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REVISED REPORT

Stage 1 Archaeological Assessment

Proposed Cardinal Creek Development, Lands North of Old Montreal Rd. Part Lot 25, 26, 27 and 28, Concession 1 in the Geographic Township of Cumberland, Historic County of Russell, Ottawa, Ontario

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1.0 Executive Summary

Paterson Group, on behalf of Taggart Investments, undertook a combined Stage 1 archaeological assessment of the study area located on Part Lot 25, 26, 27 and 28, Concession 1 in the geographic township of Cumberland. The objectives of the investigation were to assess the archaeological potential of the property.

Taggart Investments is planning to develop the property into a residential development similar to subdivisions in the surrounding areas.

The Stage 1 assessment included a review of updated Ontario Ministry of Tourism, Culture and Sport (MTCS) archaeological site databases, a review of relevant environmental, historical and archaeological literature, and primary historical research, including: historical maps, aerial photographs, and land registry records. The subject property has archaeological potential based on the proximity of historic roads and topographic features and the fact that the area is indicated as having potential on the City of Ottawa archaeological management plan (Archaeological Services Inc. & Geomatics International Inc. 1999a, 1999b).

Based on the background research and the distance from topographic features such as water and historic roads, it is determined that the entire study property has archaeological potential. It is recommended that:

1. A Stage 2 archaeological assessment be conducted by a licensed consultant archaeologist using the test pit survey method at 5m intervals for the majority of the area (76.3 ha) (as illustrated in green on Map 7).

2. A Stage 2 archaeological assessment be conducted by a licensed consultant archaeologist using the pedestrian survey method in areas that have been recently ploughed (41.6 ha) and are in appropriate conditions at the time of survey undergo pedestrian survey at 5 m intervals (as illustrated in blue on Map 7).

3. The Stage 2 archaeological assessment follow the requirements set out in the 2011 *Standards and Guidelines for Consultant Archaeologists* (MTC 2011)

2.0 Table of Contents

3.0 Project Personnel

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4.0 Project Context

4.1 Development Context

Paterson Group was contracted by Taggart Investments to conduct a Stage 1 archaeological assessment of the proposed Cardinal Creek Village Development located on Concession 1, Part Lot 25, 26, 27 and 28 in the former township of Cumberland, Russell County (Map 1). Taggart Investments is constructing a subdivision on the study property (Map 2). This archaeological assessment has been required by a pre-application submission prior to development under the planning act.

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. 1999a, 1999b). According to the management plan, the entire study area has archaeological potential.

At the time of the archaeological assessment, the study area was owned by Taggart Investments or Taggart Investments held the option to buy the property. This area was in the pre-development phase.

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 2006). Another useful resource is the *Prescott and Russell Supplement to the Illustrated Atlas of the Dominion of Canada* (1881).

4.2.2 Pre-Contact Period

The Ottawa Valley was not hospitable to human occupation until the retreat of glaciers and the draining of the Champlain Sea, some 10,000 years ago. The Laurentide Ice Sheet of the Wisconsinian glacier blanked the Ottawa area until about 11,000 B.P. At this time the receding glacial terminus was north of the Ottawa Valley, and water from the Atlantic Ocean flooded the region to create the Champlain Sea. The Champlain 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. However, by 10,000 B.P. the Champlain Sea was receding and within 1,000 years was gone from Eastern Ontario (Watson 1990:9).

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-Indian people. For Ontario the Paleo-Indian period is been divided into the Early Paleo-Indian period (11,000 - 10,400 B.P.) and the Late Paleo-Indian 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 (Ellis and Deller 1990), 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-Indian period artifacts found, as surface finds or poorly documented finds, in the broader 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-Indian 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. However, as Watson (1999:38) suggests, it is possible Paleo-Indian people followed the changing shoreline of the Champlain Sea, moving into the Ottawa Valley in the late Paleo-Indian Period, although archaeological evidence is absent.

As the climate continued to warm, the ice sheet receded further 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.). This 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. Sites from this period in the region include Morrison's Island-2 (BkGg-10), Morrison's Island-6 (BkGg-12) and Allumette Island-1 (BkGg-11) near Pembroke, and the Lamoureaux site (Bifs-2) in the floodplain of the South Nation River (Clermont 1999).

The Woodland Period is characterized by the introduction of ceramics. 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 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).

The identification of pottery traditions or complexes (Laurel, Point Peninsula, Saugeen) within the Northeast Middle Woodland, the identifiers for the temporal and social organizational changes signifying a Late Woodland Period, subsequent phases within in the Late Woodland, and the overall 'simple' culture history model assumed for Ontario at this time (e.g., Ritchie 1969; Wright 1966, 2004) are much debated in light of newer evidence and improved interpretive models (Engelbrecht 1999; Ferris 1999; Hart 2011; Hart and Brumbach 2003, 2005, 2009; Hart and Englebrecht 2011; Martin 2008; Mortimer 2012). Thus the shift into the period held as the Late Woodland is extremely fuzzy. Needless to say there are general trends for increasingly sedentary populations, the gradual introduction of agriculture, and changing pottery and lithic styles. However, nearing the time of contact, Ontario was populated with somewhat distinct regional populations that broadly shared many traits. In the southwest, in good cropland areas, groups were practicing corn-bean-squash agriculture in semi-permanent, often palisaded villages which are commonly assigned to Iroquoian peoples (Wright 2004:1297-1304). On the shield and in other non-arable environments, including the Ottawa Valley, there seems to remain a less sedentary lifestyle often associated with the Algonquian groups noted in the region at contact (Wright 2004:1485-1486).

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 1 January 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).

By the mid-1800s the settlement of Cumberland was a major seasonal forwarding centre. The 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 2005). 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 study property is located on part lots 25, 26, 27, and 28. The histories of these properties are all intertwined, with the exception of lot 28, and will be discussed together.

The patent for lot 26 was transferred from the Crown to John McKindlay May 19, 1822. Two years later on February 18, 1824, McKindley sold the property to John Gray, however it is McKindley who is listed on the 1825 map (Coffin 1825). Archibald Petrie purchased the property February 25, 1834 (OLR:AR-24).

When Lot 25 was originally granted by the Crown, it was divided into the east and west halves of the lot, it is only the west half in which the study area lies. This was granted to Archibald McLean on February 24, 1823. While there are no McLean's listed in the census records for Russell County, there is an Archibald McLean, Esq. listed in Cornwall in 1829 (Ancestry.com 2005), indicating that McLean may have been an absentee landlord. The 1825 map of Cumberland county, indicates that McLean was a Captain (Map 3) (Coffin 1825). Mclean sold the property on July 12, 1833 to Henry Symes for £100. Two years later, Symes also bought the east side of the property, although they remained as separate parcels throughout the rest of its history. In September of 1848, Symes sold the west half of lot 25 to John Barker for £100. That same month, Barker sold the property for the same sum to his neighbour from lot 26, Archibald Petrie (OLR:AR-24).

The Crown granted lot 27 as two halves, the east and the west half. The east half was granted to the Archibald Petrie on September 21, 1845, at which time Petrie then owned 400 acres in the first concession from the Ottawa River. The west half was granted to Joseph Laflame on November 3, 1845 (OLR:AR-24). The west half of lot 27 will be dealt with separately from lots 25, 26, and 27.

Lot 25 west half, Lot 26, and Lot 27 east half

Archibald Petrie and his wife Catherine had four children: Kate, Edward, Archibald, and Elizabeth (Statistics Canada 1871). The 1840 Assessment Map of Cumberland Township shows that there was a structure built on both lot 25 and 26 near the ridge (Map 3). It is unclear whether the structure located on lot 25 was on the east or west portion of the lot (Assessment Rolls for Cumberland Township 1834-1848). On April 16, 1857, Archibald Petrie passed away leaving lot 27 to his son Edward (13 years old at the time), lot 25 to Archibald (9 years old at the time), and lot 26 to his wife and the family (OLR:AR-24). A. Petrie is shown on the 1862 map of the county (Map 4).

In 1905, Edward Archibald and his wife sold the west half of lot 26 and the east half of lot 27 to Thomas D. Farmer. In February 1906, Archibald Petrie, Jr. (listed as a bachelor) sold the property to Thomas Dagg for 4500.0.0 £sd. In April that year, Dagg and his wife sold the property to Thomas D. Farmer for 4800.0.0 £sd. Farmer was born in1863 in Ontario, of Irish decent. With his wife Jeanne they had three daughters: Eva,

Catherine, and Stella (Ancestry.com 1911). In 1909, Thomas Farmer sold the "cattle pass" on half lots 25 and 27 and lot 26 to the Canadian northern Ontario Railway Company (OLR:AR-24).

Lot 27 west half

Laflame sold the west half of lot 27 in September of 1854 to James Ogilvie. In July of 1857, Ogilvie sold the property to John Carr. John Carr was a farmer from Ireland that was a Plymouth Brethren by religion. His wife Mary, was born in Ontario of Irish decent. Together they had six children: Jane, George, Elizabeth, James, Emiline, and Mary (Statistics Canada 1881). By the1891 census, Jane is no longer listed indicating that she was likely married and now living with her husband. Mary's name shows up as Minnie (Statistics Canada 1891). John Carr passed away in August of 1891 and willed the northwest half of the property to his son George, and his wife Mary retained the southern portion. When Mary passed away in 1903, Emiline and Minnie released their claim to the property and the entirety of the property was then owned by George F. Carr. George owned the property until he sold it in 1917 (OLR:AR-24).

Lot 28

The original 200 acre parcel that comprises Lot 28 was granted by the Crown to Matilda Cozens on May 25, 1836. The 1825 Coffin map of Cumberland Township shows that the land was granted at that time, which may indicate that the Land Ticket had already been issued, but had not yet been registered (Map 3). Unfortunately, Matilda Cozens must have passed away shortly after acquiring the property as the next entry in 1839 is her will. By 1840, a structure is shown on Lot 28 to the north of the roadway (Assessment Rolls for Cumberland Township 1834-1848) (Map 3). A relative of Matilda, Joshua F. Cozens, sold the property in 1848 to Edward Dagton and William McShaw for £287. In 1850, Dagton and McShaw sold the property to Robert J Lusk for £200. Lusk is shown as the property owner on the 1862 map (Walling 1862) and by 1881 the property has two small structures close to the road (Belden 1881) (Map 4). Lusk mortgaged the property several times before declaring bankruptcy in 1882. The Court ruled that the land would pass to Honoré Cotté, one of the previous lenders. Cotté sold the property in 1885 to Francis Masson, who in turn sold the property that same year to Israel Cardinal (Land Registry Record AR-24). Israel was a French Canadian farmer born in Quebec in 1857. With his wife Edwidge he had nine daughters and two sons (Canada Census 1901). The eldest son, Alderic, inherited the property in 1907 at the age of 13. In 1908, Alderic sold five and a half acres to the Canadian Northern Ontario Railway Company. Alderic maintained possession of the remainder of the property until his death in 1939, when the property remained in the Cardinal family for whom the creek that runs through the property is named (OLR:AR-24).

4.3 Archaeological Context

4.3.1 Current Conditions

The study area consists of 118 hectares that is characterized primarily by cultivated fields and wooded lot (Map 1). A total of 76.3 hectares (65%) are cultivated corn or soybean fields, 41.6 hectares (35%) are comprised of woodlot, overgrown shrubbery, or landscaped lawns. A portion of Lot 28 has been assessed under PIF P369-002-2012. The property is relatively flat, but a large slope culminating in a ridge is located to the north of the property. Residential dwellings are located 1190 Ottawa Road 174, and 1285-1295 Old Montreal Road. Centrally located in the study area is the Laporte Flower and Nursey, and an associated modern dwelling.

4.3.2 Physiography

The study area lies within the Ottawa Valley Clay Plains with some undrumlinized till plains (Map 5). 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 fresh water 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 of the regions consist of St. Rosalie clay, Wendover clay, Matilda Loam, and a Grenville loam and Bearbrook clay complex (Map 5). St. Rosalie clay consists of a stone free light clay soil. It is light grey in colour with a light grey non-calcareous parent material. Drainage of this soil is poor and the topography is level. Wendover clay soils are also stone free and grey in colour, however the parent material is non-calcareous layered red and grey clay. This type of soil is good cropland, undulating, but the drainage imperfect. Matilda loam is a stoney loam with a stoney calcareous loam till parent material. It has an undulating topography with imperfect drainage and is considered good cropland. Grenville loam is a stony loam with stony calcareous loam till parent material. It has a rolling topography and good drainage and is considered excellent cropland. Bearbrook clay is a stone free, dark grey soil. The parent material is non-calcareous layered red and grey clay. This has poor drainage, level topography, and is considered good cropland (Wicklund and Richards 1962).

4.3.3 Previous Archaeological Assessments

Archaeological work in the region has primarily consisted of cultural resource management studies related to specific properties or development projects. Projects located within the vicinity of the study property include Stage 1 and 2 assessments for a proposed subdivision located on part of Lots A, B & C, Concession. 8 & 9, Cumberland Township (Swayze 2001), a Stage 1 assessment of Part Lots D and E, Concession 7 and Part Lot 21, Concession 7 in Cumberland Township (Adams 2009), and a Stage 1 assessment for a hydro corridor to Quebec that passed through Cumberland Township (Kennett 1999). A Stage 1 and 2 archaeological assessment on Part lot 28, Concession 1 found a historic period artifact scatter dating from the mid-late 19th century that may comprise the remains of a cabin. It will be further investigated through a Stage 3 assessment (Paterson Group 2012).

4.3.4 Registered Archaeological Sites

The Cardinal Creek Site (BiFu-7), which comprises a mid-late 19th century historic period artifact scatter, is located within a 1 km radius of the study property. Within a 2 km radius, two archaeological sites are located to the south of the study area. These are BiFu-5 (Cardinal Creek Homestead), a late 19th to early 20th Century Euro-Canadian homestead, and BiFu-6, an unidentified lithic scatter.

5.0 Analysis and Conclusions

5.1 Archaeological Potential

The study property exhibits several indicators for pre-contact archaeological potential including proximity to water sources, elevated topography, and pockets of well drained sandy soil. Based on current knowledge of the pre-contact archaeology of the Ottawa Valley, there is potential for pre-contact archaeological sites in this area. Archaeological potential is increased by the proximity of other known archaeological sites, however, only one known lithic scatter is located more than 1 km away from the site.

The land registries, census records, and historic maps show that although this area was mainly rural, the property was occupied from early in the nineteenth century and there is evidence of a structure located on the property. Likewise the study property was close to historic transportation routes in the form of roads and rail systems. One other known historic period archaeological site is located within a 1 km radius of the study property, with another in the 2 km range.

This study property demonstrates high potential for both pre-contact and historic period archaeological sites (Map 6).

5.2 Conclusions

Based on these findings, the entire study area has archaeological potential. As such, a Stage 2 archaeological assessment should be conducted. In ploughable areas, a pedestrian survey strategy at 5 m intervals should be used. Around the extant and occupied dwelling with landscaping and lawns, wooded areas, and overgrown grassy areas shovel testing on 5 m intervals is recommended. Land to be pedestrian surveyed will be recently ploughed using disking along the furrows to further break up the clayey soils and to provide total topsoil exposure. Rainfall will be required to improve visibility. During a pedestrian survey if a site is found (i.e., there are a number of artifacts identified in a specific areal) all diagnostic artifacts will be recovered, while other artifacts are left in the field and their location documented with GPS coordinates. During shovel testing, if artifacts are encountered intensification should proceed following the Ministry of Culture, Tourism and Sport's *Standards and Guidelines* (2011).

6.0 Recommendations

Based on the background research and the distance from topographic features such as water and historic roads, it is determined that the entire study property has archaeological potential. It is recommended that:

1. A Stage 2 archaeological assessment be conducted by a licensed consultant archaeologist using the test pit survey method at 5m intervals for the majority of the area (76.3 ha) (as illustrated in green on Map 7).

2. A Stage 2 archaeological assessment be conducted by a licensed consultant archaeologist using the pedestrian survey method in areas that have been recently ploughed (41.6 ha) and are in appropriate conditions at the time of survey undergo pedestrian survey at 5 m intervals (as illustrated in blue on Map 7).

3. The Stage 2 archaeological assessment follow the requirements set out in the 2011 *Standards and Guidelines for Consultant Archaeologists* (MTC 2011)

7.0 Advice on Compliance with Legislation

a. This report is submitted to the *Minister of Tourism and Culture* 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 Tourism and Culture, 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 licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest , and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

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 licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.

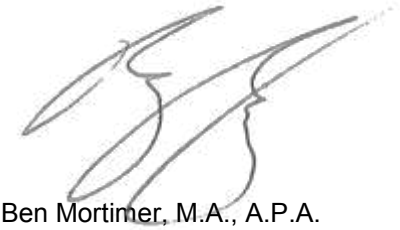
d. The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

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.

8.0 Closure

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

Paterson Group Inc.



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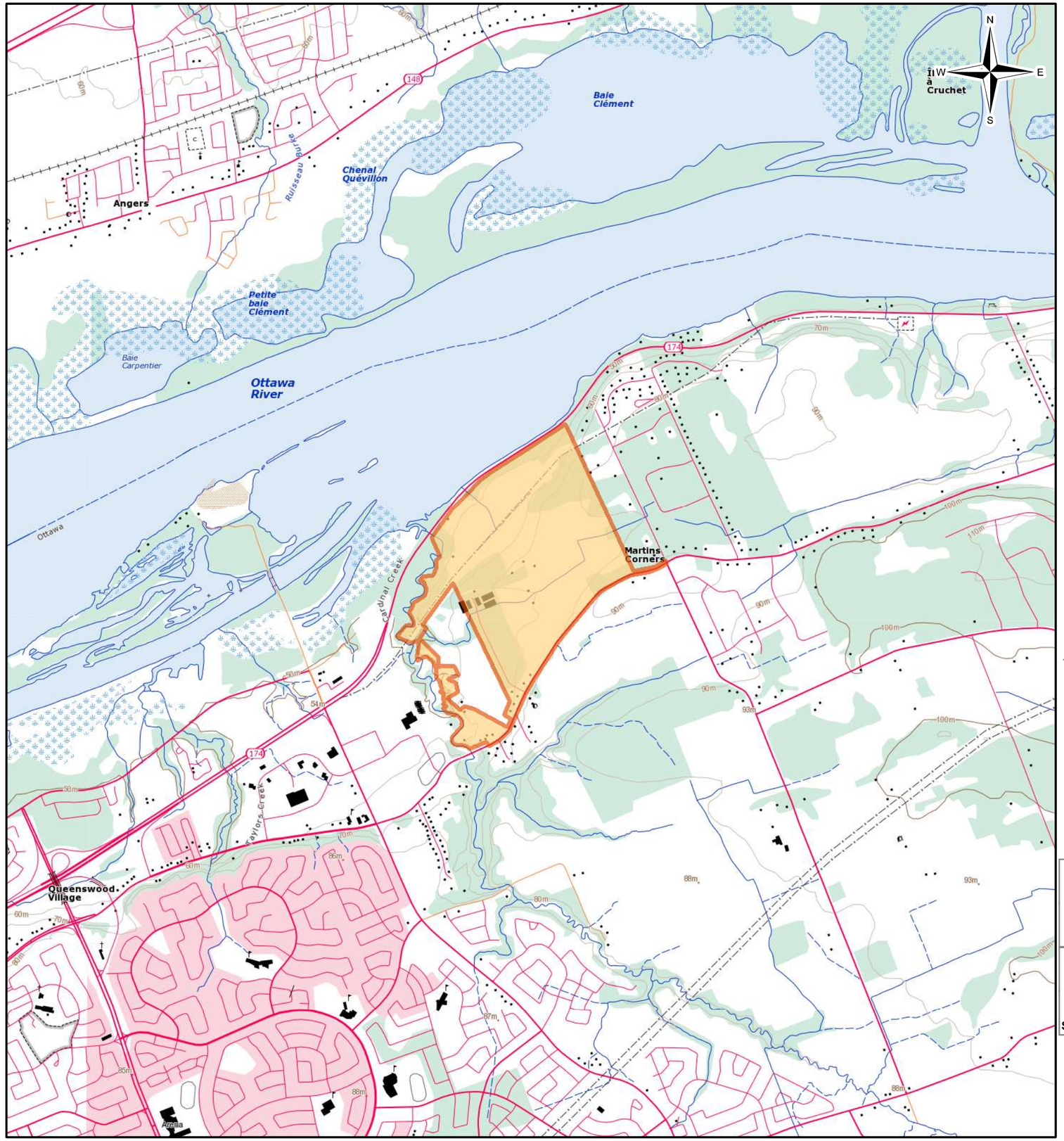
2004 *A History of the Native People of Canada: Volume III (A.D. 500 - European Contact)*. National Museum of Canada Mercury Series, Archaeological Survey of Canada Paper No. 152. Canadian Museum of Civilization, Hull.

10.0 Maps



Legend

Study Area

Reference:

Base maps provided by NRCAN WMS-Toporama

0 650 1,300 1,950 2,600

Meters

Scale 1:25,000

Projection: Transverse Mercator Datum NAD 83, UTM Zone 18

Project:

PA1001 - Cardinal Creek Village Proposed Development. Lands North of Old Montreal Rd, Township of Cumberland, City of Ottawa, Ontario

Title:

Study Area

Source file: PA1001-MAP 27 N side study area

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Map 1

Legend

Proposed Roads

Study area

Reference:

Air photo circa 2011 provided by DSEL Engineering.
Proposed development plan provided by DSEL Engineering.
Development area delineated by Taggart and provided by DSEL Engineering.

0 160 320 480 640

Meters

Scale 1:8,000

Projection: Transverse Mercator Datum NAD 83, UTM Zone 18

Project:

PA1001 - Cardinal Creek Village Proposed Development. Lands North of Old Montreal Rd, Township of Cumberland, City of Ottawa, Ontario

Title:

Taggart Proposed Development Plan
April 2012

Source file: PA1001-MAP 29 N Side Taggart Property Plan

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Map 2

Legend

Study Area

Reference:

Historical Map - Segment of Township of Cumberland, Coffin, 1825 (NMC 3425)

Historical Map - Segment of Assessment Map of Cumberland, 1840 (NAC MS 116)

0 190 380 570 760

Meters

Scale 1:15,000

Projection: Transverse Mercator Datum NAD 83, UTM Zone 18

Project:

PA1001 - Cardinal Creek Village Proposed Development. Lands North of Old Montreal Rd, Township of Cumberland, City of Ottawa, Ontario

Title:

Georeferenced Historical Maps 1

Source file: PA1001-MAP 31 N Side historic overlay 1

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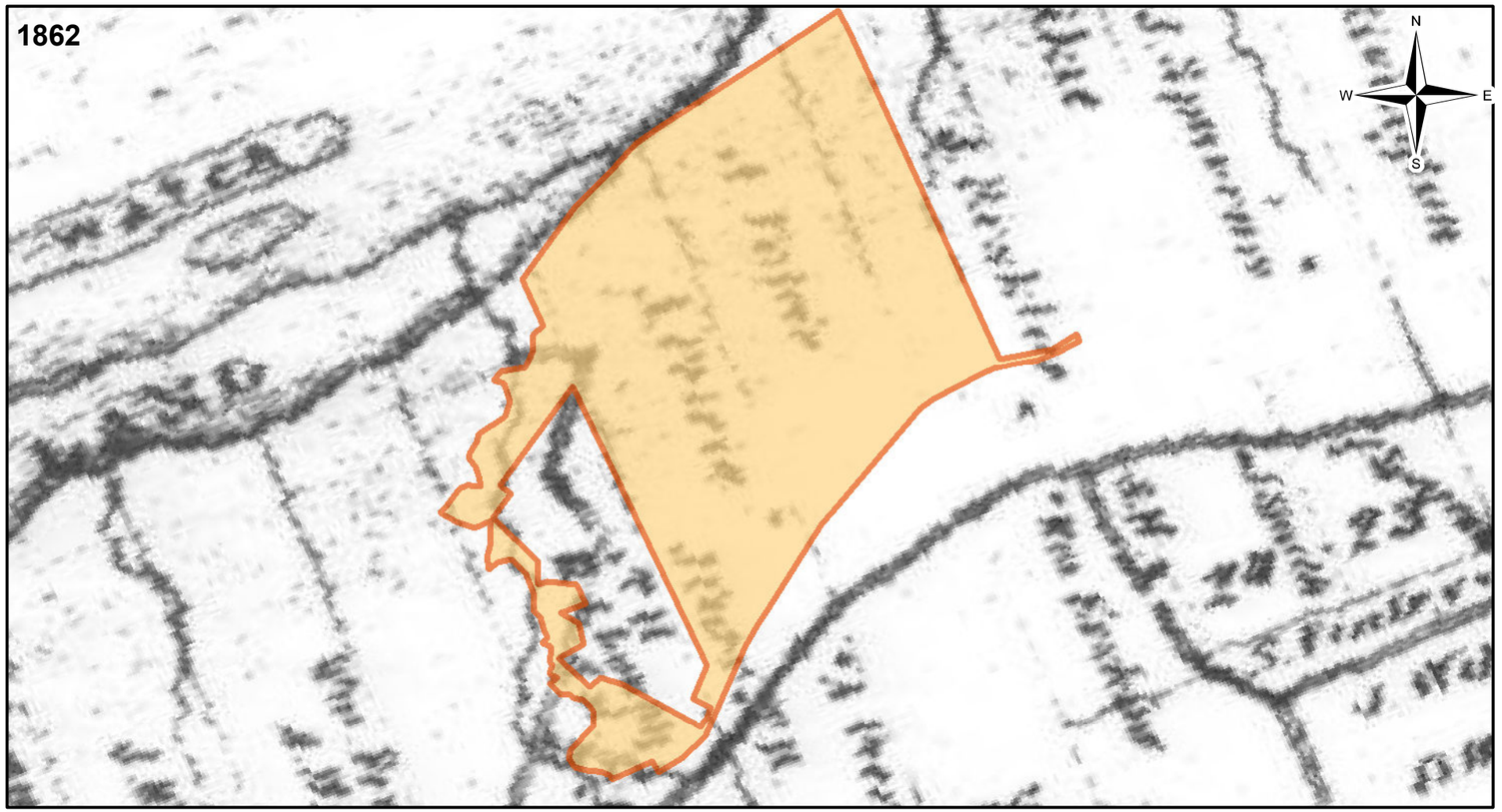
Map 3



Legend

Study Area

Reference:

Historical Map - Segment of Plan of the Counties of Stormont, Dundas, Glengarry, Prescott & Russell, Walling 1862 (NMC 21998).

Historical Map - Segment of Prescott and Russell Supplement to the Illustrated Atlas of the Dominion of Canada. Toronto. H. Belden & Co., 1881.

0 250 500 750 1,000

Meters

Scale 1:15,000

Projection: Transverse Mercator Datum NAD 83, UTM Zone 18

Project:

PA1001 - Cardinal Creek Village Proposed Development. Lands North of Old Montreal Rd, Township of Cumberland, City of Ottawa, Ontario

Title:

Georeferenced Historical Maps 2

Source file: PA1001-MAP 25 North Side historic overlay2

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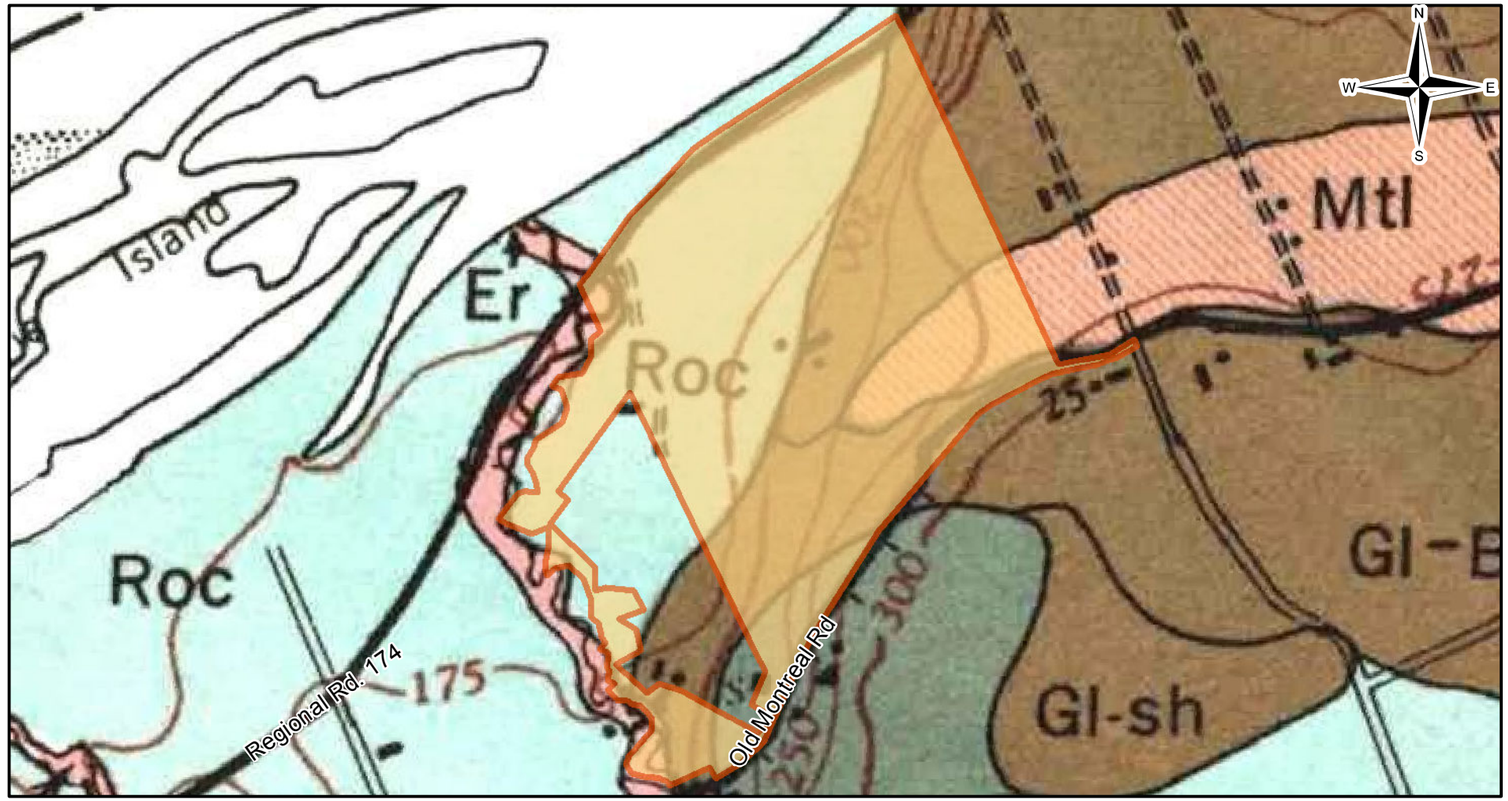
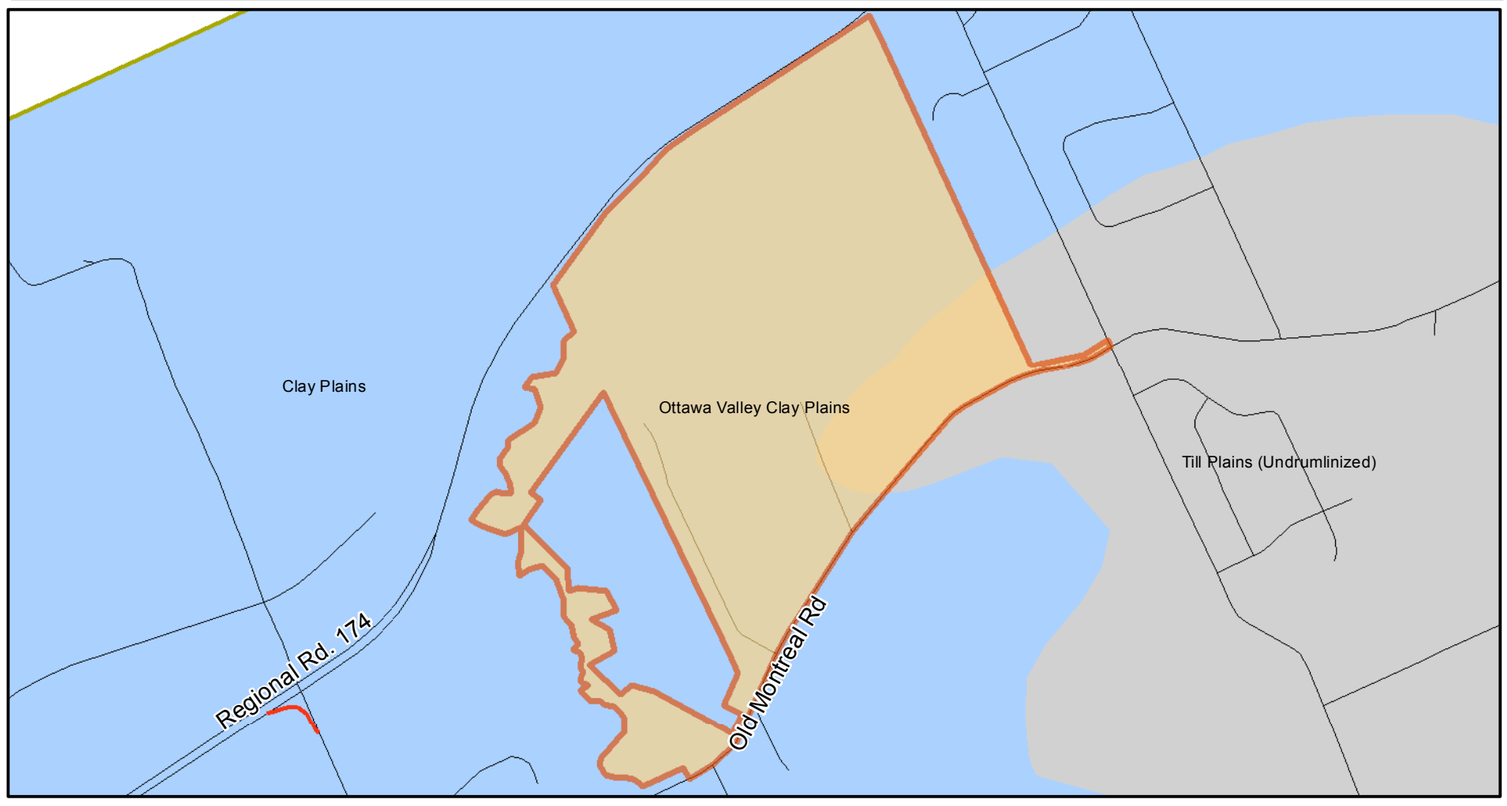
Map 4





Legend

Study Area

See text for description of soil and physiographic area.

Reference:

Wicklund and Richards 1962
Chapman and Putnam 2007

0 380 760 1,140 1,520

Meters

Scale 1:15,000

Projection: Transverse Mercator Datum NAD 83, UTM Zone 18

Project:
PA1001 - Taggart - Cardinal Creek Village Proposed Development,
Lands North of Old Montreal Rd,
Township of Cumberland, City of Ottawa, Ontario

Title:

Soils and Physiography

Source file: PA1001-MAP 33 N Side soils

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Map 5

Legend

Study Area

Archaeological Potential

Source

City of Ottawa Master Plan

Within 300m of Watersource or 50m of Historic Transportation

Reference:

Air Photo circa 2011 provided by DSEL Engineering
Archaeology Potential from The Archaeological Resource Potential Mapping Study of the Regional Municipality of Ottawa-Carleton

0 190 380 570 760

Meters

Scale 1:8,000

Projection: Transverse Mercator Datum NAD 83, UTM Zone 18

Project:
PA1001 - Taggart - Cardinal Creek Village Proposed Development,
Lands North of Old Montreal Rd,
Township of Cumberland, City of Ottawa, Ontario

Title:

Archaeological Potential

Source file: PA1001-MAP 35 N Side arch potential

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Map 6

Legend

Study Area

Assessment Strategy

Pedestrian

Shovel Test

Reference:

Air photo circa 2011 provided by DSEL Engineering

0 170 340 510 680

Meters

Scale 1:8,000

Projection: Transverse Mercator Datum NAD 83, UTM Zone 18

Project:

PA1001 - Taggart - Cardinal Creek Village Proposed Development, Lands North of Old Montreal Rd, Township of Cumberland, City of Ottawa, Ontario

Title: Proposed Stage 2 Assessment Strategy

Source file: PA1001-MAP 37 N Side assessment strategy

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Map 7