

Stage 1 Archaeological Assessment, South March Battery Energy Storage System, 2555 Marchurst Road

Part of Lots 25 and 26, Concession 1, Geographic Township of March, former Carleton County, now City
of Ottawa, Ontario

February 11, 2025

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Project Information Form Number:
P415-0525-2024

ORIGINAL REPORT




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Executive Summary

Evolugen Development Limited Partnership (Evolugen, or the Client) is proposing the construction and operation of the South March Battery Energy Storage System (BESS) (the Project) within the Algonquins of the Pikwakanagan traditional territory in the City of Ottawa, Ontario. The Project is subject to the *Class Environmental Assessment for Transmission Facilities* (Class EA for TF) in accordance with the Ontario *Environmental Assessment Act*. To facilitate the Project, the Client retained Stantec Consulting Ltd. (Stantec) to conduct Stage 1 archaeological assessment for the Project. The layout of the infrastructure within the Project's footprint has yet to be confirmed and will be determined through additional engineering studies, equipment procurement, and the Environmental Study Report for the Class EA for TF of the Project. The Stage 1 archaeological assessment study area is located in part of Lots 25 and 26, Concession 1, Geographic Township of March, former Carleton County, now City of Ottawa, Ontario. The study area for the Project comprises approximately 82.5 hectares of pasture and wooded land located on the west side of Marchurst Road, south of Thomas A. Dolan Parkway.

The Stage 1 archaeological assessment was completed under Project Information Form (PIF) number P415-0525-2024, issued by the Ministry of Citizenship and Multiculturalism's (MCM) to Patrick Hoskins, MA. A property inspection of the study area was completed by Patrick Hoskins (P415) on November 26, 2024.

The Stage 1 archaeological assessment of the study area for the Project, involving background research and a property inspection, determined that portions of the study area retain potential for the identification and documentation of archaeological resources. In accordance with Section 1.3.1 and Section 7.7.4 of the Ministry of Citizenship and Multiculturalism's (MCM) 2011 *Standards and Guidelines for Consultant Archaeologists*, **Stage 2 archaeological assessment is required for any portion of the Project's anticipated construction which impacts an area of archaeological potential.** Full and detailed Stage 2 recommendations are provided in the body of the report.

The Stage 1 archaeological assessment also determined that portions of the study area retain low to no archaeological potential due to extensive areas of exposed or shallowly buried bedrock and areas of low and permanently wet ground. These portions of the study area retain low to no potential for the identification or recovery of archaeological resources. In accordance with Section 1.3.2 and Section 7.7.4 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists*, **Stage 2 archaeological assessment is not required for any portion of the Project's anticipated construction which impacts an area of low to no archaeological potential.**

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

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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Acknowledgements

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1 Project Context

1.1 Development Context

Evolugen Development Limited Partnership (Evolugen, or the Client) is proposing the construction and operation of the South March Battery Energy Storage System (BESS) (the Project) within the Algonquins of the Pikwakanagan traditional territory in the City of Ottawa, Ontario. The Project is anticipated to be approximately 250 Megawatts (MW) and will require a final footprint size of approximately 3.5 hectares.

The Project is subject to the *Class Environmental Assessment for Transmission Facilities* (Class EA for TF) (Hydro One Networks Inc. 2024) in accordance with the Ontario *Environmental Assessment Act* (Government of Ontario 1990c). The Class EA for TF is a streamlined process utilized by projects that have predictable environmental effects that can likely be mitigated and can be planned and constructed in accordance with a common process.

To facilitate the Project, the Client retained Stantec Consulting Ltd. (Stantec) to conduct Stage 1 archaeological assessment for the Project. The layout of the infrastructure within the Project's footprint has yet to be confirmed and will be determined through additional engineering studies, equipment procurement, and the Environmental Study Report for the Class EA for TF of the Project. The Stage 1 archaeological assessment study area is located in part of Lots 25 and 26, Concession 1, Geographic Township of March, former Carleton County, now City of Ottawa, Ontario (Figure 1). The study area for the Project comprises approximately 82.5 hectares of pasture and wooded land located on the west side of Marchurst Road, south of Thomas A. Dolan Parkway (Figure 2).

1.1.1 Objectives

In compliance with the provincial standards and guidelines set out in the Ministry of Citizenship and Multiculturalism's (MCM) 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the objectives of the Stage 1 archaeological assessment are to:

- Provide information about the study area's geography, history, previous archaeological fieldwork and current land conditions
- Evaluate the study area's archaeological potential, which will support recommendations for Stage 2 survey for all or parts of the property
- Recommend appropriate strategies for Stage 2 survey

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

- Relevant archaeological, historical, and environmental literature pertaining to the study area
- Land use history of the study area, including pertinent historical maps
- The MCM's *Ontario Archaeological Sites Database* to determine the presence of registered archaeological sites in and around the study area
- The MCM's *Ontario Public Register of Archaeological Reports* to identify previous archaeological assessments completed within 50 metres of the study area
- The City of Ottawa's Archaeological Potential GIS layer on GeoMaps (City of Ottawa 2025a)



- Existing conditions via a property inspection by a licensed archaeologist.

Permission to enter the study area for the Stage 1 property inspection was arranged and provided by the Client.

1.2 Historical Context

“Contact” is typically used as a chronological benchmark when discussing Indigenous archaeology in Canada and describes the interaction between Indigenous and European nations. There is no definitive moment of contact and the understanding of when Indigenous and European nations first began to influence one another is evolving with new study of archaeological and historical evidence, and from Indigenous oral tradition and history. Contact in what is now the Province of Ontario is broadly assigned to the 16th century (Loewen and Chapdelaine 2016).

1.2.1 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). 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 archaeological periods based on observed changes in material culture. These archaeological periods are largely based in observed changes in formal lithic tools and separated into the Early Paleo, Late Paleo, Early Archaic, Middle Archaic, Late Archaic and Terminal Archaic periods. Following the advent of ceramic technology in the Indigenous archaeological record, archaeological 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 archaeological periods do not necessarily represent specific cultural identities but are a useful paradigm for understanding changes in Indigenous material culture through time.

Overall, archaeological research in many parts of eastern Ontario has been fairly limited, at least when 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 Indigenous archaeological periods of eastern Ontario is based on syntheses in Archaeologix Inc. (2008), Ellis and Ferris (1990), Pilon (1999), St-Pierre (2009), and Wright (1995). Table 1 provides a generalized archaeological period chronology for eastern Ontario in years BP, for which “present” is established at 1950.

Table 1: Generalized Cultural Chronology for Eastern Ontario

Archaeological Period	Time	Characteristics
Early Paleo	11,000 – 10,400 BP	Caribou and extinct Pleistocene mammal hunters; small camps.
Late Paleo	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.



Archaeological Period	Time	Characteristics
Middle Archaic	8,000 – 4,500 BP	Environment similar to present; fishing becomes important component of subsistence; and 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 and continuation of Terminal Archaic settlement and subsistence patterns.
Middle Woodland	2,400 – 1,400 BP	Increased sedentism; larger settlements in spring and summer, with 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.
Early Late Woodland	1,100 – 700 BP	Limited agriculture; development of small village settlement; small communal longhouses.
Middle Late Woodland	700 – 600 BP	Shift to agriculture as major component of subsistence; larger villages with large longhouses; increasing political complexity.
Late Late Woodland	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 BP, when this area was settled by Indigenous groups that had been living to the south of the emerging Great Lakes.

Early Paleo (*circa* [c.] 11,000 – 10,400 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 Early Paleo 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 Early Paleo 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 Early Paleo 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 Paleo-environment may not have recovered sufficiently from the former glaciations to have allowed an Early Paleo occupation. There is, however, some evidence of Early Paleo incursion to the Rideau Lakes area.

The Late Paleo period (c. 10,400 – 10,000 BP) is poorly understood compared to the Early Paleo, the result of less research focus than the Early Paleo. 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 Early Paleo period



moved north with the more open vegetation or became locally extinct. Like the Early Paleo, Late Paleo 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 Paleo-Indian occupation, although the evidence of such is still very limited. There is some evidence of Late Paleo occupation on Thompson Island, in the St. Lawrence River near the junction of Ontario, Quebec, and New York State.

The transition from the Paleo to the Archaic archaeological period of Ontario 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 (c. 10,000 – 8,000 BP), the jack and red pine forests that characterized the Late Paleo environment were replaced by forests dominated by white pine with some associated deciduous elements. Early Archaic projectile points differ from Paleo 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 (c. 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, raw copper tools manufactured from sources near Lake Superior were being widely traded. Two of the most notable sites in Ontario are approximately 120 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. More than 1,000 copper artifacts have been recovered from the Morrison's Island and Allumette Island sites. The copper artifacts comprise 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 between distant populations.



During the late part of the Middle Archaic (c. 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 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 (c. 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.

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 (i.e., 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 raw 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 (c. 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 lifeways 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 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 (c. 2,200 BP – 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 upper 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 and eastern Ontario is divided into three temporal components: Early, Middle and Late Late Woodland. 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 Late Woodland components have been identified near Pembroke on the Muskrat River; however, there is evidence for only limited use of cultivated plants. Middle Late Woodland sites have not been identified east of the Kingston area.

During the Late Late Woodland period a distinctive material culture emerges at the east end of Lake Ontario and along the St. Lawrence River up to Quebec 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 three hectares or more in size and composed of several 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-Wendat 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 (i.e., the Middle Late Woodland Middleport archaeological culture and Late Woodland/contact period Huron-Wendat 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, 123). Taking the point further, Fox and Garrad (2004) suggest that Huron-Wendat and Algonquin shared not only a territory in the southern Georgian Bay area (traditional “Huronian”), but also shared a material culture, and may have cohabited in settlements to a greater degree than as simply visitors.



1.2.2 Post-contact Indigenous Resources

The Ottawa River and most of its major drainage tributaries, including the Rideau River, were controlled by various Algonquin bands that occupied the Ottawa River Valley (Day and Trigger 1978; Whiteduck 2002). The Algonquin homeland is traditionally identified as the portion of the Ottawa River drainage between the Long Sault Rapids (or Point d'Original) 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 Algonquin bands (Morrison 2005). The study area is located roughly equidistant between the Rideau River and Madawaska River watersheds. The Madawaska River valley from its headwaters to just upstream of Stewartville is the traditional homeland of the historical Algonquin *Matouweskarini* band (Day and Trigger 1978:793; Whiteduck 2002). However, other sources (Ratelle 1996:44) suggest that the Matouweskarini were located on the south side of the Madawaska River and that the north side was, at least in the early 17th century, the domain of the *Kinouchipirini* (also identified as the *Keinouche*), whose territory extended north to the Bonnechere River. The Rideau River watershed, although not historically identified with a specific Algonquin band, was undoubtedly used in the early Contact period, as Samuel de Champlain mentions Indigenous use of the river, even though he himself did not travel along it (Fox and Pilon 2016; 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-Wendat traded corn, cornmeal, and fishing nets 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 Algonquin territory in 1613 until 1615, the Algonquin played a major role in the trade between the Huron-Wendat and the French, and actively worked against Champlain making a trip to Huron-Wendat territory (Day and Trigger 1978). When direct trade between the Huron-Wendat and French eventually occurred, and the Huron-Wendat and French were permitted to use the Ottawa River as a travel route, they were subject to tolls by the Kichesipirini, 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 1987; 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-Wendat, 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 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, who had initially determined to trade no firearms, would only provide firearms 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-Wendat-French fur trade collapsed, and the Five Nations Iroquois raided and destroyed the French Mission at Ste. Marie and several Huron-Wendat villages. Huronia was abandoned, with the surviving Huron-Wendat destroying their own remaining villages and moving further inland, eventually moving east to Quebec or southeast into the United States. The Algonkian-speaking communities were briefly dispersed from the lower 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*.

At the turn of the 18th century, the French interests in the fur trade had been sufficiently disrupted to a level that 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 protracted hostilities with the Iroquois and the effects of 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 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 Liève 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 on the 1740 map (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, who 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 *Proclamation of 1763* was supposed to protect Algonquin territory from further settlement by Euro-Canadians; however, the British loss in the American Revolutionary War, and the resultant influx of loyalists to the British Crown after the war, meant that new lands were required for settling these loyalists and land was purchased in what is now eastern Ontario. This purchase, one of the so-called Crawford's Purchases, was made with the Mississauga, and not the Algonquin (Morrison 2005, 31).

Even though the lands had supposedly been 'surrendered' by the Mississauga, early Euro-Canadian settlers along the Ottawa River documented the continued presence of Algonquins throughout the territory (Hessel 1987, 70). In 1819, Alexander McDonnell signed a treaty with some Algonquin that allowed him to cut timber between the Indian and Mississippi rivers and to float the resultant log rafts down the Bonnechere and Madawaska rivers. In 1837, a government Order-in Council acknowledged both the continued presence of Algonquins within the lower Ottawa valley and their historical claim to a large territory. In 1840, Reverend William Bell, a Presbyterian circuit preacher, met an Algonquin settlement along the Madawaska River near present-day Stewartville. These and other encounters testify to the continued occupation of the valley by Algonquin populations.



Despite the attempts to limit the movement of Algonquin people through their traditional territory and encouragement to permanently settle in one location (i.e., at Oka), Algonquins were still largely living on the land and practicing their traditional livelihood of hunting and trapping at the start of the 19th century (Black 1989, 64). For the most part, the Algonquin people were on the land of all but a brief period of two to three months of the year, when they would gather at Oka (Black 1989, 65), including even those who had converted to Christianity (Morrison 2005, 31). At Oka, it was noted that the Iroquoian population was heavily involved in agriculture and the wage labour economy, but only Algonquin women and elderly men were involved in cultivation pursuits, and in only a limited way at that (Black 1989, 64). During the early part of the 19th century, tensions between Algonquin, Nipissing, and Iroquoian inhabitants increased at Oka (McGregor 2004, 167).

In 1820, French traders from Montréal opened a trading post where the Desert River (Kitigan Zibi) meets the Gatineau River. For many Algonquin families it was preferable to conduct their trade at this post and spend their summer months in that region, rather than continue to Oka (McGregor 2004, 163). Beginning in the 1830s, those Algonquin families who were spending time in that region began clearing some small parcels of land to settle on when they were not in the bush (McGregor 2004, 167). Eventually, the Crown was petitioned for a reserve of approximately 60,000 acres (24,000 hectares) in the Kitigan Zibi area, largely due to the efforts of Chief Luc-Antoine Pakinawatik, who had to indicate to government officials that the land was needed for farming as hunting and trapping were on the decline (McGregor 2004, 172).

The decline of hunting and trapping was precipitated by the increase in farming and lumbering activities practiced by Euro-Canadian settlers within the Ottawa River valley, which drastically altered the landscape (Black 1989, 65). Nevertheless, Algonquin hunters and trappers continued to ply their traditional trades. As the fur trade continued to decline in importance through the 19th century, the closure or amalgamation of trading posts within the Ottawa River drainage resulted in the movement of families to new post locations, and band membership through the latter part of the 19th century became very fluid, and congregation at more favourable locations increased (Black 1989, 66-67).

One of those more favourable locations was at Golden Lake (Pikwakanagan), on the Bonnechere River, which was a summer gathering place within the wider winter hunting grounds (Morrison 2005, 33). In September 1857, the Crown Lands Agent sent the government a petition from several Algonquin families for a grant of 200 acres per family along the shores of the lake. In 1864, the government approved the sale of 1,561 acres (631 hectares) of land, which became the community of Pikwakanagan (Hessel 1987, 72).

Although the Algonquin continued to become increasingly congregated in fewer locations throughout the Ottawa River drainage area (Hessel 1987, 85), traditional activities, such as canoe building, carried on into the early 20th century at Algonquin communities such as Pikwakanagan, Kitigan Zibi, and Lac Barrière (Gidmark 1988, 75). Moreover, these canoes were used to carry on with hunting and trapping, and for transportation over long distances (Gidmark 1988, 75). Despite the continuity of traditional pursuits practiced by some, by the start of the 20th century many Algonquin had become incorporated into the wage labour economy (Black 1989, 62). While urban and industrial development were slower to affect the lands where reserves had been established, by the 1950s the ecological changes wrought by lumbering and mining, in conjunction with the drop in prices for furs and other traditional products, the



change to a wage labour model had become firmly established (Montpetit 1996, 214). Additionally, the opportunities for wage labour on reserves was in general underdeveloped, resulting in either a high degree of underemployment or the need to seek opportunities off-reserve, including, for some, settling in urban centres (Montpetit 1996, 215). Combined with the continual growth in large and small urban centres along the Ottawa River, the relationship of the Algonquin to their traditional territory began to be harder to identify among non-Indigenous populations. However, in 1983 the Algonquins of Pikwakanagan First Nation initiated a land claim process, formally submitting a petition and supporting research to the Government of Canada in 1983 and the Government of Ontario in 1985. The Province of Ontario accepted the claim for negotiations in 1991, and the Government of Canada joined the negotiations in 1992 (Algonquins of Ontario [AOO] no date [n.d.] a). Moreover, the Algonquin have become increasingly involved in the land development process in the Ottawa Valley, and in the urban National Capital Region, raising both the knowledge of Algonquin ties to the land and the Algonquin profile in the wider community (AOO n.d.b).

The land associated with the study area is governed by Treaty 27, illustrated by the letter “S” on Figure 3. Treaty 27 was enacted in 1819 between John Ferguson of Kingston and the Mississauga Nation for a parcel of land:

Commencing at the north west angle of the Township of Rawdon; thence along the division line between the Midland District and the District of Newcastle, north 16 degrees west, 33 miles; then north 74 degrees east, 61 miles more or less to a division line produced north 16 degrees west from the north east angle of the Township of Bedford; then north 16 degrees west to the Ottawa or Grand River; then down the said River to the north west angle of the Township of Nepean; then south 16 degrees east, 15 miles more or less to the north east angle of the Township of Marlborough; then south 54 degrees west to the north west angle of the Township of Crosby; then south 74 degrees west 61 miles more or less to the place of beginning.

(Morris 1943:26)

However, as noted above, there is an outstanding Algonquin land claim for the traditional Algonquin territory within those lands that remain unceded because the Algonquin were not consulted during the treaty negotiations (Algonquin Treaty Negotiation Funding Trust 2013). Figure 3 illustrates the AOO Settlement Area Boundary in relation to the study area. An Agreement-in-Principle for a modern-day treaty was signed between the AOO and the governments of Canada and Ontario in 2016.

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 archaeological resources throughout the region which show continuity with past peoples, even if they have not been recorded in Euro-Canadian documentation.



1.2.3 Euro-Canadian Resources

Written history of the general area begins in 1610, when Étienne Brûlé travelled up the Ottawa River and made note of the large waterfalls in the river, which are located to the east of the study area (DeVolpi 1964). Champlain followed in 1613, and subsequently named them the Chaudière Falls.

Despite the early mention of the area, the Ottawa region did not become settled by Euro-Canadian residents until the early 1800s, when Philemon Wright arrived from Boston with a small group of settlers and established a community on the north side of the Ottawa River (Holzman and Tosh 1999; DeVolpi 1964; Nagy 1974). Wright started trading timber in 1806 and the region became known for the square timber trade and European settlers slowly began to enter the region (Nagy 1974).

March Township was surveyed in 1820 by Reuben Sherwood (Sherwood 1820). The original survey map indicates that Lot 25, Concession 1 was a Crown reserve lot and that Lot 26, Concession 1 was a clergy reserve lot (Figure 4). When townships in Upper Canada (Ontario) were originally laid out, the Crown and the Anglican clergy each received one-seventh of the lots to sell. Unlike Lower Canada (Quebec), where the set asides were typically found in large blocks, Lieutenant-Governor John Graves Simcoe directed that the Crown and clergy lots in Upper Canada be interspersed with other privately owned lots (Wilson 1969). However, in the early 1800s, the continuing practice of free land grants depressed the sale prices of these lots and a program to lease the lands was established. Originally, leases were for 21 years, renewable every seven years on new rates (Wilson 1969). The clergy set aside was a matter of much friction with other Protestant denominations, which also wished to benefit from these lots. By 1840, an act was passed such that one half of the revenues of clergy lot sales were distributed between the Church of England and the Church of Scotland and the remaining half was divided between the remaining denominations, including the Catholic church. Eventually the matter was resolved by secularizing the clergy lots in 1854 so that they reverted to the Crown, from which they were subsequently distributed (Lee 2004).

The 1863 map of Carleton County (Walling 1863), including March Township, indicates no landowners of either of the lots associated with the study area, or in any of the adjacent lots. (Figure 5). The right-of-way for present-day Marchurst Road is marked by dashed lines, indicating that it had not yet been opened, which, combined with the rough terrain and limited agricultural potential of the area, likely contributed to the slow uptake of land in the general area.

The map of March Township in Belden & Co.'s 1879 *Illustrated Historical Atlas of the County of Carleton* (Belden & Co. 1879) shows that east half of Lot 25, Concession 1, was owned by P. Scott, who had a homestead along the east side of the property, fronting present-day Marchurst Road (Figure 6). The south half of Lot 26, Concession 1, was owned by A. Monaghan and no structures are indicated on that portion of the lot (Figure 6). A homestead is indicated on the north half of Lot 26, Concession 1, belonging to Jno. Holland, outside of the study area (Figure 6). In addition, the map also indicates an unopened road right-of-way running east-west between Lots 25 and 26 (Figure 6).

In discussing the late 19th century historical mapping, it must be remembered that historical county atlases were produced primarily to identify factories, offices, residences, and landholdings of subscribers and were funded by subscription fees. Landowners who did not subscribe were not always listed on the



maps (Caston 1997:100). As such, structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984). Further, review of historical mapping, including treaty maps, also has inherent accuracy difficulties due to potential error in geo-referencing. Geo-referencing is conducted by assigning spatial coordinates to fixed locations and using these points to spatially reference the remainder of the map. Due to changes in “fixed” locations over time (e.g., road intersections, road alignments, watercourses, etc.), errors/difficulties of scale and the relative idealism of historical cartography, historical maps may not translate accurately into real space points. This may provide obvious inconsistencies during historical map review.

Historical topographic mapping from 1929, 1934, 1943 and 1963 was also reviewed (Figure 7). The 1929 map indicates a structure in the east half of Lot 25, in roughly the same location as indicated on the 1879 Belden & Co. (1879) map, as well as two structures in the east part of the south half of Lot 26, fronting the roadway. Most of the study area in Lot 25 and the west half of Lot 26 is indicated as wooded or wetland (Figure 7). The 1934 map shows the existing hydro corridor having been constructed through the study area (Figure 7). The study area remained unchanged through to 1943 (Figure 7). However, by 1963 the structure in Lot 25 had been removed and additional hydro lines are indicated in that corridor. The amount of cleared land in Lot 26 had also changed slightly, with the first indication of the cleared land along the north edge of the south half of Lot 26 indicated as wooded but more cleared land in the northwest corner of the east half of Lot 25 (Figure 7).

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, upstream and downstream of Ottawa (Chapman and Putnam 1984, 205). The region upstream of Ottawa consists of a broad valley with “rocky Laurentian uplands rising on either side” (Chapman and Putnam 1984, 205). On the Ontario side of the river valley, the bedrock is additionally faulted such that the bedrock is lifted above the clay plain, which forms the rock ridges (Chapman and Putnam 1984, 205).

Soils within the study area are identified as Rockland, Dalhousie silty-clay, and Anstruther loam-sand (Schut and Wilson 1987) (Figure 8). Rockland (RK) is a soil type where more than 25% of the surface is composed of exposed or shallowly buried (i.e., less than 10 centimetres of soil) bedrock (Schut and Wilson 1987, 74). Specifically, the study area is classified as RK3, which indicates bedrock composed primarily of granite and gneiss and with “[s]ignificant areas of marshland” in depressional areas (Schut and Wilson 1987, 75). Where there is soil in the RK3 zone, it is from the Anstruther series (Schut and Wilson 1987, 75). Rockland has no agricultural value. Rockland makes up approximately 52.6% (43.4 hectares) of the study area. Dalhousie (D) silty-clay is a fine textured soil that develops on level to very gently sloping topography and has imperfect to poor drainage characteristics (Schut and Wilson 1987, 36). The specific Dalhousie series in the study area is D2, which indicates predominantly imperfect rather than poor drainage (Schut and Wilson 1987, 37). Dalhousie soils in general have good capability for field crops, although localized areas are in permanent pasture due to their association with Rockland and the potential for shallow bedrock (Schut and Wilson 1987, 37). Dalhousie soils make up approximately



29.2% (24.1 hectares) of the study area. Anstruther (A1) loam-sand is a moderately coarse to coarse textured soil that contains “a considerable amount of granitic material of Precambrian bedrock origin” (Schut and Wilson 1987, 30). Soil depth ranges between 1 to 50 centimetres above Precambrian bedrock, although in some instances the soil veneer is completely missing and results in exposed bedrock (Schut and Wilson 1987, 30). Overall, Anstruther soil is rapidly to well-drained and have low moisture holding capability (Schut and Wilson 1987, 31). Anstruther soils have little to no agricultural capability, remaining largely forested or pasture (Schut and Wilson 1987, 31). Anstruther soil makes up approximately 18.2% (15.0 hectares) of the study area.

The closest source of potable water to the study area is a small unnamed watercourse that flows through the study area and is one of several small streams that flow into Constance Lake, which is located approximately 4.2 kilometres to the east-northeast. Another small tributary to Constance Lake is located just south of the study area. In addition, there are several small wetlands located to the west of the study area, in the Carp Hills Wetland Complex, which form the headwaters of these tributaries (Figure 2).

The AOO’s relic shorelines model (AOO 2017) was reviewed as part of the background research for this report. The relic shorelines model was prepared to facilitate archaeological research within the Algonquin Traditional Territory to inform indicated archaeological potential based on relic shorelines of paleo waterbodies such as the Champlain Sea. In reviewing the shorelines model, the study area was found to be located east of the maximum extent of the Champlain Sea, which suggests that relic shorelines would not have formed within the study area (AOO 2017, Figure 21).

1.3.2 Registered Archaeological Sites and Surveys

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

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



An examination of the *Ontario Archaeological Sites Database* has shown that no archaeological sites are registered within one kilometre of the study area (Government of Ontario 2025a).

Based on a query of the *Ontario Public Register of Archaeological Reports* (Government of Ontario 2025b), no previous archaeological assessments have been completed out within 50 metres of the study area.

The City of Ottawa maintains an Archaeological Potential GIS layer on its web-based GeoOttawa site (City of Ottawa 2025a). 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 (Archaeological Services Inc. 1999). The City of Ottawa's potential mapping (Figure 9) identifies archaeological potential for the portions of the study area within 200 metres of the unnamed watercourses within and to the south of the study area, as well as a general zone of potential in the forested area at the west edge of the study area (City of Ottawa 2025a).

The City of Ottawa also maintain GIS layers of heritage properties designated under Part IV of the *Ontario Heritage Act* (Government of Ontario 1990a) and of properties listed in the heritage register but not yet designated (City of Ottawa 2025b). There are no designated or listed heritage properties within 300 metres of the study area (City of Ottawa 2025b).

1.4 Existing Conditions

The study area is approximately 82.5 hectares in size and located on the east half of Lot 25, Concession 1, and the south half of Lot 26, Concession 1 in the Geographic Township of March, former Carleton County, now City of Ottawa, Ontario. The majority of the study area is wooded, with large expanses of exposed or shallowly buried bedrock. There is some active pasture/hay field and some smaller areas of cleared land. A small unnamed stream runs diagonally across central part of the study area, from roughly southwest to northeast. An existing hydro corridor is located along the south corner and north-central portion of the study area.



2 Field Methods

A property inspection was conducted under the field supervision of Patrick Hoskins, MA (P415), on November 26, 2024, under Project Information Form (PIF) number P415-0525-2024, issued by the MCM to Patrick Hoskins, MA. The property inspection involved walking the length and breadth of the study area to identify the presence or absence of features of archaeological potential in accordance with Section 1.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). During the property inspection, the weather was clear and cold. Visibility of land features was excellent. At no time were lighting and weather conditions detrimental to the identification of features of archaeological potential. The photography from the property inspection confirms that the Stage 1 property inspection requirements were met, as per Section 1.2 and Section 7.7.2 Standard 1 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) (Section 7.1).

Approximately 14.6 hectares of the study area are cleared fields that are currently used as pasture/hayfield (Photos 1 to 4). Approximately 19.9 hectares of the study area comprise overgrown scrubland (Photos 4 to 6). Forest/woodlot makes up approximately 17.2 hectares on the west side of Lot 26 (Photos 7 and 8). Much of the south and east parts of the study area, approximately 29.8 hectares, are composed of exposed or shallowly buried bedrock (Photos 9 to 11). Low and wet areas, including a small wetland and a stream, make up approximately 1.0 hectares of the study area (Photo 12).



3 Analysis and Conclusions

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Stantec applied archaeological potential criteria commonly used by the MCM (Government of Ontario 2011) to determine areas of archaeological potential within the region under study. These variables include proximity to previously identified archaeological sites; distance to various types of water sources; soil texture and drainage; glacial geomorphology; elevated topography; and the general topographic variability of the area. However, it is worth noting that extensive land disturbance can eradicate archaeological potential (Government of Ontario 2011).

Potable water is the single most important resource for any extended human occupation or settlement and since water sources in southern Ontario have remained relatively stable over time, proximity to drinkable water is regarded as a useful index for the evaluation of archaeological site potential. In fact, distance to water is one of the most commonly used variables for predictive modeling of archaeological site location in Ontario. Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils or topographic variability, may also indicate archaeological potential.

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

- Primary water sources: lakes, rivers, streams, and 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
- Accessible or inaccessible shorelines: high bluffs, swamp or marshy lake edges, sandbars stretching into marsh

As stated in Section 1.3.1, the closest water source to the study area is a small unnamed watercourse that is one of several small streams that flow into Constance Lake, which is located approximately 4.2 kilometres to the east-northeast. Another small tributary to Constance Lake is located just south of the study area. In addition, there are several small wetlands located to the west of the study area, in the Carp Hills Wetland Complex, which form the headwaters of these tributaries. Ancient and/or relic tributaries of these or other primary water sources may have existed but are not identifiable today and are not indicated on historic mapping. Further examination of the study area's natural environment identified that the majority of the study area (70.8%) is composed of Rockland and Anstruther soil types that would not have been suitable for Indigenous or Euro-Canadian agriculture. The remaining soil type, Dalhousie is imperfectly drained but would support Euro-Canadian agriculture, largely as pastureland. An examination of the *Ontario Archaeological Sites Database* has shown that there are no registered archaeological sites within one kilometre of the study area (Government of Ontario 2025a).



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* (Government of Ontario 1990a) or property that local histories or informants have identified with possible historical events, activities, or occupations. Though no designated or listed heritage properties within 300 metres of the study area (City of Ottawa 2025b), historical mapping demonstrates that the study area was sparsely occupied by the late 19th century and remained relatively undeveloped or cleared for agricultural purposes from then up to the present day. A 19th century structure is indicated along the east edge of the east half of Lot 25, Concession 1, but had been removed by 1963.

When the above listed criteria are applied, approximately 62.5% of the study area retains potential for the identification of archaeological resources. The remainder of the property is composed of areas of exposed or shallowly buried bedrock (36.1%) or is low and permanently wet (1.4%); these areas are considered to have low to no archaeological potential.



4 Recommendations

The Stage 1 archaeological assessment of the study area for the Project, involving background research and a property inspection, determined that portions of the study area retain potential for the identification and documentation of archaeological resources. In accordance with Section 1.3.1 and Section 7.7.4 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is required for any portion of the Project's anticipated construction which impacts an area of archaeological potential (Figure 10).**

The objective of Stage 2 archaeological assessment is to document archaeological resources within the portions of the study area still retaining archaeological potential and to determine whether these archaeological resources require further assessment.

Although some of the area of archaeological potential is located in cleared pasture, these pasture lands are located in lands with shallow soils above bedrock with intermittent exposed rock. These pasture fields are thus not able to be ploughed in advance of Stage 2 assessment and are recommended for test pit survey. As such, the Stage 2 archaeological assessment will involve test pit survey as outlined in Section 2.1.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The MCM standards require that each test pit be at least 30 centimetres in diameter, excavated to at least five centimetres into subsoil, and have excavated 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 bedrock, low and permanently wet, steeply sloped, or disturbed during the Stage 2 field work, those areas will not require survey but will be photographically documented in accordance with Section 2.1 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

The Stage 1 archaeological assessment also determined that portions of the study area retain low to no archaeological potential due to the presence of exposed or shallowly buried bedrock or areas of low and permanently wet ground. These portions of the study area retain low to no potential for the identification or recovery of archaeological resources. In accordance with Section 1.3.2 and Section 7.7.4 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is not required for any portion of the Project's anticipated construction which impacts an area of low to no archaeological potential (Figure 10).**

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



5 Advice on Compliance with Legislation

In accordance with Section 7.5.9 of the MCM's 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), the following standard statements are a required component of archaeological reporting and are provided from the MCM's 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

This report is submitted to the Minister of Citizenship and Multiculturalism 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 1990a). 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 study area of a development proposal have been addressed to the satisfaction of the MCM, 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 1990a) 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 1990a)

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 1990a) 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 1990a)

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 Public and Business Service Delivery and Procurement.

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



6 Bibliography

- Algonquin Treaty Negotiation Funding Trust. 2013. *History of the Algonquins*. Electronic document: www.tanakiwin.com. Last accessed January 21, 2025.
- Algonquins of Ontario. No date a. Overview of Treaty Negotiations. Electronic document: www.tanakiwin.com/our-treaty-negotiations/overview-of-treaty-negotiations/. Last accessed January 21, 2025.
- Algonquins of Ontario. No date b. Overview of Treaty Negotiations. Electronic document: www.tanakiwin.com/current-initiatives/overview-of-current-initiatives/. Last accessed January 21, 2025.
- Algonquins of Ontario. 2017. *Relic Shorelines in Algonquin Traditional Territory in Ontario*. Report prepared for the Algonquins of Ontario Consultation Office, Pembroke, Ontario.
- Archaeological Services Inc. 1999. *The Archaeological Resource Potential Mapping Study of the Regional Municipality of Ottawa-Carleton*. Planning Report submitted to the Regional Municipality of Ottawa-Carleton.
- Archaeologix Inc. 2008. *Archaeological Assessment (Stage 1) Shell Proposed Refinery Project, St. Clair Township, Lambton County, Ontario*. Report prepared for Jacques Whitford Limited, Markham, Ontario. PIF number P084-109-2007.
- Belden, H., & Co. 1879. *Illustrated Historical Atlas of the County of Carleton (including the City of Ottawa), Ont.* Toronto: H. Belden & Co.
- Black, M. Jean. 1989. Nineteenth-Century Algonquin Culture Change. *Papers of the 20th Algonquin Conference*. Ottawa: Carleton University, pp. 62-69.
- Borden, Charles E. 1952. A Uniform Site Designation Scheme for Canada. *Anthropology in British Columbia* 3:44-48.
- Bourne, Annie N. (Translator) and Edward G. Bourne (editor). 2000. *Algonquians, Hurons and Iroquois: Champlain Explores America, 1603-1616*. Dartmouth: Brook House Press.
- Caston, Wayne A. 1997. Evolution in the Mapping of Southern Ontario and Wellington County. *Wellington County History*. 10:91-106.
- Chapman, Lyman John and Donald F. Putnam. 1984. *The Physiography of Southern Ontario*. 3rd ed. Ontario Geological Survey Special Volume 2. Toronto: Ontario Ministry of Natural Resources.
- City of Ottawa. 2025a. *GeoOttawa, Archaeological Potential Layer*. Electronic document: <https://maps.ottawa.ca/geoOttawa/> Last accessed January 9, 2025.



- City of Ottawa. 2025b. *GeoOttawa, Heritage Layer*. Electronic document:
<https://maps.ottawa.ca/geoOttawa/> Last accessed January 9, 2025.
- Day, Gordon M., and Bruce Trigger. 1978. Algonquin. *Handbook of North American Indians: Volume 15 Northeast*, edited by Bruce G. Trigger, pp. 792-797. Washington: Smithsonian Institution Press.
- Department of Energy, Mines and Resources. 1963. *Constance Bay, Ontario. 1:25,000. Map Sheet 031F08H, ed. 1*. Ottawa: Surveys and Mapping Branch, Department of Energy, Mines and Resources.
- Department of National Defence. 1929. *Arnprior, Ontario. 1:63,360. Map Sheet 031F08, [ed. 1]*. Ottawa: Geographical Section, General Staff, Department of National Defence
- Department of National Defence. 1934. *Arnprior, Ontario. 1:63,360. Map Sheet 031F08, [ed. 2]*. Ottawa: Geographical Section, General Staff, Department of National Defence.
- Department of National Defence. 1943. *Arnprior, Ontario. 1:63,360. Map Sheet 031F08, [ed. 5]*. Ottawa: Geographical Section, General Staff, Department of National Defence
- DeVolpi, Charles P. 1964. *Ottawa: A Pictorial Record 1807-1882*. Montreal: DEV-SCO Publications Ltd.
- Ellis, Chris J. and Neal Ferris (editors). 1990. *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, OAS, Number 5. London: London Chapter, Ontario Archaeological Society.
- Ferris, Neal. 2009. *The Archaeology of Native-Lived Colonialism: Challenging History in the Great Lakes*. Tucson: University of Arizona Press.
- Fox, William, and Charles Garrad. 2004. Hurons in an Algonquian Land. *Ontario Archaeology*. 77/78:121-134.
- Fox, William, and Jean-Luc Pilon. 2016. Evidence for Sixteenth-Century Exchange: The Ottawa and Upper Saint Lawrence Waterways. In Loewen and Chapdelaine, pp.199-215.
- Gentilcore, R. Louis and C. Grant Head. 1984. *Ontario's History in Maps*. Toronto: University of Toronto Press
- Gidmark, David. 1988. The Birchbark Canoe Makers of Lac Barrière. *Papers of the 19th Algonquin Conference*. Ottawa: Carleton University, pp. 75-80.
- Government of Ontario. 1990a. *Ontario Heritage Act, R.S.O. 1990, CHAPTER O.18*. Electronic document: http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90o18_e.htm. Last accessed January 21, 2025.
- Government of Ontario. 1990b. *Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c. F.31*. Electronic document: <https://www.ontario.ca/laws/statute/90f31>. Last accessed January 21, 2025.



- Government of Ontario. 1990c. *Ontario Environmental Assessment Act, R.S.O. 1990, c. E.18*. Electronic document: <https://www.ontario.ca/laws/statute/90e18> . Last accessed January 22, 2025.
- Government of Ontario. 2002. *Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c. 33*. Electronic document: <https://www.ontario.ca/laws/statute/02f33>. Last accessed January 21, 2025.
- Government of Ontario. 2011. *Standards and Guidelines for Consultant Archaeologists*. Toronto: Ministry of Citizenship and Multiculturalism.
- Government of Ontario. 2025a. *Archaeological Sites Database Files*. Electronic document: <https://www.pastport.mtc.gov.on.ca/APSWeb/pif/projectSiteDataSearch.xhtml>. Last accessed January 21, 2025.
- Government of Ontario. 2025b. *Past Portal Report Database Files*. Electronic document: <https://www.pastport.mtc.gov.on.ca/APSWeb/report/reportSearch.xhtml>. Last accessed January 21, 2025.
- Hessel, Peter. 1987. *The Algonkin Tribe, The Algonkins of the Ottawa Valley: An Historical Outline*. Arnprior: Kichesippi Books.
- Holmes, Joan. 1993. *Aboriginal Use and Occupation of the Ottawa River Watershed. Algonquins of Golden Lake Claim, Volume 2*. Report on file with the Ontario Native Affairs Secretariat, Ottawa.
- Holzman, Jacquelin and Rosalind Tosh. 1999. *Ottawa Then and Now*. Ottawa: Magic Light Publishing.
- Hydro One Networks Inc. 2024. *Class Environmental Assessment for Transmission Facilities*. Electronic document: <https://www.hydroone.com/abouthydroone/CorporateInformation/majorprojects/classenvironmentalassessmentforminortransmissionfacilities/Documents/Class%20EA%20for%20Transmission%20Facilities.pdf>. Last accessed January 14, 2025.
- Jacques Whitford. 2004. *Stages 2 and 3 Archaeological Assessment, Proposed Greenbelt Pathway Trailhead Phase 1, Victory Hill, Ottawa, Ontario*. Report prepared for the National Capital Commission, Ottawa. (PIF # P002-007-2005 and P002-013-2005).
- Laliberté, Marcel. 1999. *The Middle Woodland in the Ottawa Valley*. In Pilon 1999, pp. 69-82.
- Lee, Robert C., 2004. *The Canada Company and the Huron Tract, 1826-1853*. Toronto: Natural Heritage Books.
- Loewen, Brad and Claude Chapdelaine (editors). 2016. *Contact in the 16th Century: Networks among Fishers, Foragers and Farmers*. Mercury Series Archaeology Paper 176. Ottawa: University of Ottawa Press.
- Loring, S. 1980. *Paleo-Indian Hunters and the Champlain Sea: A Presumed Association*. University of Massachusetts's; Amherst.



- McGregor, Stephen. 2004. *Since Time Immemorial "Our Story": the Story of the Kitigan Zibi Anishinàbeg*. Maniwaki: Kitigan Zibi Education Council.
- Mitchell, Barry. 1975. Iroquois or Algonkin Ceramics? *Ontario Archaeology* 25:61-78.
- Mitchell, Barry. 1990. Excavation and Reassessment of the Kant Site, Renfrew County. *Annual Archaeological Report Ontario, New Series* 1: 44-45.
- Mitchell, Barry. 1996. Archaeology of the Bonnechere River: Wilber Lake Operations, Renfrew County, Ontario: 1995 Field Season. *Annual Archaeological Report Ontario, New Series* 7:107-108.
- Montpetit, Christiane. 1996. The Aboriginal People of Algonquin Origin in Val-D'Or: Migrants or City Dwellers. In *The Algonquins*, Daniel Clément (ed.). Mercury Series Canadian Ethnology Service Paper 130. Hull: Canadian Museum of Civilization; pp. 211-234.
- Morris, J.L. 1943. *Indians of Ontario*. 1964 reprint. Toronto: Department of Lands and Forests, Government of Ontario.
- Morrison, James. 2005. Algonquin History in the Ottawa River Watershed. *Background Study for Nomination of the Ottawa River Under the Canadian Heritage River System*, edited by L. Hopkins, pp. 17-32. Ipswich: Quebec-Labrador Foundation.
- Nagy, Thomas. 1974. *Ottawa in Maps: A Brief Cartographical History of Ottawa 1825-1973*. Ottawa: National Map Collection, Public Archives Canada.
- Pendergast, James F. 1999. The Ottawa River Algonquin Bands in a St. Lawrence Iroquoian Context. *Canadian Journal of Archaeology* 23 (1 and 2):63-136.
- Pilon, Jean-Luc (editor). 1999. *La préhistoire de l'Outaouis = Ottawa Valley Prehistory*. Hull: Institut d'histoire et de recherches sur l'Outaouis.
- Ratelle, Maurice. 1996. Location of the Algonquins from 1534 to 1650. In *The Algonquins*, Daniel Clément (editor), Mercury Series, Canadian Ethnology Service Paper 130. Ottawa: Canadian Museum of Civilization, pp. 41-68.
- Robinson, Francis W., IV. 2012. Between the Mountains and the Sea: An Exploration of the Champlain Sea and Paleoindian Land Use in the Champlain Basin. In: Chapdelaine, Claude (ed.). *Late Pleistocene Archaeology and Ecology in the Far Northeast*. Texas A&M University Press, United States: 191-217.
- Saint-Germain, Claire. 1999. The End of the Pre-Contact Period in the Ottawa Valley – A Look at the Zooarchaeology of the Leamy Lake Park Sites. In Pilon 1999, pp. 83-92.
- Schut, L.W. and E.A. Wilson. 1987. *The Soils of the Regional Municipality of Ottawa-Carleton*. Report No. 58 of the Ontario Institute of Pedology. Guelph: Ontario Ministry of Agriculture and Food and Agriculture Canada, Research Branch.



- Sherwood, Reuben. 1820. *March, or Township No.5*. Original survey map. Survey records held at the Ministry of Natural Resources and Forestry, Peterborough, Ontario.
- St-Pierre, Christian Gates. 2009. A Critical Review of the Last Decade of Prehistoric Archaeology in Southern Quebec. In *Painting the Past with a Broad Brush: Papers in Honour of James Valliere Wright*, edited by D. L. Keenlyside and J-L Pilon, pp. 103-141.. Mercury Series, Archaeology Paper 170. Ottawa: Canadian Museum of Civilization.
- Trigger, Bruce. 1985. *Natives and Newcomers: Canada's "Heroic Age" Reconsidered*. Kingston and Montreal: McGill-Queen's University Press.
- Von Gernet, Alexander. 1992. A Possible Matouweskarini Hunting Camp: Excavations at the Highland Lake Site, Renfrew County. *Annual Archaeological Report Ontario*, New Series 2: 120-124.
- Von Gernet, Alexander. 1993. Archaeological Investigations at Highland Lake: 1991 Field Season. *Annual Archaeological Report Ontario*, New Series 3: 74-79.
- Walling, Henry F. 1863. *Map of the County of Carleton, Canada West*. Library and Archives Canada. National Map Collection, H2/420/Carleton/1863.
- Watson, Gordon D. 1991. Dating the Woodland Occupations of Sand Island, Lower Rideau Lakes, Leeds County, Ontario. *Annual Archaeological Report Ontario*, New Series 2: 146-150.
- Watson, Gordon D. 1992. Dating Eastern Ontario Woodland Ceramics. *Annual Archaeological Report Ontario*, New Series 3: 113-117.
- Watson, Gordon D. 1999. The Early Woodland of the Ottawa Valley. In Pilon 1999, pp. 55-68.
- Whiteduck, Kirby. 2002. *Algonquin Traditional Culture*. Pikwakanagan: Council of the Algonquins of Pikwakanagan.
- Wilson, Alan, 1969. The Clergy Reserves of Upper Canada. Ottawa: The Canadian Historical Association Booklets, No 23.
- Wright, J.V. 1995. *A History of the Native People of Canada Volume 1 (10,000 – 1,000 B.C.)*. Museum of Civilization, Mercury Series, Archaeology Paper 152. Gatineau: Canadian Museum of Civilization.



7 Images

7.1 Photographs

Photo 1: Area of archaeological potential (pasture), facing south; note intermittent exposed rock



Photo 2: Area of archaeological potential (pasture), field, facing north; note intermittent exposed rock



Photo 3: Area of archaeological potential (pasture), facing north; note intermittent exposed rock



Photo 4: Area of archaeological potential in foreground (scrubland) and background (pasture); watercourse located along margin between, facing southeast; note intermittent exposed rock



Photo 5: Area of archaeological potential in foreground (scrubland), area of exposed bedrock in background, facing east-northeast; note exposed rock in foreground



Photo 6: Area of archaeological potential (scrubland), facing north



Photo 7: Area of archaeological potential (woodlot), facing southwest



Photo 8: Area of archaeological potential (woodlot) with intermittent exposed bedrock in wooded area of archaeological potential, facing southwest



Photo 9: Area of exposed and shallowly buried bedrock, low to no archaeological potential, facing northeast



Photo 10: Area of exposed and shallowly buried bedrock, low to no archaeological potential, facing southwest



Photo 11: Area of exposed and shallowly buried bedrock in foreground and at right, low to no archaeological potential, area of archaeological potential (pasture) in background, facing northwest



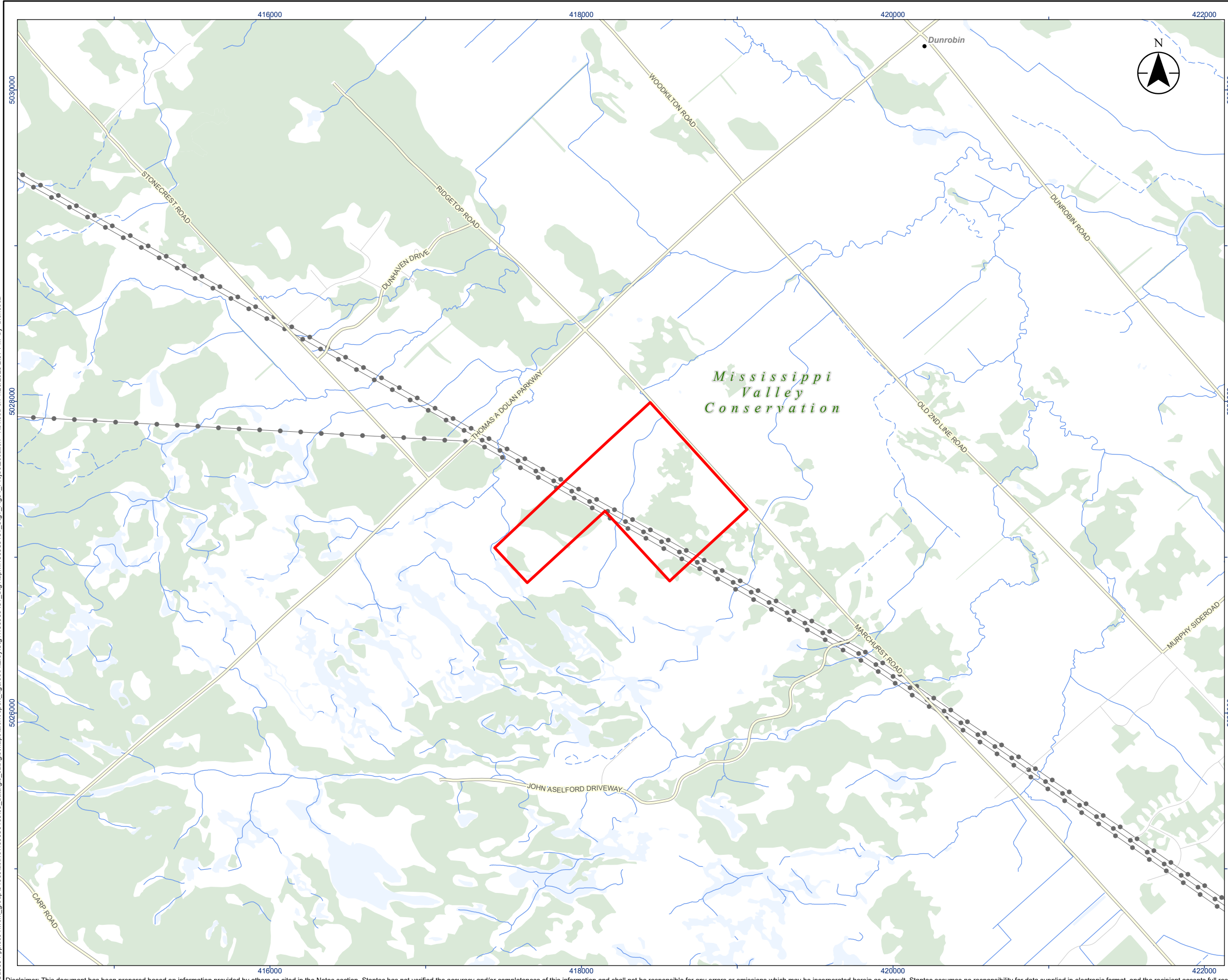
Photo 12: Low and permanently wet area, low to no archaeological potential, facing southwest



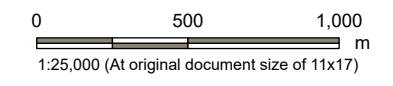
8 Maps

Maps detailing the Stage 1 archaeological assessment are provided on the subsequent pages.





- Legend**
- Study Area
 - Major Road
 - Minor Road
 - Hydro Line
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Waterbody
 - Wooded Area



- Notes**
1. Coordinate System: NAD 1983 UTM Zone 18N
 2. Contains information licensed under the Open Government Licence – Ontario, and the Open Government Licence - Canada, accessed 2025.

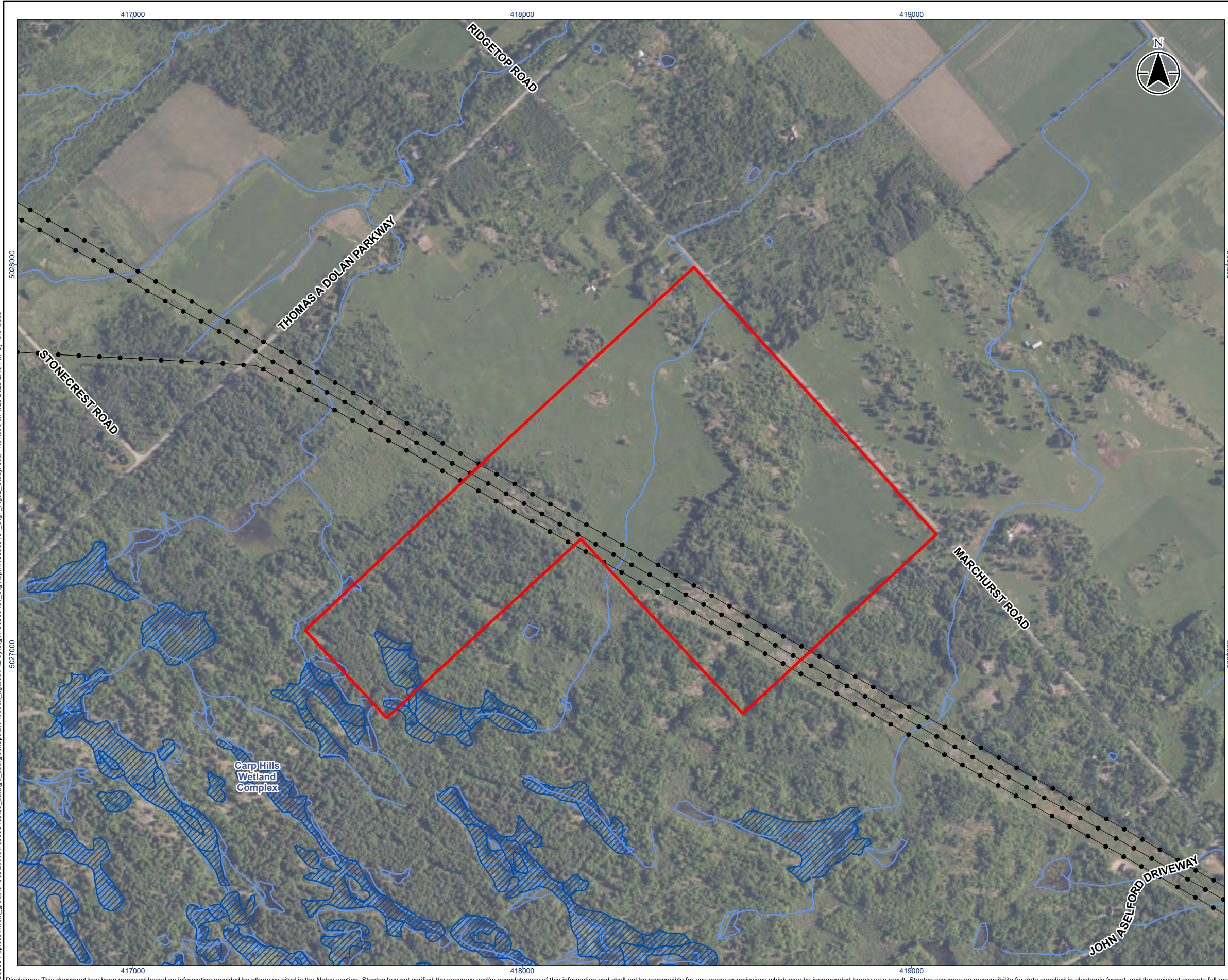


Project Location: City of Ottawa
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 Technical Review by AW on 2025-01-13

Client/Project: EVOLUGEN DEVELOPMENT LIMITED PARTNERSHIP
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT, SOUTH MARCH
 BATTERY ENERGY STORAGE SYSTEM, 2555 MARCHURST ROAD

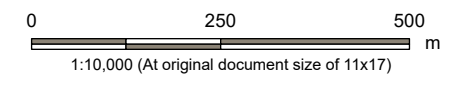
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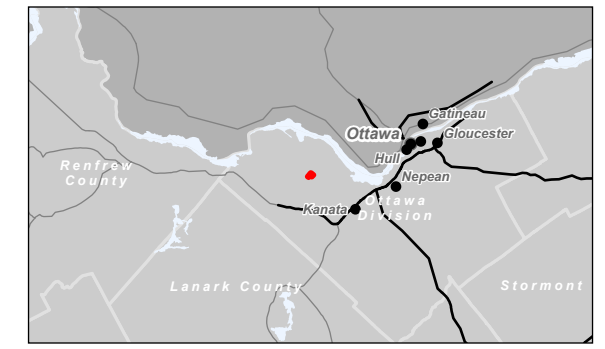


Legend

- Study Area
- Hydro Line
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Wetland, Provincially Significant
- Waterbody



- Notes**
1. Coordinate System: NAD 1983 UTM Zone 18N
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 3. Orthoimagery provided by © City of Ottawa, 2024. Imagery Date, 2022.



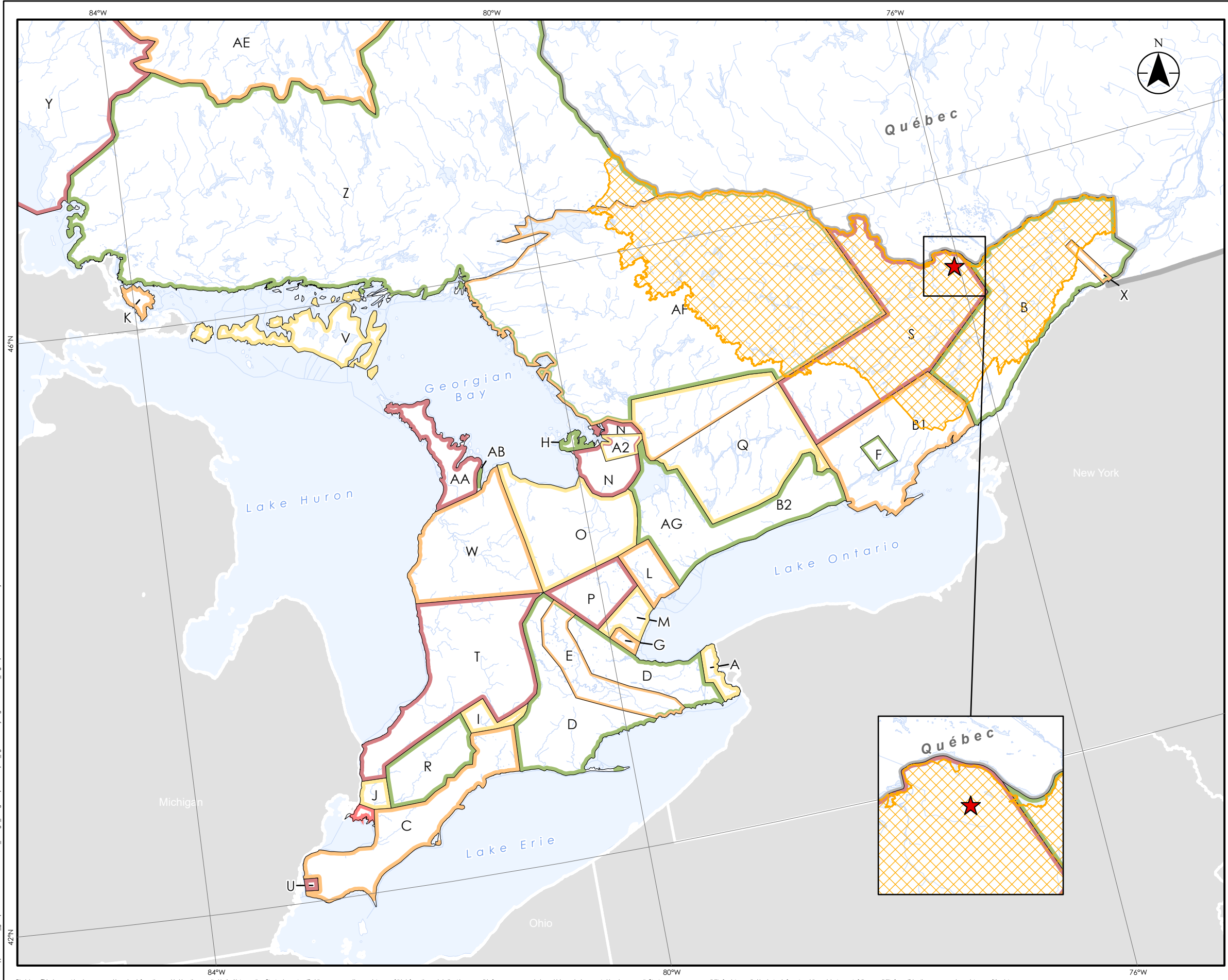
Project Location: City of Ottawa
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 STAGE 1 ARCHAEOLOGICAL ASSESSMENT, SOUTH MARCH
 BATTERY ENERGY STORAGE SYSTEM, 2555 MARCHURST ROAD

Figure No. **2**

Title: **Study Area in Detail**

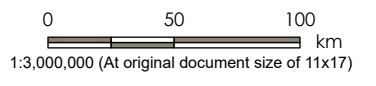
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Legend

- ★ Study Area (Approximate)
- Algonquins of Ontario Settlement Area Boundary
- Waterbody

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



Notes

1. Coordinate System: NAD 1983 Statistics Canada Lambert
2. Contains information licensed under the Open Government Licence – Ontario, and the Open Government Licence - Canada, accessed 2025.
3. Treaty boundaries adapted from Morris 1943 (1964 reprint). For cartographic representation only.

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 STAGE 1 ARCHAEOLOGICAL ASSESSMENT, SOUTH MARCH
 BATTERY ENERGY STORAGE SYSTEM, 2555 MARCHURST ROAD

Figure No.

3

Title
Treaties and Purchases (Adapted from Morris 1943)

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Legend
 Study Area (Approximate)

Figure Not to Scale

Notes
 1. Reference: Walling, H.F. 1863. *Map of the County of Carleton, Canada West*. Prescott: D.P. Putnam.



Project Location: City of Ottawa
 Prepared by BF on 2025-01-20
 Technical Review by AW on 2025-01-13

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 STAGE 1 ARCHAEOLOGICAL ASSESSMENT, SOUTH MARCH
 BATTERY ENERGY STORAGE SYSTEM, 2555 MARCHURST ROAD

Figure No. **5**
 Title: **Portion of the 1863 Map of Carleton County**

Legend
 Study Area (Approximate)

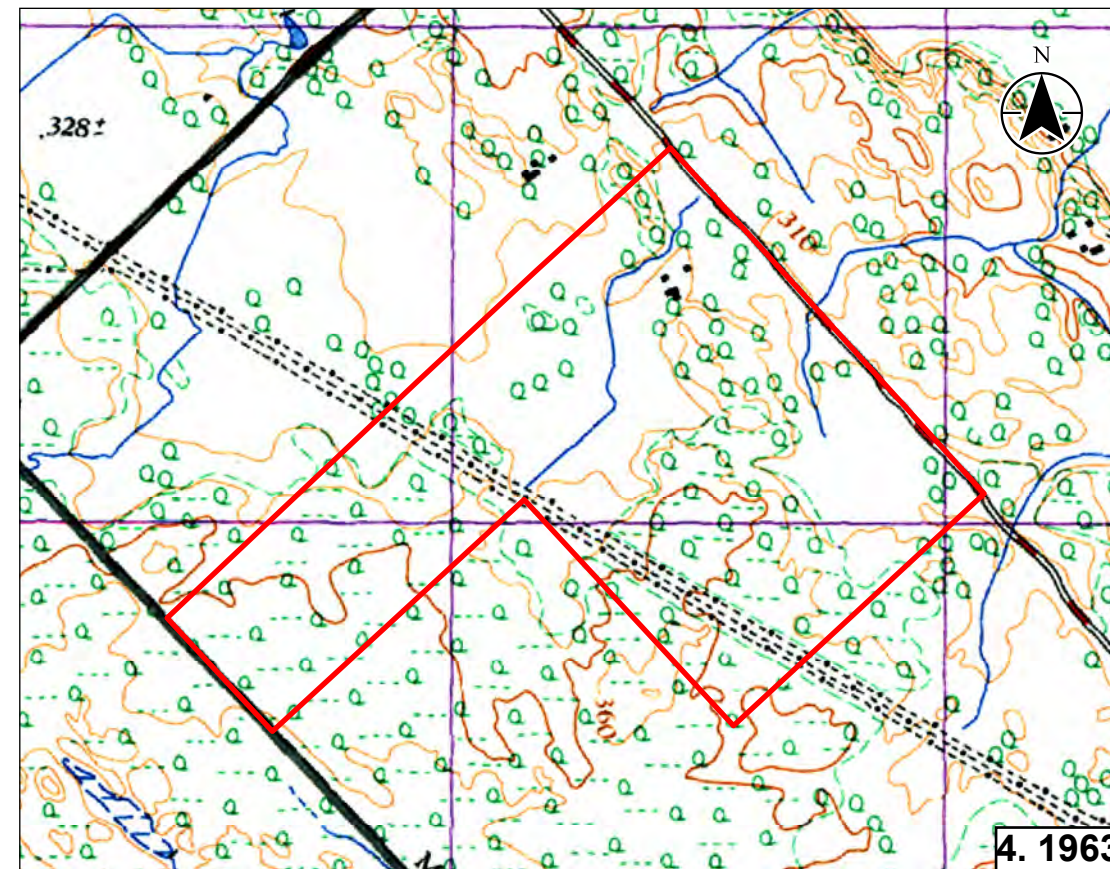
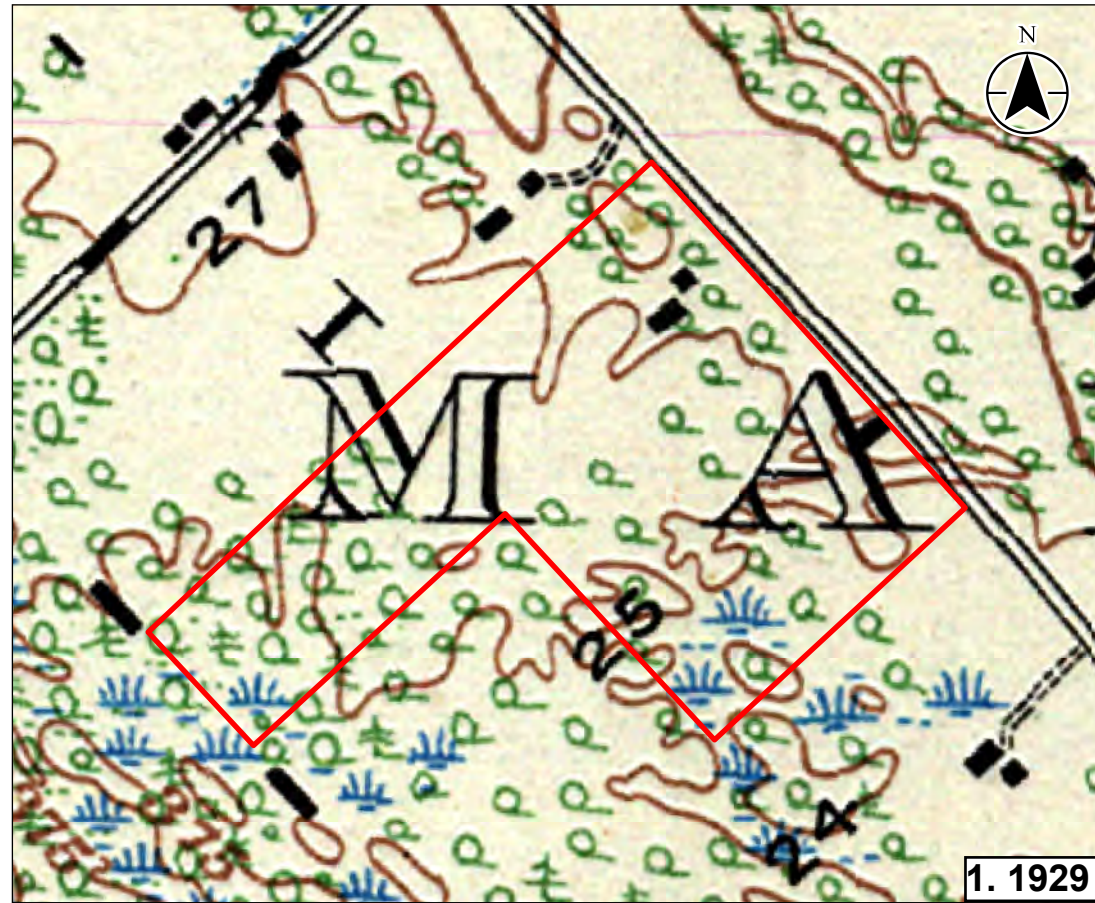
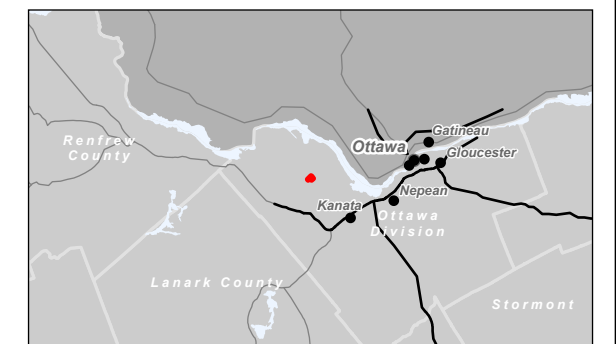


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Notes
 1. Department of National Defence. 1929. Arnprior, Ontario. 1:63,360. Map Sheet 031F08, [ed. 1]. Ottawa: Geographical Section, General Staff, Department of National Defence
 2. Department of National Defence. 1934. Arnprior, Ontario. 1:63,360. Map Sheet 031F08, [ed. 2]. Ottawa: Geographical Section, General Staff, Department of National Defence.
 3. Department of National Defence. 1943. Arnprior, Ontario. 1:63,360. Map Sheet 031F08, [ed. 5]. Ottawa: Geographical Section, General Staff, Department of National Defence.
 4. Department of Energy, Mines and Resources. 1963. Constance Bay, Ontario. 1:25,000. Map Sheet 031F08H, ed. 1. Ottawa: Surveys and Mapping Branch, Department of Energy, Mines and Resources.



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 STAGE 1 ARCHAEOLOGICAL ASSESSMENT, SOUTH MARCH
 BATTERY ENERGY STORAGE SYSTEM, 2555 MARCHURST ROAD

Figure No.
7

Title
Historical Topographic Mapping

Legend

Study Area (Approximate)

Soil Types

- RK3-A1 - Rockland
- D2.C-RK2 - Dalhousie silty-clay
- A1-D3 - Anstruther loam-sand

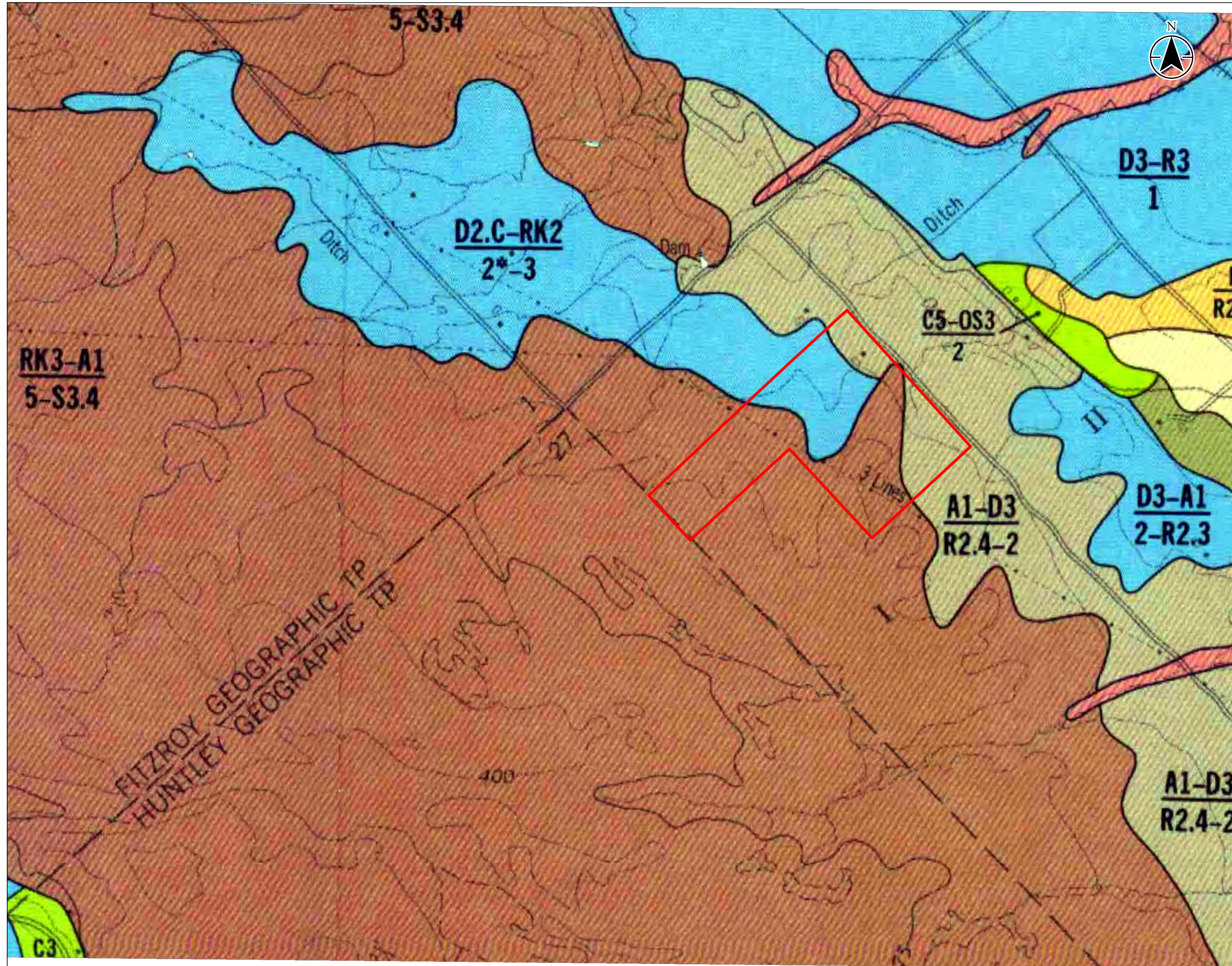


Figure Not to Scale

Notes
 1. Reference: Schut, L.W. and E.A. Wilson. 1987. The Soils of the Regional Municipality of Ottawa-Carleton. Report No. 58 of the Ontario Institute of Pedology, Guelph: Ontario Ministry of Agriculture and Food and Agriculture Canada, Research Branch.



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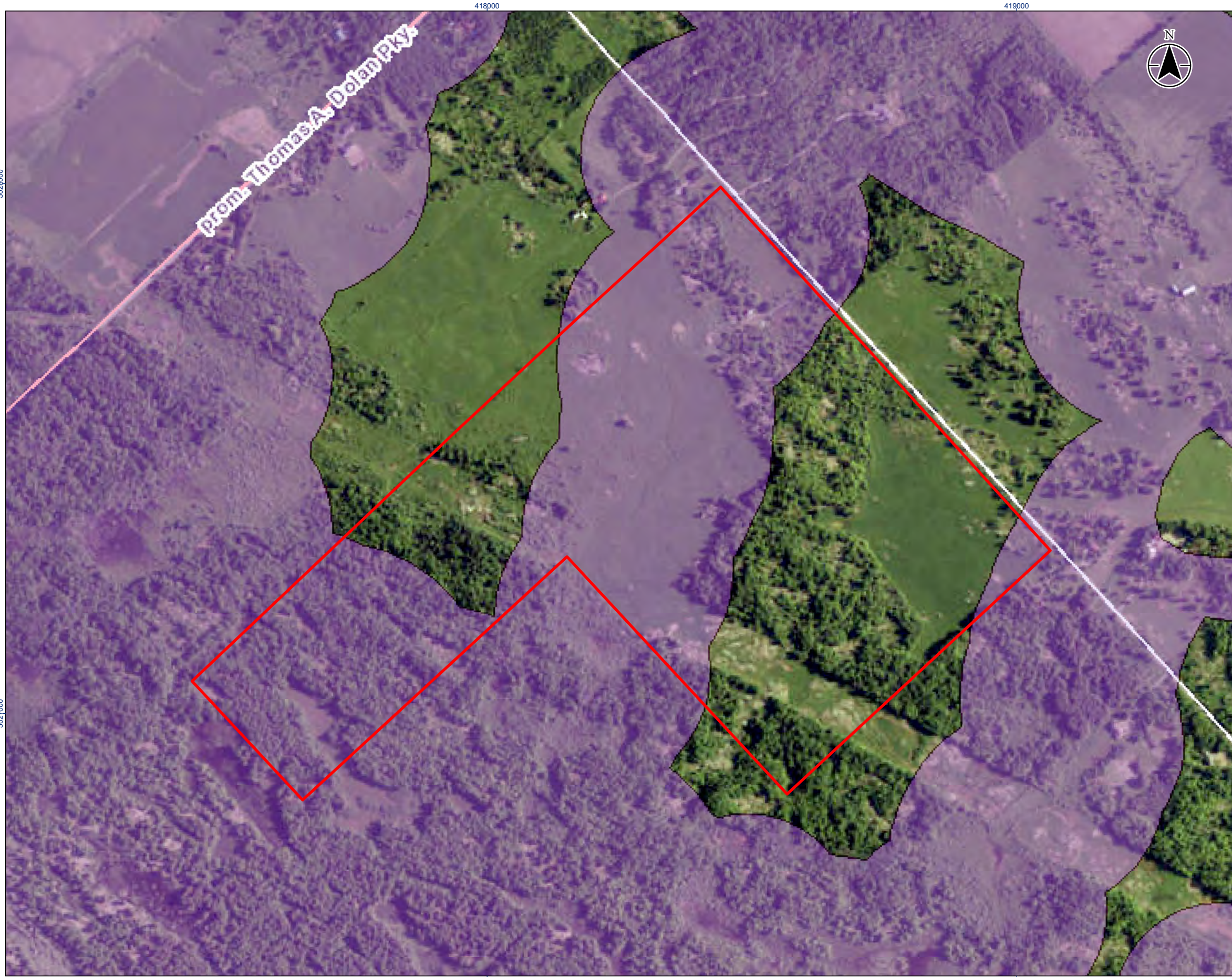
Client/Project: EVOLUGEN DEVELOPMENT LIMITED PARTNERSHIP
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT, FITZROY BATTERY
 ENERGY STORAGE SYSTEM, 2555 MARCHURST ROAD

Figure No.

8

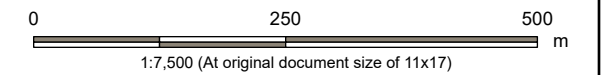
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Legend

- Study Area
- Zone of Archaeological Potential (City of Ottawa)



Notes

1. Coordinate System: NAD 1983 UTM Zone 18N
2. Contains information licensed under the Open Government Licence – Ontario, and the Open Government Licence - Canada, accessed 2025.
3. Archaeological Potential areas from City of Ottawa, 2025. GeoOttawa, Archaeological Potential Layer. Electronic document: <https://maps.ottawa.ca/geoOttawa/> Last accessed January 9, 2025.



Project Location: City of Ottawa
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 Prepared by bfonseca on 2025-01-20
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Client/Project:
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 STAGE 1 ARCHAEOLOGICAL ASSESSMENT, SOUTH MARCH
 BATTERY ENERGY STORAGE SYSTEM, 2555 MARCHURST ROAD

Figure No.

9

Title

City of Ottawa Archaeological Potential Mapping

9 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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