

MINTO COMMUNITIES INC.

STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT

AVALON - AQUAVIEW DEVELOPMENT

PARTS OF LOT 1 AND LOT2, CONCESSION 10, GEOGRAPHIC TOWNSHIP OF
CUMBERLAND, CITY OF OTTAWA, ONTARIO

MAY 17, 2018





STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT AVALON - AQUAVIEW DEVELOPMENT

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EXECUTIVE SUMMARY

WSP Canada Group Ltd. was retained by Minto Communities Inc. to conduct a Stage 1-2 Archaeological Assessment of the proposed Avalon - Aquaview development in Ottawa which is legally described as two properties comprised of Parts of Lots 1 and 2, Concession 10, Geographic Township of Cumberland, in the City of Ottawa, Province of Ontario.

This Archaeological Assessment has been triggered by Minto Communities Inc.'s intent to proceed with rezoning and subdivision applications. The City of Ottawa is the approval authority under the *Planning Act*. The rezoning and subdivision application process includes the requirement for an archaeological assessment as one of the conditions for development approval to ensure that the development proponent meets their legal obligations under the *Ontario Heritage Act*.

Archaeological activities were carried out in accordance with the Standards and Guidelines for Consultant Archaeologists (Ministry of Tourism, Culture and Sport 2011). This study involved a review of documents pertaining to the project area including historic maps, aerial photographs and local histories. A property inspection was conducted on April 26, 2018. The majority of the project area was soil stripped between 1999 and 2005 as shown from a comparison of aerial photography for the area. The property inspection noted considerable areas of disturbance comprised of drainage channels, areas subject to soil stripping and berms. Only one discrete area within the project area has not been completely disturbed; at the location of a former residential structure along Tenth Line Road.

Historic mapping of the region shows a historic structure at the location within the project area which was not subject to soil stripping. The historic structure was demolished post-2005, however, it was determined that the area was not fully disturbed during demolition due to the retention of the large trees which surrounded the house. Due to the relatively undisturbed nature of the small area in proximity to the historic Tenth Line Road and the historic house structure; it was determined that this portion of the project area retained potential for the recovery of historic archaeological materials.

Stage 2 Test Pit Survey was conducted on the area retaining its archaeological potential on May 8, 2018. The Test Pit Survey encountered compact gravel around the location of the former house foundation and natural soil profiles within the yard surrounding the house. No archaeological features or resources were discovered during the Stage 2 Test Pit Survey.

The recommendations of this Stage 1-2 Archaeological Assessment are as follows:

- 1 No further archaeological assessment is required for the project area.**

1 PROJECT CONTEXT

1.1 DEVELOPMENT CONTEXT

WSP Canada Group Ltd. was retained by Minto Communities Inc. to conduct a Stage 1 & 2 Archaeological Assessment of the Avalon - Aquaview subdivision in Ottawa which is legally described as two properties comprising of Parts of Lots 1 and 2, Concession 10, Geographic Township of Cumberland, in the City of Ottawa, Province of Ontario (**FIGURE 1, P.27**).

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The land is owned by Minto Communities Inc. Permission to access the property to conduct the property inspection was granted by Beth Henderson of Minto Communities Inc. and no limits were placed on this access.

The project area consists of two parcels of land. The smaller of the two, labelled as Stage 1 and is situated south of the Storm Water Management pond, the larger of the two, labelled as Stage 2, is bounded by Tenth Line Road, Lakepointe Drive and Aquaview Drive (**FIGURE 2, P.28**).

1.2 OBJECTIVES

This Stage 1 and Stage 2 archaeological assessment was completed to identify known archaeological and heritage resources on and in the vicinity of the project area, assess the archaeological potential, and determine if there are archaeological sites within the project area. The assessment will determine if any additional archaeological investigations are required. The objectives of both a Stage 1 and Stage 2 assessment generally flow from principles outlined in the *Ontario Heritage Act* (Consolidated 2007) and the *Standards and Guidelines for Consulting Archaeologists* (2011). More specifically, the assessment was completed with the following objectives:

- Provide information about the project area's geography, history, previous archaeological fieldwork and current land condition;
 - Evaluate in detail the project area's archaeological potential, which will support recommendations for Stage 2 surveys for all or parts of the project area;
 - Document archaeological resources within the project area;
 - Determine whether the project area contains archaeological resources requiring further assessment; and,
 - Recommend appropriate Stage 3 assessment strategies for archaeological sites identified.
-

1.3 HISTORICAL CONTEXT

1.3.1 PRE-EUROPEAN CONTACT PERIOD

The following presents a brief chronological synthesis of pre-contact occupation based on Laliberté (1999), Watson (1999), and Wright (1972, 1995).

Human occupation of Ontario is observed to begin following the retreat of the Laurentide Ice Sheet at the end of the Wisconsin Glacial period. This newly deglaciated land was subsequently settled by groups of hunter-gatherers who had previously lived to the south of the Great Lakes. These first inhabitants are identified as part of the Early Paleoindian Period (11,000 to 10,400 years before present (BP)).

Paleoindian Period populations are believed to have utilized a highly mobile hunter-gatherer subsistence life-style, covering large territories in pursuit of preferred game animals. Diagnostic projectile points associated with Early Paleoindian Period sites suggest that large game animals, such as caribou or extinct Pleistocene mammals, were hunted using thrusting or throwing spears. These projectile points are differentiated from those of subsequent cultural periods by the presence of distinctive channel-flaking, or 'fluting', at the base.

It is unlikely that Early Paleoindian Period occupation extended into the Ottawa area, as the post-glacial environment at the time would not have supported sufficient floral or faunal resources. It was not until the Late Paleoindian Period (10,400 to 10,000 BP) that the expansion of suitable habitat had reached the Ottawa area.

Late Paleoindian Period lifeways exhibit a number of similarities to the Early Paleoindian Period, with a highly mobile hunter-gatherer lifestyle based on the seasonal movement of animals. Differences, however, can be observed archaeologically in the increased frequency of sites, shift in faunal resources reflecting new forest compositions, and the transition from 'fluted' to unfluted lanceolate projectile points (to name a few). The limited presence of Late Paleoindian Period archaeological sites near the project area suggests that it wasn't until the Archaic Period that significant human occupation occurred in the region.

The transition from the Late Paleoindian to Archaic Period is marked by an increase in projectile point diversity, the introduction of notches to projectile points, new tool technologies, reduced hunting territories/population movement, and an increase in trade activities. To better define the Archaic Period, archaeologists divide the Archaic Period into three Phases: Early, Middle, and Late.

During the Early Archaic Period (10,000 to 8,000 BP) site size is observed to increase, while populations continued to exploit a hunter-gatherer subsistence pattern. Woodworking becomes an important aspect of the Early Archaic Period lifestyle as evidenced by the emergence of specialized woodworking tools.

The Middle Archaic Period (8,000 to 4,500 BP) emerges as the local environment began to resemble modern conditions. In addition to specialized woodworking tools, fishing implements such as net-sinkers begin to appear in the archaeological record. The presence of such objects suggests that fishing was becoming an important aspect of Middle Archaic Period subsistence strategies. Also observed archaeologically is the shift from using high quality bedrock lithic resources to those of lower quality, readily available materials found in glacial tills and river gravels. This transition has been interpreted as representing an increase in local population density, reducing group territory size.

It is during the Middle Archaic that the Laurentian Archaic Tradition appears. Sites associated with the Laurentian Archaic are found in the transitional zones between deciduous and coniferous forests across south-eastern Ontario, western Quebec, northern New York State, and Vermont. Artifacts associated with the Laurentian Archaic include ground slate semi-lunar knives, plummets, ground slate projectile points and knives, and ground stone tools such as adzes, gouges, and grooved axes.

A continued decrease in territory sized and increase in site density characterizes the Late Archaic Period (4,500 to 2,900 BP). The Late Archaic Period also marks the introduction of the first true cemeteries. The use of defined cemeteries rather than single or limited interments is interpreted by some to represent symbolic claims over local territories and resources during a time of increased population densities and resource competition. Increased territoriality is also interpreted as the catalyst for the diversification of projectile point morphologies during the Late Archaic Period, as well as the intensification of trade networks previously established during the Middle Archaic Period.

With the advent of pottery came the Woodland Period. Similar to the Archaic period, archeologists have divided the Woodland into three phases: Early, Middle, and Late.

While the differences between the Early Woodland Period (2,900 to 2,200 BP) and the Late Archaic Period is minimal (limited primarily to the introduction of ceramic technology), the Middle Woodland Period (2,200 to 1,100 BP) marks a distinct transition in pre-contact lifeways.

Sites located along rivers and tributaries during the Middle Woodland Period appear to have been occupied repeatedly for several hundred years. These densely occupied sites indicate the increased importance and reliance of fish as a subsistence resource. While the seasonal use of the same site location is observed for earlier cultural periods, Middle Woodland Period sites functioned as base camps, occupied on and off throughout the year.

The lifeways of the Middle Woodland Period continue into the Late Woodland Period (1,100 to 350 BP). The Late Woodland Period, comprised of the Early, Middle, and Late Iroquoian Periods, is generally used to describe the timespan during which agriculture developed and semi-permanent villages were established. During the Late Iroquoian Period (600 to 350 BP) these village sites could be up to 10 acres in size with numerous smaller satellite settlements in close proximity. While this development is observed along the east end of Lake Ontario and along the St. Lawrence River up to Quebec, no evidence for large Late Woodland Period village sites exists for the Ottawa River area at this time.

1.3.2 POST-EUROPEAN CONTACT PERIOD

Ètienne Brûlé was the first European to travel to the Ottawa Valley in 1610. He, along with a group of Algonquin, was sent by Samuel de Champlain to explore the route leading to the Great Lake Huron and to learn the native language. Champlain himself followed in 1613 where he portaged at the Chaudière Falls and visited Allumette Island, located down river to the East of Ottawa. Champlain wrote accounts of his travels, and was the record the presence of various Anishinabe groups living in the area of the Ottawa River. In his accounts, he listed a number of different groups;

- The Onontchataronons in the southern portion of the Ottawa River, near the South Nation River and Rideau River;
- The Kichesipirinis on Allumette Island;
- The Weskarinis near the Petit Nation River;
- The Matouweskarinis in the Madawaska Valley; and
- The Kinouchepirinis downstream from Allumette Island.

Champlain also recorded tensions and warfare in the area between the Huron, Algonquin, Iroquois and other southern nations over the control of the Ottawa River as it served as a major transport and trade route. At this time, occupation in Eastern Ontario was heavily influenced by the involvement of Indigenous group with the fur trade. The success of the trade was due to the Algonquian speaking groups' extensive knowledge of land and their use of canoes which facilitated the start of the French-Huron fur trade. The Algonquian speaking groups acted as intermediaries, transferring goods between the French travelling up the St Lawrence River and the interior Indigenous groups in the Great Lakes region. As the fur trade grew, the Ottawa River came to be widely used by Voyageurs (French settlers who transported furs by canoe) as the main route for the transportation of goods from Montreal and Quebec to the interior of Canada.

Despite the success of the fur trade, and the importance of the Ottawa River, permanent European settlement of the area now occupied by Ottawa did not begin until 1800. Philemon Wright, a wealthy farmer from Massachusetts, led a group of 5 families and 25 labourers from Massachusetts to a spot on the north side of the Ottawa River by the Chaudière Falls. The settlement, known as Wright's Town, grew with the construction of farms, shops, mills and other enterprises to make the small community self-sufficient. In 1807, Wright decided to attempt to use the vast woodlands in the area for lumber and attempted a journey on squared timber logs down to Quebec City as a raft. The journey was a success, and paved the way for the development of a successful timber industry in the area.

In 1809, Jehiel Collins opened a store on the south side of the Chaudière Falls in an attempt to recreate the economic success of Philemon Wright and Wright's Town. The area was first known as Collin's landing, then Bellows Landing (named after Caleb T. Bellows who acquired the store from Collins). Bellows Landing became Richmond Landing in 1818 when a group of settlers charged with creating a new road to Richmond stayed in the settlement. The new road became Richmond Road, and the settlement became known as Richmond Landing.

In the beginning the City of Ottawa consisted of a small, unnamed camp for members of the Royal Engineers working on the construction of the Rideau Canal under Lieutenant-Colonel John By. By 1827 this small camp had grown into the small town of Bytown.

The importance of the lumber industry along the Ottawa River continued to grow through the 1830's, becoming the primary focus for the region. The 1850's saw the addition of mills at Chaudière and Rideau Falls to produce squared timber. Continued growth meant that by 1855 Bytown incorporated as a city, changing its name Ottawa.

Ottawa's location and connection to transportation routes (such as the Grand Truck Railway) helped to secure its importance in Canada, resulting in its selection as the capital of the Province of Canada in 1857, and the capital of the Dominion of Canada in 1867.

The city's position as the capital of Canada ensured investment in the region. From 1871 to 1901 the population of Ottawa grew from 21,545 people to 59,928. While industrial establishments contributed to the growth of the city the outlying areas, like Cumberland Township, continued as rural agricultural areas well into the twentieth century.

1.3.3 PROJECT AREA SPECIFIC HISTORY

CUMBERLAND TOWNSHIP

Cumberland was originally incorporated as a township in 1780 as part of Russell County. It was originally named after the Duke of Cumberland Ernest Augustus (Gardiner, 1899). It was surveyed in 1789 as part of an official policy to settle the area through Crown Land Grants, however, there is no actual settlement recorded until 1801. These first documented settlers, the families of Amable Foubert and Abijah Dunning, immigrated to the area in the early 19th century (Belden, 1879). These first settlers occupied adjacent lots along the Ottawa River; the Foubert family occupying Lot 14 and the Dunning Family owning Lots 12 and 13.

Foubert had established a trading post in the town by 1807. Dunning was originally from Massachusetts and originally secured 800 acres in the area, but after becoming frustrated by the lack of improved infrastructure which would have encouraged trade and transportation, Abijah himself left the township in 1812. However, in 1817, Abijah's son, William returned to Cumberland in 1817. In 1844, George Dunning, probably William's son, opened the first store in the township and became the settlements' first post master (Belden, 1879).

It was not until the construction of Montreal Road in 1826 that a major overland transport route allowed for the settlement of the area by English, Irish, Scottish and French-Canadian immigrants. Although, still, the majority of settlement in the area at this time is along the riverside Lots, as the Ottawa River continued to play a vital role in the commercial development of the area due to its importance in the transportation of timber.

Through the early part of the 19th century, the township maintained a steady population of between 200-300 people, growth was still limited by inadequate access to the areas further inland. However, in the second half of the century, growth began to spread. This was facilitated in part by the construction of Navan Road to the south of the project area in 1840. Other connecting roads to Bytown and other settlements were established after this point, and this in turn led to the establishment of smaller communities inland; namely Bearbrook, Sarsfield, Navan and Chartrand.

Between 1840 and 1890 the population of Cumberland Village grew considerably. By 1858 it had reached over 1000 residents and included amenities such as general stores, hotels, trade ships, mills and other industries, particularly along the riverside. However, development in the interior was still very sparse well into the mid to late 19th century due to the lack of roadways (Belden, 1879).

The township remained rural and agricultural in focus through the 20th century until the commuter culture brought by the rise of the automobile resulted in the creation and expansion of suburban areas to Ottawa. The community of Orleans began to see increasing growth from the 1970s which progressed into Cumberland Township by the 1990s.

PROPERTY HISTORY

A study of available historic mapping shows that project area to be located well away from the main roads in 1862 (**FIGURE 3, P.29**). The present day Trim Road is the closest road in the area. By 1881, Tenth Line Road, along the west edge of the project area, had been established, and contemporary mapping shows a building just south of the project area, at the northern part of Lot 3 (**FIGURE 4, P.30**).

By 1908, the contemporary mapping suggests more development of the area, with properties lining Tenth Line Road, and a single structure marked within the project area (**FIGURE 5, P.31**). The road network is much more established at this time, which will undoubtedly have encouraged more settlement in the area.

The 1961 soils map does show a second building in the project area, although its proximity to the building shown on the 1908 map suggests that it is an outbuilding rather than a separate dwelling (**FIGURE 6, P.32**).

Mapping and Aerial photographs show the project area and region to be a sparsely populated agricultural landscape until the 1990s (**FIGURE 7 AND FIGURE 8, P.33-34**). 1976 Aerial photographs show the building on the 1908 maps to be still present within the project area and surrounded by agricultural fields. At this time, the building consists of a farmhouse and barn. The buildings are still present on 1999 aerial photographs, and clearly show the plough furrows in the surrounding agricultural landscape. However, new housing developments can be seen encroaching into the area north of Innes Road.

By 2005, the aerial photographs show the farmhouse and barn surrounded by a soil berm (**FIGURE 9, P.35**). The housing development has further encroached upon the project area, and the majority of the land within the project area has been soil stripped. Today the subject properties are surrounded by residential developments with a hydro corridor and parkland also in close association.

CUMBERLAND TOWNSHIP, CONSESSION 10, LOT 1

In 1837, according to the land registry, a Crown Patent for all 200 acres of Lot 1 was issued to Isabella McNab. The lot was not divided, but it did change hands on a number of occasions before it was transferred to Catherine Maitland in 1864 as a result of foreclosure.

In 1860, David Lochhead acquired the 'rear 50 acres' (the most westerly), and the same 50 acres were passed to William Stuart in 1873. In 1883 they passed to Felix Lalonde, who acquired the land, except for the 1 acre at the northwest corner. According to Census records, Felix Lalonde was a French-Canadian farmer. The lot was deeded to Jean Leger in 1898, but was bought back by Felix Lalonde in 1903.

The remaining 150 acres of Lot 1 were acquired by Philip Facett (Facette) in 1875. The census records suggest that the Facett family lived in a two-storey wooden house in 1891, however, it is not clear from the records if this house was situated within this Lot. Philip Facett is also listed as a French-Canadian farmer. In 1881, Cyrille Facett (Facette), acquired the most easterly 50 acres of Lot 1, but lost ownership of this in c.1890-92. In 1889, Napoleon Facette acquired the 50 acres to the east of his father, Philip, and Narcisse Facette acquired the remaining 50 acres to the west. Over time, the only parcel of land which remained in the hands of the Facette family was the 50 acres belonging to Narcisse Facette.

The 50-acre parcels of land then changed hands within the families until the middle of the 20th century.

CUMBERLAND TOWNSHIP, CONSESSION 10, LOT 2

In 1859, according to the land registry, a Crown Patent for all 200 acres of Lot 2 was issued to Pierre Rivait (Rivest). In 1861 Pierre Rivest Jr gave 50 acres of the lot to Pierre Rivest, Joseph Rivest and Calixte Rivest. The northern most 50 acres of the Lot were acquired by Isadore Traversy in 1863 and then by Charles Gaveau in 1864. The remaining 150 acres of the lot stayed in the hands of the Rivest family, however the project area is contained within the Northmost 50 acres, seen in the Land Registry as N 1/2 of N 1/2 and N pt 50.

Charles Gaveau retained this portion of the property until 1882 when it was transferred to a Lewis Deepay. Deepay would sell the property in the same year to a Moise Daigneau who subsequently sold on the property in 1883 to a Telesphore Brault. The property remained in the Brault family until 1942 when it was sold to a Aldoria Lafleur in 1942.

1.4 ARCHAEOLOGICAL CONTEXT

1.4.1 PHYSIOGRAPHY AND ECOREGION

Ecoregions are parts of an ecozone and are characterized by distinctive regional ecological factors including climate, flora, fauna, physiography, soil, water, and land usage.

The project area lies in the Mixedwood Plains Ecozone, in the Lake Simcoe-Rideau Ecoregion (Ecoregion 6E) (Crins et al. 2009). Climatic and geological characteristics for this ecoregion are provided below, along with a brief description of dominant vegetation and wildlife species.

The climate is mild and moist, with a mean annual temperature range of 4.9 to 7.8 degrees Celsius. The underlying bedrock is dolomite and limestone of primarily Ordovician and Silurian ages. Surface is generally covered with ice-laid materials of varying thickness. The land cover is/was predominantly cropland, pasture and abandoned fields. Forested areas include deciduous, coniferous and mixed forest types. Mean annual precipitation ranges between 759 and 1,087 mm, with the means summer rainfall between 198 and 281 mm.

The project area is within the Great Lakes-St. Lawrence Forest Region. The deciduous trees characterizing this region include sugar maple, beech, red maple, yellow birch, basswood, white ash, large-toothed aspen, red and burr oak, white eastern hemlock, eastern white pine, white spruce and balsam fir are among the coniferous species (Rowe 1972).

Characteristic mammals, birds, reptiles and fish include white-tailed deer, striped skunk, wood ducks, field sparrow, bullfrog, snapping turtle, white sucker, small mouth bass and pearl dace.

The project area is located within the Ottawa Valley Clay Plain physiographic region, which consists of clay plains interrupted by ridges of rock and sand. The clay plains were created following the retreat of the Laurentide ice sheet (c.15,000 years ago) when salt water from the Atlantic Ocean flooded the area to create the Champlain Sea. During the post-glacial rebound of the earth's crust following deglaciation, the Champlain Sea itself eventually retreated, leaving sandy deposits behind in the areas of ancient shorelines.

The Ottawa Valley is divided into upper and lower sections. The upper section is a broad valley with rocky Laurentian uplands rising on either side. The Laurentian Uplands is one of the five provinces of the larger Canadian Shield physiographic division; a large area of exposed Precambrian igneous and high grade Metamorphic rocks which forms the ancient geological core of the North American Continent.

Soils within the project area are uniformly mapped by the Soil Survey of Russell County as Bearbrook Clay (**FIGURE 6, P.32**). Bearbrook clay loam is characterized as a stone free dark gray clay soil with non-calcareous layered red and grey parent materials. They are level, except where cut by stream channels. They are poorly draining but provide good cropland, and support land uses including hay, grain crops and pasture.

1.4.2 REGISTERED ARCHAEOLOGICAL SITES

A search of the *Ontario Archaeological Sites Database* revealed that no known archaeological sites are present within the project area. A total of 3 registered archaeological sites are present within 3km of the project area. None of the sites are located within 1km of the project area.

TABLE 1 outlines the registered sites within a 3 km radius of the project area.

BiFv-14 was discovered in 2007 along the alignment of Innes Road. A small amount of Euro-Canadian ceramics was recovered in two clusters. Due to the disturbed nature of the area no further work was recommended. BiFv-13 was discovered concurrently with BiFv-14 in 2007. The site was a late 19th to early 20th century farmstead which was not considered to be of significant CHVI by the study.

BiFu-4 was discovered in 2003 during pedestrian survey and was recorded as a scatter of Paleo-Indian period material. Due to the small quantity of materials it was recommended that the site did not contain CHVI.

Table 1: Registered Archaeological Sites within 3 Kilometers of the Project

BORDEN NUMBER	SITE NAME	TIME PERIOD	AFFINITY	SITE TYPE	CURRENT STATUS
BiFv-14	Belanger/Corbeille farmstead	Post-Contact	Euro-Canadian	farmstead	No further CHVI
BiFv-13	Rathwell/Kehoe Farmstead	Post-Contact	Euro-Canadian	cabin, farmstead, workshop	No further CHVI
BiFu-4		Pre-Contact	Aboriginal	camp / campsite	No further CHVI

1.4.3 PREVIOUS ARCHAEOLOGICAL ASSESSMENTS

Only 1 previous archaeological assessment has been carried out within the project area; a Stage 1 Archaeological Assessment carried out for the proposed widening of Tenth Line Road completed by Nicole E. Brandon of Heritage Quest in 2006 under PIF #P051-094-2006 (**FIGURE 10, P.36**).

The Stage 1 Archaeological Assessment recommended the following verbatim:

- That a Stage 2 archaeological assessment of those portions of the corridor to be affected beyond the existing right-of-way be undertaken by a licensed archaeologist prior to site development;
- That the house located at 2175 Tenth Line Road be recorded prior to demolition and that this property undergo a Stage 2 archaeological assessment;
- Should deeply buried archaeological remains be found on the property during construction activities, the Ministry of Culture should be contacted immediately; and
- In the event that human remains are encountered during construction activities, both the Ministry of Tourism, Culture and Recreation and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Consumer and Commercial Relations should be contacted immediately. (Brandon 2006)

Two further archaeological assessments were found within close association to the project area and might have been completed within 50 m of the project area. As the reports were not immediately available from the *Ontario Public Register of Archaeological Reports*, the specific project area is unknown.

Nick Adams (P003) completed a Stage 1 Archaeological Assessment of a proposed development on the adjacent farm lot, Lot 1 Concession 11, across Tenth Line from the project area. Ken Swayze also completed a Stage 1 Archaeological Assessment on “Tenth Line and Scala Avenue Corridors parts of Lots 1, 2, 3 Con 10 & 11 Cumberland Twp.”

2 ARCHAEOLOGICAL POTENTIAL

2.1 PROPERTY INSPECTION

A property inspection is a visit to the project area to gain first-hand knowledge of its geography, topography, and current condition and to evaluate the archaeological potential. An inspection of the project area and its periphery was conducted in the afternoon of April 26, 2018 by Stephen Jarrett (P385). The weather allowed for good visibility of land features. The temperature was between 8 and 12 degrees Celsius.

The primary objective of the property inspection was to confirm the evaluation of the 2005 Aerial Photograph which indicated that the project area had been subject to intensive soil stripping at some point between 1999 and 2005 (**FIGURE 8 AND FIGURE 9, P.34**). The review of the properties confirmed the evidence from the 2005 Aerial Photograph that the vast majority of the project area was subject to intense disturbance from soil stripping. Drainage channels cut through the project area showed no topsoil within their profiles and areas of exposed soils also contained no topsoil (**IMAGE 1 TO IMAGE 5, P.16-18**). The grey clay observed when exposed or when the surface is scrapped (**IMAGE 6 AND IMAGE 7, P.18-19**) is consistent with the noted Horizon C materials for the Bearbrook soil series for which these properties are classified by the *Soil Survey of Russell and Prescott Counties* (Wicklund and Richards 1962, p.29 and 43).

Edging the property adjacent to Tenth Line Road is a series of soil berms visible on the 2005 aerial photograph along Lakepointe Drive and Aquaview Drive, with another spur which separated the former residence on the property from the remainder of the lands (**IMAGE 8 TO IMAGE 12, P.19-21**). The former residence, visible on the 2005 aerial photograph, has since been removed from the project area with the foundation filled in and the area leveled. Surrounding the outside edge of the property in the photo are a number of large trees which are still extant (**IMAGE 13 AND IMAGE 14, P.22**). The retention of the trees post-demolition indicates that not all of the area surrounding the structures removed was disturbed during the process.

Field notes and photographs of the project area were taken during the inspection. The photograph locations and directions were noted and all photographs were catalogued. Locations of images presented in this report can be found on **FIGURE 11 (P.37)**.

2.2 PRE-EUROPEAN CONTACT ARCHAEOLOGICAL POTENTIAL

Criteria for pre-European contact archaeological potential is focused on physiographic variables that include distance from the nearest source of water, the nature of the nearest source/body of water, distinguishing features in the landscape (e.g. ridges, knolls, eskers, wetlands), the types of soils found within the area of assessment and resource availability. Also considered in determining archaeological potential are known archaeological sites within or in the vicinity of the project area.

The project area is not within 300 m of any natural water sources. All examined mapping for the area shows no natural sources of water in the immediate area (**FIGURE 3 TO FIGURE 9, P.29-35**). The 1908 topographic map shows the closest noted feature as a drainage to the northwest which is approximately 450m away from the project area (**FIGURE 5, P.31**).

There are no pre-European contact archaeological sites registered within a 1 km radius of the project area. No distinct land forms or other features indicating pre-European contact were noted by this study for the area. Applying the MTCS Standards and Guidelines to this project results in the conclusion that the project area does not exhibit potential for the discovery of pre-European contact archaeological material.

2.3 HISTORIC ARCHAEOLOGICAL POTENTIAL

Historic research provides the basis for determining historic archaeological potential. Land registry records, historical maps and aerial photographic evidence and a property inspection of the project area all assist in determining historic archaeological potential. Additionally, the proximity to historic transportation corridors such as roads, rail and water courses also affect the historic archaeological potential.

Historic research indicates that settlement of the project area and immediate vicinity did not occur until the construction of Tenth Line Road in the late 19th century. Historic mapping of the region in 1862 and 1881 show no structures within the project area. However, one historic structure is located within the project area on the 1908 topographic map (**FIGURE 5, P.31**).

Land Registry records indicate that the properties were first granted in 1837 for Lot 1 and 1859 for Lot 2. The only feature related to the historic occupation of the area was first noted by the 1908 topographic map of the area in Lot 2, however as the 1881 map of the area was a supplement to the dominion atlas, owners had to pay to have their ownership recorded on it. This led to ownership often not being recorded on the supplements. As such, occupation of this portion of the lot could have occurred at any junction after Tenth Line Road was established between 1862 and 1881. However, the change in ownership noted in the land registry from a Charles Gaveau in 1882 through a number of hands to a Telesphore Brault in 1883 could indicate a new occupation of the lot. With Tenth Line Road in place by this transfer of ownership it would be an ideal time for an occupation at the location of the structure seen in the 1908 Topographic map.

Applying the MTCS Standards and Guidelines to this project results in the conclusion that the project area does exhibit potential for the discovery of historic Euro-Canadian archaeological materials. The features of archaeological potential are the historic alignment of Tenth Line Road in the 19th Century along the west edge of the project area and the historic occupation of the lot in the 19th century along Tenth Line Road. These features indicate that the project area has the potential to contain resources within 100 m from the historic alignment of Tenth Line Road and within 300 m of the occupation seen on the 1908 topographic map of the area as per the MTCS Standards and Guidelines Section 1.3.1.

2.4 SUMMARY

Due to the extensive soil disturbance within the project footprint, the majority of the project area retains no archaeological potential. The project area was soil stripped between the 1999 aerial photograph and the 2005 aerial photograph of the area. This disturbance was confirmed through a visual inspection of the project area.

A small area surrounding a residence, which was in place from prior to 1908 to between 2005 and the present, is the only area on the properties not have been extensively disturbed. This area exhibits potential for historic Euro-Canadian archaeological resources in relation to the historic alignment of Tenth Line Road and the historic occupation of the project area (**FIGURE 11, P.37**).

3 STAGE 2 RESULTS

3.1 FIELD METHODS

Field work for the Stage 2 archaeological assessment was conducted on May 8th, 2018. Weather conditions under which the fieldwork was conducted varied from clear to mixed sun and cloud and temperatures cool in the morning (4°C) increasing in temperature to 23°C in the afternoon. The weather conditions did not affect the archaeologist's ability to complete the archaeological assessment. All relevant GPS data was recorded using a Garmin GPS Map 64 handheld unit at +/- 3 m accuracy.

A test pit survey was completed within the project area on all areas identified as having archaeological potential on **FIGURE 11 (P.37)**. A test pit survey was conducted within a small area adjacent to Tenth Line Road which was the only area identified during the background study to not have been extensively disturbed. The test pit survey was completed at 5 m intervals with test pits measuring at least 30 cm in diameter, completed by hand 5 cm into subsoil with soils screened through 6 mm mesh.

As visible within the 2005 aerial photograph of the project area, much of the northwest portion of the area surrounding the house was gravelled (**FIGURE 9, P.35**). This gravel area was found in evidence from the test pits from that portion of the project area (**IMAGE 15 AND IMAGE 16, P.23**). The soil profile in this area contained 0 to 10 cm of dark brown clay loam over compact gravel. Hand excavation was not possible through this compact gravel layer.

The remainder of the area of archaeological potential contained soils consisting of between 25 and 35 cm of dark brown loamy clay over brown grey clay (**IMAGE 17, P.24**). These soils conditions are characteristic of the Bearbrook soil series the area is classified as; being dark in colour and stone free.

The licensee maintained a field log during the fieldwork detailing the pertinent information. Digital photographs were taken of the general area and representative test pits. A map indicating the area surveyed is included as **FIGURE 12 (P.42)**. The location from which all photographs used in this report from the Stage 2 Test Pit Survey are shown on **FIGURE 12**.

3.2 INVENTORY OF DOCUMENTATION RECORDS

The following list represents all the documentation taken in the field relating to this project and is being retained by WSP Canada Inc.:

- 3 pages of field notes; and,
 - 30 digital photographs, taken during the property inspection and 21 digital photographs, taken during Test Pit Survey.
-

3.3 RECORD OF FINDS

No archaeological resources or features were found during this Stage 2 Archaeological Assessment.

4 CONCLUSIONS AND RECOMMENDATIONS

WSP Canada Group Ltd. was retained by Minto Communities Inc. to conduct a Stage 1-2 Archaeological Assessment of the Avalon - Aquaview subdivision in Ottawa which is legally described as two properties comprising of Parts of Lots 1 and 2, Concession 10, Geographic Township of Cumberland, in the City of Ottawa, Province of Ontario

This Archaeological Assessment has been triggered by Minto Communities Inc.'s intent to proceed with rezoning and subdivision applications. The City of Ottawa is the approval authority under the *Planning Act*. The rezoning and subdivision application process includes the requirement for an archaeological assessment as one of the conditions for development approval to ensure that the development proponent meets their legal obligations under the *Ontario Heritage Act*.

Archaeological activities were carried out in accordance with the Standards and Guidelines for Consultant Archaeologists (Ministry of Tourism, Culture and Sport 2011). This study involved a review of documents pertaining to the project area including historic maps, aerial photographs and local histories. A property inspection was conducted on April 26, 2018. The majority of the project area was soil stripped between 1999 and 2005 from comparison of aerial photography for the area. The property inspection noted considerable areas of areas of disturbance which comprised drainage channels, soil strip areas and berms. Only one discrete area within the project area has not been completely disturbed, at the location of a former residential structure along Tenth Line Road.

Historic mapping of the region shows a historic structure at the location within the project area which was not subject to soil stripping. The historic structure was demolished post-2005, however, it was determined that the area was not fully disturbed during demolition, due to the retention of the large trees which surrounded the house. Due to the relatively undisturbed nature of the small area in proximity to historic Tenth Line Road and the historic house structure; it was determined that this portion of the project area retained potential for the recovery of historic archaeological materials.

A Stage 2 Test Pit Survey was conducted on the area retaining its archaeological potential on May 8, 2018. The Test Pit Survey encountered compact gravel around the location of the former house foundation and natural soil profiles within the yard surrounding the house. No archaeological features or resources were discovered during the Stage 2 Test Pit Survey.

Due to the late nineteenth century date for the occupation of this location it is possible that the historic house was the only residential structure constructed at this location on the project area. Alternatively, the small area to the north of the house within the very corner of the farm lot, may have housed the earlier occupation to put the residence closer to the small cluster of historic occupation to the north at the intersection of 3rd Line (now Innes Road) and Tenth Line Road.

The recommendation of this Stage 1-2 Archaeological Assessment is as follows:

- 1 No further archaeological assessment is required for the project area.**

5 ADVICE ON COMPLIANCE WITH LEGISLATION

This report is submitted to the Minister of Tourism, Culture and Sport as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the Standards and Guidelines for Consultant Archaeologists (2011a) that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism, Culture and Sport, a letter will be issued by the Ministry stating that there are no further concerns about 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 archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the *Ontario Heritage Act*.

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

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7 IMAGES



Image 1: Lack of topsoil within the Stage 2 property.



Image 2: Example of drainage channels within the Stage 2 property, looking SE.



Image 3: Example of drainage channels within the Stage 2 property, looking NW.



Image 4: Drainage Channels in the Stage 1 Property, looking east



Image 5: View of the area just outside the project area where topsoil survives, showing the reduction in grade onto the Stage 1 property project area.



Image 6: General shot showing lack of topsoil in the Stage 1 Property



Image 7: Lack of topsoil in the area south of two structures Road in the Stage 2 Property



Image 8: Soil berm within the Stage 2 property, looking NW



Image 9: View NW along the berm in the Phase 2 property.



Image 10: View SE along the berm in the Phase 2 property.



Image 11: View looking west along the berm at the south of the Stage 2 property



Image 12: View looking east along the berm at the south of the Stage 2 property



Image 13: View of land previously occupied by two structures Road.



Image 14: Site of two structures along Tenth Line Road, looking east.



Image 15: View down of example test pit within area of compact gravel soils. A piece of orange snow fencing is evident in the profile of the pit.



Image 16: View down of example test pit within area of compact gravel soils.



Image 17: View down of example test pit with natural soil conditions.

8 FIGURES



PROJECT:
Minto Aquaview Stage 1 & 2

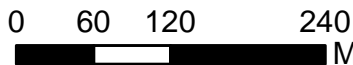
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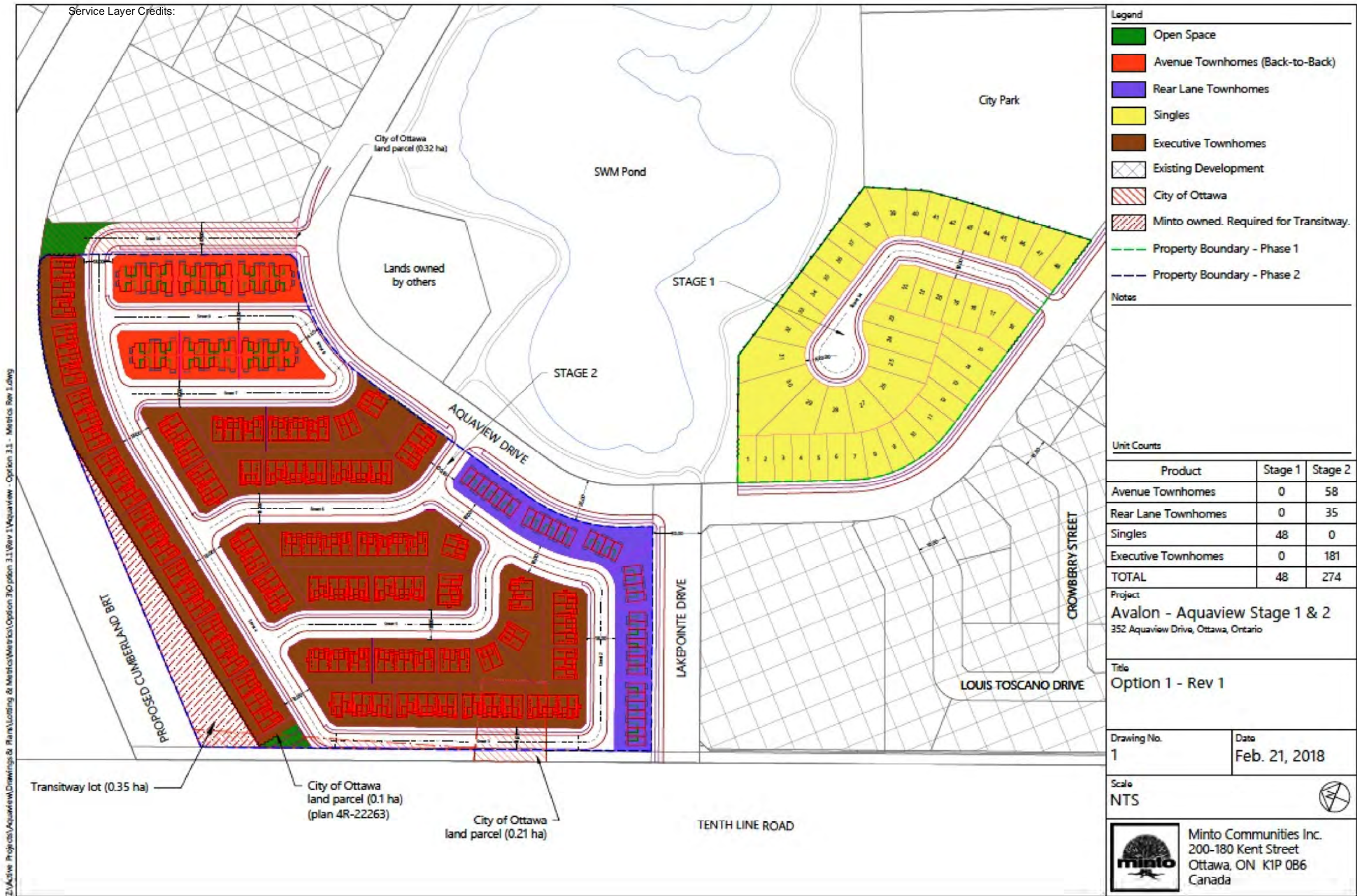
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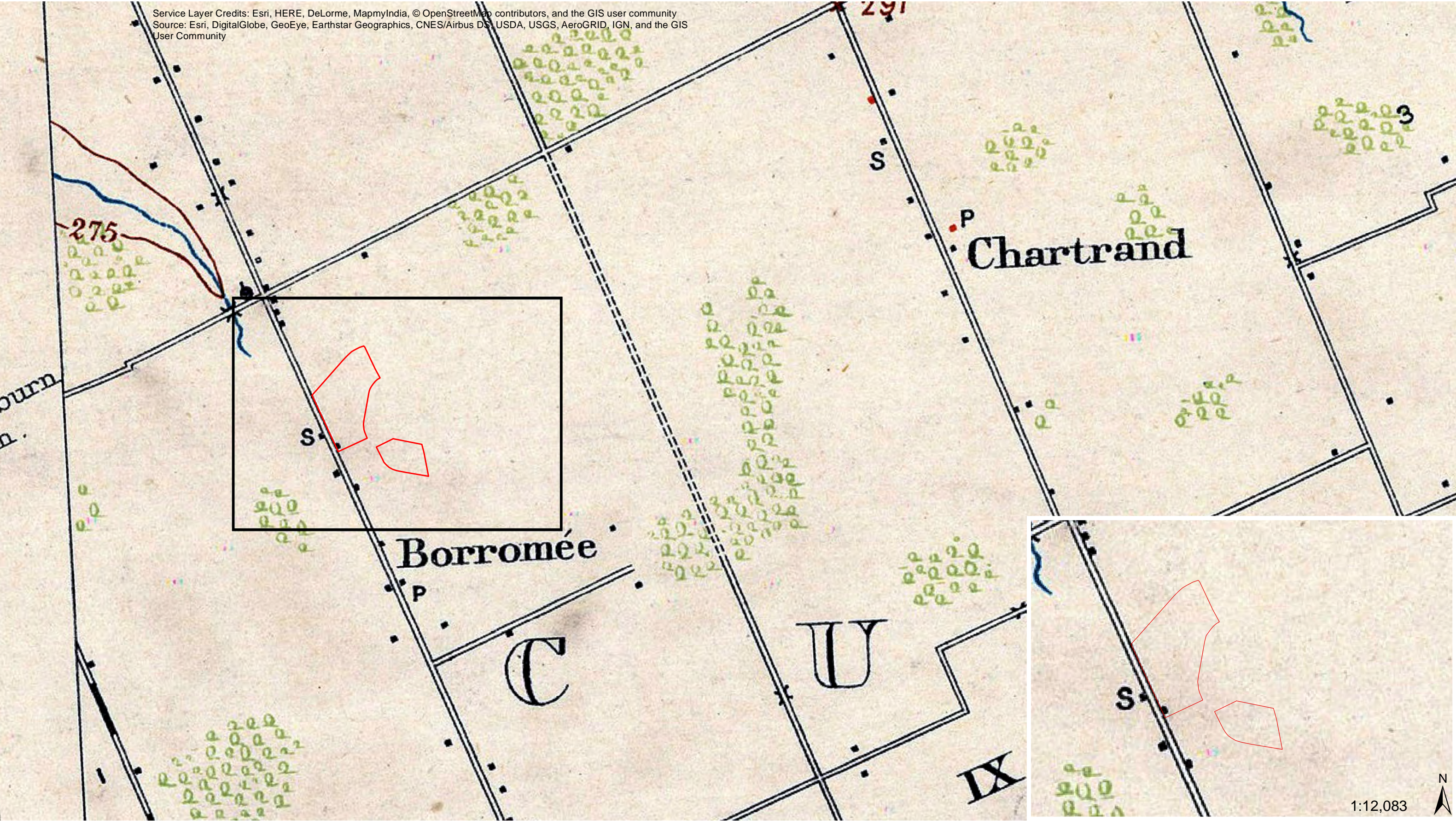
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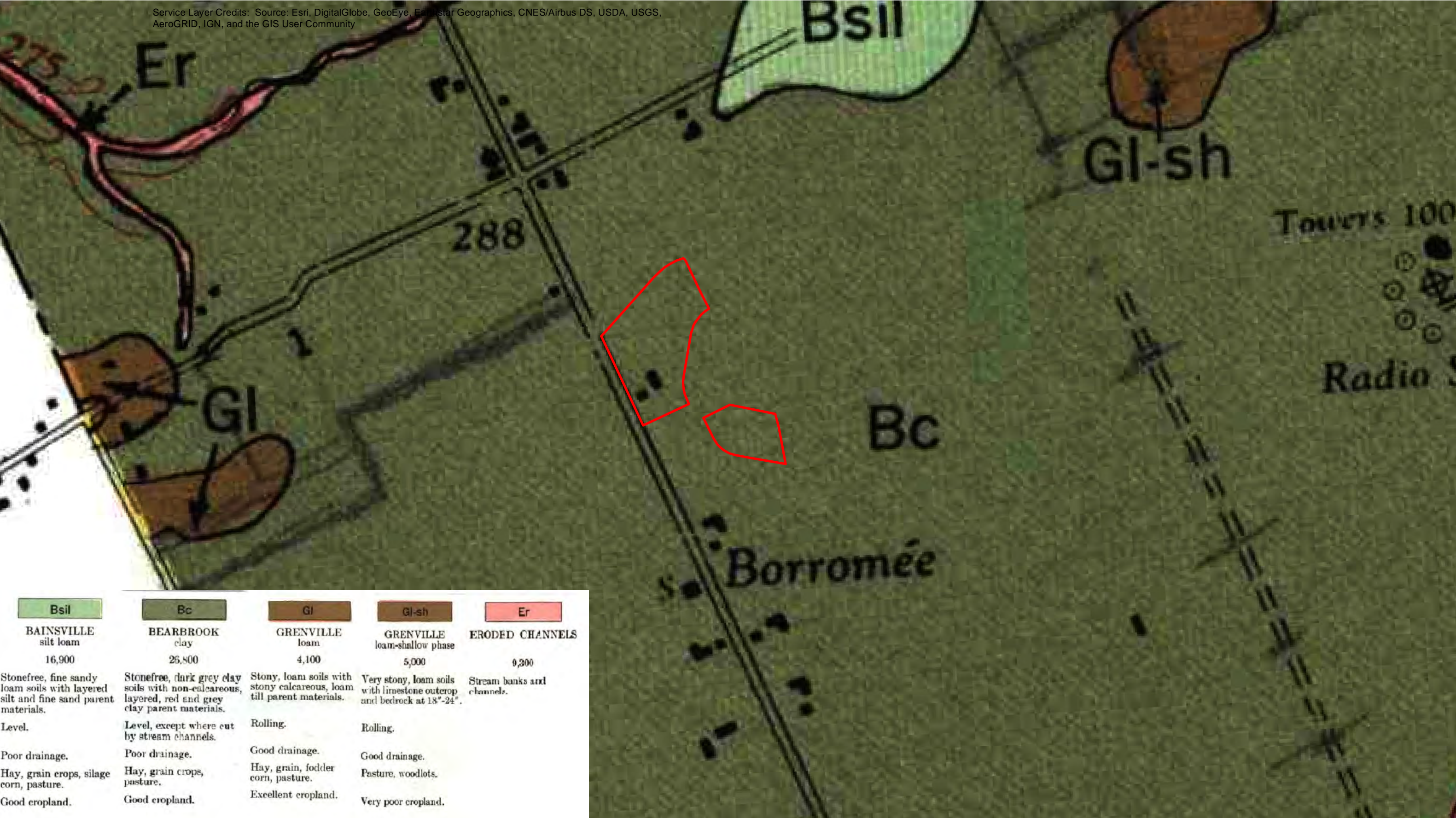
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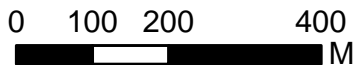
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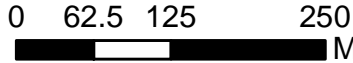
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LEGEND

- Previous Assessments
- Study Area

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Heritage Quest, 2006. Stage 1 Archaeological Assessment of the proposed widening of Tenth Line Road.

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LEGEND

- Photo locations
- ➔ Photo direction
- Study Area
- Archaeological Potential
- Area of Disturbance



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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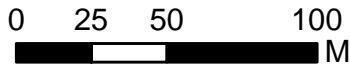
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LEGEND

- Stage 2 Photo Locations
- Study
- Area of Disturbance (Visual Inspection)
- Test Pit Survey (5m intervals)
- Disturbance Confirmed through Test Pit Survey (5m intervals)



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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