REVISED REPORT

Stage 1 Archaeological Assessment

Double Deck Lands, 560 Hazeldean Road, Part of Lot 29, Concession 11, Geographic Township of Goulbourn, Carleton County, now the City of Ottawa, Ontario

Archaeological Licensee: Aaron Mior (P1077)

PIF Number: P1077-0080-2025

Submitted to:

Double Deck Regional Inc.

c/o Regional Group
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Submitted by:

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Report Abbreviations

AA	Archaeological Assessment
ASDB	Archaeological Sites Database maintained by the MCM
BP	Years Before Present
CHVI	Cultural Heritage Value or Interest
ha	Hectare
km	Kilometre
m	Metre
MCM	Ministry of Citizenship and Multiculturalism
TNAS	True North Archaeological Services Inc.
PIF	Project Information Form issued by the MCM

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.

True North Archaeological Services Inc. (TNAS) was retained by the Double Deck Regional Inc. to undertake a Stage 1 archaeological assessment for the Double Deck Lands situated at 560 Hazeldean Road, within part of Lot 29, Concession 11, Geographic Township of Goulbourn, Carleton County, now the City of Ottawa, Ontario (Maps 1 and 2). The Stage 1 study area measures approximately 8.6 hectares in area includes an area for a proposed residential development (Map 3).

This archaeological assessment was triggered by the requirements of the Planning Act, 1990, in accordance with the Ontario Heritage Act, 1990 and was completed in advance of the Draft Plan Application.

The primary objectives of this Stage 1 archaeological assessment were to identify known archaeological resources within and in the vicinity of the study area, to provide information on previous archaeological investigations conducted in the area, to assess the archaeological potential of the study area and to provide recommendations as to whether any additional archaeological investigations are required and appropriate mitigation methods.

This Stage 1 archaeological assessment has reviewed accessible reference sources, including cartographic material, to assess the potential for archaeological resources within the study area defined in this report. This assessment has also been supplemented by the visual property inspection completed on 21 April 2025, which was undertaken on foot and primarily focussed on identifying areas where the modern landscape has transitioned since the early 20th century and provided the ability to observe features and landscapes that may influence the archaeological integrity of specific areas.

The archaeological data review indicated that four archaeological sites have been registered within 1 km of the study area, with nine archaeological assessments previously completed within 50 m of the study area (MCM 2025).

The archaeological potential model developed for the City of Ottawa was used as the base plan for assessing the potential for archaeological resources within the study area and was refined based on the current Stage 1 archaeological assessment to produce a project specific archaeological potential plan.

A significant portion of the study area was determined to possess archaeological potential as it is within 300 m of Carp River, with the northern portion of the study area situated within 300 m of known 19th century structures. Also identified as possessing archaeological potential is the land within 100 m of Hazeldean Road, which follows the historical road shown on the 19th century plans and was identified as possessing potential in the Hazeldean Road corridor Stage 1 assessment (Heritage Quest 2001). The previously completed Stage 1 assessment for the Fernbank Community Lands, which included the current study area, also denoted archaeological potential within the southern section of the study area (KHC 2011).

The archaeological potential model was further refined during the visual property inspection that identified areas that have been extensively disturbed (e.g., storm water pond and berm, parking area, buildings), as well as areas of indiscriminate landscape disturbance (e.g., practice area, driving range). A water retention pond situated within the Stage 1 study area east of the practice area and north of the driving bays also does not retain archaeological potential as it is considered to be permanently wet.

Due to environmental and flood plain restrictions, 2.3 hectare of land within the eastern extent of the Stage 1 study area cannot be altered or developed, with the remaining 6.3 hectares situated within the area for land development. All land retaining archaeological potential within the 6.3 hectare development area is recommended for Stage 2 assessment prior to any land altering activities.

The visual property inspection identified evidence of extensive disturbances to the natural landscape that negated the potential to recover archaeologically significant materials (17% of development lands), as well as areas where previous activities may have impacted the potential to recover *in situ* cultural materials although the extent of these disturbances could not be confirmed based on the visual inspection (83% of development lands). Areas of retained archaeological potential include land where evidence of subsurface utilities, as well as electrical and water irrigation infrastructure is known to be present based on the visual survey and information from the property owner. Ploughing these areas would not be possible based on the existing landscape (e.g., elevated artificial features, sub-grade sand bunkers, etc.) and the presence of subsurface utilities would present a significant safety hazard. Therefore, ploughing these areas is not considered a viable option.

This Stage 1 archaeological assessment has provided the basis for the following recommendations (Maps 14 and 14A):

1. Land retaining archaeological potential within the development area that will be impacted by soil altering activities should be assessed by test pit survey. The test pit survey should be undertaken in compliance with the MCM's *Standards and Guidelines for Consultant Archaeologists* (2011), with test pits hand excavated at 5 m intervals and transition to discretionary test pit intervals and landscape documentation where soil disturbance is documented.

2. No further archaeological assessment is recommended for portions of the study area that are not identified in this report as possessing archaeological potential.

3. Should any land within the Stage 1 study area currently outside the proposed development area be considered for development in the future, a Stage 2 archaeological assessment should be completed prior to any soil disturbance activities.

4. Any future Stage 2 archaeological assessment should be undertaken by a licensed consultant archaeologist, in compliance with the Ministry of Citizenship and Multiculturalism's 2011 *Standards and Guidelines for Consultant Archaeologists*.

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1.0 Project Context

1.1 Development Context

True North Archaeological Services Inc. (TNAS) was retained by the Double Deck Regional Inc. to undertake a Stage 1 archaeological assessment for the Double Deck Lands situated at 560 Hazeldean Road, within part of Lot 29, Concession 11, Geographic Township of Goulbourn, Carleton County, now the City of Ottawa, Ontario (Maps 1 and 2). The Stage 1 study area measures approximately 8.6 ha in area includes an area for a proposed residential development (Map 3).

This archaeological assessment was triggered by the requirements of the Planning Act, 1990, in accordance with the Ontario Heritage Act, 1990 and was completed in advance of the Draft Plan Application. The assessment was carried out in accordance with the Ministry of Citizenship and Multiculturalism's (MCM) *Standards and Guidelines for Consultant Archaeologists* (MCM 2011). Permission to access the property was provided by Stefanie Kaminski, Double Deck Regional Inc. Land Development Manager, with no restrictions or limitations

1.2 Objectives

This Stage 1 archaeological assessment was completed to identify known archaeological resources on, or in the vicinity of, the project area as well as to assess the archaeological potential of the study area. The objectives of a Stage 1 archaeological assessment are based on principals outlined in the *Ontario Heritage Act* (consolidated 2007) and the Ontario Ministry of Citizenship and Multiculturalism's (MCM) *Standards and Guidelines for Consulting Archaeologists* (2011). More specifically, this Stage 1 archaeological assessment was completed with the following objectives:

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

2.0 Historical Context

2.1 Regional Indigenous Context

The following historical narrative is intended to provide a general overview of the interpreted land use during the "Pre-Contact and Post-Contact Periods" within the vicinity of the current study area. This historical overview generally reflects inferences and interpretations based on archaeological and historical interpretations primarily made by non-Indigenous representatives.

This section is intended to provide a general historical overview that can be referenced when assessing the potential for archaeological resources within the current project study area. The text and comments

below, including the cited references, may reflect archaeological literature within general publications, but may not represent the opinions of those Indigenous communities whose history it is purported to reflect.

Paleo Period (13,000 – 9,000 BP)

The Paleo Period represents a temporal classification developed by archaeologists and does not reflect any inferences of initial human habitation. This period extends from around 13,000 years before the present (BP), when glacial ice began to recede within the modern-day area of the Ottawa Valley.

Following the period of deglaciation, the Ottawa Valley was inundated by the Champlain Sea, which is interpreted to have extended from Rideau Lakes in the south, along the Ottawa Valley and St. Lawrence areas and terminating around Petawawa in the west (Watson 1999a). The exact western boundary is undetermined as current elevation levels reflect the isostatic adjustment of the land following the melting of the glaciers and cannot be used to determine the exact location of the Champlain Sea at the time of its existence (Chapman and Putnam 1984). The eastern portion of the sea extended into the Atlantic Ocean.

During the Early and Middle Paleo Periods (13,000 – 9,500 BP) the study area would have remained inundated by the Champlain Sea, although as the Champlain Sea receded during the Late Paleo Period (9,500 – 9,000 BP) it is likely that people migrated along the changing waterfront landscape where vegetation was being re-established (Watson 1999a). The ridges and old shorelines of the Champlain Sea and early Kichi Sibi (Ottawa River) channels reflect areas most likely to contain evidence of Paleo Period land use in the region. Archaeological and geological investigations in the Ottawa Valley have indicated these early sites may be identified within the 550 ft (167.6 m) or higher contour topography, although additional research may be required to confidently assess this correlation (Kennedy 1976).

The presence of Indigenous peoples during the recession of the Champlain Sea is reflected in Algonquin oral history which tells of the hero Wiskedjak hunting giant beaver by draining Lake Superior and the beaver creating rapids as it fled east (Morrison 2005). As giant beavers went extinct along with many other North American megafauna between 12,000 to 10,000 years ago and the draining of Lake Superior reflects the drainage of glacial lakes following the end of the last glaciation, these stories may reflect cultural memories of life during the Paleo Period.

By the Late Paleo Period (9,500 - 9,000 BP), enclosed coniferous forests with some minor deciduous elements became established in eastern Ontario, with contemporary populations traversing large territories in response to seasonal resource fluctuations. The transition to the Late Paleo Period also included projectile points comprised of smaller unfluted projectiles along with lanceolate parallel flaked stemmed and non-stemmed Plano points, while hunting strategies may have transitioned from communal groups to more individualized pursuits (Ellis and Deller 1997).

The identification of Paleo Period sites in the Ottawa Valley region has been hindered by the erosion of accessible locations during the environmental changes associated with the transition from the Late Paleo Period to the succeeding Archaic Period. The potential use of watercraft by Paleo Period inhabitants (Jodry 2005; Engelbrecht and Seyfert 1995) and evidence for the abundance of marine resources (Robinson 2012; Loring 1980) raises the possibility of occupation sites situated on accessible landforms such as those exposed as isolated islands above the 167 m elevation contours. As the Ottawa River delta prograded eastward during the regression of the Champlain Sea (Fulton et al. 1987), these isolated exposed landscapes would have been impacted by periods of overflow from glacial Lake Agassiz. The inundation of flood waters from the glacial lake may have caused significant erosion (Fulton and Richard

1987), with another possibility being that the sediment transport facilitated by the moving water may have buried cultural materials within these potential occupation areas.

Documented evidence indicating land use within the Ottawa Valley during the Paleo Period includes the recovery of two bi-facially fluted projectile points recovered near the Rideau Lakes that would have been situated near the contemporary Champlain Sea shoreline (Watson 1999b) and an isolated projectile point near Quyon, Quebec (Laliberté 1991), with additional interpretations of Paleo Period material identified during archaeological investigations near Greenbank Road (Swayze 2003), Albion Road and Rideau Road (Swayze 2004). There are one registered Paleo Period archaeological sites located within Goulbourn Township, which has been registered as the Holy Spirit site (Borden Number BhFx-33). This site included the recovery of lithic materials and is situated 2.4 km southwest of the study area (MCM 2025).

Archaic Period (9,000 – 2,950 BP)

During the Early Archaic Period (9,000 – 8,000 BP), a gradual increase in atmospheric humidity in conjunction with warmer summers influenced the environmental landscape within the general study area vicinity. Fossil pollen and spore identification from sedimentation cores lifted from Lovesick Lake provide evidence of climate change, with jack pine forests becoming dominant during the beginning of the Early Archaic Period (Teichroeb 2007). Land use within the Ottawa Valley increased during this early environmental transition, with evidence of an Early Archaic dovetail projectile point recovered in the Ottawa area (Pilon and Fox 2015) confirming contemporary land use within the regional landscape.

Concurrent with the environmental evolution were notable diagnostic technological changes including the appearance of side and corner-notched projectile points used for hunting (Ellis 2013). Other significant innovations included the introduction of ground stone tools such as celts and axes, which may reflect an emerging woodworking industry.

Populations in Ontario during this period primarily utilized maritime landscapes during the spring, summer and fall seasons with large base camps on islands, near river mouths, and on the shores of embayment's where a variety of flora, fish, and wild fowl resources could be obtained. Smaller hunting and specialized campsites were also established in the uplands and along smaller watercourses. The waterways were the preferred method of travel, and many burials are located along these waterways (Taylor 2015), as well as the traditionally visited islands. Access to islands and mainland shorelines would have been facilitated by a variety of contemporary watercraft such as bark canoes, skin boats and dugout canoes (Monk 1999).

Indigenous community members utilized watercraft to travel along navigable waterways such as the Ottawa, Gatineau and Rideau River systems to meet, trade and exchange information. These waterways represented the historical highways facilitating the movement of both people and materials through the general study area vicinity. Archaeological discoveries made in the area around the Ottawa River system and associated tributaries illustrate the existence of an extensive, continent-scale network of communication and trade with the discovery of a variety of raw materials used for stone tool production including Ramah chert from the tip of Labrador, Mistassini quartzite from the centre of Québec, Hudson's Bay Lowland chert from the region bordering Hudson Bay, abundant Onondaga chert obtained from the Onondaga Escarpment region south and west of Lake Ontario, as well as distinctive Mercer and Burlington Formation cherts from modern-day Ohio and Illinois (Pilon and Boswell 2015).

The Ottawa River and tributary waterways were also an important route for the movement of copper, either through direct trade between individual groups, or through expeditions to Lake Superior to access

local copper deposits (Chapdelaine et al. 2001). 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, were presumably transported by canoes and other watercraft along regional waterways.

The Ottawa Valley was also one of the primary corridors that facilitated the transmission of technological information and techniques (Kennedy 1970). Artifacts representative of the expanding trade network included "birdstones" which were small, bird-like effigies usually manufactured from green banded slate, as well as marine shell artifacts from the Mid-Atlantic coast that are frequently encountered in burial contexts (Ellis et al. 2009; Ellis et al. 1990).

Sites with Archaic Period components that demonstrate this expanding trade network include Morrison's Island and Allumette Island in the Outaouais region of the Ottawa River (Chapdelaine et al. 2001; Clermont 1999; Clermont and Chapdelaine 1998), sites identified at Lac Leamy near the junction of the Gatineau and Ottawa Rivers, and also in the Rideau Lakes area (Paterson 2020a; Watson 1982). Additional significant sites with Archaic Period components along Ottawa Valley waterways that were likely influenced by these trade routes include Jessup Falls near the mouth of the South Nation River and at Spencerville near the source of the South Nation River (Daechsel 1980).

During the Middle Archaic Period (8,000 – 4,000 BP) the trend towards more diverse toolkits continued, as the presence of netsinkers and fish weirs reflect the importance of fishing within the contemporary subsistence strategy. It was also during this period that stone tools specifically designed for the preparation of wild plant foods were crafted and when 'bannerstones" were first manufactured, which are carefully crafted ground stone devices that served as a counterbalance for *atlatls* or spear-throwers (Ellis 2013).

The diverse trade relationships may have also influenced the transition from seasonal expeditions across large areas to more centralized occupation within smaller areas that provided the opportunity to facilitate interaction with those conducting trade, whether it was "down-the-line" or controlled by individuals interacting directly with different groups (Kennedy 1970). Another noticeable attribute during the Middle Archaic Period is the increased reliance on local, often poorer quality, chert resources for manufacturing projectile points (Ellis 2013). While groups traversed larger territories during the Paleo and Early Archaic Periods and were able to visit primary outcrops of high-quality chert at least once during their seasonal round, during the Middle Archaic Period groups traveled within comparatively smaller territories that did not always possess a source of high-quality raw materials. In these instances, lower quality resources that had been previously deposited by the glaciers in the local till and river gravels were utilized.

Trade connections across vast territories continued into the Late Archaic Period (4,000 – 2,950 BP), when the trend towards decreased territory size and a broadening subsistence strategy continued. Late Archaic Period sites have been discovered in greater numbers compared to Early and Middle Archaic Period sites, suggesting the local population was rapidly expanding (Laliberté 1998c).

It is during the Late Archaic Period that the first defined cemeteries are identified, as prior to this period individuals were typically interred close to the location where they died. During the Late Archaic Period, when an individual died while their group was away from the territorial cemetery, the remains would be kept until the group returned to the home cemetery where they could be interred (Pilon and Young 2009; Kennedy 1966). Consequently, it is not unusual to find disarticulated skeletons, or even skeletons lacking minor elements such as fingers, toes or ribs, in Late Archaic Period burial pits.

Burial grounds such as those at Morrison and Allumette Islands were also important junctions for trade and have been theorized to have provided strong symbolic claims over a local territory and the surrounding resources (Laliberté 1998c). These burial grounds are often located within areas of elevated topography containing well-drained sandy and gravel soils adjacent to major watercourses or on exposed islands.

At least 11 archaeological sites have been registered in Goulbourn Township with Archaic Period components, with the closest represented by Borden Number BhFx-12 situated 2.7 km west of the study area (MCM 2025).

Woodland Period (2,950 – 500 BP)

The Early Woodland Period (2,950 – 2,200 BP) is distinguished from the Late Archaic Period primarily by the introduction of ceramic technology. The first pots were thick walled and friable, suggesting they may have been primarily used in the processing of nut oils by boiling crushed nut fragments in water and skimming off the oil (Spence et al. 1990). These early vessels were not easily portable, and their fragile nature suggests they may have required regular replacement. There have also been numerous Early Woodland Period sites identified where ceramics were absent from the recovered assemblage, suggesting ceramic vessels may not have been completely integrated within the daily lives of Early Woodland Period populations.

Besides the addition of ceramic technology, the cultural affinity of Early Woodland Period inhabitants shows a great deal of continuity with the preceding Late Archaic Period. For instance, birdstones continued to be manufactured, although the Early Woodland Period varieties have "pop-eyes" that protrude from the sides of their heads (Spence et al. 1990). Another example of general continuity from the terminal segment of the Archaic Period is represented by the thin, well-made projectile points, although the Early Woodland Period variants were side-notched rather than corner-notched, giving them a slightly altered and distinctive appearance (Spence et al. 1990).

The transition from the Early to Middle Woodland Period (*ca*. 2,400 to 1,100 BP) is primarily characterized by an overall increase in diverse decorative styles displayed on ceramic pots, with contemporary ceramic vessels often decorated with impressed designs covering the entire exterior surface and upper portion of the vessel interior. Consequently, even very small fragments of vessels manufactured during the Middle Woodland Period can be diagnostically distinct.

In terms of subsistence strategies, the Middle Woodland Period (2,200 - 1,100 BP) reflects an evolving transition from patterns observed from archaeological excavations documenting Archaic and Early Woodland Period sites. While Middle Woodland Period populations still relied on hunting and gathering to meet their subsistence requirements, an increased consumption of fish became an important dietary component. Some Middle Woodland Period sites have produced literally thousands of bones from spring spawning species including walleye and sucker (MCR 1981).

Along the Ottawa River, Middle Woodland Period sites have been identified within the National Capital Region at Marshall’s and Sawdust Bays (Daechsel 1981; Daechsel 1980), Rockcliffe Park (Pilon and Boswell 2015; Pilon 2008) and a complex of sites at Lac Leamy (Paterson 2020a; Gates St-Pierre 2010; Pilon 2006; Laliberté 2000, 1995, 1994).

The transition from the Middle to Late Woodland Period is marked by the introduction of triangular projectile point styles and cord-wrapped stick decorated ceramics (Martin 2004; Crawford et al. 1997;

Bursey 1995; Ferris and Spence 1995; Spence et al. 1990; Williamson 1990; Ritchie 1971), although these attributes may not always reflect diagnostic components of specific Nations as many interacted and shared cultural traits.

During the Late Woodland Period, the Ottawa Valley appears to have been a zone of interaction between Iroquoian speaking populations to the south who primarily relied on domesticated crops and Algonquian speaking groups to the north who continued a predominately hunter-gatherer lifestyle. The Huron peoples along the north shore of Lake Ontario had moved to the Lake Simcoe – Georgian Bay region, leaving the area of eastern Ontario, except for some small Algonquin groups, generally unoccupied by the time early French explorers arrived in the area around the beginning of the 17th century.

The increased population and semi-nomadic lifestyle prevalent within the Ottawa Valley during the Woodland Period are reflected in the distribution of sites documented along the Ottawa River and surrounding navigable waterways. During the winter, Algonquin families resided in hunting territories shared by male members of the family and bounded by rivers, lakes, or other natural features (Pendergast 1999; Speck 1915), with moose, deer, and beaver being hunted and trapped (Morrison 2005). During the summer, larger groups came together at summer camps such as those at Morrison Island and Lac Leamy along the Ottawa River (Pilon and Boswell 2015). The importance of the Ottawa River as a transportation route, as well as an area of resource and subsistence extraction, through this period is reflected in the number of known archaeological sites identified on both sides of the river.

Late Woodland Period sites have been recorded throughout the National Capital Region. A significant Woodland Period occupation has also been identified at Lac Leamy (Pilon and Boswell 2015; Laliberté 1995). Several sites have been documented along the north shore west the study area including one near Aylmer (Sowter 1915), another near the Champlain Bridge registered as BiFw-39 (Laliberté 1998a; Laliberté 1998b), at Indian Point in the Pembroke area (Pilon 2005) and near the convergence of the Schyan and Ottawa Rivers (Kennedy 1964).

Although there few registered archaeological sites specifically dating to the Late Woodland Period within Goulbourn Township (MCM 2025), there is evidence of Woodland Period occupation near the southern Ottawa River shoreline documented across from Aylmer at Raymond Point (Sowter 1915; Sowter 1901; Sowter 1900), near Shirley's Bay and Rocky Point (Jamieson 1989), Constance Bay (Watson 1972; Savage 1972), Marshall's and Sawdust Bays (Daechsel 1981) and on Morrison Island (Pilon and Boswell 2015; Pilon and Young 2009; Kennedy 1966).

Early contact with European settlers at the end of the Late Woodland Period resulted in changes to the traditional lifestyles of many Indigenous populations, influencing settlement size, population distribution, and material culture. The introduction of European-borne diseases also significantly increased mortality rates, resulting in a drastic decrease in population size (Warrick 2000).

2.2 European Contact and Post-Contact Period

The Algonquin Nation had long been established along the Ottawa River and its tributary valleys when the French arrived in the area. Samuel de Champlain met with several Algonquin representatives in 1603 shortly after he established the first French settlement on the St. Lawrence River at Tadoussac (AOO 2013), with Étienne Brûlé generally acknowledged as the first European to pass through what is now the

Ottawa Valley area when he portaged at the Rideau Falls in 1610 and with the aid of Algonquin guides proceeded to explore the interior of Canada (AOO 2013).

Another French expedition led by Nicholas de Vignau traveled through the Ottawa Valley area in 1611 (Pendergast 1999), followed by Samuel de Champlain in 1613 who led the French voyageurs from Montreal to Morrison Island along the Ottawa River (Croft 2006), which was commonly known as the Grand River (*Kichi Sibi* in Algonquin) or the River of the Algoumequin (Pilon 2005). Champlain again encountered Algonquin community members in the Ottawa Valley area in 1615, with many living in regional groups around the Madawaska River, Muskrat Lake, along the Ottawa River above and below Morrison Island, and also along the Mattawa River to Lake Nipissing (AOO 2013).

The French established a relationship with the Algonquin communities around the Ottawa Valley that provided an opportunity to monopolize the early fur trade as the two groups developed close relations throughout the 17th century (Trigger and Day 1994). The colonial economic wealth stimulated by the French fur trade in the early 17th century promoted the rapid expansion northward, with the Ottawa River providing the opportunity to transport goods to the western trading posts on the lakes by canoe, which could not be accomplished by the larger sailing vessels operating on Lake Ontario (Adney and Chapelle 2014).

Competition for furs increased existing tensions between the Algonquin communities and their Indigenous neighbours including the Haudenosaunee Nations, residing to the south around the St. Lawrence River and Lake Ontario areas. The 17th century saw a long period of conflict known as the Beaver Wars between the Algonquin and the Haudenosaunee communities that resulted in the significant disruption of trade. Mohawk raids against Algonquin villages in the Upper Ottawa and St. Lawrence Valleys resulted in the abandonment or destruction of many Algonquin villages (Trigger and Day 1994). Some Algonquin's found refuge in French settlements such as Trois-Rivieres, Quebec City, Sillery, and Montreal while others may have relocated to interior locations along the Ottawa River's tributaries, including the Rideau River (Holmes 1993). At the end of the 17th century, the Haudenosaunee were driven out of much of southern Ontario by the Mississauga though they continued to occupy areas within eastern Ontario on a seasonal basis.

In 1701, representatives from the Haudenosaunee and more than 20 Anishinaabeg Nations assembled in Montreal to participate in the Great Peace negotiations, sponsored by the French Governor Calliere (Johnston 2006; Johnston 2004). A peace treaty between the Anishinaabeg and the Kanien'kehá:ka (Mohawk) was agreed to once again share in the bounty of the territory as partners (One Dish, One Spoon), although this partnership was strained by the "Great Imbalance" represented by the fur trade with European capitalists (Monague 2022).

The resulting treaty document signed at Montreal was not the only record made of the Peace between the Anishinaabeg and the Haudenosaunee. At a council held at Lake Superior, the Haudenosaunee secured peace by delivering a wampum belt to the Anishinaabeg. This belt was carried by successive generations of leaders who were charged with remembering the meaning of symbols worked upon the shell beads and each generation had a responsibility to renew the peace forged by their ancestors (Johnston 2006).

Between 1712-1716, Algonquin communities continued to utilize the Ottawa Valley and Gatineau River areas, with the primary Haudenosaunee activities occurring south of the St. Lawrence River (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 former French colonies. Shortly after the French abandonment around the Great Lakes, English merchant Alexander Henry ventured into the Great Lakes area where he communicated with Anishinaabeg leader Minavanana in September 1761. Henry was informed that the English would suffer retaliation for Anishinaabeg war losses unless the English King made peace with them, with many of the former French forts in the Great Lakes region within Anishinaabeg control. In response, King George III issued a Royal Proclamation on 7 October 1763 acknowledging that Indigenous Nations residing on all lands outside the boundaries of the settled colonies "*not having been ceded to or purchased by Us, are reserved to them, or any of them, as their Hunting Grounds*" (Reimer 2019, p. 38). The territory reserved for Indigenous Nations encompassed the entire Great Lakes region and peace was secured following discussions between the British and more than 1,500 Anishinaabeg leaders at Niagara Falls in July 1764 where the alliance was sealed by two magnificent wampum belts (Johnston 2006).

The extension of Quebec's boundaries in 1774 through the Quebec Act and the use of the Ottawa River as the boundary between Upper and Lower Canada following the 1791 Constitution Act separated the traditional Algonquin lands between two colonial government administrations (AOP 2012). This legislative act does not seem to have negatively influenced trade between the British and local Indigenous communities as the recovery of European trade goods (e.g., iron axes, copper kettle fragments and glass beads) from Indigenous sites throughout the Ottawa River drainage basin provides evidence of the extent of contact between the Indigenous communities and the European explorers traversing the Ottawa River during this period.

2.3 Land Treaties

Britain's colonial policy differed from the French, with the British much more interested in securing land surrenders from the Indigenous populations for settlement by Europeans rather than establishing communal relationships. The Royal Proclamation of 1763 issued by King George III enabled the Crown to monopolize the purchase of Indigenous lands west of Quebec and although the proclamation recognized Indigenous rights to their land and hunting grounds, it also included stipulations where 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 British implemented annuity systems in the purchase of lands from Indigenous peoples where the interest payments of settlers on the land were intended to cover the cost of the annuity rather than pay a one-time lump sum.

The study area is situated along the boundary of the Rideau Purchase (Treaty 27 and 27¼), and the earlier Crawford's Purchases. The Crawford Purchases occurred in 1783 and included the lands north of eastern Lake Ontario (Ontario 2024). These land purchases were intended to provide settlement areas for Loyalist refugees and their Indigenous allies. The negotiations took place between Captain William Redford Crawford and the Mississaugas and Chief Mynass from the Lake of Two Mountains (Boileau 2020).

The Rideau Purchase, which includes the lands within the western portion of the study area, occurred in 1819. British government agent John Ferguson met with representatives of the Mississaugas of the Bay

of Quinte and Kingston regions, who claimed rights to the area of the Rideau land purchase. Although the Ottawa and Madawaska River valleys were generally known to be the hunting grounds of the Iroquois and Algonquin communities, they were not invited to the discussions for either the Crawford Purchases or Rideau Purchase. The Mississauga representatives indicated they controlled the Ottawa Valley, and that "the Nipissings and Algonquins do not cross the Ottawa River" (Surtees 1994; 1982).

The land included in the Rideau Purchase comprised almost 2.75 million acres, which the Mississaugas agreed to sell for an annuity of £642.10. It was stipulated that this sum would be distributed at the rate of 50s per person. This provisional agreement was approved by the British Treasury, but due to delays in making some of the annuity payments, a confirmatory land transfer did not follow until 26 April 1825. At that time, the per capita annuity was raised to £2.10, but stipulated that payment must be confined to 257 people, which represented the number claiming the land at the time of the original agreement (Surtees 1982).

The Algonquin communities within the Crawford Purchases and Rideau Purchase areas were not only excluded from the treaty discussions, but were also not included in the allocation of payment for the "transfer" of land (Surtees 1994). In 1839, the Crown denied the Algonquin and Nipissing communities 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 British did little to prevent additional encroachments by settlers on Indigenous lands. By the 1850s, Indigenous groups had become cautious of these agreements and began to demand the retention of reserved land and preservation of hunting and fishing rights (Surtees 1994).

A reserve was purchased for use by the Algonquins in Golden Lake in 1873, now known as Pikwàkanagàn (AOO 2013; Holmes 1993). Additional reserves and settlements for the Algonquin community members were also established in Quebec during the mid-20th century, although these reserves only secured a small fragment of what once had been the original homeland of the Algonquins (AOO 2013).

The Algonquin never surrendered their territory by treaty, sale or conquest and petitions to remove settlers from their lands and to have their title recognized date back to 1772. The Algonquin of Pikwàkanagàn set in motion the ongoing land claims process in 1983 when they presented their comprehensive claim to the Government of Canada and, in 1985, to the Government of Ontario. It was not until 1991 and 1992 that the land claim was accepted by the provincial and federal governments, respectively. In 1994, the three parties signed a Framework for Negotiations Agreement, outlining shared objectives (Tomiak 2016).

An agreement-in-principal was finalized in December 2012 and has since been subject to community consultations. According to the agreement-in-principal, 117,500 acres of land administered by the Crown within the land claim area will be selected for transfer to the Algonquins of Ontario in fee simple title (Tomiak 2016; Tasker 2016). While this represents an important step in the negotiations, the talks are ongoing.

The Algonquins of Ontario today consists of ten communities comprising 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 2013).

2.4 Contextual Study Area History

An extensive historical overview of the surrounding area is outside the current scope of work. The following is included to provide a general historical overview in relation to the potential archaeological resources that may be located within the current study area.

First Nations have utilized land within the study area vicinity since time immemorial, which has been recorded through oral histories, previous archaeological assessments and contextual research reports. Archaeological evidence of this land use dates at least to the Late Paleo Period, and extends through the Woodland Period, representing material culture residues and land use over a period of around 9,500 years prior to the arrival of Europeans to the area.

An overview of registered archaeological sites confirming the presence of Indigenous peoples in the study area vicinity prior to 1600 is presented in Table 1.

Table 1: Registered Archaeological Sites Confirming Indigenous Land Use Within 10 km of the Study Area Prior to European Contact[1]

Period	Sub-Period	Temporal Context	Number of Registered Sites	Borden Numbers
Paleo	Early	13,000 – 10,000 BP		
	Middle	10,000 – 9,500 BP		
	Late	9,500 – 9,000 BP	1	BhFx-33
	Unspecified	13,000 – 9,000 BP		
Archaic	Early	9,000 – 8,000 BP	20	BhFx-3, BhFx-4, BhFx-5, BhFx-6, BhFx-7, BhFx-8, BhFx-9, BhFx-10, BhFx-11, BhFx-12, BhFx-13, BhFx-14, BhFx-15, BhFx-16, BhFx-17, BhFx-18, BhFx-29, BhFx-30, BhFx-31, BhFx-33
	Middle	8,000 – 4,000 BP	2	BhFx-27, BhFx-64
	Late	4,000 – 2,950 BP	1	BhFx-19
	Unspecified	9,000 – 2,950 BP	1	BhFx-62
Woodland	Early	2,950 – 2,200 BP	1	BhFx-66
	Middle	2,200 - 1,100 BP		
	Late	1,100 – 400 BP		

[1] Archaeological sites documenting evidence of land use over multiple temporal periods may be represented within each row accordingly.

	Unspecified	2,950 – 400 BP	1	BhFx-46
Pre-Contact	Unspecified	11,000 – 400 BP	7	BhGa-6, BhFx-2, BhFx-22, BhFx-28, BhFx-35, BhFx-36, BhFx-37

When assessed within the context of the contemporary landscape, the documentation of these archaeological sites reflects the intensified activity and the preference for land use within proximity to the Ottawa River and its tributary the Carp River within the study area vicinity. Although previous archaeological investigations have not documented land use within 10 km of the study area prior to 9,500 B.P., the Ottawa River watershed, including the tributary waterways, have witnessed an Indigenous presence since time immemorial (Luckasavitch 2019) and the presence of only one potential archaeological site within 10 km of the study area pre-dating the Early Archaic Period may be a result of environmental transitions and landscape disturbances following the arrival of Europeans that have influenced the propensity of earlier Paleo Period sites to survive within the archaeological record. Based on interpreted geological data, the study area was also likely inundated by the Champlain Sea until around 9,500 B.P., with land use occurring soon after the recession of the water.

Land occupation by Euro-Colonialists significantly increased following the Rideau and Crawford Purchase land transactions negotiated in the early 19th century. Hazeldean Road was laid out during the 1817 survey of Goulbourn Township, which facilitated access and land purchases along the corridor with many of the lots granted to Irish Protestant immigrants during the 1820s (Heritage Quest 2001).

The study area is situated within the east half of Lot 29, Concession 11, with the Crown Patent for this 100 acre property granted to John Hazelwood in 1828, who sold the 100 acres to William Hodgins in 1833 (Inst. No. 1262). The Hodgins family continued to own the property through the mid-19th century, with John Hodgins shown as the primary landowner on the 1863 and 1879 Goulbourn Township historic plans (Map 4). No structures are illustrated within the study area on the 19th century maps, with the nearest residential building within Lot 29 situated almost 280 m west of the study area. This structure generally correlates to the location of the Bradley-Craig farmhouse, which is still standing and designated as a heritage property (City of Ottawa 2025).

William Hodgins sold the east half of Lot 29 to Joshua Bradley in 1907 for $6,600 (Inst. No. 1262), although it is doubtful Hodgins or Bradley were residing on the property in the early 20th century as no structures are visible within the study area on the 1906 and 1920 topographic plans (Map 5). In 1921, the 100 acre property was split between Joshua Bradley and John C. Bradley, with Joshua selling his parcel to John in 1964 (Inst. No. 14782). The property was likely utilized for agricultural purposes during this period, with no structures illustrated within the study area on the 1963 or 1971 topographic plans (Map 5), with the 1976 aerial image providing evidence of the agricultural nature of the property (Map 6).

The east half of Lot 29 had been sold to Steenbakkers Realties Limited by 1973 (Inst. No. 178961), with the Ontario Ministry of Natural Resources expropriating a portion of the lot in 1977, which presumably included land adjacent to the Carp River, although it continued to be used for agricultural purposes through the remainder of the 20th century (Map 6).

The Kevin Haime Golf Centre has occupied the entire study area since at least 2002. The facility includes a short game practice area adjacent to Hazeldean Road and a driving range within the southern portion of the property (Map 6).

3.0 Archaeological Context

3.1 Study Area Environment and Landscape

The study area is located within the Ottawa Valley Clay Plains physiographic region (Map 7), which generally consists of low, level clay plains mixed with outcrops of bedrock and deposits of sand (Chapman and Putnam 1984). The surficial geology consists of offshore marine deposits within the western portion of the study area, with nearshore sediments extending through the eastern extent of the property (Map 8). The soil survey indicates the soils within the study area are comprised of the North Gower complex (Map 9), which typically varies between a silty loam to clay with poor drainage (Schot and Wilson 1987).

The study area is located within the Great Lakes – St. Lawrence Forest Region. Prior to Euro-Colonial agricultural practices and the removal of woodlots for agricultural purposes, the forest cover would have consisted of white and red pines, eastern hemlock and yellow birch, as well as sugar and red maples, beech, red oaks, basswood and white elms (Eckenwalder et al. 2023).

The nearest water source is the Carp River, which is currently aligned less than 100 m east of the study area.

3.2 Previously Completed Archaeological Assessments Within 50 Metres of Study Area

There are several previously completed archaeological assessments located within 50 m of the study area, which are delineated on Maps 10 and 11. An overview study was completed by Archaeological Services Inc. and Geomatics International Inc., who compiled archaeological potential mapping for the City of Ottawa as part of an archaeological master plan (ASI and GII 2009). Although this potential model was developed prior to the current *Standards and Guidelines* (MCM 2011) and doesn't accommodate the refined potential triggers, it does indicate the potential for archaeological resources within the majority of the study area (Map 10).

Stage 1 Archaeological Assessment, Fernbank Community Lands (KHC 2011)

A Stage 1 archaeological assessment for an area encompassing 647 hectares within Lots 25 to 30, Concession 10, and Lots 28 to 30, Concession 11, Goulbourn Township, was undertaken in 2005 to assess the potential for archaeological materials and support land development initiatives. This Stage 1 assessment also included the entire Double Deck Lands study area, although it was completed prior to the 2011 update to the MCM *Standards and Guidelines for Consultant Archaeologists* and therefore represents a useful baseline reference but does not conform to the existing 2011 Ministry requirements.

The Stage 1 report provided background information regarding Indigenous land use and Euro-Colonial settlement beginning in the 19th century. It also considered the potential for archaeological materials based on several other attributes including proximity to water, geo-environmental landscape and topographic features.

Based on the data review and visual property inspection, the Stage 1 archaeological assessment

provided the following recommendations (KHC 2011):

- About 143 ha, or about 23% of the total areas of the Fernbank Community land has moderate to high pre-contact archaeological potential. About 32 ha, or 5% has moderate or high discovery potential for historical archaeological sites. In total there are 175 ha of moderate or high potential areas that warrant Stage 2 archaeological assessment according to the OMCL (*now MCM*) standards and guidelines.
- The remainder, about 473 ha, has low potential for historical and precontact archaeological sites and should not require Stage 2 field assessment.
- Should deeply buried archaeological deposits ever be discovered on the property, the Heritage Operations Unit (*now MCM*) should be notified immediately.
- If human remains are uncovered, the Registrar or Deputy Registrar of the Cemeteries Regulation Unit should be notified.

Stage 1 and 2 Archaeological Assessment, Hazeldean Road Corridor (Heritage Quest 2001 and 2002)

A Stage 1 archaeological assessment for the Hazeldean Road corridor, encompassing the right-of-way and extending buffer within Lots 23-30, Concessions 11 and 12, was completed prior to the widening of Hazeldean Road from Terry Fox Drive to the Old Carp Road. This Stage 1 assessment included land within the Double Deck study area and identified the potential for archaeological materials throughout the corridor, as well as identifying the significance of five heritage properties and buildings within the overall Hazeldean Road corridor study area. The following recommendations were made within the Stage 1 report (Heritage Quest 2001):

- That Kemp's Tavern be preserved at its present location if possible.
- That a Stage 2 archaeological assessment be undertaken for those areas with archaeological potential identified.
- That a more detailed updated inventory of the remaining heritage buildings along the corridor should be undertaken prior to their removal.
- That for the remaining areas of the corridor, should deeply buried archaeological deposits be found on the property during road construction, the Ministry of Citizenship, Culture and Recreation be contacted immediately.
- In the event that human remains are encountered during construction, both the Ministry of Citizenship, Culture and Recreation and the Register or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Consumer and Commercial Relations should be notified immediately.

The portion of the Hazeldean Road Corridor Stage 1 study area that overlapped the current Double Deck Lands development area was not archaeologically testing during the Stage 2 field investigation as the road widening was to occur along the north side of Hazeldean Road. Therefore, the area identified as

possessing archaeological potential in the Stage 1 assessment within the Double Deck Lands development area retains archaeological potential based on the earlier Stage 1 assessment.

Following the completion of the Stage 2 assessment for the Hazeldean Road Corridor widening project, the following recommendations were made (Heritage Quest 2002):

- That soil stripping and grading of that segment of the corridor in Lot 28, Concession 12, within 100 metres of the Carp River Tributary be monitored by a licensed archaeologist.
- That, unless the proposed parameters of the right-of-way are expanded following this study, no additional archaeological investigation of the remaining portion of the corridor is required.
- Should deeply buried archaeological deposits be found on those areas of the corridor cleared from further archaeological concerns during road construction, the Ministry of Citizenship, Culture and Recreation be contacted immediately.
- In the event that human remains are encountered during construction, both the Ministry of Citizenship, Culture and Recreation and the Register or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Consumer and Commercial Relations should be notified immediately.

Stage 1 and 2 Archaeological Assessments, 590 Hazeldean Road (Patterson Group 2013 and 2015)

A Stage 1 archaeological assessment was completed for the 590 Hazeldean Road property, situated directly west of the study area, to support the planned residential development. The entire property was determined to possess archaeological potential based on its early 19th century settlement, presence of the Bradley/Craig Farmstead Heritage Site within the property, and the proximity to the Carp River. Portions of the property were also identified as possessing archaeological potential based on the City of Ottawa Archaeological Master Plan (ASI and GII 1999). Based on the results of the Stage 1 assessment, the following recommendations were made (Patterson Group 2013):

- A Stage 2 archaeological assessment be conducted by a licensed consultant archaeologist using the test pit survey method at 5 m intervals in all areas which have not been recently ploughed or do not have appropriate conditions for pedestrian survey at the time of the Stage 2 assessment.
- A Stage 2 archaeological assessment be conducted by a licensed consultant archaeologist using the pedestrian survey method in areas that have been recently ploughed and are in appropriate conditions at the time of the survey to undergo pedestrian survey at 5 m intervals.
- The Stage 2 archaeological assessment follow the requirements set out in the 2011 *Standards and Guidelines for Consultant Archaeologists* (MCM 2011).

The Stage 2 archaeological assessment for the 590 Hazeldean Road property was undertaken in 2013 and 2014 and included both test pit and pedestrian surveys at 5 m intervals. Although a small concentration of 19th century artifacts mixed with 20th century materials were recovered, they were not considered to possess cultural significance and the report provided the following recommendations (Patterson Group 2015):

- No further archaeological study is required for the study property.

Stage 1 and 2 Archaeological Assessments, 570 Hazeldean Road (Patterson Group 2012)

Prior to the development of land located at 570 Hazeldean Road (East Part of Lot 29, Concession 11), a Stage 1 and 2 archaeological assessment was completed to assess the potential for archaeological resources and document the location of any identified cultural materials. The Stage 1 assessment determined the property retained archaeological potential based on the 19th century settlement, proximity to the Carp River, and identification of potential documented in the City of Ottawa archaeological master plan. Based on this assessment, a Stage 2 field investigation was undertaken consisting of pedestrian survey within ploughable lands and a test pit survey where ploughing was not appropriate. Both surveys were conducted at 5 m intervals, with no archaeological materials identified during the surveys. Based on the Stage 1 and 2 assessments, the following recommendations were made (Patterson Group 2012):

- No further archaeological study is required for the study property.
- The Ministry of Tourism, Culture and Sport provide a letter confirming that there are no further concerns with regard to alterations to archaeological sites for the property.

Stage 1 and 2 Archaeological Assessment, Trinity Development Group Lands (Adams Heritage 2005 and 2008)

A Stage 1 and 2 archaeological assessment was undertaken within Lots 28 and 29, Concession 12, to support land development along the north side of Hazeldean Road within 50 metres of the Double Deck Lands study area. The Stage 1 assessment identified the potential for archaeological resources within the development property based on evidence of 19th century settlement and proximity to Poole Creek and the Carp River and provided the following recommendations (Adams Heritage 2005):

- Stage 2 archaeological investigations should be undertaken on the property prior to any development work which results in soil disturbance.
- Given the overall high potential for pre-contact First Nations archaeological sites, the entire property should be ploughed or disced to facilitate archaeological survey, as per the requirements of the Ontario Ministry of Culture's *Archaeological Assessment Technical Guidelines*.
- There is moderate potential for pre-1870 Euro-Canadian historical archaeological sites along the property frontage on to Hazeldean Road.
- There is moderate potential for evidence of pre-1870 structures in the vicinity of the existing farm buildings.
- The two 19th century farmhouses are both on the City of Ottawa's Heritage Reference List. Any plans involving the removal of these structures will need to fully address the City of Ottawa's heritage requirements.

The Stage 2 archaeological field assessment was conducted in 2008, consisting of surface surveys and a test pit survey, as well as a visual inspection of land that was visibly disturbed by landscaping and construction activities. No evidence of archaeologically significant materials was identified during the Stage 2 assessment with the report providing the following recommendations (Adams Heritage 2008):

- Since no archaeological sites were discovered during testing, the proposed development will have no impact on archaeological sites. Full clearance of any archaeological conditions associated with the property is recommended.
- If during the process of development (deeply buried / undetected) archaeological remains are uncovered, the developer or their agents should immediately notify the Archaeology Section of the Ontario Ministry of Culture.
- In the event that human remains are encountered during construction, the proponent should immediately contact the police and the Ministry of Culture and the Cemeteries Regulation Office within the Ministry of Government Services.

Stage 1 and 2 Archaeological Assessment, Carp River, Poole and Feedmill Creek Restoration Project (Golder 2017)

Golder Associates Ltd. completed a Stage 1 and 2 archaeological assessment of specific portions of the Carp River and Poole and Feedmill Creeks to support a restoration initiative to realign the Carp River from its channelized form. The Stage 1 assessment determined there was potential for archaeological resources within the project area, with the Stage 2 field assessment completed over three days in 2016. No cultural materials were observed during the Stage 2 test pit survey and the following recommendations were made:

- That no further archaeological investigations are required for the Carp River, Poole and Feedmill Creek Restoration Project study area.
- Should development extend beyond the boundary of the specific study, further archaeological investigations may be required.

3.3 Registered Archaeological Sites and Heritage Properties Within One Kilometre of Study Area

The primary source of information regarding previously registered archaeological sites within the Province of Ontario is the MCM archaeological sites database (ASDB), which designates archaeological sites registered according to the Borden system. Under the Borden system, Canada is divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13 km east to west and approximately 18.5 km north to south. Each Borden Block is referenced by a four-letter designator and sites within a block are numbered sequentially as they are found.

The ASDB was accessed on 24 March 2025 and a 1 km buffer was applied to the general limits of the study area. The search of the ASDB indicated that four archaeological sites have been registered within 1 km of the study area (MCM 2025).

General information regarding each archaeological site within a 1 km radius of the study area is included in Table 2, which provides the site Borden Number and name, the spatial relationship to the study area, temporal context, inferred site type, and information regarding the development review status that indicates whether the site has been identified as retaining cultural heritage value or interest (CHVI) and recommended for additional mitigation.

Table 2: Registered Archaeological Sites within 1 km of the Study Area

Borden Number	Site Name	MCM PIF(s) Associated with Site	Spatial Relationship to Study Area	Temporal Context	Inferred Site Type	Development Review Status
BhFx-65	Bradley-Craig	P378-006-2013	460 m south	Post-Contact	Agricultural, homestead	No Further CHVI
BhFx-68	W. Bradley	P378-0019-2016, P369-0055-2017, P369-0056-2017	545 m southwest	Post-Contact	Agricultural, homestead	No Further CHVI
BhFx-67	H. Bradley	P378-0019-2016	605 m west	Post-Contact	Agricultural, farmstead	No Further CHVI
BhFx-47	Bradley Farm	P031-035-2011, P369-0068-2018, P369-0114-2020	615 m west	Post-Contact	Cabin, homestead	No Further CHVI

In addition to the four registered archaeological sites within 1 km of the study area, a registered heritage site denoted as the Bradley-Craig Farmstead has been designated by the City of Ottawa under By-law 2010-247 (City of Ottawa 2025). The Bradley-Craig heritage site is situated 220 m west of the study area within Lot 29 and includes a complex comprising a two-and-a-half storey Gothic Revival style farmhouse and a large dairy barn. The sites cultural heritage value is recognized as being an excellent example of a farmhouse and barn constructed in the latter part of the 19th century when agriculture was the dominant economic activity within the province.

Built on land originally settled by Joshua Bradley in 1821, the farmhouse was built in the 1870s with the barn constructed in 1873 (City of Ottawa 2025). Both the farmhouse and barn underwent restoration in 2021 (McKay 2021). The location of the Bradley-Craig farmhouse was archaeologically assessed for no culturally significant materials recovered (Patterson Group 2015).

3.4 Visual Property Inspection Field Methods and Results

A visual inspection of the Stage 1 study area was completed on 21 April 2025 during party cloudy conditions and a temperature of 3˚C. At no time were the weather or lighting conditions detrimental to the identification of features representing archaeological potential.

The visual inspection covered the entire Stage 1 study area with no restrictions or limitations and was completed in order to review in detail the current conditions of the study area and to document areas exhibiting archaeological potential as well as those where extensive landscape disturbances have removed the potential for archaeological resources. The field images referenced in this report are provided in Section 9 and the location and direction of each image is illustrated on Map 12, which also delineates the results of the visual inspection.

The northern portion of the study area consists of a parking lot, infrastructure associated with the Kevin Haime Golf Centre and short game practice and training area. The parking lot and structures associated with the golf training centre, including the golf driving bays and connecting office and retail areas, have disturbed the natural landscape and these areas no longer retain archaeological potential (Images 1 to 5). The area adjacent to Hazeldean Road south of the ditch is fairly level and may have been previously landscaped (Image 6), although this area is situated within 100 m of the Hazeldean Road historical transportation corridor and was previously identified as possessing archaeological potential (ASI and GII 2009; Heritage Quest 2001).

The short game practice and training area east of the parking lot has been extensively landscaped with elevated berms and sub-grade sand features (Images 7 to 11). Based on the surrounding landscape, including utility junction boxes and irrigation sprinklers, there are also subsurface utilities and pipes through this area. Although previous landscaping may have removed potential archaeological materials within the majority of this area, some areas may not have been extensively altered and may retain archaeological potential.

A gravel path and drainage ditch are situated along the western extent of the property, which has negated the potential for recovering *in situ* archaeological materials where the landscape has been significantly altered (Images 12 and 13). Several coniferous trees are adjacent to the northern portion of the gravel pathway within a flat area west of the driving range (Image 14).

The southern extent of the property has been significantly altered by the recent construction of a storm water feature and a berm (Images 15 and 16). These features had been established by 2022 (Map 6) and have negated any archaeological potential within this area.

The driving range is situated north of the storm water pond and south of the golf driving bays and includes several topographic features including elevated terraces and sub-grade sand bunkers (Images 17 and 18). In addition to the landscape alterations facilitated to design the driving range, the property owner confirmed there is also an extensive subsurface irrigation system and buried electrical utilities throughout the range area. Although previous landscaping may have removed potential archaeological materials within the majority of this area, some areas may not have been extensively altered and may retain archaeological potential.

A permanently wet area was documented east of the practice area and south of the driving bays (Image 19).

3.5 Assessment of Archaeological Potential

Several factors are employed when assessing archaeological potential within a particular area. In addition to the proximity to known archaeological sites, factors for determining archaeological potential for Indigenous and Euro-Colonial historical materials include watershed area (primary and secondary watercourses), distance from water, drainage patterns, identification of historical water sources (e.g. beach ridges, river beds, relic creeks, ancient shorelines, etc.), naturally elevated topography, identification of significant physiological and geological features (e.g. knolls, drumlins, eskers, plateaus, etc.), soil geomorphology, distinctive land formations (e.g. mounds, caverns, waterfalls, peninsulas, etc.), known burials sites and cemeteries, ecological features (e.g. distribution of food and animal resources before European colonization), features identifying early Euro-Colonial settlements (e.g. monuments, structures, etc.), historical transportation routes (e.g. historical roads, trails, portages, rail corridors, etc.) and properties designated and/or listed under the *Ontario Heritage Act.* Local knowledge from Indigenous communities and heritage organizations, as well as consultation of available historical and archaeological literature and cartographic resources, aids in the identification of features denoting archaeological potential. These criteria are based on the MCM's *Standards and Guidelines for Consultant Archaeologists* (2011) and were used to assess the potential for archaeological resources within the study area.

The archaeological potential model developed for the City of Ottawa was used as the base plan for assessing the potential for archaeological resources within the study area (Map 10). Consultation of this planning document was undertaken to establish a foundational baseline of archaeological potential within the study area, although the document is intended to be an overview of a large area rather than identify discrete intricacies within specific locations and as it only includes attributes of select archaeological knowledge up to its 1999 publication date, the current Stage 1 archaeological assessment included a review of this model and refinement where required.

In addition to the archaeological potential model produced for the City of Ottawa (ASI and GII 1999), the remaining portion of the study area was identified as possessing attributes denoting archaeological potential by applying the MCM *Standards and Guidelines for Consultant Archaeologists* (2011) (Map 13).

A significant portion of the study area was determined to possess archaeological potential as it is within 300 m of Carp River, with the northern portion of the study area situated within 300 m of known 19th century structures (Map 4). Also identified as possessing archaeological potential is the land within 100 m of Hazeldean Road, which follows the historical road shown on the 19th century plans and was identified as possessing potential in the Hazeldean Road corridor Stage 1 assessment (Heritage Quest 2001). The previously completed Stage 1 assessment for the Fernbank Community Lands, which included the current study area, also denoted archaeological potential within the southern section of the study area (KHC 2011).

The application of these archaeological potential attributes assumes the landscape has not been significantly altered or impacted in a way to reduce or negate the potential for archaeological resources within the study area. The archaeological potential model was further refined during the visual property inspection that identified areas that have been extensively disturbed (e.g., storm water pond and berm, parking area, buildings), as well as areas of indiscriminate landscape disturbance (e.g., practice area, driving range). A water retention pond situated east of the practice area and north of the driving bays also does not retain archaeological potential as it is considered to be permanently wet.

Based on the review and integration of the City of Ottawa archaeological potential model, and the refinement of the areas of archaeological potential based on this Stage 1 assessment, Map 13A reflects the areas identified as retaining archaeological potential within the Stage 1 study area landscape.

4.0 Analysis and Conclusions

This Stage 1 archaeological assessment has reviewed accessible reference sources, including cartographic material, to assess the potential for archaeological resources within the Stage 1 study area defined in this report. This assessment has also been supplemented by the visual property inspection completed on 21 April 2025, which was undertaken on foot and primarily focussed on identifying areas where the modern landscape has transitioned since the early 20th century and provided the ability to observe features and landscapes that may influence the archaeological integrity of specific areas.

The archaeological potential model developed for the City of Ottawa was used as the base plan for assessing the potential for archaeological resources within the study area (Map 10) and was refined based on the current Stage 1 archaeological assessment to produce a project specific archaeological potential plan that defines the area considered to be permanently wet and delineates areas of previous landscape disturbance that has negated the archaeological integrity of these areas (Map 13A).

Due to environmental and flood plain restrictions, 2.3 ha of land within the eastern extent of the Stage 1 study area cannot be altered or developed (Maps 14 and 14A). A memorandum dated 5 June 2025 signed by the Hon. Graham McGregor, Minister of Citizenship and Multiculturalism, states that the archaeological assessment is "*to focus only on the areas of the property that will be directly impacted by development. If you are not disturbing the land, you will not be required to assess it*". As the land developer has confirmed the eastern 2.3 ha. within the Stage 1 study area will not be altered or developed (see Supplemental Document), this area will not require a Stage 2 assessment at this time. All land within this 2.3 ha area that retains archaeological potential (Map 13A) will require a Stage 2 archaeological assessment in the future prior to any land altering activities.

Table 3 provides a summary of the site conditions observed during the Stage 1 assessment and the recommended Stage 2 approach for the land within the 6.3 ha development area, including the percentage of study area associated with each approach.

Table 3: Observed Site Conditions and Recommended Stage 2 Approach

Observed Site Condition	Stage 2 Approach	Area (ha.)	Percentage of Overall Study Area
Possible Intact Natural Topsoil. Archaeological Potential Retained	Test pit survey at 5 m intervals where possible, with transition to discretionary test pit intervals and landscape documentation where soil disturbance is documented	5.2	83%
Disturbed	Visual inspection completed during Stage 1 AA. No test pit survey required	1.1	17%

The visual property inspection identified evidence of extensive disturbances to the natural landscape that negated the potential to recover archaeologically significant materials (17% of development lands), as well as areas where previous activities may have impacted the potential to recover *in situ* cultural materials although the extent of these disturbances could not be confirmed based on the visual inspection (83% of development lands). Areas of retained archaeological potential include land where evidence of subsurface utilities, as well as electrical and water irrigation infrastructure is known to be present based on the visual survey and information from the property owner. Ploughing these areas would not be possible based on the existing landscape (e.g., elevated artificial features, sub-grade sand bunkers, etc.) and the presence of subsurface utilities would present a significant safety hazard. Therefore, ploughing these areas is not considered a viable option.

The Stage 2 field assessment should be completed within areas where the potential for archaeological materials remains by employing the test pit survey method. The test pit survey should be initiated at 5 m intervals and continue in accordance with Standard 2.1.2 of the *Standards and Guidelines for Consultant Archaeologists* (2011).

In areas where subsurface disturbance that has negated the potential for cultural materials is confirmed by test pit survey, the Stage 2 assessment should transition to employ Standard 2.1.8 “Property survey to confirm previous disturbance” as detailed in the *Standards and Guidelines for Consultant Archaeologists* (2011). This Standard provides the ability to “*place Stage 2 test pits throughout the disturbed areas according to professional judgement (and where physically viable) so as to confirm that these areas have been completely disturbed*”

The Stage 2 test pit survey should be completed throughout all areas where the potential for archaeological resources is identified within the current development area (Maps 14 and 14A) and based on professional opinion by the licensed field director at the time of the field investigation, the test pit survey may expand to discretionary intervals where subsurface disturbance is documented that has negated the potential for archaeological resources, and where this survey strategy is in compliance with the MCM *Standards and Guidelines for Consultant Archaeologists* (2011).

5.0 Recommendations

This Stage 1 archaeological assessment has provided the basis for the following recommendations (Maps 14 and 14A):

1. Land retaining archaeological potential within the development area that will be impacted by soil altering activities should be assessed by test pit survey. The test pit survey should be undertaken in compliance with the MCM’s *Standards and Guidelines for Consultant Archaeologists* (2011), with test pits hand excavated at 5 m intervals and transition to discretionary test pit intervals and landscape documentation where soil disturbance is documented.

2. No further archaeological assessment is recommended for portions of the study area that are not identified in this report as possessing archaeological potential.

3. Should any land within the Stage 1 study area currently outside the proposed development area be considered for development in the future, a Stage 2 archaeological assessment should be completed prior to any soil disturbance activities.

4. Any future Stage 2 archaeological assessment should be undertaken by a licensed consultant archaeologist, in compliance with the Ministry of Citizenship and Multiculturalism's 2011 *Standards and Guidelines for Consultant Archaeologists*.

6.0 Advice on Compliance with Legislation

This report is submitted to the Ministry of Citizenship and Multiculturalism 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 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 Citizenship and Multiculturalism, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

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

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

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

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 licence.

7.0 Important Information and Limitations of this Report

This report has been prepared for the specific site, development objective, and purpose as requested by the client and outlined in the original proposal, and subsequent agreed changes, for this project. The specific results, factual data, interpretations, and recommendations, outlined in this report are for the sole use of the client, and applicable only to this project and site location. No other warranty, expressed or implied, is made. No other party may rely on all, or portions, of this report without True North Archaeological Services Inc.'s express written consent. 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 True North Archaeological Services Inc. The Client acknowledges the electronic media is susceptible to unauthorized modification, deterioration and incompatibility and therefore the Client can only rely upon the electronic media versions of this True North Archaeological Services Inc. report or other work products at their discretion.

True North Archaeological Services Inc. prepared this report in a manner consistent with the level of care and skill ordinarily exercised by other members of the archaeological consulting community currently practicing within the Province of Ontario, in accordance with the *Ontario Heritage Act* the Ministry of Citizenship and Multiculturalism's (MCM) 2011 *Standards and Guidelines for Consultant Archaeologists*, and all the subsequent MCM bulletins.

There are special risks whenever an archaeological assessment is completed, whether they be solely desktop assessments or in-field assessments, and even a thorough background study, comprehensive field investigation or sampling and testing program may fail to detect all archaeological resources present within the project area. The desktop review, field strategies and subsequent interpretations utilized for this report comply with the Ministry of Citizenship and Multiculturalism's (MCM) 2011 *Standards and Guidelines for Consultant Archaeologists*, and all the subsequent MCM bulletins.

All artifacts collected as part of this archaeological assessment, when applicable, will be housed and curated by True North Archaeological Services Inc. until such time that the collection may be transferred to an appropriate MCM approved repository or repatriated to an appropriate First Nation. As part of Licensing obligations, this report, along with pertinent written information will be uploaded to the MCM Past Portal website and reviewed for compliance with the 2011 *Standards and Guidelines for Consultant Archaeologists*.

8.0 References

Adams Heritage

2008 **Stage 2 Archaeological Assessment, Trinity Development Group Lands – Kanata West, Part Lots 28 and 29, Concession 12, Geographic Township of Goulbourn, City of Ottawa**. Consultant's Report Submitted to the Ministry of Culture. CIF Number P003-182-2008.

2005 **Stage 1 Archaeological Assessment, Trinity Development Group Lands – Kanata West, Part Lots 28 and 29, Concession 12, Geographic Township of Goulbourn, City of Ottawa**. Consultant's Report Submitted to the Ministry of Culture. CIF Number P003-048.

Adney, Edwin Tappan and Howard Chapelle

2014 **Bark Canoes and Skin Boats of North America**. New York.

Algonquins of Ontario (AOO)

2013 **Our Proud History**. Accessed from <https://www.tanakiwin.com/algonquins-of-ontario/our-proud-history/> [15 January 2025].

Algonquins of Pikwakanagan First Nations (AOP)

2012 **History**. Accessed from <http://www.algonquinsofpikwakanagan.com/culture_history.php> [4 January 2018].

Archaeological Services Inc. (ASI) and Geomatics International Inc. (GII)

1999 **The Archaeological Resource Potential Mapping Study of the Regional Municipality of Ottawa-Carleton: Planning Report**. Archaeological Master Plan study prepared for the Regional Municipality of Ottawa-Carleton.

Belden, H. & Co.

1879 **Illustrated Historical Atlas of the County of Carleton.** Reprinted 1981, Ross Cumming, Port Elgin.

Boileau, John

2020 *Crawford Purchase.* **The Canadian Encyclopedia.** <https://www.thecanadianencyclopedia.ca/en/article/crawford-purchase> [27 August 2024].

Bond, Courtney C.J.

1984 **Where the Rivers Meet: Al Illustrated History of Ottawa.** Windsor Publications (Canada) Ltd., Ottawa.

Bursey, Jeffrey

1995 *The Transition from the Middle to Late Woodland Periods: A Re-Evaluation*. **Origins of the People of the Longhouse: Proceedings of the 21st Annual Symposium of the Ontario Archaeology Society**. A. Bekerman and G. Warrick (eds), Ontario Archaeology Society, pp. 43-54.

Chapdelaine, Claude, Norman Clermont, and Jacques Cinq-Mars

2001 *Laurentian Archaic in the Middle Ottawa Valley*. In J. L. Pilon, M. Kirby and C. Theriault (eds.) **A Collection of Papers Presented at the 33rd Annual Meeting of the Canadian Archaeological**

Association. Ottawa, The Ontario Archaeological Society and the Canadian Archaeological Association, p. 102-110.

Chapman, L.J. and D.F. Putnam
1984 **The Physiography of Southern Ontario**. Ontario Geological Survey Special Volume 2, Ontario.

City of Ottawa
2025 **Individually Designated Properties**. Accessed from <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://documents.ottawa.ca/sites/default/files/individually_designated_properties_en.pdf> [14 April 2025].

Clermont, Norman
1999 *The Archaic Occupation of the Ottawa Valley*. In J. L. Pilon (ed.), **Ottawa Valley Prehistory**. Imprimerie Gauvin, Hull Quebec, p. 45-53.

Clermont, Norman and Claude Chapdelaine
1998 **Ile Morrison: Lieu Sacré et atelier de l'Archaique dans l'Outaouais.** Musée Canadien des Civilisations, Montreal.

Crawford, Gary, David Smith and Vandy Bowyer
1997 *Dating the entry of corn (Zea mays) into the Lower Great Lakes region*. **American Antiquity**, 62(1): 112-119.

Croft, David J.A.
2006 *Champlain's Portage from Muskrat Lake to the Ottawa River*. **Ontario Archaeology**, 81/82:3-12.

Cultural Resource Management Group Limited (CRMGL)
2002 **Stage 1 & 2 Archaeological Assessment Terry Fox Drive Extension, Campeau Drive to South of Richardson Side Road, Kanata.** Consultant's report submitted to the MCM under PIF 2002-010-002.

Daechsel, Hugh J.
1980 **An Archaeological Evaluation of the South Nation River Basin**. A report prepared for the South Nation River Conservation Authority, Berwick, Ontario.

1981 **Sawdust Bay-2. The Identification of Middle Woodland Site in the Ottawa Valley.** M.A. Thesis, Department of Anthropology, McMaster University.

Eckenwalder, James E., Deborah Metsger, Timothy Dickinson, and Sarah Hodges
2023 **A Field Guide to Trees of Ontario**. Royal Ontario Museum, Ontario.

Ellis, C.J.
2013 *Before Pottery: Paleoindian and Archaic Hunter-Gathers.* **Before Ontario: The Archaeology of a Province**., eds. Marit K. Munson and Susan M. Jamieson. Library and Archives of Canada Publishing.

Ellis, Christopher and Brian D. Deller
1997 *Variability in the Archaeological Record of Northeastern Early Paleoindians: A View from Southern Ontario*, **Archaeology of Eastern North America**, 25: 1-30.

Ellis, Chris J., Ian T. Kenyon, and Michael W. Spence

1990 *The Archaic*. **The Archaeology of Southern Ontario to A.D. 1650**, C.J. Ellis and N. Ferris (eds), Ontario Archaeology Society, p. 65-124.

Engelbrecht, William E. and Carl K. Seyfert
1995 *Paleoindian Watercraft: Evidence of Implications*. **North American Archaeologist** 15(3): 221-234.

Ferris, Neal and Michael Spence
1995 *The Woodland Traditions in Southern Ontario.* **Revista de Arqueologia Americana** 9: 83-138.

Fulton, R.J. and S.H. Richard
1987 *Chronology of Late Quaternary Events in the Ottawa Region*. In **Quarternary Geology of the Ottawa Region, Ontario and Quebec**, edited by R.J. Fulton, pp. 24-30. Geological Survey of Canada 86-23.

Fulton, R.J., T.W. Anderson, N.R. Gadd, C.R. Harington, I.M. Kettles, S.H. Richard, C.G. Rodrigues, B.R. Rust and W.W. Shilts
1987 *Summary of the Quaternary of the Ottawa Region*. In H.M. French and P. Richard (eds) **Papers Presented at the Quaternary of the Ottawa Region and guides for day excursions INQUA 87 International Congress**, National Research Council of Canada, p. 7-20.

Gates St-Pierre, Christian
2010 **Le Patrimoine Archéologique Amérindien du Sylvicole Moyen au Québec.** Document soumis a la Direction du Patrimoine et de la Muséologie, Ministère de la Culture.

Golder Associates Ltd.
2017 Stage 1 and 2 Archaeological Assessment, Carp River, Poole and Feedmill Creek Restoration Project, Lots 1 and 2, Concession 2, March Township, Lot 29, Concession 12, Geographic Township of Goulbourn, City of Ottawa, Ontario. Consultant's Report the Ministry of Tourism, Culture and Sport. PIF Number P311-0309-2016.

Heritage Quest
2002 **Stage 2 Archaeological Assessment of Hazeldean Road Corridor from Terry Fox Drive to the Carp Road, Lots 23-30, Concessions 11 and 12, Former Township of Goulbourn and City of Kanata, City of Ottawa**. Consultant's Report Submitted to the Ministry of Citizenship, Culture and Recreation. CIF Number 2001-033-013.

2001 **Stage 1 Archaeological Assessment of Hazeldean Road Corridor from Terry Fox Drive to the Carp Road, Lots 23-30, Concessions 11 and 12, Former Township of Goulbourn and City of Kanata, City of Ottawa**. Consultant's Report Submitted to the Ministry of Citizenship, Culture and Recreation. CIF Number 2000-025-031.

Holmes, Joan & Associates Inc. (Holmes)
1993 **Report on the Algonquins of Golden Lake Claim.**

Jamieson, J.B.
1989 **An Inventory of the Prehistoric Archaeological Sites of Ottawa-Carleton**. Report Submitted to the Ontario Archaeological Society, Ottawa Chapter.

Jodry, Margaret A.
2005 *Envisioning Water Transport Technology in Late-Pleistocene America*. In R. Bonnichse, B.T. Lepper, D. Stanford and M.R. Waters (eds) **Paleoamerican Origins: Beyond Clovis**. Texas A&M University Press, College Station, p. 133-160.

Johnston, Darlene
2006 **Connecting People to Place: Great Lakes Aboriginal History in Cultural Context**. Ipperwash Inquiry.

Johnston, Louise
2004 **The Covenant Chain of Peace: Metaphor and Religious Thought in Seventeenth Century Haudenosaunee Council Oratory**, Montreal, McGill University Press.

Kennedy, Clyde C.
1964 **Archaeological Survey in Renfrew and Pontiac Counties**. Report Submitted to the National Museum of Canada.

1966 *Preliminary Report on the Morrison's Island-6 Site*. **National Museum of Canada, Bulletin No. 206, Contributions to Anthropology, 1963-64, Part 1**. National Museum of Canada, Ottawa.

1970 **The Upper Ottawa Valley**. Renfrew County Council, Pembroke.

1976 *Champlain Sea and Early Ottawa River Shoreline Studies, 1975*. **Arch Notes**, 76-7:18-23.

Kinickinick Heritage Consultants (KHC)
2011 **A Stage 1 Archaeological Assessment of the Fernbank Community Lands, Lots 25-30, Concession 10 and Lots 28-30, Concession 11, Goulbourn Township, City of Ottawa**. Consultant's Report Submitted to the Ministry of Tourism and Culture. PIF Number P039-094-2006.

2005 **A Stage 1 & 2 Archaeological Assessment of the Broughton Lands, Part of Lots 5, Concession 1, March Twp. (Geo), City of Ottawa.** Consultants Report Submitted to the Ministry of Citizenship, Culture and Recreation. CIF Number P039-064.

Laliberté, M.
1991 **Notes sur le site BjGb-1 a Quyon.** Consultants Report Submitted to the National Capital Commission.

1994 **Les Recherches Archeologiques de 1994 dans le Parc du Lac Leamy.** Report Submitted to the National Capital Commission and Ministere de la Culture et des Communications du Quebec.

1995 **Inventaire Archéologique du Parc du Lac Leamy, 1995.** Report Submitted to the National Capital Commission and Ministere de la Culture et des Communications du Quebec.

1998a **Inventaire archéologique des stationnements Champlain, Chaudière et autres d'aménagement connexes. Corridors des voyageurs/Parc des rapides Deschênes, Volume 1**. Consultant's Report Submitted to the National Capital Commission.

1998b **Fouilles de sauvetage sur un site de halte et de portage du Sylvicole inférieur et moyen. Projet de sauvetage du site archéologique BiFw-39. Parc des rapides Deschênes-stationnement Champlain**. Consultant's Report Submitted to the National Capital Commission.

1998c **Archaeological Resource Potential, Federal Lands in the National Capital Region, Volumes 1 and 2.** Report on file with the NCC.

1999 *The Middle Woodland in the Ottawa Valley*. In J. L. Pilon (ed.), **Ottawa Valley Prehistory**. Imprimerie Gauvin, Hull Quebec, p. 70-81.

2000 **Recherches Archéologiques Dans Le Parc du Lac-Leamy 1993-1999.**

Martin, Scott
2004 *Lower Great Lakes Region Maize and Enrichment in the First Millennium AD*. **Ontario Archaeology**, 77/78: 135-159.

McKay, Lesley
2021 Restoration Continues at the Bradley-Craig Farm with Preservation of the Farmhouse. <https://stittsvillecentral.ca/restoration-continues-at-the-bradley-craig-farm-with-preservation-of-the-farmhouse/> [25 April 2025].

Ministry of Citizenship and Multiculturalism (MCM)
2011 **Standards and Guidelines for Consulting Archaeologists**. Queens Printer, Ontario.

2025 **Search of Past Portal Database for Registered Archaeological Sites and Previous Archaeological Assessments within 50 metres of Study Area**, 24 March 2025.

Monague, Jeff
2022 *Area's Indigenous Roots Ignored in History Books*. **Orillia Matters**. Accessed from <https://www.orilliamatters.com/local-news/column-areas-indigenous-roots-ignored-in-history-books-5994672> [27 October 2022].

Monk, Kimberly E.
1999 *The Development of Aboriginal Watercraft in the Great Lakes Region*. **Totem: The University of Western Ontario Journal of Anthropology**, 7(1):1-7.

Morrison, J.
2005 *Algonquin History in the Ottawa Riber Watershed.* In **A Background Study for Nomination of the Ottawa River Under the Canadian Heritage Rivers System**, ed. Len Hopkins, pp. 17-32. Quebec-Labrador Foundation, Ipswich, MA.

Ontario (King's Printer)
2024 **Map of Ontario Treaties and Reserves.** <https://www.ontario.ca/page/map-ontario-treaties-and-reserves> [25 April 2025].

Patterson Group
2015 **Stage 2 Archaeological Assessment, 590 Hazeldean Rd., Concession 11, West Part Lot 29, Geographic Township of Goulbourn, City of Ottawa, Ontario**. Consultant's Report Submitted to the Ministry of Tourism, Culture and Sport. PIF Number P378-006-2013.

2013 **Stage 1 Archaeological Assessment, 590 Hazeldean Rd., Concession 11, West Part Lot 29, Geographic Township of Goulbourn, City of Ottawa, Ontario**. Consultant's Report Submitted to the Ministry of Tourism, Culture and Sport. PIF Number P378-004-2013.

2012 **Stage 1 and 2 Archaeological Assessment, 570 Hazeldean Rd., Concession 11, East Part Lot 29, Geographic Township of Goulbourn, City of Ottawa, Ontario**. Consultant's Report Submitted to the Ministry of Tourism, Culture and Sport. PIF Numbers P378-001-2012 and P378-002-2012.

Pendergast, James F.
1999 *The Ottawa River Algonquin Bands in a St. Lawrence Iroquoian Context*. **Canadian Journal of Archaeology**, 23: 63-136.

Pilon, Jean-Luc
2003 *On the Nature of Archaeology in the Ottawa Area and Archaeological Mysteries.* **Ontario Archaeology** 75: 17-27.

2005 *Ancient History of the Lower Ottawa River Valley*. **A Background Study for Nomination of the Ottawa River Under the Canadian Heritage River System**. QLF Canada, p. 12-17.

2006 **In the Shadow of the City Archaeological Investigations at BiFw-6 and BiFw-16, Summer, 2002.** Canadian Museum of Civilization, Gatineau.

Pilon, Jean-Luc and Randy Boswell
2015 *Below the Falls; An Ancient Cultural Landscape in the Centre of (Canada's National Capital Region) Gatineau*. **Canadian Journal of Archaeology**, 39:257-293.

Pilon, Jean-Luc and William Fox
2015 *St. Charles or Dovetail Points in Eastern Ontario*. **Arch Notes**, 20(1):5-9.

Pilon, Jean-Luc and Janet Young
2009 *The Ottawa Valley Burial Patterns Spanning Six Millennia*. **Painting the Past with a Broad Brush: Papers in Honour of James Valliere Wright**, Canadian Museum of Civilization Corporation, p. 181-211.

Reimer, Gwen
2019 *British-Canada's Land Purchases, 1783-1788: A Strategic Perspective*. **Ontario History**, 111(1): 36-72.

Ritchie, William
1971 *A Typology and Nomenclature for New York Projectile Points, Revised Edition*. **New York State Museum and Science Service, Bulletin Number 384**. The University of the State of New York, The State Education Department, Albany, New York.

Savage, Howard
1972 *Faunal Findings at the Constance Bay Site No. 1 (BiGa-2)*. **Ontario Archaeology**, 18:25-36.

Schot, L.W and E.A. Wilson
1987 **The Soils of the Regionals Municipality of Ottawa Carleton** (excluding the Ottawa fringe). Report No. 58, Ontario Institute of Pedology.

Smith, David G.

1990 *Iroquoian Societies in Southern Ontario: Introduction and Historic Overview*. **The Archaeology of Southern Ontario to A.D. 1650**. C.J. Ellis and N. Ferris (eds), Ontario Archaeological Society, p. 279-290.

Sowter, Edwin

1900 *Archaeology of Lake Deschènes*. **The Ottawa Naturalist**, 13(10):225-241.

1901 *Prehistoric Camping Grounds Along the Ottawa River*. **The Ottawa Naturalist**, 15(6):141-151.

1915 *The Highway of the Ottawa*. **Ontario Historical Society**, 13:42-52.

Speck, F.G.

1915 **Family Hunting Territories and Social Life of Various Algonkian Bands of the Ottawa Valley.** Department of Mines Geological Survey Memoir 70: No. 8, Anthropological Series. Government Printing Bureau, Ottawa.

Spence, Michael W., Robert H. Pihl, and Carl Murphy

1990 *Cultural Complexes of the Early and Middle Woodland Periods* in **The Archaeology of Southern Ontario to A.D. 1650**, C.J. Ellis and N. Ferris (eds), Ontario Archaeology Society, p. 125-169.

Surtees, Robert J.

1982 **Indian Land Cessions in Ontario, 1763-1862: The Evolution of a System**. Ph.D. Thesis Submitted to Carleton University.

1994 *Land Cessions, 1763-1830*. In In E.S. Rogers and D.B. Smith (eds) **Aboriginal Ontario: Historical Perspectives on the First Nations**. Dundurn Press, Toronto, p. 92-121.

Swayze, Ken

2003 **A Stage 1 & 2 Archaeological Assessment of Woodroffe Estates Part North Half Lot 16, Concession 2 Nepean (Geo.) Twp., City of Ottawa**. Consultant's Report Submitted to the Ontario Ministry of Culture.

2004 **Stage 1 & 2 Archaeological Assessment of Proposed Central Canada Exhibition, Albion Road Site, Part Lots 24 and 25, Concession 3, Gloucester Township (Geo.), City of Ottawa**. Consultant's Report Submitted to the Ontario Ministry of Culture.

Tasker, Paul

2016 **Historic Land Deal with Algonquin Peoples Signed by Federal, Ontario Governments**. Accessed from <https://www.cbc.ca/news/politics/ottawa-ontario-algonquin-agreement-in-principle-1.3809876> [15 January 2025].

Taylor, Anne

2015 *Forging New Bonds of Trust*. **Peterborough Archaeology**. D. Verhulst (ed), Peterborough Chapter of the Ontario Archaeological Society, p. 59-65.

Teichroeb, Janet

2007 **The Archaic Lithic Assemblage from West Burleigh Bay, Ontario**. M.A. Thesis Submitted to Trent University.

Tomiak, Julie

2016 *Unsettling Ottawa: Settler Colonialism, Indigenous Resistance, and the Politics of Scale*. **Canadian Journal of Urban Research**, 25(1):8-21.

Trigger, Bruce G. and Gordon M. Day
1994 *Southern Algonquin Middlemen: Algonquin, Nipissing and Ottawa, 1550-1780*. In E.S. Rogers and D.B. Smith (eds) **Aboriginal Ontario: Historical Perspectives on the First Nations**. Dundurn Press, Toronto, p. 64-77.

Warrick, Gary
2000 *The Precontact Iroquoian Occupation of Southern Ontario*. **Journal of World Prehistory**, 14(4): 415-456.

Watson, Gordon
1972 *A Woodland Indian Site at Constance Bay, Ontario*. **Ontario Archaeology**, 18:1-24.

1982 *Prehistoric Peoples in the Rideau Waterway*, **Archaeological Historical Symposium, Rideau Ferry, Ontario**, F.C.L. Wyght, Lombardy, Ontario, pp. 24-55.

1999a *The Paleo-Indian Period in the Ottawa Valley*. In J. L. Pilon (ed.), **Ottawa Valley Prehistory**. Imprimerie Gauvin, Hull, Quebec, p. 28-41.

1999b *The Early Woodland of the Ottawa Valley*. In J. L. Pilon (ed.), **Ottawa Valley Prehistory**. Impremerie Gauvin, Hull Quebec, 56-76.

Williamson, Ronald F.
1990 *The Early Iroquoian Period of Southern Ontario*. **The Archaeology of Southern Ontario to A.D. 1650**.C.J. Ellis and N. Ferris (eds), Ontario Archaeology Society, p. 291-320.

9.0 Images

Image 1: Northern portion of the study area including paved entrance leading to parking lot, view southeast.

Image 2: Parking lot within the northern portion of the study area, view northwest.

Image 3: Entrance to the Kevin Haime Golf Centre, view southeast.

Image 4: Kevin Haime Golf Centre driving range bays, view southwest.

Image 5: Gravel storage area on the northwest side of the golf centre, view east.

Image 6: Northern boundary of the study area showing grassed area between drainage ditch and parking lot, view northeast.

Image 2: Landscaped putting green and subgrade sand bunker in short game training area, view southeast.

Image 3: Existing landscape and utility junction box providing evidence of buried utilities within short game training area, view north.

Image 4: Landscaped putting green within short game training area, view southwest.

Image 5: Subgrade sand feature within short game training area, view south.

Image 11: Sprinkler head within short game training area, view south.

Image 12: Gravel path and drainage ditch along the western boundary of the study area, view southeast.

Image 13: Gravel path along the western boundary of the study area, view northwest.

Image 14: Row of trees on west side of driving range, view northwest.

Image 15: Large berm within southern extent of study area between driving range and storm water pond, view east.

Image 16: Southern portion of study area showing transition from driving range to large berm on the right, view east.

Image 17: Driving range landscape with elevated features and subgrade sand bunkers and berm in background, view southeast.

Image 18: Driving range landscape with elevated features and subgrade sand bunkers, view east.

Image 19: Permanently wet area between practice area and Carp River, view northeast.

10.0 Maps

LEGEND

Stage 1 Study Area

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83.
COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: ESRI TOPOGRAPHIC MAP

500 0 500 1,000 1,500 m

SCALE 1:50,000

CLIENT

DOUBLE DECK REGIONAL INC.

PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT, DOUBLE DECK LANDS, 560 HAZELDEAN ROAD, CITY OF OTTAWA, ONTARIO

TITLE

KEY PLAN

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

YYYY-MM-DD	2025-08-11
PREPARED	AM
REVIEWED	BD
APPROVED	BD

PROJECT NO.	REV.	MAP
2025023	001	1

KEY PLAN

SCALE 1:100,000

LEGEND

Stage 1 Study Area

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83.
COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLANS: LAND INFORMATION ONTARIO (LIO) OPEN DATA DRAPE 2014 AND ESRI TOPOGRAPHIC MAP

50 0 50 100 150 m

SCALE 1:5,000

CLIENT

DOUBLE DECK REGIONAL INC.

PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT, DOUBLE DECK LANDS, 560 HAZELDEAN ROAD, CITY OF OTTAWA, ONTARIO

TITLE

SITE PLAN

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

YYYY-MM-DD	2025-08-11
PREPARED	AM
REVIEWED	BD
APPROVED	BD

PROJECT NO.	REV.	MAP
2025023	001	2

LEGEND

Stage 1 Study Area

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83.
COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: SITE DEVELOPMENT PLAN PROVIDED BY THE REGIONAL GROUP

25 0 25 50 75 m

SCALE 1:3,000

CLIENT

DOUBLE DECK REGIONAL INC.

PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT, DOUBLE DECK LANDS, 560 HAZELDEAN ROAD, CITY OF OTTAWA, ONTARIO

TITLE

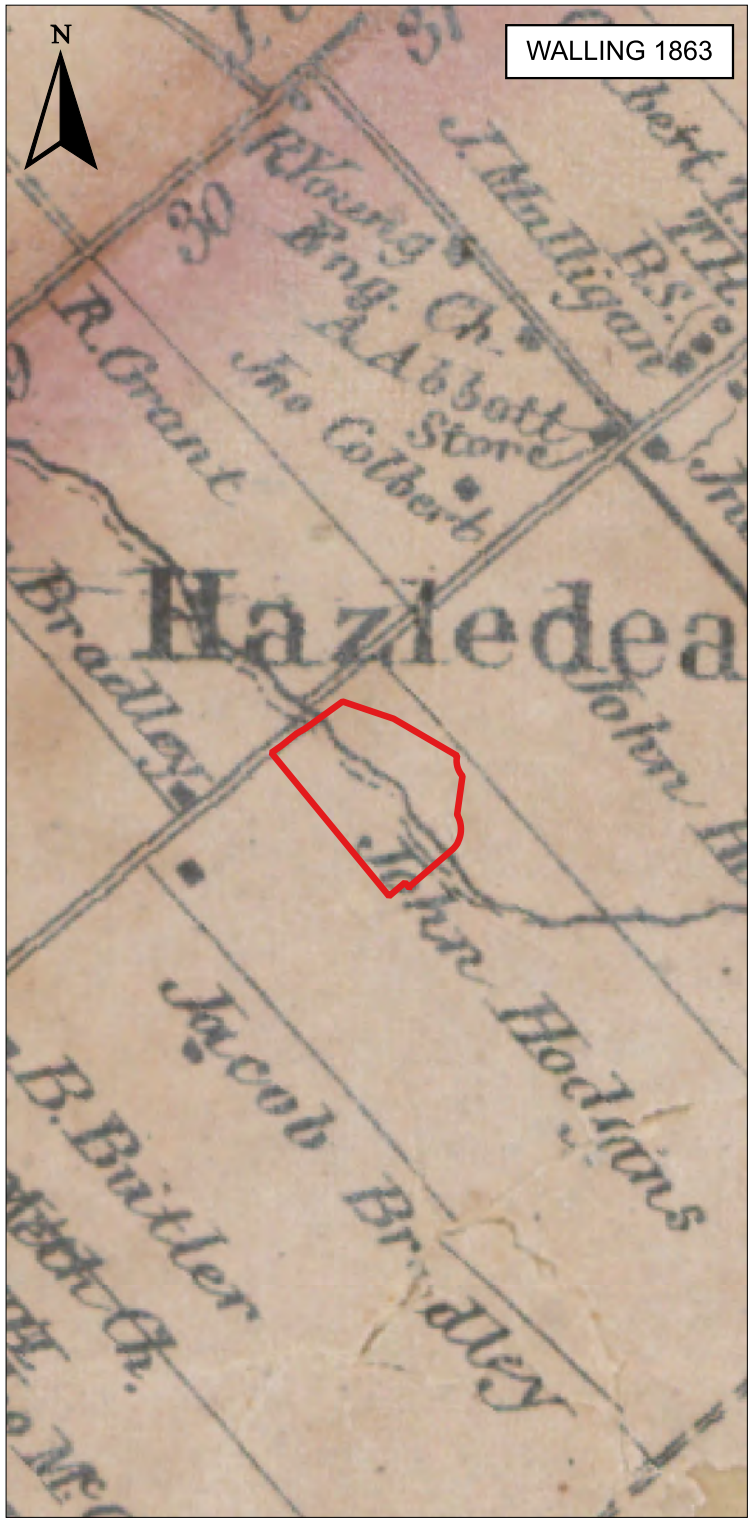
DEVELOPMENT PLAN

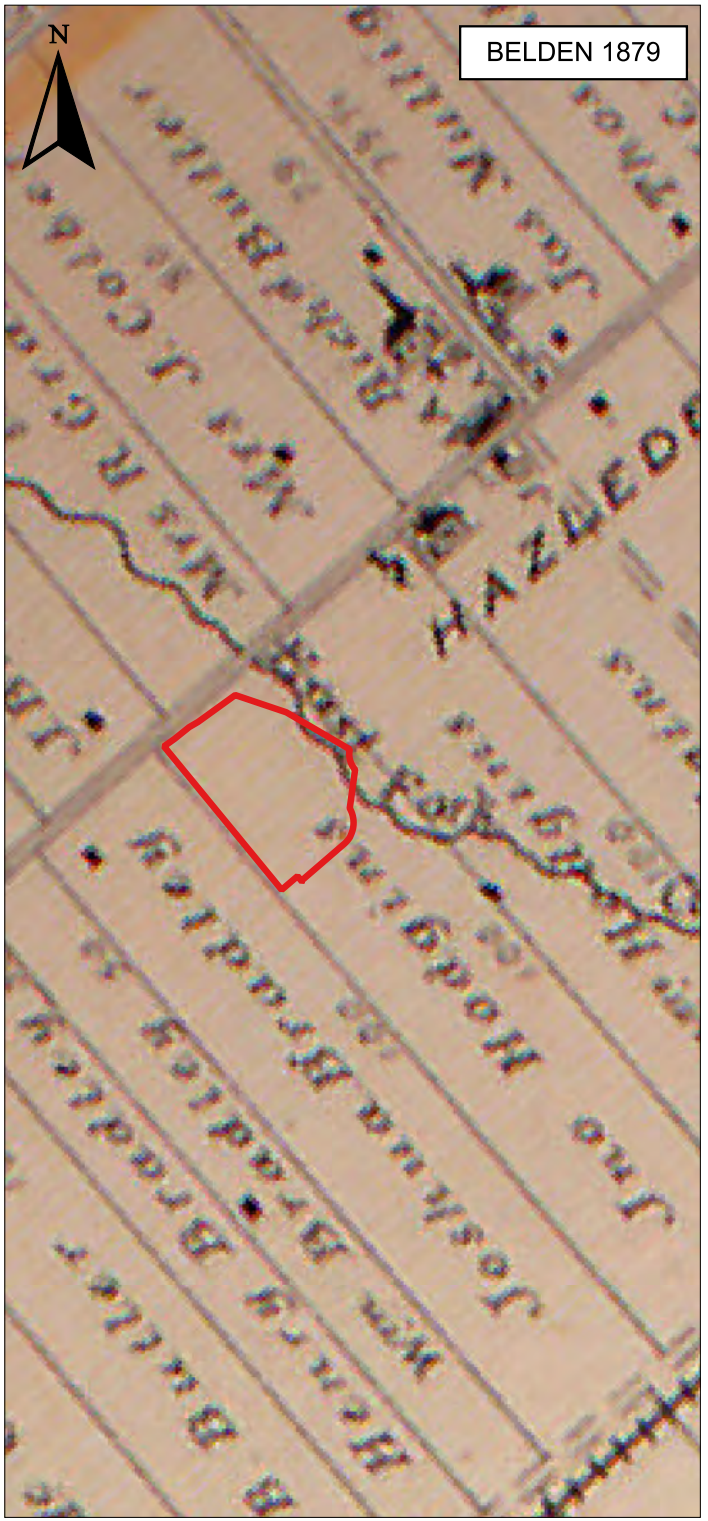
CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

YYYY-MM-DD	2025-08-11
PREPARED	AM
REVIEWED	BD
APPROVED	BD

PROJECT NO.	REV.	MAP
2025023	001	3





LEGEND

Stage 1 Study Area

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83.
COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLANS: MAP OF THE COUNTY OF CARLETON, CANADA WEST, FROM SURVEYS UNDER THE DIRECTION OF H.F. WALLING, 1863
ILLUSTRATED HISTORICAL ATLAS OF THE COUNTY OF CARLETON, MAP OF GLOUCESTER TOWNSHIP, H. BELDEN & CO., 1879

200 0 200 400 600 m

SCALE 1:15,000

CLIENT

DOUBLE DECK REGIONAL INC.

PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT, DOUBLE DECK LANDS, 560 HAZELDEAN ROAD, CITY OF OTTAWA, ONTARIO

TITLE

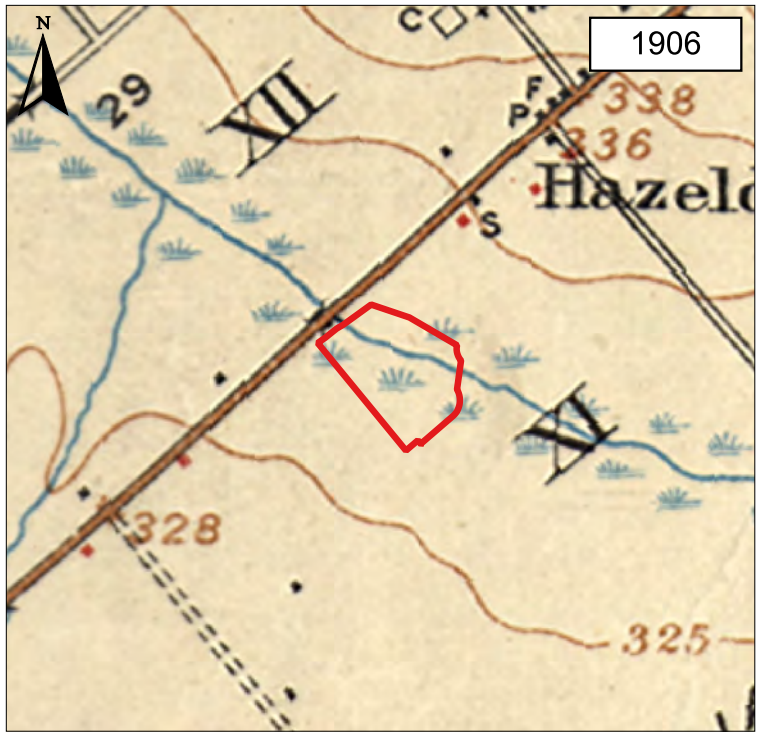
19TH CENTURY PLANS

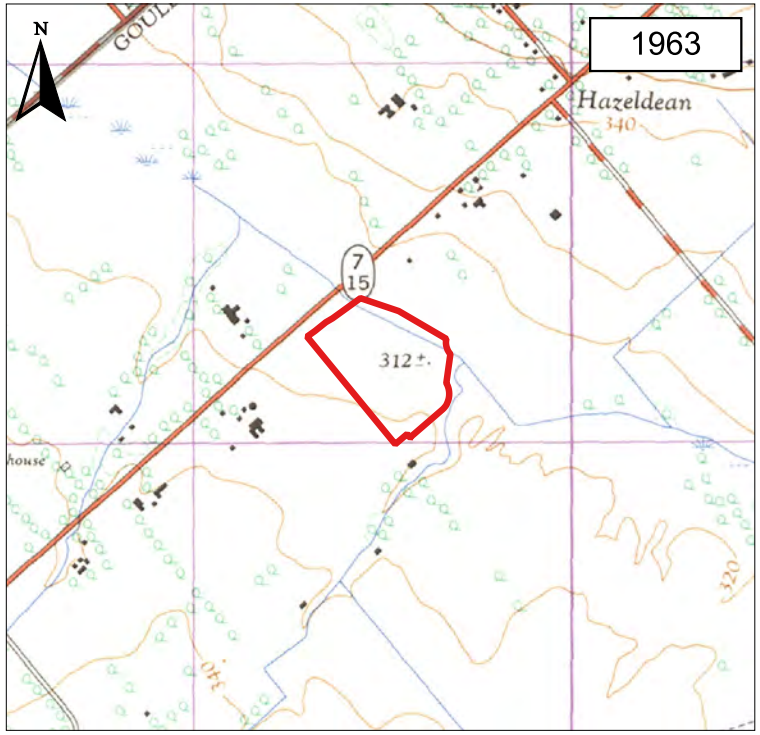
CONSULTANT

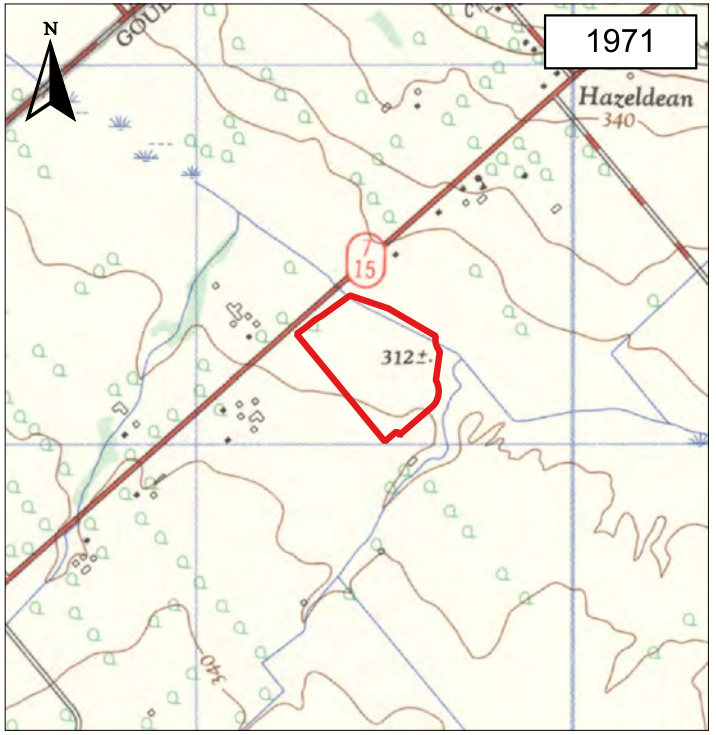
TRUE NORTH ARCHAEOLOGICAL SERVICES

YYYY-MM-DD	2025-08-11
PREPARED	AM
REVIEWED	BD
APPROVED	BD

PROJECT NO.	REV.	MAP
2025023	001	4







LEGEND

Stage 1 Study Area

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83.
COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLANS: DEPARTMENT OF MILITIA AND DEFENCE DEFENCE, GEOGRAPHICAL SECTION, OTTAWA SHEET, 1906
DEPARTMENT OF MILITIA AND DEFENCE DEFENCE, GEOGRAPHICAL SECTION, OTTAWA SHEET, 1918 WITH CORRECTIONS 1920
COMPILED 1961-62 BY THE ARMY SURVEY ESTABLISHMENT, R.C.E., FROM AIR PHOTOGRAPHS TAKEN IN 1960. CULTURE CHECK 1961. PRINTED 1963
SURVEYS AND MAPPING BRANCH, DEPARTMENT OF ENERGY, MINES AND RESOURCES.
INFORMATION DEPICTED CURRENTS AS OF 1968. PRINTED 1971

250 0 250 500 750 m

SCALE 1:20,000

CLIENT

DOUBLE DECK REGIONAL INC.

PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT, DOUBLE DECK LANDS, 560 HAZELDEAN ROAD, CITY OF OTTAWA, ONTARIO

TITLE

20TH CENTURY TOPOGRAPHIC PLANS

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

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PREPARED	AM
REVIEWED	BD
APPROVED	BD

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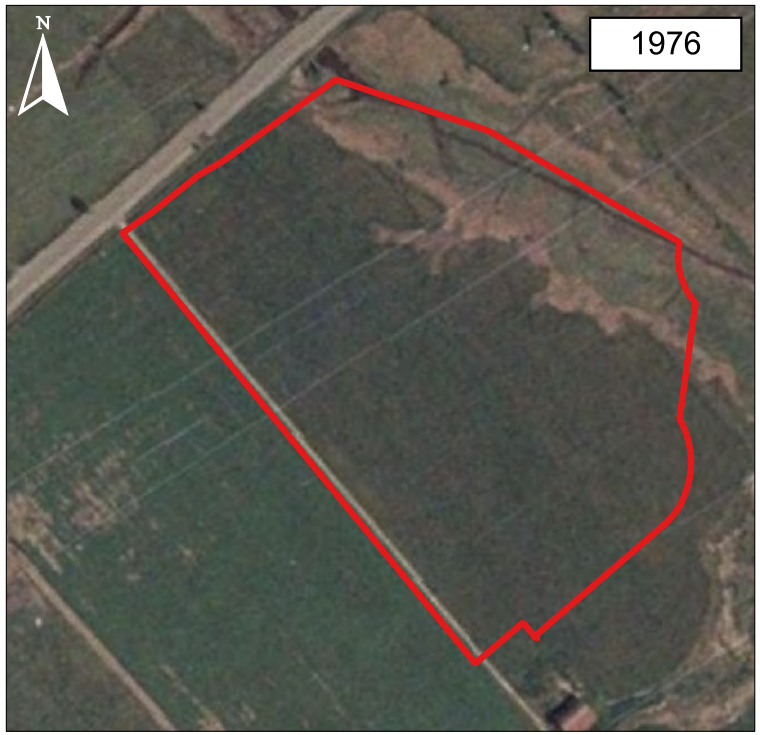

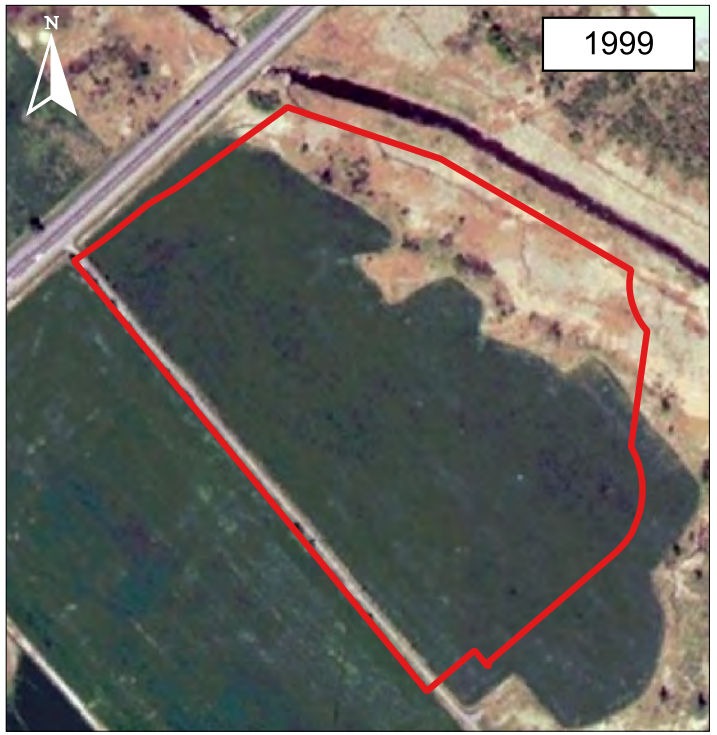

LEGEND

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83.
COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLANS: GeoOTTAWA AERIAL IMAGERY, 1976, 1999, 2002, 2022

50 0 50 100 150 m

SCALE 1:5,000

CLIENT

DOUBLE DECK REGIONAL INC.

PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT, DOUBLE DECK LANDS, 560 HAZELDEAN ROAD, CITY OF OTTAWA, ONTARIO

TITLE

20TH AND 21ST CENTURY AERIAL IMAGERY

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

YYYY-MM-DD	2025-08-11
PREPARED	AM
REVIEWED	BD
APPROVED	BD

PROJECT NO.	REV.	MAP
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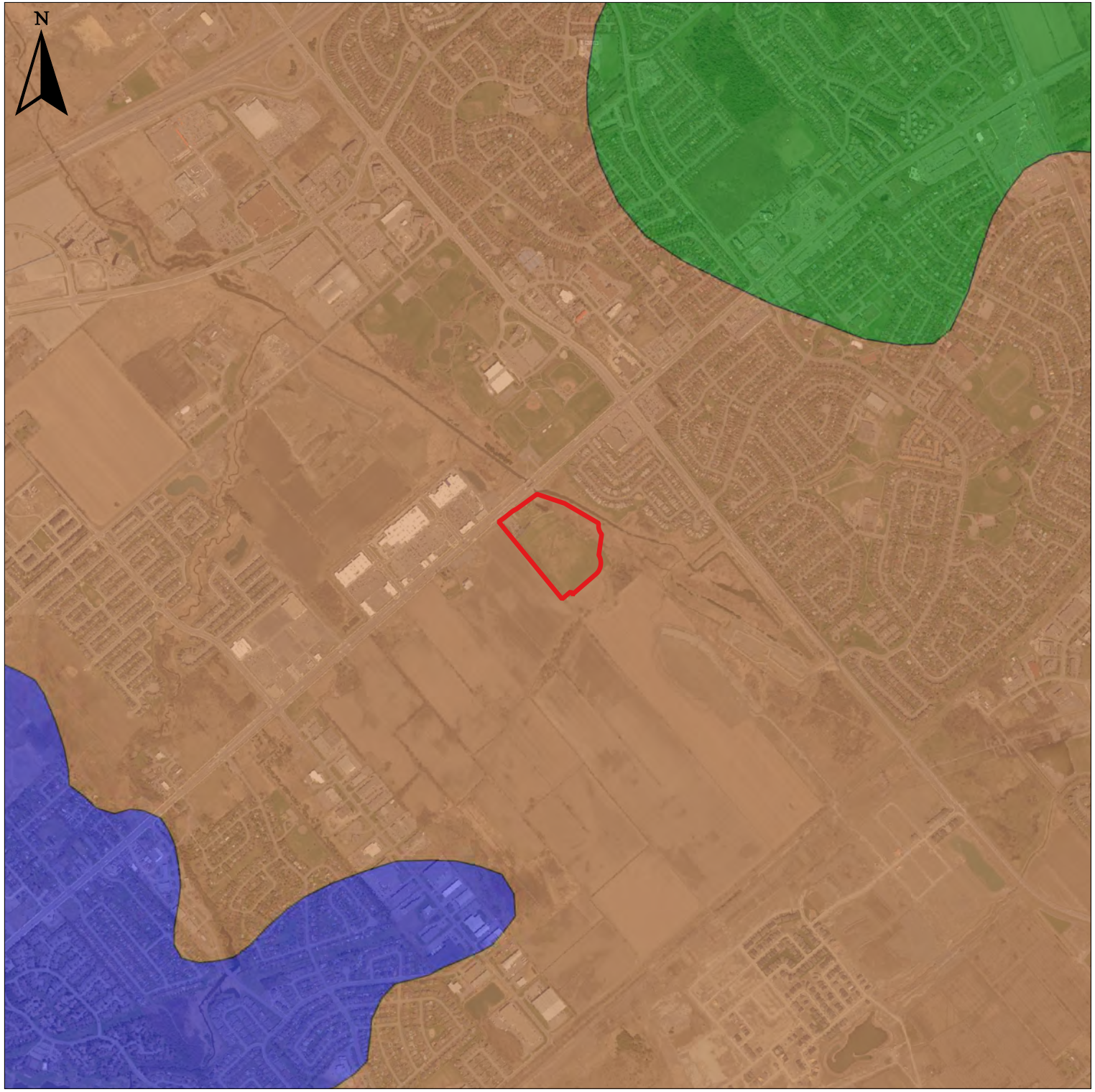

LEGEND

Stage 1 Study Area

PHYSIOGRAPHIC DESCRIPTION

Clay Plains

Limestone Plains

Sand Plains

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83.
COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: CHAPMAN, L.J. AND PUTNAM, D.F. 2007. PHYSIOGRAPHY OF SOUTHERN ONTARIO; ONTARIO GEOLOGICAL SURVEY, MISCELLANEOUS RELEASE-DATA 2008 AND LAND INFORMATION ONTARIO (LIO) OPEN DATA, DRAPE 2014

200 0 200 400 600 m

SCALE 1:20,000

CLIENT

DOUBLE DECK REGIONAL INC.

PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT, DOUBLE DECK LANDS, 560 HAZELDEAN ROAD, CITY OF OTTAWA, ONTARIO

TITLE

PHYSIOGRAPHY

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

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REVIEWED	BD
APPROVED	BD

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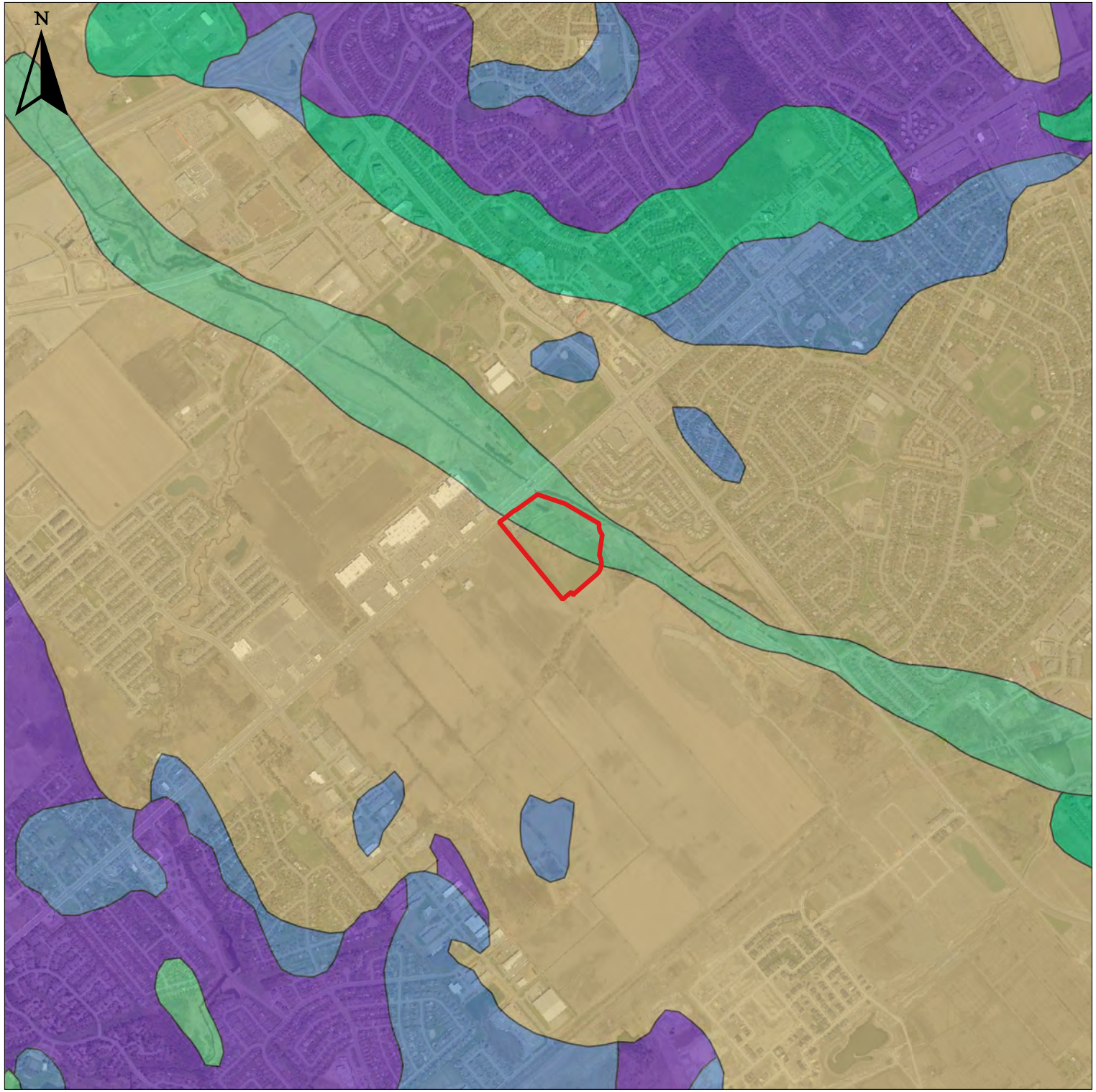

LEGEND

- Stage 1 Study Area

OGS SURFICIAL GEOLOGY

- Bedrock
- Nearshore sediments
- Offshore marine deposits
- Organic deposits
- Till

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83.
COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: ONTARIO GEOLOGICAL SURVEY 2010, SURFICIAL GEOLOGY OF SOUTHERN ONTARIO; ONTARIO GEOLOGICAL SURVEY, MISCELLANEOUS RELEASE-DATA 128-REV AND LAND INFORMATION ONTARIO (LIO) OPEN DATA, DRAPE 2014

200 0 200 400 600 m

SCALE 1:20,000

CLIENT

DOUBLE DECK REGIONAL INC.

PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT, DOUBLE DECK LANDS, 560 HAZELDEAN ROAD, CITY OF OTTAWA, ONTARIO

TITLE

SURFICIAL GEOLOGY

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

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REVIEWED	BD
APPROVED	BD

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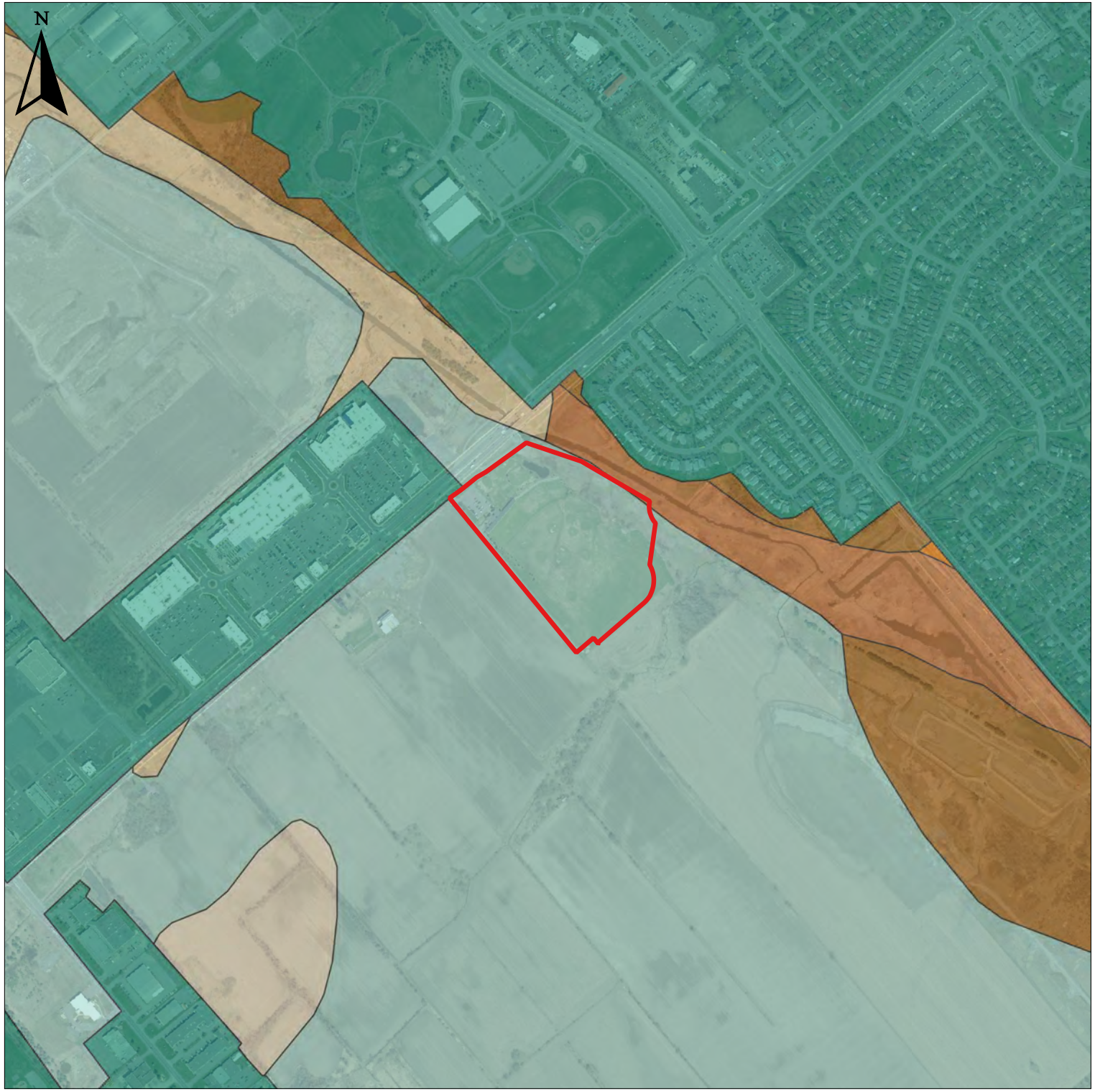

LEGEND

Stage 1 Study Area

SOIL SURVEY COMPLEX

- Alluvium
- Bainsville
- Eroded Channel
- Grenville
- North Gower
- Not Mapped
- Urban

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83.
COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: SOIL SURVEY COMPLEX, ONTARIO MINISTRY OF AGRICULTURE, FOOD AND RURAL AFFAIRS, 2019-11-06 AND LAND INFORMATION ONTARIO (LIO) OPEN DATA, DRAPE 2014

100 0 100 200 300 m

SCALE 1:10,000

CLIENT

DOUBLE DECK REGIONAL INC.

PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT, DOUBLE DECK LANDS, 560 HAZELDEAN ROAD, CITY OF OTTAWA, ONTARIO

TITLE

SOIL SURVEY COMPLEX

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

YYYY-MM-DD	2025-08-11
PREPARED	AM
REVIEWED	BD
APPROVED	BD

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LEGEND

- Stage 1 Study Area
- Archaeological Potential Defined in the City of Ottawa Archaeological Master Plan

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83.
COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: LAND INFORMATION ONTARIO (LIO) OPEN DATA DRAPE 2014

3. THE ARCHAEOLOGICAL RESOURCE POTENTIAL MAPPING STUDY OF THE REGIONAL MUNICIPALITY OF OTTAWA-CARLETON, ASI & GII, 1999

50 0 50 100 150 m

SCALE 1:4,000

CLIENT

DOUBLE DECK REGIONAL INC.

PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT, DOUBLE DECK LANDS, 560 HAZELDEAN ROAD, CITY OF OTTAWA, ONTARIO

TITLE

CITY OF OTTAWA ARCHAEOLOGICAL MASTER PLAN

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

YYYY-MM-DD	2025-08-11
PREPARED	AM
REVIEWED	BD
APPROVED	BD

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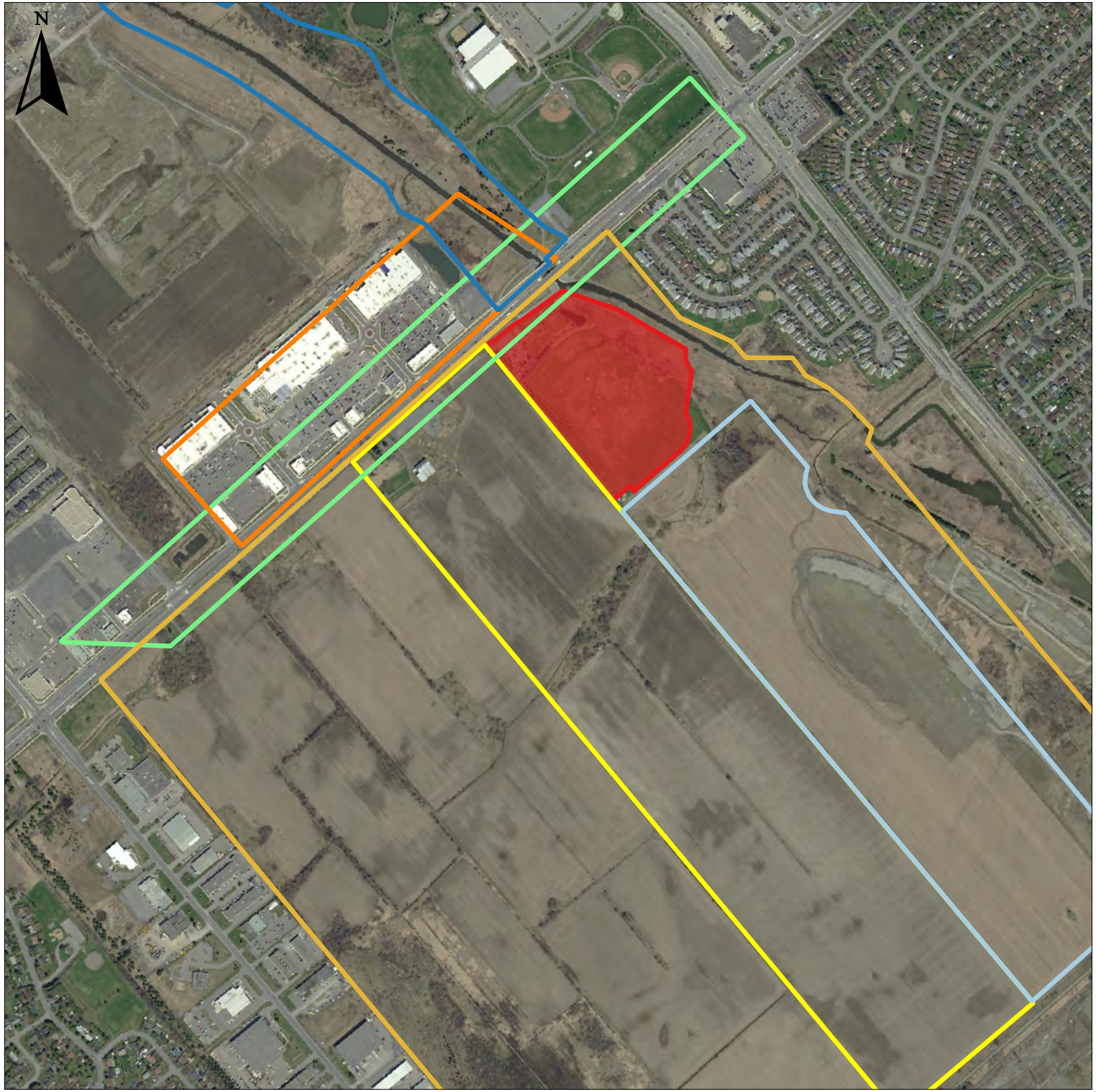

LEGEND

- Stage 1 Study Area

Previous Archaeological Assessments Within 50 m of Study Area

- Stage 1 AA (KHC 2011)
- Stage 1 & 2 AA (Heritage Quest 2001, 2002)
- Stage 1 & 2 AA (Patterson Group 2013, 2015)
- Stage 1 & 2 AA (Patterson Group, 2012)
- Stage 1 & 2 AA (Adams Heritage 2005, 2008)
- Stage 1 & 2 AA (Golder 2017)

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83.
COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: LAND INFORMATION ONTARIO (LIO) OPEN DATA DRAPE 2014

3. SPATIAL INFORMATION FOR ALL ARCHAEOLOGICAL ASSESSMENTS DEPICTED ON THIS MAP ARE REFERENCED FROM AVAILABLE REPORTS AND INFORMATION MAINTAINED BY THE MINISTRY OF CITIZENSHIP AND MULTICULTURALISM

100 0 100 200 300 m

SCALE 1:10,000

CLIENT

DOUBLE DECK REGIONAL INC.

PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT, DOUBLE DECK LANDS, 560 HAZELDEAN ROAD, CITY OF OTTAWA, ONTARIO

TITLE

PREVIOUS ARCHAEOLOGICAL ASSESSMENTS

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

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APPROVED	BD

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LEGEND

Visual Inspection Results

- Archaeological Potential Retained
- Previous Landscape Disturbance
- Permanently Wet

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83.
COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: GeoOTTAWA AERIAL IMAGERY, 2022

25 0 25 50 75 m

SCALE 1:2,500

CLIENT

DOUBLE DECK REGIONAL INC.

PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT, DOUBLE DECK LANDS, 560 HAZELDEAN ROAD, CITY OF OTTAWA, ONTARIO

TITLE

VISUAL INSPECTION RESULTS

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

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PREPARED	AM
REVIEWED	BD
APPROVED	BD

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LEGEND

- Study Area
- Archaeological Potential Based on Proximity to Carp River
- Archaeological Potential Based on Proximity to 19th Century Structures
- Archaeological Potential Defined in the City of Ottawa Master Plan
- Archaeological Potenital Defined in Stage 1 AA Completed by Heritage Quest (2002)
- Archaeological Potenital Defined in Stage 1 AA Completed by KHC (2011)

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83. COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: LAND INFORMATION ONTARIO (LIO) OPEN DATA DRAPE 2014

3. ARCHAEOLOGICAL POTENTIAL BASED ON REQUIREMENTS DETAILED IN MINISTRY OF CITIZENSHIP AND MULTICULTURALISM'S STANDARDS AND GUIDELINES FOR CONSULTANT ARCHAEOLOGISTS (2011)

50 0 50 100 150 m

SCALE 1:5,000

CLIENT

DOUBLE DECK REGIONAL INC.

PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT, DOUBLE DECK LANDS, 560 HAZELDEAN ROAD, CITY OF OTTAWA, ONTARIO

TITLE

ARCHAEOLOGICAL POTENTIAL ATTRIBUTES

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

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LEGEND

Archaeological Potential Assessment

- Archaeological Potential Retained
- Disturbed Lands No Longer Retaining Archaeological Potential
- Permanently Wet Land No Longer Retaining Archaeological Potential

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83.
COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: GeoOTTAWA AERIAL IMAGERY, 2022

3. ARCHAEOLOGICAL POTENTIAL BASED ON REQUIREMENTS DETAILED IN MINISTRY OF CITIZENSHIP AND MULTICULTURALISM'S STANDARDS AND GUIDELINES FOR CONSULTANT ARCHAEOLOGISTS (2011)

25 0 25 50 75 m

SCALE 1:2,500

CLIENT

DOUBLE DECK REGIONAL INC.

PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENTS, DOUBLE DECK LANDS, 560 HAZELDEAN ROAD, CITY OF OTTAWA, ONTARIO

TITLE

ARCHAEOLOGICAL POTENTIAL

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

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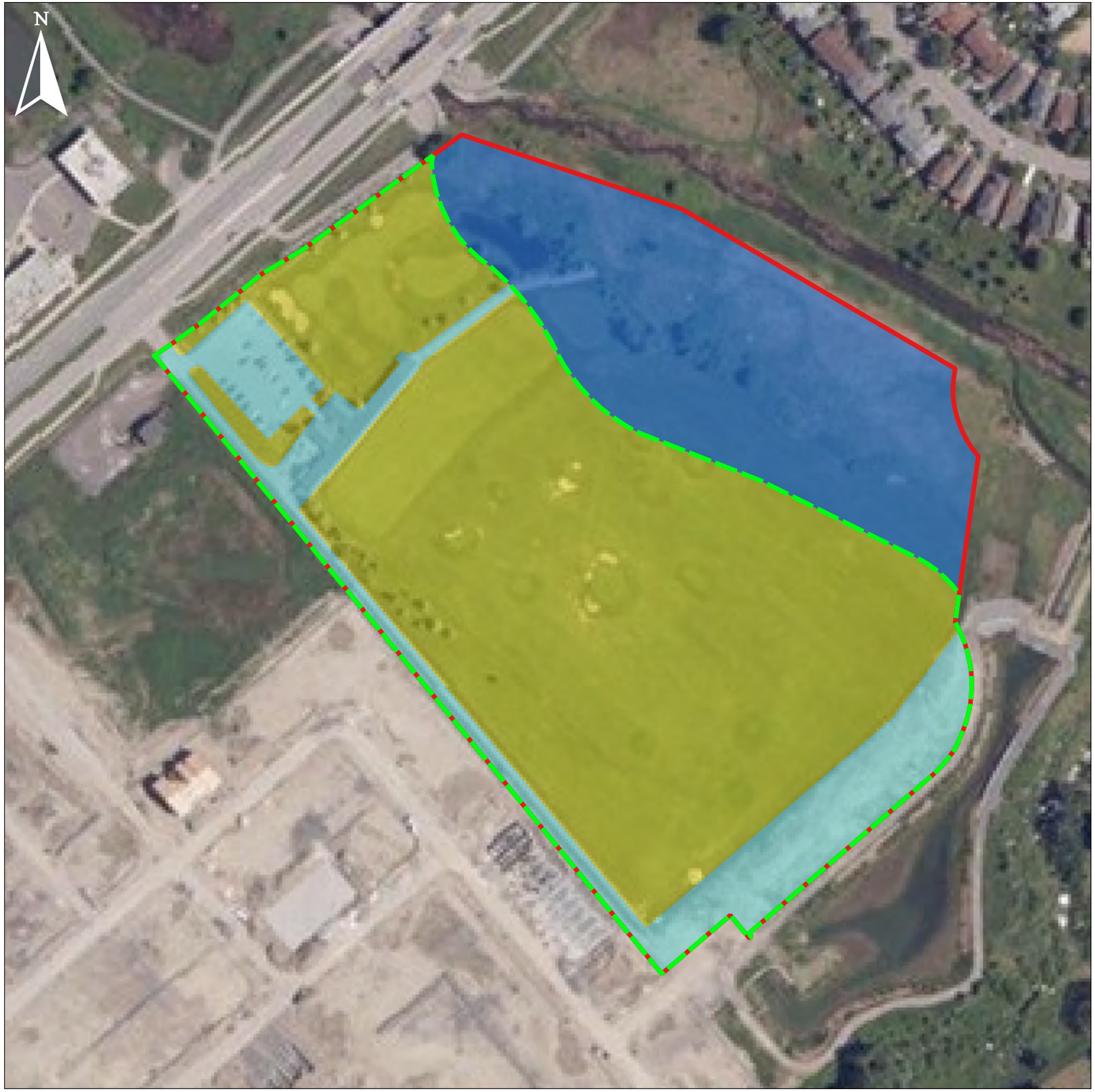

LEGEND

- Stage 1 Study Area
- Stage 2 Study Area

Stage 2 Assessment Strategy

- Test Pit Survey at 5 m Intervals Where Possible, With Transition to Discretionary Test Pit Intervals and Landscape Documentation Where Soil Disturbance is Documented
- Disturbed Lands - No Further Archaeological Assessment Recommended
- Land Outside Current Development Area - Stage 2 Archaeological Assessment Required Prior to Any Future Land Development Activities

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83.
COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: GeoOTTAWA AERIAL IMAGERY, 2022

3. RECOMMENDATIONS ARE BASED ON REQUIREMENTS DETAILED IN MINISTRY OF CITIZENSHIP AND MULTICULTURALISM'S STANDARDS AND GUIDELINES FOR CONSULTANT ARCHAEOLOGISTS (2011)

25 0 25 50 75 m

SCALE 1:2,500

CLIENT

DOUBLE DECK REGIONAL INC.

PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENTS, DOUBLE DECK LANDS, 560 HAZELDEAN ROAD, CITY OF OTTAWA, ONTARIO

TITLE

STAGE 1 RECOMMENDATIONS

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

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APPROVED	BD

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LEGEND

- Stage 1 Study Area
- Stage 2 Study Area

Stage 2 Assessment Strategy

- Test Pit Survey at 5 m Intervals Where Possible, With Transition to Discretionary Test Pit Intervals and Landscape Documentation Where Soil Disturbance is Documented
- Disturbed Lands - No Further Archaeological Assessment Recommended
- Land Outside Current Development Area - Stage 2 Archaeological Assessment Required Prior to Any Future Land Development Activities

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83. COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

2. BASE PLAN: SITE DEVELOPMENT PLAN PROVIDED BY THE REGIONAL GROUP

3. RECOMMENDATIONS ARE BASED ON REQUIREMENTS DETAILED IN MINISTRY OF CITIZENSHIP AND MULTICULTURALISM'S STANDARDS AND GUIDELINES FOR CONSULTANT ARCHAEOLOGISTS (2011)

25 0 25 50 75 m

SCALE 1:2,500

CLIENT

DOUBLE DECK REGIONAL INC.

PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENTS, DOUBLE DECK LANDS, 560 HAZELDEAN ROAD, CITY OF OTTAWA, ONTARIO

TITLE

STAGE 1 RECOMMENDATIONS

CONSULTANT

TRUE NORTH ARCHAEOLOGICAL SERVICES

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APPROVED	BD

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Signature Page

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

TRUE NORTH ARCHAEOLOGICAL SERVICES INC.

Aaron Mior

Aaron Mior, M.MA
Principal, Senior Archaeologist

Bradley Drouin

Bradley Drouin, MA
Principal, Senior Archaeologist

truenortharchaeology.com