrown field conditions



Photo 4: View from southwest corner of study area, looking north, showing overgrown field conditions



Images November 27, 2018

Photo 5: View from southeast edge of study area, looking southeast toward edge of terrace above Mer Bleue, relic shoreline of Champlain Sea and feature of archaeological interest



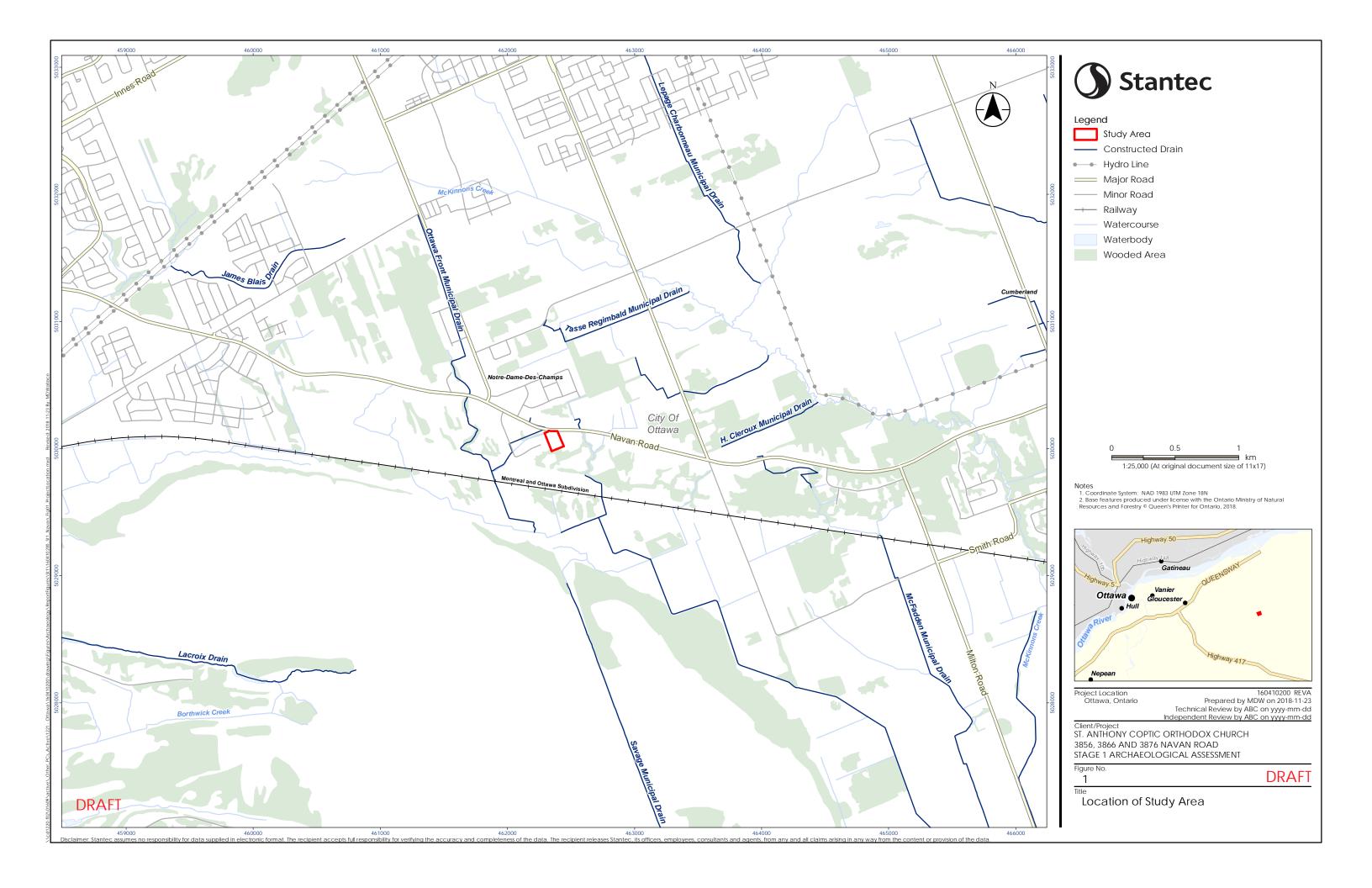
Photo 6: View from centre of study area, looking northeast showing overgrown field conditions

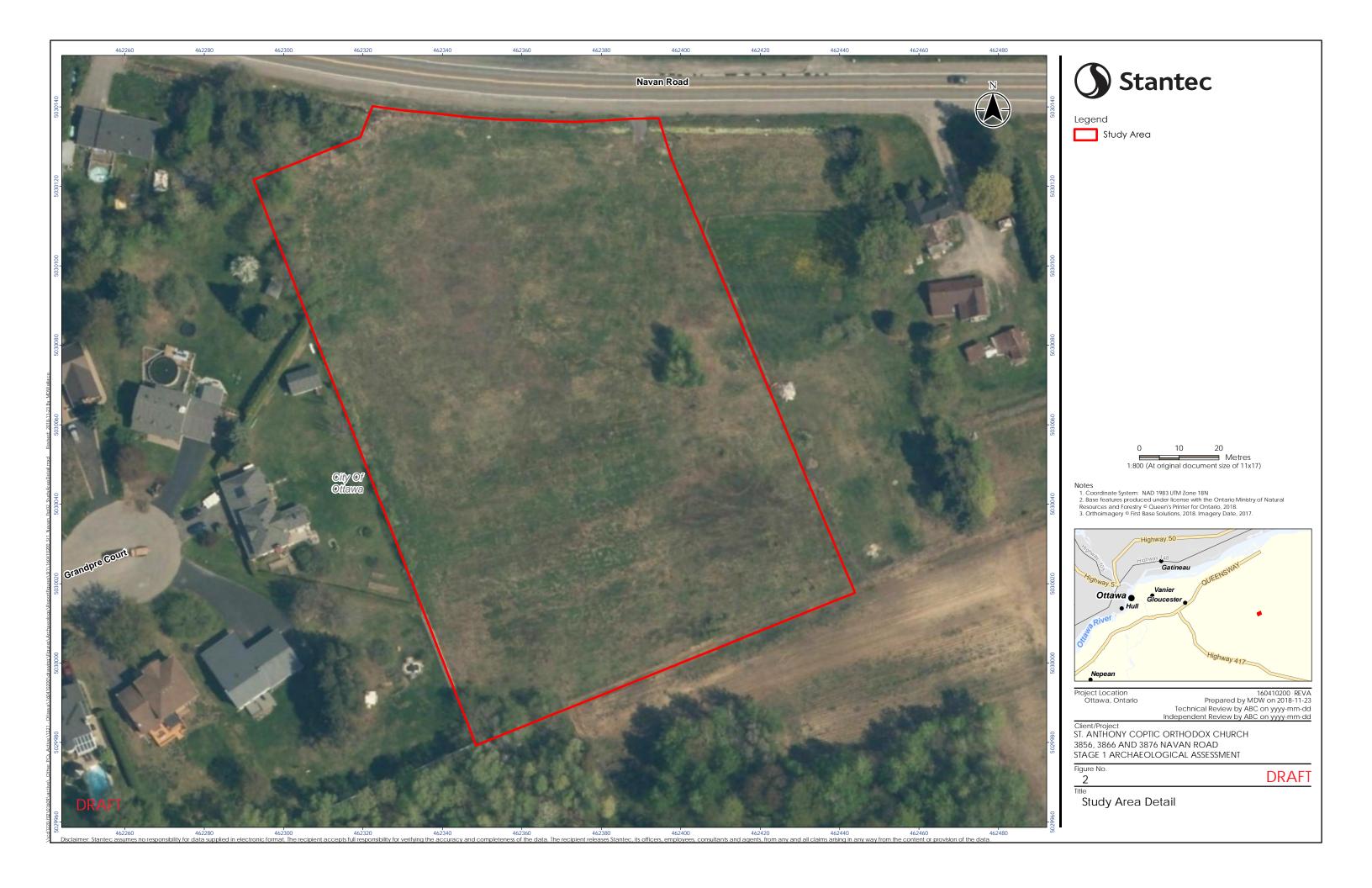


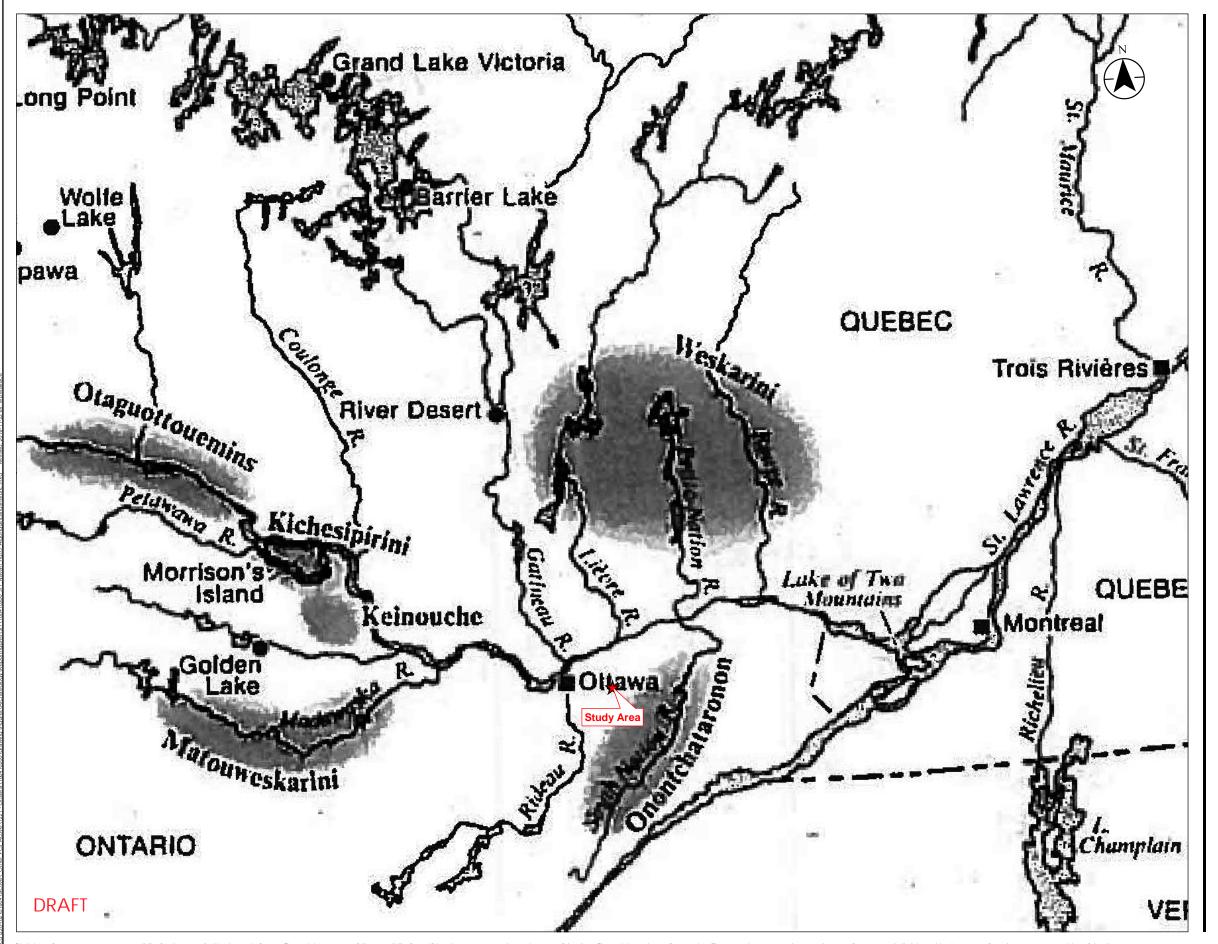
Maps November 27, 2018

8.0 MAPS

All maps will follow on succeeding pages.





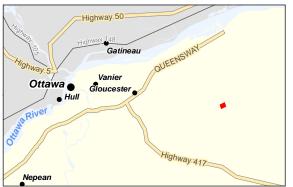




★ Study Area

Figure Not to Scale

1. Day, Gordon M. and Bruce Trigger. 1978. *Algonquin. Handbook of the North American Indians: Volume 15 Northeast*. Washington: Smithsonian Institution, pp.

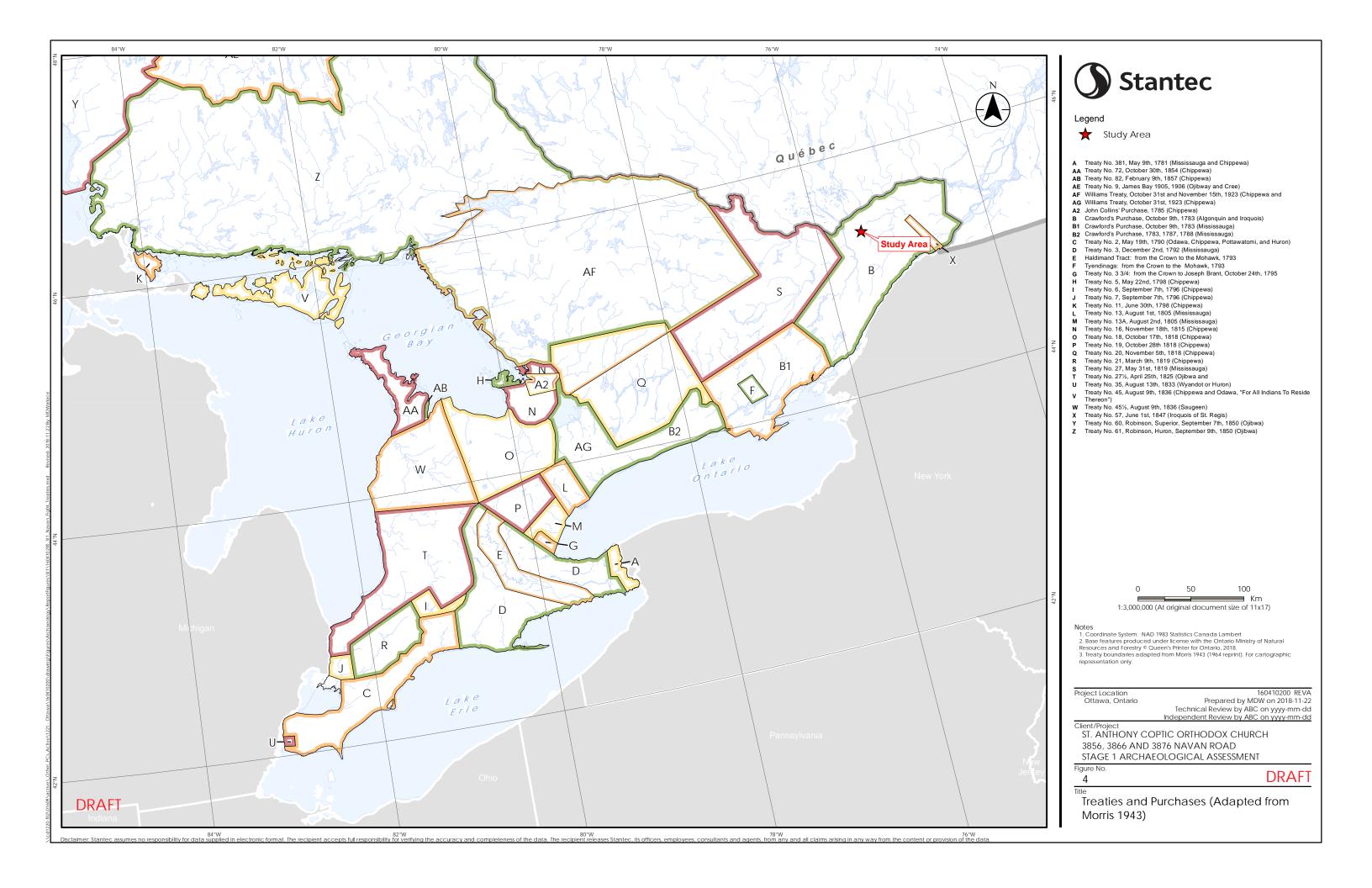


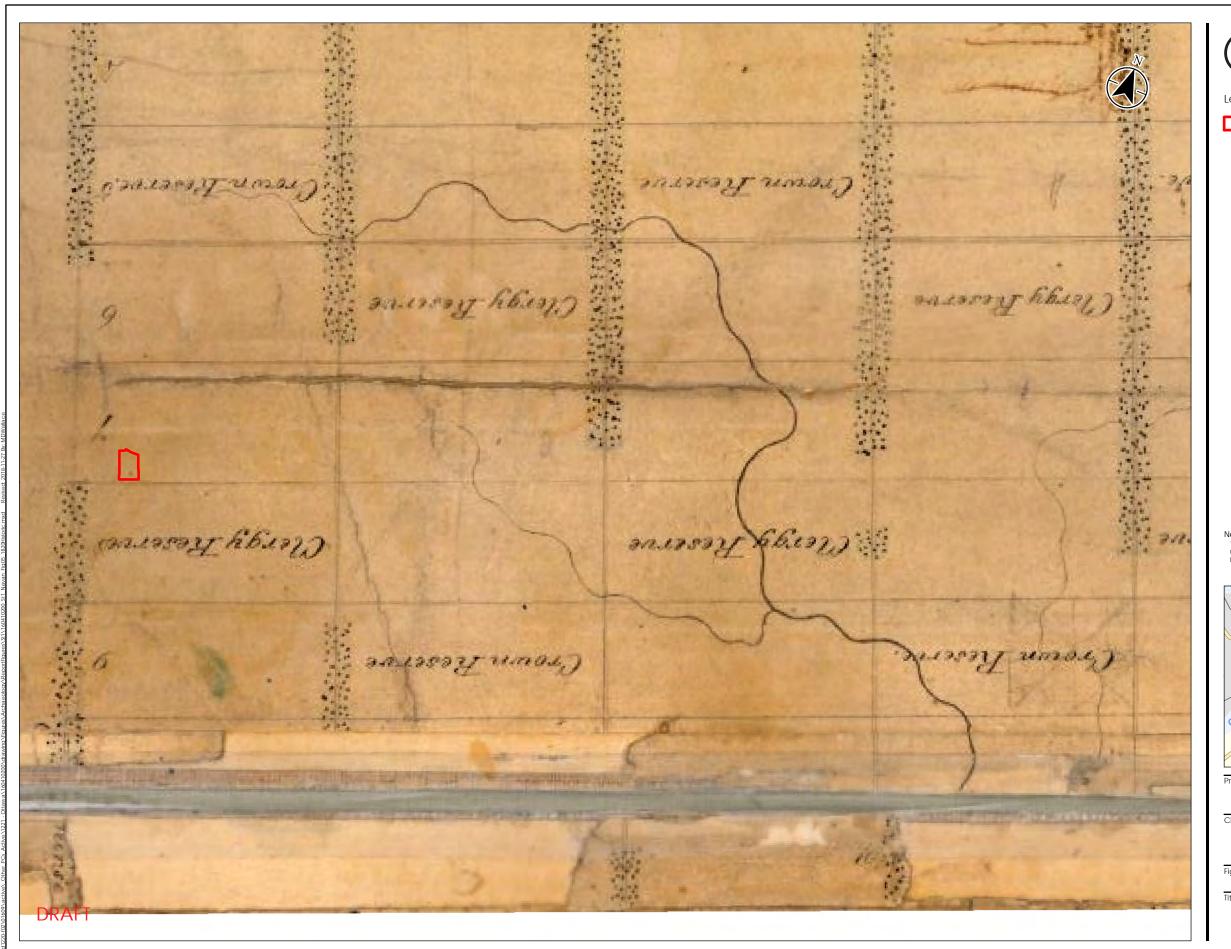
160410200 REVA Prepared by MDW on 2018-11-22 Technical Review by ABC on yyyy-mm-dd Independent Review by ABC on yyyy-mm-dd

Client/Project
ST. ANTHONY COPTIC ORTHODOX CHURCH
3856, 3866 AND 3876 NAVAN ROAD
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

DRAFT

Location of Historic Algonquin Bands in the Ottawa Valley







Legend

Study Area (Approximate Location)

Figure Not to Scale

A. McDonnell, D. 1820b. *Plan of Township of Cumberland*. Original township survey map held at Crown Land Surveys, Office of the Surveyor General, Ministry of Natural Resources and Forestry, Peterborough, Ontario.



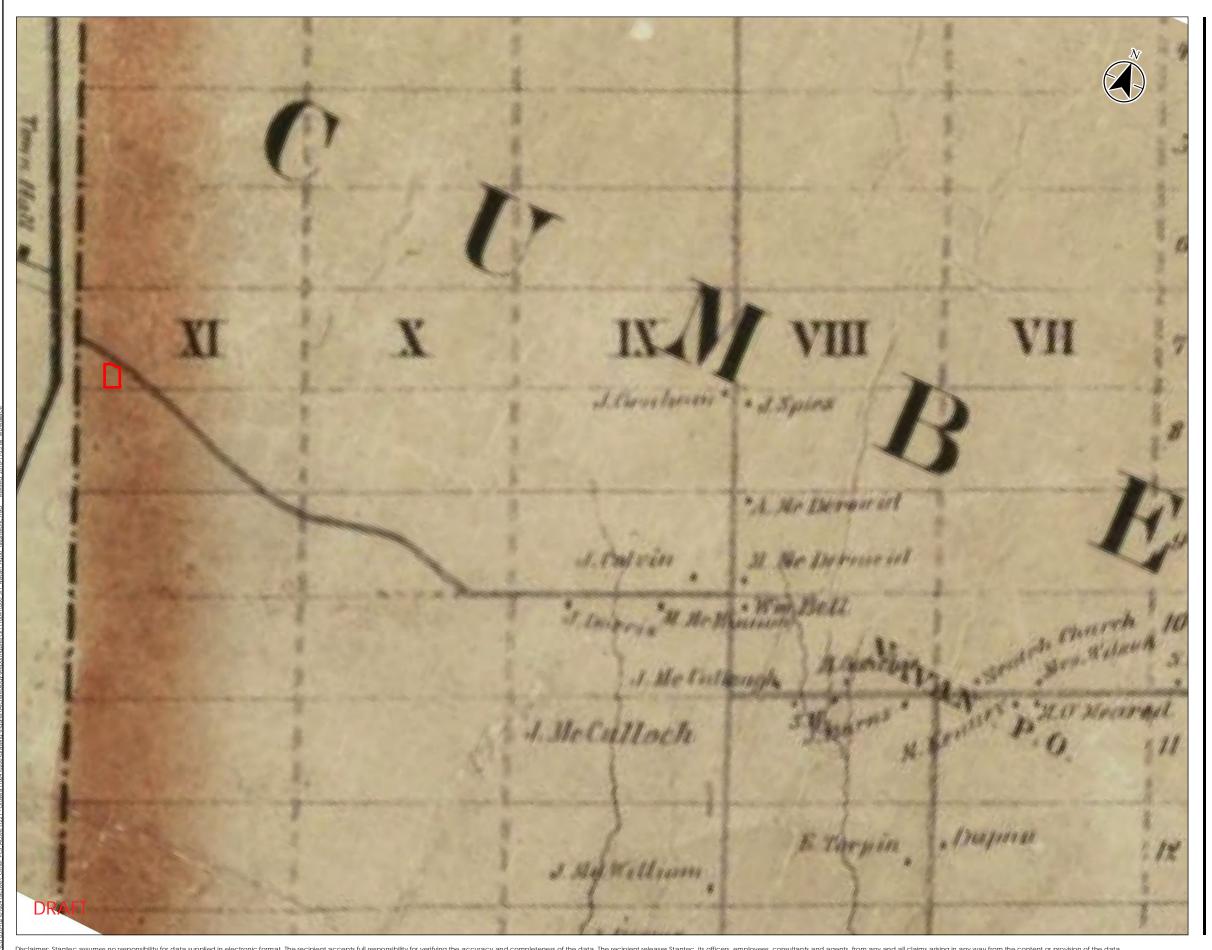
Project Location Ottawa, Ontario

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Client/Project
ST. ANTHONY COPTIC ORTHODOX CHURCH
3856, 3866 AND 3876 NAVAN ROAD STAGE 1 ARCHAEOLOGICAL ASSESSMENT

DRAFT

1820 Original Survey Map of Cumberland Township



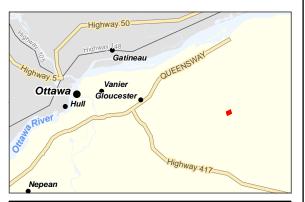


Legend

Study Area (Approximate Location)

Figure Not to Scale

Walling, Henry F. 1862. Map of the counties of Stormont, Dundas, Glengarry, Prescott & Russell, Canada West. National Map Collection, H2/420/Stormont/1862



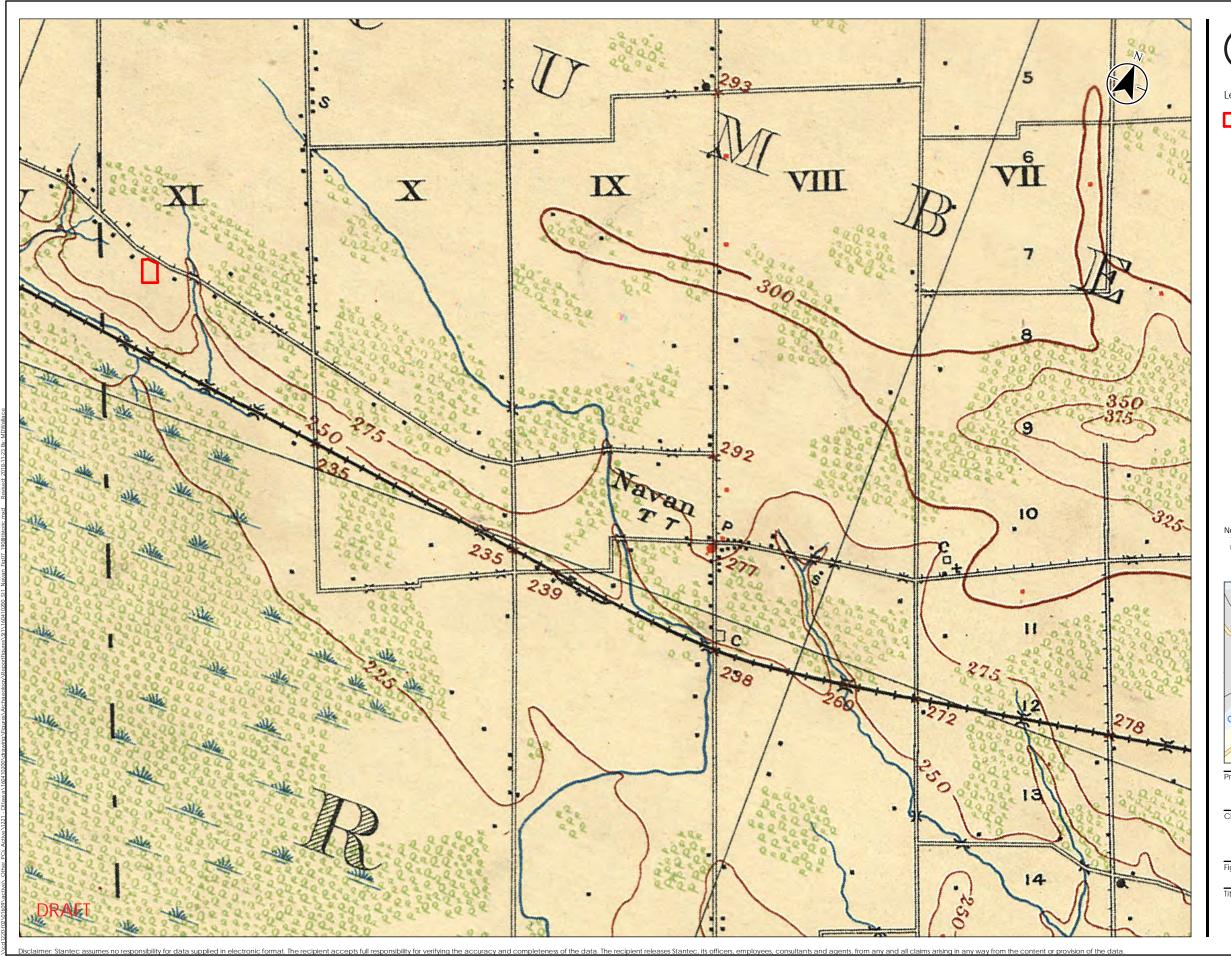
Project Location Ottawa, Ontario

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STAGE 1 ARCHAEOLOGICAL ASSESSMENT

DRAFT

Portion of the 1862 Map of Cumberland Township





Study Area (Approximate Location)

Figure Not to Scale

Notes
1. Russell, Ontario. 1908. *1:63,360. Map Sheet 031G06, [ed. 1].* Survey Division, Department of Militia and Defence, Ottawa.



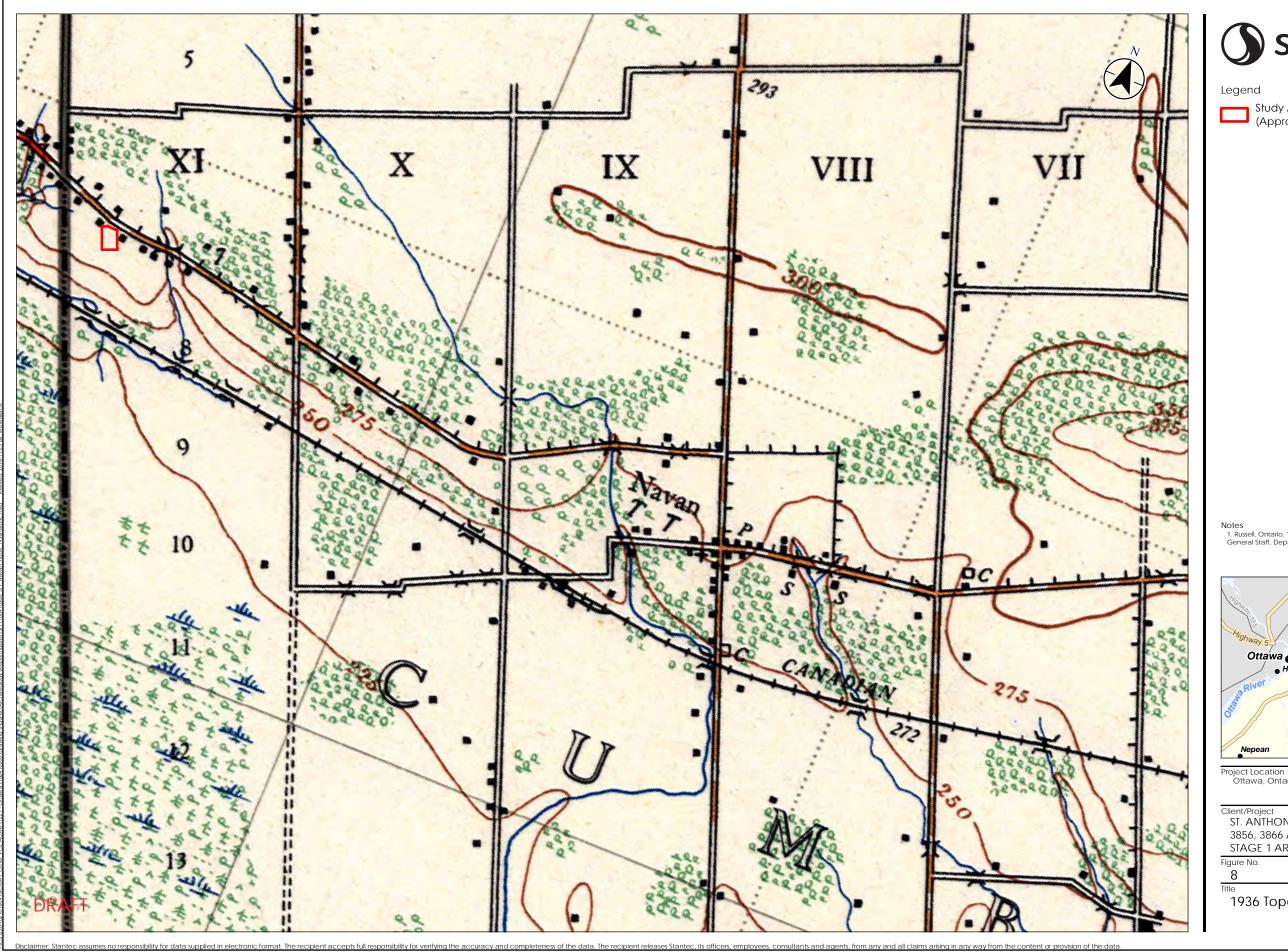
Project Location Ottawa, Ontario

160410200 REVA Prepared by MDW on 2018-11-23 Technical Review by ABC on yyyy-mm-dd Independent Review by ABC on yyyy-mm-dd

Client/Project
ST. ANTHONY COPTIC ORTHODOX CHURCH
3856, 3866 AND 3876 NAVAN ROAD
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

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1908 Topographic Map of the Study Area



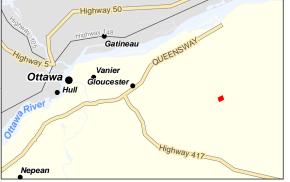


Study Area (Approximate Location)

Figure Not to Scale

Notes

1. Russell, Ontario. 1936. 1.63,360. Map Sheet 031G06. [ed. 4]. Geographical Section, General Staff, Department of Militia and Defence, Ottawa.

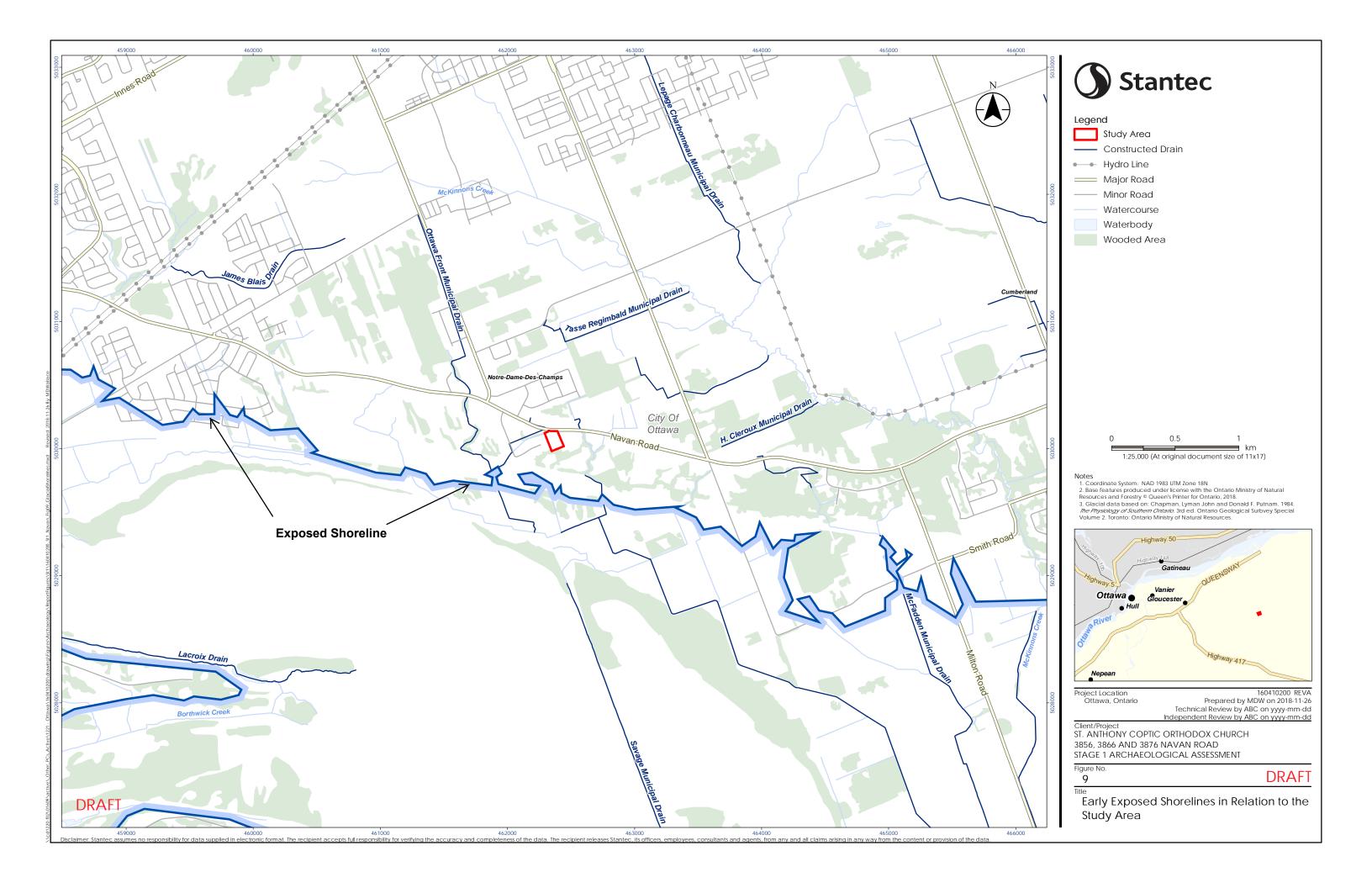


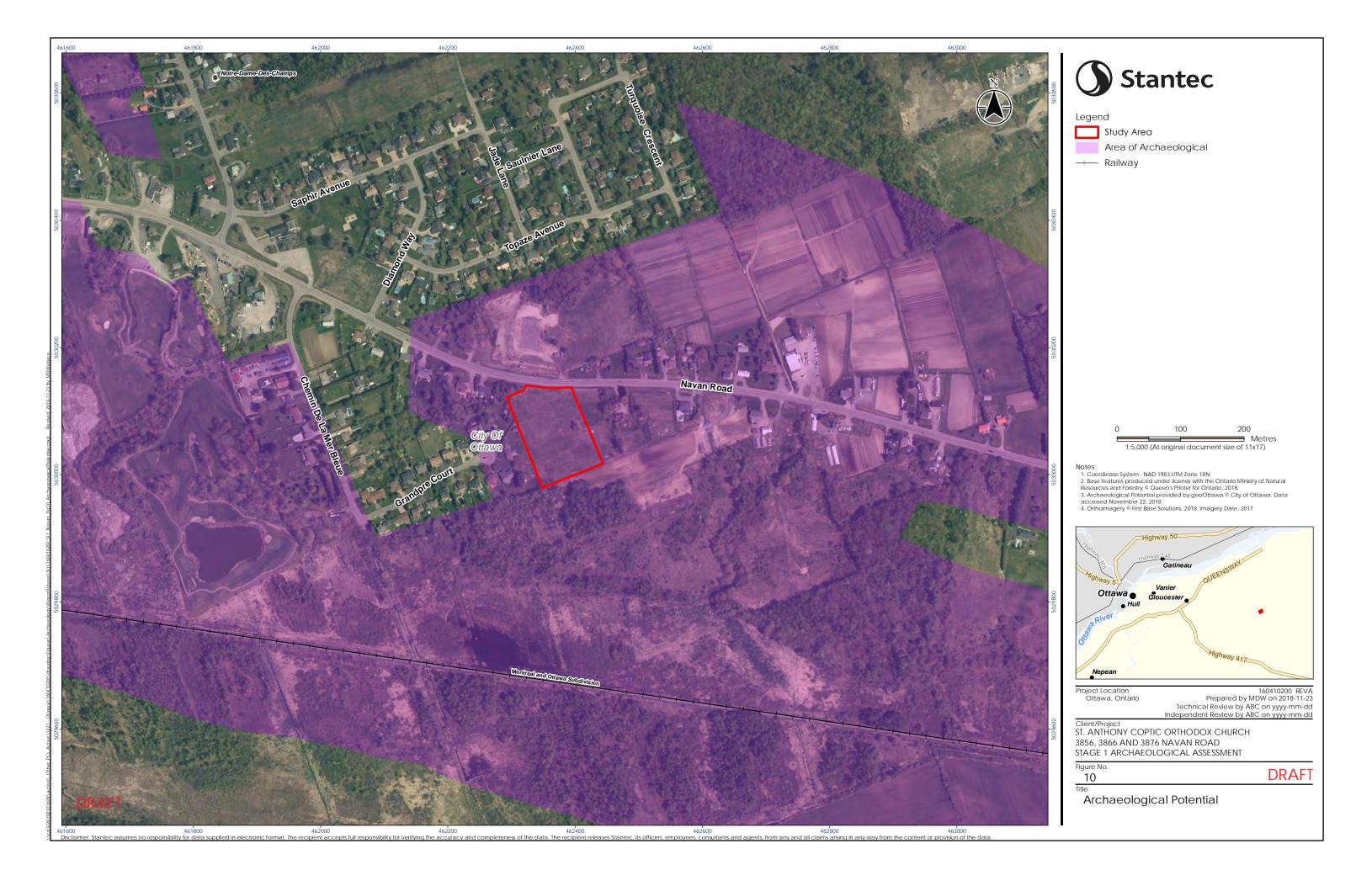
160410200 REVA Prepared by MDW on 2018-11-23 Technical Review by ABC on yyyy-mm-dd Independent Review by ABC on yyyy-mm-dd

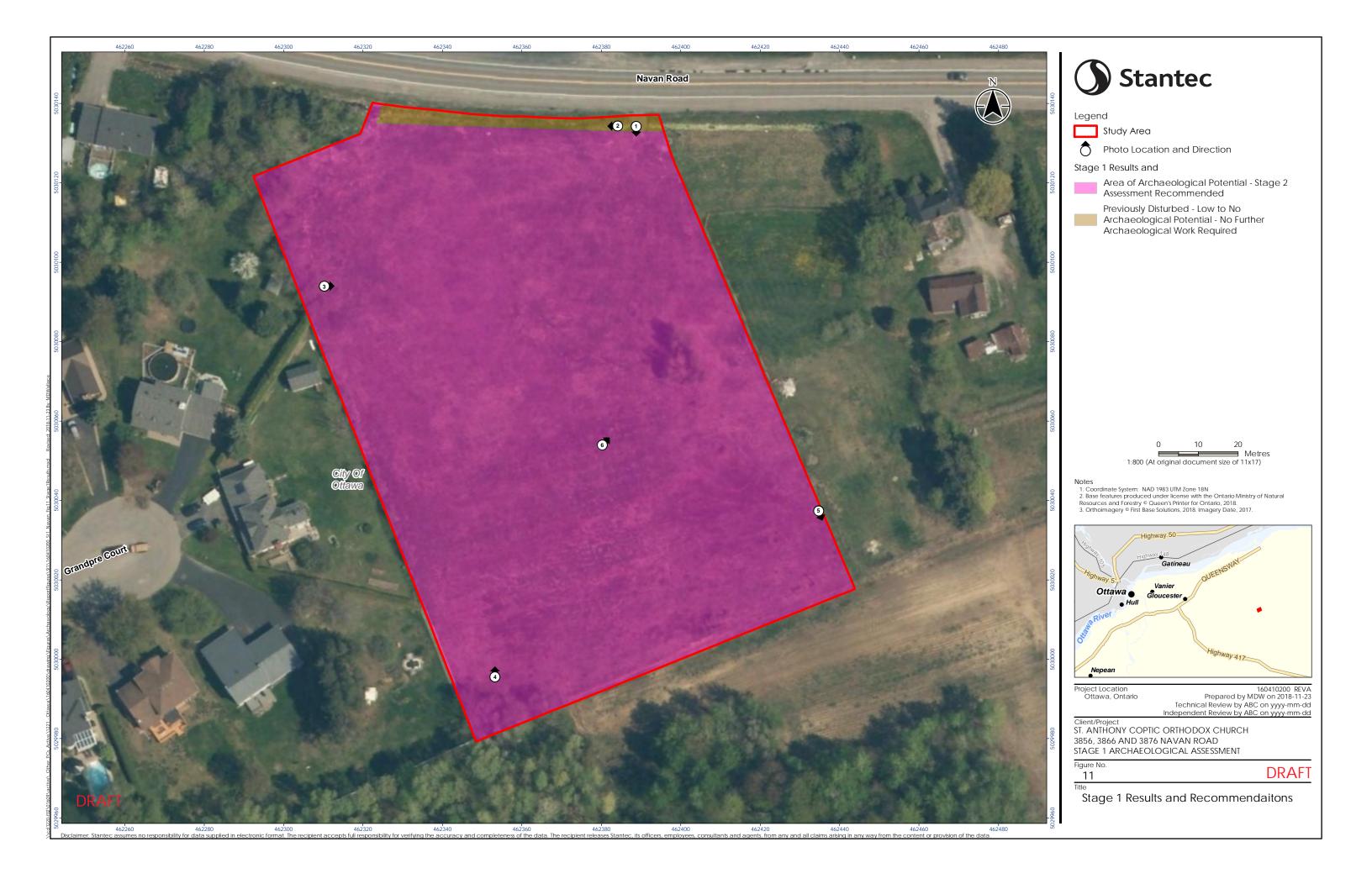
DRAFT

ST. ANTHONY COPTIC ORTHODOX CHURCH
3856, 3866 AND 3876 NAVAN ROAD
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

1936 Topographic Map of the Study Area







Closure November 27, 2018

9.0 CLOSURE

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

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

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

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Quality Review

(signature)

Jeffrey Muir, Senior Archaeologist

Independent Review

(signature)

Jim Wilson, Principal, Senior Archaeologist