



ORIGINAL REPORT

Stage 1 Archaeological Assessment

1015 Tweddle Road, PIN 14538, Part Lot 30,
Concession 1 from the Ottawa River,
Geographic Township of Cumberland, formerly
in Russel County, formerly in the Municipality of
Cumberland, now in the City of Ottawa, Ontario

Prepared For

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1.0 Executive Summary

Matrix Heritage, on behalf of Vuze Construction undertook a Stage 1 archaeological assessment of 1015 Twedde Road, PIN 14538, Part Lot 30, Concession 1 from the Ottawa River, Geographic Township of Cumberland, formerly in Russel County, formerly in the Municipality of Cumberland, now in the City of Ottawa, Ontario (Map 1). The assessment of the property was requested by the City of Ottawa as a component of a residential development application in accordance with the Planning Act (Map 2). The assessment is in accordance with the Ministry of Citizenship and Multiculturalism's (MCM) *Standards and Guidelines for Consultant Archaeologists* (2011).

The City of Ottawa has an archaeological management plan which was developed in 1999, *The Archaeological Resource Potential Mapping Study of the Regional Municipality of Ottawa-Carleton*. The management plan covers the Township of Cumberland (Archaeological Services Inc. and Geomatics International Inc 1999). According to the management plan, the majority of the study area falls within an area of archaeological potential (Map 3).

The Stage 1 assessment included a review of the Ontario MCM archaeological site database, a review of relevant environmental, historical, and archaeological literature, as well as primary historical research including: historical maps, land registry, and census records. A property inspection was undertaken to confirm the extent of possible disturbances and to determine what survey strategies and effort would be appropriate for a Stage 2 assessment, should it be required. Areas were examined to confirm if features of archaeological potential were present and if there were any areas of disturbance which would have removed archaeological potential.

The Stage 1 assessment of the study area, including the property inspection, determined that, given the high level of deep disturbances the development area of the property does not retain archaeological potential. While the development application (Map 2) area extends into the Ottawa River, there are no impacts from this project to this area as it is the river and a protected wetland area within an environmental setback.

Based on the results of this investigation it is recommended that:

1. No further archaeological study is required for the subject property as delineated in Map 1.

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3.0 Project Personnel

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4.0 Project Context

4.1 Development Context

Matrix Heritage, on behalf of Vuze Construction undertook a Stage 1 archaeological assessment of 1015 Twedde Road, PIN14538, Part Lot 30, Concession 1 from the Ottawa River, Geographic Township of Cumberland, formerly in Russel County, formerly in the Municipality of Cumberland, now in the City of Ottawa, Ontario (Map 1). The assessment of the property was requested by the City of Ottawa as a component of a residential development application in accordance with the Planning Act (Map 2). The assessment is in accordance with the Ministry of Citizenship and Multiculturalism's (MCM) *Standards and Guidelines for Consultant Archaeologists* (2011).

While the development application (Map 2) area extends into the Ottawa River, there are no impacts from this project to this area as it is the river and a protected wetland area within an environmental setback.

At the time of the archaeological assessment, the study area was under private ownership. Permission to access the study property was granted by the owner via the proponent prior to the commencement of any field work; no limits were placed on this access.

4.2 Historical Context

4.2.1 Historic Documentation

There are a few published resources on the history of Cumberland Township. The township is briefly referred to in *Ottawa Country* (Bond 1968), but most notably in *Historical Research for Cumberland Township* (Heinz 1936), and *Memories of Cumberland Township* (Cumberland Township Historical Society 2005). Another useful resource is the *Prescott and Russell Supplement to the Illustrated Atlas of the Dominion of Canada* (Belden 1881).

4.2.2 Pre-Contact Period

Archaeological information suggests that ancestral Algonquin people lived in the region for at least 8,000 years before the Europeans arrived in North America. This traditional territory is generally considered to encompass the Ottawa Valley on both sides of the river, in Ontario and Quebec, from the Rideau Lakes to the headwaters of the Ottawa River. The region is dominated by the Canadian Shield which is characterized by low rolling land of Boreal Forest, rock outcrops and muskeg with innumerable lakes, ponds, and rivers. This environment dictated much of the traditional culture and lifestyle of the Algonquin peoples. At the time of European contact, the Algonquin territory was bounded on the east by the Montagnais people, to the west by the Nipissing and Ojibwa, to the north by the Cree, and to the south by the lands of the Iroquois.

Naming

The Algonquins' name for themselves is Anishinabe Algonquin, which means "human being." The word Algonquin supposedly came from the Malecite word meaning "they are our relatives", which French explorer Samuel de Champlain recorded as "Algoumequin" in 1603. The name stuck and the term "Algonquin" refers to those groups that have their traditional lands around the Ottawa Valley. Some confusion can arise regarding the term "Algonquian" which refers to the broader language family, of which the dialect of the Algonquin is one. The Algonquian linguistic group stretches across a significant part of North America and comprises scores of Nations related by language and customs.

Early Human Occupation

The earliest human occupation of the Americas has been documented to predate 14,000 years ago, however at this time much of eastern Canada was covered by thick and expansive glaciers. The Laurentide Ice Sheet of the Wisconsinian glacier blanketed the Ottawa area until about 11,000 B.P. when then the glacial terminus receded north of the Ottawa Valley, and water from the Atlantic Ocean flooded the region to create the Champlain Sea. This sea encompassed the lowlands of Quebec on the north shore of the Ottawa River and most of Ontario east of Petawawa, including the Ottawa Valley and Rideau Lakes. By 10,000 B.P. the Champlain Sea was receding and within 1,000 years has drained from Eastern Ontario (Watson 1990:9).

The northern regions of eastern Canada were still under sheets of glacial ice as small groups of hunters into the southern areas following the receding ice and water. By circa 11,000 B.P., when the Ottawa area was emerging from glaciations and being flooded by the Champlain Sea, northeastern North America was home to what are commonly referred to as the Paleo people. For Ontario the Paleo period is divided into the Early Paleo period (11,000 - 10,400 B.P.) and the Late Paleo period (10,500-9,400 B.P.), based on changes in tool technology (Ellis and Deller 1990). The Paleo people, who had moved into hospitable areas of southwest Ontario, likely consisted of small groups of exogamous hunter-gatherers relying on a variety of plants and animals who ranged over large territories (Jamieson 1999). The few possible Paleo period artifacts found, as surface finds or poorly documented finds, in the broader Eastern Ontario region are from the Rideau Lakes area (Watson 1990) and Thompson's Island near Cornwall (Ritchie 1969:18). In comparison, little evidence exists for Paleo occupations in the immediate Ottawa Valley, as can be expected given the environmental changes the region underwent, and the recent exposure of the area from glaciations and sea. As Watson suggests (Watson 1999:38), it is possible Paleo people followed the changing shoreline of the Champlain Sea, moving into the Ottawa Valley in the late Paleo Period, although archaeological evidence is absent.

Archaic Period

As the climate continued to warm, the glacial ice sheet receded further northwards allowing areas of the Ottawa Valley to be travelled and occupied in what is known as the Archaic Period (9,500 – 2,900 B.P.). In the Boreal forests of the Canadian Shield this cultural period is referred to as the “Shield Archaic” and in the more southerly forests as the “Laurentian Archaic”. The Archaic period is generally characterized by increasing populations, developments in lithic technology (e.g., ground stone tools), and emerging trade networks.

Archaic populations remained hunter-gatherers with an increasing emphasis on fishing. People began to organise themselves into small family groups operating in a seasonal migration, congregating annually at resource-rich locations for social, religious, political, and economic activities. Sites from this period in the Ottawa Valley region include Morrison's Island-2 (BkGg-10), Morrison's Island-6 (BkGg-12) and Allumette Island-1 (BkGg-11) near Pembroke, and the Lamoureux site (BiFs-2) in the floodplain of the South Nation River (Clermont 1999). Often sites from this time are located on islands, waterways, and at narrows on lakes and rivers where caribou and deer would cross, suggesting a common widespread use of the birchbark canoe that was so prominent in later history (McMillan 1995). It is suggested that the Algonquin peoples in the Ottawa Valley area developed out of the Laurentian Archaic culture.

Woodland / Pre-European Contact Period

Generally, the introduction of the use of ceramics marks the transition from the Archaic Period into the Woodland period. Populations continued to participate in extensive trade networks that extended across much of North America. Social structure appears to have become increasingly complex with some status differentiation recognized in burials. Towards the end of this period domesticated plants were gradually introduced to the Ottawa Valley region. This coincided with other changes including the development of semi-permanent villages. The Woodland period is commonly divided into the Early Woodland (1000 – 300 B.C.), Middle Woodland (400 B.C. to A.D. 1000), and the Late Woodland (A.D. 900 – European Contact) periods.

The Early Woodland is typically noted via lithic point styles (i.e., Meadowood bifaces) and pottery types (i.e., Vinette I). Early Woodland sites in the Ottawa Valley region include Deep River (CaGi-1) (Mitchell 1963), Constance Bay I (BiGa-2) (Watson 1972), and Wyght (BfGa-11) (Watson 1980). The Middle Woodland period is identified primarily via changes in pottery style (e.g., the addition of decoration). Some of the best documented Middle Woodland Period sites from the region are from Leamy Lake Park (BiFw-6, BiFw-16) (Laliberté 1999). On the shield and in other non-arable environments, including portions of the Ottawa Valley, there seems to remain a less sedentary lifestyle often associated with the Algonquin groups noted in the region at contact (Wright 2004:1485–1486).

The Woodland Period Algonquin peoples of the Ottawa Valley area had a social and economic rhythm of life following an annual cyclical pattern of seasonal movements. Subsistence was based on small independent extended family bands operating an annual round of hunting, fishing, and plant collecting. Families returned from their winter hunting camps to rejoin with other groups at major fishing sites for the summer. The movements of the people were connected with the rhythm of the natural world around them allowing for efficient and generally sustainable subsistence (Ardoch Algonquin First Nation 2015). Their annual congregations facilitated essential social, political, and cultural exchange.

The Woodland Period the Algonquin peoples in the Ottawa Valley also established significant trade networks and a dominance of the Ottawa River (in Algonquian the “Kitchissippi”) and its tributaries. The trade networks following the Ottawa River connected the Algonquins to an interior eastern waterway via Lake Timiskaming and the Rivière des Outaouais to the St. Maurice and Saguenay as well as the upper Great Lakes and interior via Lake Nipissing and Georgian Bay. From there their Huron allies would distribute goods to the south and west. The Iroquois and their allies along the St. Lawrence River and the lower Great Lakes dominated the trade routes on those waterways to the south thus leading to a rivalry that would escalate with European influence (Moreau et al. 2016).

European Contact

The addition of European trade goods to artifacts of native manufacture in archaeological material culture assemblages’ ushers in a new period of history. Archaeological data shows that European goods penetrated the Canadian Shield as early as 1590 and the trade was well entrenched by 1600 through the trade routes established by the Algonquin peoples along the Ottawa River (Moreau et al. 2016) and their neighbouring allies the Michi Saagiig and the Chippewa nations.

The first recorded meeting between Europeans and Algonquins occurred at the first permanent French settlement on the St. Lawrence at Tadoussac in the summer of 1603. Samuel de Champlain came upon a party of Algonquins, the Kitchissippiwaki under Chief Tessouat, who

were celebrating a recent victory over the Iroquois with their allies the Montagnais and Malecite (Hessel 1993). Champlain made note of the “Algoumequins” and his encounter with them, yet the initial contact between Champlain and the Algonquin people within their own territory in the Ottawa Valley was during his travels of exploration in 1613.

By the time of Champlain’s 1613 journey, the Algonquin people along the Ottawa River Valley were important middlemen in the rapidly expanding fur-trade industry. Champlain knew this and wanted to form and strengthen alliances with the Algonquins to further grow the fur-trade, and to secure guidance and protection for future explorations inland and north towards a potential northwest passage. Further, involving the Algonquins deeper in the fur trade promised more furs filling French ships and more Indigenous dependence on European goods. For their part, the French offered the promise of safety and support against the Iroquois to the south.

Early historical accounts note many different Algonquian speaking groups in the region at the time. Of note for the lower Ottawa Valley area were the Kichesipirini (focused around Morrison Island); Matouweskarini (upstream from Ottawa, along the Madawaska River); Weskarini (around the Petite Nation, Lièvre, and Rouge rivers west of Montreal), Kinounchepirini (in the Bonnechere River drainage); and the Onontchataronon, (along the South Nation River) (Holmes and Associates 1993a; Morrison 2005; Pilon 2005). However, little archaeological work has been undertaken regarding Algonquins at the time of contact with Europeans (Pilon 2005).

Fur Trade, Early Contact with the French

Champlain understood that the Algonquins would be vital to his eventual success in making his way inland, exploring, and expanding the fur trade. This was partially due to their language being the key to communication with many other groups, as well as their dominance over trade routes surrounding the Ottawa River and the connection with the Huron in the west.

When the French arrived, there was already a vast trade network in place linking the Huron and the Algonquins, the Michi Saagiig and Chippewa, extending from the Saguenay to Huronia. This route existed at least from the very early beginnings of agricultural societies in Ontario around A.D. 1000 (Moreau et al. 2016). This trade increased rapidly after the arrival of the Europeans with the introduction of European goods and the demand for furs. The Huron held a highly strategic commercial location controlling the trade to the south and the west, and the Algonquin, Michi Saagiig, and Chippewa were their critical connection to goods from the east, including European products.

By the mid-17th century, the demands of the fur trade had caused major impacts to the traditional way of life including a change in tools, weapons, and a shift in diet to more European as hunting was more for furs and not for food. This dependence on European food, ammunition, and protection tied people to European settlements (McMillan 1995). The summer gathering sites shifted from prominent fishing areas to trading posts. This further spurred social changes in community structure and traditional land distribution and use.

The well-situated Algonquin, particularly the Kichesipirini who controlled passage around Allumette Island, were originally reluctant to cede any of their dominance in fear of being cut out of their lucrative middleman role in the trade economy. However, an alliance with the French meant protection and assistance against the Iroquois. The French, as well as other Europeans like the Dutch and English, were able to align their own political and economic rivalries with those of the native populations. The competitive greed and obsession with expanding the fur trade entrenched the rivalries that were already in place, and these were intensified by European weapons and economic ambition.

Haudenosaunee (Iroquois) Wars

Little information exists about inter-tribal warfare prior to European contact, however, there was existing animosity between the Haudenosaunee and the Algonquins when Champlain first arrived in the Ottawa Valley. Like his fellow Europeans, Champlain was able to use this existing rivalry to make a case for an alliance, thus gaining crucial access to the established trade networks and economic power of the Algonquin. Prior to European contact, the hostilities had been mainly skirmishes and raids, but everything changed as European reinforcement provided deadlier weapons and higher economic stakes with the introduction of the fur trade.

Along with the French, the Algonquin were allied against the Haudenosaunee with the Huron, Nippissing, Michi Saagiig, and Chippewa. French records suggest that at the end of the sixteenth century the Algonquins were the dominant force and were proud to have weakened and diminished the Iroquois. The first Algonquin campaign the French took part in was a 1609 attack against the Mohawk. The use of firearms in this fight marked the beginning of the escalation of brutality between these old enemies. The Haudenosaunee corn stalk shields could stop arrows but not bullets or French swords (Hessel 1993).

Eventually the tide changed and as the Haudenosaunee exhausted the beaver population in their own territory they became the aggressors, pushing into the lands of the Algonquin, Michi Saagiig, Chippewa, and Huron, with the added strength of Dutch weaponry. Through the 1630s and 40s constant and increased raiding into Algonquin, Michi Saagiig, and Chippewa territory by the Haudenosaunee nations had forced many multi-generational residents to leave their lands in seek protection from their French allies in places like Trois Rivieres and Sillery while others fled to the north. By 1650 Huronia, the home of the long-time allies of the Algonquin and traditional and treaty territory of the Chippewa, had been destroyed by the Haudenosaunee. The Algonquins of the Ottawa Valley had largely been scattered or displaced, reduced through war and disease to small family groups under the protection of the French missions only fifty years after the first Europeans had travelled the Ottawa River (Morrison 2005:26).

There is some evidence that Algonquins did not completely abandon the Ottawa Valley but withdrew from the Ottawa River to the headwaters of its tributaries and remained in those interior locations until the end of the century. Taking advantage of the Algonquin absence, the Ottawa people, originally from the area of Manitoulin Island, used the river for trade during this time and their name became historically applied to the river.

Aftermath of War

As the Haudenosaunee push continued and the Algonquin sought refuge amongst their French allies, other factors came into play that significantly contributed to their displacement and near destruction. The introduction of European diseases, the devastating influence of alcohol, and the increasing pressure to convert to Christianity massively contributed to the weakening of the Algonquin people and their traditional culture.

The Algonquins thought of themselves as part of the natural world with which they must live in harmony. The traditional stories of Algonquin folklore contained lessons and guides to behaviour. The French missionaries regarded them as "heathens" and dismissed their religion as superstition (Day 2005). The missionaries believed it was their duty to convert these people to Christianity to save them from evil. Algonquin chief Tessouat had seen his Huron neighbours become ill and die after interactions with the European missionaries and had thus originally warned his people about abandoning their old beliefs and the dangers of conversion (Hessel 1993). Eventually the French imposed laws allowing only those converted to Christianity to

remain within the missions and under French protection. This created divisions amongst the Algonquin themselves which weakened the social structure as some settled into a new religion and new territory.

Starting in the 1630s and continuing into the 1700s, European disease spread among the Algonquin groups along the Ottawa River, bringing widespread death (Trigger 1986:230). As disease spread through the French mission settlements the priests remained certain that the suffering was punishment for resisting Christianity. An additional threat lurking amongst the French settlements was alcohol which precipitated many issues.

The Long Way Back

After the Haudenosaunee (Iroquois) Wars, the remaining Algonquin people were generally settled around various French trading posts and missions from the north end of the Ottawa Valley to Montreal. A large settlement at Oka was the first mission established on Algonquin lands in 1720. This settlement included peoples from many groups who had been collected and moved around from various locations. It became a type of base camp; occupied during the summer while the winters were spent at their traditional hunting territories in the upper Ottawa Valley. This arrangement served the French well, since the Algonquin converts at Oka maintained close ties with the northern bands and could call upon the inland warriors to join them in case of war with the British or Iroquois League.

As the British gained control of Canada from the French in 1758-1760 they included in the Articles of Capitulation a guarantee that the Indian allies of the French would be maintained in the lands they inhabited. Many of the Algonquin and other native groups that had been living on French mission settlements were shuffled around to new reserves while others began to migrate back to their traditional territories. Those who had remained on the land and continued to be active in the fur trade, now did so with the English through companies in Montreal like the North West Company, and in the north with the Hudson Bay Company.

Some Algonquin people began to return to their traditional territory to join those groups who had remained in the lower Ottawa Valley and continued their traditional lifeway through to the influx of European settlement in the late 1700s and early 1800s. This included bands noted to be living along the Gatineau River and other rivers flowing into the Ottawa. These traditional bands maintained a seasonal round focused on harvesting activities into the 1800s when development pressures and assimilation policies implemented by the colonial government saw Indigenous lands taken up, albeit under increasing protest and without consideration for Indigenous claims, for settlement and industry. Algonquin lands began to be encroached upon by white settlers involved in the booming lucrative logging industry or having been granted the land as Loyalist soldiers or through other settler groups.

As some Algonquins had been redistributed to lands in Quebec, their traditional territory within the Ottawa Valley was included in multiple land transfer deals, agreements, and sales with the British Crown beginning in the 1780s and continuing till the 1840s. The Algonquin were not included in these transactions and numerous petitions and inquiries on behalf of their interests were often overruled or ignored (Holmes and Associates 1993a, 1993b; Sarazin). The Constitution Act of 1791 divided Quebec into the Provinces of Upper and Lower Canada with Ottawa River as the division line, thus the lands claimed by the Algonquins fell under two separate administrations creating more confusion, exclusion, and oversight.

Two “protectorate” communities were eventually established in the nineteenth century for the Algonquin people at Golden Lake in Ontario and River Desert (Maniwaki) in Quebec. One of the

last accounts of the Algonquins living traditionally was from 1865. The White Duck family was living just west of Arnprior when they were forced to leave their wigwams as surveyors arrived to tell them the railway was being expanded through their land (Hessel 1993).

Algonquin people continue to live in the Ottawa Valley and there are still many speakers of several Algonquian dialects. Outside of the officially recognized bands there are an unspecified number of people of Algonquin descent throughout the Ottawa Valley unaffiliated with any reserve. Today there are ten Algonquin communities that comprise the Algonquins of Ontario: The Algonquins of Píkwakanagàn First Nation, Antoine, Kijicho Manito Madagouskarini, Bonnechere, Greater Golden Lake, Mattawa/North Bay, Ottawa, Shabot Obaadjiwan, Snimikobi, and Whitney and area.

Struggles to officially secure title to their traditional land, as well as fight for hunting and fishing rights have continued into modern times. The Algonquins of Ontario (AOO) and the Governments of both Canada and Ontario are working together to resolve this land claim through a negotiated settlement. The claim includes an area of 9 million acres of unceded territory within the watersheds of the Ottawa and Mattawa Rivers in Ontario including the city of Ottawa and most of Algonquin Park. The signing of the Agreement-in-Principle in 2016 by the AOO and the provincial and federal governments, signifying a mutual intention for a lasting partnership, was a key step towards a final agreement to clarify the rights and nurture new economic and development opportunities in the area.

4.2.3 Post-Contact Period

The first survey of 47,000 acres that would become Cumberland Township took place in 1791. A second survey in 1798 stated that counties should be made up of townships within eight judicial districts: Eastern, Johnston, Midland, Home, Niagara, London, Western and Newcastle. This was executed in 1802, when the area became part of the Eastern District which consisted of the counties of Glengarry, Dundas, Leeds, and Stormont (Cumberland Township Historical Society 2005).

In the summer of 1799, Cumberland Township was named to honour Prince Ernest Augustus I, one of the numerous children of George III, who became Duke of Cumberland on 24 April 1799. By October 1799, Cumberland Township was listed as existing partly in Stormont and Dundas Counties. On January 1, 1800, Cumberland Township was included with the townships of Clarence, Gloucester, Osgoode, Russell, and Cambridge in the County of Russell, which was now included in the Eastern District (Cumberland Township Historical Society 2005).

In Russell County, the first settlements occurred along the Ottawa River. The village of Cumberland was established on the south shore of the Ottawa River in 1801. Its strategic location at the confluence of the Lievre and Ottawa Rivers made it a popular early fur trading post. Settlement is not recorded in the interior of the township prior to 1820. By 1828, there were only twelve landowners in the township (Assessment Rolls for Cumberland Township 1834-1848).

By the mid-1800s the village of Cumberland was a major seasonal forwarding centre. A wharf allowed for mail carriers to transport communications, and the village had two telegraph offices. Cumberland also had a small ship building industry (Cumberland Township Historical Society 2006). In 1851, the population of Cumberland township was 1,659 and by 1861 had almost doubled to 2,609 (Bond 1968:22). In 1851, the township consisted of one stone house, 54 frame houses, 46 log houses, and 115 shanties. By 1861, the township had 6 stone houses, 16 frame houses, 315 log houses, and zero shanties (Bond 1968:24).

4.2.4 Study Area Specific History

The patent for the study area lands within the east half, of Lot 30, Concession 1 from the Ottawa River was issued June 3, 1870 to Gideon O. Taylor (OLR).

Taylor sold the east half of the lot to J. M. Russell in 1885. Jane M. Russell, listed as a widow in the land registry, left the property to her son, William H. Russell, who inherited it in 1916 following her death on January 11 of that year. William, who married Myrtle (née Lough) in 1912, sold the west half of the east half of Lot 30 to his youngest son, Robert Lough Russell, in 1947. After William's death in 1954, the east half of the east half was passed to his wife, Myrtle, and their son, Robert L. Russell. Myrtle relinquished her claim in favour of her son two years later. The property remained with the Russell family until 1987, when Robert L. Russell sold the E1/2 of Lot 30 (Ancestry.com 2012; OLR).

The 1825 Coffin map shows the east half of Lot 30, which encompass the study area, as granted but does not specify to whom. The west half of Lot 30, which does not include the study area, is listed as having been granted to a Catherine Beek alias McLeod (Coffin 1825)(Map 4). The 1862 Walling map lists William Ferrand on the eastern half of Lot 30 and shows a structure along what is now Old Montreal Road, outside the current study area (Walling 1862) (Map 4). However, the 1881 Belden map does not show any structures on the lot. East of the study area is a small industrial complex of mills and structures along Cardinal Creek. (Belden 1881) (Map 4).

4.3 Archaeological Context

4.3.1 Current Conditions

The study area (1.83 hectares) consists of an irregularly shaped area that is heavily disturbed with a built-up gravel access road from the west with a retaining wall along the northern edge of the road at the water's edge, and an access road to the south which is on an artificial gravel plateau. The northern boundary of the study area is permanently wet marsh fronting the Ottawa River characterised by standing water, dogwood, and cattails. The eastern boundary of the study area has a narrow tree line while the southern section of the study area is a mixed forest with scrubby undergrowth. The central section of the study area has been clear and levelled off using imported gravel fill. To the west of this central area is a berm. General conditions are shown in Figure 1 to Figure 8, and Map 5. The parcel is bordered to the north by the Ottawa River, to the west by Tweddle Road, to the south by Jeanne d'Arc Boulevard North, and the east by marsh and forest. In general, the study area is characterized by gravel roads, marsh, and a berm.

A review of historical aerial imagery of the study area demonstrated that the property is largely infill within the river and has been deeply disturbed (Map 6).

4.3.2 Physiography

The study area lies within the Ottawa Valley Clay Plains (Map 7). The region is characterized by poorly drained topography of clay plains interrupted by ridges of rock or sand that offer moderately better drainage. This topography was influenced by the post glacial sequence Champlain Sea (ca. 10,500 to 8,000 B.C.) that deposited these clay soils and were subsequently covered by sand deposits from the emerging freshwater drainage. Some of these sands were eroded to the underlying clay deposits by later channels of the developing Ottawa River. The sections to the north and south of the Ottawa River are characteristically different. On the Ontario side there is a gradual slope, although there are also some steep scarps (Chapman and Putnam 2007:205–208).

The soils in the study area are of the Ste. Rosalie Series (Map 7). These are poorly drained clay soils that are found in the Ottawa River valley. These soils have developed olive-gray clay which is often 15 feet thick. The moist and wet soils have a dense consistency that is the result of clay swelling and internal drainage is almost completely blocked. The topography is flat and natural drainage courses are imperfectly developed. The surface plow layer is dark grey in colour and is very low in organic matter content. Hay and grain are the principal crops grown in these soils (Gillespie and Wicklund 1964).

The surficial geology of the study area indicates that the property consists of Massive-well laminated, fine-textured glaciomarine deposits with terraces nearby (Map 7). This topography is composed of silt and clay as well as minor sand and gravel.

The study area is adjacent to the Ottawa River which runs along the northern border and is 350 m west of Cardinal Creek and 675 m east of Taylors Creek.

4.3.3 Previous Archaeological Assessments

There has been no previous assessment of the study area or the adjacent parcels. Nearby assessments include:

- A series of archaeological assessments and a mitigation of impact for a proposed subdivision to the northeast along Old Montreal Road, including the Stage 4 mitigation of the BiFu-7 historic homestead site (Paterson Group 2012a, 2013a, 2013b, 2014);
- Stage 1 assessment and follow-up Stage 2 assessments of the Trim Road corridor and realignment were undertaken (Archaeological Services Inc 1998; Golder Associates Ltd 2011a, 2011b);
- Stage 2 assessment on Trim Road, near Old Montreal Road that found no archaeological resources (Golder Associates Ltd 2011a);
- Stage 1 and 2 assessment of 955 Dairy Road (Paterson Group 2013c); and
- Stage 1 assessment of the Mondavi Court Development located at 1765 Trim Road (Paterson Group 2012b).

4.3.4 Registered Archaeological Sites and Commemorative Plaques

A search of the Ontario Archaeological Sites Database indicated there are no sites within 50 m of the study area, but there are two registered sites within a 1 km radius of the study area (Table 1). These include the Cardinal Creek Site (BiFu-7), a mid-1800s historical homestead site; and the Ferrin Site (BiFu-7), another historical homestead site. No commemorative plaques or monuments are located near the subject property.

Borden Number	Site Name	Time Period	Affinity	Site Type	Current Development Review Status
BiFu-8	Ferrin Site	Post-Contact	Euro-Canadian	Homestead	No Further CHVI
BiFu-7	Cardinal Creek Site	Post-Contact	Euro-Canadian		

Table 1: Registered archaeological sites within 1km.

4.4 Archaeological Potential

Potential for pre-contact Indigenous sites is based on physiographic variables that include distance from the nearest source of water, the nature of the nearest source/body of water, distinguishing features in the landscape (e.g., ridges, knolls, eskers, wetlands), the types of soils

found within the area of assessment, and resource availability. The study area is within a zone of potential for pre-contact Indigenous archaeological sites due to its location adjacent to the Ottawa River, the presence of nearby fluvial terraces, and proximity to Cardinal Creek to the east.

Potential for historical Euro-Canadian sites is based on proximity to historical transportation routes, historical community buildings such as schools, churches, and businesses, and any known archaeological or culturally significant sites. The study area property exhibits low potential for historical period archaeological sites due to the later patent date and lack of historical features mapped in or near the study area (Belden 1881; Walling 1862).

The City of Ottawa has an archaeological management plan which was developed in 1999, *The Archaeological Resource Potential Mapping Study of the Regional Municipality of Ottawa-Carleton*. The management plan covers the Township of Cumberland (Archaeological Services Inc. and Geomatics International Inc 1999). According to the management plan, the study area does fall within an area of archaeological potential (Map 3).

Despite being within an area of archaeological potential, extensive prior works within the development area, as shown through the property inspection and aerial imagery has caused significant deep and pervasive disturbance, and potential for uncovering archaeological sites in this area has been completely negated through these disturbances (Section 1.3.2, MCM 2011).

5.0 Field Methods

A property inspection was undertaken on October 16, 2024, as per Section 1.2 (MCM 2011). Permission to access the property was provided by the owner with no limitations. Weather conditions at the time of the site visit were partly cloudy with a high of 10° C. Ground surfaces were clear of obstruction and visibility was good. During the site visit the entire property was systematically inspected (Section 1.2 Standard 1.).

The property inspection was undertaken to confirm the extent of possible disturbances and to determine what survey strategies and effort would be appropriate for a Stage 2 assessment, should it be required. Areas were examined to confirm if features of archaeological potential were present and if there were any areas of disturbance which would have removed archaeological potential.

Digitized boundaries for the study area, obtained from the development mapping (Map 2), were loaded into ESRI Field Map prior to the site visit. This data layer was then accessed on an iPhone with GPS for real-time positioning in the field with horizontal accuracies averaging +/- 5 m.

Field notes and photographs of the property were taken during the visit to document the current land conditions as per Standard 1.a., Section 7.8.6 (MCM 2011). Locations of all photos included in this report are shown on Map 5, identified by figure number. Site photograph, document, and map catalogues appear in Appendices A, B, and C.

6.0 Record of Finds

The 1.83 ha study area is characterized by extensive disturbance across multiple zones as documented through the property inspection and historical aerial imagery. A built-up gravel access road, bordered by a retaining wall to the north along the water's edge and a gravel plateau to the south, demonstrate ground alteration.

The northern boundary consists of a permanently wet area that transitions into the Ottawa River, with vegetation dominated by standing water, dogwood, and swamp grasses. The southern section is a mixed forest with scrubby undergrowth, though evidence of prior disturbance is present on the surface in the form of granular and mixed fill.

The central section has been extensively cleared and levelled, utilizing imported gravel fill, indicating substantial modification. A disturbed berm is located immediately west of this central area.

7.0 Conclusions and Recommendations

Matrix Heritage, on behalf of Vuze Construction, undertook a Stage 1 Archaeological Assessment of the study area located at 1015 Twedde Road on Part Lot 30, Concession 1 from the Ottawa River, in the Geographic Township of Cumberland, formerly in Russell County, in the city of Ottawa, Ontario (Map 1). Stage 1 assessment included a review of the updated MCM archaeological site databases, a review of relevant environmental, historical and archaeological literature, primary historical research, and a property inspection.

This Stage 1 assessment concludes that, based on criteria outlined in the MCM's *Standards and Guidelines for Consultant Archaeologists* (Section 1.3, 2011), potential for uncovering archaeological sites has been completely negated through extensive and deep disturbances related to years of major landscape modifications including site clearing, roads, a berm in the center of the study area, and the presence of permanent wetlands in the northern section (Section 1.3.2, MCM 2011).

Historical aerial photographs of the site (Map 6) and the property inspection demonstrate that dry areas of the parcel are deeply and pervasively disturbed. This disturbance has removed all archaeological potential from the dry portions of the development area (Section 1.3.2, MCM 2011). While the development application (Map 2) area extends into the Ottawa River, there are no impacts from this project to this area as it is the river and a protected wetland area within an environmental setback. Accordingly, no further archaeological assessment is required for the study area as shown on Map 1.

Based on the results of this investigation it is recommended:

1. No further archaeological study is required for the study property delineated in Map 1.

8.0 Advice on Compliance with Legislation

- a. This report is submitted to the *Minister of Citizenship and Multiculturalism* as a condition of licencing 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.
- b. It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licenced archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest , and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.
- c. 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 licenced consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.
- d. 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.

9.0 Closure

Matrix has prepared this report in a manner consistent with the time limits and physical constraints applicable to this report. No other warranty, expressed or implied, is made. The strategies incorporated in this study comply with those identified in the Ministry of Citizenship and Multiculturalism's *Standards and Guidelines for Consultant Archaeologists* (2011) however; archaeological assessments may fail to identify all archaeological resources.

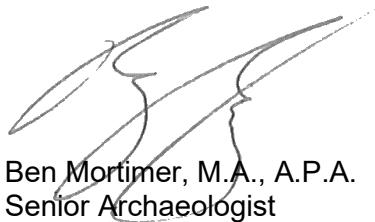
The present report applies only to the project described in the document. Use of this report for purposes other than those described herein or by person(s) other than Vuze Construction or their agent(s) is not authorized without review by this firm for the applicability of our recommendations to the altered use of the report.

Unless otherwise indicated, all materials in the report are copyrighted by Matrix Heritage. All rights reserved. Matrix Heritage authorizes the client and approved users to make and distribute copies of this report only for use by those parties. No part of this document either text, map, or image may be used for any purpose other than those described herein. Therefore, reproduction, modification, storage in a retrieval system or retransmission, in any form or by any means, electronic, mechanical, or otherwise, for reasons other than those described herein, is strictly prohibited without prior written permission of Matrix Heritage.

This report is pending Ministry approval.

If you have any questions or we may be of further assistance, please contact the undersigned.

Matrix Heritage Inc.



Ben Mortimer, M.A., A.P.A.
Senior Archaeologist

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11.0 Images

Figure 1: Overview of site (MH1329-D012)



Figure 2: Overview of site with topsoil pile (MH1329-D011)

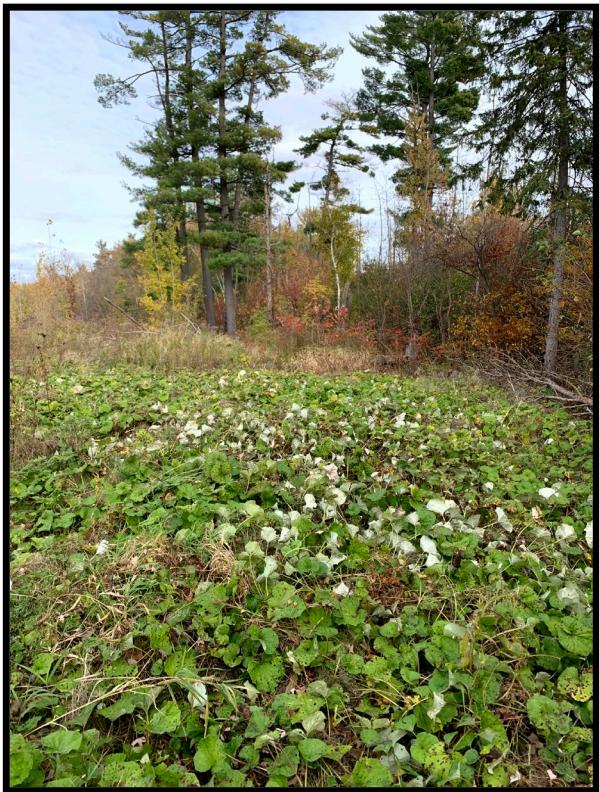


Figure 3: Overview of site (MH1329-D010)



Figure 4: Overview of site with road access (MH1329-D009)



Figure 5: Overview of site (MH1329-D005)



Figure 6: Overview of site (MH1329-D013)

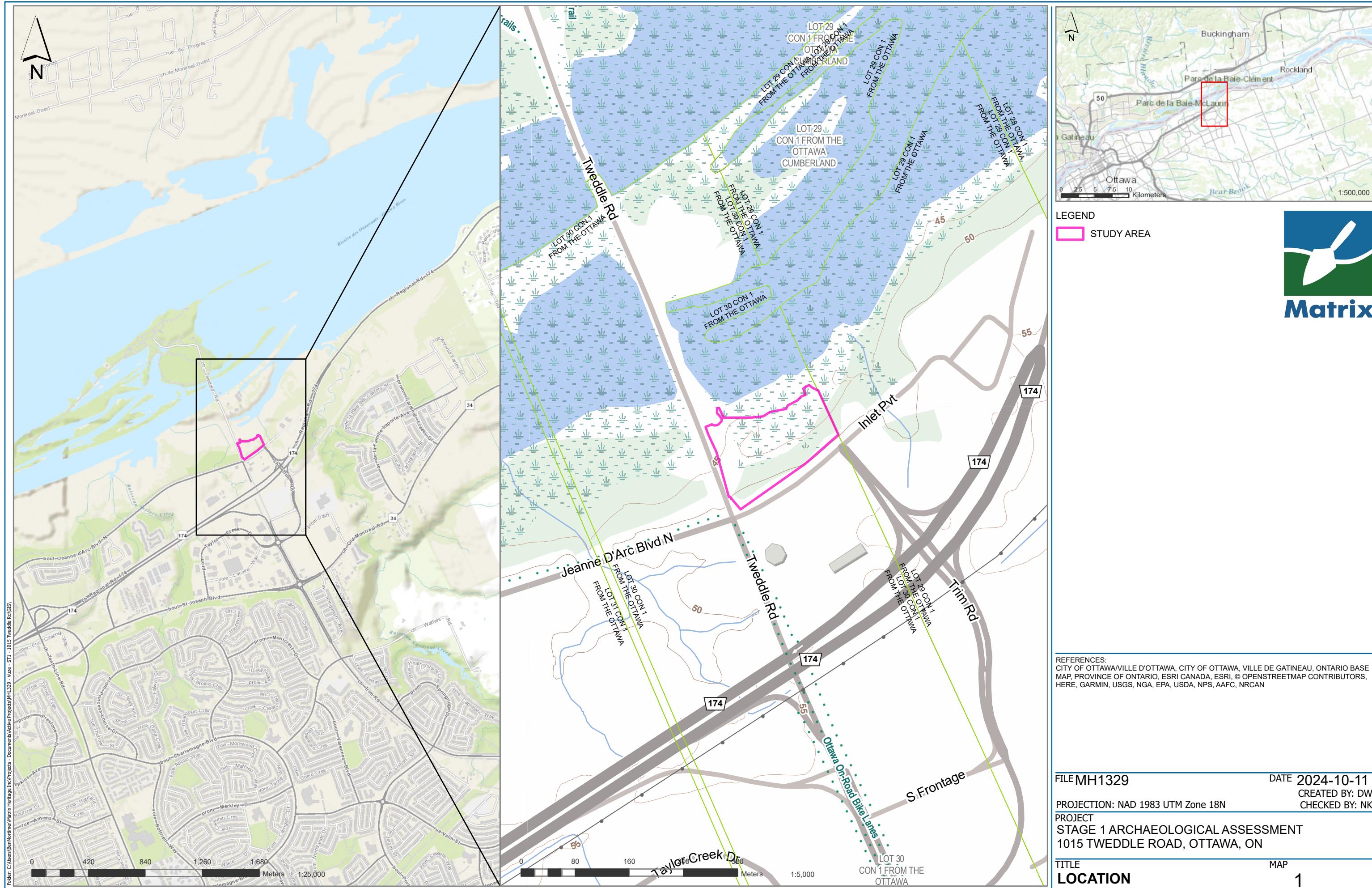


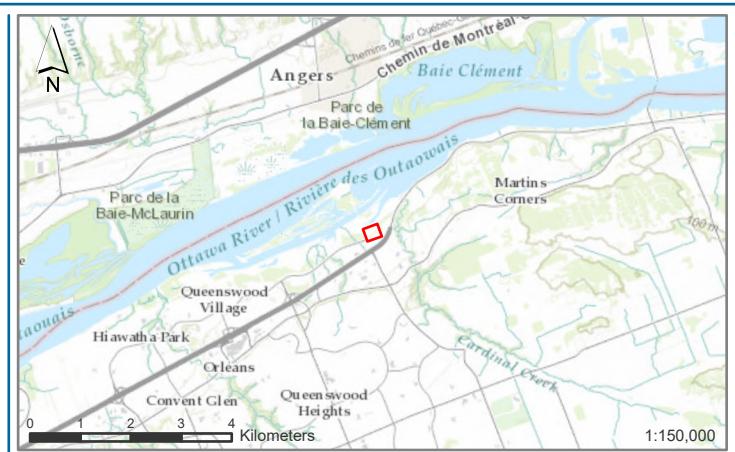
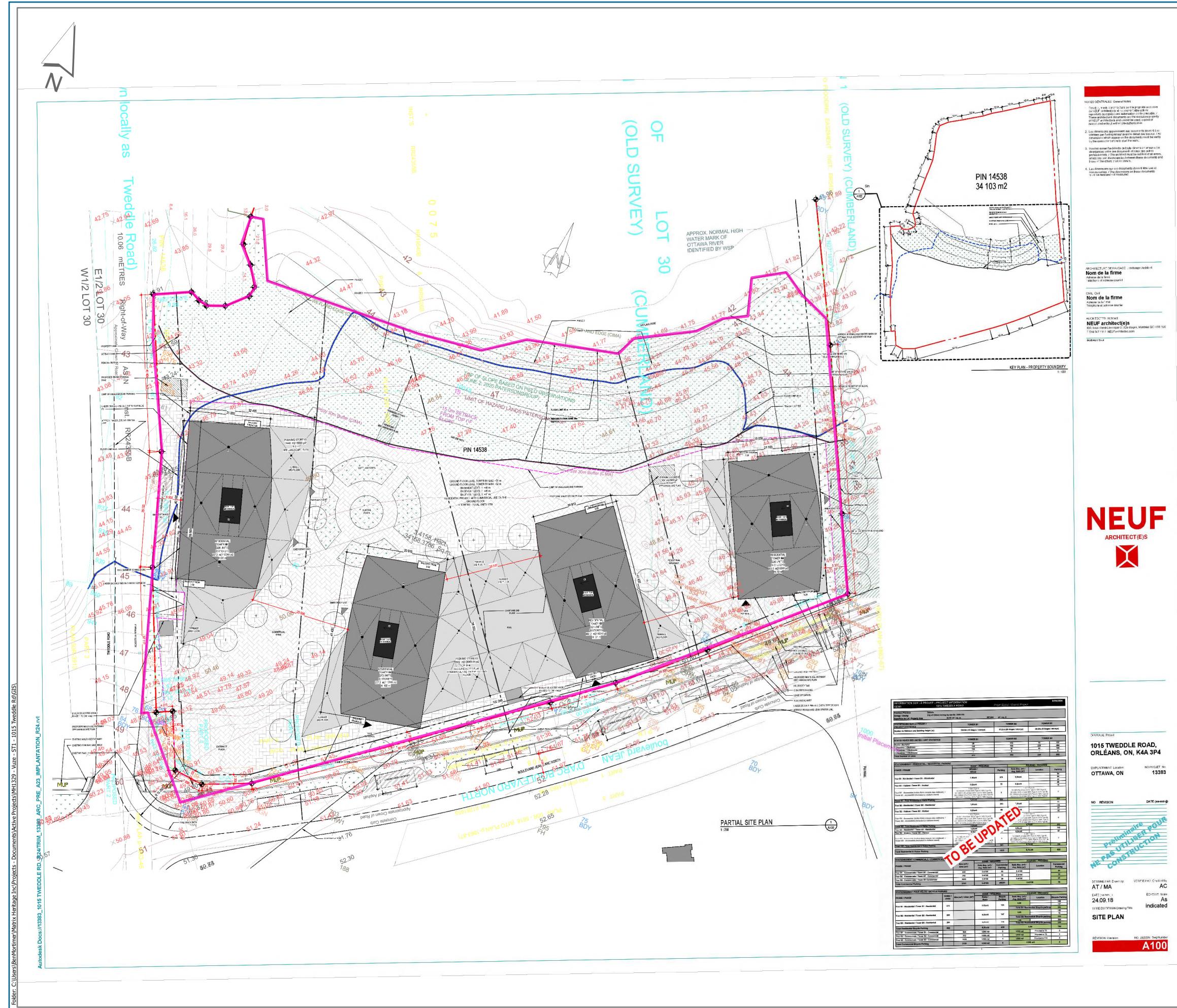
Figure 7: Overview of site (MH1329-D001).

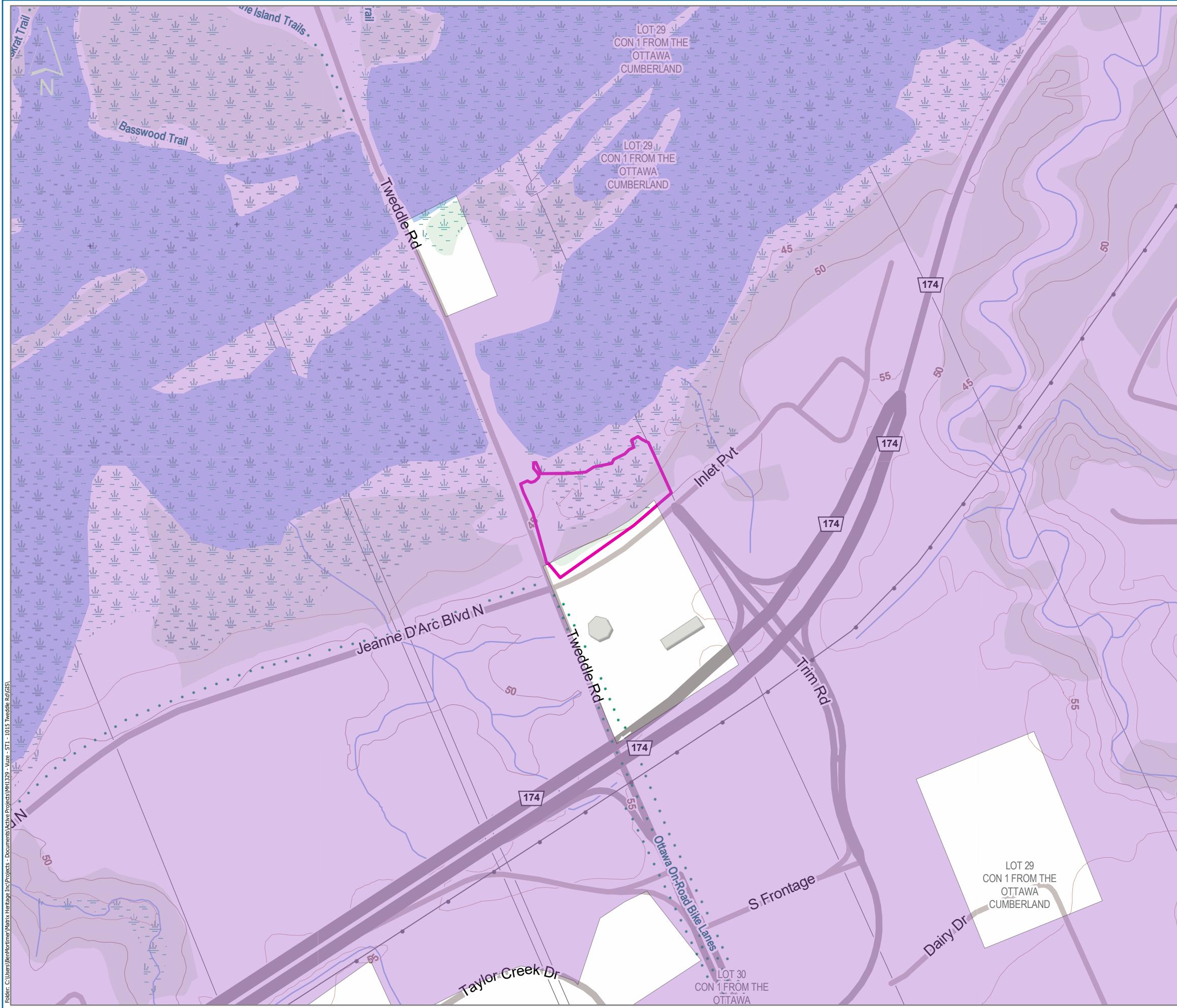


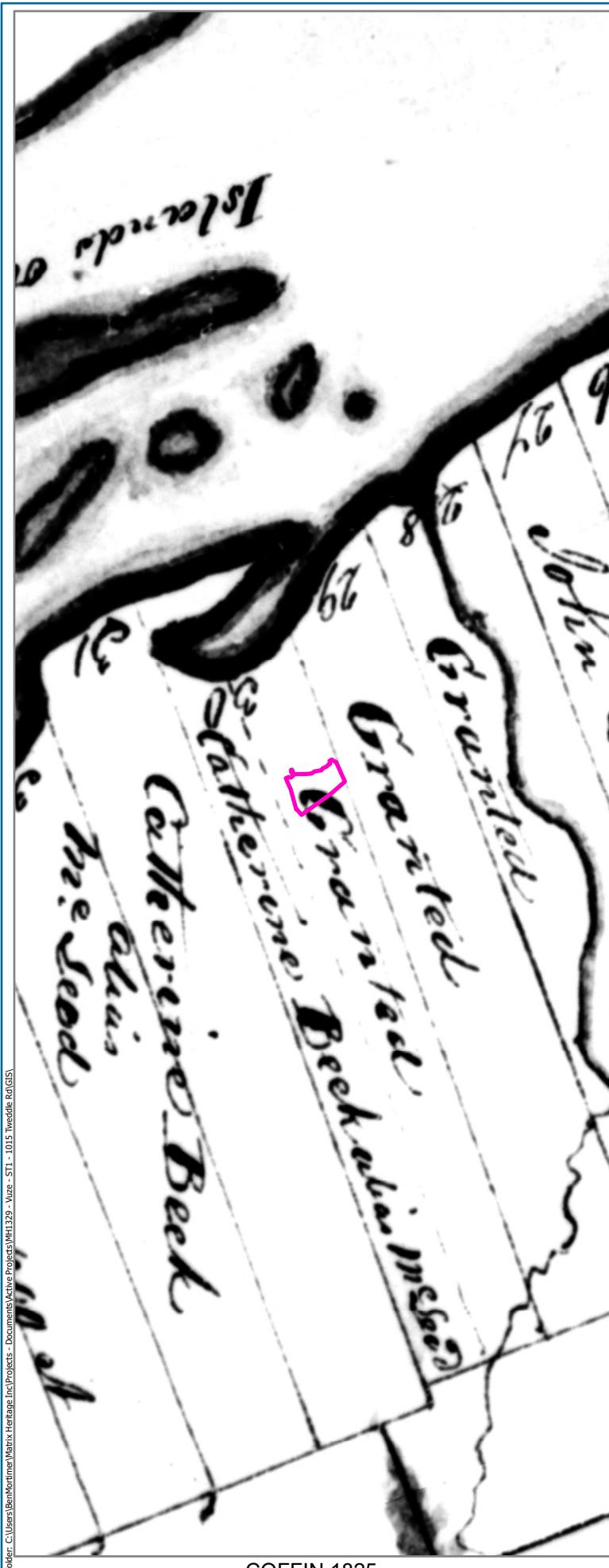
Figure 8: Overview of wetlands along river (MH1329-D004).

12.0Maps









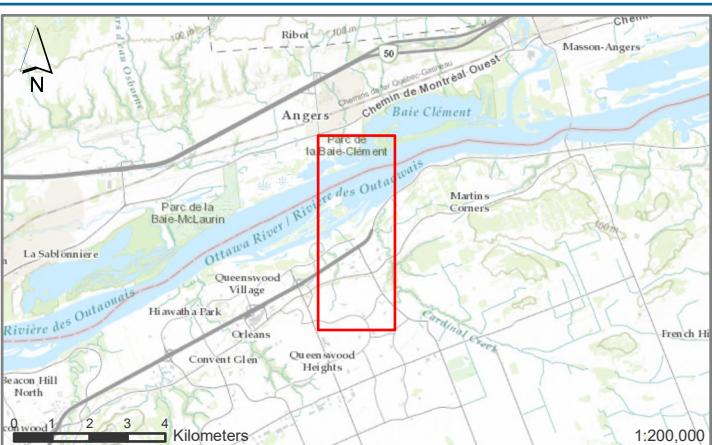
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WALLING 1862

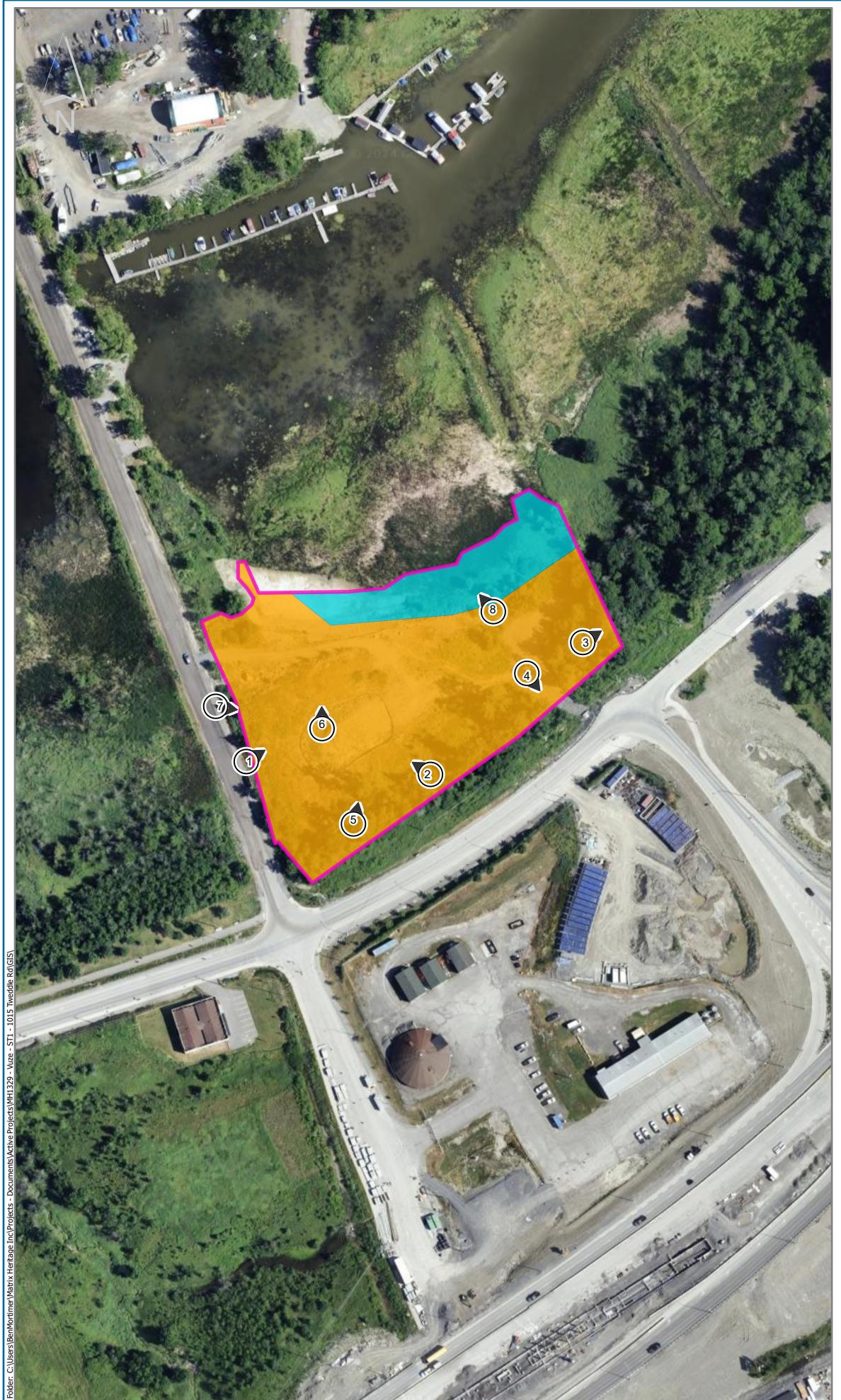


BELDEN 1881



LEGEND





LEGEND

- STUDY AREA
- RECOMMENDATIONS
- LOW POTENTIAL
- DEEPLY DISTURBED
- PERMANENTLY WET
- PHOTO LOCATION, DIRECTION, AND FIGURE NUMBER



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USGS, METI/NASA, EPA, USDA, AAFC, NRCCN

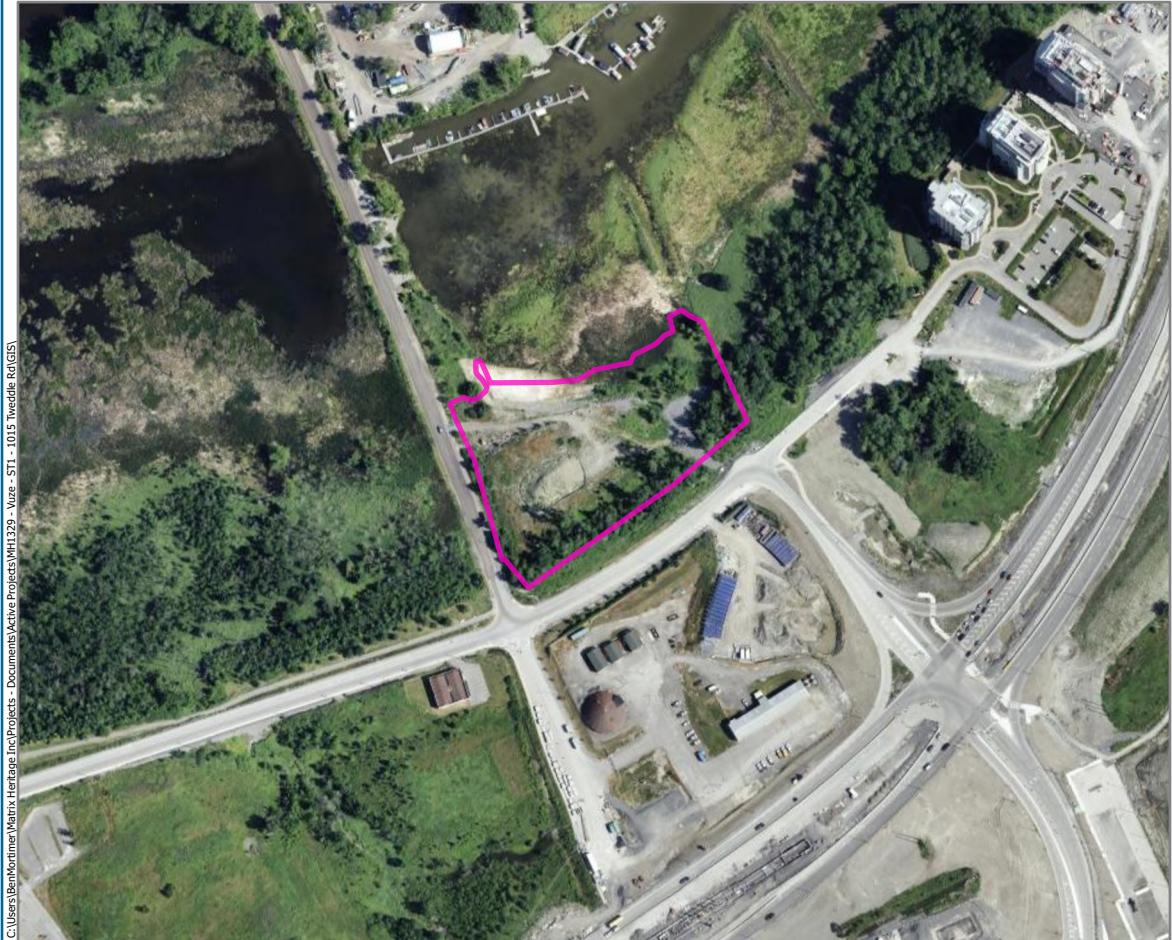
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PROJECT
CHECKED BY: BM
STAGE 1 ARCHAEOLOGICAL ASSESSMENT
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TITLE
METHODS, KEY CONDITIONS MAP
5



1976



2002



2018



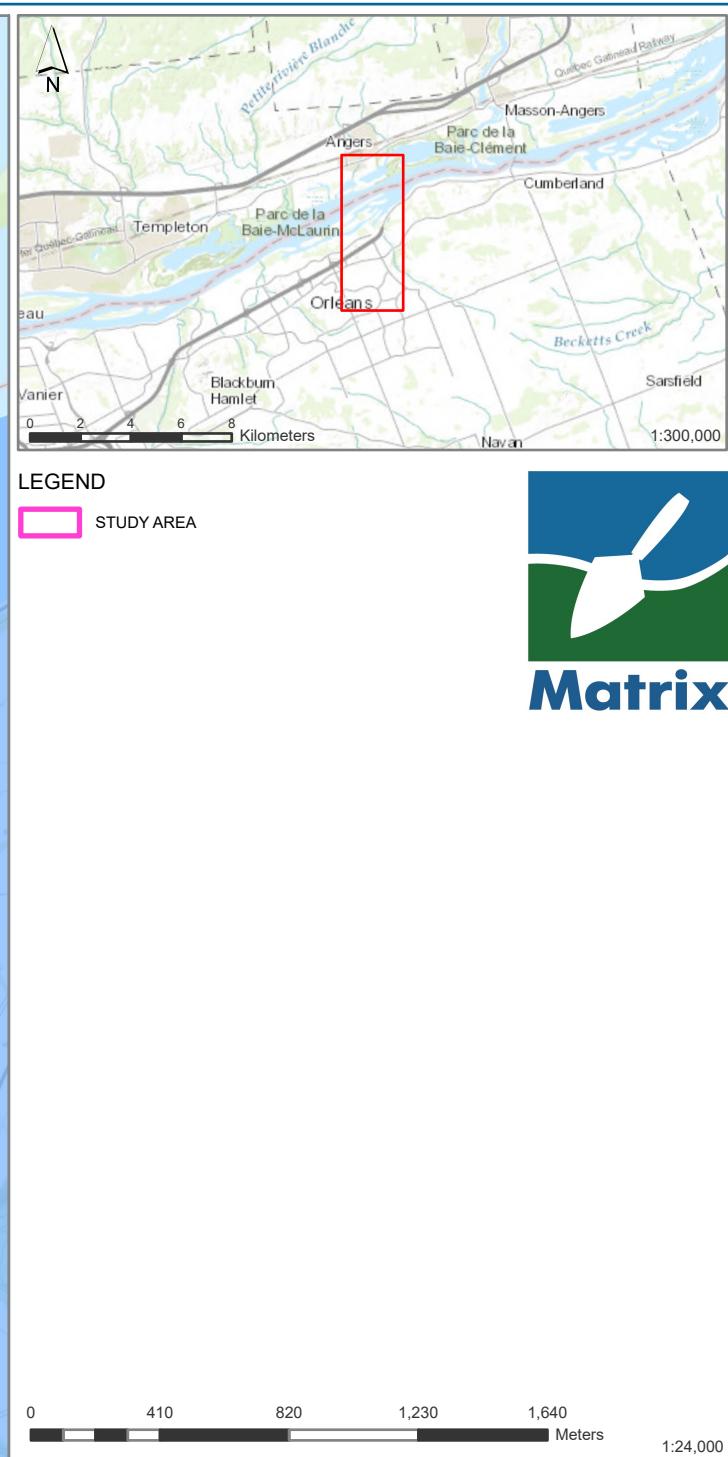
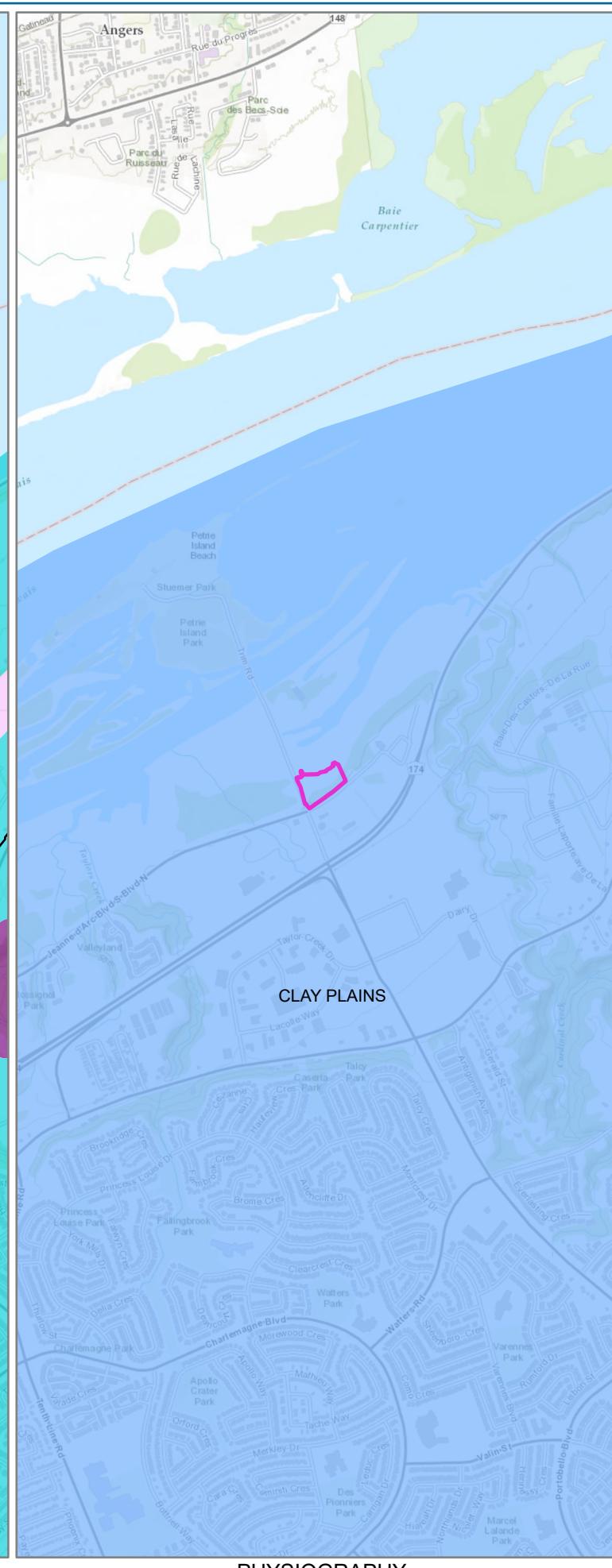
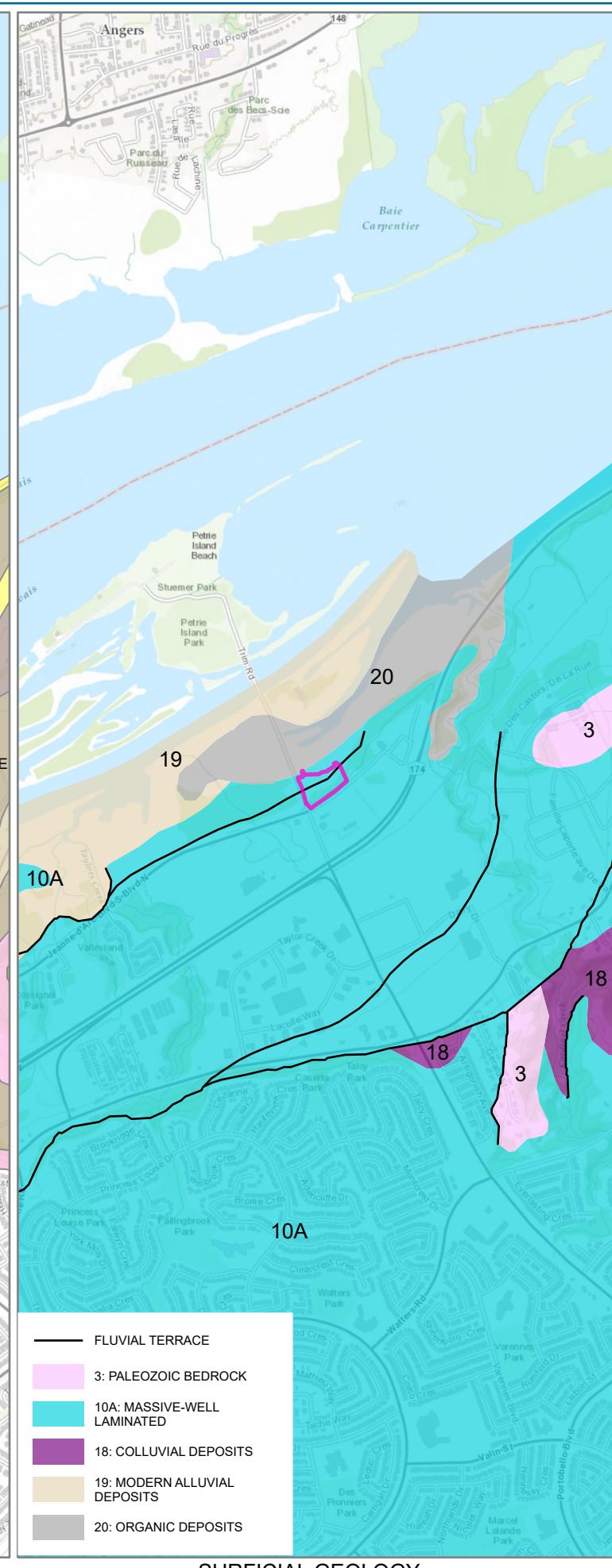
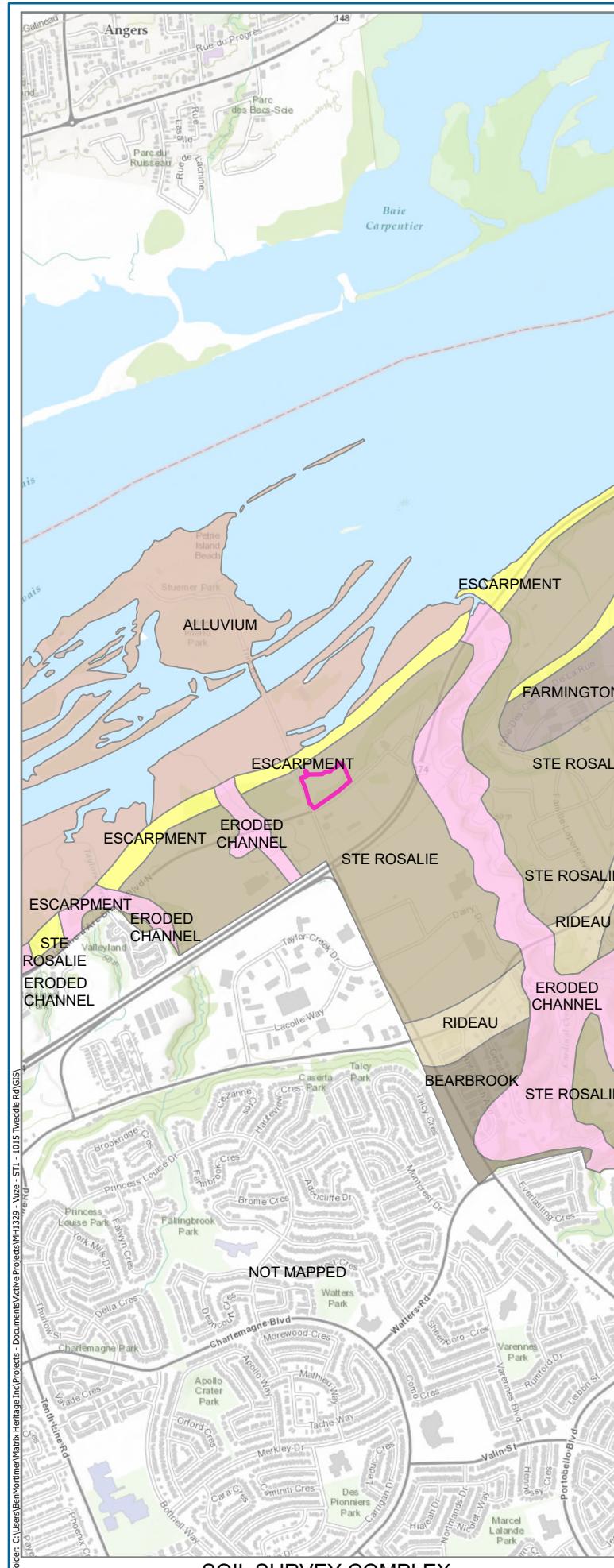
2022



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 STUDY AREA





REFERENCES:
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 SOIL SURVEY COMPLEX L10
 SURFICIAL GEOLOGY OF SOUTHERN ONTARIO 2003
 CHAPMAN AND PUTNAM 2007 PHYSIOGRAPHY OF SOUTHERN ONTARIO

FILE MH1329 DATE 2024-11-15
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 PROJECT
 CHECKED BY: BM
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT
 1015 TWEDDE ROAD, OTTAWA, ON
 TITLE MAP
 SOILS AND GEOLOGY 7

Appendix A: Photo Catalogue

Photo Number	Description	Direction	Date	Photographer
MH1329-D001	Disturbed area with gravel fill and shrubs	East	Oct 16 2024	D.Kavanagh
	Wooded area next to river, disturbed with fill and asphalt on surface	North	Oct 16 2024	D.Kavanagh
MH1329-D002	Gravel access road and built-up retaining wall	West	Oct 16 2024	D.Kavanagh
MH1329-D003	Grassy sloped area sloping towards river with granular surface	North	Oct 16 2024	D.Kavanagh
MH1329-D004	Permanently wet area along river	North	Oct 16 2024	D.Kavanagh
MH1329-D005	Disturbed area with gravel fill	West	Oct 16 2024	D.Kavanagh
MH1329-D006	Sloped forest area with asphalt and concrete on surface, likely fill	South	Oct 16 2024	D.Kavanagh
MH1329-D007	Forest area with evidence of fill on surface.	East	Oct 16 2024	D.Kavanagh
MH1329-D008	Disturbed area with gravel fill with road further back	South	Oct 16 2024	D.Kavanagh
MH1329-D009	Disturbed area with gravel fill and vegetation on top	East	Oct 16 2024	D.Kavanagh
MH1329-D010	Built up berm	North	Oct 16 2024	D.Kavanagh
MH1329-D011	Disturbed area with gravel fill and vegetation, from on top of berm	East	Oct 16 2024	D.Kavanagh
MH1329-D012	Disturbed area with gravel fill and vegetation	North	Oct 16 2024	D.Kavanagh
MH1329-D013	Site area overview.	South	Oct 16 2024	D.Kavanagh
MH1329-D014				

Appendix B: Map Catalogue

Map Number	Description	Created By
1	Location	B. Mortimer
2	Development Map	B. Mortimer
3	Potential	B. Mortimer
4	Historical	B. Mortimer
5	Conditions, Photo Key and Methods	B. Mortimer
6	Historical Aerials	B. Mortimer
7	Soils	B. Mortimer

Appendix C: Document Catalogue

Project Number	Description	Created By
MH1329	1015 Twedde Road Stage 1 Field Notes (One Note File)	D. Kavanagh