Stage 1, 2, & 3 Archaeological Assessment

PROPOSED AGGREGATE PIT
PART OF LOTS 23, 24 & 25 CONCESSION 1, HORTON TWP (GEO), COUNTY OF RENFREW, ONTARIO

Prepared for:

Phil White

Thomas Cavanaugh Construction Ltd.
9094 Cavanaugh Road,
Ashton, On K0A 1B0
613-227-1488
pwhite@thomascavanaugh.ca

Prepared by:

Cameron Heritage Consulting
5021- 25 Civic Centre Road
Petawawa, ON K8H 0B0
Phone (613) 281-3838
email: Courtney@CameronHeritage.com
and
Kinickinick Heritage Consulting
207 Old Mine Rd.
Cobden, ON K0J 1K0
Phone: 613-791-4391
Email: jkenswayze@gmail.com
C.H.C. Project #2021-021

PIF Number: P371-0038-2021 & P371-0040-2021& P371-0042-2021
REVISED REPORT
September 27, 2022

Executive Summary

Stage 1, 2, and 3 archaeological assessments has been completed under the scope of '*The County of Renfrew Official Plan*' in preparation for a Proposed Aggregate Pit next to the Renfrew Golf Course. The archaeological assessment area is located in part of Lots 23, 24, and 25, Concession 1, Horton Township (Geo), Renfrew County, Ontario, approximately 7 km northwest of the town of Renfrew, Ontario. The entire Archaeological Assessment Area (AAA) is approximately 40 ha.

The Stage 1 archaeological assessment included consultation with local heritage organizations or archives, review of local reference books, land grant and title records, aerial imagery, national topographic maps, physiographic and other maps showing the environmental data, and early maps of the area. In addition, information regarding known archaeological sites, and previous archaeological work in the vicinity was reviewed. Approximately 18.2 ha of the AAA within Lots 24 and 25 have previously been subjected to a Stage 1 & 2 archaeological assessment under PIF# P039-0236-2018, and one archaeological site (BjGe-4) was identified at that time and recommended for Stage 3 archaeological assessment.

For the remaining 22.3 ha, the site inspection was conducted concurrently with the Stage 2 Archaeological Assessment. The entire 22.3 ha is within 300 m of early Euro-Canadian settlement or hydrological features indicating archaeological potential. However, large swathes of the AAA were not testable with conventional means due to deforestation activities on the property, which resulted in large amounts of dead wood being deposited on the ground. Much of the AAA also contained steeply sloped terrain and wet areas which were also not testable with conventional means. Therefore, the Stage 2 Test Pit Survey and Pedestrian Survey were carried out where possible as per the Standards and Guidelines for Consultant Archaeologists (MTC 2011).

The Stage 1 Archaeological Assessment study was completed by Courtney Cameron M.A. (P371), and William Moody M.Sc. (R1215). The Stage 2 Archaeological Assessment was completed by Courtney Cameron, William Moody, Marc Kelly (R1212), Katerina Ladika, Don Webb, and Julia Klimack.

The Stage 2 Archaeological Assessment resulted in the recovery of a total of 11 precontact artifacts from four discrete areas. One area met the requirements to be registered as an archaeological site (BjGe-8). BjGe-8 is a small lithic scatter, and was recommended for Stage 3 archaeological Assessment.

Three post-contact Euro-Canadian foundations were noted in two discrete areas during the archaeological assessment. Shovel tests around Foundations 1 and 2 all produced modern material except for one which contained a fragment of flow blue which dates between mid-19th and early 20th century. Intensification of the shovel test produced a total of 9 pre-1900 Euro-Canadian artifacts from 4 ceramic vessels. Three exploratory units were excavated and the foundations were recorded and photographed. Three additional pre-1900 Euro-Canadian artifacts were recovered from Foundation 1 for a total of 11 pre-1900 Euro-Canadian artifacts spread out over an area of 250 m^2. A number of artifacts that were in use during the late 19th and early and 20th century were retained (clay pipes, cut nails, ceramics) and numbered 113. In addition, there were 510 number of post-1900 objects (e.g., plastics, car parts, bottles).

The stone foundations were built into the landscape and located where Walling's 1863 map shows a single building. Due to the possibility of early settler association and the presence of some pre-1900 artifacts, the foundations were registered as BjGe-9.

Given the lack of early 19th century material, the low number of mid-late 19th century artifacts, (many of the assemblage could be dated to either the 19th or 20th century), and the large portion of the assemblage of 20th century material (because the site was continuously occupied into the mid-late 20th century) BjGe-9 has been deemed to be of low cultural heritage value or interest and no further archaeological work is recommended. The foundations have been thoroughly documented through photographs and drone mapping.

Foundation 3 consists of poured cement and since all the test pits around it produced modern cultural material, it has been determined to be modern in age and without archaeological significance.

The Stage 3 Archaeological Assessments of BjGe-4 and BjGe-8 were completed by William Moody, and Katerina Ladika. Kathleen Forward from the Algonquins of Ontario participated in the Stage 3 archaeological assessments.

Stage 3 excavations of both BjGe-4 and BjGe-8 did not meet the requirements to recommend Stage 4. No further archaeological assessment is recommended for this area.

Table of Contents

Project Personnel

Project Manager
Courtney E.G. Cameron, M.A. (P371)

Report Author
William Moody, M.Sc. (R1215)
Courtney E.G. Cameron
J. Ken Swayze, M.A.

Senior Review
J. Ken Swayze

Project Research
William Moody
Courtney E.G. Cameron

Field Work
Courtney E.G. Cameron (Field Director)
William Moody (Field Director)
Marc Kelly B.A. (R1212)
Katerina Ladika, M.A
Don Webb
Julia Klimack, B.A, B.Ed.
Kathleen Forward, M.A. (AOO Liaison)

Assessment, Analysis and Report Preparation
Courtney E.G. Cameron
William Moody

Mapping
Courtney E.G. Cameron
William Moody
Katerina Ladika
Renée Van Den Berghe
David Beatty – Ottawa Valley Agri Drones Inc.
Chris Wall – True North Drones

1 Project Context

1.1 Objectives

Projects that require an archaeological assessment in the province of Ontario generally start with a Stage 1 Background Study. *The Standards and Guidelines for Consultant Archaeologists* (MTC 2011) outlines the purpose and requirements for conducting a Stage 1 Background Study. This study "documents the property's archaeological and land use history and present condition" (MTC 2011). The information used in this study has been garnered from several sources, which include, but are not limited to:

- A review of the Minister of Tourism Culture & Sport (MTCS) Archaeological sites database for archaeological sites that have been recorded within a 2 km radius of the Archaeological Assessment Area (AAA).
- A review of archaeological assessments that have taken place within 50 m of the AAA.
- A review of historical maps, and maps or datasets containing topographical, geological and other natural feature information.
- A review of the databases of historic places, commemorative plaques or monuments around the AAA.
- A review of any available archaeological management plans, archaeological potential mapping or other archaeological documents of the general area.
- Interviews with previous property owners, members of historical societies, local museums, and/or First Nations.
- A visual inspection of the AAA.

The information gathered will be used to determine the potential for the presence of archaeological resources within the AAA, and to develop recommendations based on the results.

1.2 Development & Regulatory Context

A Stage 1, 2, and 3 archaeological assessment was completed under the scope of the Aggregate Act in preparation for a proposed aggregate extraction pit. The AAA is located on part of Lots 23, 24, and 25, Concession 1, Horton Township (Geo), Renfrew County, and is approximately 7 km northwest of the town of Renfrew and is located next to the Renfrew Golf Course (Figures 1-3). The development area contains previously archaeologically assessed and surveyed areas and a previously identified archaeological site (BjGe-4), as well as areas that had not previously been surveyed for archaeological resources. Phil White is the agent for Thomas Cavanaugh Construction Ltd and he provided permission to conduct the Stage 1, 2, and 3 archaeological assessments.

1.3 Historical Context

1.3.1 Paleoenvironmental History

During the Wisconsinan Glacial Age the entire area of Ontario was glaciated. De-glaciation started in the southern part of the province about 15,000 years ago (Gilbert 1994**;** Munson 2013; Figure 4). As the glaciers receded the land underwent significant changes. The geography of today's Ontario was formed through this process of deglaciation. A large amount of water

previously held as ice was released creating large post-glacial lakes and rivers. The glaciers scoured the landscape and during deglaciation deposited till, moraine, and eskers. The land, after bearing the weight of the glaciers, began to rise. Before the depressed regions of Ontario were able to fully rebound, marine waters flooded these areas forming the Champlain Sea along the St. Lawrence and Ottawa Rivers (Anderson 1987; Figure 5). The retreat was not one of continuous de-glaciation but stages of advancement and retreat. Most of the glacial ice completely retreated between 9,000 and 6,000 years ago from Ontario.

In Eastern Ontario the geomorphology is not only created from till deposits and fresh water released from retreating ice, but by the inundation of sea water along the St. Lawrence and Ottawa Valleys, known as the Champlain Sea. The exact location of the western extent of the Champlain Sea is still being studied, but shells in marine sediments near Pembroke Ontario date to 10,870± 130 BP[1] (GSC-90) (Fullerton 1980; Watson 1999), and skeletons of marine whales have been found near White Lake (Kennedy 1977).

The most significant and dramatic effect of the post-glacial period in Eastern Ontario was the creation of the Champlain Sea and its regression, over several millennia, through a series of river basin lakes. Beginning about 12,700 BP the entire St Lawrence Lowlands was submerged under the Champlain Sea (Gilbert 1994:6). The northwest arm of this sea (Barnett 1988) occupied the upper Ottawa Valley as far as Point Alexander, near Rolphton.

Although the environment of this sea, and its fluctuating littoral, was complex and capable of such biodiversity and biomass as necessary to support a Palaeo-Indian or Early Archaic lifestyle (Watson 1999), there is other evidence which suggests that the Ottawa Valley may have been a dangerous environment, at least at intervals when Agassiz 'slugs' flooded the valley walls. As Teller (1988) points out, this evidence has come to light relatively recently, and earth scientists, and others, have not yet considered the impact of those dynamic years on the environment of the Ottawa/St. Lawrence basin, let alone their effect on human populations.

The Champlain Sea would have been a major hydrological feature of the project area about 10,000 BP, during the Late Palaeo-Indian cultural period. The Geological Survey of Canada (Catto et al. 1982; Lewis and Andersen 1989) postulate an Early Holocene water plane that fell in sequentially lower episodes until modern continental drainage patterns developed in the mid-Holocene about 4,700 BP, and the Ottawa River as it is now was established.

The environment that existed at the time of deglaciation was vastly different than today. At first it was cooler and more tundra-like. The vegetation would have changed over time with the advent of the hypsithermal period, about 9,000 BP, when average temperatures were higher than today. Vegetation would also have changed with distance from the Champlain Sea. Recent studies suggest that a small group of plant species that were associated with the perimeter of the Champlain Sea still exist in relict pockets on the shores of some lakes (Watson 1999). Megafauna, such as mastodon and mammoths, giant beaver, as well as bison, caribou, and musk-ox all existed immediately following deglaciation, but eventually they would have been supplanted by species

[1] BP-Before Present. A time scale used to specify when events occurred before the origin of radiocarbon dating and is set at 1950.

common to the boreal forest environment. The climate was cooler and moister in the mid-Holocene and peat bogs and organic terrain filled many formerly open water bodies.

1.3.2 Pre-Contact Period

The pre-contact period covers the span of time when people first came to North American to when contact was made with Europeans. The most widely accepted theory of North America occupation is the migration of people across Beringia from Siberia to Alaska. The exact timing of this migration is still a topic of debate among archaeologists, however, recent analysis by the University of Montreal of artifacts excavated by Jacques Cinq-Mars at the Bluefish Caves site in the Yukon, has confirmed a date of 24,000 BP (CBC 2017; Cinq-Mars 1979). This site is currently the oldest known in North America.

The peopling of Ontario could only begin once the glaciers withdrew from the landscape. Only then were people able to move in and exploit new resources. In Ontario, the glaciers began receding in the south approximately 15,000 BP (Munson 2013). But in Eastern Ontario, the glaciers did not recede until approximately 11,000 BP (Peers 1985; Storck 1971), and therefore, no archaeological sites are known to date before this. The environment that existed at that time was cooler and more tundra-like which supported megafauna. The land started to rebound after years of subsistence due to the weight of the glaciers, and large amounts of water were released from the glaciers which carved the landscape, and marine waters inundated Eastern Ontario forming the Champlain Sea. This combination of events created a landscape which resembles nothing like today. Archaeologists call the people who lived in this environment between 11,000 and 10,000 BP Palaeo-Indians. Because of the presence of glaciers and the Champlain Sea, the Palaeo-Indian Period occurs later in Eastern Ontario than in Southern Ontario.

The Palaeo-Indian Period (pre 10,000 years BP)

The Palaeo-Indian culture is considered to be fairly homogenous throughout North America, with small regional variations in lithic materials and knapping technologies. While occurring at different times throughout the continent, there are attributes that tie all peoples of this culture period together. Palaeo-Indian peoples are described as nomadic hunter-gatherers, living opportunistically on the landscape. They gathered vegetal foodstuffs and hunted game, including megafauna. The theories generated about Palaeo-Indians are based on few material remains. The lithic tool kit that can be associated with Palaeo-Indians include their unique fluted projectile points made from exotic cherts; uniface and biface knives; uniface end, side, and spoke-shave scrapers; gravers; borers; drills; flint wedges, and a few rough stone hammers or anvils (Ritchie 1983). Palaeo-Indian people would have used a large amount of organic material (*i.e.,* plants and animals), which is very perishable, and it is therefore not surprising that not much remains. Only one Palaeo-Indian site in Ontario has ever produced burned food remains. They included caribou, arctic fox, and either hare or rabbit (Storck and Spiess, 1994). Palaeo-Indian sites are rare and there are just over 100 known Palaeo-Indian sites in Ontario (Ellis 2013).

The environment continued to warm throughout the Palaeo-Indian Period and eventually, the megafauna animals disappeared. Technology and culture continued to evolve and these changes can be observed in the archaeological record. Seven thousand years ago such a change occurred. Archaeologists have characterized sites dating between 10,000 - 3,000 BP, as Archaic. All archaeological sites within the Archaic show similar attributes, but can be further divided into three sub-categories termed the Early, Middle, and Late Archaic Period.

Few indisputable Palaeo-Indian artifacts have been found in the Ottawa Valley. Gordon Watson found an isolated find of a lanceolate point near Big Rideau Lake. Elsewhere in Eastern Ontario, a lanceolate point was recovered at Thompson Island in the Cornwall area (Ritchie 1969:18; Wright 1995:10); and during Cultural Resource Management work, Heritage Quest Inc. reported non-fluted lanceolate points from the Kingston and the Thousand Islands areas (Daechsel 1989; Kennett and Earl 2000).

The Archaic Period (ca 10,000 - 3,000 years BP)

At around 10,000 BP, the archaeological record begins to exhibit more regional diversity. It appears that groups moved seasonally to take advantage of natural resources. The Archaic tool kit is different from the Paleo-Indian, as it contains smaller knapped projectile points that have a notched base instead of a fluted base. Archaic people added grinding technology to their manipulation of lithic materials. Many of these groundstone tools, such as adzes, and gouges indicate woodworking activities. Evidence for fishing, such as net sinkers, plummets, and fishhooks, and occasionally fish scales and bones are also found on Archaic sites. In addition, native copper is used and traded over long distances. Culturally, the presence of cemeteries and non-utilitarian items, such as "gorgets", pipes, bracelets, and "birdstones" appear. Some of the most significant and widely-known Archaic sites in North America are in traditional Algonquin territory on Morrison Island and Allumettes Island in the Ottawa River. Recent archaeological research has proposed that people could have occupied the shorelines of the Champlain Sea and Ancestral Ottawa River in the Ottawa area in the Early Archaic Period between 10,000 and 6,500 years BP (Swayze and McGhee 2011) and suggests that the closest fit, in terms of cultural affiliation, is the *Gulf of Maine Archaic tradition* as defined by Robinson (1992).

By the end of the Archaic the glaciers had completely receded and the Champlain Sea had withdrawn, exposing areas not previously available for exploitation. The environment cooled, peat bogs began to grow and spread, and began to resemble modern conditions. The population of North America grew and archaeological sites indicate that social groups became larger, and more regionally diverse. It is believed that people at this time started to identify themselves regionally as unique Nations with their own language, customs, and traditions.

The Woodland Period (*ca* 3,000 - 350 years BP)

The Woodland Period is defined by significant changes in social organization and technology. Pottery makes an appearance in the early part of the Woodland Period and the bow and arrow at the end. During the late Woodland, in the southern and eastern portion of the province horticulture/agriculture was practiced in addition to the basic lifestyle of the hunting/gathering/fishing groups.

The pottery of the Early Woodland Period (*ca* 3000 -2400 BP) is considered crude, thick, poorly fired and undecorated but it was an effective vessel for transporting and cooking maize. One of the oldest examples of pottery in the Upper Ottawa Valley is a "Vinette 1" pottery vessel recovered by Barry Mitchell in 1963 near Deep River (Mitchell 1963). Cord markings appear inside and outside on the pottery, which probably indicates the clay was formed around a basket or bag before it was fired. Ceremonial mounds began to be constructed in the Great Lakes Region, and over the Woodland Period they became more elaborate. For instance, some mounds took the form of effigy of animals and symbols, and some burial mounds included status artifacts, such as gorgets and birdstones (OAS 2015).

The Middle Woodland Period (*ca* 2400 - 1100 BP) is distinguished from the Early Woodland Period by projectile point type changes, and by the pottery, which becomes more decorative and more regionally variable in the decoration. It is during the Middle Woodland that most of the burial mounds, such as Serpent Mound at Rice Lake, Ontario, were created. According to the archaeological site database, mounds have been reported in Algonquin traditional territory at North Bay and Mattawa. There is some evidence for the introduction of agriculture in the Middle Woodland in the southern part of the province (OAS 2015). Archaeologists have been able to identify four main complexes (*i.e.*, cultures) that existed throughout the province during the Middle Woodland Period. These complexes are The Point Peninsula Complex in Algonquin traditional territory, the Saugeen Complex in western Ontario, the Couture Complex in peninsular Ontario, and the Laurel Complex in the northwest. The Point Peninsula Complex is found in the south-central and southeastern part of the province, including along the Ottawa River (The Mud Lake sites near Pembroke, the Pointe au Baptême site in Chalk River Laboratories, the Rideau Lakes complex and the Leamy Lake sites in Gatineau); The Saugeen Complex is found along the southeast shores of Lake Huron and the Bruce Peninsula, around the London area, and possibly as far east as the Grand River. The Couture Complex is found around Lake St. Clair and the western end of Lake Erie. The Laurel Complex is found in Northern Ontario.

Towards the end of the Middle Woodland Period, archaeologists have identified two additional cultures that appear to have developed in Southern Ontario (Princess Point - between Lake Ontario and Lake Erie and Sandbanks - around Kingston). The methods of decorating and constructing pottery also changes from the coil technique to the paddle and anvil technique. This was also when corn and tobacco appear in Southern Ontario.

The Late Woodland (*ca* 1,100 -350 BP) exhibits the most regional variability throughout Ontario and can be subdivided by region and by chronology. During the Late Woodland period in Northern Ontario, the economy retained the hunter-gatherer lifestyle, but there was variation in pottery design and decoration over time. Pottery vessels from Southern Ontario found in Northern Ontario indicate that there was an extensive trade network throughout the province and a common material culture. Although the people of Northern Ontario continued to build mounds, in which they sometimes buried their dead, this practice disappeared throughout the rest of the province. It is believed that pictographs and petroglyphs were first created during the Late Woodland, although some archaeologists suggest that they probably occurred earlier.

In Southern Ontario the Late Woodland Period is defined primarily by the change in subsistence from a hunter-gatherer society to an agricultural society based on corn, beans and squash. This culture is called the Ontario Iroquois tradition. The increased reliance on horticulture, lead to an increase in population, and the formation of villages that were occupied for 20 - 40 years before being moved (OAS 2015). It is also probable that during this time political groups larger than the single village emerge. Material remains indicates that there is a temporal variation in pottery design and decoration, and in projectile point shape.

In Eastern Ontario it appears that there is an overlap in hunter-gatherer and horticultural subsistence strategies. Those cultures that continued to use hunter-gatherer subsistence strategies are generally believed to be Algonquin speaking populations along the Ottawa Valley (OAS 2015). Archaeologists have identified a distinct culture (along the St. Lawrence River and eastern

shore of Lake Ontario, and lower tributaries of the Ottawa River), which they call the St. Lawrence Iroquois Tradition. It is during this time that semi-permanent villages and fishing camps start to emerge, and the pottery technique improves to create thinner more compact vessels, and there is more reliance on agriculture. During his travels through what is now Renfrew County, Samuel de Champlain visited the village of the Algonquin Chief Nibacis, near Cobden, and noted his fields of corn and gardens. Dave Croft, an avocational archaeologist from Pembroke, observed a St. Lawrence Iroquois type pottery (Lalonde High Collar) *in situ* nearby at Astrolabe Lake in the 1970s, which may be associated with this village, and, since Lalonde High Collar dates to Champlain's day, it suggests a connection between the Algonquin Nibacis and St. Lawrence Iroquois material culture.

1.3.3 Algonquin Oral History

Algonquin oral history is reported in some detail here because once accepted into the public register, archaeological reports will be used for research and educational purposes. It is an opportunity to present a history of Algonquins, who have described themselves as "invisible people".

The traditional oral history of the Anishinabek (those who speak an "Algonquian" language) includes a concept of the postglacial world. The Algonquin creation story refers to an ancient flood that destroyed an earlier world. Only Original Man survived. He found himself, with only a few animals and birds for company, floating in a water-world. With kindness, ingenuity, and selflessness, the animals provided a home called "Turtle Island", where he and his offspring lived after receiving the breath of life from him through the Mide shell. One of those descendants was the hero Nanaboozhoo (or Nanabush, or Wiskedjak) who survived a second flood in a similar fashion. The original glacial and postglacial world of the Anishinabek was truly a water world that, like Turtle Island, grew larger and larger over time.

There are several traditional stories (Morrison 2007:19; Speck 1915) that resonate with the geological post-glacial landscape evolution described below. A story from the Temiskaming Reserve refers to a giant beaver, who used a mountain for a lodge and ponded a huge lake in the upper Dumoine River. Wiskedjak came hunting it and broke the giant beaver dam, which caused a flood to sluice through the Allumette Basin and the Calumet chutes of the Ottawa River. Similarly, the Nipissing and Amikwa people told Nicolas Perrot, in the 1600s, that a giant beaver had entered Lake Nipissing from the French River and built a series of dams as it traveled eastward through the Mattawa River and down the Ottawa River, which later became rapids and portages. Charlevoix, who traveled through Nipissing territory in 1721, reports a similar story and recounts that the beaver was buried in a mountain on the north shore of Lake Nipissing. Joseph Misabi told the surveyor Robert Bell in 1891 that in ancient times Kitchigami (Lake Superior) was the pond of the great beaver Manitou called Amik and his dam was at Bawating (Sault Ste Marie rapids). Wiskedjak and his wife came hunting him and they broke the dam, which caused the giant beaver to hurry along the North Channel of Lake Huron, up the French River forming a series of dams and rapids along the way. The beaver continued down the Mattawa and Ottawa Rivers to the Noddaway (St. Lawrence) River where he died and formed the mountain at Montreal Island.

There is also a traditional story, based on a wampum belt that was held by Elder William Commanda, called the Prophecy of the Seven Fires, which refers to time periods the history of

Anishinabek (Benton-Banai 1988:89-93). This story is relevant because it shows that the Anishinabek know that their ancestors arrived a very long time ago when the world was predominantly water and the landscape was emerging from it. It also provides an opportunity to associate geological and archaeological (cultural) periods to the time of each "fire period" in the story.

The prophecy of the First Fire describes a migration from the Atlantic Region in watercraft upon large inland bodies of water, which sound like the Champlain Sea and the Ancestral Great Lakes. The First Fire and Second Fire may be the times that archaeologists call the "Palaeo-Indian" and "Early Archaic" and "Middle Archaic" periods, which have a radiocarbon dates that span from about 11,500 to 6,000 BP. By the time the Third Fire prophecy occurred, the Anishinaabe were adapted to life on lakes and rivers and their economy focused on littoral environments. The Third Fire spans many thousands of years and includes what archaeologists call the Archaic and Woodland Periods.

In terms of glacial and postglacial lake phases in the traditional territory of the Algonquin-Nipissing, the First, Second, and Third Fires happened, successively, during the Lake Algonquin and Champlain Sea maximum (First Fire) and during the recessional (Third Period) Champlain Sea and Mattawa Early Flood and Mattawa Base Flow periods (as per Lewis and Anderson 1989). Modern water levels began about 5,000 BP also in the Third Fire period, during the Late Archaic.

In the prophecy of the Fourth Fire the Anishinabek two prophets (indicated by a double diamond shape in the center of the wampum belt) warned of the imminent arrival of a Light-Skinned Race, who would either show the face of brotherhood or bring death. The time of the Fourth Fire is called the proto-historic period and occurred during Late Woodland times. The prophecy of the Fifth Fire soon followed and warned of suffering and false promises. The Fifth Fire occurred during the "Historical Period" from the 17th to 19th centuries when missionaries, warfare, expropriation, and colonialism had great effect on traditional Anishinabek culture. The prophecy of the Sixth Fire, or Colonial Period, occurred in the 20th century, when cultural assimilation caused a new sickness to afflict the Anishinabek and it foretold that the sacred bundles and scrolls of the Midewiwin Way would be first hidden from danger, then revealed again to inspire the emergence of New People and inspire a reborn Anishinabek. We are now, perhaps, in the time of the Seventh Fire when all the people have a choice to make between respect for life on Turtle Island or see its destruction.

This integration of geological and archaeological time scales with the "Seven Fires" of the prophecy belt is the consultant's own interpretation, not necessarily that of others. The consultant thinks that the association between the First, Third, Fourth and subsequent fires with the Palaeo-Indian/Early Archaic, Archaic & Woodland, Proto-Historic, Historic and Modern, is straight-forward enough—it is the Second Fire which is most difficult to integrate. It was a time of social upheaval and it occurred a long time ago at the end of the First Fire journey and the beginning of the long, long, golden years of the Third Fire. Since it was a time of social upheaval, it has arbitrarily been associated with the Marquette-Ottawa Low Stand simply because it was a time of great environmental stress and catastrophe.

1.3.4 Algonquin History

The objective of this historical outline is to present Algonquin history from the proto-historic to the attempted establishment of a reserve in the early 20th century with reference to what can, or could, be corroborated by the archaeological record and to provide a discussion of nature of the archaeological deposits of each period. Such information, ultimately, will lead to an improved ability to predict where archaeological sites will most likely be found.

To summarize briefly, this Algonquin history identifies factors that must have affected technological and settlement pattern change that, theoretically, should be reflected in the archaeological record. These include: 1) technological change from "quartz time" to the "iron age" and resultant change in cold season settlement patterns from, fish and stored nuts and wild rice, to fur harvesting and reliance on deer and beaver; 2) Beginning in the mid-19th century there was a homesteading movement in the upper Madawaska Valley, which involved technological change and a more sedentary settlement pattern. While the first changes will be hard to test, because of the difficulty of finding and identifying the deposits, the archaeological remains and features of the Algonquin settlers should be "relatively easy" to identify.

1.3.4.1 Proto-Historic Period

European whalers and fishermen began to interact on a regular basis with Anishinabek, Haudenosaunee, (Iroquoian-speaking "People of the Long House") and Inuit people in the St. Lawrence estuary as early as the late 1500s (Bailey 1969). They introduced iron knives, hatchets, and metal cooking vessels that must have had a great effect on Anishinabek lifestyle and economy: for tasks that could be completed in hours with hatchets and crooked knives had previously, taken days of "quartz time". On the other hand, numerous contagious diseases were introduced for the first time in the proto-historic period and tribal warfare became endemic, as successive people competed for advantage in the fur trade. Finally, as the luxuries and trophies of trade became necessities, the traditional economy of the Anishinabek came to be based on the fur trade.

Champlain and various missionaries provide most of the written record of the early contact period. The French then believed that the Algonquin identified their own subgroups according to the river basin they occupied: thus, the Kitchisipirini, Keinouche, Ottagowtowuemin, and Onontchataronon lived, respectively, at: Allumette/Morrisons Island, Muskrat River, Upper Allumette/Holden basin, and South Nation; while the Matouweskarini occupied the Madawaska River valley (Pendergast 1999). Kirby Whiteduck (1995) has reviewed the historical record of this period, from the Algonquin point of view, and he points out that historical interpretation should take into account the numerous factors that biased the authors of these histories.

The archaeological record of this transitional period is poorly known generally because it was a fleeting moment in time. A hallmark of sites of this period in the Ottawa Valley is so-called St. Lawrence Iroquois pottery, characterized by high collars with castellations and corncob motifs, which was found at the Highland Lake site (von Gernet 1991) in Griffith Township and near the Eardley escarpment in Low P. Q. In the 1970s, Dave Croft observed this distinctive pottery at Astrolabe Lake, near Cobden, however he was not able to sample the site (Swayze 2000). It is worth noting that these sites, and others of the period, are strategically situated off the main waterways in locations that provide a view of any approach and offer a choice of "back door"

exits. In 1613, Champlain visited the Upper Ottawa Valley and met Chief Nibacis who showed him his gardens and fields and took him to Chief Tessouat's village, on Lower Allumette Lake, and his fort on Morrison Island (Biggar 1925). The location of these village sites has never been identified but, if they still exist, high-collared pottery should be in evidence. The archives of the Canadian Museum of Civilization contain a report that describes Algonquin graves from this period that were found the shore of Lower Allumette Lake. The dead were sprinkled with red ochre and buried in birchbark coffins, with trade goods such as swords, rings, and crucifixes, but also with native-made pottery (Swayze 2000).

From an archaeological perspective, the proto-historic period is marked by technological changes that saw stone and native pottery replaced by iron, brass, and ceramics. The new technology must have provided the Algonquin of the day with more time on their hands. Although some of this time must have been spent acquiring a surplus of furs, other time may have been spent on regalia and ceremonial elaboration. There also must have been a shift in settlement patterns in this period: in the pre-contact and early proto-historic, sites must have been located so as to facilitate access to food resources; while, in the early historic period, access to fur-bearing animals would have been of increasing importance. In the Stone Age, First Nations only trapped enough furbearers to clothe their own family for the winter; but in the Iron Age they labored all winter to accumulate bales of furs in order to purchase food and clothing. In order to take advantage of seasonal resource availability Anishinabek groups moved frequently over the course of the year and, although population aggregation was possible at some locations, usually in the summer, in the winter people scattered widely in order to trap and hunt. The winter season settlement pattern of this period probably differed from pre-contact times. Whereas in the past a fishery near stores of rice or nuts may have been important, in the proto-historic a focus on ungulates, bear, and beaver may have been the case. Moose hunting in particular may have become less risky as access to firearms became common. However, since there are so few sites recorded from the proto-historic period, these predictions cannot be tested.

1.3.4.2 Iroquoian/Beaver Wars

Although the ancestors of the Anishinabek have probably been on the Algonquin Dome since early postglacial period (Swayze 2008; Swayze and McGhee, 2011), the ancestors of the Haudenosaunee have interacted with them and shared some of the land base for thousands of years (Porter 2008; Sioui 1999).

In the early French regime, the hostility between Anishinabek and Haudenosaunee, which had originated in the proto-historic, escalated from violent raids and skirmishes into full-scale warfare, from 1640 to 1650, that resulted in the destruction of "Huronia". Although they were driven from "Huronia", the "Hurons,", or more properly the Wendat, (like the "St. Lawrence Iroquois" before them) were not extirpated (like the passenger pigeon), since large numbers of them were captured and adopted by the Seneca and Mohawk Nation. Others went to Quebec and became established as the Huron of Wendake, while others went to Montreal and lived with the Mohawk. Still others settled in the mid-west and became known as the Wyandot.

The period of the Beaver Wars, from 1650 to 1675, is often referred to as a 'period of dispersal' because Anishinabek withdrew from shorelines of the major lakes and rivers and some families moved temporarily to the St. Lawrence settlements, or farther afield to Timiskaming or Lake Nipigon. With regards to the so-called "period of dispersal", the reader should remember that

European observers (and potential historians) were, obviously, few in number at that time—and they did not frequently travel the back-country—and reports that the territory was completely abandoned were probably exaggerated. It seems unlikely that hunter-gatherers, who knew every tributary stream of their territory, would completely abandon the Lake Nipissing basin and the Ottawa Valley in order to avoid Iroquois war parties (Holmes 1993: ii). Nevertheless, until 1701, when the French in Montreal made peace with the Iroquois, the shores of the main travel routes must have been thinly occupied and avoided. Even though the Iroquois hunted widely over the Ontario peninsula and some established villages on the north shore of Lake Ontario, it should be noted that the Anishinabek defended their territory and took offensive action.

Unfortunately, there are no known sites from this period in the upper Ottawa valley or elsewhere in traditional Algonquin and Nipissing territory. Ideal locations for sites of this period would be the Algonquin Dome where rivers such as the Madawaska, Bonnechere, Petawawa, Gull, and Muskoka have their source.

1.3.4.3 The French Regime 1701 – 1759

The histories of Champlain and the Jesuit Relations speak of the "Nipissing" as a people apart from the "Algonquins" as if the homeland of the former was the shores of Lake Nipissing. However, by the 18th century the historical records invariably state that the two groups considered the entire drainage from Lake Nipissing to the St. Lawrence River to be their ancestral homeland.

In the Ottawa River watershed in the historical period, the Nipissing and Algonquin both lived together and acted together in economic and political matters. They wrote joint petitions to successive Colonial Government officials that described their territory as a single undivided land—although they always signed the documents under the heading of "Algonquin" or "Nipissing". From the *etic* point of view of the outsider—like missionaries, British colonial officers, or this consultant—this close association between the Algonquin and the Nipissing, makes it seem that they were essentially the same people. Their language, material culture, and customs were apparently the same and they intermarried and resided together. The *emic*, or internalist, view was not revealed partly because Europeans largely wrote (or translated, or edited) the historical record and, partly, because the Nipissing and Algonquin of the time did not see that an explanation of the difference between the two terms was called for. Since the Algonquin and Nipissing kinship system must have been similar, perhaps this dichotomy of self-identity acted like a moiety, or division, of the community irrespective of clan structure.

"Our old Chiefs and principal warriors…[decided that]..the whole of our hunting grounds…should be divided into two parts as equally as possible according to the different situations abounding in furs, and part to be enjoyed by the Algonquin tribe, and the other for the benefit of the Nipissings; the part or proportion allotted to each…band or clan might have a certain extent…in proportion to the number of the band…By this arrangement, the various chiefs or heads of bands had an opportunity of nursing their beavers and otters…by dividing the portion belonging to the band into two equal parts, which were still very extensive, and hunting and changing alternately every two or three years from one part to the other…" (Holmes 1993: Document 315 Note: although the intent is clear, this paragraph of the document is fragmentary).

In addition, the Europeans of the historical period were ignorant of the traditional clan system that both groups used and they superimposed their own system.

In the French Regime period, the Algonquin and Nipissing began to visit the Sulpician mission at Lake of Two Mountains for up to two months each year, usually in the summer. Although some spent the greater part of the year at the mission, most people continued to make seasonal rounds in their own territory. The church records of this period may underestimate the total population of Algonquin and Nipissing by assuming that all had become Christian. Although the fur trade economy required considerable labour during the winter months, by the 17th and 18th centuries the Algonquin and Nipissing had become successful merchants of a scarce luxury product and they generally received good prices for their furs (Ray and Freeman 1978).

Except for scattered trading posts, the Algonquin and Nipissing were the sole occupants of the Ottawa Valley in this period and, of course, they chose to live, as much as possible, at the most attractive locations in their territory. These included: the islands in the Ottawa River, the mouths of principal tributaries, the junctions of principal tributary streams, the foot of rapids and falls, at the ends of portage routes, and around wild rice lakes and fisheries. Since these attractive locations were generally the first to be later chosen by settlers and industrialists, the archaeological deposits formed in French Regime period have been greatly impacted and many have been lost to posterity. Nevertheless, some deposits from this period must remain along the shores of the major waterways; however, as noted above, the archaeological record of the Ottawa valley is sparse because of the relative lack of field survey as compared to southern Ontario.

There are at least two known north-south travel routes used to traverse what is now Ross Township – The Ottawa River and the Champlain Trail Lakes Portage route. The Ottawa River route involved numerous "Carrys" around the rapids on the Ottawa River between Portage Du Fort and Pembroke that could be dangerous in terms of enemy ambush (Swayze 2000). The Champlain Trail Lakes Portage Route was considered the safer route from ambushes, but was more difficult. The Champlain Trail Lakes Portage route begins where the river currents outlet into Chats Lake at Chenaux, at the base of "Story Land Hill", and it involves such an arduous climb, encumbered with canoe, paddles, and baggage, that no professional Voyageurs would normally have considered taking it. Indeed, Champlain notes he left baggage behind—including his food! Champlain followed this route through a chain of lakes when he travelled up the Ottawa in 1613 through Algonquin Territory. He took this route (instead of the passage through 18 "carrys") at the advice of a local Algonquin, who told Champlain he could take the Ottawa River route (as his servant, Nicolas Vigneau recommended) "if you are tired of living" (Swayze 2000).

An astrolabe found by accident on the Champlain Lakes Trail route at Astrolabe Lake in the 19th century has been attributed to Champlain ever since (Biggar 1925; Swayze 2000). Indeed, given that there are no extant historical records to indicate this route was ever used again during the French Regime, who else could have lost it? During his celebrated meeting on June 6, 1613 near Cobden with Chief Nibacis, Champlain was shown the gardens and fields around the Algonquin village, and his description indicates that Nibacis' village economy, unlike other early descriptions of Algonquin settlement and subsistence, combined intensive agriculture with traditional hunting, gathering, and fishing. This hybrid economy was also characteristic of the St. Lawrence Iroquois, who had abandoned their lower Ottawa Valley territory only a couple of generations before Champlain's visit. Taken with David Croft's discovery of a type of pot-sherd

at Astrolabe Lake (Pers. Comm., see Swayze 2000), that was in the St. Lawrence Iroquois style, and an historical account (see Pendergast 1999), where an Algonquin on Mont Royal claimed his ancestors had lived in a village below that is now called the Dawson archaeological site, a deposit usually attributed to the St. Lawrence Iroquois village, which Cartier observed in 1535.

On the same day (June 6, 1613), that Champlain toured Nibachis' village, he was taken to visit Chief Tessouat's village, on Lower Allumette Lake; and fort on Morrison Island (Biggar 1925). Unfortunately, no trace of Nibacis' village has yet been found in the Muskrat Lake vicinity, although Wintemberg's notes contain several references to the discovery of chert arrowheads and other lithic artifacts, from various places around the east end of the lake (Wintemberg n.d). Similarly, Tessouat's village has not been recognized archaeologically. Although Douglas Leechman of the Archaeological Survey of Canada, reported a disturbed Algonquin cemetery from the "broken shore" of Lower Allumette Lake that is probably associated with the village (see so-called Bellows Bay Burials in Swayze 2000). Nor has Tessouat's fort on Morrison Island ever been located, although earlier Archaic activity has been recorded on Morrison Island (Clermont and Chapdelaine 1998; Kennedy 1967). Although the toponym "Champlain Trail of Lakes" commemorates Champlain's 1613 voyage through the area, the portage corridor would have been known into pre-contact times (Kennedy 1970:71). The Historical Atlas of Renfrew County shows the location of the portage road (Belden 1881) and in the 19th century the portion of the Champlain Trail Lakes portage system to Cobden, which bypassed part of the Ottawa River, was upgraded and used by ox-cart (see Swayze 2000).

1.3.4.4 Pre-Confederation British Colonial Period 1760 – 1867

After the fall of New France, in 1759, the Algonquin and Nipissing came under the administration of the colonial government's Indian Affairs Department, represented initially by Sir William Johnson. Although the Proclamation of 1763 recognized the territorial rights of First Nations, including those of the Nipissing and Algonquin, by 1772 they found it necessary to deliver a formal claim to the land from Long Sault on St. Lawrence to Lake Nipissing. They also protested against the liquor trade in their hunting grounds. Twelve Nipissing and seven Algonquin signed the 1772 petition. In the next two generations, up to 1841, they resubmitted the same petition nine more times.

The Algonquin and Nipissing fought for the British during the American Revolution and the War of 1812. In 1841 Chief *Ka-on-di-no-kitch* reminded Superintendent Hughes of this:

"During the last two wars with the United States, our ancestors as well as ourselves, were called upon by our fathers the then Governors and told that we had lands to defend, as well as our white brethren. We obeyed; we knew it was our duty to defend our hunting grounds. We gave the war whoop, we fought, and bled, in defending the rights of our great father, and our soil, and we would assure our father, the Governor- General, that we are ready to do so again whenever called upon." (Holmes 1993: Document 249).

The 1840s was a time of encroachment and alienation throughout peninsular Ontario as well as the Lake Huron basin and the Ottawa Valley. In petition after petition The Nipissing and the Algonquin pointed out that they were loyal allies and war veterans and they stressed that, when the invasion of loggers and settlers began, they had been patient and helpful towards the newcomers and had not, generally, resorted to violent resistance.

In 1840 the Algonquin and Nipissing addressed a comprehensive petition to Lord Sydenham, Governor of Lower Canada, including statements that clearly indicate that their economy and land use patterns were changing:

"That day is now arrived—which we never expected to see—your red Children the Nipissing and Algonquin, have never been in the habit of tilling the ground, from time immemorial our chief and only dependence for a livelihood sprang from the chase from which we procured abundance. Not so now—our hunting grounds are entirely ruined—our beaver & other fur have been destroyed by the constant fires made by the lumber men in our majestic forests; our deer have disappeared—our timber to the amount of hundreds of thousands of pounds, is annually taken from those very hunting grounds, which by our Great Father's orders were to be removed for us and us only…As we…can no longer depend on the chase for support, we must set ourselves to the hoe—or else starve—we demand your assistance" (Holmes 1993: Document 241).

Similarly, Chief *Ka-on-di-no-kitch* (Nipissing) in council at Lake of Two Mountains with Superintendent Hughes:

"…we have already told you that our hunting grounds, which are vast and extensive and once abounded in the richest furs and swarmed with deer of every description, are now ruined. we own…that we are partly the cause of these present misfortunes: we were too good and generous: we permitted strangers to come and settle on our grounds and to cultivate the land; wood merchants to destroy our valuable timber, who have done us much injury, as by burning our rich forests, they have annihilated our beaver and our peltries and driven away our deer…but we had good hearts and took pity on our white brethren; we know that they must live as well as ourselves… we never thought of futurity and we were silent at these encroachments. But now we are pitiful ourselves and are obliged to crave assistance…" [in order to settle on farmsteads] (Holmes 1993: Document 249).

Despite their reliance on country food until this period, there is historical evidence that the Algonquin had been gardening and raising maize since at least the 17th century, if not since the Middle Woodland period. Champlain reported in 1613 Chief Nibacis' village had gardens and cornfields and Chief Tessouat's village garden included peas—of which the knowledge and seed stock had only been recently acquired. According to Superintendent Hughes, the Algonquin and Nipissing of Lake of Two Mountains used hoes and spades to raise "Indian corn, pease [sic], beans, potatoes, pumpkins, oats, and hay" (Holmes 1993: Document 297). Given that they only spent the summer months at the mission, and that they could not attain title to these lands or sell the produce on the open market, these gardening efforts were on a small scale.

In a petition dated 1849 some Algonquin and Nipissing described their decision to acquire land and farm as follows:

"When you see us traveling from one end of the rivers and lakes to the other in our frail canoes, you are surprised at our way of life and you find us very poor. We confess that this is certainly true. We are poverty stricken, because day by day we are being stripped of our possessions. Our lands are rapidly passing into the hands of the Whites. You have long advised us to cultivate the land; long too have we failed to listen to such salutary advice. Is this surprising? We were rich in bygone days. We lacked for nothing. The forests were inhabited by animals of every species and we sold the carcasses to eager merchants for a very good price. But now it is no longer thus…we

are reduced to dire poverty. We want to imitate the Whites. This is why we are asking for land to farm…we want to farm near our hunting grounds… (Holmes 1993: Document 330).

In 1862, the Nipissing and Algonquin again petitioned the Governor General of Canada, Viscount Monk, and claimed that the Ottawa Valley had been their home since time immemorial. They protested the incursion of white trappers who stripped the fur-bearing animals from their territory, while they always left enough animals to breed.

"We have no desire to interfere with the Lumbermen, whose legitimate object is the manufacture of timber, nor with the settler whose object is the cultivation of the soil, but what we consider a real grievance is the custom pursued by white trappers who infest our hunting grounds for the sole purpose of trapping. The Indian, whose hunting ground is secured to him according to ancient usages amongst his own people under the regulation of his Chief, pays every attention to the increase of (particularly the muskrat and beaver) which are purely local, whilst the white trappers invariably exterminate them." (Holmes, 1993: Document 398).

Eight Chiefs and over 250 individual Algonquin and Nipissing, whose hunting grounds were in the Madawaska Valley, petitioned Monk in 1863 for a specific tract of land on the upper South Madawaska adjacent Canisbay Township:

"That in times past [our] hunting grounds were in the country watered by the Madawaska and adjoining streams about 150 miles from…Two Mountains, but owing to that country having become during the last few years thickly settled it has rendered useless and destroyed [our] hunting grounds and has compelled [us] to travel still further westward until at present [our] hunting grounds are from 300 to 350 miles from (Two Mountains]".

That [we] are desirous of having a tract of land near our present hunting grounds granted or reserved for them for the purpose of building up an Indian Village capable of supporting four hundred families, a desire we sincerely trust will be gratified, ...[since] the whole country was once [ours] and the land of the departed braves, [our] fathers."

"That such a tract of land, as would suit the purposes required, [we] have found in the Township of Lawrence, next adjoining the Township of Eyre, [which] would meet all the requirements [since it] is near their hunting grounds, is suitable for the village, and would be the greatest blessing that could be bestowed on [us]… (Holmes 1993: Document 400]"

The local Member of Parliament (Robert Bell) found supporters for the Lawrence Reserve and the Department of Indian Affairs recommended it to the Commissioner of Crown Lands, who heeded the appeal. In 1866 he notified the Indian Agent at Arnprior that he had:

"…reserved the south east quarter of the Township of Lawrence from sale during the pleasure of the Crown for the use of the Algonquin Indians for a settlement. The Indians are not to have any right to the merchantable timber on the land nor are they to interrupt those parties who hold timber licenses for it from cutting and carrying off the timber" (Holmes 1993: Document 407).

William Spragge, Deputy Superintendent of Indian Affairs, even went so far as to recommend that, "given the rugged character of the terrain", the northeast quarter of the Lawrence Township should be added to double the size of the reserve (Holmes 1993: Document 408).

1.3.4.5 Post-Confederation Federal-Provincial Colonial Period

Two years later, however, after Confederation, when Upper Canada became the Province of Ontario, Pon Sogmogneche, High Chief of the Algonquin and Nipissing, was still waiting for official recognition of the reserve:

"Some time since I was given to understand that there was a tract of land granted to me for use of my tribe of Indians in the Township of Lawrence on the Madawaska River. I wish to know if the boundary lines will be run and the lots laid out so that each one of my tribe settling will know his portion and I wish for a document from you as soon as practible (sic) to shew that I have authority to settle without molestation on the said land and that it is laid apart for use of my Indians" (Holmes 1993: Document 412).

In 1878, when Niven surveyed the Township of Nightingale, which is on the east side of Lawrence Township and also on the Madawaska, he noted two "Indian" clearings (Holmes 1993: Document 445).

In 1886, Chief Nogon-nak-suk-way forwarded another request for land in Lawrence Township to L. Vankoughnet, the Deputy Superintendent General of Indian Affairs:

"I am requested by the Chief *Non-non-she-gushig* and his band to make enquiries on their behalf. The said Chief and his band…now desire, unitedly, to locate on some good land that they might see fit for farming purposes in the Township of Lawrence, or in some other. And such lands if found to be set apart for them as an Indian reserve." (Holmes 1993: Document 477)

Vankoughnet replied to this request saying: "I beg in reply to state that the Algonquin band of Indians have a Reserve on the River Desert in the Township of Maniwaki on the upper Ottawa where there is plenty of land to accommodate them." (Holmes 1993: Document 478).

Two years later, in 1888, an Algonquin or Nipissing, who said he was the Chief of 30 families or 150 people (his return address was a post office near Barry's Bay), wrote to Indian Affairs on behalf of the Lawrence Township band:

"It seems the South East quarter of the Township of Lawrence has been reserved for the Algonquin Indians, their Chief *Non-no-che-ke-shick* has requested me to write to [Indian Affairs] to have that reserve cancelled in exchange for some other nearer a market." (Holmes 1993: Document 480).

Indian Affairs replied that in order for this exchange to take place, Non-no-che-ke-shick and his band, "for whom part of Lawrence was set aside", must pass a resolution stating their intention and specify the land desired in exchange so that tract could be assessed for suitability and if the result was favorable, then "the Government of Ontario should be applied to for an exchange of the tract in Lawrence for land selected by the Indians." (Holmes 1993: Document 481).

No further correspondence on the Madawaska reserve issue was found until 1894; when Chief Peter Sharbot revived the Lawrence Reserve request with Indian Affairs Canada, stating that his band had been in occupation since 1849 (Document 500). In 1896, Chief Sharbot provided a list of families, totaling 46 people (Document 514). The Crown forwarded the matter to Ontario Department of Crown Lands with a request that the claim be investigated (Documents 503 and 512). Although Superintendent Thomson of Algonquin Park did visit Lawrence Township, "The

report of the inspection by Superintendent Thomson was not made as he died before he could write a report" (Holmes 1993:174). Nevertheless, Crown Lands provided an account of the inspection (Document 522), which must have stemmed from comments Thompson made before he died. This document is quoted at length below, because it provides information about potential for archaeological material of 19th century Algonquin settlement.

"…Mr. Thomson visited the township in August last, that he did not find a single Indian settler in the township and the only attempt at clearing or settling which he found was a small improvement, if it could be called such, made by one Francois Antoine, which consisted of an attempt to clear up part of lots 3 and 4 in the 9th and 10th Cons. the nature of the work being roughly under brushing in the Indian style about 1½ acre. He [Thomson] states that the nature of the land in the township is such that it is well adapted for settlement, the greater part of the township being fine, arable, rolling land, dipping to the east and south. The soil is black loam and sand mixed, the timber beech, black and yellow birch, spruce and pine, the quantity of pine estimated to be some 45 million feet, which is scattered through the township."

"The township of Lawrence is situated upon the confines of Algonquin National Park, which as you know was reserved as a home for game of all descriptions, the intention being to preserve the beauty of the Park and to afford a harbor for the different wild animals, birds, etc. which are natives of this Province. The formation of a settlement of Indians upon the borders of a territory of this kind would, in my opinion, be attended with great danger to the preservation of the game in the Park. You know the predatory habits of these people, how they roam about, and how difficult it is to keep watch of their movements in the forest or get them to recognize a law which applies to white people, with respect at the rate to the killing of game, should be made to apply to the Indian, who depends for his livelihood in a great measure upon what he can kill in the forest…There being such a large quantity of pine timber still growing in the township is another difficulty. The Department does not open to sale to white people lands upon which there is still a considerable quantity of pine timber growing, and where there is about 40 or 50 million feet of pine in a township, it would not be a proper thing to open it to indiscriminate settlement."

"It would appear from what Mr. Simpson says that there is a considerable number of Indians in the Township of Nightingale, some 32 individuals in all, many of whom have entered into possession of lots and made small clearings, and have been there for a considerable period. I think it would be well that these people should be given to understand by your Department that they have no rights there, and that they must not expect that these lands will, as a matter of course, be allowed to them."

Undaunted, in 1896, Chief Sharbot suggested to Indian Affairs (Document 527) an alternate site in Sabine Township: "You will see by the enclosed letter that the Indians at Long Lake in Lawrence Township have located a place to live on away from Lawrence or Nightingale…" (Holmes 1993: Document 528). In 1897, in a letter to Agent Bennett, Chief Sharbot elaborated:

"In regard to the Reserve, which we are trying to get. I might say that the land we wish to secure lies at the head of Hay Lake in the township of Sabine to the south west end of the lake, there are four families living there now, all with more or less clearance and there would be probably ten families altogether living there should that part of the township to be set aside for the purpose of

a reserve. Kindly let me know what further steps I should take in this matter. We are all Algonquins" (Holmes 1993: Document 534).

Three weeks later, Chief Sharbot, in response to Bennett's reply, sent another letter to Agent Bennett:

"Yours of January 20th to hand and in reply beg to enclose you letter received from Dept. Crown Lands through Mr. Simpson Park Superintendent. We also wish to say that we were not aware that the lands in question were not in the market and that there are at present four families of Indians living there all more or less clearance, while three more families are intending to locate there in the spring.

The reasons we have for desiring this location are that it is in a country fifteen miles from the nearest railway and about seven or eight miles from the nearest white settlers who have been living in the same township for over eighteen years, the land is also well situated on the water ways being on Hay Lake which is emptied into Long Lake of the Madawaska River and also near the Mink Lakes tributary to the York Branch of the Madawaska.

The pine is all cut off this part of the country and if you could induce the Indian Dpt. to grant us one fourth of this township for settlement, we would be self-supporting and independent of government assistance in every way" (Holmes 1993: Document 535).

Agent Bennett's superiors at Indian Affairs instructed him, in April 1897, to tell the "Indians of Sabine" to "go to Golden Lake Reserve" and in May, the exasperated agent had to inform head office that:

"…the Indians at Sabine do not belong to Golden Lake Reserve, also there is no room for them on the Reserve…So there is no use in asking them to come to live on the Reserve. …If it is possible it would be better to get the reserve for them in Sabine. I understand that there is two parties, and that they are not agreed on the place to locate. I think it would be advisable to send someone and call a meeting of all the Indians and find out the particulars and then report to govt" (Holmes 1993: Document 542).

Indian Affairs duly sent Agent Bennett to meet with the Sabine band and report (Holmes 1993: Document 546), which he did promptly, for he filed a report dated July 15 1897. Because of its relevance to archaeological potential Bennett's letter report is cited, in full, below:

"I visited the Indians at Sabine (who are Algonquins) as authorized by Department, and found three families settled on land bordering on Hay Lake in the Township of Sabine, and others and others waiting to settle on the proposed Reserve. The names and ages of the Indians whom I found there are:

Name	Age	
Mat Whiteduck	37	Wife and family
Amab Lavally	28	"
Henry Macoose	35	"
Exavier Levally	24	unmarried
Denis "	29	"
Lemab Sharbot	20	"

Name	Age	
Peter Sharbot	65	widower
Frank Sharbot	29	Wife and family
William Levally	30	"
Louis "	50	widower
John "	32	Wife and family

Three families are living on land on Sabine with improvements made thereon the other Indians who are there but afraid to make any improvements until they are sure of the Reserve being set aside for them.

The area of the Reserve they want is ten lots in width and seven in length, there is about 1500 acres of a drowned [sic] marsh in the south east corner of the Township of Sabine, I think however that 4000 acres would be sufficient for these Indians and would recommend that lots 1 to 10 inclusive in con. 4-5-6-7 of the Township of Sabine be acquired for them. This tract of land is not fit for settlement and I do not think it will be settled upon by white settlers" (Holmes 1993: Document 547).

In 1893, these townships were incorporated into Algonquin Park and, in 1894, Peter Sharbot and 32 Algonquin settlers were evicted (Allen 2007). Kidd (1948) referred to some of these Algonquin homestead remains at Rock Lake, during his excavations in 1939; however, his interest was primarily deposits of the pre-contact period. Allen has carried out archaeological assessments at "Franceways" homestead at Rock Lake and elsewhere on the upper Madawaska.

1.3.5 Euro-Canadian Period

Jacque Cartier was the first European to travel the St. Lawrence in 1535 to reach the Kingdom of Saguenay, and went as far as Hochelaga, present-day Montreal, where he stayed with the Iroquois in a village with a population of nearly 2,000 (Canadian Museum of History n.d.). Champlain followed in 1603, almost 70 years later. In 1611, he was able to overcome the rapids that had prevented further westward exploration by Cartier, and apart from Étienne Brûlé, became the first European to explore the beyond Montreal (Canadian Museum of History n.d). Étienne Brûlé had travelled up the Ottawa River in 1610 in preparation for Champlain who followed in 1613 (Kennedy 1970:71). These explorers made contact with the original inhabitants of the area, Algonquins. After Champlain's initial voyage, Europeans began using the Ottawa River as a major route to access the interior of the continent; however, it would be a few hundred years before permanent settlement by Europeans occurred.

After the American Revolution the British arranged for the settlement of United Empire Loyalists and the Mohawk, under Joseph Brant, in Mississauga territory on the north side of Lake Ontario and the upper St. Lawrence River. Although the Algonquins were not included in the Crawford Purchase negotiations and did not cede any land in the Ottawa Valley, the British presumed as much. During the long Napoleonic wars, the natural resources of the Crawford Purchase Lands, and the Algonquin land in the Ottawa Valley, became of significance to the British—particularly its pine timber, pitch, and potash. In 1823, The Hudson's Bay Company established a fur trade post on the north side of the Ottawa River, at Fort William (Kennedy 1970:29), and there was a trickle of settlers drawn by the timber trade. By the late 18th century, there was sporadic settlement along the Ottawa and Rideau Rivers by lumbermen and traders, for instance: Robert Shirreff at Fitzroy Harbour, Philemon Wright in Hull, and Braddish Billings on the Rideau River.

One of the first histories of Ottawa, by H. Belden (1881), provides insight to the initial contact between Algonquin and settlers with the story of Philemon Wright's arrival in Hull at the turn-of-the-century. According to Belden, the Algonquin greeted Wright cordially, even though he was cutting down their maple grove in the sugaring season. After welcoming and feasting Wright, the Algonquin asked him by what authority he was cutting down their sugar bush and were not satisfied until Wright (an American) produced a letter of approval from Sir John Johnson, a minister of the Crown, and provided a payment and gifts to the Algonquins.

After the Napoleonic Wars, or the War of 1812, the British began to settle veteran soldiers and their families in eastern Ontario, in Perth and Richmond, by presuming it was allowed by the Crawford Purchases, and through other payments made to the Mississauga. The Algonquins were not consulted about this settlement, and the land remains unceded Algonquin territory.

"The Algonquins of Ontario claim includes an area of 9 million acres within the watersheds of the Kichisippi (Ottawa River) and the Mattawa River in Ontario, an unceded territory that covers most of eastern Ontario" (AOO 2013). The AOO are comprised of the Algonquins of Pikwakanagan First Nation (AOPFN), based on their reserve on Golden Lake, and nine other non-status communities throughout the Ottawa Valley. The AOO are currently negotiating a modern land claim settlement with Canada and Ontario, and have signed an agreement in principle (AIP) that recognizes the importance of the archaeological record of their ancestor's presence on the land (AOO 2016: note especially Chapter 10).

The earliest drawing of the Bonnechere River on a map was on the 1688 map by Jean Batiste Louis Franquilin, a French cartographer who came to New France in 1672. He was appointed Hydrographer at Quebec in 1685 (Bonnechere Museum 2022). The head of the Bonnechere River is located within Algonquin Park, and flows to the Ottawa River making it ideal for the transportation of timber, and lumbermen began to use the Bonnechere before 1820 (Cotton 2008:111). Horton township was named in 1826 and surveyed by Owen Quinn in July and August 1825 (Rayburn 1997: 161 and his notes mention that Norway Pines had been cut from Concession 1 Lots 10, 11, 21, and 22, and that shanties were located on Concession 1 Lot 23 (Smallfield and Campbell 1919). Along the Bonnechere River there are several chutes which created obstacles for moving timber along the Bonnechere River, and timber cribs had to be disassembled, moved downstream and then reassembled before proceeding along the Bonnechere River. At the 2nd chute, Joseph Brunette established a stopping place in the 1820s providing food, accommodation and drink for the timber men who would need to spend many days on bypassing the chute (Cotton 2008:143). The stopping place was initially called Second Chute, after the timber slide (Rayburn 1997:289). At the time, the area was dominated by lumbering activities and there were few settlers (Town of Renfrew 2018). However, Second Chute gradually grew and a Post Office opened in 1848 under the name Renfrewville. Construction of The Opeongo Road began in 1854, which served to connect the town overland, as opposed to being accessible only by the Bonnechere River and in 1858 Renfrewville separated from Horton township (Town of Renfrew 2018) to create an independent town. Renfrewville vied with Arnprior and Pembroke in 1866 to be the seat of Renfrew County, but was rejected in favour of Pembroke (Town of Renfrew 2018). The Canada Central line was constructed in 1872, which brought the railway to Renfrewville and runs along the western boundary of the project area (Figure 6). Renfrew incorporated as a town under the new name in 1895 (Town of Renfrew 2018).

1.3.5.1 Renfrew County, Horton Township

During much of the 18th century, the project area was located in Lower Canada. In 1788, four districts (Hesse, Nassau, Mecklenburg and Lunenburg) were created in what would become Upper Canada in 1791 (Archives of Ontario 2015). The project area would then have been located within the Mecklenburg District. At the time, there were only eight surveyed townships within Mecklenburg and they were all located along the Saint Lawrence and Lake Ontario. By 1792, the districts had been renamed as the Eastern, Midland, Home and Western Districts, of which the project area would have been located in the Midland District. The first Counties were created at this time and in the Midland district, the Counties of Hastings, Lennox, Addington and Frontenac were created along Lake Ontario. In 1800 the project area was located in Johnston District, which had been carved out between the Eastern and Midland Districts (Archives of Ontario 2015). The Johnston District was split by 1826 into the Bathurst District and the Johnston District. By 1838, the Bathurst District contained two counties – Lanark and Renfrew. The Municipal Government of the County of Renfrew was established in 1841 and in 1850 the Bathurst District was abolished and was replaced by the United Counties of Lanark and Renfrew. In 1861 the County of Renfrew became a provisional county, later becoming independent of Lanark in 1866.

Horton Township was first surveyed in 1825 by Owen Quinn (Humphries and Humphries 1986). The township is named after Sir Robert J. Wilmot Horton, a British member of parliament. Horton, as Undersecretary of State for War and the Colonies from 1821-1828, pushed for immigration into the region to exploit the abundant resources of the region such as timber and furs. In 1823-1825 the Colonial Office of the Crown began sponsoring this, with Horton responsible for this experimental enterprise; this proved to be successful, with Horton becoming knighted in 1831 for his efforts with the Colonial Office (Humphries and Humphries 1986).

1.3.5.2 Concession 1 Lots 23, 24, and 25, Horton Township

The west half of Lot 23 Concession 1 was patented Oct 20, 1856 (Government of Ontario n.d.) to William Peever, and despite selling to James Peever in 1858, he (or another William Peever) is shown as the owner on the Walling 1863 map (Figures 6 & 7, Walling 1863) even though it wasn't sold to William Peever until Feb 22, 1865. Local historical knowledge maintained by the Renfrew Golf Club suggests that the Peever's had occupied the lot since the mid 1820s; however, no census data nor the 1841-1851 Early Settlement map of Horton Township prepared from the 1841 and 1851 census by Con J Hunt (1991), nor the land patent date supports this. Land records show that the Peever family owned properties in various lots in and around Horton Township throughout the late 19th, and early 20th centuries. In 1871, 75 acres of Lot 23 had been improved and there were 8 acres of pasture, and half an acre of garden or orchard, approximately 7 acres of wheat, and 22 acres of hay (Library and Archives Canada 1871). The original Peever farmhouse was still standing during the development of the Renfrew Golf Club in 1929. Structures related to the original farmstead including the farmhouse itself are outside of the AAA but were approximately 75-150 m east of the boundary of the AAA (Figure 7).

Concession 1 Lot 24, Township of Horton, in the County of Renfrew was first patented to Thomas McKiddie in April 1865, who was born in Scotland about 1835 (Figure 6). However, the lot was sold in 1856 to Thomas Mackadie (Arnprior and District Archives n.d.) and by 1857 he was living in the township as his children were being born there (Library and Archives Canada 1881).

He is listed as Thomas McCady on the general population census of 1861 in Renfrew, but not on the agricultural portion which ties families to a particular lot (Library and Archives Canada 1861, 2022). The 1861 census indicates that Thomas McCady had a single-storey log home. He is shown as Thomas McKeady on Concession 1 Lot 24 on the 1863 Walling map which shows one building within the AAA (Figure 7). The 1871 census is for William McReadie and indicates one house and three barns. The names on the 1861 and 1871 census do not match. This might indicate a change in ownership but the land titles record Thomas McKiddie registering the patent in 1865 and the first transfer of ownership was by will wasn't until 1881 to William Peever. Two of the children listed in the 1861 census are also listed in the 1871 census, although the ages are slightly off as is the age of Thomas McCady compared to William McReadie. However, given the similarity in names, record of at least two of the children in both census and that there was no transaction recorded between 1865 and 1881, it is assumed that Thomas McCady and William McReadie are one in the same. The lot was transferred in 1881 to William Peever -presumably the same William Peever who was the neighbor on Lot 23.

The west half of Concession 1 Lot 25, Township of Horton, County of Renfrew was first patented to Christopher Crozier (100 acres) in 1856 (Figure 6) and he is listed as occupying concession 1 Lot 25 in the 1861 agricultural census (Library and Archives Canada 1861). Walling's 1863 map shows Jonathan Crozier on the lot, but no buildings, however a building across the lot line appears immediately in front of the name making it appear that his house was located in the adjacent lot (Figure 7). By 1871, approximately 50 acres had been improved. There were 8 acres of pasture, and half an acre of garden or orchard. There was approximately 5 acres of wheat, 1 acre of potatoes, and 20 acres of hay. There was one house and two barns on the property (Library and Archives Canada 1871).

1.4 Existing Conditions/Archaeological Context

1.4.1 Current Environmental Conditions

The AAA is situated on the edge of the Bonnechere Ridge, approximately 1.5 km north of the Bonnechere River (Figures 1-2). The AAA is variable with areas of slope, areas of relatively level topography, as well as more undulating terrain. Much of the area had previously been agricultural land, much of it had been disused for many years until having been deforested again within the past 4 years.

1.4.1.1 Physiographic Conditions

Physiographic conditions are the natural properties of the area. These include landforms, bedrock geology, surficial geology, hydrological features, and soil types. Canada has been divided into seven broad physiographic regions that are further divided by province and landscape. The Ontario Ecological Land Classification system divides the province into Ecozones, Ecoregions, and Ecodistricts. The AAA is situated within the Mixedwood Plains Ecozone, the Lake Simcoe-Rideau Ecoregion and the Pembroke Ecodistrict (Wester et al. 2018) (Figure 8). The Mixedwood Plains Ecozone makes up 8.6% of the province and is south of the Canadian Shield. It encompasses the entire southern part of the province from Lake Huron to Quebec. The Mixedwood Plains Ecozone is divided into two Ecoregions based on a characteristic range and pattern in climatic variables (Crins et al. 2009:6). The AAA is located in the Lake Simcoe-Rideau Ecoregion, which extends from Lake Huron in the west to the Ottawa River in the east, the

Ontario portion of the St. Lawrence River Valley and most of the shore of Lake Ontario. The Lake Simcoe-Rideau Ecoregion is further subdivided into 16 Ecodistricts, based on a characteristic set of physiographic features, including bedrock and/or surficial geology, and topography (Wester et al. 2018:2). The AAA is located in the Pembroke Ecodistrict, which makes up a small portion (0.2%) of the province. The Pembroke Ecodistrict extends from Pembroke in the west, east along the Ottawa River to Watts Creek and from the Ottawa River south to Pakenham (Wester et al. 2018:388). The Pembroke Ecodistrict is dominated by fine-textured glaciolacustrine deposits which are underlain by a mix of Precambrian and Paleozoic bedrock. Over half of the ecodistrict has been converted to cropland (Wester et al. 2018:388). The topography is gently rolling and varies in elevation from 55 m asl to 225 m asl. Forests are typically mixed or deciduous and coniferous forests are limited (Wester et al. 2018:388).

1.4.1.2 Hydrological Conditions

The PDA is located on the Bonnechere Ridge which is bounded by the Bonnechere River valley to the south and the Champlain Trail Lakes and the Ottawa River to the north (Figure 1). Only one hydrological feature is present within the PDA - a small pond with an associated wetland along the northeastern boundary (Figure 2). Several small ponds, wetlands, and creeks exist within 300 m of the PDA (Figure 9). No significant hydrological feature exists within 300 m of the AAA.

1.4.1.3 Soil and Geological Conditions

The AAA is underlain by the Precambrian Grenville Province bedrock. The bedrock belongs to the Grenville Supergroup and Flinton Group and are characterized by Carbonate metasedimentary rocks such as marble, calc-silicate rocks, skarns, and tectonic breccias (Ontario Geological Survey 2011, Figure 10). There is abundant bedrock exposure with a thin drift cover.

The surficial geology that is present is glacio-fluvial in origin. There are ice-contact stratified deposits of gravel, gravelly sand, sand, silt, minor clay and till. It occurs in moraines, eskers, games and ice-marginal deltas (Ontario Geological Survey 2010, Figure 11). There are suspected ice-contact sediments beneath a greater than 1 m cover of marine shallow water sands (Ontario Geological Survey 2010).

A 1964 soil survey of Renfrew County defines the soil type of the PDA as the Uplands Series (OMAFRA 2019; Figure 12). Uplands soils are described as well drained sandy deltaic deposits that were laid down in the glacial lake that extended southward into the Ottawa Valley. They are characterized as generally fine and very fine sands, uniformly graded that have a level or gentle undulating topography. The profile of the soils is podzolic, with a leached gray horizon that is usually two inches thick. The brown subsoil horizons have concentrations of iron and organic matter, but not in sufficient quantity to alter the soil texture nor its consistency. The entire profile has the properties of loose sand with very low water-holding capacity (Gillespie et al. 1964).

1.4.2 Existing Heritage Plaques & Monuments

A review was made of the Ontario's Historical Plaques database (Brown 2018), and the Ontario Heritage Trust Online Plaque Guide (Ontario Heritage Trust 2018) There are no existing heritage plaques or monuments within or near the AAA. The closest Heritage Plaque is approximately 6 km southeast of the AAA at Bruce and Albert Streets in the Town of Renfrew, which recognizes Sir Francis Hincks who was a prominent figure in Upper Canada. He had purchased land north

of the Bonnechere River in 1853, and by subdividing his holdings into town lots as well as donating land, he contributed substantially to the development of the Town of Renfrew (Brown 2018).

1.4.3 Built Heritage & Cemeteries

A review was made of the Building Stories database maintained by the University of Waterloo and the Canadian Register of Historic Places, and there are no registered built heritage properties in, adjacent or near the AAA (CRHP 2018; University of Waterloo 2018).

A review of the Ontario registry of cemeteries within Renfrew County at CanadaGenWeb Cemetery Project shows there are no cemeteries occurring in or adjacent to the AAA (CGWCP 2004). The closest cemetery is the Rosebank Cemetery located at 288 Haley Rd, Haley Station, approximately 1.3 km west of the AAA (and approximately 1.2 km from the Stage 3 location for BjGe-4 and 8).

1.4.4 Previous Archaeological Assessments and Potential Mapping

A review of the Provincial archaeological report database was made on August 12, 2021, and within Horton Township, Renfrew County there are 14 reports in the database, but only one within 50 m of the Assessment Area – P039-0236-2018 which produced a small lithic scatter (MTCS 2021a).

No archaeological potential mapping exists for the AAA; however, archaeological potential mapping exists of the areas assessed in 2018. It does not include the 2021 study area, though similar conditions exist within the 2021 AAA as it is immediately adjacent to the 2018 assessment.

1.4.5 Existing Archaeological Sites

According to a review of the MTCS archaeological sites database made on August 16th, 2021 there is one archaeological site registered within the AAA. This site, known as the Bonnechere Ridge site (BjGe-4) is a lithic scatter identified in 2018; the site met the criteria of having Cultural Heritage Value or Interest (CHVI) and required further archaeological assessment (Figure 13). There are no other known sites within 5 km of the AAA (MTCS 2021b). Other sites in the broader area include BjGd-1, known as Storie's Point, which was identified in 1998 and consists of a few artifacts recovered along the Ottawa River approximately 19.5 km east of the AAA, with possible burials in the area according to local history but were not able to be located. Closer sites to the AAA are also located just outside of Horton Township, in the former Ross Township (now Whitewater Region). There are three pre-contact sites recorded during the archaeological survey of Logos Land (approximately 10.5 km northwest of the AAA) in 2000 (Swayze 2000). Wintemberg reports in his notes, that a cache of arrowheads (presumably Meadowood points) was found near Pinnacle Hill, which is also located on the Bonnechere Ridge, a 4.7 km to the southeast of the PDA (Wintemberg and Smith 1917).

The lack of archaeological sites in the area is not an indication of low archaeological potential, because there have been few archaeological assessments conducted within Horton Township.

1.5 Stage 1 Field Methods

The purpose of the Stage 1 property inspection is to visit the AAA and gain first-hand knowledge of its geography, topography, current condition, and to evaluate and map archaeological potential. The property inspection was completed between August 24 and October 20, 2021, concurrently with the Stage 2 Test pit survey. The property inspection was conducted according to the archaeological fieldwork standards as outlined in the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011) (Table 1).

Table 1: Stage 1 Property Inspection Standards

Standards	Comments
Inspect the entire property and its periphery. The inspection may be either systematic (e.g., every 30 m) or random spot checking. Coverage must be sufficient to identify the presence or absence of any features of archaeological potential.	The entire AAA was inspected.
Inspect the property when weather conditions permit good visibility of land features. Do not inspect when weather conditions (e.g., snow cover, frozen ground, excessive rain or drought) may reduce the chances of observing features of archaeological potential.	The weather was clear and seasonable. Visibility was good.
Confirm that previously identified features of archaeological potential are present where they were previously identified. Watercourses are present where mapped and are not artificial or altered. Land formations are natural and not artificial.	Features of archaeological potential including watercourses are present where mapped.
Identify and document additional features of archaeological potential not visible on mapping. Knolls, ridges or plateau too small to show on large-scale topographic maps. Relict water channels glacial shorelines Patches of well-drained soils in areas of heavy soil Slightly elevated areas in low and wet areas.	No additional features of archaeological potential not visible on the mapping were noted.
Identify and document features that will affect assessment strategies, e.g.; woodlots, small bogs, swamps or permanently wet areas, steeper grade than indicated on maps, overgrown vegetation that does not allow ploughing, heavier soils than expected, recent land disturbances such as regrading, depositing fill or clearing vegetation.	A significant portion of the AAA has been logged, with an abundance of dead wood covering the ground. While the original ground surface may be undisturbed in these areas, the sheer volume of logs and other organic detritus such as branches and wood chips eliminate the possibility of testing by conventional means. Only 2 areas within the AAA are suitable for ploughing, though one of which has been fully stripped by machines and therefore archaeological potential only remains in one (Figure 14).
Identify and document structures and build features that will affect assessment strategies, e.g.: heritage structures or landscapes cairns, monuments or plaques cemeteries	Two historic foundations are present within the AAA.

1.5.1 Site Inspection: Field Conditions and Observations

The AAA was, until the recent logging and landscaping activity, largely covered in mixed woodland; this is still present on small rock knobs throughout the area which have not been altered by these activities or where only select trees had been removed. Small pockets of formerly agricultural fields are also present. The existing forest is comprised of a wide variety of species including but not limited to oak (*Quercus* sp.), maple (*Acer* sp.), cedar (*Thuja* sp.), balsam (*Abies* sp.), spruce (*Picea* sp.), pine (*Pinus* sp.), poplar (*Populus* sp.), and birch (*Betula* sp.). Dense copses of sumac (*Rhus* sp.) are present at the edges of the mixed woodland. The former agricultural fields are covered with various grasses, as well as broadleaf plants such as milkweed (*Asclepias* sp.), and mullein (*Verbascum* sp.). Bordering and in pockets within the wooded areas are dense swathes of poison ivy (*Toxicodendron* sp.). In areas which have been logged small plants, such as mullein, are present, and in some areas large amounts of poplar saplings are growing. (Figure 15; Photographs 1-14) The ground surface, widely, has been obscured by tree-tops and branches, which were left after the logging operation, so that the ground surface is not visible in many areas that have been logged.

The soil within the AAA is very sandy, in some cases with exposed sand at the surface (largely due to disturbances). The depth of the soils varies from exposed bedrock to over 1 m in depth.

1.5.1.1 Lot 23

Lot 23 is the south-easternmost lot in the AAA (Figure 2) and at 1.83 ha (4.52 acres) it is the smallest of the three lots. The study area is within a small area in the southwestern corner of Lot 23. The access road forks from Golf Course Road and runs along the southern boundary of the study area and around the northeast end of Clubhouse Lake Approximately 34% (0.62 ha) of the AAA in Lot 23 is testable with conventional means. The remaining 66% (1.21 ha) is largely untestable due to very steep slopes, while a small amount has lost any archaeological potential from the disturbance related to the construction of the road and modifications to the shore of Clubhouse Lake (Figure 14)

1.5.1.2 Lot 24

Approximately 49% (19.86 ha/49.07 acres) of the Stage 2 AAA is within Lot 24, the central of the three lots within which the AAA is situated (Figure 2). However, only approximately 13% of the lot is testable via conventional means. One area in the southern part of the lot is suitable for ploughing, though it only accounts for approximately 2.5% of the study area within Lot 24. Approximately 8.52 ha (42.9%), of the AAA within lot 24 was previously assessed. The remaining 8.74 ha (44%) of the study area is either steeply sloped, standing water, covered in dead wood due to logging activities, and/or has lost any archaeological potential from disturbances such as sand extraction activities, along the path of the road which enters from Lot 23, or the former buildings which once stood along the side of the road (Figures 14, 16, 17, 18; Photographs 1-11).

1.5.1.3 Lot 25

Approximately 18.78 ha (46.41 acres) of the AAA is located in Lot 25 (Figure 2). Approximately 73% (13.78 ha) was previously assessed. Of the remaining area approximately 7.8% (1.46 ha) is testable via conventional means. The remaining 18.9% (3.5 ha) is untestable due to steep slopes, being covered in dead wood due to logging activities, or both. Two large ridges run approximately north-south starting from the northern edge of Lot 24. These run almost fully

across the AAA in Lot 25. It accounts for the majority of the testable area in Lot 25 (Figure 14; Photographs 12-14).

1.6 Stage 1 Analysis & Conclusions

1.6.1 Analysis of Archaeological Potential

1.6.1.1 Analysis of Pre-Contact Context

There are qualities and characteristics that indicate potential for the presence of Pre-Contact archaeological resources. These are listed in the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011) and are evaluated in the following table.

Table 2: Presence or absence of features indicating Pre-Contact archaeological potential.

Features	Presence	Comments
Previously identified archaeological sites within or near the AAA	Y	Site BjGe-4 was previously identified within the part of the AAA in Lot 25 which underwent Stage 2 archaeological assessment in 2018.
Water sources within 300 m of the AAA		
Primary Water Source (lakes, river, streams and creeks)	Y	Clubhouse Lake located at the southern boundary (Figure 9).
Secondary Water Source (intermittent streams and creeks, springs, marshes, swamps	Y	There are associated wetlands and seasonally inundated areas associated with an unnamed stream that runs through the southern portion of the AAA and along the eastern boundary.
Features indicating past water sources (e.g., glacial lake shorelines indicated by the presence of raised sand or gravel beach ridges, relict river or stream channels indicated by clear dip or Swale in the topography, shorelines or drained lakes or marshes, cobble beaches)	Y	There are sand bench deposits. Maximum Champlain Sea elevation is at 180m in the area and these elevations occur only in the far northwestern portion of the assessment area.
Accessible or inaccessible shoreline (e.g., high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh	~	Shorelines may have existed at various times and locations within the AAA as water levels changed over time.
Elevated topography (e.g., eskers, drumlins, large knolls, plateau)	Y	The entire AAA is atop a dramatically elevated area (Bonnechere Ridge) which rises from west to east. Within the AAA there are elevated ridges (Figure 2).
Pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground	Y	Throughout the AAA are well-drained sandy soils between elevated rocky ridges.
Distinctive land formations that might have been special or spiritual places	N	No distinctive land formations are present in the AAA.
Resources areas for food or medicinal plants, scarce raw materials	Y	Terrestrial and aquatic subsistence resources.
Deeply buried deposits	~	Naturally deeply buried deposits should not be present in the AAA due to the elevation of the area

Features	Presence	Comments
		preventing floodplains from forming. However, some landscaping activities may have deeply buried soils in some areas.
Archaeological potential mapping	N	No pre-existing archaeological potential mapping is available for the AAA. However, archaeological potential mapping, and Stage 2 Archaeological Assessment was undertaken in 2018 immediately adjacent to the 2021 study area.
Other	N	The small water features of the AAA were unlikely to be used as transportation or trading routes.

1.6.2 Analysis of Post-Contact Context

There are features and characteristics that would indicate the potential for the presence of Post-Contact archaeological resources. These are listed in the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011) and are evaluated in the following table.

Table 3: Presence or Absence of Features Indicating Post-Contact Archaeological Potential.

Features	Presence	Comments
Previously identified archaeological sites within or near the AAA	N	No previously identified historic archaeological sites are in or near the AAA.
Resources areas for food or fresh water	Y	Terrestrial and aquatic subsistence resources
Resource areas for Euro-Canadian industry (e.g., fur trade, logging, prospecting, mining)	Y	Early forestry and animal resources (i.e., fur trade).
Areas of early Euro-Canadian settlement (e.g., pioneer homesteads, isolated cabins, farmsteads.	Y	The first known settlement in Lot 23 is within 100 m of the AAA (Figure 7).
Early historical transportation routes	Y	The Canada Central Railway runs along the southern boundary of the AAA (Figures 1 & 6).
Property listed on a municipal register or designated as a historic landmark or site	N	No properties listed on a municipal register, or designated as a historic landmark or site is present in or near to the AAA.
Property that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations	Y	The Renfrew Golf Club notes the presence of the Peever home on their property (within 100 m of the AAA on Lot 23) (Figures 7, 16, 17, 18).
Presence of monuments or plaques indicating an event, historical person or place	N	No monuments or plaques are present in or near the AAA.
The presence of early churches or cemeteries	N	No early church or cemetery is known to exist in or near the AAA.

There are features and characteristics that indicate that the potential for the presence of Post-Contact archaeological resources has been removed. These are listed in the *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011) and are evaluated in the following table.

Table 4: Features indicating that some archaeological potential has been removed.

Features	Presence	Comments
Quarrying	Y	Some removal of sand has taken place within the AAA.
Major landscaping involving grading below topsoil	Y	Major stripping has occurred in some areas of the AAA (Figure 14; Photographs 4, 5, 6, 8, & 9).
Building footprints	Y	Some modern building footprints were identified during the Stage 2 archaeological assessment; they can be seen particularly clearly in the 1929 aerial photograph (Figure 17; Photographs 15-17).
Sewage and infrastructure development	Y	Some development / alterations have occurred, especially in relation to Clubhouse Lake (though this is largely outside of the AAA). Some cutting of the original ground surface has occurred in the development of the roads within the AAA.

1.7 Stage 1 Conclusions and Recommendations

Given the proximity of hydrological features, the surficial geology, and early settlement activity (particularly in Lot 23), the entire AAA has the potential to contain archaeological resources.

Approximately 22 ha (54%) of the assessment area had been previously assessed under P039-0236-2018 and therefore was omitted from assessment under P371-0038-2021. In addition, approximately 3 ha (9.4 %) of the AAA does not retain any archaeological potential due to significant disturbance caused through major modifications to the natural ground surface (roads, bulldozing, removal of sand, and ground stripping) Figure 14; Photographs 1, 4, 5, 6, 8, 9, & 10). Approximately 3 ha (9.4) of the AAA is not suitable for testing by conventional means due to significant deforestation and the subsequent deposition of thick layers of wood on the ground surface, and approximately 5.8 ha (14%) of the study area is not suitable for testing by conventional means due to the presence of steeply sloped terrain and 0.89 ha (2%) was wetlands/standing water (Figure 14; Photographs 2, 3, 11, 12, 13).

The remaining approximate 4.7 ha (12%) of the AAA does retain archaeological potential, and is suitable for testing by conventional methods (a combination of test pit survey in 5 m transects, and pedestrian survey as per the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011) (Figure 14; Photographs 7 & 11). In addition, cluster test pitting was conducted in the sloped areas where small areas of potential were found, and in the clearcut areas where the ground surface was accessible.

2 Stage 2 Archaeological Assessment: Field Methods

The purpose of a Stage 2 assessment determines whether archaeological resources exist on the property and whether they require further assessment. The Stage 2 assessment was conducted on various dates from August 24, 2021 to May 12, 2022. The weather was variable during the Stage 2 assessment, ranging from hot, hazy, and sunny, to cool, and overcast; visibility was excellent.

The Stage 2 Property Assessment was carried out according to the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011). Test pits (each at least 30 cm in diameter) were dug by hand at 5 m intervals down to a depth into the first 5 cm of subsoil (Photograph 18). Test pit contents were screened through 6 mm mesh and examined for their contents as well as stratigraphy, cultural features, or evidence of fill as per the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011; Table 5). In positive test pits (where artifacts were recovered), artifacts were tagged and bagged according to date, excavator, and sequential number (i.e., July20PC01). The location of positive test pits was recorded using a hand-held *Bad Elf GNSS Surveyor* with ± 1m accuracy. One area of the AAA was subjected to pedestrian survey at 5 m intervals on recently ploughed soil that was allowed to be weathered prior to survey; no archaeological resources were found through the pedestrian survey (Figure 14; Photograph 7).

Table 5: Stage 2 Archaeological Assessment Standards (Test Pit Survey)

Standards	Field Method Comments
Test pit survey only on terrain where ploughing is not possible or viable.	Ploughing is only possible in two areas within the AAA, and only necessary in one due to disturbance in the other.
Space test pits at maximum intervals of 5m between 0-300m from the feature of archaeological potential (MTC, 2011: Section 2.1.5).	Test pits were placed at intervals of 5 m where possible, and clustered in areas where 5 m transects were not viable due to ground conditions.
Space test pits at maximum intervals of 10m in areas more than 300m from any feature of archaeological potential.	No test pits were more than 300 m from any feature of archaeological potential and were therefore done at intervals of 5m.
Ensure that test pits are at least 30cm in diameter.	All test pits were at least 30 cm in diameter.
Excavate each test pit, by hand, into the first 5cm of subsoil, and examine the pit for stratigraphy, cultural features, or evidence of fill.	All test pits were excavated by hand into the first 5 cm of subsoil (where present), and examined for stratigraphy, cultural features, or evidence of fill.
Screen soil through mesh no greater than 6mm	All soil was screened through 6mm mesh.
Collect all artifacts according to their associated test pit.	Any artifacts collected were recorded to their associated test pit.
Backfill all test pits unless instructed otherwise by the landowner.	All test pits were backfilled.
When artifacts are recovered during test pits: Continue test pit excavation on the survey grid to determine whether there are further positive test pits. This may produce sufficient archaeological resources to meet the criteria for making a recommendation to carry out Stage 3 assessment, in which case further Stage 2 is not necessary.	No area prior to intensification (see below) produced sufficient archaeological resources to meet the criteria for making a recommendation to carry out a Stage 3 archaeological assessment.
When insufficient archaeological resources are found through continued survey on the grid to meet the criteria for continuing to Stage 3, intensify survey coverage around the positive test pit to determine whether a recommendation for the Stage 3 assessment can be supported.	One area produced sufficient archaeological resources to meet the criteria for making a recommendation to carry out Stage 3 archaeological assessment following strategy A. This site was given the Borden number BjGe-8.

Standards	Field Method Comments
Use one of the following strategies (A or B): a.) a maximum of 8 additional test pits at a distance of 2.5m, and one or more 1m test units, placing at least one unit over the positive test pit. b.) Excavate additional 1m test units, as required, within 5m of the positive test pit. If excavating three or more 1m test units, intensified test pitting may be omitted.	

Table 6: Stage 2 Archaeological Assessment Standards (Pedestrian Survey)

Standards	Field Comments
Actively or recently cultivated agricultural land must be subjected to pedestrian survey.	The recently cultivated agricultural land within the AAA was subjected to pedestrian survey.
Land to be surveyed must be recently ploughed. Use of chisel ploughs is not acceptable. In heavy clay soils ensure furrows are disked after ploughing to break them up further.	The land to be subjected to pedestrian survey within the AAA was recently ploughed, specifically for the purpose of archaeological assessment. Soils in the AAA are sandy, and therefore disking was not necessary.
Land to be surveyed must be weathered by one heavy rainfall or several light rains to improve the visibility of archaeological resources.	The land to be surveyed was subjected to several rains prior to being surveyed.
Provide direction to the contractor undertaking the ploughing to plough deep enough to provide total topsoil exposure, but not deeper than previous ploughing.	Instructions were given to ensure this.
At least 80% of the ploughed ground surface must be visible. If surface visibility is less than 80% (e.g. due to crop stubble, weeds, young crop growth), ensure the land is re-ploughed and weathered before surveying.	At least 80% of the ploughed ground surface was visible.
Space survey transects at maximum intervals of 5m (20 survey transects per hectare).	Survey transects were placed at 5 m intervals.
When archaeological resources are found, decrease survey transects to 1m intervals over a minimum of a 20m radius around the find to determine whether it is an isolated find or part of a larger scatter. Continue working outward at this interval until the full extent of the surface scatter has been defined.	No archaeological resources were found during the pedestrian survey.
Collect all formal artifact types and diagnostic categories. For 19th century archaeological sites, also collect all refined ceramic sherds (or, for larger sites collect a sufficient sample to form the basis for accurate dating).	N/A
Based on professional judgement, strike a balance between gathering enough artifacts to document the archaeological site and leaving enough in place to relocate the site if it is necessary to conduct further assessment.	N/A

2.1 Stage 2 Record of Finds

The cultural material recovered during the stage 1 & 2 archaeological assessment consisted of pre-contact and post-contact artifacts. A total of four shovel test pits contained material pre-contact artifacts. These consisted of a single piece of chert, two single quartz flakes, and a gneiss flake (Figure 19, Photograph 19).

- Intensification around MM01Aug 26/21 -the single piece of chert - did not produce additional artifacts.
- Intensification around MM01Aug 24/21 - one quartz flake - produced five additional quartz artifacts.
- Intensification around CC01Aug24/21 - quartz flake - produced one additional quartz fragment.
- Intensification around MM01Aug31/21-the gneiss fragment - produced a single chert shatter.

A total 11 pre-contact artifacts from four discrete areas were recovered during the stage 2 archaeological assessment.

In addition to the pre-contact artifacts recovered from test pits, three foundations in two discrete locations were identified during the survey (Figure 19). Foundation 1 and 2 consisted of a stone structure built into the landscape. Foundation 3 was the remains of a poured cement slab.

Two stone foundations were noted in a forested area on the east side of the road within close proximity to one another. Foundation 3 was located on the west side of the road approximately 100 m north in a bulldozed area that had been cleared and was overgrown with saplings, brambles and stinging nettle.

Foundation 1 is located on the east side of the road and is 24 m west of Foundation 2 (Figure 20). The structure is a partially intact stone foundation that appears to consist of a combination of cemented stone and concreted stone (Photographs 20 & 21). There is an entry in the east side of the foundation that is approximately 1.2 m wide (Figure 21). An electrical node is present just outside the structure door indicating the building had electricity. The north and southern walls consist of two rows of stone approximately 0.7 m apart– double walled (Photographs 22 & 23). The foundation is filled with modern residential garbage – e.g., hot water tank, electric oven, bed springs, sheet metal, plastics The structure is approximately 4.64 m long, 2.33 m wide and 1.4 m deep.

Foundation 1 was cleaned and the modern garbage within was removed so that the foundation could be photographed and recorded. The objects removed consisted of mattress springs, a hot water tank, an electric stove, sheet metal, and much plastic. During the cleaning process one fragment of pipestem was recovered, but could not be definitely dated to pre-1900. In addition, three pre-1900 Upper Canada coins (one dating to 1859, one dating to 1854, and the other couldn't be read but was the same size as the 1859 coin), were recovered from the top of the southern interior wall. These were the only pre-1900 artifacts to have been recovered associated with Foundation 1 (Photograph 24).

Foundation 2 is located on the east side of the road and is approximately 24 m east of Foundation 1 and is built into the side of the hill. The structure is a partially intact stone foundation and that has concrete and cement holding the stones together and the walls have been whitewashed (Photograph 25). No obvious entry was noted, but the structure faced the west and a low course of stone ran along the entire west side indicating the entrance would have been located along the western side. A portion of a single window reveal was still intact on the northern wall (Photograph 26). The foundation was filled with rubble from the fallen stone walls, and modern garbage – *e.g.*, car parts, 20th century liqueur bottles, brown betty teapot, child's plastic bicycle seat, light blue vinyl from car seats, and unknown rusted iron.

Both foundations were partially filled with garbage and rubble. Modern garbage was on the ground surface around the foundations (*e.g.,* cables, plastics, sheet metal, a hydro pole with the cables and insulators).

Foundation 2 was cleaned and the modern garbage within was removed so that the foundation could be photographed and recorded. All the objects removed consist of modern garbage (car parts, a Dec 1966 license plate, and bottles) and none contained CHVI.

After Foundations 1 & 2 were cleaned they were photographed and recorded using drones (a DJI Phantom 2 RTK system and Skydio 2XD System). Ground Control points were surveyed in using an Emlid RS2 GNSS Rover and Base Station.

All the cultural material recovered from the test pits and the surface around the foundations produced modern cultural material (*e.g.,* golf balls, glass - various shapes, colours and thicknesses, plastic, sheet metal, metal wire, foil, a single flow blue ceramic shard, clothing and shoes, car parts). None dated to pre-1900.

One test pit (CC01 Oct 20/21) located approximately 1.5 m east of Foundation 2 produced a single shard of flow blue which was popular from 1845-1865 and again between the 1890s and 1920s (Kenyon 1985a, 1985b, 1985c; Majewski and O'Brien 1987). The ceramic shard was found in association with modern (a golf ball and metal seat springs) cultural material. Given the possible pre-1900 date of the ceramic shard, even though found in association with modern cultural material, the test pit was intensified.

The test pits around the intensification unit produced a post-contact Euro-Canadian cultural material. A total of 150 objects were noted from the eight test pits, however, a total of only 15 artifacts were retained. These consisted of 10 cut nails and 4 fragments of a medicine bottle as that date either to the 19th or 20th century. Cut nails were first in use in the 1810s; however, they only became available in Canada from about 1850 and reached a peak around 1886. Steel cut nails will post-date 1882, but whether the cut nails were iron or steel could not be determined. Wire nails became predominant in the late 1890s, but the cut nail was still produced well into the 1900s (Adams 2002, Emery 2012) In addition, four fragments of a medicine bottle were recovered. Embossed on the surface was Jas. Clark Druggist Renfrew Ontario, who was a pharmacist active in the Town of Renfrew from 1881-1910 (Library and Archives Canada 1881, 1891, 1901 & 1911). There was a number of 20th century (115) cultural material (windshield glass-70 fragments, wire nails -35, hard white plastic -1, blue vinyl fabric - 6, painted steel piece of car -1, golf ball – 1, melamine – 1, Swiss army-type knife fragment with aluminum parts-1,) that was not retained. In addition, there was a number of objects (20) that beyond being post-contact in nature can't be

used to establish a date and are of low diagnostic value - rusted metal objects (unknown -1, metal strips - 4, metal spring - 1, slotted screw – 1, metal clasp -1, screw hook -1), and small glass fragments (clear flat glass – 8 fragments, brown bottle glass - 3) and were not retained. The material from the test pits ranges in date from the late 1800s to the present, with the majority, if not all, being post 1900.

Excavation of level 0-10 cm of the intensification unit produced Euro-Canadian post-contact cultural material. A total of 46 objects were noted in the level. A total of 9 possible pre-1900 artifacts were retained. These consisted of 6 fragments of aqua glass (1800 to 1930s, Lindsey 2020). The fragments were too small to determine function or technique of manufacture and can only be classed by colour. In addition, 2 fragments of flow blue refined earthenware were retained and are probably from the same vessel as the initial find and a key plate that takes skeleton keys. There was a number (31) of modern cultural material which was not retained and included electrical tape, a fragment of black rubber, black plastic shovel handle (post 1907; Science Museum 2019), fragment of hard red plastic, 14 fragments of Styrofoam (post 1941, Cansler 2018), metal seat springs, 7 fragments of solarized glass (1905 to early 1920s, Munson 2018), 1 fragment of straw-coloured glass (1912-1960s, Munson 2018), and 4 fragments of windshield glass (1937+). In addition, there were 6 fragments of clear plate glass, which beyond being post-contact in nature can't be used to establish a date. It has low diagnostic value and was not retained. The material from level 0-10 cm ranges in date from the late 1800s to the present, with the majority, if not all, being post 1900.

Excavation of level 10-20 cm of the intensification unit produced Euro-Canadian post-contact cultural material. A total of 278 objects were noted in this level. A total of 32 artifacts were retained as they date either to the 19th or 20th century. These consisted of 2 cut nails, 13 fragments of a flow blue vessel – (tableware – many pieces mend but undeterminable function), 13 fragments of aqua glass and the top of an aqua tinge glass bottle fragment whose manufacture dates 1820-1915, Lindsey 2020), 1 piece of thick molded aqua glass (dinner plate?) (1800 to 1930s, Lindsey 2020) and 1 fragment of the medicine bottle that mends with the Jas. Clark bottle from the test pit. In addition, one fragment of a cut bone- mandible of an ungulate was retained as it is an example of sustenance. There was a number (37) of modern 20th century cultural material which was not retained and included a piece of unknown black plastic, 1 fragment of light blue plastic probably from the car, a wire nail, 1 art deco style gold plated 'gold filled' broach marked P S Co. The P S Co trademark was filed in 1905 (Justia 2022). Also were 2 pieces of Styrofoam, and 27 pieces of solarized bottle glass (1905 to early 1920s, Munson 2018), the bottom of the shovel, a metal cap, 2 bolts. In addition, (209) there were 25 pieces of unknown rusted sheet/tin can metal, 75 pieces of a red earthenware crock probably from the same vessel (continues to be made); 2 fragments of brown bottle glass (continues to be made), 86 pieces of clear flat glass of various thicknesses (continues to be made), 16 fragments of clear bottle glass of various thicknesses (continues to be made), and 5 pieces of leather – probably from a shoe. Beyond being post-contact in nature, they can't be used to establish a date. They have low diagnostic value and were not retained. The material from the level ranges in date from the late 1800s to the present, with the majority if not all, being post -1900.

Excavation of level 20-30 cm of the intensification unit produced Euro-Canadian post-contact cultural material. A total of 157 objects were noted in this level. A total of 1 artifact was retained

because it dates to the 19th century and 32 artifacts were retained as they date to either the 19th or early 20th century. These consist of 5 cut nails, 23 fragments of aqua glass, one fragment of a large clay pipe bowl and one fragment of a pipe stem stamped "McDo" and "Glas"(McDougall pipes date from 1847-1967, Bradley 2000), one fragment of white refined earthenware flow blue, one hand painted late palette (blue, green and red flowers and leaves with a red rim line) fragment of a teapot (1830s-1870s, Kenyon 1995; 1820-1850 Jouppien 1980), and one fragment of a clear rectangular glass bottle – embossed "B.F. G Co." and "T." The Beaver Flint Glass Co. (the T indicates Toronto) made nurser bottles which were colourless and were not designed until 1890 (Lindsey 2020). There was a number (29) of modern 20th century cultural material which was not retained and included 15 fragments of solarized glass, 3 pieces of foil from a gin bottle, 1 glass base of a machine-made desert dish, 4 fragments of an aqua bottle labeled (AB) (1905-1917, Lindsey 2020), 6 fragments of a red teacup stamped H.B&Co Made in France (1921+, Birks 2004). In addition (95), there were 37 more fragments of the red earthenware crock, 2 fragments of dark green glass, 1 metal hinge, 1 metal hook, 4 small metal rings of unknown function, 5 fragments of flat bands springs (possibly from the car), 2 fragments of metal bands of unknown function, 5 fragments of clear flat glass, 3 fragments of undecorated WRE that is probably from the 1921+ teacup, 29 fragments of clear bottle glass, 5 fragments of rusted metal cans, and 1 piece of coal. Metal can fragments, and other metal objects, coal, earthenware crock, fragments of undecorated WRE, clear flat glass, and bottle glass fragments offer low diagnostic value and information from their analysis and were not retained' because, beyond being post-contact in nature, they don't have sufficient attributes to establish a date. The aqua-coloured glass that did not retain sufficient attributes to date to the 19th or 20th century were retained despite being associated with aqua glass fragments that were definitely 20th century. Overall, the material from 20-30 cm dates from the mid-1800s to the mid-1900s, with a single example of pre-1900 ceramics.

Excavation of level 30-40 of the intensification unit produced Euro-Canadian post-contact cultural material. A total of 47 objects was noted in the level. Eight artifacts from the 19th century, and 4 from either the 19th or early 20th century, were retained. The 19th century artifacts include one pearlwear base rim (1780-1840, Miller 1991), and 3 pearlware mends of hand-painted polychrome, late palette decoration teapot that matches with the fragment from level 20-30 cm, Photograph 24). There were also two refit fragments of monochrome brown hand-painted floral with a thick brown band ceramic which may be pre-1900, (Photograph 24). The function seems to be tablewear, perhaps a bowl, but there were not sufficient attributes to determine. There were also two fragments that mend of hand-painted blue and green possible fleur-de-lys design with a blue band, with a paste similar to the teapot, but the glaze was indeterminable. Probably pre-1900, but can't confirm. The function is probably tablewear, but there are insufficient diagnostic attributes. There were also 4 cut nails that were retained as they date either to the 19th or 20th century. In addition (35), there was also a rusted metal buckle, a piece of a metal trap, two pieces of the metal shovel, 1 fragment of cast metal of unknown function, 2 pieces of the red earthenware crock, 3 wire nails, 12 fragments of clear flat glass, 8 shards of bottle glass (4 clear and 4 green), and 5 unknown rusted metal objects and were not retained as they are of low diagnostic value and little information is derived from their analysis.

There were 679 objects from the intensification of the test pit. Overall, the vast majority are modern 20th century artifacts, while there were only 9 pre-19th century ceramic sherds representing 4 vessels.

Due to the lack of pre-1900 artifacts and clear association with the first occupation of the lot, additional 1 x 1 m test units were excavated in three locations (outside Foundation 1, above the midden and at the edge of the midden).

Test unit 01

One test unit (EU01) was placed outside the entrance to Foundation 1. It contained 2 cut nails which were retained, 1 threaded screw, 1 wire spiral tin roofing nail, 18 fragments of clear bottle glass, 1 shard of applied color to glass (1933+ Lindsey 2020), 8 fragments of clear flat windowpane glass, 1 fragment of light bulb glass, 2 fragments of brown bottle glass, 2 undecorated WRE fragments, 1 plastic shirt button, 4 unidentifiable pieces of plastic, and 2 fragments of red brick. Overall, the material from EU01 dates from the late 1800s to the mid-1900s—if not entirely post -1900.

Test unit 02

A test unit (EU02) was placed on a terrace over-looking a pond and a midden (identified by the pile of glass, and sheet metal). A total of 273 objects were noted. This unit contained glass, metal, bone, plastic, nails, clothing and shoes, brick and cement, ceramics, plastics and a coin. Also unearthed were 10 fragments of undecorated WRE, which probably belong to the same vessel as the 5 fragments of decalware rim, 1 fragment of yellow-glazed white refined earthenware rim, 2 fragments of white refined earthenware that matches the pattern of the red post-1921 ceramics from the intensification unit of CC01, and 1 molded orange-luster rim shard of white refined earthenware. Lusterware was introduced in the early 1800s and declines after 1860s (Samford & Miller 2022), however early lusterware is primarily pink, purple or copper-coloured. This shard resembles Japanese lusterware, when orange was a popular colour, from the 1950s and therefore this piece is most likely from the 1950s especially as the majority of the other material from the unit post-dates 1900. A number of shirt fragments (cotton) were noted the unit and, as a result, a number of loose buttons (25) were noted. They consist of various sizes and types, and are of both metal and plastic. Only one bone button that may pre-date 1900 was recovered from the unit and was retained. There were over 16 examples of various kinds of plastics (including a fragment of a vinyl record, Styrofoam and a toy dump truck called "Marx"). Metal objects consisted of 23 cut nails, which were retained as they may pre-date 1900, 7 roofing nails, about 50 wire nails, one tack, a bolt with a washer, a metal spring, a Philips flat head screw (1930s+), a drill bit, two metal staples, a hinge, a plumb bob, beer bottle caps (one Molson), a zipper (1925+), foil, and a metal can fragment (none retained). Additional building material noted consisted of cement and brick fragments. Various cut bones (vertebra from a mammal, 2 fragments of mammal long bones, a fragment of a medium-sized mammal long bone, and an ungulate knuckle) were noted. Glass consisted of over 20 fragments of bottle glass fragments, 5 clear flat glass fragments, one fragment of glass with applied colour, 14 fragments of light bulb glass, a fragment of melted bottle glass, 3 rims of machine-made glass containers, 7 fragments of clear molded bottle glass (Pepsi bottle). Also noted was a battery. All cultural material that can be assigned a date, post-dates 1900. The oldest object, found at the bottom of the unit was a 1902 Canadian nickel. A single bone button, which was retained, could possibly pre-date 1900, but contains no attributes to assign a pre-or-post-1900 date and given that buttons were frequently reused, and it was found above the 1902 coin it was probably deposited after 1902 as was everything else.

Test unit 03

The last test unit (EU03) was placed at the edge of the midden. A total of 290 objects were noted. It contained glass, metals, car parts, ceramic, plastics, brick and mortar, fragments of a clay pipe, and bone.

Glass consisted of 83 shards of windshield glass, 2 fragments of brown bottle glass, 6 fragments of 5 clear glass jar bases, 1 molded clear glass fragment, 15 fragments of a 1950s Canadian Jewel Jar, 10 shards of clear molded glass bottles (possibly Pepsi), 14 shards of clear bottle glass that may belong to the Jewel jar, 2 shards of round bottle base with stippling (1940+, Lindsey 2020), 2 shards of green bottle with a screw top (1910+, Lindsey 2020), 1 clear base fragment with embossed writing (indecipherable), 1 base shard of a clear oval bottle with stippling on the base (1940+), 1 complete post 1906 Heinz ketchup bottle, 1 base of a clear bottle marked "Diamant Ltee Ville Marie Beaupre, Que" (1960+), 1 fragment of clear glass bottle with capacity labelling (1913+, Lindsay 2020), 2 fragments of green bottle glass with threaded tops (1910s+, Lindsey 2020). Almost all of the glass retains elements that can be used to date them post-1900. Fragments of bottle glass that do not contain elements that can be used to determine date were not retained as they have low diagnostic value.

Metal objects consisted of one complete 20 oz tin can (minus the top) and 71 tin can fragments, 1 wire nail, 6 cut nails, 1 roofing nail, 1 metal spring (mouse trap?), 1 Burns Sandwich meat spread tin from around 1959, 2 fragments (top and bottom) of an oil can, a bundle of wires coated either in red or yellow plastic, 1 metal buckle (from a belt?), 2 pieces of foil with not enough printing to identify, 1 1969 penny, car parts (4 fragments of a name plate but not enough to read), a piece of trim, a locking mechanism, metal rods (4), aluminum fragments (5), and 4 unidentified, unrusted, metal fragments (probably car trim). The cut nails were retained as they can be dated to either the 19th or early 20th century. All other metal objects, which either are 20th century or did not contain sufficient attributes to determine date or function, were not retained as they have low diagnostic value.

Ceramics consisted of 4 fragments of decalware that mend and 4 others with the same decoration, 1 shard of undecorated WRE, 1 shard of flow blue, 1 white refined earthenware rim shard with a red band and light blue hand painted decoration, 3 shards of a white refined earthenware with a robin's egg blue solid glaze on front and back. The fragment of flow blue was retained as it can be dated to either the 19th or 20th century. All other ceramics, which either are 20th century or did not contain sufficient attributes to be used to determine date or function were not retained as they have low diagnostic value.

Sixteen plastic fragments were noted (10 light blue 'tiles'), 1 hard red fragment of a vehicle tail light, 2 unknown hard white fragments, 1 golf ball and 1 white button and 1 red button). In addition, there was a single fragment of red brick, one fragment of yellow brick, and 5 fragments of mortar. There were 2 pieces of bone (unfused epiphyses of a mammal long bone), and two fragments of clay 'kaolin' pipe bowls.

None of the cultural materials recovered date definitely pre-1900. Nine items could date either to the 19th or 20th century—two fragments of a clay pipe bowl, one marked 'T.D', a design that is post 1840 (Reid 1976); a shard of flow blue, a fragment of hand-painted WRE, and 6 cut nails (which were retained). But none contained sufficient attributes to assign a pre-or-post-1900 date.

Approximately, 165 items (including a 1969 penny and many car parts), definitely post-date 1900 and therefore do not contain CHVI.

Distribution of Artifacts by Class and Group from BjGe-9 (Adapted from Parks Canada 1992)

Type	Frequency	%
Electrical	2	0.08
Exchange Medium	5	0.42
Faunal	5	0.42
Food Tools & Equipment	510	43.22
Fuel	3	0.25
Lighting Device	15	1.27
Metal Tools and Equipment	187	15.84
Personal	53	4.49
Sound Communication	1	0.08
Structural	149	12.63
Toy	2	0.08
Transportation	182	15.42
Unknown	66	5.59
Total	1180	

2.1.1 Electrical

This category is composed of 1 piece of electrical tape and 1 AA battery (Photograph 28)

2.1.2 Exchange Medium

This category is composed of 3 Upper Canada pennies (1854, 1859, and unknown date) (Photograph 24), one 1969 penny and one 1902 nickel.

2.1.3 Faunal

This category is composed of 5 bones which consist of 1 cut mandible (left side) from a medium-sized ungulate (Photograph 27), one fragment of a mammal long bone, one fragment of a mammal vertebra, and two unidentifiable fragments of a mammal bone.

2.1.4 Food Tools & Equipment

This category is composed of glass, ceramics and metal containers that are used for food. The glass category has 312 objects composed of 3 fragments of brown bottle glass, 2 fragments of bottle glass with orange labelling – unable to make out name, 49 fragments of solarized glass containers, 13 fragments of green bottle glass, 2 fragments of a green bottle with a screw top, 1 melted fragment of green bottle glass and 4 melted clear bottle glass, 6 fragments of bases of clear bottle glass with no distinguishing features, 3 clear rims from a pressed glass container, 103 fragments of clear bottle glass with insufficient features for more diagnostic analysis, 1 pressed clear glass fragment possibly from a bowl or cup, 15 fragments from a 1950s Jewel Jar and additional 14 fragments that may be Jewel Jars, 17 fragments of molded clear glass soda bottle, 2 fragments of clear bottle bases with stippling, 1 fragment of a , 1 clear oval glass bottle base fragment with stippling and an Owens scar, 1 complete Heinz ketchup bottle, post-1906 design, clear glass bottle base with indecipherable embossed writing, 1 fragment of the base of a clear bottle from 'Diamante Ltee Ville Marie Beaupre, Que', 1 fragment of a clear bottle glass with capacity labelling, 1 straw-coloured glass fragment, 51 fragments of aqua bottle glass, 3 fragments of an aqua bottle marked with 'AB', 1 fragment of a nurser bottle made by The Beaver Flint Glass Co, 1 fragment of the base of a desert dish and 1 aqua glass plate fragment

There are 108 food related ceramic objects. They consist of 115 crock fragments, 17 flow blue fragments, 4 late palette decoration refined earthenware teapot, of which 3 fragments mend, 7 fragments of a red teacup that was made in France, 16 undecorated WRE, 13 fragments of various decalware design, 1 rim fragment of WRE with yellow glaze on both sides, 1 rim fragment with orange luster, 2 fragments a brown hand-painted bowl, which mend together (Photograph 24). Two rim fragments of refined white earthenware, which mend and are hand-painted and have a blue band with a blue and green fleur-de-lys design. 1 fragment of a pearlware base from a teacup, 3 fragments of refined white earthenware with a robin's egg blue glaze on both sides, 1 fragment of refined earthenware rim with a red band and hand painted light blue design – teacup or bowl.

There are 90 metal food related objects. They consist of 5 foil fragments from the neck of a scotch bottle, 77 tin can fragments, 1 complete tin, minus the lid, 1 Burn's Sandwich meat spread tin, 2 foil food wrappers with blue writing, but there was not enough to read, 4 beer bottle caps, of which one was Molson

2.1.5 Fuel

This category is composed of two oil cans and one piece of coal (Photograph 27).

2.1.6 Lighting Device

This category is includes 15 light bulb fragments (Photograph 28).

2.1.7 Metal Tools and Equipment

This category includes 168 objects, which consist of: 53 cut nails (Photograph 24), 8 roofing nails, 87 wire nails, 2 bolts and 1 bolt with the nut, 2 metal staples, 1 slotted screw, 1 rusted metal clasp, 1 metal hinge, 1 metal hook, 2 rusted metal springs, 1 half-inch flat-head Phillips screw, 1 1930s drill bit, 1 plumb bob, 1 rusted metal ceiling screw hook, 1 plastic shovel handle, the shovel head, and 2 fragments of the shovel socket, 1 fragment of cast metal of unknown function, This category is composed of 1 metal spring from a mouse trap (Photograph 28)

2.1.8 Personal

This category is composed of 53 objects which consist of 2 metal buckles, 28 plastic buttons of various sizes and shapes, 6 pieces of shoe leather, 1 zipper, 1 plastic pink child's shoe, 1 art deco broach, 5 clear glass fragments from a medicine bottle, 1 fragment of a Swiss Army style pocket knife, 5 clay pipe fragments (Photograph 24), 3 fragments of a cotton shirts.

2.1.9 Sound Communication

This category consists of 1 fragment of a vinyl record (Photograph 28).

2.1.10 Structural

This category consists of 149 objects are composed of 13 fragments of mortar/cement, 6 fragments of red brick, 1 fragment of yellow brick, 128 fragments of clear flat glass (Photograph 28), 1 metal key plate,

2.1.11 Toy

This category consists of two objects which are composed of a golf ball and a fragment of a toy plastic truck with the name MARX (Photograph 27).

2.1.12 Transportation

This category consists of 182 objects which are composed of 1 fragment of an orange indicator light, 1 car seat-spring, 157 fragments of windshield glass, 1 copper rod, 1 vehicle lock mechanism, 5 hoses and rods (vacuum hose, gas pedal link) 5 fragments of window trim, 4 fragments of the vehicle name trim (Photograph 28), 1 grill trim/decoration, 2 rusted metal caps/lids, strapping, 2 light blue melamine board, 1 hard red plastic tail light, 1 fragment of molded steel painted light blue (the same colour as the rest of the car), 7 fragments of light blue vinyl fabric (seat covers).

2.1.13 Unknown

This category consists of 66 objects which are composed mainly of unidentifiable plastics and consist of 2 fragments of flat hard black plastic, 17 fragments of Styrofoam, 1 rusted sheet metal, 6 random rusted metal, 1 fragment of hard white flat plastic, 4 fragments of rusted thin metal strips, 1 fragment of cast metal, 5 fragments of metal spring bands of unknown function, 3 fragments of rusted flat metal bands of unknown function (Photograph 27), 4 metal rings (like washers or grommets of unknown function, 1 rusted metal hook of unknown function, 3 fragments of plastic, 2 small hard white concave plastic fragments of unknown function, 1 fragment of black rubber of unknown function, 1 small fragment of hard, flat red plastic of unknown function, 3 fragments of hard thin yellow plastic with blue (indecipherable) writing and red artwork, 1 dark yellow hard sheet plastic, 1 thin translucent filmy plastic, 1 plastic with 'twin le' written on it, 1 plastic washer, 1 metal hinge from unknown object, 2 fragments of metal strap of unknown function, 4 fragments of metal strap with holes in the centre – possibly car parts

Foundation 3 consists of the remains of a poured cement slab that correlates with a barn that is visible on the 1928 and 1929 aerial photographs on the west side of the road (Figures 16 and 17). All the cultural material recovered from the test pits around the foundation produced modern cultural material (glass, metal, car parts). In addition, some test pits smelled of hydrocarbons indicating the presence of motorized vehicles in the past. The cultural material and the foundation indicate a modern age for the area. The entire area has recently been cleared and bulldozed (since 2018) and was very disturbed. No other foundations from the other buildings visible in the 1928 and 1929 historical aerial photographs were found. The poured concrete foundation is of post 1900 construction.

A total of 10 pages of notes, 22 photographs and three digital files (2 drone imagery files) were created. Artifacts are stored in one banker's box at the company facility.

2.2 Stage 2 Archaeological Assessment: Conclusions

According to the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011) in order to meet the definition of a pre-contact archaeological site, there needs to be 3-or-more non-diagnostic pre-contact artifacts within a 10 m radius (MTC 2011: 39-41). Where five or more non-diagnostic pre-contact artifacts are found, the location is determined to have cultural heritage value or interest (CHVI), requiring further archaeological assessment (MTC 2011: 39-41). Due to the sensitive nature of artifact recovery location, these locations have not been included in the body of this text. An additional Supplemental Document containing this sensitive information has been generated to supplement this report. Information regarding find spot and site locations, and artifact distribution can be found in Supplemental Document.

BjGe-8 consists of six pre-contact quartz artifacts and, as such, was determined to have cultural heritage value or interest.

BjGe-9 consists of two Euro-Canadian stone foundations and a single positive test pit with a single artifact that dates from the 19th to the early 20th century. Background resources revealed that the lot was sold in 1856 to Thomas Mackadie (Arnprior and District Archives n.d.) and by 1857 he was living in the township where his children were born. The 1861 census indicates that Thomas McCady had a single-storey log home, and the Walling's map shows a single building in the general location in 1863. The 1871 census for indicates William McReadie had one house and three barns. By 1881 the lot was transferred by will to William Peever. Unfortunately, the 1881 census records which would provide more detail on the buildings on the lot have not survived.

One structure (Foundation 1) is visible on the 1928, 1929 and 1963 historical aerial photographs, but the trees obscured the area of the other structure (Foundation 2). A third foundation once stood approximately northwest of Foundation 1 but was destroyed during the last four years when the road was improved. A structure in the vicinity of the destroyed foundation is not visible on any of the historical aerials and may have already been reduced to foundations by 1928. As both foundations are stone with concrete holding the stones together, it is unlikely that they were the first structures on the lot, because the original buildings would have been made of logs with minimal foundations. It is possible that the stone foundations may have been the barns as listed on the 1871 built between 1863 and 1871. However, the assemblage around the foundations is primarily domestic and contained few pre-1900 artifacts – (11 artifacts representing 4 ceramic vessels and 3 coins). There are approximately 113 that date to either the 19th or 20th century, while the vast majority of the artifacts are 20th century or beyond being post-contact in nature and lack sufficient attributes to have any meaningful diagnostic value. It is possible foundation 1 started out as a barn or a root cellar that was expanded and repurposed over the years as a residential home and incorporated the original stone foundation. When Foundation 1 was cleaned two corner logs (burnt) were noted along the interior stone wall indicating that a log structure sat upon the interior foundation walls at one time. On the whole, not a lot of building material was noted, but melted glass and plastic indicates there was a fire at one point. In addition, three pre-1900 coins (dated 1854, 1859 and unknown -but the size is similar to the 1859 coin) and a clay pipe stem fragment were recovered amongst the 20th century material that was removed from the foundation.

The majority of the cultural material at BjGe-9 is 20th century Euro-Canadian, with a small number that can be attributed to either the 19th or 20th century, and an even smaller number (11) of artifacts representing 4 vessels and 3 cons, which can be attributed to only the 19th century. Documentation (Census, land records, and early mapping data) indicates that the foundations may date to around 1870. The construction of the foundations – stone which has been cemented or concreted together and in the case of Foundation 2 – whitewashed indicates a later date. Based on the cultural material this site was continuously occupied to at least the 1970s. The foundations were registered as archaeological site BjGe-9.

Many of the artifacts in the assemblage could be dated to either the 19th or 20th century, but there were only a few artifacts which could be clearly attributed to only the early to mid-19th century and they form a very small proportion of the total assemblage, and therefore have low CHVI (MTCS 2014).

The Stage 2 Field Assessment identified two archaeological sites with one containing CHVI (Figures 23 and 24). As the collection meets the definition of an archaeological site as per the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011), it has CHVI and has been assigned a "Borden Number": **BjGe-8**, and has been registered in the Provincial archaeological site database.

2.3 Stage 2: Recommendations

The background study, field visit, and results of Stage 2 fieldwork, form the basis for the following recommendation:

- An additional archaeological site with cultural heritage value or interest was found on the property (BjGe-8) in addition to the previously identified site (BjGe-4). Further archaeological assessment (Stage 3) is recommended.
- One historical archaeological site was found on the property (BjGe-9). This site has been sufficiently documented and no further archaeological assessment is recommended.

3 Stage 3 Archaeological Assessment: Field Methods

The purpose of the Stage 3 Archaeological Assessments were: to determine the spatial extent of the archaeological sites identified in Stage 2; to evaluate their CHVI; and, if necessary, to make recommendations for a Stage 4 to mitigate development impacts (MTC 2011). The Stage 3 Archaeological Assessment of site BjGe-4 in Lot 25 Concession 1 was conducted September 8, and the Stage 3 Archaeological Assessment of site BjGe-8 in Lot 25 Concession 1 was conducted September 14, 2021. On both days, the weather was warm, humid, and clear; visibility was excellent. The Stage 3 Archaeological Assessment was carried out according to the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011 Table 7).

3.1.1 BjGe-4

Eleven 1 m^2 test units were excavated in a 5 m grid across the extent of BjGe-4, with two additional units placed within the site extent in areas of interest (a total of 13 units) (Figure 23). Due to trees and bedrock, some of the units were offset to avoid the obstructions. The site is located on the edge of a rock knob and slopes down at the southeast. The units were shallow and rocky (no more than 30 cm deep) and dug at least 5 cm into subsoil (Photograph 29).

3.1.2 BjGe-8

Three 1 m^2 units were excavated in a 5 m grid across the extent of BjGe-8, with an additional 2 units placed within the site extent in areas of interest (a total of 5 units) (Figure 25). Some initial grid units were shifted to avoid large trees, bare rocks, or other obstructions; in BjGe-8, a large stone outcrop and the project boundary prevented a full grid at 5 m intervals (Photograph 30). All units were excavated in standardized, systematic levels until 5 cm into subsoil (Photograph 31). The soil was sandy with large rocks with a very thin A-horizon. Artifacts recovered were recorded according to their site and grid unit designation.

Table 7: Stage 3 Archaeological Assessment Standards

Standards	Field Comments
Excavate by 1m square units.	All excavated units were 1 m^2 units.
To determine the placement of test units, establish a grid on the site based on the permanent datum to at least the accuracy of transit and tape measurements.	A grid was established and laid in by William Moody on September 8th, 2021 for BjGe-4 and September 14th, 2021 for BjGe-8.
Place and excavate 1m square units in a 5m grid across the site. Place additional test units, amounting to 20% of the grid total, focusing on areas of interest within the site extent such as areas of distinct artifact concentration.	An initial 11 units made up the 5 m grid for site BjGe-4, and 3 units for site BjGe-8 (a large stone outcrop prevented a full 5m grid around the location). An additional 2 units were placed within the site extent of BjGe-4, and an additional 2 units were placed within the extent of BjGe-8.
Excavate test units by hand. Do not use heavy machinery (e.g. gas-powered augers, backhoes) except to remove sterile or recent fill covering confirmed, deeply buried, or sealed archaeological sites (e.g. in urban areas, floodplains).	All test units were excavated by hand. Neither BjGe-4 nor BjGe-8 are deeply buried or sealed archaeological sites.
Excavate test units by systematic levels (stratigraphic or standardized).	All test units were excavated in standardized, systematic levels.
Excavate test units into the first 5cm of subsoil, unless excavation uncovers a cultural feature.	All test units were excavated into the first 5 cm of subsoil. In some cases, some bedrock was reached due to the shallow nature of the unit.
If test unit excavation uncovers a cultural feature, do not excavate into feature fill. Instead: A.) Record the exposed plan of the feature, B.) Place geotextile fabric over the unit floor and backfill the unit.	No cultural features were identified.
Screen all excavated soil through mesh with an aperture of no greater than 6mm. For confirmed single component Paleo-Indian and Early Archaic archaeological sites, for a sample of units (at least 20% of the total number of units in sandy soil, and at least 10% of the total number of units in heavy soil), screen the entire contents of each unit through mesh with an aperture of no greater than 3mm.	None of the sites are confirmed single-component Palaeo-Indian or Early Archaic sites. All soil was therefore screened through 6 mm mesh.
Collect and retain all artifacts. Record and catalogue them by their corresponding grid unit designation.	All recovered artifacts were collected and retained. All artifacts were recorded and catalogued by their corresponding grid unit designation.

4 Stage 3 Record of Finds

4.1 BjGe-4

Four artifacts were recovered during the Stage 3 Archaeological Assessment of site BjGe-4. They were all (100%) quartz debitage (1 shatter fragment, 1 flake, and 2 flake fragments. None of these are diagnostic artifacts, but are associated with the Pre-contact era.

4.2 BjGe-8

Two artifacts were recovered during the Stage 3 Archaeological Assessment of site BjGe-8. They were all quartz, both (100%) of which are flakes (lithic debitage) (Photograph 19). None of these are diagnostic artifacts, but are associated with the Pre-contact era.

Artifacts from the stage 3 assessment of BjGe-4 and BjGe-8 are stored in one banker's box with the stage 2 assemblage of BjGe-8 and BjGe-9, at the company facility

5 Stage 3 Analysis and Conclusions

5.1 BjGe-4

BjGe-4 was initially identified during the stage 2 assessment in 2018 under PIF P039-0236-2018. It consisted of two positive test pits containing a total of five (5) non-diagnostic lithic artifacts. The find met the criteria to require a Stage 3 assessment, which was conducted in 2021 under PIF P371-0040-2021. The stage 3 assessment recovered four quartz debitage (shatter, flake and flake fragments). Overall, the site consists of a small lithic scatter (~60 m^2) composed of quartz debitage. No diagnostic artifacts were recovered. The site dates to the Pre-contact and is typical of a small lithic scatter. The site contains no cultural heritage value or interest.

5.2 BjGe-8

BjGe-8 was identified during the stage 2 assessment in 2021 under PIF P371-0038-2021. It was identified through a single positive test pit containing a single quartz flake. Intensification of the unit recovered five (5) additional non-diagnostic quartz artifacts. The find met the criteria to require a Stage 3 assessment which was conducted in 2021 under PIF P371-0042-2021. The stage 3 assessment recovered two (2) quartz flakes. Overall, the site consists of a small lithic scatter (~3 m^2) composed of quartz debitage (flakes). No diagnostic artifacts were recovered. The site dates to the Pre-contact and is typical of a small lithic scatter. The site does not contain cultural heritage value or interest.

5.3 Stage 3 Final Recommendations

The background study, site inspection, and Stage 3 Archaeological Assessment forms the basis for the following recommendation:

- No further CHVI is retained at BjGe-4, or BjGe-8. No further archaeological assessment is recommended.

6 Advice on Compliance with Legislation

This report is submitted to the Minister of Heritage, Sport, Tourism and Culture Industries as a condition of licensing in accordance with Part VI of the Ontario Heritage Act, R.S.O. 1990, c. O.18. The report is reviewed to ensure that it complies with the *Standards and Guidelines for Consultant Archaeologists* (2011) that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection, and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Heritage Sport

Tourism and Culture Industries, a letter will be issued by the Ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

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

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

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

7 Report Conditions & Limitations

This report has been prepared by Cameron Heritage Consulting Incorporated and Kinickinick Heritage Consulting as a requirement of Archaeological PIF #P371-0038-2020, P371-0040-2021, and P371-0042-2021 for the sole benefit of Thomas Cavanaugh Construction Ltd. with regards to a specific site, design objective, development or purpose that are described within the report.

Interpretations, conclusions, and recommendations are specific to this particular project and are intended only for the guidance of the client, and are not applicable to any other project or location. Any use which a third party makes of this report is the responsibility of such third party. The information and recommendations contained in this report are based upon work undertaken in accordance with generally accepted scientific practices, and *Standards & Guidelines for Consulting Archaeologists in Ontario* current at the time the work was performed, and in a manner consistent with archaeological practices in the jurisdiction within which the work was undertaken, and subject to the time limits and physical constraints applied to the project.

Further, the information and recommendations contained in this report are in accordance with our understanding of the project as it was presented at the time of our report. The information provided in this report was compiled from existing documents, design information provided by Thomas Cavanaugh Construction Ltd. data provided by regulatory agencies and others, specifically in support of this report.

Any follow-up work recommended in this report must be reviewed by the Archaeology Program Unit, Programs and Services Branch, Ministry of Heritage Sport Tourism and Culture Industries, Province of Ontario, which may take several months after the submission of the report.

Given that archaeological investigations are conducted to identify subsurface archaeological resources, even the most comprehensive investigation, sampling and testing may fail to detect all or some archaeological resources. Since the potential always exists to miss important information in archaeological surveys, if any artifacts or human remains are encountered during the development of the subject property, please refer to section 6 of this report, and for any of Indigenous interest please contact:

Algonquins of Ontario Consultation Office
31 Riverside Drive, Suite 101
Pembroke, Ontario K8A 8R6
Tel: 613-735-3759
Fax: 613-735-6307
E-mail: algonquins@tanakiwin.com

We trust this report provides sufficient information for your present purposes. If you have any questions or comments on the contents of this report, or we can be of further service to you, please contact the undersigned.

KINICKINICK HERITAGE CONSULTING

CAMERON HERITAGE CONSULTING INCORPORATED

Ken Swayze, M.A., P039
Archaeologist,

Courtney Cameron, M.A., P371
Archaeologist,

8 References

Adams, William Hampton
2002 Machine Cut Nails and Wire Nails: American Production and Use for Dating 19th-century and Early 20th century sites. Historical Archaeology 36 (4):66-88.

Allen, W.
2007. Nineteenth Century Aboriginal Farmers of the Nineteeth Century, Partners to the Past: Making Connections in the Ottawa River Valley, Ontario Archaeological Symposium, Petawawa.

Anderson, T. W.
1987. Terrestrial environments and age of the Champlain Sea based on pollen stratigraphy of the Ottawa Valley-Lake Ontario region; & Quaternary Geology of the Ottawa Region, Ontario and Quebec, ed. R.J. Fulton; Geological Survey of Canada, Paper 86-23, p. 31-42.

Archives of Ontario
2015 The Changing Shape of Ontario. Available online at http://www.archives.gov.on.ca/en/maps/index.aspx. Accessed May 28, 2022.

Arnprior and District Archives
n.d. Ontario Land Records Index RF1 Series C113 Vol 002 p.550

Bailey, A.
1969. Conflict of European and Eastern Algonkian Cultures 1504-1700: A Study in Canadian Civilization. University of Toronto Press: Toronto.

Barnett, P. J.,
1988. History of the north-western arm of the Champlain Sea, In; Gadd, N.R. (ed.) The Late Quaternary Development of the Champlain Sea Basin, Geological Association of Canada, Special Paper 35, pp. 25- 36.

Belden, H.
1881. Historical Atlas of Lanark and Renfrew Counties, Ontario Illustrated. H. Belden & Co.: Toronto.

Benton-Banai, E.
1988. The Mishomis Book: the Voice of the Ojibway Indian, Country Communications Inc., Hayward, Wisconsin ISBN 1-893487-00-8 Bernhardt, Torsten.

Biggar, H. P.
1925. *The Works of Champlain* Vol. II, The Champlain Society, Toronto.

Birks, Steve
2004 "General Guide to Pottery Trade Marks. Online at http://www.thepotteries.org/mark/general.htm. Last updated 7 Sept 2004. Accessed June 2022.

Bonnechere Museum
2018 Bonnechere River Facts. Available online at http://www.bonnechere.ca/cultural-history/bonnechere-river-facts/.

Brown, Alan L
2018 Ontario's Historical Plaques. Website ontarioplaques.com. Accessed Dec 6, 2018

Canadian Museum of History
n.d. Virtual Museum of New France. Accessed Nov 26, 2021. Online at https://www.historymuseum.ca/virtual-museum-of-new-france/the-explorers/jacques-cartier-1534-1542/.

Cansler, Clay
2018. 'Styrofoam, a Practical and Problematic Creation: The good and bad of an everlasting Invention'. In *Distillations*. Science History Institute. Online at https://www.sciencehistory.org/distillations/styrofoam-a-practical-and-problematic-creation. Accessed June 22, 2022.

Catto, N. R., Patterson, R. J., and Gorman, W. A.
1982. The Late Quaternary geology of the Chalk River region, Ontario and Quebec Canadian Journal of Earth Science v.19:1218-1231, NRC Ottawa.

CRHP (Canadian Registrar of Historic Places), Parks Canada
2018. Canadian Registrar of Historic Places, Accessed Dec 6, 2018 from http://www.historicplaces.ca/en/pages/about-apropos.aspx

CBC (Canadian Broadcasting Corporation)
2017. Yukon home to 1st traces of humans in North America 24,000 years ago, research suggests. Online at http://www.cbc.ca/news/canada/north/yukon-first-humans-north-america-1.3936886. Posted Jan 16, 2017.

CGWCP (CanadaGenWeb Cemetery Project)
2004. CanadaGenWeb's Cemetery Project. Accessed March 9, 2021, online at http://cemetery.canadagenweb.org.

Cinq–Mars, J.
1979. Bluefish Cave 1, Canadian Journal of Archaeology, No. 3, 1979:1.

Clermont, N., and Chapdelain, C.
1998. Île Morrison: Lieu sacré et atelier de L'Archaïc dans l'Outaouais. Paléo-Québec No. 28. Recherches amérindienne au Québec, Québec. Available in English at: www.thealgonquinway.ca/e-books.

Crins, W. J., Gray, P. A., Uhlig, P. W. C., and Wester M. C.
2009. The Ecosystems of Ontario, Part 1: Ecozones and Ecoregions. Technical Report SIB TER IMA TR-01. Ministry of Natural Resources, Science & Information Branch, Inventory, Monitoring and Assessment Section.

Daechsel, H.
1989. Phase 1 Study of the Heritage Resources of Horton Township Renfrew County prepared for Greer Galloway & Assoc. Cataraqui Archaeological Research Foundation, Kingston.

Ellis, C. J.
2013. Before Pottery: Paleoindian and Archaic Hunter-Gatherers. In Before Ontario: The Archaeology of a Province. Edited by Marit K. Munson and Susan M. Jamieson. Kingston: McGill-Queen's University Press.

Emery, Katy Meyers
2012 "All About Nails..." MSU Campus Archaeology Program. Online at http://campusarch.msu.edu/?p=1305. Accessed June 2022.

Fullerton, D. S.
1980. Preliminary Correlation of post-Erie interstadial events (16 000-10 000 radiocarbon years Before Present): Central and eastern Great Lakes region, and Hudson, Champlain, and St. Lawrence Lowlands, United States and Canada. U.S. Geological Survey, Professional Paper 1084.

Gilbert, R.
1994. A field guide to the glacial and postglacial landscape of southeastern Ontario and part of Quebec. Geological Survey of Canada Bulletin, bulletin 453.

Gillespie, J. E., Wickland, R. E., and Matthews, B. C.
1964. Soil Survey of Renfrew County. Report No. 37 of the Ontario Soil Survey.

Government of Ontario
n.d. Abstract/Parcel Register Book, Renfrew (49), Ross, Book 121. Online at https://www.onland.ca/ui/49/books/65901/viewer/698876728?page=1.

Holmes, J.
1993. *Aboriginal Use and Occupation of the Ottawa River Watershed* Algonquins of Golden Lake Claim Vol. 2. Prepared by Joan Holmes and Associates Inc., for the Ontario Native Affairs Secretariat, Ottawa.

Humphries, D., and Humphries, C.
1986. Horton: The Story of a Township. Juniper Books.

Jouppien, Jon,
1980 The Application of South's Mean Ceramic Formula to Ontario Historic Sites, Arch Notes 80 May/June.

Justia
2022 Justia Trademarks. Online at https://trademarks.justia.com. Accessed July 3, 2022

Kennedy, C. C.
1970. The Upper Ottawa Valley. Renfrew County Council: Pembroke.

1977. Whale bones found. Canadian Museum of History website https://www.historymuseum.ca/cmc/exhibitions/archeo/kichisibi/k300c-clydeswhale.html.

1967. Preliminary Report on the Morrison Island-6 Site. In Contributions to Anthropology, Part 1 pp. 100-124. National Museum of Man, Ottawa.

Kennett, B. L. and Earl, J. D.
2000. Stage 1, 2 and 3 Archaeological Assessment of the Allen Point Subdivision, Part Lots 40 & 41, Concession V, City of Kingston (Former Kingston Township). Report by Heritage Quest Inc., on file, Ministry of Tourism, Culture and Sport, Toronto.

Kenyon, Ian T.
1985a A History of Ceramic Tableware in Ontario, 1870-1890. **ArchNotes** 85(6): 14–21.

1985b A History of Ceramic Tableware in Ontario, 1780-1840. **ArchNotes** 85(3): 41–57.

1985c A History of Ceramic Tableware in Ontario, 1840-1870. **ArchNotes** 85(5): 13–28.

1995 A History of ceramic Tableware in Ontario, 1780-1910. Manuscript prepared for Table talks lecture series, Montgomery's Inn, Etobicoke. Manuscript prepared for Table talks lecture series, Montgomery's Inn, Etobicoke

Kidd, K.
1948. *A Prehistoric Camp Site at Rock Lake, Algonquin Park, Ontario* Southwestern Journal of Anthropology vol. 4:98-106. University of New Mexico, Albuquerque.

Lewis, C. F. M., and Anderson, T. W.
1989. Oscillations of levels and cool phases of the Laurentian Great Lakes caused by inflows from glacial Lake Agassiz and Barlow-Ojibway *Journal of Paleolimnology* v.2: 99-146.

Library and Archives Canada
1861 *Census returns for 1861*. LAC microfilm C-999 to C-1007, C-1010 to C-1093, C-1095 to C-1108, C-1232 to C-1331, M-1165 to M-1166, M-1168 to M-1171, M-556, M-874 to M-878, M-880 to M-886, M-896 to M-900. Library and Archives Canada, Ottawa.

1871 *Census of Canada 1871,* Ottawa, Ontario, Canada: Library and Archives Canada, n.d. RG31-C-1. Statistics Canada Fonds. Microfilm reels: C-9888 to C-9975, C-9977 to C-10097, C-10344 to C-10388, C-10390 to C-10395, to C-10540 to C-10570.

1881 *Census of Canada, 1881*. Statistics Canada Fonds, Record Group 31-C-1. LAC microfilm C-13162 to C-13286. Library and Archives Canada, Ottawa. http://www.bac-lac.gc.ca/eng/census/1881/Pages/about-census.aspxl. C_13234; Page:58; Family No:242

1891 *Census of Canada, 1891*. Ottawa, Ontario, Canada: Library and Archives Canada, 2009. http://www.bac-lac.gc.ca/eng/census/1891/Pages/about-census.aspx. Series RG31-C-1. Statistics Canada Fonds. Microfilm reels: T-6290 to T-6427.

1901 *Census of Canada, 1901*. Ottawa, Ontario, Canada: Library and Archives Canada, 2004. http://www.bac-lac.gc.ca/eng/census/1901/Pages/about-census.aspxl. Series RG31-C-1. Statistics Canada Fonds. Microfilm reels: T-6428 to T-6556.

1911 *Census of Canada, 1911*. Ottawa, Ontario, Canada: Library and Archives Canada, 2007. http://www.bac-lac.gc.ca/eng/census/1911/Pages/about-census.aspx. Series RG31-C-1. Statistics Canada Fonds. Microfilm reels T-20326 to T-20460.

2022 *Censuses*. Available online at https://www.bac-lac.gc.ca/eng/census/Pages/census.aspx. Last Modified 2021-12-23. Accessed May 3, 2022.

Lindsey, Bill.
2020 *Historic Glass Bottle Identification & Information Website*. ONLINE. Society for Historical Archaeology and Bureau of Land Management. Available: http://www.sha.org/bottle/index.htm Accessed May-June, July 2022)

Majewski, Teresita, and Michael J. O'Brien
1987 The Use and Misuse of Nineteenth-Century English and American Ceramics in Archaeological Analysis. *Advances in Archaeological Method and Theory* 11: 97–209.

Miller, George
1991 Identification to English Ceramics for Archaeologists. Workshop for Ontario Association of professional Archaeologists, Toronto

MTCS (Ministry of Tourism, Cultural & Sport)
2021a. Register of Archaeological Reports. Online at the government of Ontario ONeKey PastPortal. Accessed March 2, 2021.

2021b. Database of archaeological sites. Online at the government of Ontario ONeKey PastPortal. Accessed March 2, 2021.

Mitchell, B.
1963. Occurrence of Overall Corded Pottery in the Upper Ottawa Valley, Canada. American Antiquity 29:114-115.

Morrison, J.
2007. Algonquin History of the Ottawa River Watershed, Sicani Research and Advisory Services, Chapter two Cultural Heritage of Ottawa River Heritage Designation Committee report.

MTC (Ministry of Tourism, and Culture)
2011. Standards and Guidelines for Consultant Archaeologists. Toronto: Ministry of Tourism, Culture and Sport.

Munson, M. K.,
2013. A Land Before Ontario. In *Before Ontario: The Archaeology of a Province*. Edited by Marit K. Munson and Susan M. Jamieson. Kingston: McGill-Queen's University Press.

2018 Identifying & dating 19th-20th c. ceramics & glass containers. Workshop for the Association of Professional Archaeologists 4 May 2018. Marit Munson Dept of Anthropology Trent University.

Ministry of Natural Resources
1928. Aerial photograph. National Air Photo Library photograph #A63_032. Scale 15K.

1929 Aerial photograph. National Air Photo Library photograph #A1017_046. Scale 15K

1963 Aerial photograph. National Air Photo Library photograph #A18082_003. Scale 20K.

OAS (Ontario Archaeological Society)
2015. The Archaeology of Ontario. http://www.ontarioarchaeology.on.ca/summary/contents.php Accessed April 20, 2015.

Ontario Geological Survey
2011. 1:250 000 scale bedrock geology of Ontario; Ontario Geological Survey, Miscellaneous Release–Data 126 - Revision 1. Available at http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=pub&id=MRD126- .

2020. Surficial Geology of southern Ontario; Ontario Geological Survey, Miscellaneous Release – Data 128-Revised. Available at http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=pub&id=MRD128-REV .

Ontario Heritage Trust
2018. Online Plaque Guide. Website: http://www.heritagetrust.on.ca/Resources-andLearning/Online-Plaque-Guide.aspx Accessed Dec 6, 2018.

OMAFRA (Ontario Ministry of Agriculture, Food and Rural Affairs)
2019. Soil Survey Complex of Ontario. Revised. Available at https://geohub.lio.gov.on.ca/datasets/ontarioca11::soil-survey-complex. Accessed July 23, 2020.

Ontario Ministry of Natural Resources
1978. Wetlands [computer file]. 1978-05-01. Last update 2019-05-13. Available at Ontario GeoHub. <https://www.ontario.ca/page/open-government-licence-ontario Accessed March 23, 2020.

2007. Ecoregions [computer file]. 2007-01-01. Revised 2016-12-29. Available at Ontario GeoHub https://www.ontario.ca/page/open-government-licence-ontario Accessed April 24, 2017.

2020. Lot fabric improved [computer file]. Peterborough, ON, March 10, 2020. Available at Ontario GeoHub < https://geohub.lio.gov.on.ca> (Accessed March 30, 2020).

Parks Canada
1992 Canadian Parks Service Classification System for Historical Collections. National Historic Sites, Parks Service, Environment Canada.

Peers, L.
1985. Ontario Paleoindians and Caribou Predation. Ontario Archaeology 43:31-40.

Pendergast, J.
1999. The Ottawa River Algonquin Bands in a St. Lawrence Iroquoian Context. Canadian Journal of Archaeology 23 (1&2): 63-136 .

Porter, T.
2008. And Grandma Said...lroquois Teachings as passed down through oral tradition transcribed and edited by Lesley Forrester, Xlibris Corporation.

Ray, A. J., and Freeman, D. B.
1978. Give Us Good Measure: Indians in the fur Trade. University of Toronto Press.

Rayburn, Alan.
1997. *Place names of Ontario*. Toronto: University of Toronto Press

Reid, C.S.
1976. Clay Pipes in the Upper Great Lakes: The Ermatinger Assemblage. Northeast Historical Archaeology Vol. 5, Article 1.

Ritchie, W. A.
1983. The Mystery of Things Paleoindian. *Archaeology of Northeastern North America* 11:30-32.

1969 *The Archaeology of New York State*. Revised ed. The Natural History Press: Garden City.

Robinson, B. S.
1992. Early and Middle Archaic Period Occupation in the Gulf of Maine Region: Mortuary and Technological Patterning. In Early Holocene Occupation in Northern New England, edited by Brian S. Robinson, James B. Petersen and Ann K. Robinson, pp.63-116. Occasional Publications in Maine Archaeology, 9.

Samford, Patricia and George L. Miller
2022 Post-Colonial Ceramics. Diagnostic Artifacts in Maryland. Online at https://apps.jefpat.maryland.gov/diagnostic/Post-Colonial%20Ceramics/index-PostColonialCeramics.htm. Last updated 26 Oct 2015. Accessed June 2022.

Sioui, G.
1999. Huron-Wendat: The Heritage of the Circle revised edition translated from the French by Jane Brierly UBC Press Vancouver.

Smallfield, W.E. and Rev. Robert Campbell
1919 The Story of Renfrew From the Coming of the First Settlers About 1820. Vol. 1. Available on line at https://archive.org/stream/storyrenfrew00smaluoft/storyrenfrew00smaluoft_djvu.txt

Speck, F. G.
1915. "Myths and Folk-Lore of the Timiskaming Algonquin and Timagami Ojibwa" Geological Survey Memoir 71, Dept. of Mines, Anthropological Series No. 8, Ottawa.

Storck, P. L.
1971. The Search for Early Man in Ontario. Rotunda 4(4):18-27.

Storck, P. L., and Spiess, A. E.
1994. The Significance of New Faunal Identifications Attributed to an Early Paleoindian (Gainey Complex) Occupation at the Udora Site, Ontario. American Antiquity 59:121-142.

Swayze, K.
2000. Archaeological Investigations at Logos Land Resort, Lot 12 & 13 Ross Twp. Report on file with OMTC, Toronto.

2008. PIF P039-115-2007 Archaeological Assessments at Chalk River Laboratories, Buchanan Township (Geo.), Renfrew County. Inventory of Known Cultural Resources, Cultural Resource Management Projects, Archaeological Predictive Model, and Master Plan, report on file with OMCTS, Toronto.

Swayze, K., and McGhee, R.
2011. The Heritage Hills Site and Early Postglacial Occupation of the Ottawa Valley. Archaeology of Eastern North America Vol 39 (131-152).

Teller, J.T.
1988. "Lake Agassiz and its Contribution to Flow Through the Ottawa - St. Lawrence System", In Gadd, N.R. (ed.) The Late Quaternary Development of the Champlain Sea, Geological Association of Canada Special Paper 35, pp. 281-289.

Town of Renfrew
2018 History of Renfrew. Online at https://www.renfrew.ca/history-of-renfrew.cfm

University of Waterloo's Heritage Resources Centre
2018. Building Stories. Accessed Dec 6, 2021 from http://www.buildingstories.co/index.php#.

von Gernet, A.
1991. 1990-1991 Excavations at the Highland Lake Site. Report on file with OMCL, Toronto

Walling, H.F.
1863. Map of the Counties of Lanark and Renfrew, Canada West. D.P. Putnam: Prescott, C.W.

Watson, G. D.
1999 The Paleoindian Period in the Ottawa Valley. In *Ottawa Valley Prehistory*, edited by J.-L. Pilon, pp. 27-41. Hull, Quebec: Imprimerie Gauvin.

Wester M. C., Henson, B. L., Crins, W. J., Uhlig, P. W. C., and Gray, P. A.
2018. The Ecosystems of Ontario, Part 2: Ecodistricts. Science and Research Technical Report TR-26. Ministry of Natural Resources and Forestry.

Whiteduck, K. J.
1995. Algonquin Traditional Culture. B.A. thesis, York University, Toronto. Published by the Council of the Algonquins of Pikwakanagan, Golden Lake

Wintemberg, W. J.
n.d. "untitled"—notes on archaeological discoveries from Renfrew County, in the archives of the CMC, Hull, Québec.

Wintemberg, W.J.W. and Smith, H.I.,
1917 *Archaeology of the Madawaska and Ottawa Valley*. Ms on file in the archives of the Canadian Museum of Civilization, Hull Québec.

Wright, J. V.
1995. A History of the Native People of Canada, Vol. I (10,000-1,000 B.C). Canadian Museum of Civilization, Archaeological Survey of Canada, Mercury 152.

8.1 Additional Sources Consulted

The following additional sources were consulted as part of the Stage 1 Assessment.

Heritage Renfrew
1992. Founding Families of Admaston, Horton & Renfrew Village, Juniper Books Ltd, Renfrew

Federal Heritage Buildings Review Office online Directory of Heritage Designations (https://www.pc.gc.ca/apps/dfhd/default_eng.aspx)
Canada's Historic Places (https://www.historicplaces.ca/en/home-accueil.aspx)

Ontario Heritage Trust (https://www.heritagetrust.on.ca/en/pages/tools/ontario-heritage-act-register)

Ontario Crown Lands Department
1982. Township papers, ca. 1783-1870s. Archives of Ontario, Toronto: Ontario. RG1 series C-IV. Online at https://www.familysearch.org/search/catalog/185567?availability=Family%20History%20Library. Accessed March 1, 2022.

Ministry of Heritage, Tourism, Culture, and Sport Industries, Heritage Conservation Districts (http://www.mtc.gov.on.ca/en/heritage/heritage_conserving_districts.shtml)

Ministry of Tourism, Culture and Sport
2014 The Archaeology of Rural Historical Farmsteads. A Darft Technical Bulletin for Consultant Archaeologists in Ontario.

Library and Archives Canada
n.d. Land Petitions of Upper Canada, 1763-1865. Online at https://www.bac-lac.gc.ca/eng/discover/land/land-petitions-upper-canada-1763-1865/Pages/search-petitions-upper-canada.aspx. Accessed March 1, 2022.

9 Figures

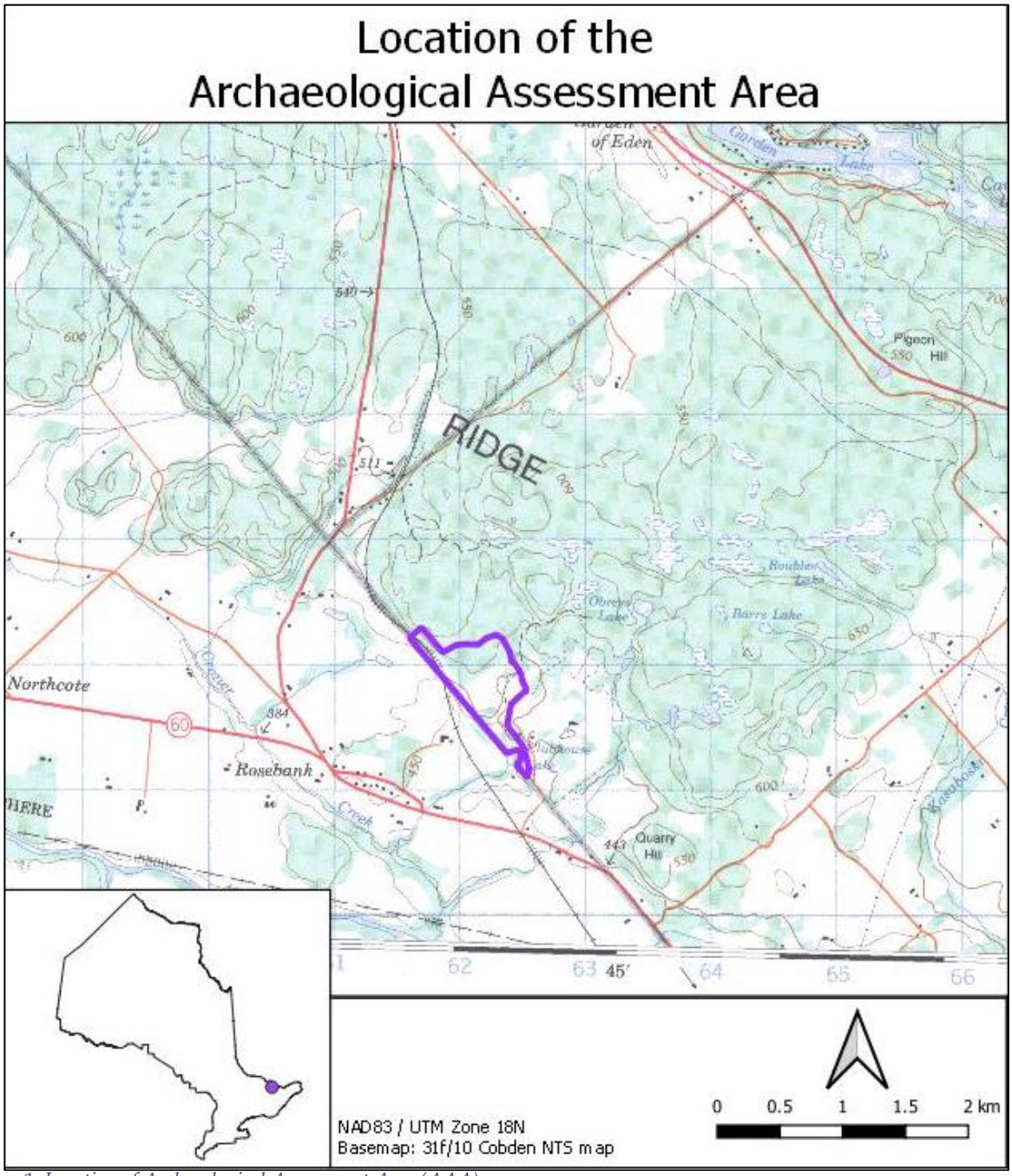


Figure 1: Location of Archaeological Assessment Area (AAA).

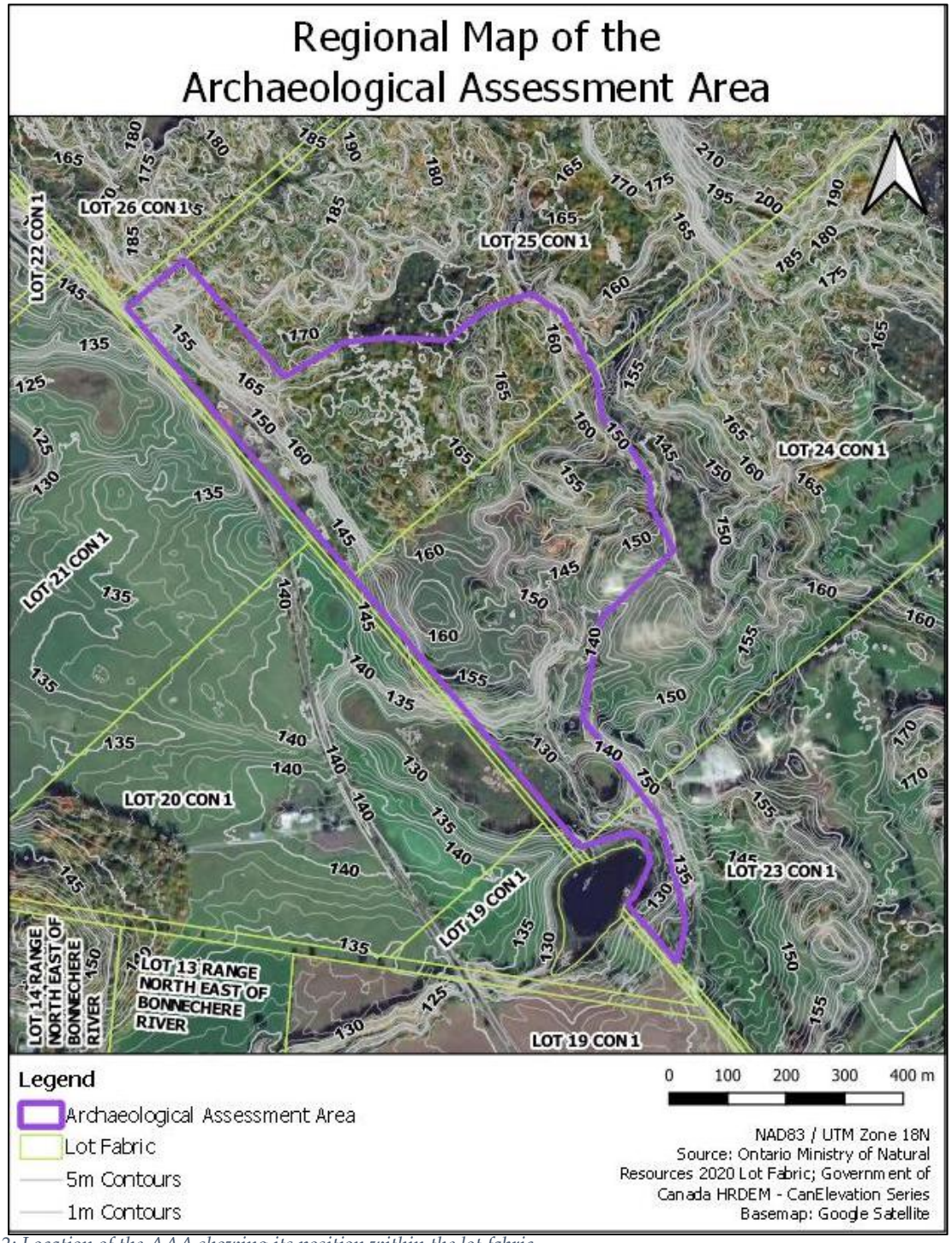


Figure 2: Location of the AAA showing its position within the lot fabric.

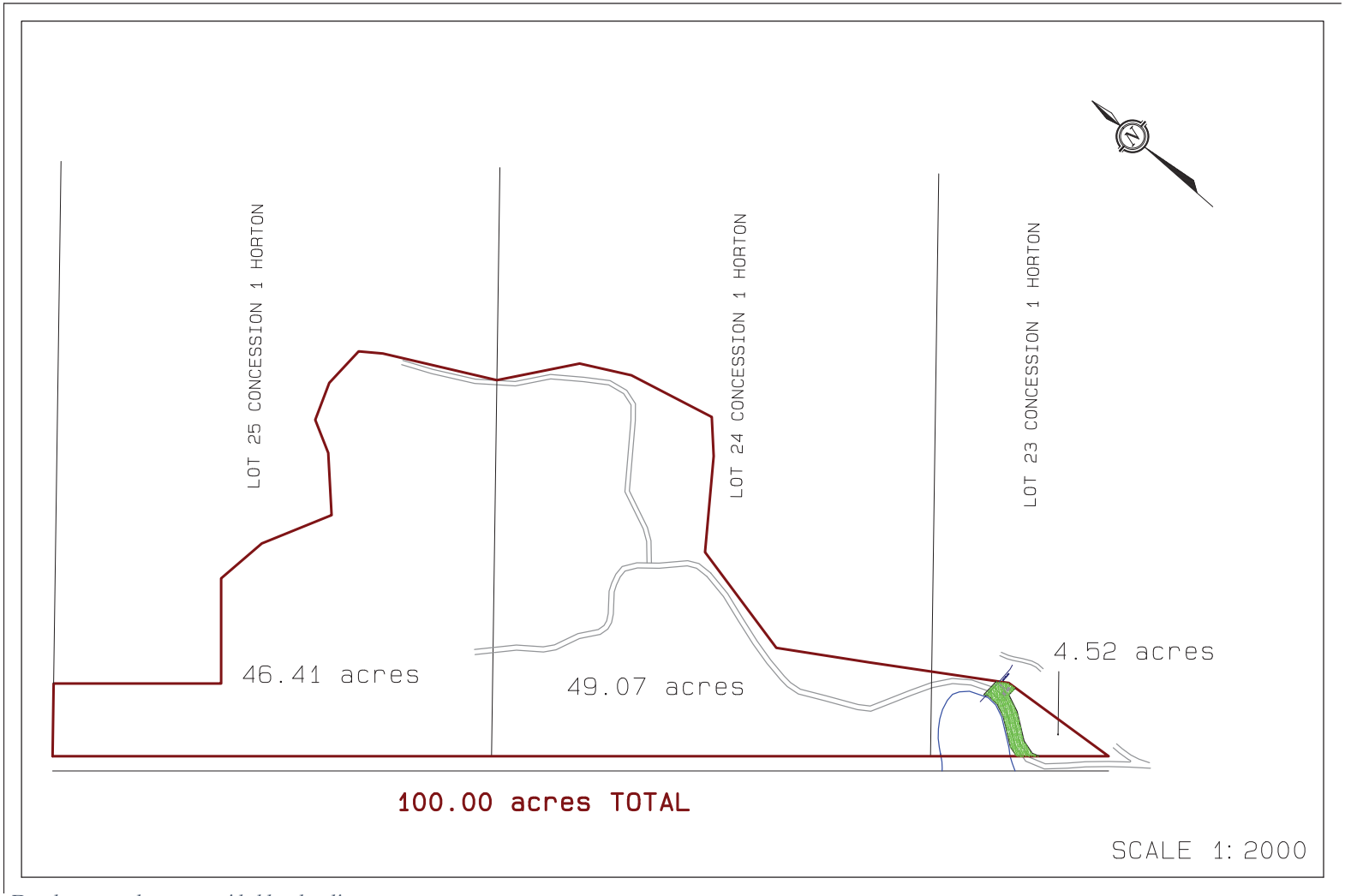


Figure 3: Development plan as provided by the client.

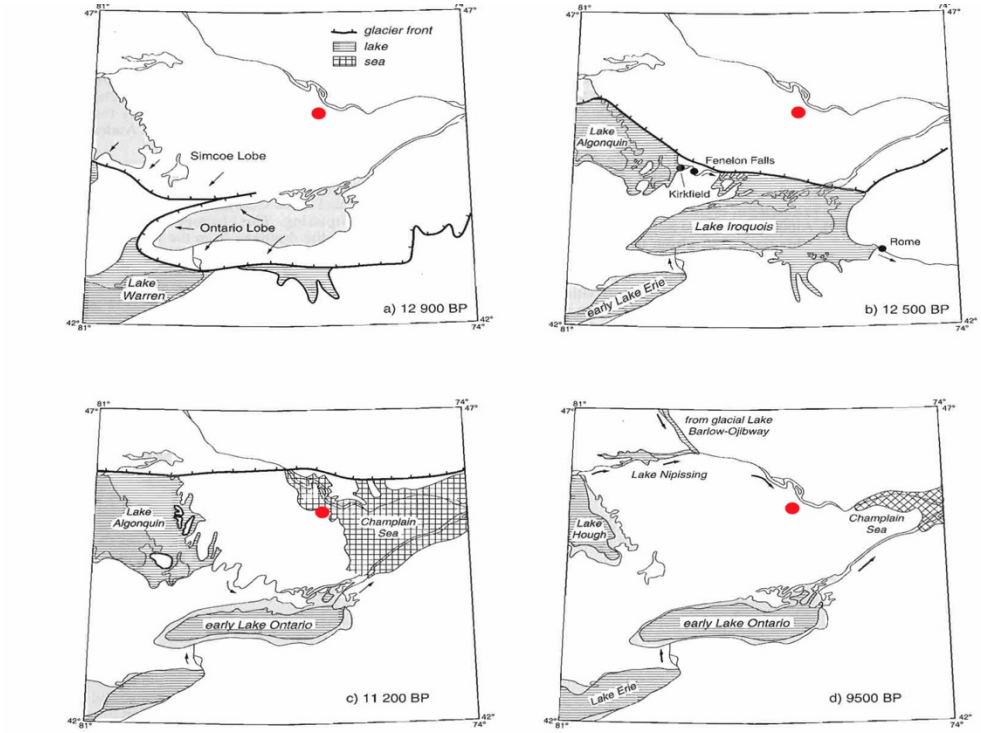


Figure 4: Deglaciation chronology of Ontario (adapted from Gilbert, 1994). AAA location in red.

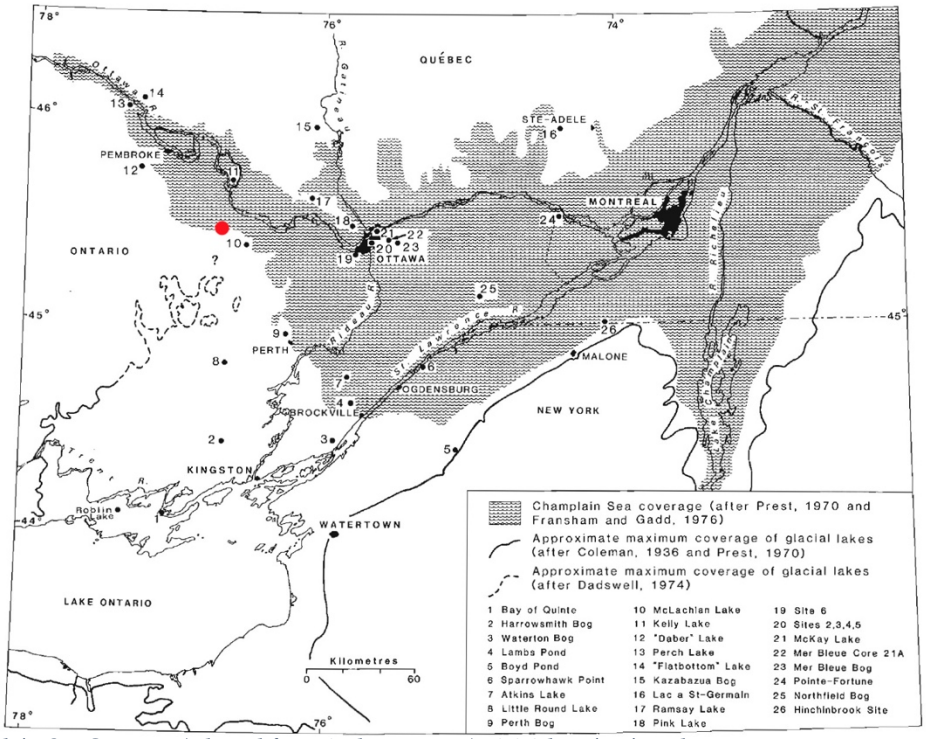


Figure 5: Champlain Sea Coverage (adapted from Anderson 1987). AAA location in red.

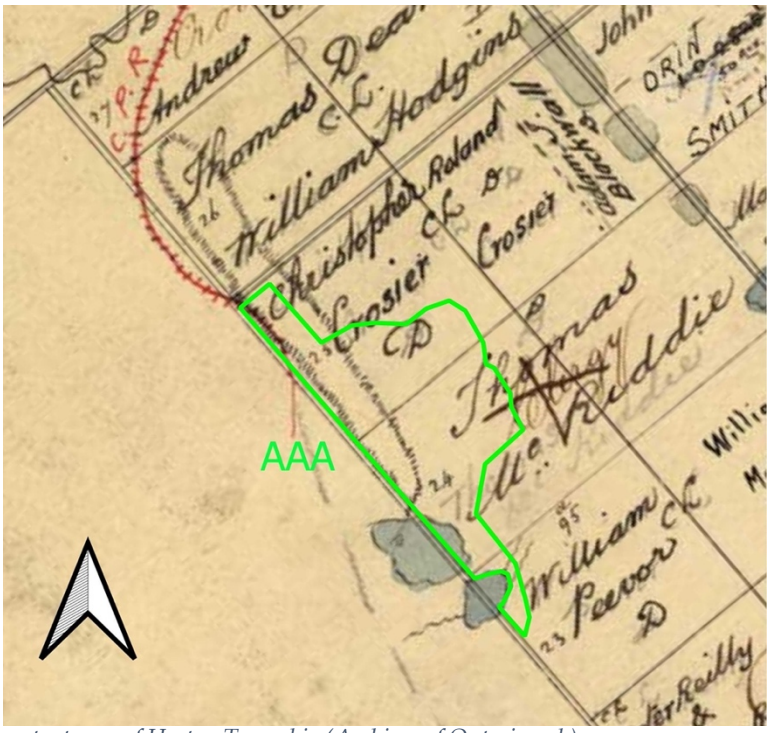


Figure 6: AAA shown on patent map of Horton Township (Archives of Ontario n.d.)

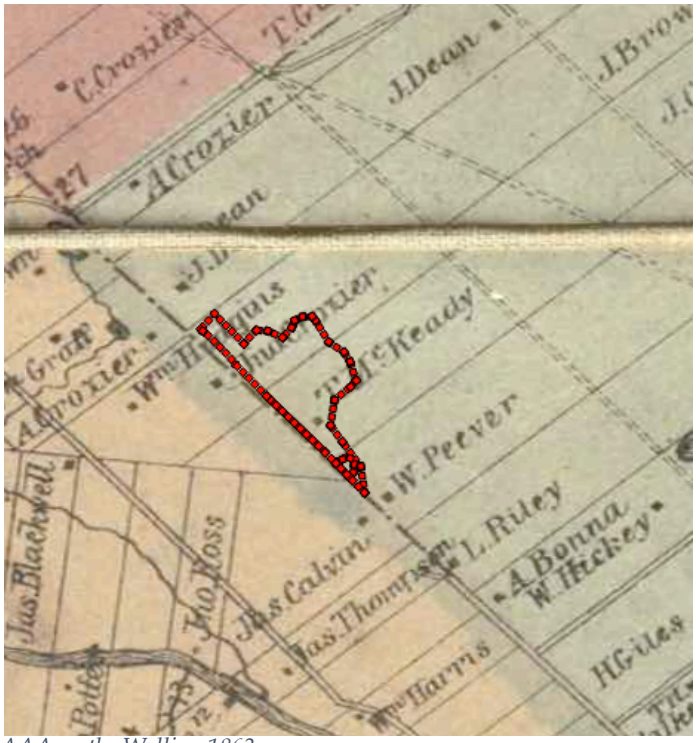


Figure 7: The location of the AAA on the Walling 1863 map.

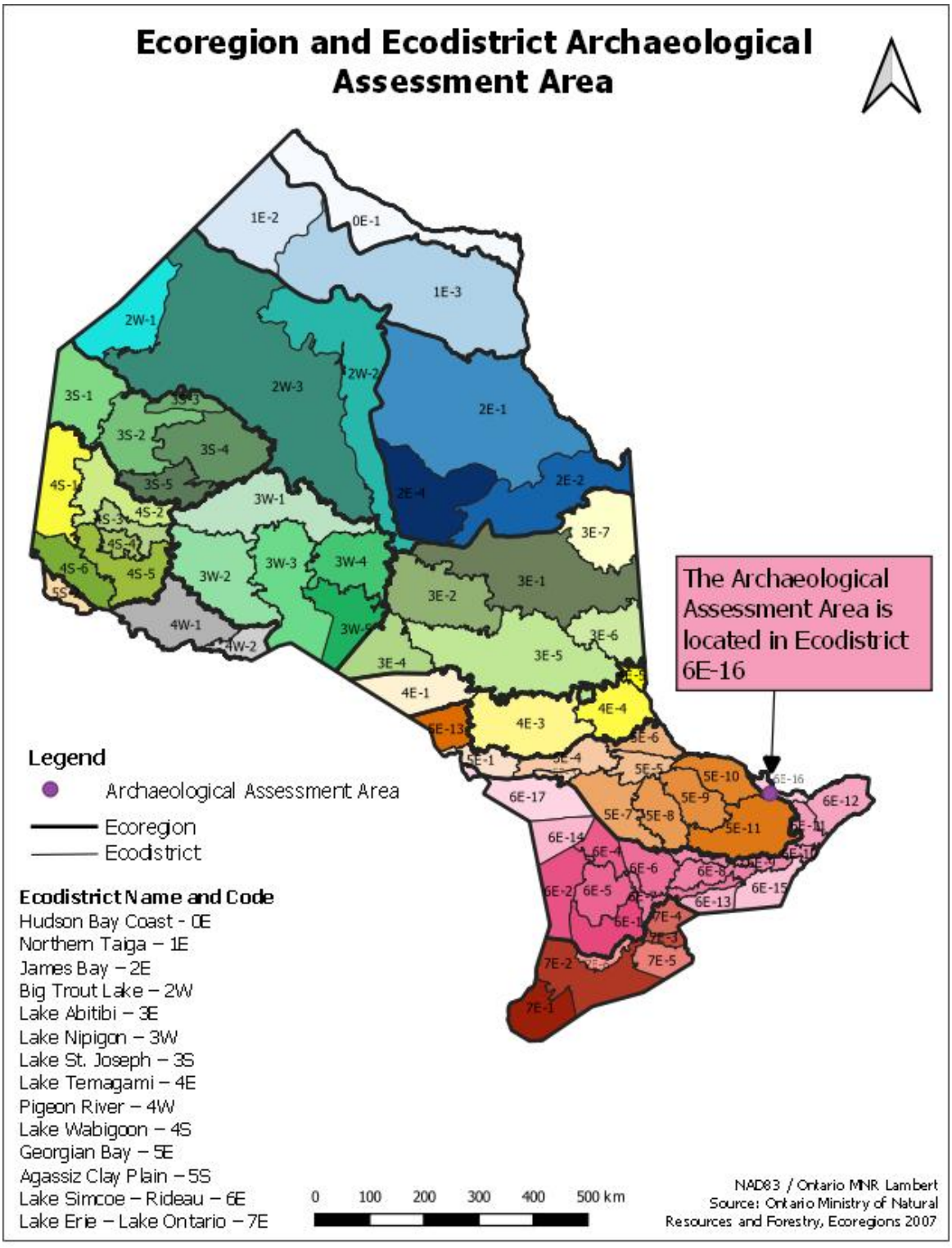


Figure 8: Ecoregion location of the AAA

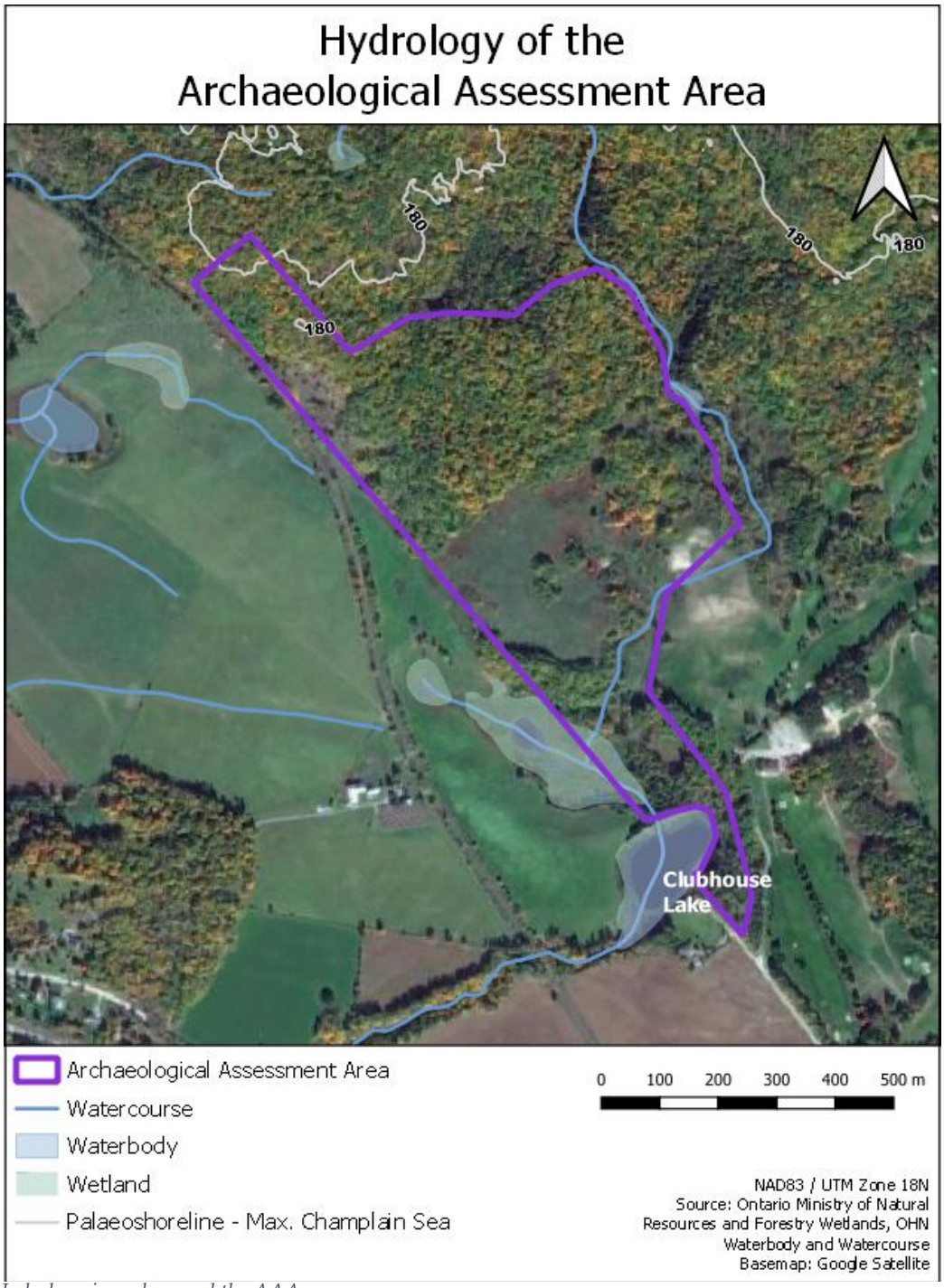


Figure 9: Hydrology in and around the AAA

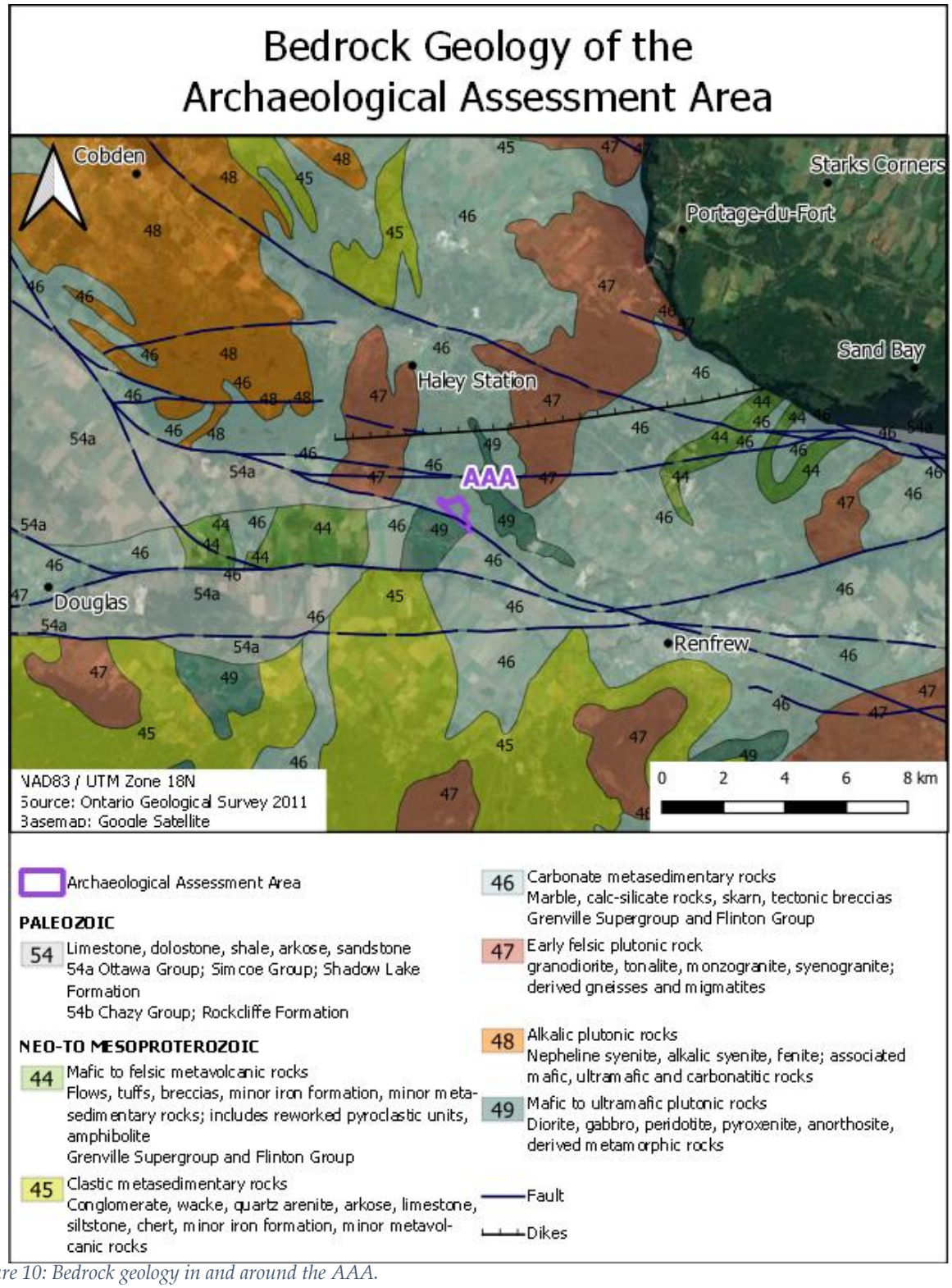


Figure 10: Bedrock geology in and around the AAA.

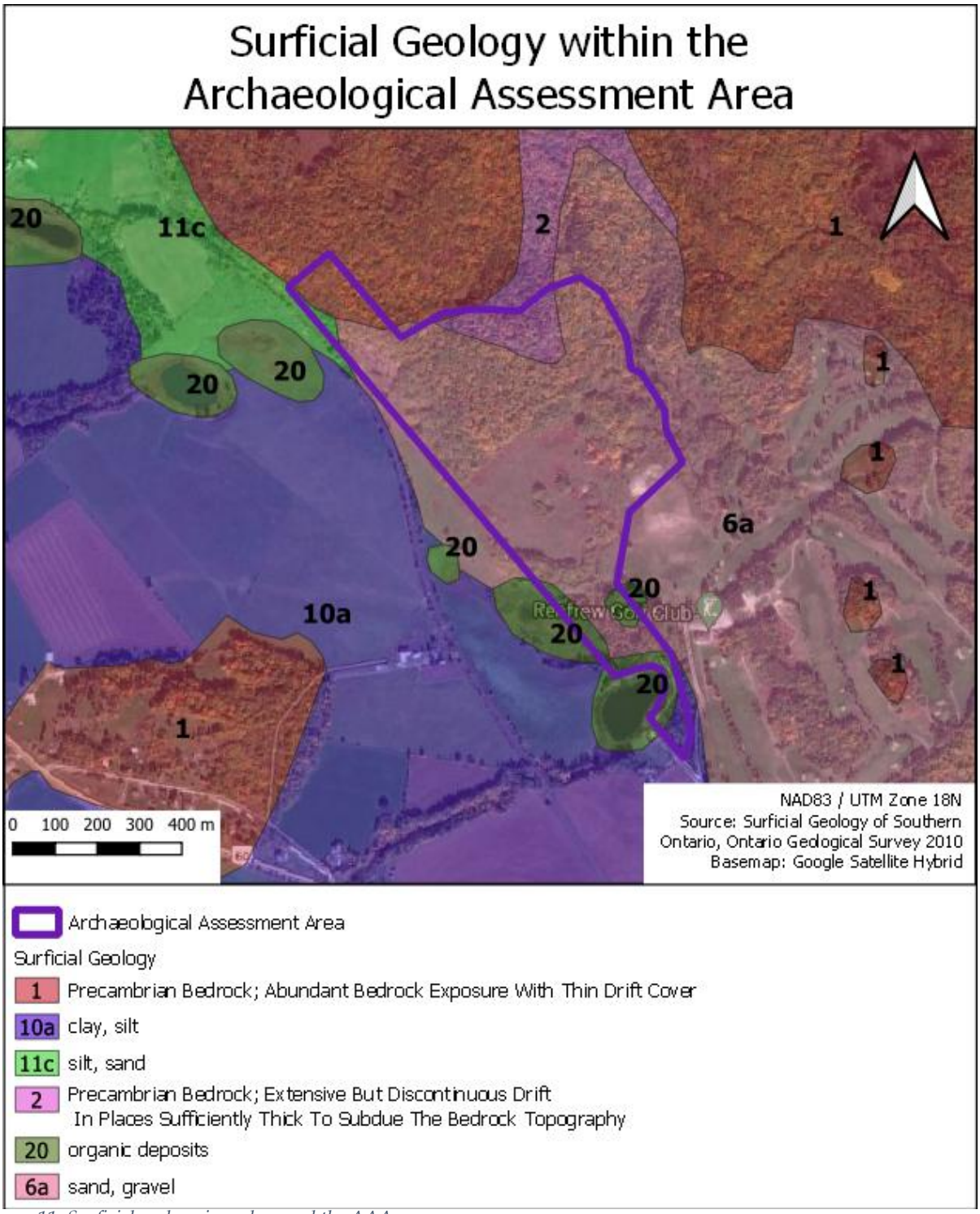


Figure 11: Surficial geology in and around the AAA

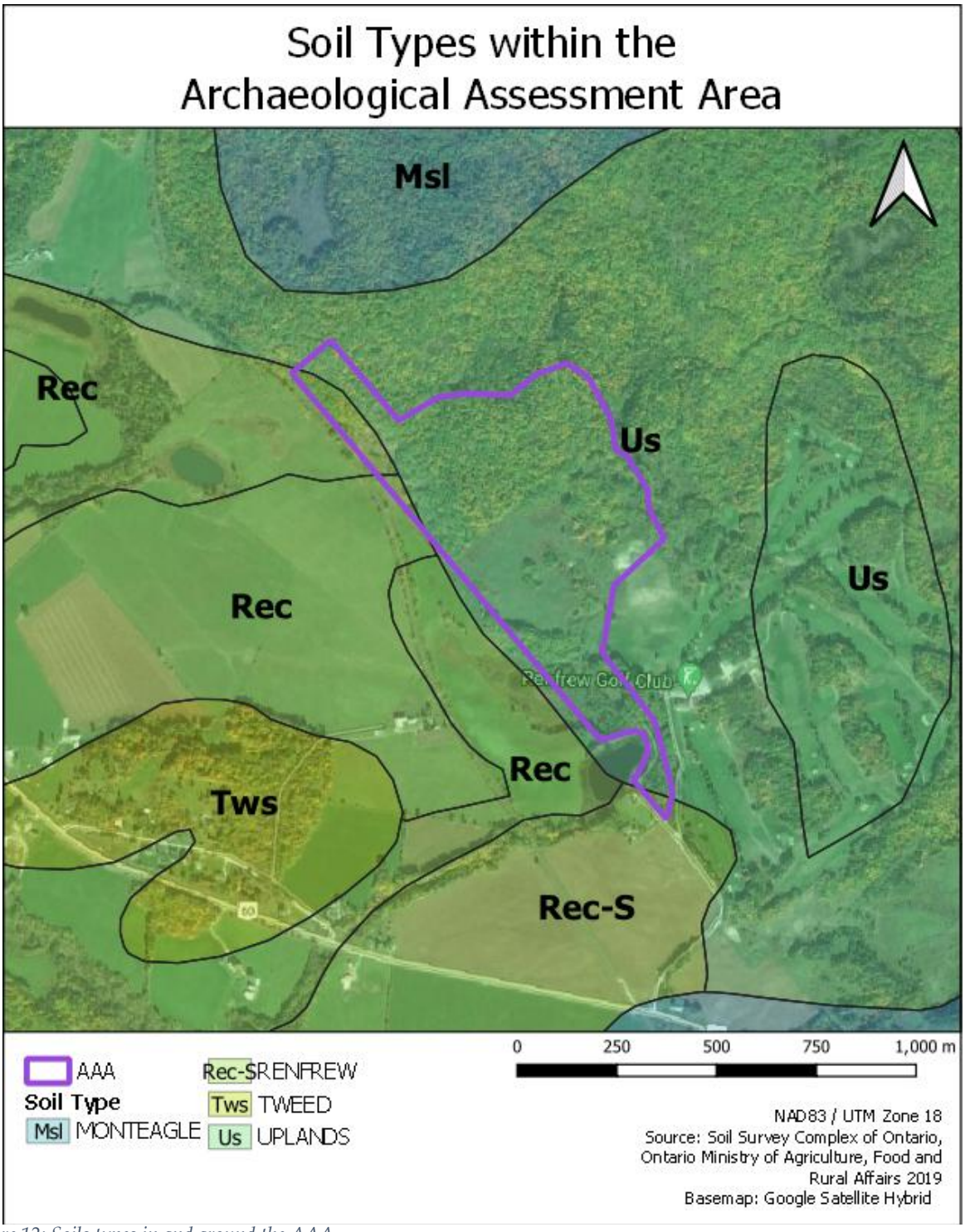


Figure 12: Soils types in and around the AAA

Due to the sensitive locational data in figure 13, it has been placed in the Supplemental Document associated with this report.

Figure 13: Location map of BjGe-4

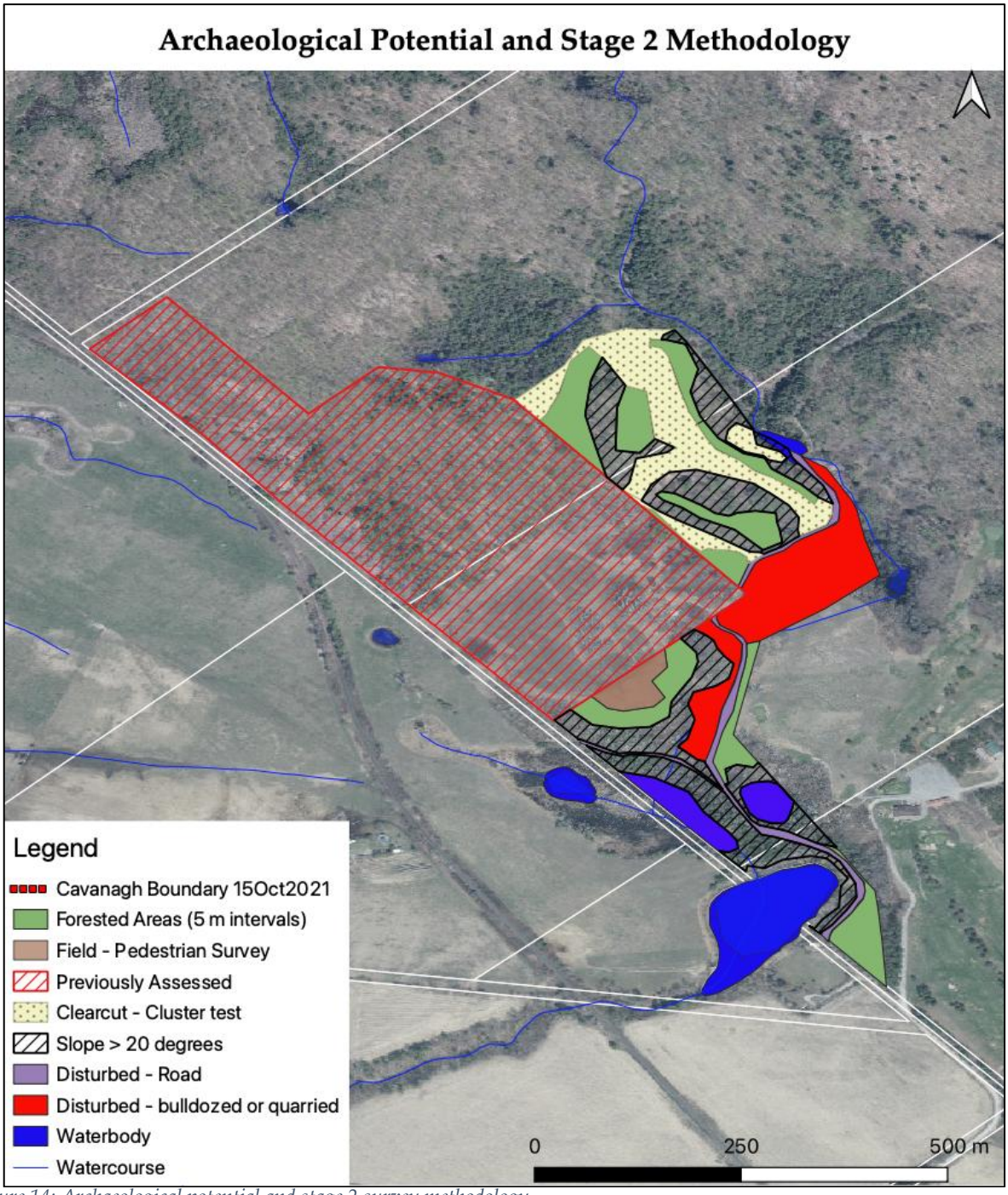


Figure 14: Archaeological potential and stage 2 survey methodology

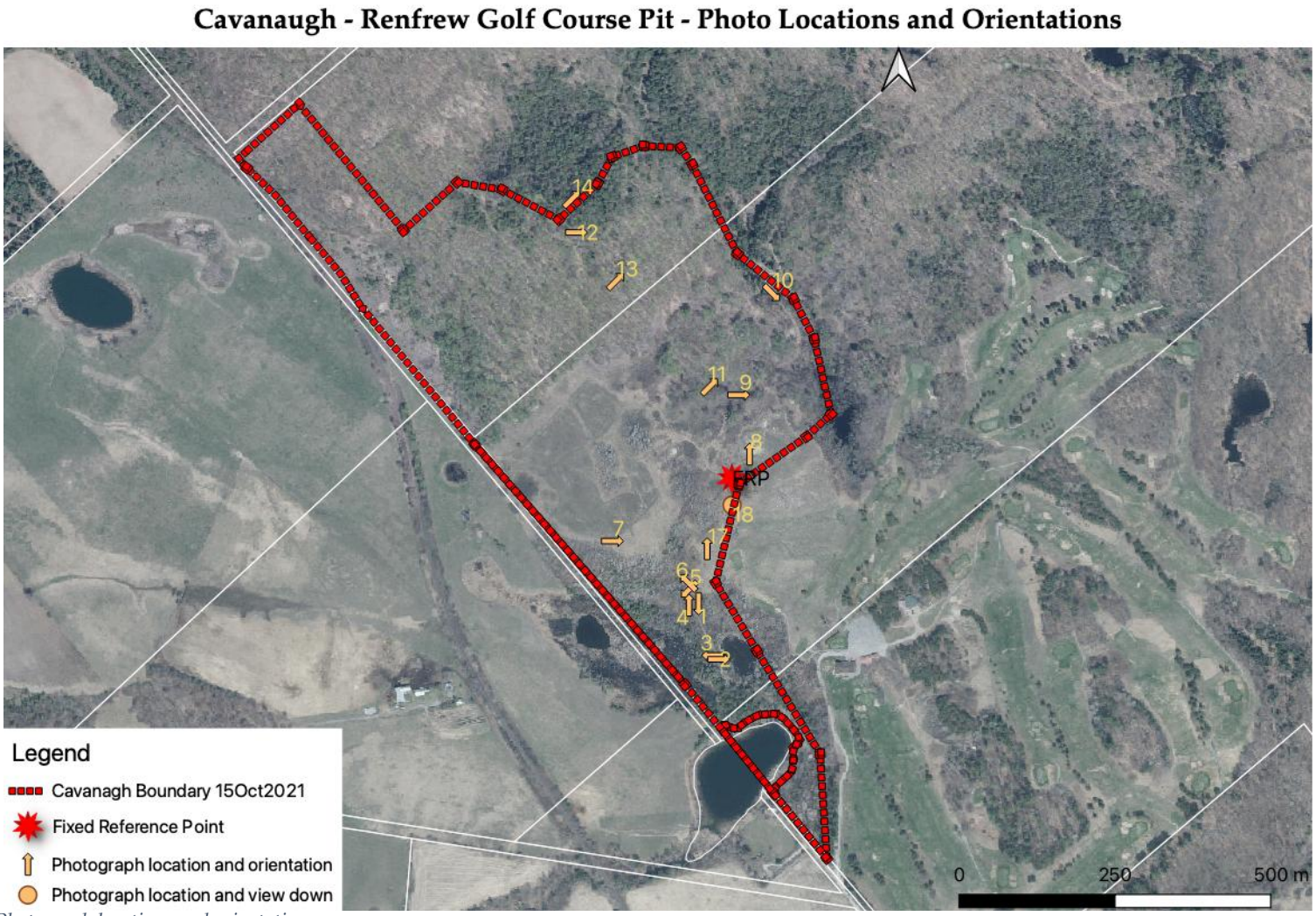


Figure 15: Photograph locations and orientations

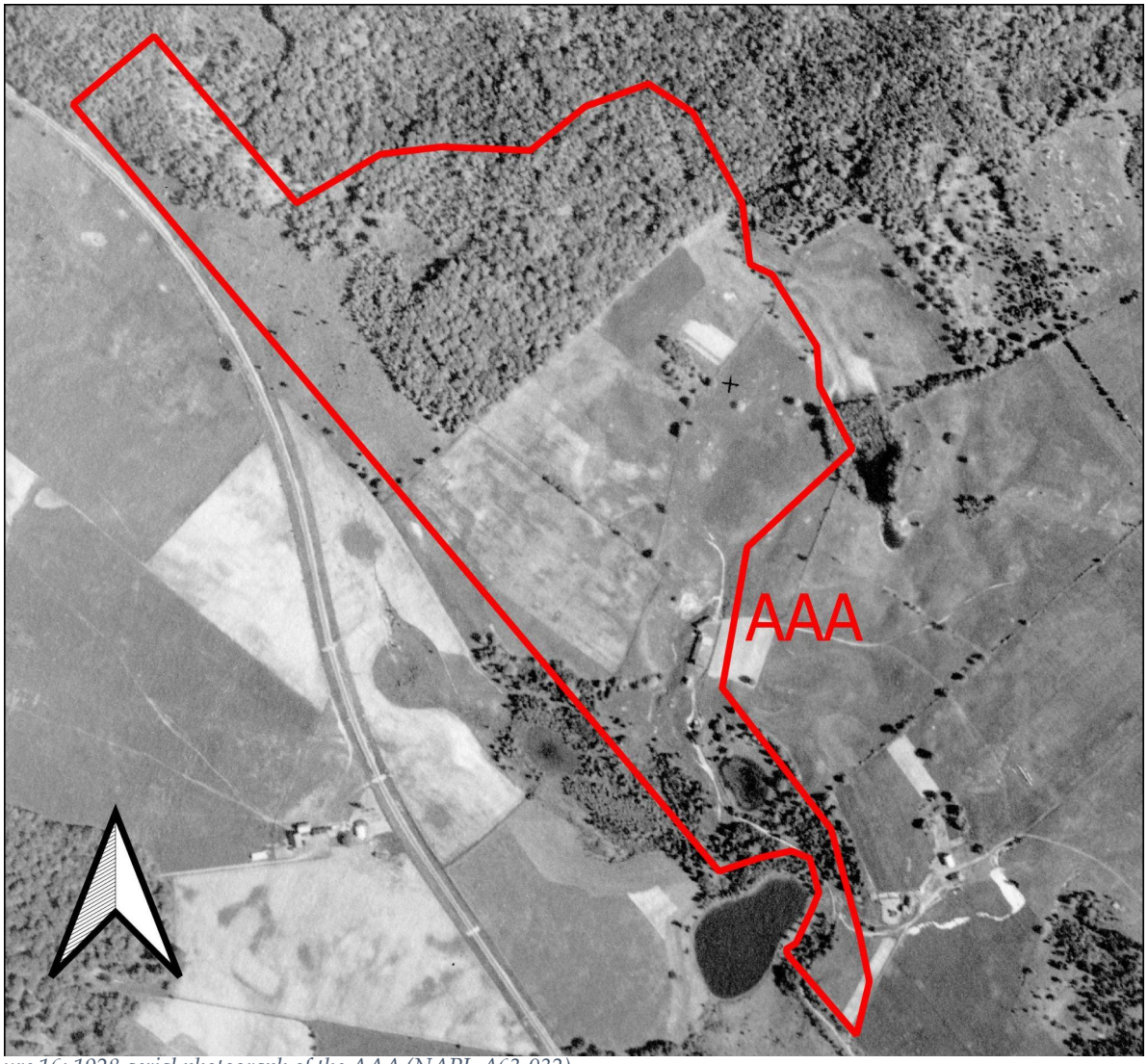


Figure 16: 1928 aerial photograph of the AAA (NAPL A63-032)

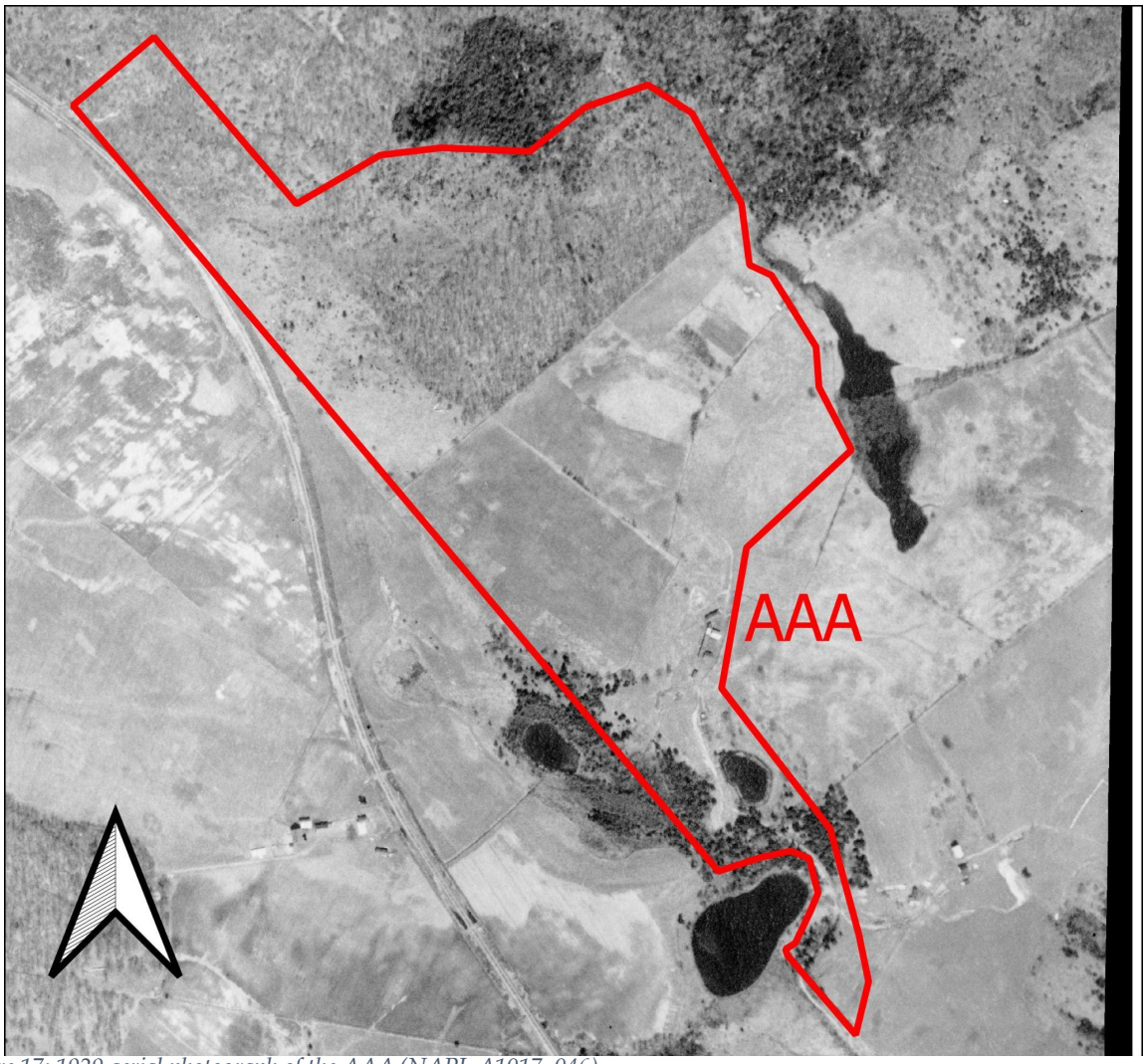


Figure 17: 1929 aerial photograph of the AAA (NAPL A1017_046)

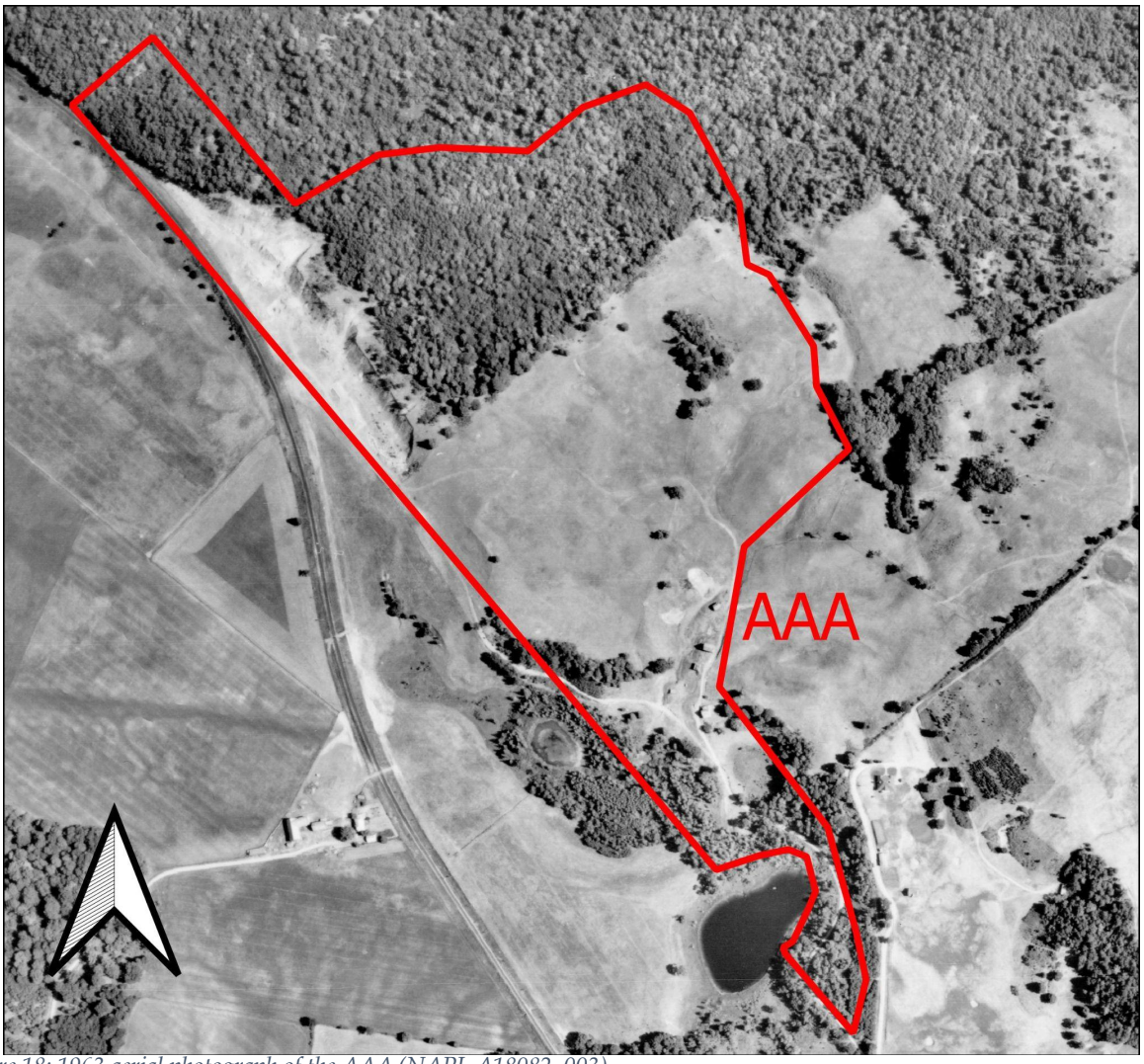


Figure 18: 1963 aerial photograph of the AAA (NAPL A18082_003)

Due to the sensitive locational data in this figure, it has been placed in the Supplemental Document associated with this report.

Figure 19: Results of the Stage 2 archaeological Assessment

Due to the sensitive locational data in this figure, it has been placed in the Supplemental Document associated with this report.

Figure 20: BjGe-9 - Foundations 1 and 2

Figure 21: Aerial view of BjGe-9 Foundation 1

Figure 22: Aerial view of BjGe-9 Foundation 2

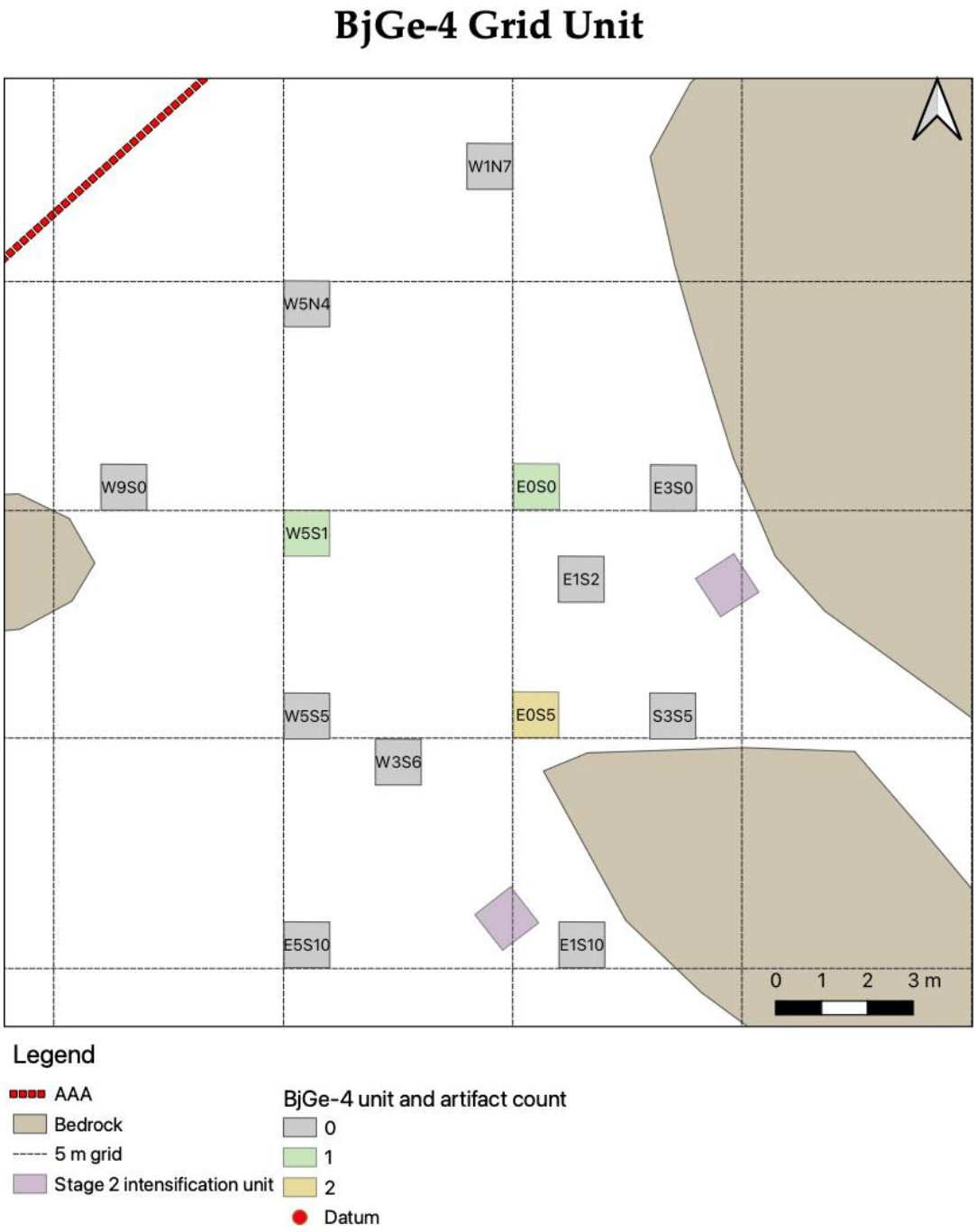


Figure 23: BjGe-4 grid map

Due to the sensitive locational data in this figure, it has been placed in the Supplemental Document associated with this report.

Figure 24: Location of BjGe-4, BjGe-8, and BjGe-9

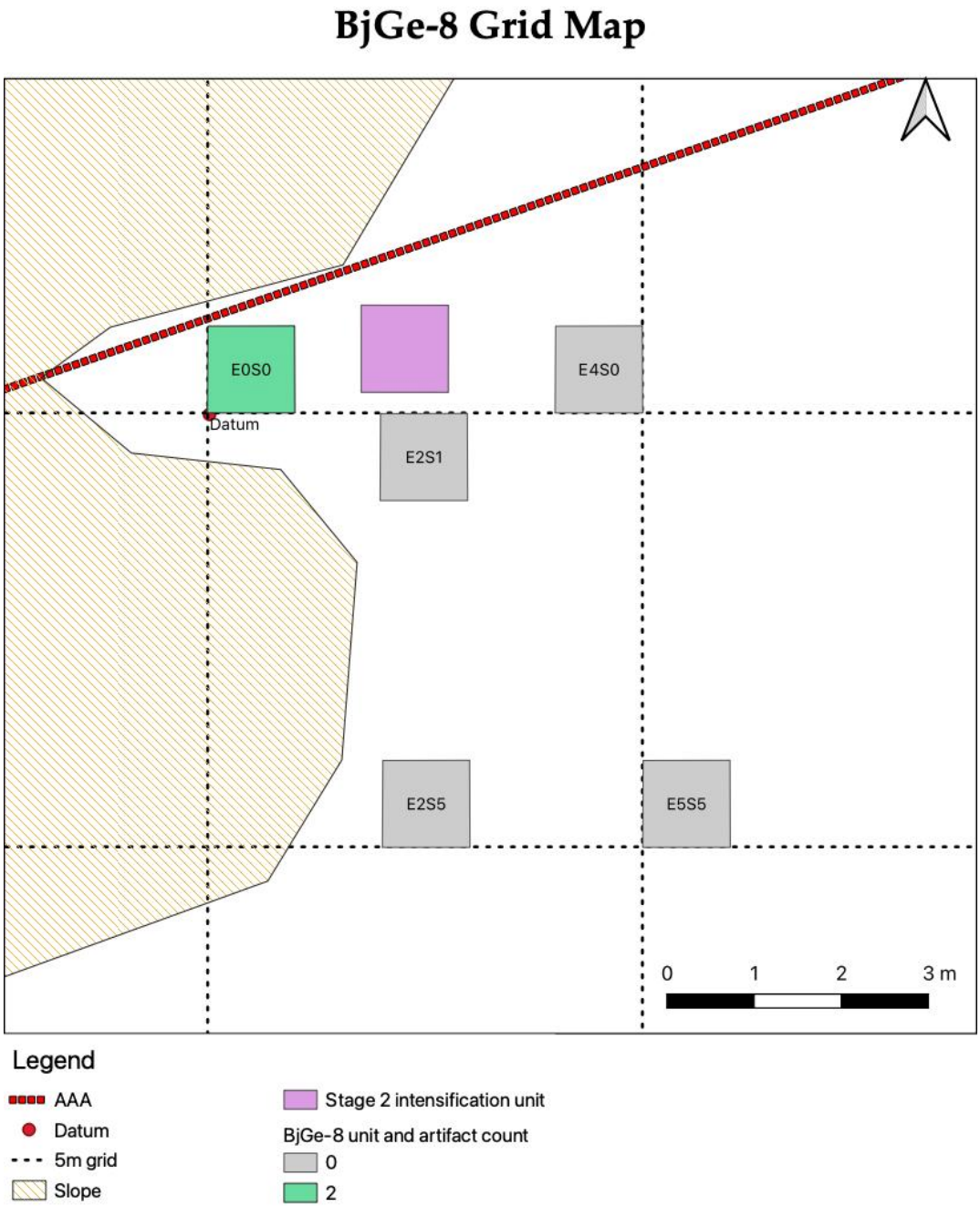


Figure 25: BjGe-8 grid map

10 Photographs

Photograph 1: Road through assessment area

Photograph 2: Pond in assessment area.

Photograph 3: Example of the slope in the assessment area.

Photograph 4: Example of the disturbance in the assessment area

Photograph 5: Example of the disturbance and slope in the assessment area.

Photograph 6: Example of disturbance, slope and the watercourse that runs through the assessment area.

Photograph 7: Agricultural field in the assessment area.

Photograph 8: Area that has been stripped.

Photograph 9: Disturbance in the assessment area

Photograph 10: Road in the north end of the assessment area.

Photograph 11: Showing the ridges in the assessment area.

Photograph 12: Clearcut in the assessment area

Photograph 13: Example of ground surface within the clearcut area

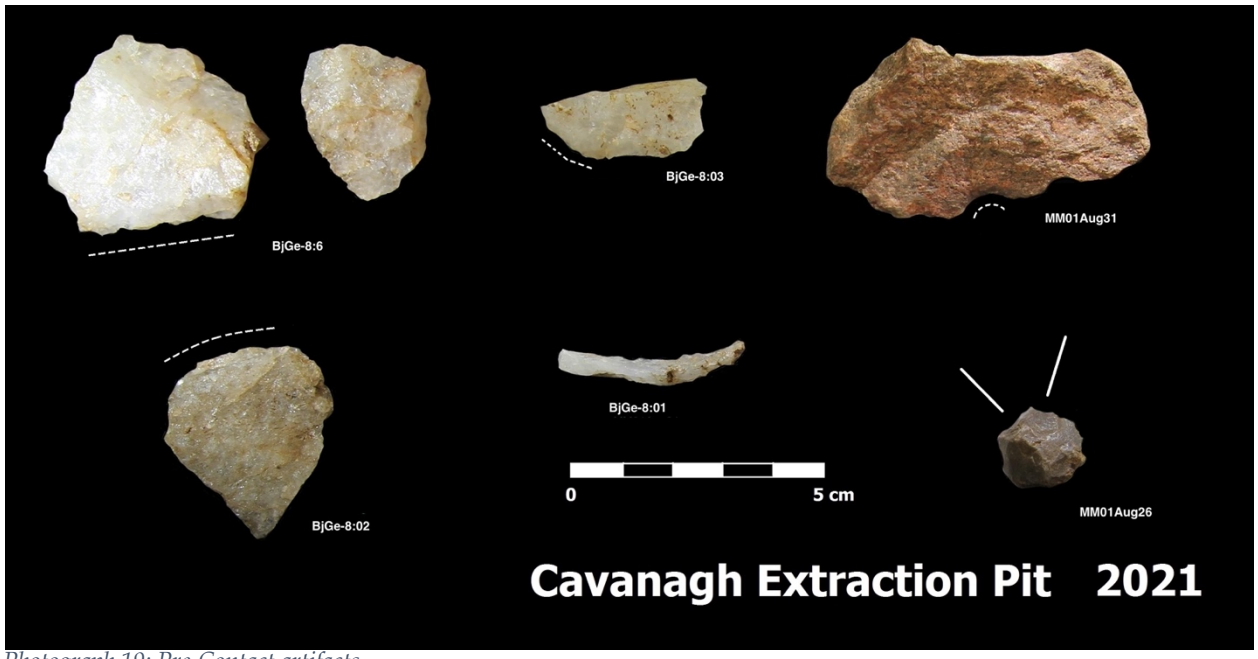
Photograph 14: Example of poorly drained areas within the assessment area.

Photograph 15: Foundation 1 – stone.

Photograph 16: Foundation 2 – stone

Photograph 17: Foundation 3 - poured concrete.

Photograph 18: Shovel test pit



Photograph 19: Pre-Contact artifacts

Photograph 20 Foundation 1. View of section of wall to the south of the feature entrance.

Photograph 21: view east of the interior of the eastern wall of foundation 1

Photograph 22: view east of the northern wall of foundation 1

Photograph 23: view northwest of the southern wall of foundation 1

Photograph 24: Post contact Euro-Canadian artifacts from BjGe-9

Photograph 25: Foundation 2. View north

Photograph 26: Foundation 2. Window reveal.

Photograph 27: Examples of categories from BjGe-9. BjGe-9:13 – Faunal, A-Toy, B- Unknown, C-Fuel

Photograph 28: Examples of Categories from BjGe-9. A-vehicle trim, B-vinyl record, C-Clear flat glass, D- trap, E - Light bulb fragment, and F - AA battery

Photograph 29: BjGe-4 Unit W3S6

Photograph 30: BjGe-8: Bedrock outcrop

Photograph 31: BjGe-8 Unit E2S1

11 Appendix A: Catalog

Number	Address	QTY	Material	Object	Comments	Reference
1	CC01Aug 24	1	Quartz	Flake		
2	CC01Aug 24 SW	1	Quartz	Fragment		
3	MM01Aug26	1	Chert	Retouched Fragment	Beaked fragment	
5	MM01Aug31	1	Gneiss	Flake		
6	MM01 Aug 31 NE	1	chert?	Flake	Vascular material	
BjGe-8:1	MM01Aug24 TP	1	Quartz	Flake	Small, scimitar-like.	
BjGe-8:2	MM01Aug24 unit	1	Quartz and gneiss	Flake	Crushing on part of the edge of the quartz side.	McGee & Swayze 2008
BjGe-8:3	MM01Aug24 unit	1	Quartz	Flake	Micro-polish? No regular flaking visible under microscope	McGee & Swayze 2008
BjGe-8:4	MM01Aug24 unit	2	Quartz	Flake	Overall general shape	
BjGe-8:5	MM01Aug24 unit	1	Quartz	Core	Core-like w/flakes removed. Hinge fracture?	
BjGe-8:6	BjGe-8 E0S0	2	Quartz	Flake		
BjGe-4:6	BjGe-4 E0S0	1	Quartz	Fragment	Possible working along one edge?	
BjGe-4:7	BjGe-4 E0S5	2	Quartz	Flake Fragment	One sample looks like the results of bipolar percussion. Other may be a broken flake. No working or retouch visible under microscope. No bulb of percussion. Decent platform.	
BjGe-4:8	BjGe-4 W5S1	1	Quartz	Flake	Has overall general shape, platform is weak and no bulb of percussion evident. Poor example.	
BjGe-9:1	CC01 Oct 20/21 NE	1	ceramic	Food T&E	flow blue. 1845-1865 and 1890s and 1920s	Kenyon 1985a, 1985b, 1985c; Majewski and O'Brien 1987
BjGe-9:2	CC01 Oct 20/21 S	2	metal	Metal T&E	1810s-1900s	Emery 2012
BjGe-9:3	CC01 Oct 20/21 SW	8	metal	Metal T&E	1850s-1900s	Emery 2012, Adams 2002
BjGe-9:4	CC01 Oct 20/21 NE	4	glass	Personal	Jas. Clark Druggist Renfrew Ontario medicine bottle. Pharmacist in Renfrew between 1881-1910.	Census records 1881-1910
BjGe-9:5	CC01 Oct 20/21 0-10 cm	6	glass	Food T&E	Very small fragments. Dates 1800 to 1930s	Lindsey 2020
BjGe-9:6	CC01 Oct 20/21 0-10 cm	2	ceramic	Food T&E	flow blue. 1845-1865 and 1890s and 1920s	Kenyon 1985a, 1985b, 1985c; Majewski and O'Brien 1987
BjGe-9:7	CC01 Oct 20/21 0-10 cm	1	metal	Structural	Takes skeleton keys which were used until the 1950s	
BjGe-9:8	CC01 Oct 20/21 10-20 cm	1	glass	Personal	Jas. Clark Druggist Renfrew Ontario medicine bottle. Pharmacist in Renfrew between 1881-1910.	
BjGe-9:9	CC01 Oct 20/21 10-20 cm	15	ceramic	Food T&E	flow blue. 1845-1865 and 1890s and 1920s. Plate? Several pieces mend	Kenyon 1985a, 1985b, 1985c; Majewski and O'Brien 1987
BjGe-9:10	CC01 Oct 20/21 10-20 cm	2	metal	Metal T&E	1850s-1900s	Emery 2012, Adams 2002

Number	Address	QTY	Material	Object	Comments	Reference
BjGe-9:11	CC01 Oct 20/21 10-20 cm	14	glass	Food T&E	One bottle top (shoulders, neck and lip intact).	
BjGe-9:12	CC01 Oct 20/21 10-20 cm	1	glass	Food T&E	Plate?	
BjGe-9:13	CC01 Oct 20/21 10-20 cm	1	bone	Faunal	cut	
BjGe-9:14	CC01 Oct 20/21 20-30 cm	23	glass	Food T&E	From one maybe two containers	
BjGe-9:15	CC01 Oct 20/21 20-30 cm	8	metal	Metal T&E	1510s-1900s	Emery 2012, Adams 2002
BjGe-9:16	CC01 Oct 20/21 20-30 cm	2	clay	Personal	McDougall/Glasgow/ 1847-1967	Bradley 2000
BjGe-9:17	CC01 Oct 20/21 20-30 cm	1	glass	Personal	embossed “B.F. G Co.” and “T.” post 1890	Lindsey 2020
BjGe-9:18	CC01 Oct 20/21 20-30 cm	1	ceramic	Food T&E	flow blue. 1845-1865 and 1890s and 1920s.	Kenyon 1985a, 1985b, 1985c; Majewski and O’Brien 1987
BjGe-9:19	CC01 Oct 20/21 20-30 cm	1	ceramic	Food T&E	late palette polychrome pearlware	
BjGe-9:20	CC01 Oct 20/21 30-40 cm	1	ceramic	Food T&E	Pearlware	
BjGe-9:21	CC01 Oct 20/21 30-40 cm	2	ceramic	Food T&E		
BjGe-9:22	CC01 Oct 20/21 30-40 cm	2	ceramic	Food T&E		
BjGe-9:23	CC01 Oct 20/21 30-40 cm	3	ceramic	Food T&E	late palette polychrome pearlware	
BjGe-9:24	CC01 Oct 20/21 30-40 cm	4	metal	Metal T&E	1850s-1900s	Emery 2012, Adams 2002
BjGe-9:25	MK EU 01	2	metal	Metal T&E	1850s-1900s	Emery 2012, Adams 2002
BjGe-9:26	MK EU 02	1	bone	Personal		
BjGe-9:27	MK EU 02	23	metal	Metal T&E	1850s-1900s	Emery 2012, Adams 2002
BjGe-9:28	MK EU 03	2	clay	Personal	One with T.D. stamped on the pipe bowl.	Reid 1976
BjGe-9:29	MK EU 03	1	ceramic	Food T&E	flow blue. 1845-1865 and 1890s and 1920s	Kenyon 1985a, 1985b, 1985c; Majewski and O’Brien 1987
BjGe-9:30	MK EU 03	6	metal	Metal T&E	1850s-1900s	Emery 2012, Adams 2002
BjGe-9:31	MK EU 03	1	ceramic	Food T&E		
BjGe-9:32	Foundation 1	3	metal	Exchange medium	Coins - 3 Upper Canada pennies (one date unknown but same size as 1859, one 1854 and one 1859)	
BjGe-9:33	Foundation 1	1	clay	Personal	Splatter of varnish on stem	