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REVISED REPORT

Stage 1 and 2 Archaeological Assessment

Proposed Cardinal Creek Development - Part Lot 28 Concession 1, Geographic Township of Cumberland, Ottawa, Ontario

Prepared For

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Attention: Mr. Ted Philips

September, 2012

PIF: P369-002-2012

Ben Mortimer, MA (Licence Number P369)

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1.0 Executive Summary

Paterson Group, on behalf of Taggart Investments (Taggart), undertook a combined Stage 1 and 2 archaeological assessment of the study area located on Part Lot 28, Concession 1 in the geographic township of Cumberland. The objectives of the investigation were to assess the archaeological potential of the property and determine through field survey whether there were archaeological resources in the study area prior to development in accordance with the Planning Act.

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).

The Stage 2 component of the archaeological assessment involved a pedestrian survey of the area where ploughing was possible. Subsurface testing occurred in areas that could not be ploughed, such as woodlots, which consisted of hand excavated test pits at 5m intervals. The field portion was undertaken over 6 days between June 5 and July 3, 2012. Weather conditions were sunny with temperatures that ranged between 18 and 32° Celsius. Permission to access the property was provided by Taggart (May 22, 2012).

Based on the results of this investigation it is recommended:

- 1. That a partial clearance of the Proposed Cardinal Creek Development Part Lot 28 be granted, except for Operation 2.
- 2. 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 partial cleared areas of the property (excluding Operation 2).
- 3. That a Stage 3 archaeological assessment be conducted by a licensed archaeologist in the form of a controlled surface pick-up followed by 1m² excavation units on a grid. This site dates to before 1870 and so displays cultural heritage value as per Section 1. a., Standard 3.4.2, and is recommended to proceed to a Stage 4. Therefore the Stage 3 testing should be done on a 10 m interval as per Standard 1, Section 3.2.3, as (MTCS 2011), to determine the extent and affinity of the historic site located on Part Lot 28, Operation 2 (BiFu-7) (as illustrated by the area marked in orange on Supplementary Documentation Map 3) as per Sections 3.2.1, 3.2.2, and 3.2.3 (MTCS 2011). Furthermore, as per Standard 1, Section 3.2.3, as (MTCS 2011), an additional 40% infill of the initial grid unit total should be excavated in areas of interest. This site will have a 20 m protective buffer zone, and a 50 m monitoring zone (Supplementary Documentation Map 4).

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3.0 Project Personnel

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4.0 Project Context

4.1 Development Context

Paterson Group was contracted by Taggart Investments (Taggart) to conduct a Stage 1 and 2 archaeological assessment of the proposed Cardinal Creek Village Development located on Concession 1, Part Lot 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.

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 entirety of the study area was owned by Taggart Investments and was in the pre-development phase. Permission to access the study property was granted by Taggart Investments 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 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 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

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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).

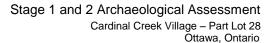
The identification of pottery traditions or complexes (Laurel, Point Peninsula, Saugeen) within the Northeast Middle Woodland, the identifiers for the temporal and social organizational changes signifying the Late Woodland Period, subsequent phases within in the Late Woodland, and the overall 'simple' 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 portions of 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

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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 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 area is located on Part Lot 28, the first Concession from the Ottawa River in the geographic township of Cumberland. 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 Honore Cotte, one of the previous lenders. Cotte 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).

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4.3 Archaeological Context

4.3.1 Current Conditions

The study area consists of 18.8 hectares that is characterized primarily by cultivated corn fields (Figure 1, Figure 3), lightly wooded areas to the north and central section (Figure 8), and an overgrown field to the south surrounding a barn (Figure 5). The property is relatively flat, but a large slope culminating in a ridge is located to the north of the property. Cardinal Creek runs through the property.

A barn and church are present on the south section of the study property, however the church is not owned by Taggart and is outside of the development area. No other structures are present on the study area property.

4.3.2 Physiography

The study area lies within the Ottawa Valley Clay 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, 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. 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).

4.3.4 Registered Archaeological Sites

A search of the Ontario Archaeological Sites Database indicated that no registered sites are located within a 1 km radius of the study area. The search was expanded to a 2 km radius and revealed two archaeological sites 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.

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4.4 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, the only 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 2 km radius of the study property.

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

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5.0 Field Methods

This property is considered high potential according to the 2011 standards set out for consultant archaeologists by the MTCS, due to its proximity to historic development areas, water sources, and topographic features. In accordance with these standards, the entire property was surveyed at a 5 metre test interval, with the exception a small section of the northern slope and ridge which was judged to have a grade exceeding 20 degrees (Figure 11 and Figure 12), areas that consisted of permanently wet land (Figure 7) and the footprint of the barn which consisted of a disturbed area (Figure 5). This area is exempt from Stage 2 survey as per Stand. 2. a. i. and iii., Sect. 2.1 (MTCS 2011). These excluded areas comprised 13% (2.5 ha.) (Map 7).

Approximately 63% (11.9 ha.) of the subject property was suitable for ploughing (Map 7) as described in Standard 1, Section 2.1.1 of the Standards and Guidelines for consultant archaeologists (MTCS 2011) (Figure 1, Figure 3). This area was pedestrian surveyed at high potential 5 metre intervals (Figure 2, Figure 4). All surveyed fields had been plowed prior to commencing fieldwork, and exhibited minimal new growth. Fields were adequately weathered, with heavy rainfall occurring June 3, the day before pedestrian survey began. Pedestrian survey resulted in the discovery of a moderate sized scatter of historic Euro-Canadian artifacts.

Approximately 23% (4.4 ha.) of the property was not suitable for ploughing as per Standard 1.a. and 1.c., Section 2.1.2 (MTCS 2011) (Figure 5). This area was shovel tested at 5 meter intervals (Map 7) (Figure 6, Figure 8). All tests-pits were a minimum of 30 cm² and were excavated into the first 5cm of subsoil. All soil was screened using 6mm mesh screens. All test-pits were examined for cultural features and stratigraphy then backfilled. In areas where insufficient information was found for recommending a Stage 3 assessment, the survey area was intensified around a positive test pit in order to determine whether or not a Stage 3 was necessary (Figure 9, Figure 10).

Diagnostic or formal artifact types were all collected, bagged, and labelled according to the find spot during the pedestrian survey, or by shovel test unit. When artifacts were found during pedestrian survey they were flagged then pedestrian survey of the area surrounding the find was intensified to 1 m transects perpendicular to the 5 m transects. These extended 20 m in all directions from the find. As new finds were found in the intensified area, they too were flagged and the area of 1 m transects expanded accordingly until such time as 20 m from the last find had been cleared. Diagnostic artifact locations were recorded using a Garmin GPSmap 62 GPS unit.

When artifacts were found during the shovel testing the location was recorded using a Garmin GPSmap 62 and flagged for ease of returning to that location. The remainder of the grid was investigated.

The provenience system used for this project is based upon the Paterson project number plus operation number, plus sub-operation number, plus find spot number, thus the first pedestrian find in operation 1, sub-operation A under this Project number was P1001-1A1. Similarly the first positive test pit in sub-operation B within operation 1 is designated P1001-1B1. Operation areas are intended to convey geographic areas within the larger property. Sub-operations are intended to represent find areas or archaeological interest areas

Photographs were taken during fieldwork in order to document the current land conditions (Map 8) Standard 1.a., Section 7.8.5 (MTCS 2011). A representative sample of all categories of diagnostic artifacts were also photographed as per Standard 2, Section 7.5.11 (MTCS 2011).

Field work was undertaken during 6 days between June 5 and July 3, 2012. Weather conditions were sunny with temperatures that ranged between 18 and 32° Celsius. Permission to access the property was provided by Taggart (May 22, 2012).

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6.0 Record of Finds

All artifact dates are sourced from the Parks Canada Archaeological Resources Database (Parks Canada 2012).

6.1 Operation 1

During field testing of the southern section of the property a total of 26 artifacts were recovered from pedestrian survey and shovel testing (see Supplementary Documentation Map 1). This area was labelled Operation 1. Artifacts were recovered over a wide area (230 x 350 m) and are not concentrated. The artifact catalogue is provided as Appendix A.

Recovered ceramics indicate a scatter of mid to late 18th century Euro-Canadian artifacts. These include refined white earthenwares of different styles including plain and blue transfer (1830+). One piece of a porcelain tea cup with a lithographed floral design (1890+) was found.

Other artifacts include an iron buckle, possibly from a harness, a base from a 2-piece bottle mould with hinged base (1750-1870) of aqua glass, and a fragment of plain pipe stem (Figure 15).

Also recovered was a small amount of lithic material, which consists of two quartzite thinning flakes and one quartzite secondary thinning flake (Figure 13).

Artifacts left in the field as an indicator of the site location, as per Section 2.1.1, Standard 9 (MTCS 2011), include three plain refined white earthenware body sherds, one olive green bottle body fragment, two cut nails, a piece of lamp chimney glass, and a quartzite thinning flake.

6.2 Operation 2

During pedestrian survey in the north-eastern field area a scatter of historic Euro-Canadian artifacts was located. The periphery of the forested area had four positive test pits. Intensification around three positive test pits did not occur, since they were associated with the finds from the adjacent field in which intensification of the pedestrian survey did occur (see Supplementary Documentation Map 2). The area around test pit PA1001-2C1 was intensified (as per 2.1.3 Standard 2b Option A) with no additional finds Supplementary Documentation Map 5. This area was labelled Operation 2. The artifacts collected during Stage 2 testing totalled 143 and included ceramics, window pane glass, bottle glass, smoking pipe fragments, and other miscellaneous items. The artifact catalogue is provided as Appendix A.

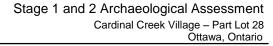
Recovered ceramics included refined white earthenwares of different styles such as blue transfer, which included the Willow pattern (1830+); blue sponged (1840-1890); black stamped (1840-1890); blue edged (1830-1890); brown transfer (1830+); red transfer (1830+) industrial slip banded pattern (1830-1930); and painted late palette (1830+). Other ware types included yelloware (1827-1972), coarse red earthenware, coarse buff earthenware, and vitrified white earthenware (1845+) (Figure 14).

Bottle glass was mostly aqua, light blue, colourless, or dark olive green coloured glass. These consisted of panel bottles and unidentified bottle shards.

Smoking pipe fragments included two pipe bowl fragments, one plain and one with a band of raised rectangles, and one plain pipe stem made of red earthenware (Figure 15). Personal items included one shell two-hole button and part of a writing slate.

Artifacts left in the field as an indicator of the site location, as per Section 2.1.1, Standard 9 (MTCS 2011), encompass approximately 50% of the scatter and include refined white earthenware sherds of various decoration types (blue transfer, purple transfer, hand painted, blue edged), one coarse red

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earthenware sherd, clear bottle glass, mammal teeth, decorated smoking pipe bowl, and red clay pipe stem.

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7.0 Analysis and Conclusions

The artifacts from Operation 1 do not trigger a requirement for a Stage 3 assessment based on Section 1.a.i.(2), 1.c., Standard 2.2 (MTCS 2011).

Analysis of the Euro-Canadian artifacts recovered during Stage 2 survey in Operation 2 found that the majority of the recovered material dated to the mid-late 19th century, with no material suggesting a post 1900 date. The combination of household artifacts, building materials, and scatter size suggests that the site may comprise the remains of a cabin. Under Standard 1.c. of Section 2.2 of the Standards and Guidelines for Consultant Archaeologists (MTCS 2011) this site is considered culturally significant and requires Stage 3 investigation with a likelihood of Stage 4 as this site dates to before 1870 and so displays cultural heritage value as per Section 1.a., Standard 3.4.2 (MTCS 2011). This site has been registered with the MTCS as BiFu-7 (Supplementary Documentation Map 3).

8.0 Recommendations

Based on the results of this investigation it is recommended:

- 1. That a partial clearance of the Proposed Cardinal Creek Development Part Lot 28 be granted, except for Operation 2.
- 2. 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 partial cleared areas of the property (excluding Operation 2).
- 3. That a Stage 3 archaeological assessment be conducted by a licensed archaeologist in the form of a controlled surface pick-up followed by 1m² excavation units on a grid. This site dates to before 1870 and so displays cultural heritage value as per Section 1. a., Standard 3.4.2, and is recommended to proceed to a Stage 4. Therefore the Stage 3 testing should be done on a 10 m interval as per Standard 1, Section 3.2.3, as (MTCS 2011), to determine the extent and affinity of the historic site located on Part Lot 28, Operation 2 (BiFu-7) (as illustrated by the area marked in orange on Supplementary Documentation Map 3) as per Sections 3.2.1, 3.2.2, and 3.2.3 (MTCS 2011). Furthermore, as per Standard 1, Section 3.2.3, as (MTCS 2011), an additional 40% infill of the initial grid unit total should be excavated in areas of interest. This site will have a 20 m protective buffer zone, and a 50 m monitoring zone (Supplementary Documentation Map 4).

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9.0 Advice on Compliance with Legislation

- a. This report is submitted to the Minister of Tourism and Culture 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 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 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.
- 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.

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.

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10.0 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.

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

Nadine Kopp, M.A., A.P. Project Archaeologist

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11.0 Bibliography and Sources

Adams, N.

2009 An Archaeological Assessment (Stage 1) of the proposed Development Lands 1730 Wilhaven Road near Orleans, Ontario. Report prepared for 2183144 Ontario Ltd c/o Thomas Cavanagh Construction Limited, on file, Ministry of Tourism, Culture and Sport. P003-260-2009.

Assessment Rolls for Cumberland Township

1834-1848.

Belden, H. C.

1881 Segment of Prescott and Russel Supplement to the Illustrated Atlas of the Dominion of Canada, Toronto.

Bond, C. C. J.

1968 The Ottawa Country. National Capital Comm., Ottawa.

Chapman, L. J. and D. F. Putnam

2007 The Physiography of Southern Ontario Miscellaneous Release Data 228. Ontario Geological Survey, Toronto.

Clermont, N.

1999 The Archaic Occupation of the Ottawa Valley. In *Ottawa Valley Prehistory*, edited by J.-L. Pilon, pp. 43-53. Imprimerie Gauvin, Hull.

Coffin, W.

1825 Segment of Township of Cumberland.

Cumberland Township Historical Society

2005 History of Cumberland Township.

2006 *Memories of Cumberland Township*. Cumberland Township Historical Society, Ottawa, ON.

Ellis, C. J. and B. D. Deller

1990 Paleo-Indians. In *The Archaeology of Southern Ontario to A.D.1650*, edited by C. J. Ellis and N. Ferris, pp. 37-63. vol. 5. Occasional Publications of the London Chapter, OAS, London.

Engelbrecht, W.

1999 Iroquoian Ethnicity and Archaeological Taxa. In *Taming the Taxonomy: Toward a New Understanding of Great Lakes Archaeology*, edited by R. F. Williamson and C. M. Watts, pp. 51-60. eastendbooks, Toronto.

Ferris, N.

1999 Telling Tales: Interpretive Trends in Southern Ontario Late Woodland Archaeology. Ontario Archaeology 68:1-62.

Hart, J. P.

2011 The Effects of Geographical Distances on Pottery Assemblages and Similarities: A Case Study from Northern Iroquoia. In *Journal of Archaeological Science*.

Hart, J. P. and H. J. Brumbach

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2003 The Death of Owasco. American Antiquity 68(4):737-752.

2005 Cooking Residues, AMS Dates, and the Middle-to-Late Woodland Transition in Central New York. *Northeast Anthropology* 69(Spring):1-34.

2009 On Pottery Change and Northern Iroquoian Origins: An Assessment from the Finger Lakes Region of Central New York. *Journal of Anthropological Archaeology* 28 367-381.

Hart, J. P. and W. Englebrecht

2011 Northern Iroquoian Ethnic Evolution: A Social Network Analysis. In *Journal of Archaeological Method and Theory*.

Heinz, W. A.

1936 Historical Research for Cumberland Township. Unknown, Navan, ON.

Jamieson, S.

1999 A Brief History of Aboriginal Social Interactions in Southern Ontario and Their Taxonomic Implications. In *Taming the Taxonomy: Toward a New Understanding of Great Lakes Archaeology*, edited by R. F. Williamson and C. M. Watts, pp. 175-192. eastendbooks, Toronto.

Kennett, B.

1999 Stage 1 Archaeological assessment of the Hydro Transmission Corridor from The Hawthorne Transformer Station (Ottawa) to the Cumberland Junction, Regional Municipality of Ottawa Carleton. Report prepared for Report prepared for Ontario Hydro Service Company, on file, Ministry of Toursim, Culture and Sport.

Laliberté, M.

1999 The Middle Woodland in the Ottawa Valley. In *Ottawa Valley Prehistory*, edited by J.-L. Pilon, pp. 69-81. Imprimerie Gauvin, Hull.

Martin, S. W. J.

2008 Languages Past and Present: Archaeological Approaches to the Appearance of Northern Iroquoian Speakers in the Lower Great Lakes Region of North America. *American Antiquity* 73(3):441-463.

Ministry of Tourism and Culture

2011 Standards and Guidelines for Consultant Archaeologists, edited by Ministry of Tourism and Culture. Queen's Printer for Ontario.

Mitchell, B. M.

1963 Occurrence of Overall Corded Pottery in the Upper Ottawa Valley, Canada. *American Antiquity* 29(1):114-115.

Mortimer, B.

2012 Whos Pot is This? Analysis of Middle to Late Woodland Ceramics From the Kitchikewana Site, Georgian Bay Islands National Park of Canada. Unpublished M.A. Thesis, Department of Anthropology, Trent University, Peterborough.

OLR

Ontario Land Registry Office Records, Ontario.

Parks Canada

Report: PA1001 July, 2012



2012 Archaeological Resources Database. Parks Canada, Cornwall.

Ritchie, W. A.

1969 The Archaeology of New York State. Revised ed. The Natural History Press, Garden City.

Swayze, K.

2001 Stage 1 & 2 Archaeological Assessment of a Proposed Subdivision on Part of Lots A, B & C, Conc. 8 & 9, Cumberland Township (Geo), City of Ottawa. On file, Ministry of Tourism, Culture and Sport.

Walling

1862 Segment of Plan of the Counties of Stormont, Dundas, Glengarry, Prescott & Russell.

Watson, G. D.

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

1980 The Wyght Site: A Multicomponent Woodland Site on the Lower Rideau Lake, Leeds County, Ontario. Unpublished M.A. Thesis, Department of Anthropology, Trent University, Peterborough.

1990 Paleo-Indian and Archaic Occupations of the Rideau Lakes. *Ontario Archaeology* 50:5-26.

1999 The Paleo-Indian Period in the Ottawa Valley. In *Ottawa Valley Prehistory*, edited by J.-L. Pilon, pp. 28-41. Imprimerie Gauvin, Hull.

Wright, J. V.

1966 The Ontario Iroquois Tradition. Bulletin 210. National Museum of Canada, Ottawa.

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.

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12.0 <u>Images</u>



Figure 1: Photo showing field conditions in southern portion of the property prior to pedestrian survey (D001).



Figure 2: Field walking southern portion of property (D010).



Figure 3: Photo showing field conditions in northern field prior to pedestrian survey (D020).



Figure 4: Field walking in northern field, orange flags indicate find spots (D030).

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Figure 5: Tall grasses around barn area in southern section of the property (D015).



Figure 6: Shovel testing through long grasses around the barn area (D052).



Figure 7: Photo showing a drainage ditch near the barn and tall grass area, located to the east of the southern field (D014).



Figure 8: Shovel testing in forested area (D034).

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Figure 9: Excavating 1x1 m unit in forested area on edge of northern field (D039).



Figure 10: 1x1 m unit excavated to subsoil in forested area on edge of northern field (D041).

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Figure 11: Excluded area due to slope greater than 20 degrees towards the creek (D054).



Figure 12: Edge of excluded area to the north of the study area due to slope greater than 20 degrees (D056).



Figure 13: Thinning flakes and secondary thinning flake of quartzite found in Operation 1.



Figure 14: Representative sample of artifacts found in Operation 2.



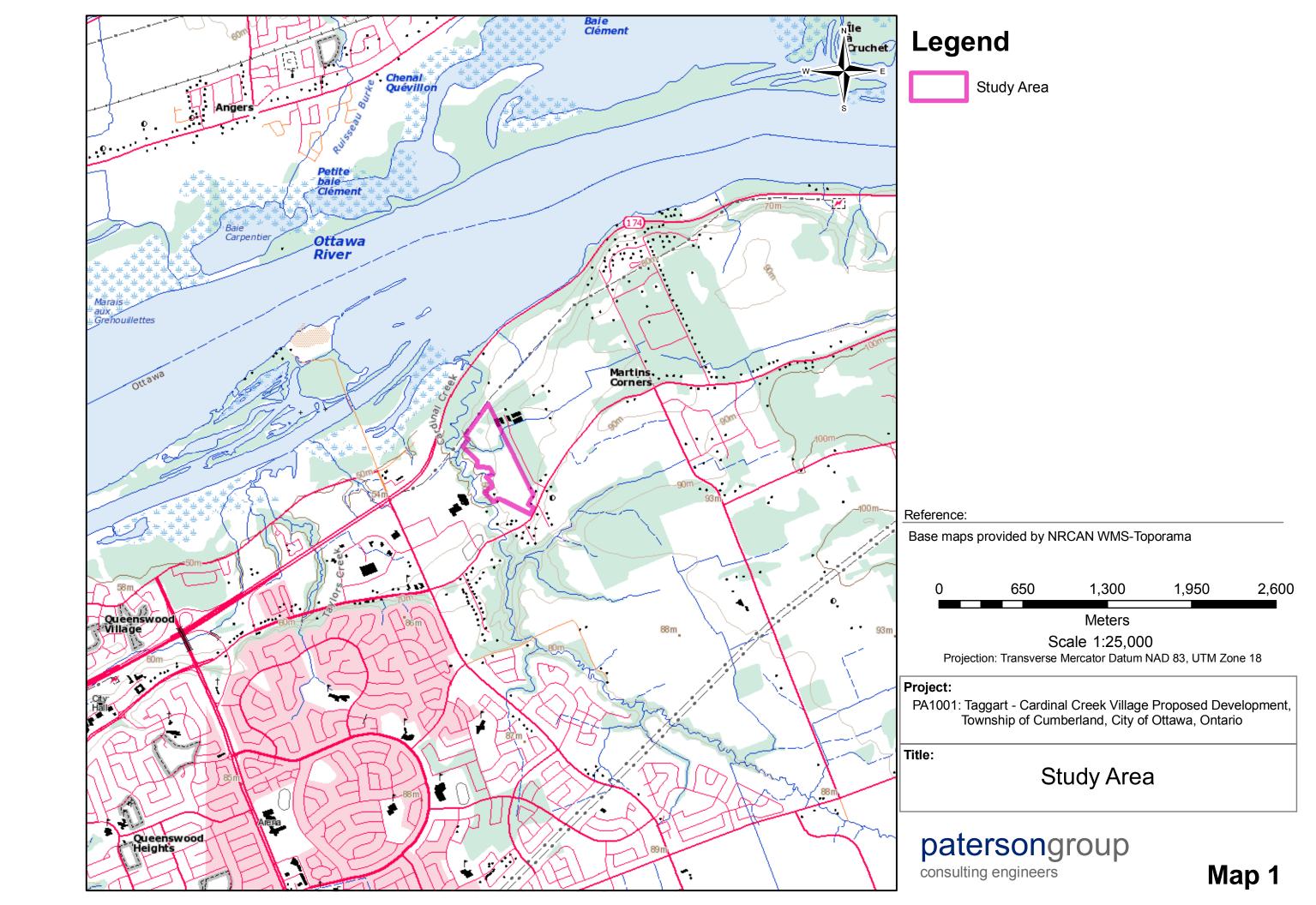
Figure 15: Smoking pipe fragments: plain pipe stem (Operation 1), and bowl with band of raised rectangles and red earthenware pipe stem (Operation 2).

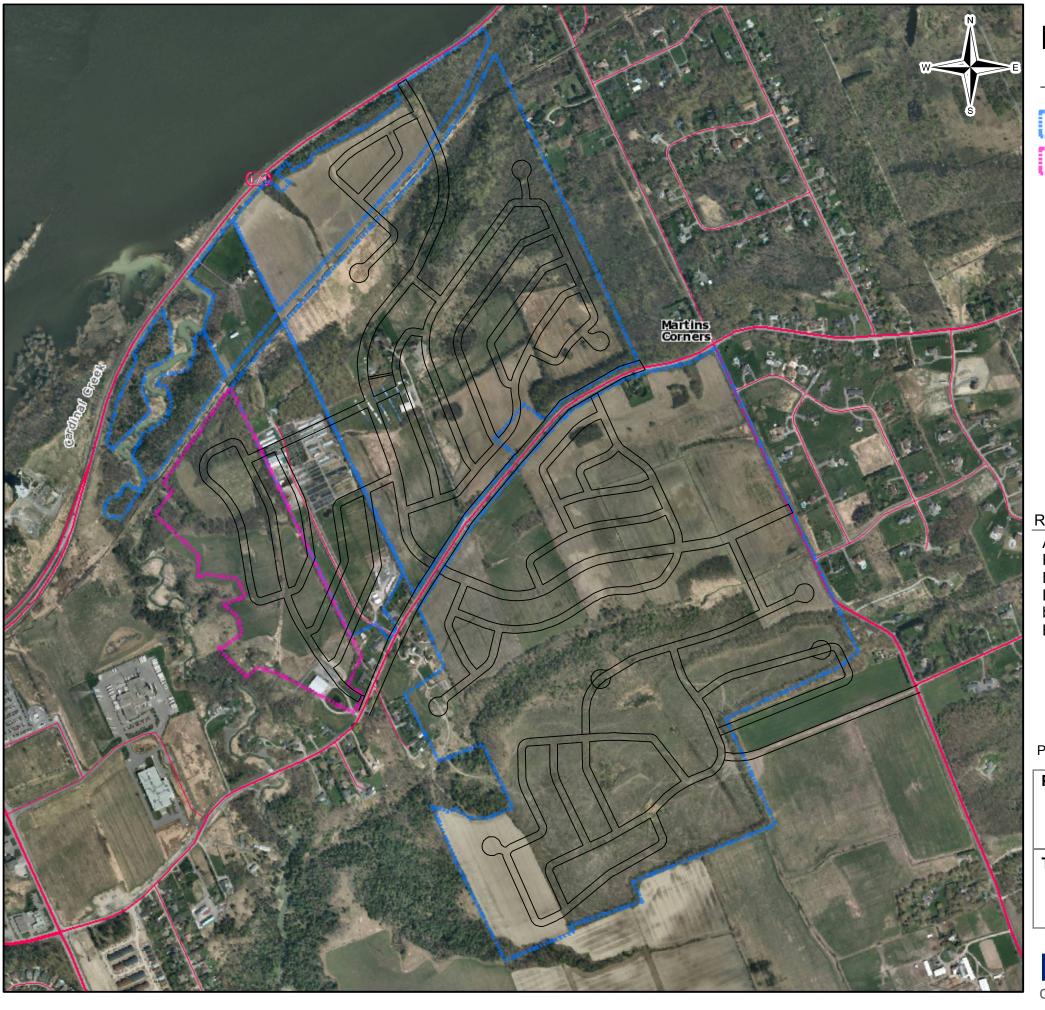
paterson@roup Ottawa Kingston North Bay

Stage 1 and 2 Archaeological Assessment Cardinal Creek Village – Part Lot 28 Ottawa, Ontario

13.0 <u>Maps</u>

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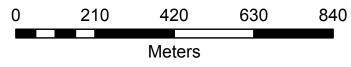
Proposed Roads Other Study Areas **Current Study Area**

Reference:

Air photo circa 2011 provided by DSEL Engineering. Proposed development plan provided by DSEL Engineering.

Development are delineated by Taggart and provided by DSEL Engineering.

Base map from NRCAN WMS-Toporama



Scale 1:10,000

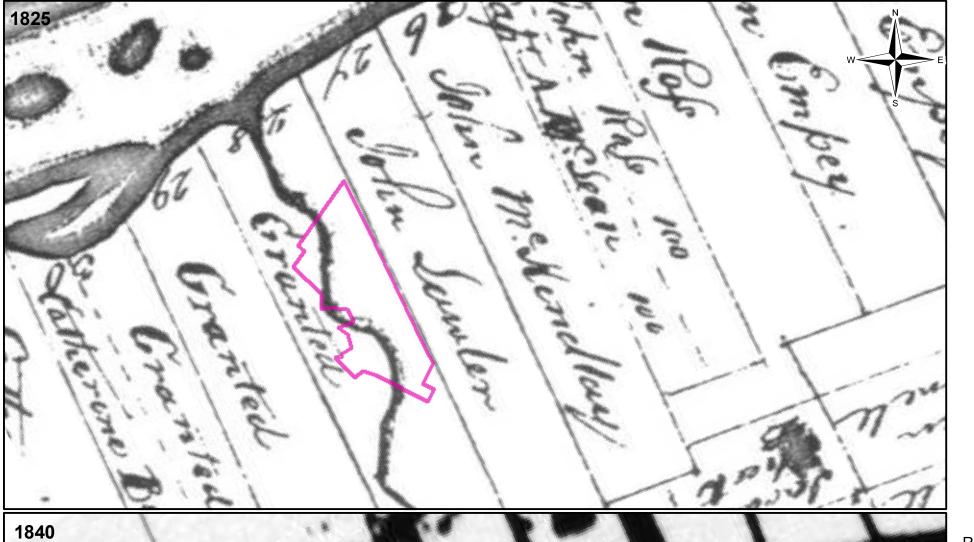
Projection: Transverse Mercator Datum NAD 83, UTM Zone 18

Project:

PA1001: Taggart - Cardinal Creek Village Proposed Development, Township of Cumberland, City of Ottawa, Ontario

Taggart Proposed Development Plan April 2012

patersongroup consulting engineers





Study Area



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 1:14,690

Projection: Transverse Mercator Datum NAD 83, UTM Zone 18

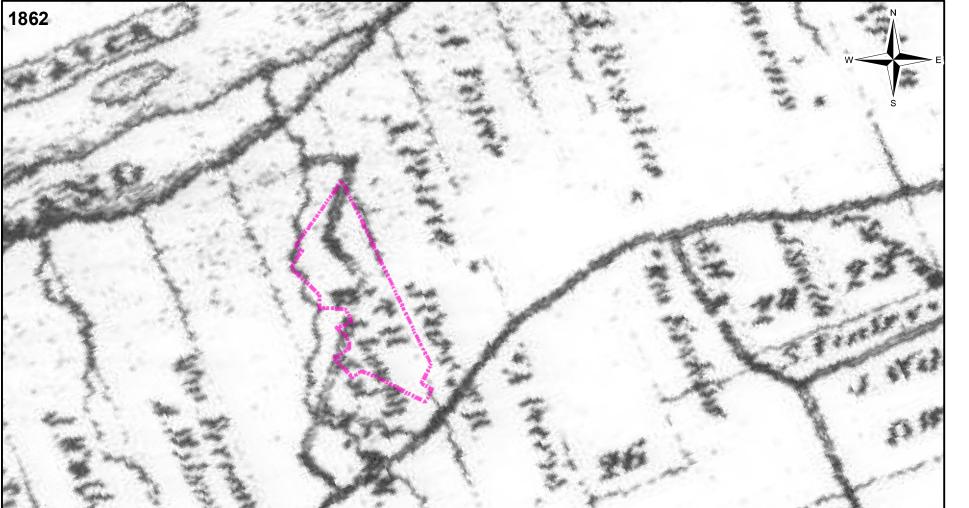
Project

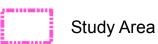
PA1001: Taggart - Cardinal Creek Village Proposed Development, Township of Cumberland, City of Ottawa, Ontario

Title:

Georeferenced Historical Maps 1









1881

<u> Reference:</u>

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.

0 190 380 570 760 Meters

Scale 1:14,690

Projection: Transverse Mercator Datum NAD 83, UTM Zone 18

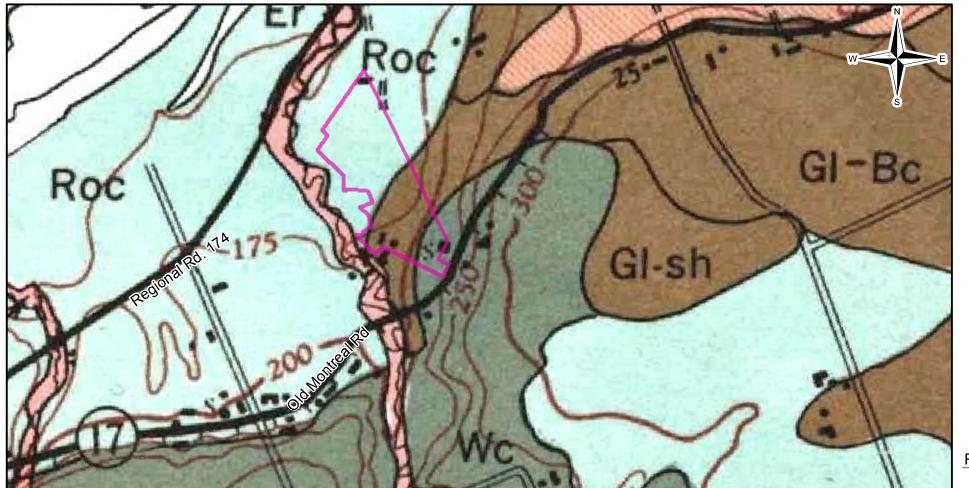
Project:

PA1001: Taggart - Cardinal Creek Village Proposed Development, Township of Cumberland, City of Ottawa, Ontario

Title:

Georeferenced Historical Maps 2





Clair Plains (Uberfuntinized) Ottawa Valley Clay Plains Ottawa Valley Clay Plains Unestone Plains Unestone Plains

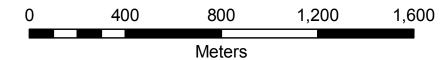
Legend

Study Area

See text for description of soil and physiographic area.

Reference:

Wicklund and Richards 1962 Chapman and Putnam 2007



Scale 1:15,727

Projection: Transverse Mercator Datum NAD 83, UTM Zone 18

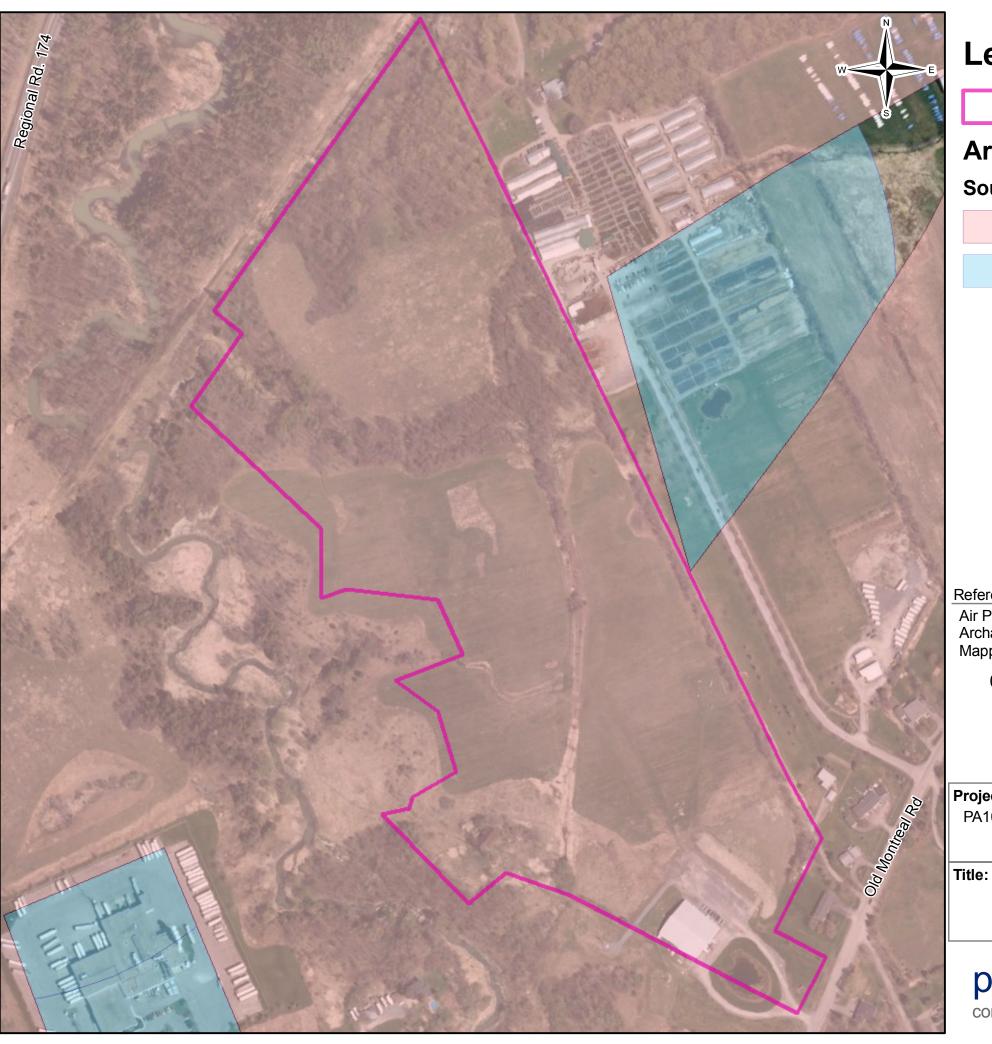
Project:

PA1001: Taggart - Cardinal Creek Village Proposed Development, Township of Cumberland, City of Ottawa, Ontario

Title:

Soils and Physiography

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Study Area

Archaeological Potential

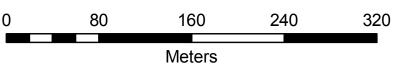
Source

City of Ottawa Master Plan

Within 300m of Watersource

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



Scale 1:3,265

Projection: Transverse Mercator Datum NAD 83, UTM Zone 18

PA1001: Taggart - Cardinal Creek Village Proposed Development, Township of Cumberland, City of Ottawa, Ontario

Archaeological Potential

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Study Area

Testing_Strategy

Assessment Method



Shovel Test



Pedestrian



Deeply Disturbed, NOT EXAMINED



Permanently Wet, NOT EXAMINED



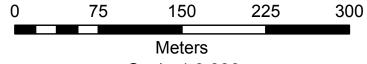
Slope > 20 Degrees, NOT EXAMINED



Separate Ownership

Reference:

Air photo circa 2011 provided by DSEL Engineering



Scale 1:3,386

Projection: Transverse Mercator Datum NAD 83, UTM Zone 18

Project:

PA1001: Taggart - Cardinal Creek Village Proposed Development, Township of Cumberland, City of Ottawa, Ontario

Assessment Strategy

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Map 7



Legend

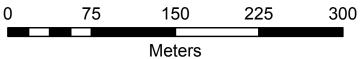
Photo Location and Direction



Study Area

Reference:

Air photo circa 2011 provided by DSEL Engineering



Scale 1:3,386

Projection: Transverse Mercator Datum NAD 83, UTM Zone 18

Project:

PA1001: Taggart - Cardinal Creek Village Proposed Development, Township of Cumberland, City of Ottawa, Ontario

Title:

Photo Key

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Appendix A: Artifact Catalogue

Project	Provenience	Rec. Number	Material	Function	Function Detail	Dec Patterns	Decorative Pattern	Decorative Colour	Primary Diagnostic	Portion	Condition	Quantity
PA1001	1a6	32	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Willow	blue	Blue transfer	rim	Incomplete	1
PA1001	1b3	37	Refined White Earthenware	Tableware unspecified	unspecified	generic	plain	translucent	plain	body	Incomplete	2
PA1001	1b4	38	Refined White Earthenware	Tableware unspecified	unspecified	generic	plain	translucent	plain	body	Incomplete	1
PA1001	1e1	35	Refined White Earthenware	Plate unspecified	plate /coaster /pat	generic	plain	translucent	plain	body	Incomplete	1
PA1001	1f1	150	Green Glass (dark olive)	Wine bottle	bottle					neck		1
PA1001	1g1	34	Blue/Green Glass (aqua)	Panel bottle	pharmaceutical / toiletry bottle				2 Piece bottle mould (hinged base)	base	Incomplete	1
PA1001	1g1	33	Refined White Earthenware	Tableware unspecified	unspecified	generic	plain	translucent	plain	rim	Incomplete	1
PA1001	1h1	141	Blue/Green Glass (aqua)	Panel bottle	pharmaceutical / toiletry bottle				Mould blown	base	Incomplete	1
PA1001	1h1	142	Iron	Buckle	buckle						Complete	1
PA1001	1j1	25	Quartzite	Thinning flake	flake							2
PA1001	1j1	26	Quartzite	Secondary thinning flake	flake							1

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Project	Provenience	Rec. Number	Material	Function	Function Detail	Dec Patterns	Decorative Pattern	Decorative Colour	Primary Diagnostic	Portion	Condition	Quantity
PA1001	1j1	39	Refined White Earthenware	Tableware unspecified	unspecified	painted	Painted unspecified	blue	Blue painted	body	Incomplete	1
PA1001	1j1	23	Vitrified White Earthenware	Plate unspecified	plate /coaster /pat	generic	Plain	translucent	Plain	body	Incomplete	1
PA1001	1j1	24	Vitrified White Earthenware	Handle / knob unspecified	unspecified	generic	plain	translucent	plain	handle	incomplete	1
PA1001	1k1	36	White Clay	Smoking pipe	pipe	generic	plain			bowl body	Incomplete	1
PA1001	1m1	31	Porcelain unspecified	Teacup	cup /saucer	lithograph	flowers	pink	Lithograph	rim	Incomplete	1
PA1001	1m1	30	Refined White Earthenware	Tableware unspecified	unspecified	generic	plain	translucent	plain	body	Incomplete	2
PA1001	1n1	172	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Willow	blue	Blue transfer	rim	Incomplete	1
PA1001	1n2	174	Blue/Green Glass (aqua)	Bottle unidentified	unidentified				Mould blown	body	Incomplete	1
PA1001	1n2	173	Colourless Glass	Bottle unidentified	unidentified					body	Incomplete	1
PA1001	1n2	175	White Clay	Smoking pipe	pipe					stem	Incomplete	1
PA1001	1n3	176	Blue Glass	Panel bottle	pharmaceutical / toiletry bottle					body	Incomplete	2
PA1001	2a1	164	Refined White Earthenware	Plate unspecified	plate /coaster /pat	generic	plain	translucent	plain	body	Incomplete	2
PA1001	2a1	166	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Willow	blue	Blue transfer	body	Incomplete	1

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Project	Provenience	Rec. Number	Material	Function	Function Detail	Dec Patterns	Decorative Pattern	Decorative Colour	Primary Diagnostic	Portion	Condition	Quantity
PA1001	2a2	168	Refined White Earthenware	Plate unspecified	plate /coaster /pat	generic	plain	translucent	plain	body	Incomplete	1
PA1001	2a3	165	Refined White Earthenware	Plate unspecified	plate /coaster /pat	generic	plain	translucent	plain	footring	Incomplete	1
PA1001	2a4	154	Blue/Green Glass (aqua)	Bottle unidentified	unidentified					body	Incomplete	1
PA1001	2a4	152	Coarse Earthenware buff	Holloware	holloware	generic	plain	translucent		rim	Exfoliated	1
PA1001	2a4	151	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Sponged /stamped	Sponged	blue	Sponged /stamped	body	Incomplete	2
PA1001	2a4	153	White Glass opaque (milk)	Bottle unidentified	unidentified					body	Incomplete	1
PA1001	2a5	167	Refined White Earthenware	plate	unspecified materials	generic	plain	translucent	plain	rim	Incomplete	1
PA1001	2b1	10	Refined White Earthenware	Tableware unspecified	unspecified	Sponged /stamped	Sponged	Blue	Sponged /stamped	rim	Incomplete	2
PA1001	2b1	9	Refined White Earthenware	Tableware unspecified	unspecified	Sponged /stamped	Stamped	blue	Sponged /stamped	body	Incomplete	1
PA1001	2b1	12	White Clay	Smoking pipe	pipe	pipe bowl	Band of raised rectangles			bowl body	Incomplete	1
PA1001	2b1	11	Yelloware	Holloware	holloware	generic	Plain	translucent		rim	Incomplete	1

Project	Provenience	Rec. Number	Material	Function	Function Detail	Dec Patterns	Decorative Pattern	Decorative Colour	Primary Diagnostic	Portion	Condition	Quantity
PA1001	2b10	69	Refined White Earthenware	Bowl unspecified	bowl	generic	plain	translucent	plain	footring	Incomplete	1
PA1001	2b10	68	Refined White Earthenware	Plate unspecified	plate /coaster /pat	moulded	Scalloped rim	blue	Edged blue	rim	Incomplete	1
PA1001	2b10	66	Refined White Earthenware	saucer	cup /saucer	Transfer /batt print	Unspecified Transfer	brown	Other transfer (1st group/ black, dk brown, red)	body	Incomplete	1
PA1001	2b10	67	Refined White Earthenware	Tableware unspecified	unspecified	Transfer /batt print	Unspecified Transfer	blue	Blue transfer	body	Incomplete	2
PA1001	2b10	65	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Willow	blue	Blue transfer	body	Incomplete	1
PA1001	2b11	51	Refined White Earthenware	Plate unspecified	plate /coaster /pat	edged	Unscalloped with It. Impressed pattern	blue	Edged blue	rim	Incomplete	1
PA1001	2b11	50	Refined White Earthenware	Tableware unspecified	unspecified	Transfer /batt print	Unspecified Transfer	brown	Other transfer (1st group/ black, dk brown, red)	body	Incomplete	1
PA1001	2b11	52	shell	Button	button				4 hole		Complete	1
PA1001	2b12	77	Green Glass (dark olive)	Case bottle	bottle				Moulded	base	Incomplete	1
PA1001	2b12	73	Refined White Earthenware	Plate unspecified	plate /coaster /pat	edged	Even scalloped /impressed pattern	blue	edged blue	rim	Incomplete	1

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Project	Provenience	Rec. Number	Material	Function	Function Detail	Dec Patterns	Decorative Pattern	Decorative Colour	Primary Diagnostic	Portion	Condition	Quantity
PA1001	2b12	71	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Sponged /stamped	Sponged	black	Sponged /stamped	body	Incomplete	1
PA1001	2b12	76	Refined White Earthenware	Plate unspecified	plate /coaster /pat	edged	Unscalloped with It. Impressed pattern	blue	Edged blue	rim	Incomplete	1
PA1001	2b12	72	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Unspecified Transfer	brown	Other transfer (1st group/ black, dk brown, red)	rim	Incomplete	1
PA1001	2b12	74	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Unspecified Transfer	red	Other transfer (1st group/ black, dk brown, red)	rim	Incomplete	1
PA1001	2b12	75	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Unspecified Transfer	blue	Blue transfer	rim	Incomplete	1
PA1001	2b12	70	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Willow	blue	Blue transfer	rim	Incomplete	1
PA1001	2b13	47	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Unspecified Transfer	blue	Blue transfer	body	Incomplete	1
PA1001	2b13	49	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Unspecified Transfer	brown	Other transfer (1st group/ black, dk brown, red)	body	Incomplete	1

Project	Provenience	Rec. Number	Material	Function	Function Detail	Dec Patterns	Decorative Pattern	Decorative Colour	Primary Diagnostic	Portion	Condition	Quantity
PA1001	2b13	48	Refined White Earthenware	Bowl unspecified	bowl	Transfer /batt print	Willow	blue	Blue transfer	body	Incomplete	1
PA1001	2b14	46	Refined White Earthenware	Bowl unspecified	bowl	Transfer /batt print	Willow	blue	Blue transfer	body	Incomplete	2
PA1001	2b15	45	Refined White Earthenware	Saucer	cup /saucer	Sponged /stamped	Sponged	black	Sponged /stamped	footring	incomplete	1
PA1001	2B16	1	Refined White Earthenware	Plate unspecified	plate /coaster /pat	edged	unscalloped with It. Impressed pattern	Blue	Edged blue	rim	Incomplete	1
PA1001	2B16	2	Refined White Earthenware	Holloware	holloware	Transfer /batt print	Unspecified Transfer	blue	Blue transfer	rim	Incomplete	1
PA1001	2B16	3	Refined White Earthenware	Saucer	cup /saucer	Transfer /batt print	Willow	blue	Blue transfer	footring	Incomplete	1
PA1001	2b2	56	Refined White Earthenware	Plate unspecified	plate /coaster /pat	painted	Painted unspecified	green	Painted	body	Incomplete	1
PA1001	2b2	58	Refined White Earthenware	Plate unspecified	plate /coaster /pat	edged	Unscalloped with It. Impressed pattern	blue	Edged blue	rim	Incomplete	1
PA1001	2b2	55	Refined White Earthenware	saucer	cup/saucer	Transfer /batt print	Unspecified Transfer	purple	Other transfer (2nd series/lt. green blue brown purple	rim	Incomplete	1

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Project	Provenience	Rec. Number	Material	Function	Function Detail	Dec Patterns	Decorative Pattern	Decorative Colour	Primary Diagnostic	Portion	Condition	Quantity
PA1001	2b2	57	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Unspecified Transfer	blue	Blue transfer	body	Incomplete	1
PA1001	2b3	63	Refined White Earthenware	Teacup	cup /saucer	painted	Floral	blue	Painted blue	rim	incomplete	1
PA1001	2b3	64	Refined White Earthenware	saucer	cup /saucer	painted	Floral	red	Painted	rim	Incomplete	1
PA1001	2b3	62	Refined White Earthenware	Bowl unspecified	bowl	Sponged /stamped	Sponged	blue	Sponged /stamped	body	Incomplete	1
PA1001	2b3	61	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Unspecified Transfer	blue	Blue transfer	body	incomplete	4
PA1001	2b4	84	Coarse Earthenware red	Smoking pipe	pipe					stem	Incomplete	1
PA1001	2b4	81	Refined White Earthenware	Tableware unspecified	unspecified	generic	plain	translucent	plain	body	Incomplete	1
PA1001	2b4	78	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Sponged /stamped	Sponged	black	Sponged /stamped	body	Incomplete	1
PA1001	2b4	80	Refined White Earthenware	Cup unspecified	cup /saucer	Sponged /stamped	Sponged	blue	Sponged /stamped	rim	Incomplete	1
PA1001	2b4	79	Refined White Earthenware	Tableware unspecified	unspecified	Transfer /batt print	Unspecified Transfer	brown	Other transfer (1st group/ black, dk brown, red)	body	Incomplete	2

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Project	Provenience	Rec. Number	Material	Function	Function Detail	Dec Patterns	Decorative Pattern	Decorative Colour	Primary Diagnostic	Portion	Condition	Quantity
PA1001	2b4	82	Refined White Earthenware	saucer	cup /saucer	Transfer /batt print	Unspecified Transfer	blue	Blue transfer	rim	incomplete	3
PA1001	2b4	83	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Willow	blue	Blue transfer	body	Incomplete	3
PA1001	2b5	103	Refined White Earthenware	Holloware	holloware	industrial slip	Banded	brown	Industrial slip	rim	Incomplete	1
PA1001	2b5	104	Refined White Earthenware	Teacup	cup /saucer	Ceramic / Glass	Moulded		moulded	body	Incomplete	1
PA1001	2b5	101	Refined White Earthenware	Pot unspecified _	pot	generic	plain	translucent	plain	rim	Burned / Melted	1
PA1001	2b5	105	Refined White Earthenware	Bowl unspecified	bowl	generic	plain	translucent	Plain	footring	Incomplete	1
PA1001	2b5	107	Refined White Earthenware	Plate unspecified	plate /coaster /pat	edged	Unmoulded unscalloped rim	blue	Edged blue	rim	Incomplete	1
PA1001	2b5	106	Refined White Earthenware	Plate unspecified	plate /coaster /pat	edged	Unscalloped with It. Impressed pattern	blue	Edged blue	rim	Incomplete	1
PA1001	2b5	100	Refined White Earthenware	Holloware	holloware	Transfer /batt print	Unspecified Transfer	brown	Other transfer (1st group/ black, dk brown, red)	rim	Incomplete	1

Project	Provenience	Rec. Number	Material	Function	Function Detail	Dec Patterns	Decorative Pattern	Decorative Colour	Primary Diagnostic	Portion	Condition	Quantity
PA1001	2b5	102	Refined White Earthenware	Cup unspecified	cup /saucer	Transfer /batt print	Unspecified Transfer	black	Other transfer (1st group/ black, dk brown, red)	body	Incomplete	1
PA1001	2b5	108	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Unspecified Transfer	blue	Blue transfer	body	Incomplete	1
PA1001	2b5	109	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Unspecified Transfer	blue	Blue transfer	rim	Incomplete	1
PA1001	2b5	111	slate	Writing item	writing						incomplete	1
PA1001	2b5	110	Vitrified White Earthenware	Tableware unspecified	unspecified	Ceramic / Glass	Moulded			body	Incomplete	1
PA1001	2b6	22	Coarse Earthenware red	Milk pan	pan					rim	Incomplete	2
PA1001	2b6	20	Refined White Earthenware	Tableware unspecified	unspecified	moulded	Moulded unspecified	blue		body	incomplete	1
PA1001	2b6	16	Refined White Earthenware	Bowl unspecified	bowl	painted	Painted unspecified	blue	Blue painted	footring	Incomplete	1
PA1001	2b6	17	Refined White Earthenware	Plate unspecified	plate /coaster /pat	painted	Painted unspecified	blue	Blue painted	rim	Incomplete	1
PA1001	2b6	19	Refined White Earthenware	Tableware unspecified	unspecified	generic	Plain	translucent	Plain	footring	Incomplete	1
PA1001	2b6	18	Refined White Earthenware	Tableware unspecified	unspecified	Sponged /stamped	Sponged	Blue, light	Sponged /stamped	body	Incomplete	1

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Project	Provenience	Rec. Number	Material	Function	Function Detail	Dec Patterns	Decorative Pattern	Decorative Colour	Primary Diagnostic	Portion	Condition	Quantity
PA1001	2b6	21	Refined White Earthenware	Tableware unspecified	unspecified	edged	Unscalloped with It. Impressed pattern	blue	Edged blue	rim	Incomplete	1
PA1001	2b6	14	Refined White Earthenware	Cup unspecified	cup /saucer	Transfer /batt print	Unspecified Transfer	blue	Blue transfer	rim	Incomplete	1
PA1001	2b6	15	Refined White Earthenware	Tableware unspecified	unspecified	Transfer /batt print	Unspecified Transfer	blue	Blue transfer	body	Incomplete	1
PA1001	2b6	13	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Willow	blue		rim	Incomplete	3
PA1001	2b7	128	Refined White Earthenware	Holloware	holloware	industrial slip	Cable	blue	Industrial slip	body	Incomplete	2
PA1001	2b7	121	Refined White Earthenware	Plate unspecified	plate /coaster /pat	painted	Floral generic	blue	Blue transfer	footring	Incomplete	1
PA1001	2b7	117	Refined White Earthenware	Teacup	cup /saucer	painted	Painted unspecified	blue	Painted	body	Incomplete	1
PA1001	2b7	126	Refined White Earthenware	Plate unspecified	plate /coaster /pat	painted	Painted unspecified	green	Painted	body	Incomplete	1
PA1001	2b7	127	Refined White Earthenware	Plate unspecified	plate /coaster /pat	painted	Painted unspecified	blue	Painted	rim	Incomplete	1
PA1001	2b7	115	Refined White Earthenware	Plate unspecified	plate /coaster /pat	generic	Plain	translucent	plain	body	Incomplete	5

Project	Provenience	Rec. Number	Material	Function	Function Detail	Dec Patterns	Decorative Pattern	Decorative Colour	Primary Diagnostic	Portion	Condition	Quantity
PA1001	2b7	116	Refined White Earthenware	Bowl /individual service	bowl	generic	Plain	translucent	plain	footring	Incomplete	1
PA1001	2b7	123	Refined White Earthenware	Plate unspecified	plate /coaster /pat	moulded	Scalloped rim	blue	Edged blue	rim	Incomplete	2
PA1001	2b7	112	Refined White Earthenware	Bowl /individual service	bowl	Sponged /stamped	Sponged	blue	Sponged /stamped	body	Incomplete	1
PA1001	2b7	113	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Sponged /stamped	Stamped	blue	Sponged /stamped	body	Incomplete	2
PA1001	2b7	114	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Sponged /stamped	Stamped	black	Sponged /stamped	body	Incomplete	2
PA1001	2B7	122	Refined White Earthenware	Plate unspecified	plate /coaster /pat	edged	Unmoulded unscalloped rim	blue	Edged blue	rim	Incomplete	4
PA1001	2b7	119	Refined White Earthenware	Tableware unspecified	unspecified	Transfer /batt print	Unspecified Transfer	blue	Blue transfer	body	Incomplete	1
PA1001	2b7	120	Refined White Earthenware	Teacup	cup /saucer	Transfer /batt print	Unspecified Transfer	blue	Blue transfer	body	Incomplete	1
PA1001	2b7	125	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Unspecified Transfer	purple	Other transfer (1st group/ black, dk brown, red)	rim	Incomplete	1
PA1001	2b7	118	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Willow	blue	Blue transfer	rim	Incomplete	3
PA1001	2b7	124	Yelloware	Holloware	holloware	generic	plain	translucent		rim	Incomplete	1

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Project	Provenience	Rec. Number	Material	Function	Function Detail	Dec Patterns	Decorative Pattern	Decorative Colour	Primary Diagnostic	Portion	Condition	Quantity
PA1001	2b8	53	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Sponged /stamped	Sponged	black	Sponged /stamped	body	Incomplete	1
PA1001	2b8	54	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Willow	blue	Blue transfer	body	Incomplete	3
PA1001	2b9	60	Refined White Earthenware	Tableware unspecified	unspecified	Transfer /batt print	Unspecified Transfer	black	Other transfer (1st group/ black, dk brown, red)	body	incomplete	1
PA1001	2b9	59	Refined White Earthenware	Plate unspecified	plate /coaster /pat	Transfer /batt print	Willow	blue	Blue transfer	body	Incomplete	3
PA1001	2c1	177	Iron	Hardware	miscellaneous door / window							1
PA1001	2c1	29	Refined White Earthenware	Tableware unspecified	unspecified	Transfer /batt print	Unspecified Transfer	red	Other transfer (1st group/ black, dk brown, red)	body	Incomplete	1
PA1001	2c2	44	Refined White Earthenware	Plate unspecified	plate /coaster /pat	generic	plain	translucent	Plain	body	Incomplete	2
PA1001	2c3	43	bone	Mammal bone	bone							2
PA1001	2c4	40	Bone	Mammal bone	bone						Incomplete	6
PA1001	2c4	42	Refined White Earthenware	Tableware unspecified	unspecified	generic	plain	translucent	plain	body	Incomplete	1
PA1001	2c4	41	Refined White Earthenware	Tableware unspecified	unspecified	Transfer /batt print	Unspecified Transfer	blue	Blue transfer	rim	incomplete	1

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Appendix B: Photographic Catalogue

Catalogue	Prov.	Lot	Con	Subject	Dir	Latitude	Longitude	Photographer
Number								
PA1001-D001		28	1	Field conditions in south field	NW	75°28'10.47"	45°29'44.79"	BM
PA1001-D002		28	1	Field conditions in south field	NW	75°28'10.47"	45°29'44.79"	BM
PA1001-D003		28	1	Field conditions in south field	NE	75°28'10.47"	45°29'44.79"	BM
PA1001-D004		28	1	Field conditions in south field	NE	75°28'10.47"	45°29'44.79"	BM
PA1001-D005		28	1	Field conditions in south field	NW	75°28'10.47"	45°29'44.79"	BM
PA1001-D006		28	1	Field conditions in south field	SE	45°29'47.64"	75°28'8.52"	BM
PA1001-D007		28	1	Pedestrian survey in south field	SE	45°29'47.01"	75°28'12.67"	BM
PA1001-D008		28	1	Pedestrian survey in south field	SE	45°29'47.15"	75°28'12.75"	BM
PA1001-D009		28	1	Pedestrian survey in south field	Ν	45°29'46.18"	75°28'14.87"	BM
PA1001-D010		28	1	Pedestrian survey in south field	NW	45°29'46.21"	75°28'14.87"	BM
PA1001-D013		28	1	Drainage ditch near tall grassy area around barn	S	45°29'42.79"	75°28'12.21"	BM
PA1001-D014		28	1	Drainage ditch near tall grassy area around barn	S	45°29'42.79"	75°28'12.37"	BM
PA1001-D015		28	1	Tall grassy area looking towards barn	NW	45°29'43.59"	75°28'14.57"	BM
PA1001-D016		28	1	Looking towards south field from tall grassy area near barn	Ε	45°29'43.68"	75°28'14.57"	BM
PA1001-D017		28	1	Field conditions in north field	NE	45°29'49.37"	75°28'19.47"	BM
PA1001-D018		28	1	Field conditions in north field	Ν	45°29'49.67"	75°28'19.54"	BM
PA1001-D019		28	1	Field conditions in north field	Ν	45°29'49.83"	75°28'19.58"	BM
PA1001-D020		28	1	Field conditions in north field	SE	45°29'55.45"	75°28'21.5"	BM
PA1001-D021		28	1	Field conditions in north field	SE	45°29'55.49"	75°28'21.54"	BM
PA1001-D022		28	1	Field conditions in north field	S	45°30'0.05"	75°28'26.77"	BM
PA1001-D023		28	1	Field conditions in north field	SE	45°30'0.52"	75°28'17.44"	BM
PA1001-D024		28	1	Pedestrian survey in north field	SE	45°29'59.89"	75°28'17.34"	BM
PA1001-D025		28	1	Pedestrian survey in north field	SE	45°29'59.89"	75°28'17.34"	BM
PA1001-D026	PA1001- 2	28	1	Looking towards operation 2 in north field	NE	45°29'57.94"	75°28'18.55"	BM
PA1001-D027	PA1001- 2	28	1	Looking towards operation 2 in north field	NE	45°29'58.16"	75°28'18.76"	ВМ
PA1001-D028	PA1001- 2	28	1	Looking towards operation 2 in north field with find spots marked with orange flags	SE	45°29'58"	75°28'19.28"	ВМ
PA1001-D029	PA1001-	28	1	Intensification of pedestrian survey around operation 2	SE	45°29'58"	75°28'19.28"	BM

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Catalogue	Prov.	Lot	Con	Subject	Dir	Latitude	Longitude	Photographer
Number								
	2							
PA1001-D030		28	1	Pedestrian survey of north field, orange flags mark find spots	SE	45°29'58"	75°28'19.28"	BM
PA1001-D031	PA1001-	28	1	Intensification of pedestrian survey around operation 2	SE	45°29'58"	75°28'19.27"	BM
	2							
PA1001-D032		28	1	N. Kopp shovel testing in lightly wooded area	NW	45°29'54.66"	75°28'19.97"	BM
PA1001-D033		28	1	M. Lapensée-Paquette on edge of lightly wooded area	NE	45°29'54.66"	75°28'19.97"	BM
PA1001-D034		28	1	Shovel testing in lightly forested area	NW	45°29'54.66"	75°28'19.97"	BM
PA1001-D035		28	1	Shovel testing in lightly forested area	NW	45°29'54.64"	75°28'19.93"	BM
PA1001-D036		26	1	Shovel testing along edge of field	SE	45°29'55.66"	75°28'19.43"	BM
PA1001-D037		28	1	Typical test pit	D	45°29'58.19"	75°28'17.62"	BM
PA1001-D038		28	1	typical test pit	D	45°29'58.21"	75°28'17.59"	BM
PA1001-D039		28	1	Excavating 1x1 unit near operation 2	W	45°29'56.29"	75°28'17.65"	BM
PA1001-D040		28	1	Excavating 1x1 near operation 2	W	45°29'56.29"	75°28'17.65"	BM
PA1001-D041		28	1	1x1 unit near operation 2	W	45°29'56.26"	75°28'17.69"	BM
PA1001-D042		28	1	1x1 unit near operation 2	W	45°29'56.26"	75°28'17.69"	BM
PA1001-D043		28	1	Typical test pit	D	45°29'49.73"	75°28'8.87"	BM
PA1001-D044		28	1	Typical test pit	D	45°29'49.71"	75°28'8.87"	BM
PA1001-D045		28	1	Shovel testing on edge of southern field	Ε	45°29'52.43"	75°27'55.32"	BM
PA1001-D046		28	1	C. Pechie shovel testing area	N	45°29'52.55"	75°27'56.11"	BM
PA1001-D047		28	1	Shovel testing on edge of southern field	W	45°29'52.52"	75°27'55.21"	BM
PA1001-D048		28	1	Testing in long grasses near barn area	S	45°29'44.2"	75°28'14.95"	BM
PA1001-D049		28	1	Long grasses near barn area	S	45°29'44.11"	75°28'15.02"	BM
PA1001-D050		28	1	Shovel testing in tall grassy area	SW	45°29'44.07"	75°28'15.06"	BM
PA1001-D051		28	1	Inside of the barn	W	45°29'43.69"	75°28'18.52"	BM
PA1001-D052		28	1	Shovel testing in tall grasses near barn	S	45°29'45.61"	75°28'15.26"	BM
PA1001-D053		28	1	Shovel testing in lightly wooded area to the north of the	W	45°30'3.54"	75°28'18.59"	BM
				property on edge of the ridge				
PA1001-D054		28	1	Steep slope down to creek	SW	45°29'57.16"	75°28'25.4"	BM
PA1001-D055		28	1	Steep slope towards creek	SW	45°29'57.16"	75°28'25.4"	BM
PA1001-D056		28	1	Shovel testing on edge of steep slope	NE	45°29'57.04"	75°28'25.41"	BM
PA1001-D057		28	1	Lightly forested area on edge of steep slope towards creek	NW	45°29'57.05"	75°28'25.41"	BM

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Catalogue Number	Prov.	Lot	Con	Subject	Dir	Latitude	Longitude	Photographer
PA1001-D058		28	1	Steeply sloping area	N	45°29'54.97"	75°28'29.16"	BM
PA1001-D059		28	1	Shovel testing through lightly wooded area in central section between north and south field	SE	45°29'55"	75°28'29.13"	ВМ



Appendix C: Map Catalogue

Map Number	Description	Created By
1	Study Area	B. Mortimer
2	Taggart Proposed Development Plan April 2012	B. Mortimer
3	Georeferenced Historical Maps 1	B. Mortimer
4	Georeferenced Historical Maps 2	B. Mortimer
5	Soils and Physiology	B. Mortimer
6	Photo Key	B. Mortimer
7	Assessment Strategy	B. Mortimer

Appendix D: Document Catalogue

Project	Description	Created By			
PA1007	Cardinal Creek Part Lot 28 Field Notes Stage 2 (scanned to PDF	B. Mortimer			
	"PA1001 - Tagart Cardinal Creek Part Lot 28 - Field Notes.pdf")				

Report: PA1001 July, 2012