



DRAFT REPORT

Stage 1 Archaeological Assessment

Proposed Development, Part of Lot 2, Concession 11, Geographic Township of Cumberland, City of Ottawa, Ontario

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PIF Number: P1107-0024-2019

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Executive Summary

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

Golder Associates Ltd. (Golder) was retained by Ironclad Developments Inc. to conduct a Stage 1 archaeological assessment for the proposed development located at Part of Lot 2, Concession 11, Geographic Township of Cumberland, City of Ottawa, Ontario (Maps 1 & 2). The study area is an approximately 1.2 hectare property.

The objectives of the Stage 1 archaeological assessment are defined in the Ontario Ministry of Heritage, Sport, Tourism, and Culture Industries' (MHSTCI) *Standards and Guidelines for Consultant Archaeologists* (2011). A Stage 1 archaeological assessment background study provides information about the project area, evaluates archaeological potential and provides recommendations as to whether further work is required.

This Stage 1 study included a review of historic maps and aerial photographs as well as relevant archaeological, historical, and environmental documentation. No optional site inspection was conducted. The MHSTCI's database, Past Portal, was queried on March 4, 2020. No registered archaeological sites were identified within a 1 km radius of the study area.

Evidence for human occupation of Eastern Ontario dates to at least 9,000 BP following the retreat of the Champlain Sea. Based upon the existing data, the study area first became available for human occupation in the late Paleo Period or very early in the Archaic Period and was subsequently occupied until contact with European explorers. Cumberland Township was first surveyed in 1789 as part of an official policy to settle the area through Crown property grants. The study area is located in Lot 2, Concession 11 of Cumberland Township. Land Registry records indicate the lot was first granted in the mid 19th century.

The archaeological potential of the study area was assessed based on the presence of features indicating archaeological potential as outlined in Section 1.3.1 of the *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011). Features indicating archaeological potential include proximity to previously identified archaeological sites, water sources, early transportation routes, early Euro-Canadian habitation as well as the presence of elevated topography, pockets of well-drained sandy soil, and distinctive land formations or resource areas. Based on data gathered for this Stage 1 background study, it was determined that the study area has archaeological potential due to its proximity to Tenth Line Road which follows a historic road in Cumberland Township.

Aerial photographs indicate that the archaeological potential of the southern half of the study area may have been impacted by modern construction activities in the early 2010s. Any disturbance will be documented during Stage 2 archaeological assessment.

This Stage 1 archaeological assessment has provided the basis for the following recommendations;

- 1) Stage 2 archaeological assessment is required for the entire study area. The stage 2 archaeological assessment should be a test pit survey following the standards outlined in Section 2.1.2 of the MHSTCI's (2011) *Standards and Guidelines*.
- 2) Any previous disturbance in the southern half of the study area should be documented using the standards outlined in Section 2.1.8 of the *Standards and Guidelines* (MHSTCI 2011)

This report is submitted to the Ministry 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. 0.18. The report is reviewed to ensure that the licensed consultant archaeologist has met the terms and conditions of their archaeological license, and that the archaeological field work and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario.

Project Personnel

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Abbreviations

ASDB	Archaeological Site Database
BP	Before Present, Taken to mean before 1950 and used as an alternative to BC/AD
CHVI	Cultural Heritage Value or Interest
Golder	Golder Associates Ltd.
m	Metre(s)
MHSTCI	Ministry of Heritage, Sport, Tourism and Culture Industries
ND	No Date
PIF	Project Identification Form

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1.0 PROJECT CONTEXT

1.1 Development Context

Golder Associates Ltd. (Golder) was retained by Ironclad Developments Inc. to conduct a Stage 1 archaeological assessment for the proposed development located at Part of Lot 2, Concession 11, Geographic Township of Cumberland, City of Ottawa, Ontario (Maps 1 & 2). The study area is an approximately 1.2 hectare property.

No optional property inspection was conducted as part of the Stage 1 archaeological assessment.

1.1.1 Objectives

The objectives of this Stage 1 archaeological assessment follow the MHSTCI *Standards and Guidelines for Consultant Archaeologists* (2011, p.13):

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

1.2 Historic Context

1.2.1 Regional Indigenous History

The Ottawa Valley was covered by the Laurentide ice sheet until approximately 11,000 years before present (BP). Following the period of deglaciation, the Ottawa Valley was inundated by the Champlain Sea which is interpreted to have extended from the Rideau Lakes in the south, along the Ottawa Valley and St. Lawrence areas and terminating in the vicinity of Petawawa in the west. The exact western boundary is unconfirmed as current elevation levels reflect the isostatic adjustment of the land following the melting of the glaciers which has obscured definitive traces of the Champlain Sea shoreline at the time of its existence. The eastern portion of the sea extended into the Atlantic Ocean.

During the much of the Paleo Period (11,000–ca. 9,000 BP) Ottawa would have remained inundated by the Champlain Sea, although as the Champlain Sea receded towards the end of this period it is possible that people migrated along the changing waterfront landscape eventually moving into the Ottawa Valley (Watson 1999a).

The ridges and old shorelines of the Champlain Sea and early Ottawa River channels generally represent areas most likely to contain evidence of Paleo occupation in this region, however identifying the location and dates of these ancient shorelines has proved challenging. The boundaries of the Champlain Sea are not marked by a continuous identifiable shoreline, especially in its western shore where rocky conditions were not favorable to the formation of beaches (Chapman and Putman 1973). Attempts to use deposits of marine mollusk shells as a source for radiocarbon dates to delineate the transgression of the shorelines have proved unreliable as shells absorb carbon at different rates according to their depth below the surface and geological location (Robinson 2012). Additionally, earlier interpretations showing discrete stages of regression (see Chapman 1937) have proven not to be supported by the geological record. Unlike the catastrophic flood events during the Younger Dryas climatic event that led to the rapid formation of the Champlain Sea, its regression was a slow process occurring as sea waters drained during isostatic rebound (Robinson 2012). The interpretation of the presence of shorelines is further complicated by the fact that isostatic rebound may have raised the Ottawa region above its current elevation before it receded to its current level (Fulton and Richards 1987). Flooding resulting from the overflow of glacial Lake Agassiz also eroded and manipulated topographic landforms within the evolving landscape (Fulton et al. 1987). As a consequence, only the margins of the Champlain Sea at its maximum extent,

a time when the Ottawa region would have been fully submerged, have been reliably mapped due to the rapid inundation creating pronounced shoreline features (Loring 1980). Although recent studies using various dating techniques that do not rely upon deposits of mollusk shells have provided some favourable results (Tremblay 2008), considerable work remains in developing the chronology of the Champlain Sea's regression.

The earliest possible settlement in the Ottawa Valley would have occurred during the recession of the Champlain Sea when the vegetation and wildlife began to develop within the area, which enabled the sustainability of humans (Watson 1999a). The ridges and old shorelines of the Champlain Sea and early Ottawa River channels reflect areas most likely to contain evidence of Paleo Period occupation in the region. Archaeological and geological investigations in the Ottawa Valley have suggested these early sites may be identified within the 550 foot (167.6 metres) or higher contour topography, although additional research may be required to confidently assess this correlation (Kennedy 1976).

Evidence of human occupation within the Ottawa Valley during this period has been documented by a variety of archaeological discoveries including fluted points (laurel leaf shaped points with a channel flake scar extending from the base of the point) recorded in the Rideau Lakes area (Watson 1982; 1999b). In Ottawa, sites interpreted to have produced Paleo Period material have been recorded near Greenbank Road (Swayze 2003), Albion Road and Rideau Road (Swayze 2004), although the lack of diagnostic material represented at these sites and the inferred climatic environment suggests these sites may rather be reflective of Archaic Period occupation following the recession of the Champlain Sea.

During the succeeding Archaic Period (ca. 9,000 to 2,800 BP), the environment of eastern Ontario approached modern conditions (Ellis et al. 1990). Occupation within the Ottawa Valley developed as the environment became habitable, with an Early Archaic Dovetail projectile point recovered in Ottawa South sometime around 1918-1920 (Pilon and Fox 2015) potentially representing the earliest diagnostic evidence of human interaction within the local landscape.

Archaic Period inhabitants generally continued to employ a hunter-gatherer subsistence strategy focused on localized faunal and floral resources including deer, fish, berries and nuts. The McIntyre Site, located on the north shore of Rice Lake and south of Peterborough, contained the remains of a large variety of floral and faunal species (Ellis et al. 1990). Plant remains recovered from the site included butternut, acorn, hickory, plum, cherry, blueberry and hawthorn. Faunal remains included deer, canine, beaver, muskrat, bear, and a large variety of fish including bass, bullheads, and suckers. The inhabitants of the site may also have been gathering wild rice (McAndrews 1984). In the Ottawa Valley, a stone fish weir likely dating to the Archaic Period found upstream from Morrison Island and Allumette Island demonstrates the increasingly sophisticated technology that was being employed during the period (Allen 2010).

The Ottawa Valley was an important route for the movement of copper, either through direct trade between individual groups, or through trips to Lake Superior to exploit the native copper deposits located there. Copper artifacts similar to those documented on Allumette Island in the Ottawa River have been discovered in Wisconsin, Michigan, New York State and Manitoba (Kennedy 1970). This commodity, as well as other tradable goods, was presumably transported by canoes and other vessels along the navigable waterways including the Ottawa River.

The earliest evidence of human burials within the Ottawa Valley are interpreted to date to the Archaic Period (Pilon & Young 2009). Excavations at Allumette and Morrison Islands have found burial sites containing the remains of dozens of individuals within deposits that appear to have been used continuously for millennia (Kennedy 1966). The inclusion of grave offerings such as native copper pieces in burials found at the site of Coteau-du-Lac provides evidence for Archaic ritual practice (Pilon & Young 2009). Other sites with Archaic Period components within the Ottawa Valley region have been noted on Aylmer Island, Chaudière Falls, Wilber Lake, Leamy Lake, the Rideau Lakes (Watson 1982), Jessups Falls, and in Pendleton (Daechsel 1980). Archaic sites

have been documented within the vicinity of the Rideau River (BhFw-19; BhFw-110, Golder 2017), and evidence from archaeological investigations around Honey Gables, Albion Road and Rideau Road may contain Early Archaic material (Swayze 2004). Evidence of Archaic Period occupation has also been recovered from isolated find spots within the city of Ottawa (Jamieson 1989), although the context of many of these have been poorly documented.

The Woodland Period (ca. 2,800 to 450 BP) is primarily distinguished from the Archaic Period by the introduction of ceramics (Wright 1972). Early Woodland Period inhabitants continued to live as hunters, gatherers and fishers in much the same way as earlier populations had done. They also shared an elaborate burial ceremonialism influenced by the inclusion of exotic artifacts within grave deposits (Spence *et al.* 1990, p. 129).

By the Middle Woodland Period (2,400 to 1,150 BP) regional cultural expressions or traditions have been distinguished by archaeologists. These traditions have been identified based on patterns of ceramic decorations, use of lithic materials, and are the primary basis to differentiate the Middle Period from the Early. A greater number of known sites from this period have allowed archaeologists to develop a better picture of the seasonal round followed in order to exploit a variety of resources within a home territory. Through the late fall and winter, small groups would occupy an inland “family” hunting area. In the spring, these dispersed families would congregate at specific lakeshore sites to fish, hunt in the surrounding forest, and socialize. This gathering would last through to the late summer when large quantities of food would be stored for the approaching winter.

Along the Ottawa River, Middle Woodland sites have been identified in the northwest end of Ottawa at Marshall's and Sawdust Bays (Daechsel 1980; Daechsel 1981), Rockcliffe Park (Pilon 2008; Pilon and Boswell 2015), as well as at Leamy Lake (Laliberte 1995), along the Rideau River (BhFw-6, BhFw-101, BhFw-110 and BhFw-118; Golder 2017; Patterson 2016) and within the City of Ottawa west of Bank Street (Golder 2014). Sawdust Bay 2 (BiGb-6), located approximately 750 m west of where the Mississippi River drains into the Ottawa, represents a camp site radiocarbon dated to 1560 BP (\pm 290 BP) and interpreted to reflect the Point Peninsula Tradition. The corresponding artifact assemblage shows that subsistence was focused around hunting fauna living in the adjacent lakes and swamps. The Leamy Lake and Rockcliffe Park Sites (BiFw-16 and BiFw-91), all located in the area around the mouth of the Gatineau River and the east shore of the Ottawa River, show evidence of seasonal warm weather settlement spanning a period from 4000 BP up to at least the Middle Woodland period (Pilon & Boswell 2015).

Another significant development of the Woodland Period was the introduction of agriculture and appearance of domesticated plants ca. 1,450 BP. Initially, only a minor addition to the diet, the cultivation of corn, beans, squash, sunflowers and tobacco gained economic importance during the Late Woodland Period. Unlike in southern Ontario, where the shift in subsistence resulted in the development of semi-permanent and permanent villages, evidence suggests that the Ottawa Valley remained occupied by mobile hunter-gatherers. In part, this was because the terrain was less than suitable for early agriculture. It was also a reflection of the increased pressure on hunting territories and conflict over trade routes at the end of the Woodland Period.

By the end of the Late Woodland Period, distinct regional populations occupied specific areas of Southern Ontario separated by vast stretches of largely unoccupied land, including the Huron along the north shore of Lake Ontario, and the St. Lawrence Iroquois along the St. Lawrence River. Facing persistent hostilities with Iroquoian populations based in what is now New York State, the Huron moved from their traditional lands on the north shore of Lake Ontario to the Lake Simcoe and Georgian Bay region. The St. Lawrence Iroquois disappeared sometime in the late 16th century with refugees possibly dispersing among the Algonquin populations in the Ottawa Valley region (Pendergast 1999).

The Algonquins, who occupied the lands north of the Huron, had historical hunting territories that may have extended as far east as the St. Maurice River in Quebec. They also claimed the lowlands south of the St. Lawrence River after the disappearance of the St. Lawrence Iroquois in the late 16th century (Trigger & Day 1994). At the time of initial contact, the French documented several Algonquin groups residing in the vicinity of the present location of the City of Ottawa (Heidenreich & Wright 1987, Plate 18). These included the Kichesipirini of Morrison Island, the Matouweskariini along the Madawaska River to the west, the Onontchataronon in the Gananoque River basin to the southwest, and the Weskarini, the largest of the three, situated in the Petite Nation River basin to the northeast.

Late Woodland sites have been recorded throughout the Ottawa Valley. Two small Late Woodland sites were identified on a property near the Village of Cumberland (Ferris 2002). A significant Woodland Period occupation has also been identified at the Leamy Lake site and several burials dating to the Archaic Period have also been documented on the north side of the Ottawa River, just east of the Chaudière Falls. Many of these burials were observed during the mid-19th century, with upwards of twenty individuals documented along the northern shore of the Ottawa River between the Chaudière Falls and the Gatineau River. Many of these internments were associated with red ochre deposits, although there does not appear to be a consistent deposition positional pattern to those recorded (Pilon and Boswell 2015).

Though it is often difficult to link archaeological sites to specific historic Indigenous groups, the Highland Lake site (BiGh-1), located west of Ottawa, may be an Algonquin site associated with the Matouweskariini (von Gernet 1992). Ottawa Valley Algonquin sites typically consist of shallow deposits characteristic of seasonal occupation by small family groups within family or band territorial limits and are typically located on the headwaters of major tributaries (Pendergast 1999). Exceptions include a number of summer camps identified at Morrison Island and Leamy Lake where larger groups came together (Pilon & Boswell 2015).

The Algonquins' location along the same river networks used for transportation by early French traders positioned them to monopolize the early fur trade with the two communities becoming close allies following Champlain's expedition in 1603. Competition for furs increased existing tensions between the Algonquin communities and their neighbours including the Haudenosaunee Nations, such as the Mohawk, residing to the south in what is now Ontario and New York. The 17th century saw a long period of conflict known as the Beaver Wars between the Algonquin and the Haudenosaunee that resulted in the significant disruption of life. Mohawk raids against Algonquin Villages in the Upper Ottawa and St. Lawrence Valleys resulted in the abandonment or destruction of many Algonquin villages in these areas (Trigger and Day 1994). Some Algonquin's found refuge in French settlements such as Trois Rivières, Quebec City, Sillery, and Montreal while others may have retreated to interior locations along the Ottawa River's tributaries (Holmes 1993). At the end of the 17th century, the Haudenosaunee were driven out of much of southern Ontario by the Mississaugas though they continued to occupy parts of eastern Ontario on a seasonal basis.

The French brokered a peace treaty in 1701 at Montreal where the Algonquin, the French, and the Haudenosaunee agreed to peacefully share the lands around the Great Lakes (INAC 2011). In exchange for peace, the Algonquin gave the Haudenosaunee secure access to furs which the Haudenosaunee used to secure their alliance with the British. Between 1712-1716, Algonquins were noted as living along the Gatineau River with the Haudenosaunee occupation located south of the St. Lawrence (Holmes 1993). By 1740, Algonquin communities were present in the vicinity of Trois-Rivières, Rivière Lièvre and Lake of Two Mountains and Mohawk community members were residing near Lake of Two Mountains (Holmes 1993).

Following the Seven Years' War in the mid-18th century, the defeat of the French, Algonquin, and their allies by the British and the Haudenosaunee resulted in the further loss of Algonquin hunting territories in Southern Quebec and Eastern Ontario as the British seized France's colonies. The extension of Quebec's boundaries in 1774 through the Quebec Act and the use of the Ottawa River as the boundary of Upper and Lower Canada following the 1791 Constitution Act separated the Algonquins between two government administrations (AOP n.d.).

Britain's colonial policy differed from the French in that the Crown was much more interested in securing land surrenders from the Indigenous populations for settlement by Europeans. The Royal Proclamation of 1763 issued by King George III enabled the Crown to monopolize the purchase of Indigenous lands west of Quebec. Although the proclamation recognized Indigenous rights to their land and hunting grounds, it also provided a way through which these rights could be taken away (Surtees 1994). Land cession agreements between Indigenous groups and the Crown increased following the War of 1812 as a new wave of settlers arrived in Upper Canada primarily from Britain. The Crown implemented annuity systems in the purchase of lands from Indigenous peoples where the interest payments of settlers on the land would cover the cost of the annuity rather than pay a one-time lump sum. By the 1850s, Indigenous groups had become cautious of these agreements and had begun to demand the retention of reserved land and preservation of hunting and fishing rights (Surtees 1994).

In 1819, the Algonquin were left out of talks between the Crown and the Mississauga of the Bay of Quinte and Kingston areas for the sale of lands that included a portion of Algonquin territory in the Ottawa Valley (Surtees 1994). Captain William Redford Crawford, who enjoyed the trust of the Mississauga chiefs living in the Bay of Quinte region, negotiated on behalf of the British government who erroneously believed the Mississauga to be the only Indigenous peoples living in the region. In the so-called "Crawford Purchase," the Mississauga were pressed into giving up Aboriginal title to most of Eastern Ontario, including what would become the Counties of Stormont, Dundas, Glengarry, Prescott, Russell, Leeds, Grenville and Prince Edward, as well as the front Townships of Frontenac, Lennox, Addington and Hastings and much of what is now the City of Ottawa (including the Geographic Townships of Gloucester, Nepean, Osgoode, Marlborough and North Gower). The Algonquins were never consulted and never ceded their lands. Similarly, Algonquin petitions following the Rideau Purchase of 1819/1822 between the Mississauga and the Crown were largely ignored (Holmes 1993).

In 1839, the Crown denied the Algonquins and Nipissings the right to lease portions of their land, including islands in the Ottawa River, to settlers with whom they had previously been collecting rent payments (Holmes 1993). Furthermore, the Crown did little to prevent further additional encroachments by settlers on Indigenous lands.

A reserve was purchased for use by the Algonquins in Golden Lake in 1873 (Holmes 1993). The Golden Lake reserve, now known as the Algonquins of Pikwakanagan First Nation, has a registered population of around 2,000 people with over 400 living on the reserve (INAC 2013). Additional reserves and settlements for the Algonquins were established in Quebec during the mid-20th century.

The Indian Act of 1876 framed the relationship between the Canadian government and Canada's Indigenous peoples as a paternalistic one where the government served as their guardian until their cultures were able to integrate into Canadian society (INAC 2011). The Department of Indian Affairs was granted the authority to make policy decisions such as determine who was classified as Indigenous, manage their lands, resources and money, and promote "civilization". The consequence was the further erosion of Indigenous rights to autonomy and self-governance. The implementation of residential schools and adoption of Algonquin children by non-Indigenous families in the mid-20th century reflected further discrimination and the disregard of rights (AOP n.d.).

The Algonquins of Ontario today consists of ten communities: Antoine, Algonquins of Pikwakanagan First Nation, Bonnechere, Greater Golden Lake, Kijicho Manito Madaouskarini, Mattawa/North Bay, Ottawa, Shabot Obaadjiwan, Snimikobi, and Whitney and Area (AOO n.d.).

The Ottawa Valley is unceded Algonquin land and land claim negotiations with Canada and Ontario are in progress. The Algonquin and the Government of Canada signed an agreement in principal to transfer 117,500 acres of Crown lands in eastern Ontario to the Algonquin (INAC 2016; Tasker 2016). While this represents an important step in the negotiations, the talks are ongoing.

1.2.2 Post-Contact Regional History

Samuel de Champlain was the first European to document his explorations of the Ottawa Valley, initially in 1613 and again in 1615. He was preceded by two of his emissaries, Etienne Brule around 1610 and Nicholas de Vigneau in 1611. It is likely that all three travelled at least the lower reaches of the Rideau River. In the wake of Champlain's voyages, the Ottawa River became the principal route for explorers, missionaries and fur traders travelling from the St. Lawrence to the interior, and throughout the seventeenth and eighteenth centuries this route remained an important link in the French fur trade.

Commonly acknowledged as the first permanent European resident in the area, Philemon Wright settled in Hull Township with five families and thirty-three men in 1800 (Bond 1984). This community grew over the next few years along the north shore of the Ottawa River and by 1805 Wright had begun significant lumbering activity in the area. Settlement of the south shore was very slow through the early nineteenth century. In 1809 another American, Jehiel Collins, erected a store at what was to become known as Bellows and later Richmond Landing. The first settler in the area was Ira Honeywell, who, in 1810, constructed a cabin west of the Chaudiere Rapids (Bond 1984). Another early settler was Braddish Billings, who established a small cabin in Gloucester Township in 1812. Billings went into the lumbering business with Philemon Wright and developed his homestead into a large family estate along the banks of the Rideau River.

The construction of the Rideau Canal (1827–1832) provided the new settlement of Bytown with its first major growth in population. This resulted in the development of two areas: Lower Bytown to the east of the Canal primarily populated by French Canadian and Irish labourers and merchants, and Upper Bytown to the west with a predominantly white Anglo-Saxon Protestant population. Bytown was incorporated as the City of Ottawa on January 1, 1855, with a population of 10,000. The selection of Ottawa as the capital of Canada in 1857 was the major catalyst in the subsequent development of the city.

By the late eighteenth century, John Graves Simcoe, Lieutenant Governor of Upper Canada, had issued a proclamation aimed at attracting new settlers to the Ottawa Valley. To help facilitate the influx of expected immigration to the area individual lots were surveyed within each township boundary and many of these settlement lots were granted by the Crown to United Empire Loyalists and other prospective immigrants.

1.2.3 Cumberland Township

Originally named after the Duke of Cumberland Ernest Augustus, Cumberland Township was first surveyed in 1789 as part of an official policy to settle the area through Crown property grants. The majority of accessible land fronting the Ottawa River was granted to United Empire Loyalists and their descendants, many of whom never actually came to the area and remained absentee landowners.

Early settlers to Cumberland Township included the families of Amable Foubert and Abijah Dunning who immigrated to the area in the early nineteenth century. These two pioneering families settled close to each other along the Ottawa River, with the Foubert's occupying Lot 14 and the Dunning family owning Lots 12 and 13. By 1807, Foubert had established a trading post in the township. The Dunning family had arrived from Massachusetts and secured 800 acres within Cumberland Township. Frustrated with the lack of improvements to roads and bridges which impeded commerce and transportation through this area, Abijah left Cumberland by 1812. His son William, however, returned to the area in 1817 and re-established the Dunning family along the Ottawa River in Cumberland Township. The scarcity of roads and the poor state of transportation beyond the shore of the Ottawa River slowed settlement within the Township in the early nineteenth century.

1.2.4 Study Area History

Historic maps (Map 3) from 1861 and 1881 show no structures on Lot 2, Concession 11 of Cumberland Township. The closest structure is a house located on the northwest corner of Lot 3, Concession 10 in the 1881 map (Map 3).

Aerial photographs (Map 4) show that the study area was agricultural field through much of the 20th century. No structures are visible within the study area, but a farmstead is located within 50 m to the east across Tenth Line Road. Tenth Line Road underwent substantial upgrades beginning in the late 20th century. Tenth Line Road was a dirt road in 1976, but was paved and widened by 1991. It was widened to four lanes with a median by 2009. Gerry Lalonde Drive, which is located south of the study area, is a recently constructed road built in the early 2010s. The property's use as an agricultural field ended by the early 2010s.

An air photo from 2014 (Map 4) shows the southern portion of the study area was being used by construction crews likely for the construction of housing developments located to the south and west. Large backdirt piles are visible and it appears part of the study area may have been used as a source of topsoil. These activities may have impacted the archaeological potential of the study area.

A small pond located within 300 m to the east of the study area is a modern stormwater management pond that was dug in the early 2000s and does not correspond to a natural water source.

1.3 Archaeological Context

1.3.1 Study Area Environment

The study area lies within the Ottawa Valley Clay Plains (Chapman and Putnam 1984). The clay plains are characterized by a flat, poorly drained topography. The study area lies within the Upper St. Lawrence sub-region of the Great Lakes-St. Lawrence Forest Region (Rowe 1977). The deciduous trees characterizing this sub-region include sugar and red maple, beech, yellow and white birch, basswood, white ash, red and burr oak, and largetooth aspen. Coniferous species include eastern hemlock, eastern white pine, alder, willow, white and black spruce and balsam fir.

The surficial geology is fine textured glaciomarine deposits (Map 5). Soils (Map 6) are bearbrook soils which are poorly drained soils composed of a reddish brown to brown heavy clay parent material that are found in gently sloping areas within Cumberland Township (Schut and Wilson 1987).

The study area is presently abandoned agricultural field.

1.3.2 Previous Archaeology

Two previous archaeological assessments are known to have been completed within 50 m of the study area (Map 7; Table 1). The first is a Stage 1 archaeological assessment conducted by Heritage Quest (2006) for the Widening of Tenth Line Road widening and covers part of the present Stage 1 study area. Heritage Quest (2006) recommended Stage 2 archaeological assessment for the portions of the corridor to be affected beyond the existing Tenth Line Road right-of-way. Though the Tenth Line Road widening has since been completed, the MHSTCI's Archaeological Report Database on the Past Portal website contains no record of a Stage 2 archaeological assessment having been completed for the project within the current Stage 1 study area.

Table 1: Summary of Previous Archaeological Assessment Studies within 50 m of the Study Area

PIF#	Date	Title	Consultant	Recommendation
P051-094-2006	2006	Stage 1 Archaeological Assessment of the Proposed Widening of Tenth Line Road, Lots 1 to 6, Concession 10	Hugh Daechsel – Heritage Quest Inc.	Stage 2 Recommended for Parts of the Study Area
P385-0039-2018	2018	Stage 1 & 2 Archaeological Assessment Avalon – Aquaview Development Parts of Lot 1 and Lot 2, Concession 10, Geographic Township of Cumberland, City of Ottawa, Ontario	Stephen Jarrett-WSP	Stage 2 Complete – No Further CHVI

In 2018, WSP (2018) conducted a Stage 1 & 2 archaeological assessment within 50 m east of the study area for an adjacent property located on the east side of Tenth Line Road. WSP determined that much of the property was previously disturbed and recommended no further archaeological assessments.

Additional archaeological assessments that have been conducted within the vicinity of the study area. These assessments are summarized in Table 2.

Table 2: Summary of Previous Archaeological Assessment Studies within the Vicinity of the Study Area

PIF#	Date	Title	Consultant	Distance from Study Area (m)	Recommendation
P366-0041-2013	2014	Stage 1 Archaeological Assessment, “Concession 10 Lands” of the Community Design Plan (CDP), Lots 4 to 6, Concession 11, Geographic Township of Cumberland, Former County of Russell, City of Ottawa, Ontario	Erin Wilson – Golder Associates Ltd.	1,100	Stage 2 Recommended for Parts of the Study Area
P366-0040-2013	2016	Stage 1 Archaeological Assessment East Urban Community Centre (EUC) Project Community Design Plan (CDP) Lots 1-4 Concession 3 Geographic Township of Gloucester and Lots 1-2 Concession 11 Geographic Township of Cumberland City of Ottawa Ontario	Erin Wilson – Golder Associates Ltd.	650	Stage 2 Recommended for Parts of the Study Area
P270-0003-2015	2016	Stage 2 Archaeological Assessment Tenth Line Road Widening Part Lots 3 and 4 Concessions 11 and 12, Geographic Township of Cumberland, Carleton County, Ontario	Heather Tulloch – Golder Associates Ltd.	600	Stage 2 Complete – No Further CHVI

PIF#	Date	Title	Consultant	Distance from Study Area (m)	Recommendation
P415-0092-2016	2016	Stage 1 and 2 Archaeological Assessment for Site Plan Application at 4100 Innes Rd/2025 Mer Bleue Rd, City of Ottawa, Ontario	Patrick Hoskins – Stantec Consulting Ltd.	1,000	Stage 2 Complete – No Further CHVI
P376-0016-2017	2017	Stage 1 Archaeological Assessment Vanguard Drive Extension Environmental Assessment Study, Part Lots 1-2, Concession 11, Geographic Township of Cumberland, Russell County & Part Lot 1, Concession 3 Ottawa River, Geographic Township of Gloucester, Carleton County; City of Ottawa, Ontario	Christienne Uchiyama – Letourneau Heritage Consulting Inc.	400	Stage 2 Recommended for Parts of the Study Area
P094-0249-2017	2018	Stage 1 and 2 Archaeological Assessment Orleans Family Health Hub Part of Lot 2, Concession 11 (Former Township of Cumberland, County of Russell), City of Ottawa, Regional Municipality of Ottawa-Carleton, Ontario	Lisa Merritt – Archaeological Services Inc.	1,200	Stage 2 Complete – No Further CHVI

1.3.3 Known Archaeological Sites

The primary source of information regarding known archaeological sites in the vicinity of the study area was the MHSTCI's archaeological site database. The database was consulted on March 4, 2020 for the assessment and it was determined that there are no registered archaeological sites located within 1 km of the study area.

1.3.4 Assessing Archaeological Potential

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. In accordance with the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* the following are features or characteristics that indicate archaeological potential:

- Previously identified archaeological sites;
- Water sources:
 - Primary water sources (lakes, rivers, streams, creeks);
 - Secondary water sources (intermittent streams and creeks; springs; marshes; swamps);
 - Features indicating past water sources (e.g. glacial lake shorelines indicated by the presence of raised gravel, sand, or beach ridges; relic river or stream channels indicated by clear dip or swale in the topography; shorelines of drained lakes or marshes; and cobble beaches);

- Accessible or inaccessible shoreline (e.g. high bluffs, swamps or marsh fields by the edge of a lake; sandbars stretching into marsh);
- Elevated topography (eskers, drumlins, large knolls, plateaux);
- Pockets of well drained sandy soil, especially near areas of heavy soil or rocky ground; Distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases (there may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings);
- Resource areas including:
 - Food or medicinal plants;
 - Scarce raw minerals (e.g. quartz, copper, ochre or outcrops of chert);
 - Early Euro-Canadian industry (fur trade, mining, logging);
- Areas of Euro-Canadian settlement; and,
- Early historical transportation routes.

In recommending a Stage 2 property survey based on determining archaeological potential for a study area, the MHSTCI stipulates the following:

- No areas within 300 metres of a previously identified site; water sources; areas of early Euro-Canadian Settlement; or locations identified through local knowledge or informants can be recommended for exemption from further assessment;
- No areas within 100 metres of early transportation routes can be recommended for exemption from further assessment; and,
- No areas within the property containing an elevated topography; pockets of well-drained sandy soil; distinctive land formations; or resource areas can be recommended for exemption from further assessment.

1.3.5 Features Indicating Archaeological Potential has been removed

Archaeological potential can be determined not to be present when the area has been subject to extensive and deep land alterations that severely damaged the integrity of any archaeological resources, including:

- Quarrying;
- Major landscaping involving grading below topsoil;
- Building footprints; and,
- Sewage and infrastructure development.

1.3.6 Potential for Archaeological Resources

The study area has potential for Euro-Canadian archaeological resources as it falls within 100 m of a historic transportation route. Tenth Line Road, which follows the route of a historic road in Cumberland Township dating to the 19th century, runs adjacent to the property (Map 3).

Aerial photographs indicate that the southern portion of the study area may have been impacted by modern construction during the early 2010s related to nearby housing developments.

2.0 FIELD METHODS

No optional property inspection was conducted as part of this Stage 1 archaeological assessment.

3.0 ANALYSIS AND CONCLUSIONS

The study area has potential for archaeological resources based on its proximity to Tenth Line Road which follows the route of a 19th century road through Cumberland Township. As per Standard 1d of Section 1.4.1 of the *Standards and Guidelines* (MHSTCI 2011), no areas within 100 m of early historic transportation routes can be recommended for exemption from further archaeological assessment. The entire study area is located within 100 m from the historic road and thus the entire study area is recommended for Stage 2 archaeological assessment (Map 8).

As per Standard 1c of Section 2.1.2, the study area is an abandoned agricultural field with heavy brush and weed growth so Stage 2 archaeological assessments should involve test pit survey. Aerial photographs indicate that the potential of the southern portion of the study area may have been impacted by its use during the construction of nearby residential developments. As no property inspection was conducted, the extent of the disturbance could not be documented. If the archaeological potential has been impacted by modern construction, any disturbances can be documented during Stage 2 test pit survey following the guidelines outlined in Section 2.1.8 of the *Standards and Guidelines* (MHSTCI 2011).

4.0 RECOMMENDATIONS

This Stage 1 archaeological assessment has provided the basis for the following recommendations:

- 1) Stage 2 archaeological assessment is required for the entire study area. The stage 2 archaeological assessment should be a test pit survey following the standards outlined in Section 2.1.2 of the MHSTCI's (2011) *Standards and Guidelines*.
- 2) Any previous disturbance in the southern half of the study area should be documented using the standards outlined in Section 2.1.8 of the *Standards and Guidelines* (MHSTCI 2011)

The MHSTCI is requested to review this report with regard to the 2011 *Standards and Guidelines for Consultant Archaeologists* and the terms and conditions for archaeological licences, and to enter this report into the Ontario Public Register of Archaeological Reports.

5.0 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 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the culture 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, 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 Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject 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 or having knowledge of a burial site shall immediately notify the police or coroner. It is recommended that the Registrar of Cemeteries at the Ontario Ministry of Consumer Services is also immediately notified.

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

6.0 IMPORTANT INFORMATION AND LIMITATIONS OF THIS REPORT

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

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

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

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

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

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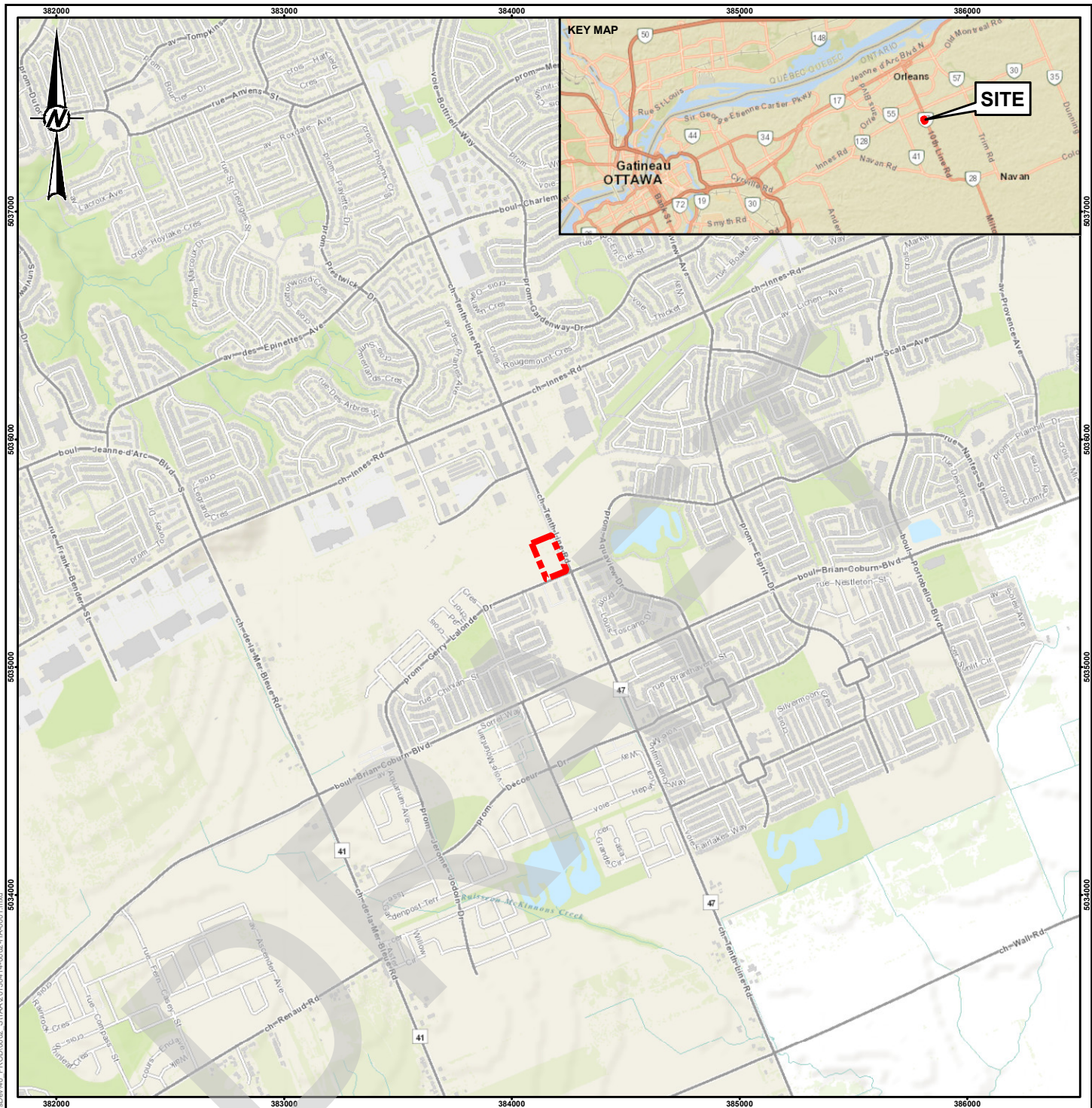
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8.0 MAPS

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LEGEND



STUDY AREA

DRAFT



NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. SERVICE LAYER CREDITS: CITY OF OTTAWA
SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI,
ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP
CONTRIBUTORS, AND THE GIS USER COMMUNITY
2. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT PROPOSED
DEVELOPMENT, PART OF LOT 2, CONCESSION 11,
GEOGRAPHIC TOWNSHIP OF CUMBERLAND, CITY OF OTTAWA,
ONTARIO

TITLE

KEY PLAN

CONSULTANT



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LEGEND

- STUDY AREA
- ROADWAY
- LOT LINE
- BUILDING FOOTPRINT

NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
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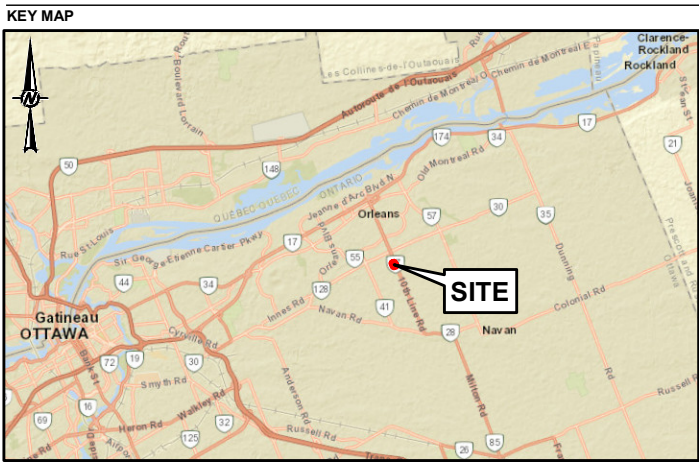
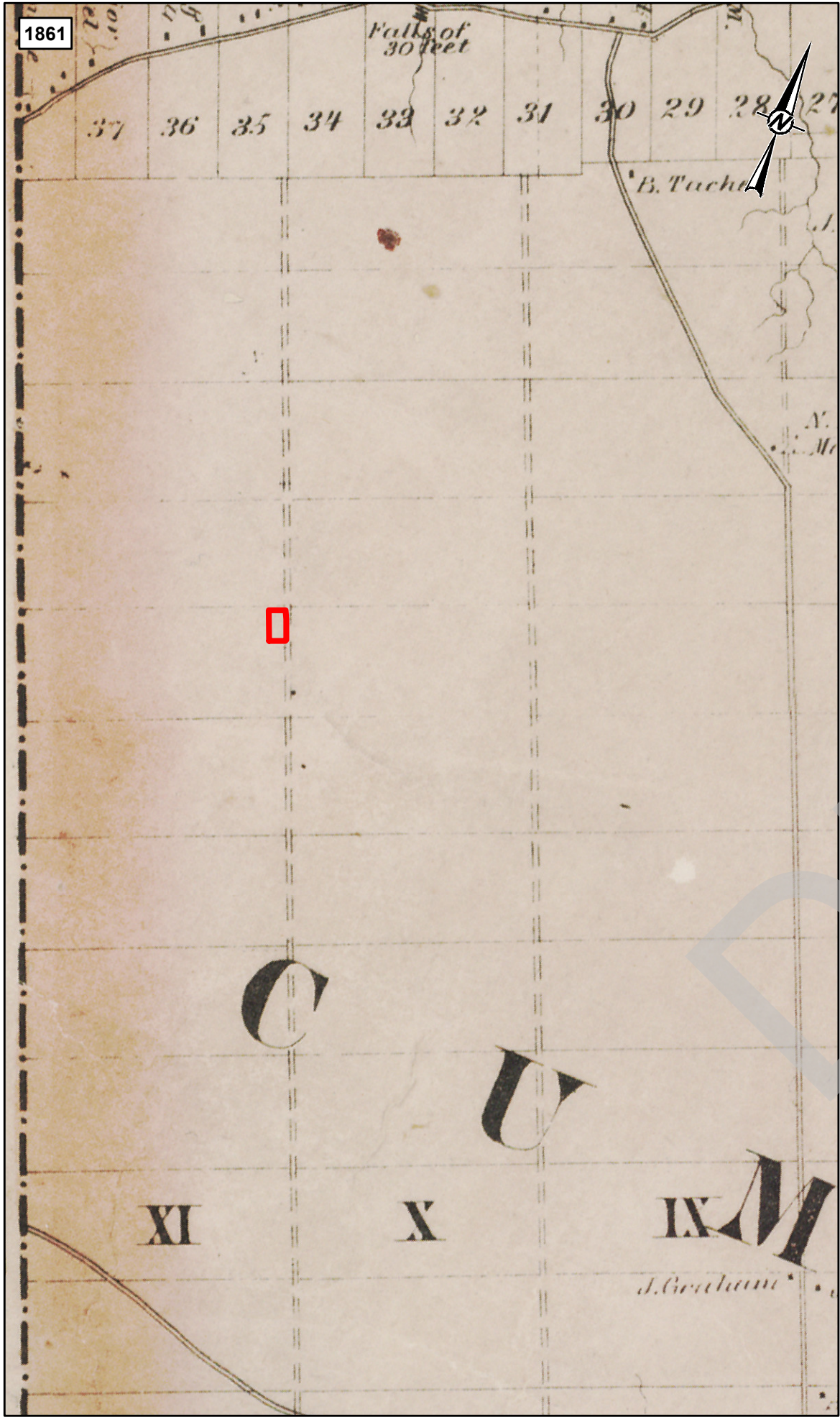
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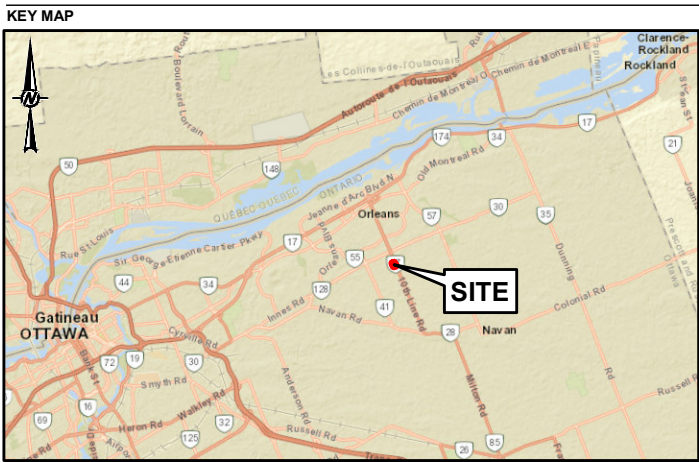
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2. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: MTM ZONE 9, VERTICAL DATUM: CGVD28




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 STUDY AREA

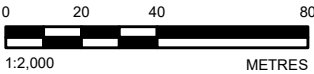
NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

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2. SERVICE LAYER CREDITS: CITY OF OTTAWA
SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
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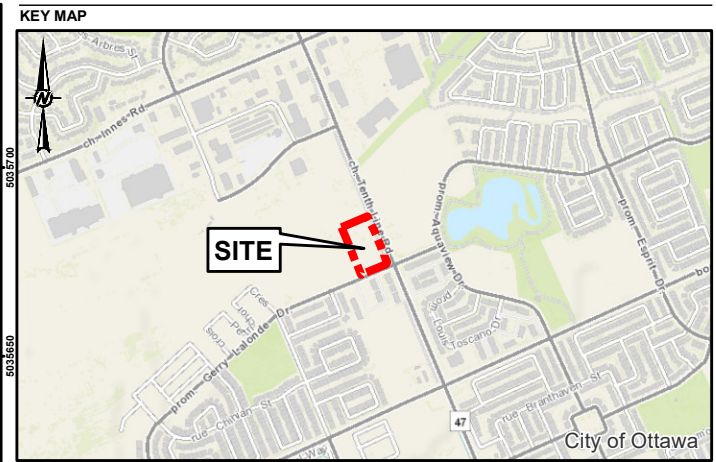
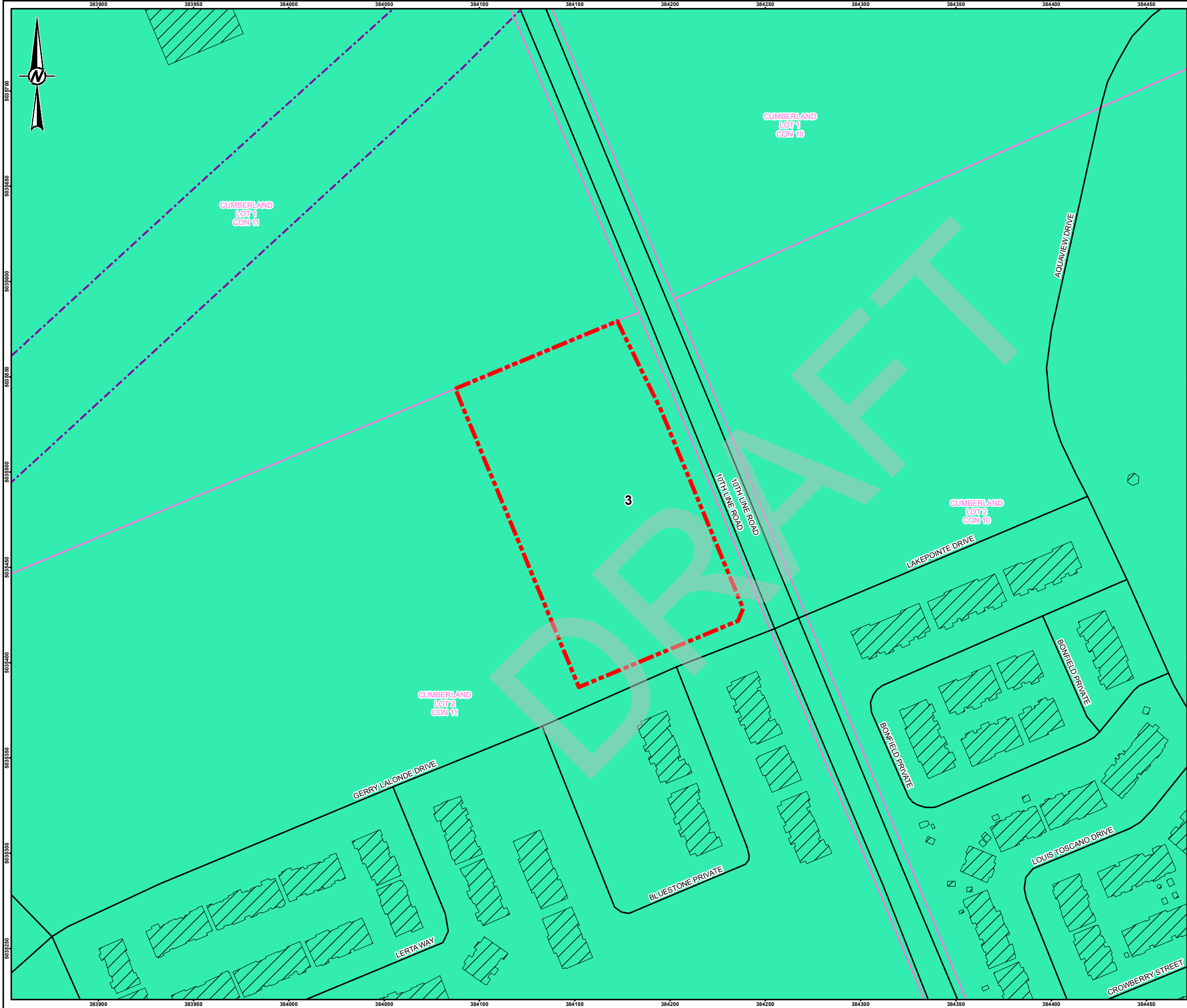
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PROJECT
STAGE 1 ARCHAEOLOGICAL ASSESSMENT PROPOSED
DEVELOPMENT, PART OF LOT 2, CONCESSION 11,
GEOGRAPHIC TOWNSHIP OF CUMBERLAND, CITY OF OTTAWA,
ONTARIO

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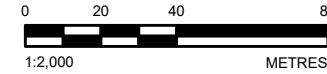
GSC SURFICIAL GEOLOGY

- 3. OFFSHORE MARINE DEPOSITS: CLAY, SILTY CLAY & SILT

NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
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2. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2018
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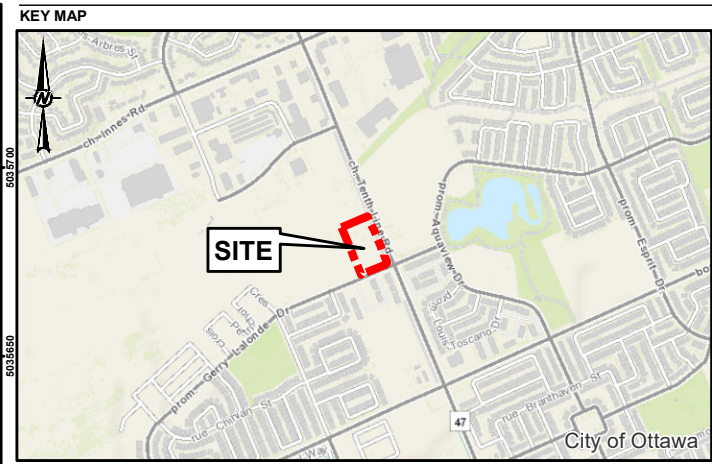
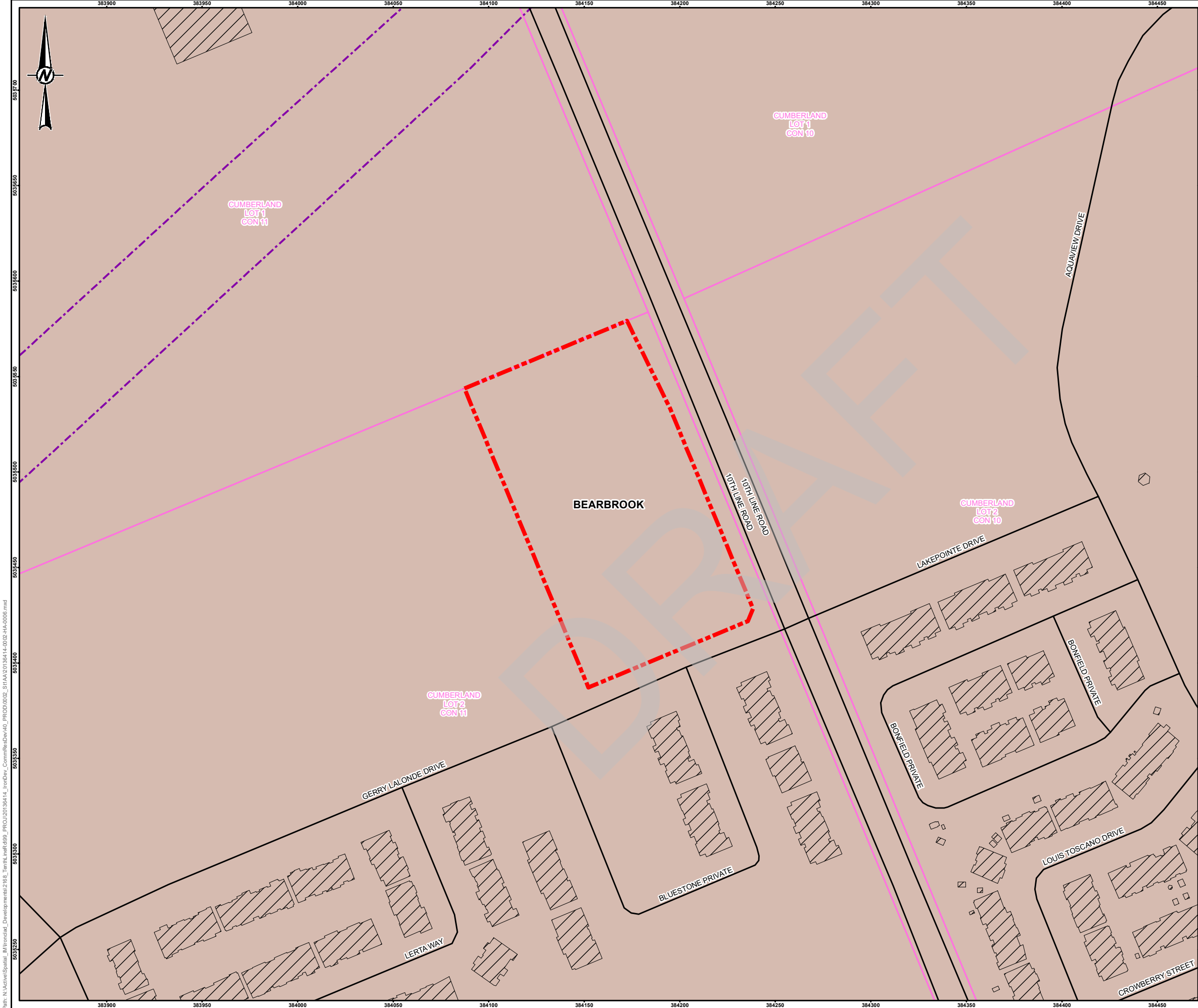
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PROJECT
STAGE 1 ARCHAEOLOGICAL ASSESSMENT PROPOSED DEVELOPMENT, PART OF LOT 2, CONCESSION 11, GEOGRAPHIC TOWNSHIP OF CUMBERLAND, CITY OF OTTAWA, ONTARIO

TITLE
SURFICIAL GEOLOGY

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PROJECT NO. 20136414 CONTROL 0002 REV. A FIGURE 5



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- STUDY AREA
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 - LOT LINE
 - BUILDING FOOTPRINT
- SOIL SURVEY COMPLEX**
- BEARBROOK

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2018
2. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: MTM ZONE 9, VERTICAL DATUM: CGVD28

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CLIENT

IRONCLAD DEVELOPMENTS INC.

PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT PROPOSED DEVELOPMENT, PART OF LOT 2, CONCESSION 11, GEOGRAPHIC TOWNSHIP OF CUMBERLAND, CITY OF OTTAWA, ONTARIO

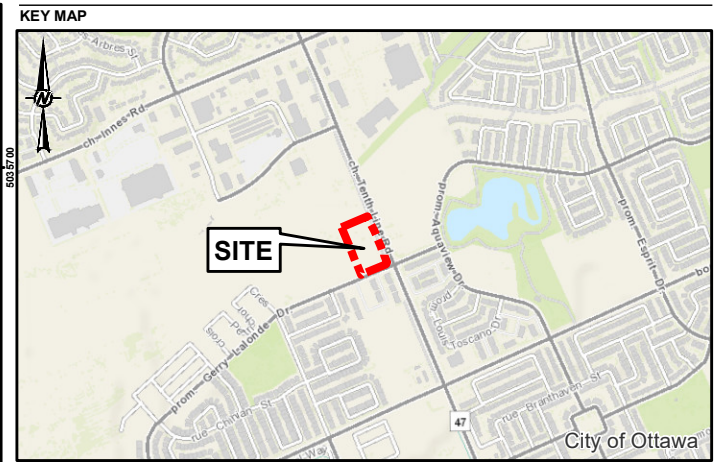
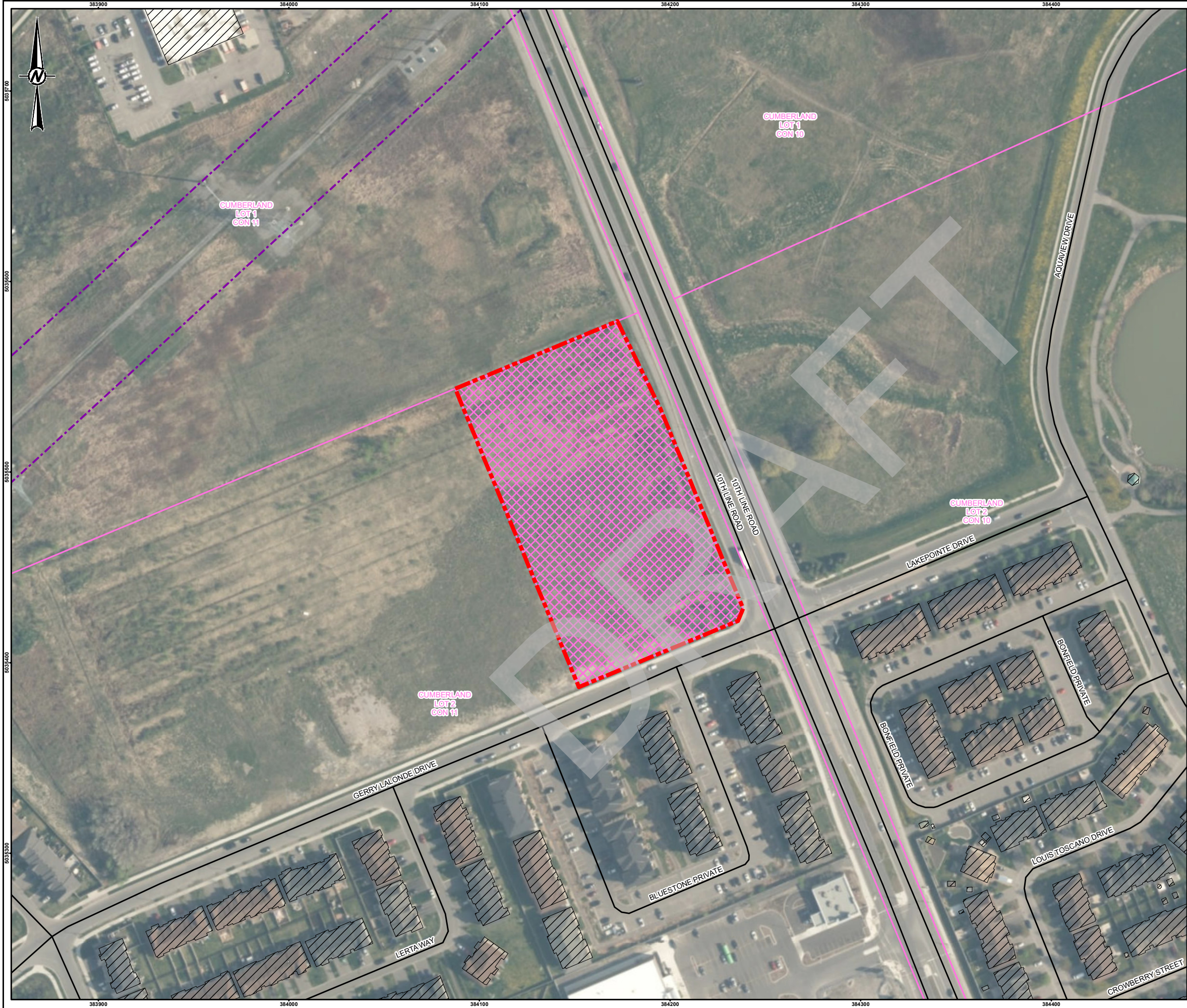
TITLE

SOIL SURVEY COMPLEX

CONSULTANT	YYYY-MM-DD	2020-03-17
DESIGNED	----	
PREPARED	BR	
REVIEWED	----	
APPROVED	----	



PROJECT NO. 20136414 CONTROL 0002 REV. A FIGURE 6



LEGEND

- STUDY AREA
- ARCHAEOLOGICAL POTENTIAL DUE TO PROXIMITY TO HISTORIC TRANSPORTATION ROUTE - STAGE 2 ARCHAEOLOGICAL ASSESSMENT REQUIRED
- ROADWAY
- HYDRO LINE
- LOT LINE
- BUILDING FOOTPRINT

NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2018
2. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: MTM ZONE 9, VERTICAL DATUM: CGVD28

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0 20 40 80
1:2,000 METRES

CLIENT IRONCLAD DEVELOPMENTS INC.			
PROJECT STAGE 1 ARCHAEOLOGICAL ASSESSMENT PROPOSED DEVELOPMENT, PART OF LOT 2, CONCESSION 11, GEOGRAPHIC TOWNSHIP OF CUMBERLAND, CITY OF OTTAWA, ONTARIO			
TITLE ARCHAEOLOGICAL POTENTIAL AND RECOMMENDATIONS			
CONSULTANT		YYYY-MM-DD	2020-03-17
		DESIGNED	----
		PREPARED	BR
		REVIEWED	----
		APPROVED	----
PROJECT NO. 20136414	CONTROL 0002	REV. A	FIGURE 8

Signature Page

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

Golder Associates Ltd.

Randy Hahn, Ph.D.
Staff Archaeologist

Bradley Drouin, M.A.
Associate, Senior Archaeologist

RH/BD/ca

[https://golderassociates.sharepoint.com/sites/120835/project files/6 deliverables/stage 1 archaeology/draft report/p1107-0024-2020_march2020_re.docx](https://golderassociates.sharepoint.com/sites/120835/project%20files/6%20deliverables/stage%201%20archaeology/draft%20report/p1107-0024-2020_march2020_re.docx)

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