# STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT OF 5574 ROCKDALE ROAD PART OF LOT 24, CONCESSION 7 GEOGRAPHIC TOWNSHIP OF CUMBERLAND CITY OF OTTAWA, ONTARIO

**PAST RECOVERY**
**ARCHAEOLOGICAL SERVICES INC.**

# STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT OF 5574 ROCKDALE ROAD, PART OF LOT 24, CONCESSION 7, GEOGRAPHIC TOWNSHIP OF CUMBERLAND, CITY OF OTTAWA, ONTARIO

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P.I.F. No.: P336-0016-2013

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Original Report

## ACKNOWLEDGMENTS

Rollin Developments provided site plans, information for the project context, and site access permission for the field reconnaissance.

Mr. Robert von Bitter, Data Coordinator, Ontario Ministry of Tourism, Culture and Sport provided a current listing of archaeological sites within one kilometre of the study area.

## PROJECT PERSONNEL

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## EXECUTIVE SUMMARY

Past Recovery Archaeological Services Inc. (PRAS) was retained by Rollin Developments to undertake a Stage 1 and 2 archaeological assessment of a proposed apartment building development on the property located at 5574 Rockdale Road, Vars. This involved the examination of 1.77 hectares of land located on Part 5 of Plan 4R-20412 (part of Lot 24, Concession 7) in the geographic Township of Cumberland, now in the City of Ottawa (Figures 1 to 4). The purpose of the Stage 1 assessment was to identify known heritage resources associated with the study area, to determine the archaeological potential of the property and to present recommendations for the mitigation of any significant known or potential archaeological resources. The purpose of the Stage 2 assessment was to determine whether or not the property contained archaeological resources and, if so, to provide appropriate recommendations for Stage 3 assessment if warranted.

The Stage 1 archaeological assessment involved a site inspection on September 12th, 2013, followed by a review of the local environment, historic maps, local histories and aerial photographs. In addition the Ministry of Tourism, Culture and Sport's site registry listing for the region was consulted, as well as previous archaeological studies undertaken in the area. The assessment resulted in the determination that the property exhibited potential for the presence of significant archaeological resources associated with historical Euro-Canadian land uses and/or settlement. On this basis it was recommended that the study area would require a Stage 2 archaeological assessment undertaken by a licensed archaeologist prior to any future soil disturbances or other alterations.

The Stage 2 archaeological assessment of this study property was completed on the 16th of September, 2013. Given that approximately 80% of the property consisted of ploughed field, most of the Stage 2 fieldwork involved field walking at 5 metre intervals. The remaining 20% of the property was shovel tested at 5 metre intervals. No archaeological resources were discovered.

The results of the Stage 1 and 2 archaeological assessments documented in this report form the basis for the following recommendations:

1) There are no further archaeological concerns associated with the study area.

The reader is referred to Section 5.0 below, however, to ensure compliance with the *Ontario Heritage Act* as it may relate to this project. In particular, the proponent should be aware that if deeply buried archaeological deposits are exposed during excavation, work should cease in that area until it has been assessed by a licensed archaeologist.

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# 1.0 INTRODUCTION

Past Recovery Archaeological Services Inc. (PRAS) was retained by Rollin Developments to undertake a Stage 1 and 2 archaeological assessment of a proposed apartment building development on the property located at 5574 Rockdale Road, Vars. This involved the examination of 1.77 hectares of land (Figures 1 to 4).

The objectives of the present Stage 1 archaeological assessment were as follows:

- To provide information concerning the study area's geography, history, previous archaeological fieldwork, and current land condition;
- To evaluate the study area's archaeological potential; and,
- To recommend appropriate strategies for Stage 2 archaeological assessment in the event further assessment is warranted.

The objectives of the Stage 2 archaeological assessment were as follows:

- To determine whether or not the property contained archaeological resources;
- To evaluate the significance of these resources; and,
- To recommend appropriate strategies for Stage 3 archaeological assessment in the event further assessment is warranted.

# 2.0 PROJECT CONTEXT

This section of the report provides the context for the archaeological work undertaken, including a description of the study area, the related legislation or directives triggering the assessment, any additional development related information, as well as confirmation of permission to access the study area for the purposes of the assessment.

## 2.1 Development Context

Rollin Developments has submitted a site plan application to the City of Ottawa for a residential development to be located on the property at 5574 Rockdale Road. The proposed project would see the erection of a two-storey apartment building with underground parking (see Figure 4). The location and boundary of the study area were provided to PRAS on mapping supplied by Rollins Development (see Figure 3 and 4). These plans were used by PRAS staff to determine the limits of the area of investigation in the field. This archaeological assessment was triggered by the *Planning Act* as part of the development planning application.

The property at 5574 Rockland Road is an irregular "L" shaped parcel approximately 1.77 hectares in size (see Figure 3). This property is bordered on the west and south by private residences, to the east by Rockdale Road and to the north by a treed lot (see Figure 2).

## 2.2 Addition Development-Related Information

The present study area falls within the area covered by *The Archaeological Resource Potential Mapping Study of the Regional Municipality of Ottawa-Carleton* (ASI & GII 1999a, 1999b), better known as the *Ottawa Archaeological Master Plan*. This management plan identified one feature indicative of archaeological potential within or in close proximity to the study area, a nineteenth century transportation corridor. On the basis of these findings, the archaeological potential mapping prepared for the *Master Plan* identified portions of the current study area as exhibiting archaeological potential and requiring further archaeological assessment (Figure 6).

## 2.3 Access Permission

Permission to access the subject property and complete all aspects of the archaeological assessment, including photography, was granted by the client and property owner, Rollin Developments.

# 3.0 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

## 3.1 Historical Context

This section of the report includes an overview of human settlement in the region with the intention of providing a context for the evaluation of known and potential archaeological sites, as well as a review of property-specific detailed archival research presenting a record of land use history.

Historical research was performed at Queen's University Stauffer Library.

### 3.1.1 Previous Historical Research

Amongst the few published historical resources which focus specifically on Cumberland Township are *Historical Research for Cumberland Township* (Heintz 1936) and *Memories of Cumberland Township* (Cumberland Township Historical Society 2006). Other works which refer to Cumberland Township include *Ottawa Country* (Bond 1968) and *Prescott & Russell Supplement to the Illustrated Atlas of the Dominion of Canada* (Belden 1881)

### 3.1.2 Regional Pre-Contact Cultural Overview

It should be noted that our understanding of the pre-Contact sequence of human activity in the area is very incomplete, stemming from a lack of systematic archaeological surveys in the region, as well as from the destruction of archaeological sites caused by development prior to legislated requirements for archaeological assessments to be completed. It is possible, however, to provide a general outline of the pre-Contact occupation in the region based on archaeological, historical, and environmental research conducted across eastern Ontario.

The earliest human occupation of southern Ontario began approximately 11,000 years ago with the arrival of small groups of hunter-gatherers referred to by archaeologists as Palaeo-Indians (Ellis and Deller 1990:39). These groups gradually moved northward as the glacial ice of the last Ice Age retreated and the water levels of the meltwater-fed glacial lakes dropped. While very little is known about their lifestyle; it is likely that Palaeo-Indian groups travelled widely, relying on the seasonal migration of caribou as well as small animals and wild plants for subsistence in a sub-arctic environment. They produced a variety of distinctive stone tools including fluted projectile points, scrapers, burins and gravers. Most archaeological evidence for the Palaeo-Indian period has been found in south-western and south-central Ontario at sites located on the former shorelines of glacial Lake Algonquin. First Nations settlement of eastern Ontario was late in comparison to these other parts of the province as a result of the high water levels of the St. Lawrence Marine Embayment of the post-glacial Champlain Sea (Hough 1958:204).

The Ottawa Valley remained very much on the fringe of the portions of the province occupied by Palaeo-Indian colonizers and the ridges and old shorelines of the Champlain Sea and the Ottawa River channels would be the most likely areas to find evidence of this initial settlement. In recent years, Ken Swayze has found what he believes to be Palaeo-Indian material in several

locations in the City of Ottawa, including near Greenbank Road (Kinickinick Heritage Consultants 2003a), and at the intersection of Albion Road and Rideau Road (Kinickinick Heritage Consultants 2004). It should be noted however, that the validity of these sites is not currently widely accepted in the archaeological community and that additional supporting evidence of these locations as sites of Late Palaeo-Indian and/or Early Archaic occupations would be required to substantiate this interpretation.

During the succeeding Archaic period (c.7000 to 1000 B.C.), the environment of southern Ontario approached modern conditions and more land became available for occupation as water levels in the glacial lakes dropped (Ellis, Kenyon, and Spence 1990:69). Populations continued to follow a mobile hunter-gatherer subsistence strategy, although there appears to have been a greater reliance on fishing and gathered food (e.g. plants and nuts) and more diversity between regional groups. The tool kit also became increasingly diversified, reflecting an adaptation to environmental conditions similar to those of today. This included the presence of adzes, gouges and other ground stone tools believed to have been used for heavy woodworking activities such as the construction of dug-out canoes, grinding stones for processing nuts and seeds, specialized fishing gear including net sinkers and plummets and a general reduction in the size of projectile points. The middle and late portions of the Archaic period saw the development of trading networks spanning the Great Lakes, and by 6,000 years ago copper was being mined in the Upper Great Lakes and traded into southern Ontario. There is increasing evidence of ceremonialism and elaborate burial practices and a wide variety of non-utilitarian items such as gorgets, pipes and 'birdstones' were being manufactured.

More extensive First Nation settlement of eastern Ontario began during the Archaic period, sometime between 5,500 and 4,500 B.C. (Kennedy 1970:61; Ellis, Kenyon and Spence 1990:93). Artifacts from Archaic sites in eastern Ontario suggest a close relationship to the Laurentian Archaic stage peoples of New York State. Laurentian peoples occupied the Canadian biotic province transition zone between the deciduous forests to the south and the boreal forests to the north. The Laurentian Archaic artifact complex contains large, broad bladed, chipped stone and ground slate projectile points, and heavy ground stone tools. This stage is also known for the extensive use of cold-hammered copper tools including "bevelled spear points, bracelets, pendants, axes, fishhooks, and knives" (Kennedy 1970:59). The first significant evidence for occupation of this region appears at this time. Archaic sites have been located at Leamy Lake Park in Gatineau (Laliberté 2000; Laliberté et al. 1998) and on Allumette and Morrison Islands on the Ottawa River near Pembroke (Clermont, Chapdelaine and Cinq-Mars, eds. 2003). Over 1,000 copper artifacts and other exotic materials were recovered from the Allumette Island-1 Site (Kennedy 1966). Burial features excavated on the Allumette Island-1 and Morrison Island-6 sites, dating to the Middle Archaic period, are some of the earliest recorded human burials found in eastern Ontario (Kennedy 1962, 1964, 1965, 1966). Late Archaic sites have also been identified to the west in the Rideau Lakes, and at Jessups Falls and in the Pendleton area along the South Nation River to the east (Watson 1982; Daechsel 1980). A few poorly documented finds of Archaic artifacts have been made within the City of Ottawa (Jamieson 1989) and sites at Honey Gables and at the Albion Road and Rideau Road intersection may contain Early Archaic material (Kinickinick Heritage Consultants 2003b, 2004).

The introduction of ceramics to Ontario marked the beginning of the Woodland period (c.1000 B.C. to A.D. 1550). Local populations continued to participate in extensive trade networks that, at their zenith at circa A.D. 200, spanned much of North America and included the movement of conch shell, fossilized shark teeth, mica, copper and silver. Social structure appears to have become increasingly complex, with some status differentiation evident in burials. It was in the Middle Woodland period (c.300 B.C. to A.D. 900) that distinctive trends or 'traditions' evolved in different parts of Ontario for the first time. The Middle Woodland tradition found in eastern and south-central Ontario has become known as 'Point Peninsula' (Spence, Pihl and Murphy 1990:157). Investigations of sites with occupations dating to this time period have allowed archaeologists to develop a better picture of the seasonal round followed in order to exploit a variety of resources within a home territory. Through the late fall and winter, small groups would occupy an inland 'family' hunting area. In the spring, these dispersed families would congregate at specific lakeshore sites to fish, hunt in the surrounding forest and socialize. This gathering would last through to the late summer when large quantities of food would be stored up for the approaching winter.

Towards the end of the Woodland period (circa A.D. 800) domesticated plants were introduced in areas to the south of the Canadian Shield. Initially only a minor addition to the diet, the cultivation of corn, beans, squash, sunflowers and tobacco gained economic importance for late Woodland peoples. Along with this shift in subsistence, settlements located adjacent to corn fields began to take on greater permanency as sites with easily tillable farmland became more important. Eventually, semi-permanent and permanent villages were built, many of which were surrounded by palisades, evidence of growing hostilities between neighbouring groups.

The proliferation of sites suggests an increase in the population of eastern Ontario, although the Ottawa area has yet to yield as many sites as other parts of south-eastern Ontario. Significant Middle Woodland components have been found at the Leamy Lake sites (Laliberté 2000) and at a recently discovered site in Vincent Massey Park (which also contains Late Archaic material) (Jacquie Fisher, personal communication 2011). Fragments of an early ceramic vessel were recovered from the Deep River Site (CaGi-1) on the Quebec side of the Ottawa River across from Chalk River (Mitchell 1963). The Meath Sites (BkGg-1 through BkGg-10), located on Mud Lake in the Muskrat River Basin south of Pembroke, have yielded a range of occupations from the Archaic through to the Middle Woodland (Robertson and Croft 1971, 1973, 1974, 1975; Croft 1986). The Wilbur Lake sites on the Bonnechere River near Eganville are centered around the Kant Site (BjGg-1), which is primarily related to aspects of the Middle Woodland cultural period, although they also contain elements spanning the Late Archaic to Late Woodland periods (Mitchell 1987, 1988, 1989, 1990, 1991; Pendergast 1957). Middle Woodland sites have been noted in the South Nation Drainage Basin and along the Ottawa River including the northwest part of Ottawa at Marshall's and Sawdust Bays (Daechsel 1980, 1981). Late Woodland sites have been recorded throughout the Ottawa Valley.

Three distinct tribal groups are known to have occupied eastern Ontario in the final decades prior to the arrival of Europeans. Agricultural villages, dating to A.D. 1400, of an Iroquoian people referred to as "proto-Huron" have been found in southern Hastings and Frontenac Counties (Pendergast 1972). By A.D. 1500, however, the easternmost settlements of the Huron were

located between Balsam Lake and Lake Simcoe. St. Lawrence Iroquois occupied the upper St. Lawrence River Valley. Finally, a number of Algonquin groups occupied the Ottawa Valley (Day and Trigger 1978:793).

The material culture and settlement patterns of the fourteenth and fifteenth century Iroquoian sites found in the Prescott area of Ontario are directly related to the Iroquoian-speaking groups that Jacques Cartier and his crew encountered in 1535 at Stadacona (Quebec City) and Hochelaga (Montreal Island) (Jamieson 1990:386). Following Cartier's initial voyages, subsequent journeys by Europeans found only abandoned settlements along the St. Lawrence River. At this time, there was a significant increase of St. Lawrence Iroquoian ceramic vessel types on Huron sites, and segments of the St. Lawrence Iroquois population may have relocated to the north and west either as captives or refugees (Wright 1966:70-71; Sutton 1990:54). These tumultuous events of the late sixteenth and early seventeenth centuries were certainly in part a result of the disruption of traditional trade and exchange patterns among all First Nation peoples brought about by the arrival of the French, Dutch and British along the Atlantic seaboard

### 3.1.3 Regional Post-Contact Cultural Overview

Samuel de Champlain was the first European to document his explorations of eastern Ontario, initially in 1613 and again in 1615. At this time he travelled from the Ottawa River up the Mississippi River to the south-east shore of Mississippi Lake and then overland along an Indian trail to the Rideau River. Champlain was preceded by two of his emissaries, Étienne Brûlé around 1610 and Nicholas de Vignau in 1611, and it is possible that they travelled portions of the Rideau River system before him. These and other French explorers and missionaries travelling in the region in the early seventeenth century encountered groups of people speaking different dialects of an Algonquian language, including the Matouweskarini along the Madawaska River to the west, the Kichespirini at Morrison Island, the Otaguottouemin along the Ottawa River northwest of Morrison Island, the Onontchataronon in the Gananoque River basin to the southwest, and the Weskarini in the Petite Nation River basin to the north (Pendergast 1999; Trigger 1976). These loosely aligned bands subsisted by hunting, fishing and gathering, and undertook limited horticulture.

Since at least the late sixteenth century, all of these Algonquin peoples were at war with the Mohawk Iroquois, the easternmost Five Nations Iroquois group, over control of the St. Lawrence River trade. While prolonged occupation of the region may have been avoided as a result of hostilities with Iroquoian speaking populations to the south, at least the northern reaches of the South Nation River basin were undoubtedly used as hunting territories by the Algonquin at this time.

The first centuries of contact between First Nations peoples and Europeans contributed to a period of significant change in the region. The endemic warfare of the age and severe smallpox epidemics in 1623-24 and again between 1634 and 1640 brought about drastic population decline among all First Nation peoples (Hessel 1993:63-65). Between 1640 and 1650, French unwillingness to provide direct military support against their natural enemy, the Mohawk, led to the defeat and dispersal of the Algonquin and Huron by the Five Nation Iroquois of New York State (Trigger 1976:610, 637-638). Survivors of the various groups often coalesced in

settlements to the north and west of the Ottawa Valley, and at the French posts of Montreal, Sillery, and Trois Rivières. In the absence of these groups, the Cayuga came to occupy several sites along the north shore of Lake Ontario. Later, in the eighteenth and early part of the nineteenth centuries, Mississauga groups came to settle large parts of the region lying to the south of the height of land separating the Ottawa River watershed from that of Lake Ontario.

In the wake of Champlain's travels, the Ottawa River (originally known as the Grand River) became the principal route to the interior for explorers, missionaries, and fur traders. Throughout the seventeenth and eighteenth centuries this route remained an important link in the French fur trade. In 1673, Fort Frontenac was established at the present site of Kingston, and a fort was erected at La Presentation (Ogdensburg, New York) in 1700. These forts were constructed to solidify the French hold on the lucrative fur trade and to enhance their ties with the local Native population. The recovery of European trade goods (i.e. iron axes, copper kettle pieces and glass beads) from Native sites throughout the Ottawa River drainage basin provides evidence of the extent of contact between Natives and the fur traders during this period. Since the fur trade in New France was Montreal-based, Ottawa River navigation routes were of strategic importance in the movement of trade goods inland and furs down to Montreal. The establishment of Fort Frontenac undoubtedly led to an increase in the use of the Cataraqui River system. As a major tributary of the Ottawa and with headwaters close to those of the Cataraqui, it is likely that the Rideau system was also used throughout this period by both Natives and Europeans. The English continued to use the Ottawa River as an important transportation corridor after they took possession of New France following the end of the Seven Years War in 1763.

Settlement in the Ottawa area was not actively encouraged by the colonial government until the late eighteenth century. With the end of the American Revolutionary war in 1783, an exodus of Loyalists and disbanded soldiers moving north across the St. Lawrence required the acquisition and settling of new lands. In response, the British Government sought to obtain the rights to lands in eastern Ontario by negotiating treaties with local First Nations groups. The first such treaty, known as the "Crawford Purchase" was negotiated in 1783 with the Mississauga for a huge parcel of land that would become the Counties of Glengarry, Stormont, Dundas, Prescott, Russell, Leeds, Grenville and Prince Edward, the southern parts of Frontenac, Lennox, Addington and Hastings. United Empire Loyalists began settling the newly surveyed townships along the north shore of the St. Lawrence River and Lake Ontario the following year.

The Ottawa River shore of Cumberland Township was first surveyed in 1789. Much of the most accessible land fronting the Ottawa River was granted to United Empire Loyalists; however, they remained absentee land owners having already settled along the north shores of the St. Lawrence River or Lake Ontario. The scarcity of roads and poor state of transportation beyond the Ottawa River shore slowed settlement in the rear of the township (Belden 1881).

The first recorded settlers of Cumberland Township were Abijah Dunning and his sons, who arrived in 1801 and settled on the future site of the Village of Cumberland along the Ottawa River. They were soon followed by Amable Foubert, who purchased part of the Dunning property and set up a trading post in 1807 (Belden 1881). With the failure of the Crown to

complete any of the promised improvements to roads and bridges in the area the Dunnings left the area in 1812. By 1817 William Dunning, a son of Abijah, had returned to the area, but in 1822 there were still only six settlers recorded on the waterfront lots of Cumberland Township.

Settlement in the township was at first concentrated in the Village of Cumberland. The village was popular as an early fur trading post because of its location across from the confluence of the Lievre and Ottawa Rivers and in the mid nineteenth century developed into a major forwarding centre. The rear of the township was sparsely populated; the inland community of Bear Brook was first settled in 1815 and was officially created in 1834. The potential for water power was likely the impetus for the development of this community along Bear Brook creek, as by 1848 the only mill in Cumberland Township was located in Bear Brook (Belden 1881).

By 1840, the 'Forced Road' had been established between Cumberland Village in the north of the township, south through Bear Brook and on into Russell Township. Established by quarter session, this road can be seen on a map included in the 1840 assessment roll and on the later Belden map (1881) of the Township of Cumberland (Figure 6 and Figure 7).

The Village of Vars was originally named Bear Brook Station as it was situated at the junction of the Forced Road and the Canadian Atlantic Railway line, four kilometers from the established village of Bear Brook. The rail line was laid between 1881 and 1882, and with its location on a railway stop, the village of Vars grew rapidly. The village soon had hotels, storage sheds, cattle yards, stores, tradesmen, machinery dealers, churches, a community hall, schools, a cheese factory, a bakery and a bank (NPI 2010:8-9). With the establishment of a Post Office in 1886 the name of the village was changed from Bear Brook Station to Vars to avoid confusion between the two communities (CTHS 2005). The importance of the railway and village diminished, through the twentieth century with improvements to the roadways and the ability for people in the area to commute to the City of Ottawa for employment (NPI 2010:9).

### 3.1.4 Property History

The following discussion will focus on the main developments of the nineteenth and twentieth centuries, particularly as they relate to the archaeological potential of the study area. Documents reviewed in order to develop the property history of the study areas include the available nineteenth and twentieth century maps.

No structures appear within the study area on the 1840 assessment role map (see Figure 6) or the 1881 Belden map of the Township of Cumberland (see Figure 7); however, the atlas was sold based on subscription and not all structures would appear on this map.

On the 1908 Russell Sheet topographic map the study area is shown to be in a heavily wooded area, with one structure adjacent to the study area (Figure 8). On the 1951 topographic map there are five structures near the study area with two of them potentially falling within the study area, and a portion of the land has been cleared of trees (Figure 9). An aerial photograph of the study area dating to 1976 shows a barn and out building within the limits of the study area (Figure 10). These structures are more clearly visible in a 1991 aerial photograph (Figure 11) and are evident on a 2000 topographic map (Figure 12). It appears that these structures were part

of a twentieth century farmstead. The associated farm house is located to the south on Part 4 of Plan 4R-20412 (see Figure 3). The barn and out building were demolished sometime between 2005 and 2008.

### 3.2 Archaeological Context

This section describes the environmental and archaeological context of the study area which, combined with the historical context outlined above, provides the necessary information to assess the archaeological potential of the property.

#### 3.2.1 Previously Recorded Archaeological Sites

The primary source for information regarding known archaeological sites is the *Archaeological Sites Database* maintained in Ontario by the Ministry of Tourism, Culture and Sport (MTCS). The database largely consists of archaeological sites discovered by professional archaeologists conducting archaeological assessments required by legislated processes under land use development planning (mostly since the late 1980s). A request for a search of the database for all registered sites located within a one kilometre radius of the study area was made and notification from the *Archaeological Data Coordinator* indicated that no registered archaeological sites are located within the boundaries of the study area. No registered sites were found located within a one kilometre radius of the study area. The nearest registered site is located approximately 12 km to the southeast.

#### 3.2.2 Previous Archaeological Research

A preliminary indication of the archaeological potential of the study area is indicated by its inclusion in *The Archaeological Resource Potential Mapping Study of the Regional Municipality of Ottawa-Carleton: Technical Report* (or *Archaeological Master Plan*) (Archaeological Services Inc. & Geomatics International Ltd. 1999b).

An archaeological assessment has been conducted in the study area by Golder Associated Ltd. (Golder) as part of an assessment of a larger area for the village of Limoges potable water and wastewater systems expansion project (Golder 2011). The broad assessment conducted by Golder prevents a comprehensive determination of the archaeological potential for the current study area. The only previous archaeological report directly relevant to the study area was an archaeological and heritage study for the Village of Vars (Daechsel 1988); however the consultant foundation which performed the study is now defunct and their reports are inaccessible.

#### 3.2.3 Identified Local Cultural Heritage Resources

The recognition or designation of cultural heritage resources (here referring only to built heritage features and cultural heritage landscapes) may provide valuable insight into aspects of local heritage, whether identified at a local, provincial, national, or international level. Some of these cultural heritage resources may be associated with significant archaeological features or deposits. Accordingly, the Stage 1 archaeological assessment included the compilation of a list of cultural

heritage resources that have previously been identified within or immediately adjacent to the current study area. The following sources were consulted:

- Federal Heritage Buildings Review Office online Directory of Heritage Designations (http://www.pc.gc.ca/eng/progs/beefp-fhbro/index.aspx);
- Canada's Historic Places website (http://www.historicplaces.ca/en/home-accueil.aspx);
- Ontario Heritage Properties Database (http://www.hpd.mcl.gov.on.ca/scripts/ hpdsearch/ english/default.asp); and,
- Ministry of Tourism, Culture and Sport's List of Heritage Conservation Districts (http://www.mtc.gov.on.ca/en/heritage/heritage_conserving_list.shtml).
- Ontario Heritage Trust website (www.heritagetrust.on.ca/Resources-and-Learning/Online-Plaque-Guide.aspx)

No previously identified cultural heritage resources were found to be located within or immediately adjacent to the present study area.

### 3.2.4 Heritage Plaques and Monuments

A search of several listings of plaques and monuments was undertaken, given that these markers typically indicate some level of heritage recognition. No plaques or monuments were noted within or adjacent to the study area.

### 3.2.5 Cemeteries

No known nineteenth century cemeteries were located in or adjacent to the study area, although there is always the possibility of unrecorded early family burial plots on rural properties.

### 3.2.6 Local Environment

The assessment of present and past environmental conditions in the study area is a necessary component in determining the potential for past occupation of the property. Factors such as nearness to water, soil types, forest cover and topography all contribute to the suitability of the site for the production of food sources for pre-Contact peoples. As well, an examination of the geophysical evolution of the study area provides an indication of the possible range in age of pre-Contact sites that could be found on the property.

The study area is situated within the Russell and Prescott Sand Plains physiographic region which has a level surface with an elevation of approximately 76 m above sea level. (Chapman & Putnam 1984:207). These sand deposits were originally part of a delta of the early Ottawa River. Geologic mapping at a scale of 1:250,000 shows the bedrock geology of the study area to be within the Carlsbad Formation comprised of dark grey shale interbedded with fossiliferous calcareous siltstone and silty bioclastic limestone, which overlies the Billings Formation. The surficial geology for the study area falls within deltaic and estuarine deposits comprised of medium to fine grained sand. Dunes that have generally been reworked by wind are located to the west and northwest of the study area (Figure 13). Soil mapping of the area indicated that the study area falls within the St. Thomas soil series, specifically ST5, which is characterized by

medium to strongly acid sand marine, fluvial or eolian materials with dominantly poor drainage in combination with significant areas of good drainage. The topography ranges from gently sloping to undulating (Schut and Wilson 1987: 70-71; Figure 14).

The study area lies within the Upper St. Lawrence sub-region of the Great Lakes-St. Lawrence Forest Region. The deciduous trees characterizing this sub-region include sugar and red maples, beech, basswood, white ash, large tooth aspen, yellow birch, and red and burr oaks, while coniferous trees include eastern hemlock, eastern white pine, white spruce and balsam fir (Rowe 1972: 94). Much of the region was cleared of the original forest during the nineteenth century through lumbering and agricultural development.

The study area lies within the South Nation watershed. The nearest sources of water to the study area are Shaws Creek, which is situated approximately 650 metres to the west, and Bear Brook Creek, which is approximately 2.4 kilometers to the north

The subject property lies within a Class 4 area, having moderate capability for ungulates. and a Class 7 area, having negligible or nonexistent capability for waterfowl (Canada Land Inventory 1970).

### 3.2.7 Property Inspection

In order to gain first-hand knowledge of the geography, topography, and current conditions of the study area and to inform an evaluation of archaeological potential, a preliminary property inspection was undertaken on September 12th, 2013. The property inspection was conducted according to the archaeological fieldwork standards outlined in *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011). The weather was warm and overcast, permitting visibility of land features and the identification and documentation of features influencing archaeological potential.

Field conditions and features influencing archaeological potential were documented with digital photographs. The complete photographic catalogue is included as Appendix 1 and the locations and orientations of all photographs used in this report are shown in Figure 15. As per the *Terms and Conditions for Archaeological Licences* in Ontario, curation of all field notes, photographs, and maps generated during the Stage 1 archaeological assessment is being provided by Past Recovery Archaeological Services Inc. pending the identification of a suitable repository. An inventory of the records generated by the assessment is provided below in Table 1.

The study area consisted of an irregular plot of open grass field approximately 1.77 hectares in size. This property is bounded by private residences to the east, south and west, and by a wooded lot to the north. The entrance to the bulk of the lot consists of an area 97.5 m by 30 m fronting onto Rockdale Road. This area is comprised of a manicured lawn and gravel laneway (Figure 16). The bulk of the lot consists of open field with long grass and a few isolated trees (Figures 17 to 20). The western edge of the lot is lined with trees, separating the open field from the backyards of the adjacent private residences (Figure 21). The topography of the study area is flat. No areas of extensive disturbance were noted on the property.

**Table 1. Inventory of the Stage 1 Documentary Record.**

| Type of Document | Description | Number of Records | Location |
|---|---|---|---|
| Photographs | Digital photographs documenting the Stage 1 property inspection | 8 photographs | On PRAS computer network – file PR13-27 |
| Field Notes | Notes on the Stage 1 property inspection | 1 page | PRAS office - file PR13-27 |
| Map | Maps with additional annotations | 1 map | PRAS office - file PR13-27 |

## 3.3 Analysis and Conclusions

### 3.3.1 Determination of Archaeological Potential

A number of factors are used to determine archaeological site potential. For pre-Contact sites criteria are principally focused on topographical features such as the distance from the nearest source of water and the nature of that water body, areas of elevated topography including features such as ridges, knolls and eskers, and the types of soils found within the area being assessed. For historic sites, the assessment of archaeological site potential is more reliant on historical research (land registry records, census and assessment rolls, etc.), cartographic and aerial photographic evidence and the inspection of the study area for possible above ground remains or other evidence of a demolished historical structure. Also considered in determining archaeological potential are known archaeological sites within or in the vicinity of the study area.

Archaeological assessment standards established by MTCS (*Standards and Guidelines for Consultant Archaeologists*, 2011) set minimum distances to be tested from features indicating archaeological potential. Areas that are considered to have pre-Contact site potential and therefore require testing include lands within 300 metres of water sources, wetlands or elevated features in the landscape including former river scarps. Areas of historic archaeological site potential requiring testing include locations within 300 metres of sites of early Euro-Canadian settlement and 100 metres of historic transportation corridors. Further, areas within 300 metres of registered archaeological sites, designated heritage buildings or structures/locations of local historical significance are considered to have archaeological potential and require testing. These guidelines were refined and applied to the study area after the research and site inspection described above, generating the Stage 1 recommendations presented below in Section 3.3.2.

The review of the local environmental conditions and of the historical development of the property, combined with the results of the site reconnaissance, determined that the study area does not exhibit characteristics that indicate potential for the presence of archaeological resources associated with pre-Contact settlement and/or land uses.

The study area does, however, exhibit characteristics that indicate potential for the presence of archaeological resources associated with post-Contact settlement and/or land uses. Specifically,

a portion of the property is within 100 m of the Forced Road, a historic transportation corridor. Thus, this Stage 1 assessment supports the determination of archaeological potential as indicated by the City of Ottawa *Archaeological Master Plan* (ASI 1999; see Figure 5).

Even though only a portion of the property falls within 100 m of the Forced Road the entire property must be subject to a Stage 2 archaeological assessment based on Section 1.4.2 and Standard 1 of Section 2.1 of the *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011). The property does not meet any of the criteria that would exempt portions of the study area from property survey, as defined in Standard 2 of Section 2.1 of the *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011).

### 3.3.2 Stage 1 Recommendations

The results of the Stage 1 assessment form the basis for the following recommendations:

1) Should the proposed residential apartment building construction proceed at 5574 Rockdale Road, all portions of the study area should be subjected to Stage 2 archaeological assessment.

2) Any future Stage 2 archaeological assessment should be undertaken by a licensed consultant archaeologist, in compliance with *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011) prior to any planned construction disturbance below the current grade. The current property conditions are amenable to ploughing and pedestrian survey, as outlined in section 2.1.1 of the *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011), and this is the recommended method for this project. Any areas of the property that cannot be ploughed should be subject to test pit survey as outlined in section 2.1.2 of the *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011)

The reader is referred to Section 5.0 below to ensure compliance with the *Ontario Heritage Act* as it may relate to this project.

# 4.0 STAGE 2 ARCHAEOLOGICAL ASSESSMENT

## 4.1 Fieldwork Methodology

The Stage 2 archaeological fieldwork was completed over the course of one day (September 16th, 2013) with a crew of seven people. Field work was conducted according to the archaeological fieldwork standards outlined in *Standards and Guidelines for Consultant* (MCTS 2011). Weather and lighting conditions were good with partially overcast skies providing good visibility, ideal conditions for the identification, documentation, and where appropriate, recovery of archaeological resources**.**

The limits of the subject property were determined in the field using maps of the property provided by Rollin Developments, which allowed the study area to be referenced in relation to features such as limits of ploughed fields, laneways, and Rockdale Road. Using these maps, PRAS staff were able to ensure full coverage of the subject property.

Field activities were recorded through field notes and digital photographs. A catalogue of the material generated through the Stage 2 property survey is included below in Table 2. Sample test pits were documented with digital photographs. The complete photographic catalogue is included as Appendix 1, and the locations and orientations of all photographs used in this report are shown in Figure 22.

Conditions of the study area required that both pedestrian survey and shovel test pits were performed to ensure complete coverage (Figure 23).

As per MTCS standards, all portions of the subject property consisting of actively or recently cultivated land were assessed by means of pedestrian survey (Figure 24 and Figure 25). This consisted of approximately 80% of the study area. Prior to survey all ploughable lands were ploughed with a conventional mouldboard plough. Direction was provided to the project planner to instruct the contractor who carried out the ploughing to plough deep enough to ensure total topsoil exposure, but not deeper than previous ploughing. In all instances, a surface visibility of at least 80% was achieved in pedestrian surveyed fields (Figure 26). Ploughed areas were weathered by several heavy rainfalls to improve the visibility of archaeological resources. The pedestrian survey was conducted at five metre transects, with PRAS crew systematically walking ploughed areas and examining the ground surface for archaeological resources. If archaeological resources were found, these items would have been flagged and the area re-walked more intensively at one metre intervals to clearly define the limits of the scatter of material. All diagnostic artifacts would have been collected for analysis. Each scatter would have been assigned a sequential find spot number in order of appearance. All find spots would have been recorded on a site plan.

The area around the laneway accessing the property consisted of manicured lawn (Figure 27). This area was shovel tested at five metre intervals (Figure 28). All test pits were hand excavated by shovel and trowel with the backdirt screened through six millimetre mesh. Shovel test pits were at least 30 centimetres in diameter and excavation continued five centimetres into sterile subsoil. All pits were examined for stratigraphy, cultural features and artifacts, as well as

evidence of deposited fills. All test pits were backfilled once any recording had been completed. If there were positive test pits, they would have been assigned test pit numbers in the order of excavation. All positive test pits would have been ringed with additional test pits on an intensified 2.5 metre grid; intensification continuing as long as items were being recovered. All artifacts would have been collected and bagged by test pit number, and the locations of all positive test pits would have been recorded on a site plan.

**Table 2. Inventory of the Stage 2 Documentary Record.**

| Type of Document | Description | Number of Records | Location |
|---|---|---|---|
| Photographs | Digital photographs documenting the Stage 2 property survey | 35 photographs | On PRAS computer network – file PR13-27 |
| Field Notes | Notes on the Stage 2 property survey | 1 page | PRAS office - file PR13-27 |

### 4.2 Analysis and Conclusions

No significant archaeological materials were recovered during the Stage 2 archaeological assessment of 5574 Rockdale Road, Vars, Ontario. A small amount of twentieth century refuse was encountered in the vicinity of the former barn and outbuilding identified in the Stage 1 assessment (see Figure 11).

The typical soil stratigraphy across the study area consisted of 15 to 20 cm of dark brown sandy loam topsoil over light brown sandy loam subsoil (Figure 29). This soil profile is consistent with the ploughed section of the study area (see Figure 26).

Fill deposits were recognized in two locations in the study area (Figure 30). The area of the laneway, subjected to shovel test pit survey, showed evidence of fill in the eastern end of the area near Rockdale Road, which tapered out towards the western end of this area. The fill deposit consisted of mottled greyish brown silty clay with less than 5% limestone gravel inclusions. It ranged in thickness from ca. 25 cm to 10 cm (Figures 31 and 32). The second fill deposit was noted in the ploughed section of the study area. The fill consisted of dark brown clay loam with 5% limestone gravel inclusions and covered an area approximately 80 by 100 m in size (Figure 33).

No artifacts or features of cultural heritage value or interested were identified during the Stage 2 field assessment.

### 4.4 Stage 2 Recommendations

This report forms the basis for the following recommendation:

1) There are no further archaeological concerns associated with the study area.

The reader is also referred to Section 5.0 below to ensure compliance with the *Ontario Heritage Act* as it may relate to this project.

## 5.0 ARCHAEOLOGICAL COMPLIANCE

In order to ensure compliance with the *Ontario Heritage Act*, the reader is advised of the following:

1) This report is submitted to the Minister of Tourism, Culture and Sport 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, Culture and Sport, 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.

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

3) 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*.

4) 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.

5) 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.

## 6.0 LIMITATIONS AND CLOSURE

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

This report has been prepared for the specific site, design objective, developments and purpose prescribed in the client proposal and subsequent agreed upon changes to the contract. The factual data, interpretations and recommendations pertain to a specific project as described in this report and are not applicable to any other project or site location.

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

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

The documentation related to this archaeological assessment will be curated by Past Recovery Archaeological Services Inc. until such a time that arrangements for their ultimate transfer to an approved and suitable repository can be made to the satisfaction of the project owner(s), the Ontario Ministry of Tourism, Culture and Sport and any other legitimate interest group.

We trust that this report meets your current needs. If you have any questions of if we may be of further assistance, please do not hesitate to contact the undersigned.

Brenda Kennett, M.A.
Principal
Past Recovery Archaeological Services Inc.

## 7.0 REFERENCES

Archaeological Services Inc. & Geomatics International Inc.
1999a **The Archaeological Resource Potential Mapping Study of the Regional Municipality of Ottawa-Carleton: Planning Report**. Archaeological Master Plan study prepared for the Regional Municipality of Ottawa-Carleton, on file, City of Ottawa & Ministry of Culture, Toronto.
1999b **The Archaeological Resource Potential Mapping Study of the Regional Municipality of Ottawa-Carleton: Technical Report**. Archaeological Master Plan study prepared for the Regional Municipality of Ottawa-Carleton, on file, City of Ottawa & Ministry of Culture, Toronto.

Belden, H. Co.
1881 **Prescott and Russell Sipplement to the Illustrated Atlas of the Dominion of Canada**. Reprinted by Richardson, Bond & Wright LTd. (1972), Owen Sound, Ontario.

Bond, C.C.J.
1968 **The Ottawa Country.** National Capital Commission, Ottawa.

Canada Land Inventory
1970 **Land Capability Classification for Wildlife**. The Canada Land Inventory. Report No. 7. Environment Canada. Accessed online at Agri Food Canada. www.agr.gc.ca

Chapman, L.J. and D.F. Putnam
1984 **The Physiography of Southern Ontario.** 3rd edition. Ontario Geological Survey, Special Volume 2. Toronto, Ministry of Natural Resources.

Clermont, Norman, C. Chapdelain and J. Cinq-Mars, eds.
2003 **Ile aux Allumettes**. Collection Paleo-Quebec 2003. Musée Canadien des civilizations, Gatineau.

Croft, D.J.A.
1986 **Untitled Field Notes on the McLaren Site**. Documents on file, Ministry of Tourism, Culture and Sport, Toronto.

Cumberland Township Historical Society
2005 **History of Cumberland Township**. http://www.cths.ca/english/7/7-1.html

Daechsel, Hugh
1988 **A Heritage and Archaeological Study of the Village of Vars, Cumberland Township, Ottawa Carleton Region, Water Transmission**. Report on file, Ministry of Tourism, Culture and Sport, Toronto.
1981 **Sawdust Bay-2: The Identification of a Middle Woodland Site in the Ottawa Valley**. Unpublished M.A. Thesis, Department of Anthropology, McMaster University.

Daechsel, Hugh
1980 **An Archaeological Evaluation of the South Nation River Drainage Basin**. Report on file, Ontario Ministry of Tourism, Culture and Sport, Toronto.

Day, G.M. and Bruce G. Trigger
1978 "Algonquin." **Handbook of North American Indians, Volume 15, Northeast.** Ed. B.G. Trigger. Washington: Smithsonian Institution Press, pp 792-797.

Ellis, Christopher J., and Brian Deller
1990 Paleo-Indians. In **The Archaeology of Southern Ontario to A.D. 1650.** Ed. Chris Ellis and Neal Ferris. London: Occaional Publications of the London Chapter of the Ontario Archaeological Society, pp. 65-124.

Ellis, Christopher, Ian Kenyon and Michael Spence
1990 "The Archaic." **The Archaeology of Southern Ontario to A.D. 1650.** Ed. C. Ellis and N. Ferris. London: Occasional Publications of the London Chapter of the Ontario Archaeological Society, pp. 65-124.

Golder Associates Ltd.
2011 **Preliminary ''Desktop'' Archaeological Assessment Potable Water and Wasterwater Systems Expansion for the Village of Limoges, Ontario**. Report on file, Ministry of Tourism, Culture, and Sport, Toronto.

Heintz, W.A.
1936 **Historical Research for Cumberland Township**. Navan Women's Institute, Navan, Ontario.

Hessel, P.
1993 **The Algonkin Nation: The Algonkins of the Ottawa Valley, A Historical Outline.** Arnprior: Kichesippi Books.

Hough, J.L.
1958 **Geology of the Great Lakes.** Urbana: University of Illinois Press.

Jamieson, J.B.
1990 "The Archaeology of the St. Lawrence Iroquoians." **The Archaeology of Southern Ontario to A.D. 1650.** Ed. C. Ellis and N. Ferris. London: Occasional Publications of the London Chapter of the Ontario Archaeological Society, pp. 65-124.
1989 **An Inventory of the Prehistoric Archaeological Sites of Ottawa-Carleton**. Manuscript available through the Ontario Archaeological Society, Ottawa Chapter.

Kennedy, Clyde
1970 **The Upper Ottawa Valley.** Pembroke: Renfrew County Council.
1966 Preliminary Report on the MN6 Site. In **Contributions to Anthropology, 1963-1964**, Part I. National Museum of Canada Bulletin 206. Ottawa.

Kennedy, Clyde
1965 **Summary of 1965 Field Work in the Ottawa and Related Areas**. Report on file, Archives of the Canadian Museum of Civilization, Gatineau.
1964 **Activities in Renfrew and Pontiac Counties, 1964**. Report on file, Archives of the Canadian Museum of Civilization, Gatineau.
1962 Archaic Hunters in the Ottawa Valley. **Ontario History** 54(2):122-128.

Kinickinick Heritage Consultants
2004 **Stage 1 & 2 Archaeological Assessment of Proposed Central Canada Exhibition, Albion Road Site, Part Lots 24 and 25, Concession 3, Gloucester Township (Geo.), City of Ottawa**. Report on file, Ontario Ministry of Tourism, Culture and Sport, Toronto.
2003a **A Stage 1 & 2 Archaeological Assessment of Woodroffe Estates Part North Half Lot 16, Concession 2 Nepean (Geo.) Twp., City of Ottawa.** Report on file, Ontario Ministry of Tourism, Culture and Sport, Toronto.
2003b **Stage 1 & 2 Archaeological Assessment of a Proposed Subdivision in Honeygables, Lot 18 Broken Front Concession, Gloucester Twp. (Geo.), City of Ottawa.** Report on file, Ontario Ministry of Tourism, Culture and Sport, Toronto.

Laliberté, M.
2000 **Synthèse des recherches archéologiques dans le Parc du Lac Leamy 1993-1999**. Écomusée de Hull, Gatineau, Quebec.
1998 **Archaeological Resource Potential – Federal Lands in the National Capital Region**, Volume I. National Capital Commission, Ottawa.

Ministry of Tourism, Culture and Sport (MCTS)
2011 **Standards and Guidelines for Consultant Archaeologists.** Ministry of Tourism, Culture and Sport, Toronto.

Mitchell, B.M.
1991 **Untitled Report on Field Work Relating to the Wilbur Lake Sites**. Report on file, Ministry of Tourism, Culture and Sport, Toronto.
1990 Vinette-1: A Review of Origin and Development. **The Ottawa Archaeologist**, 17(2):9-13.
1988-1989 **Untitled Report on Field Work Relating to the Wilbur Lake Sites**. Report on file, Ontario Ministry of Tourism, Culture and Sport, Toronto.
1987 Archaeology of the Petawawa River: The Second Site at Montgomery Lake. **Michigan Archaeologist**, Vol. 15(1-2), pp 1-53.
1963 The Occurrence of Overall Corded Pottery in the Upper Ottawa Valley. **American Antiquity**, 29(1):114-115.

Neighborhood Planning Initiative
2010 **Vars Neighbourhood Plan**. City of Ottawa.

Ontario Geological Survey
2003a **1:250,000-scale Bedrock Geology of Ontario**. Ontario Geological Survey, Miscellaneous Release-Data 126.
2003b **Surficial Geology of Southern Ontario**. Map.

Pendergast, J.
1999 The Ottawa River Algonquin Bands in a St. Lawrence Iroquoian Context. **Canadian Journal of Archaeology** 23 (1&2):63-136.
1972 "The Lite Site: An Early Southern Division Huron Site near Belleville, Ontario." **Ontario Archaeology**. No. 17:24-61.
1957 **Report on the Kant Site, BjGh-1**. Report on file, Archives of the Canadian Museum of Civilization, Gatineau.

Robertson, D.S. and Croft D.J.A.
1971, 1973, 1974, 1975
**Untitled field notes relating to the Mud Lake Sites. Report on file**, on file, Ministry of Tourism, Culture and Sport, Toronto.

Rowe, J.S.
1972 **Forest Regions of Canada.** Department of Northern Affairs and National Resources, Forestry Branch, Bulletin 123, Ottawa.

Schut, L.W. & E.A. Wilson
1987 **The Soils of the Regional Municipality of Ottawa-Carleton (excluding the Ottawa Urban Fringe), Volume 1**. Report No. 58 of the Ontario Institute of Pedology. Toronto: Ontario Ministry of Agriculture and Food.

Spence, M., R. Pihl, and C. Murphy
1990 "Cultural Complexes of the Early and Middle Woodland Periods." **The Archaeology of Southern Ontario to A.D. 1650.** Ed. C. Ellis and N. Ferris. London: Occasional Publications of the London Chapter of the Ontario Archaeological Society, pp 65-124.

Sutton, R.
1990 **Hidden Amidst the Hills: Middle and Late Iroquoian Occupations in the Middle Trent Valley.** Occasional Papers in Northeastern Archaeology No. 3. Dundas: Copetown Press.

Trigger, Bruce.G.
1976 **The Children of Aataensic: A History of the Huron People to 1660.** 2 Volumes. Montreal: McGill-Queen's University Press.
1982 **Prehistoric Peoples of the Rideau Waterway**. In Archaeological Historical Symposium, October 2-3, 1982, Rideau Ferry, Ontario. Ed. By F.C.L. Wyght, Performance Printing, Smith Falls.

Watson, Gordon
1982 **Prehistoric Peoples of the Rideau Waterway.** In Archaeological Historical Symposium, October 2-3, 1982, Rideau Ferry, Ontario. Ed. by F.C.L. Wyght, Performance Printing, Smith Falls.

Wright, James
1966 **The Ontario Iroquois Tradition.** National Museum of Canada, Bulletin No. 210.

**PRIMARY DOCUMENTS:**

**Queen's University Map Library**

1908 First edition (one-inch-to-one-mile) NTS Map Sheet 31G06 - Russell
1951 Second edition (1 to 50000) NTS Map Sheet 31G06W Russell
2000 Seventh edition (1 to 50000) NTS Map Sheet 31G06 Russell

## 8.0 ILLUSTRATIONS (Images and Maps)

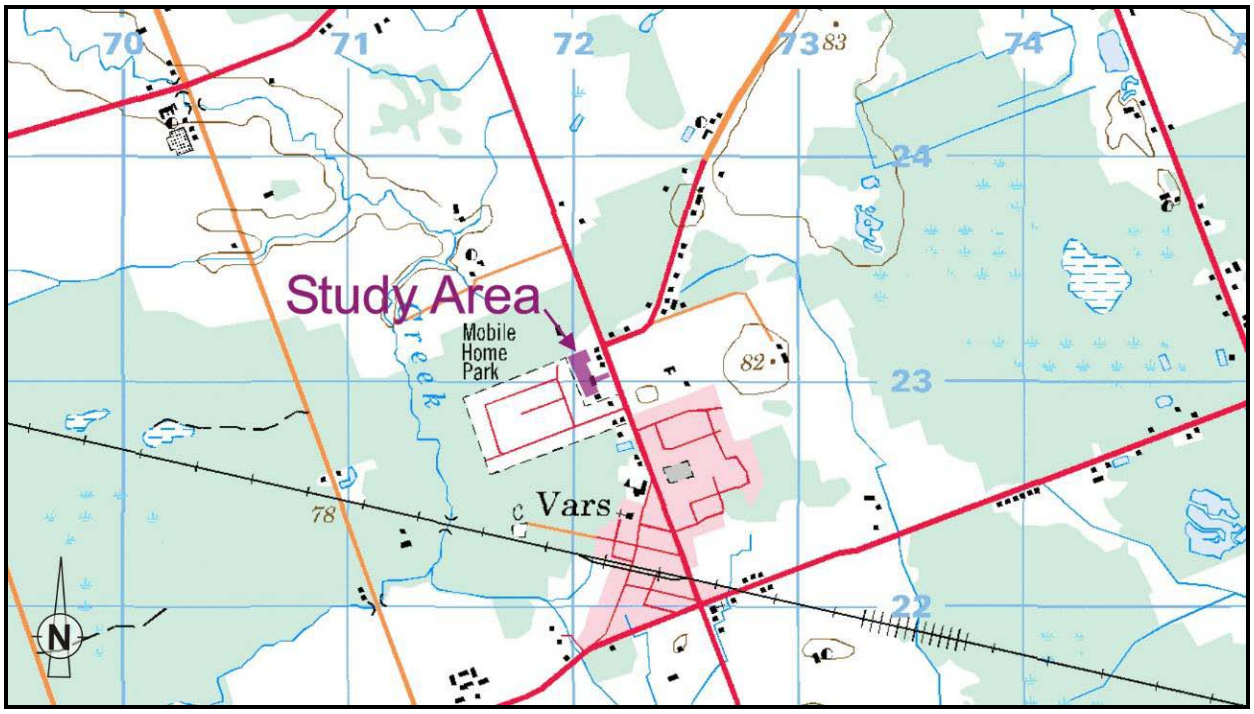


**Figure 1. Location of the study area.** (NTS 1:50,000, 31G06-Russell; 2000)

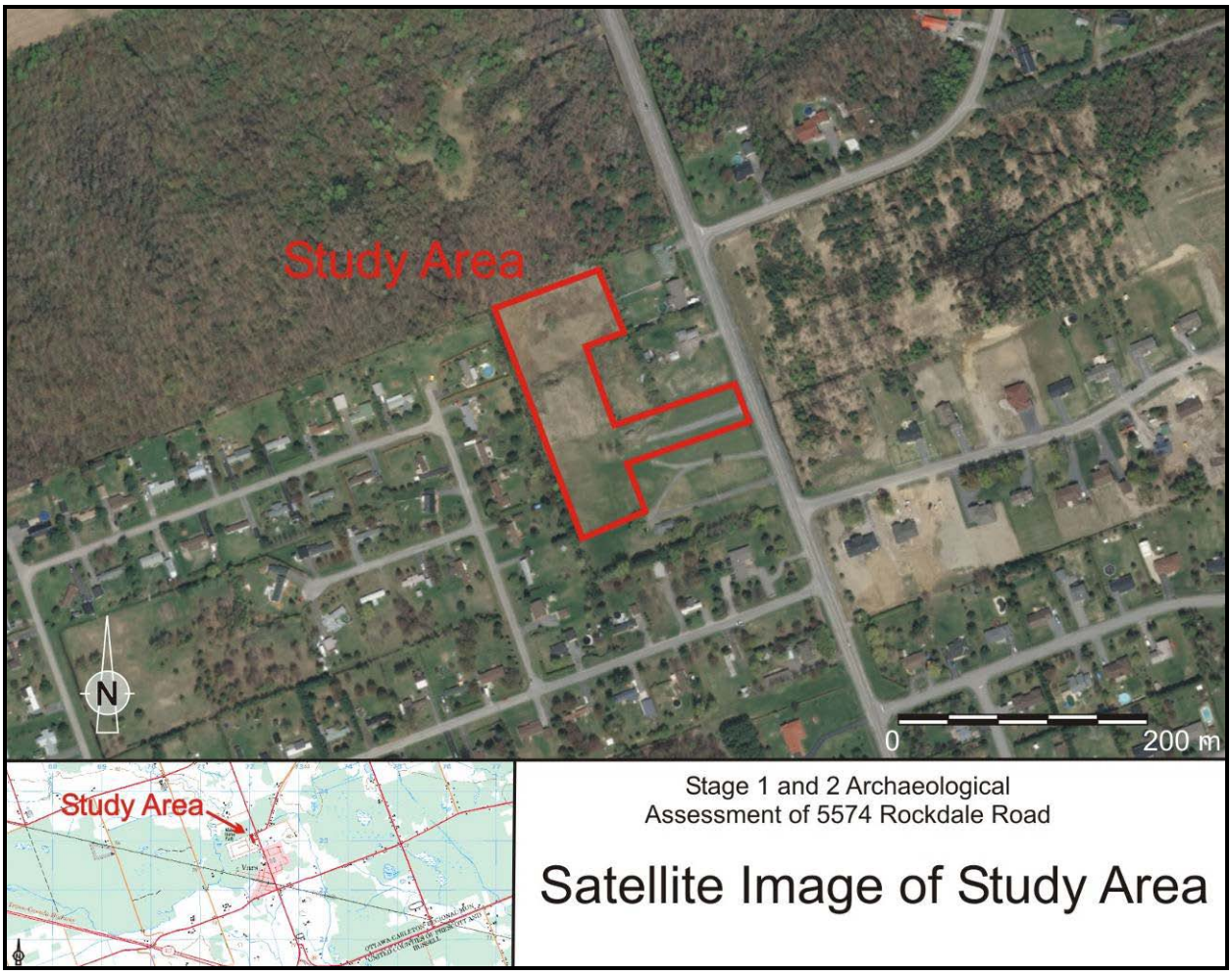


**Figure 2. Plan of the study area.** (base 2008-2009 DRAPE satellite imagery)

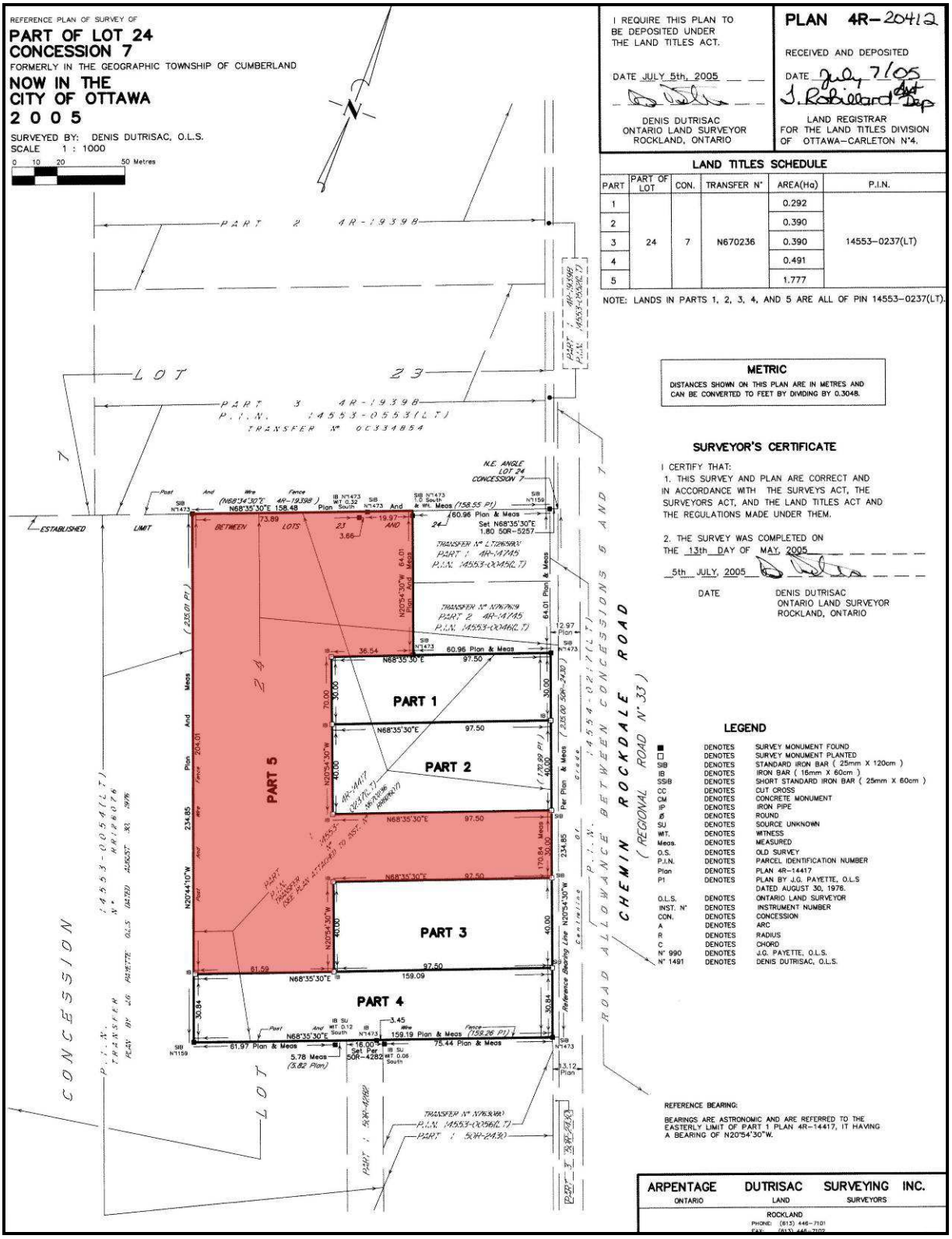


**Figure 3. Survey of the study area.** (base map supplied by Rollin Developments) Study area highlighted in red.

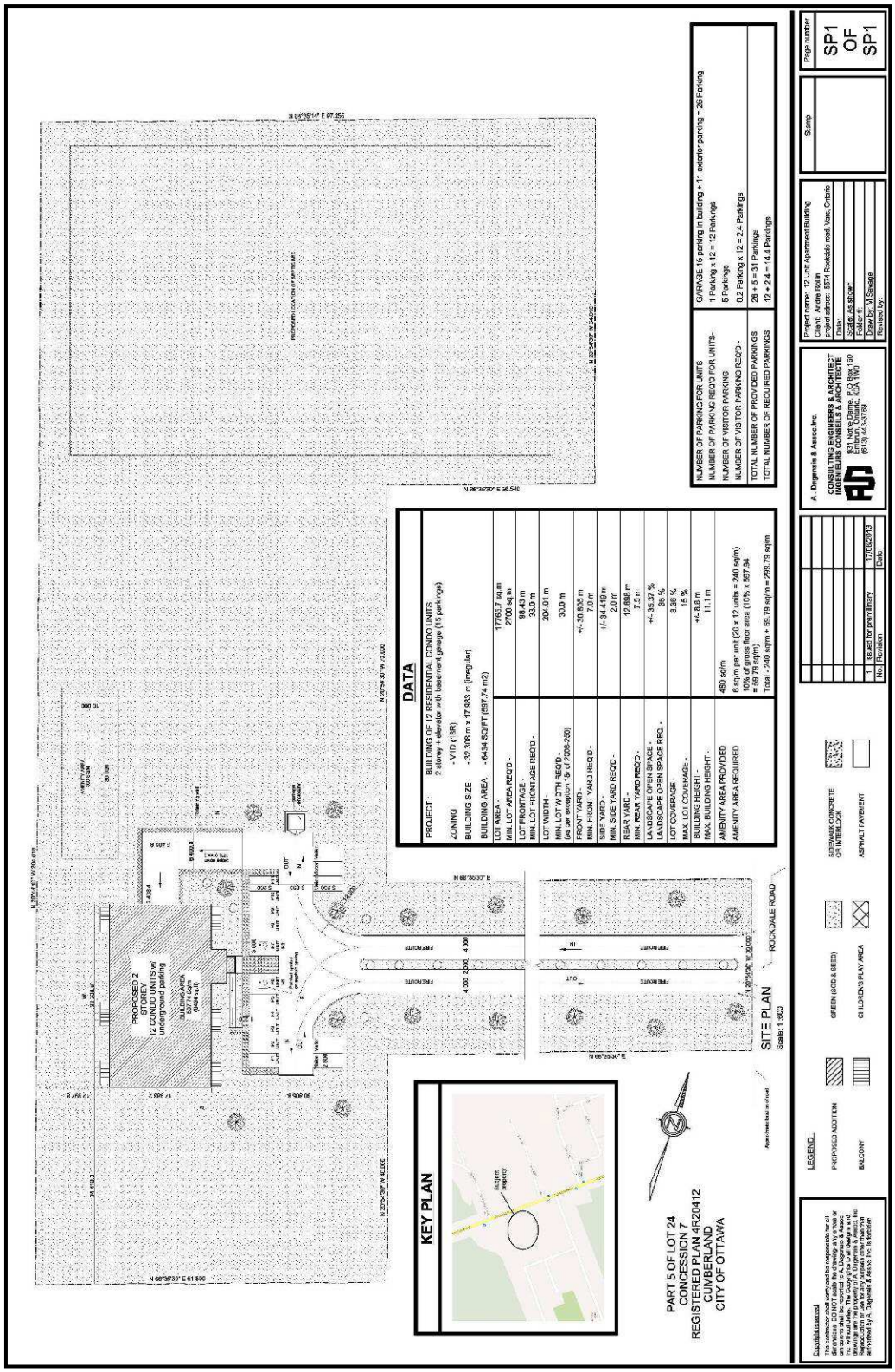


**Figure 4. Plan of the proposed development for the study area.** (Rollin Developments)

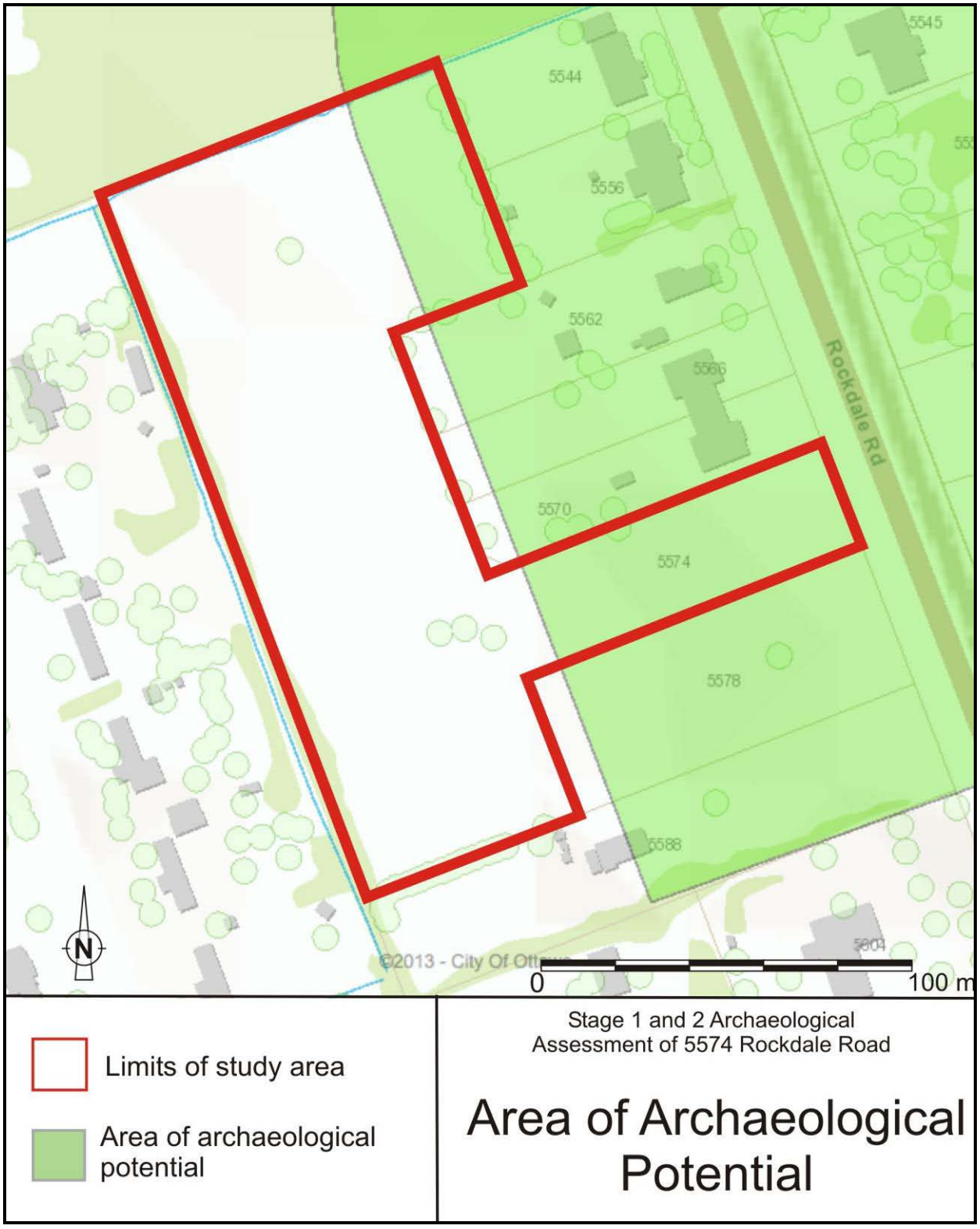


**Figure 5. Ottawa master plan for archaeological potential covering portions of the study area.** (base map geoOttawa 2013) Study area outlined in red.

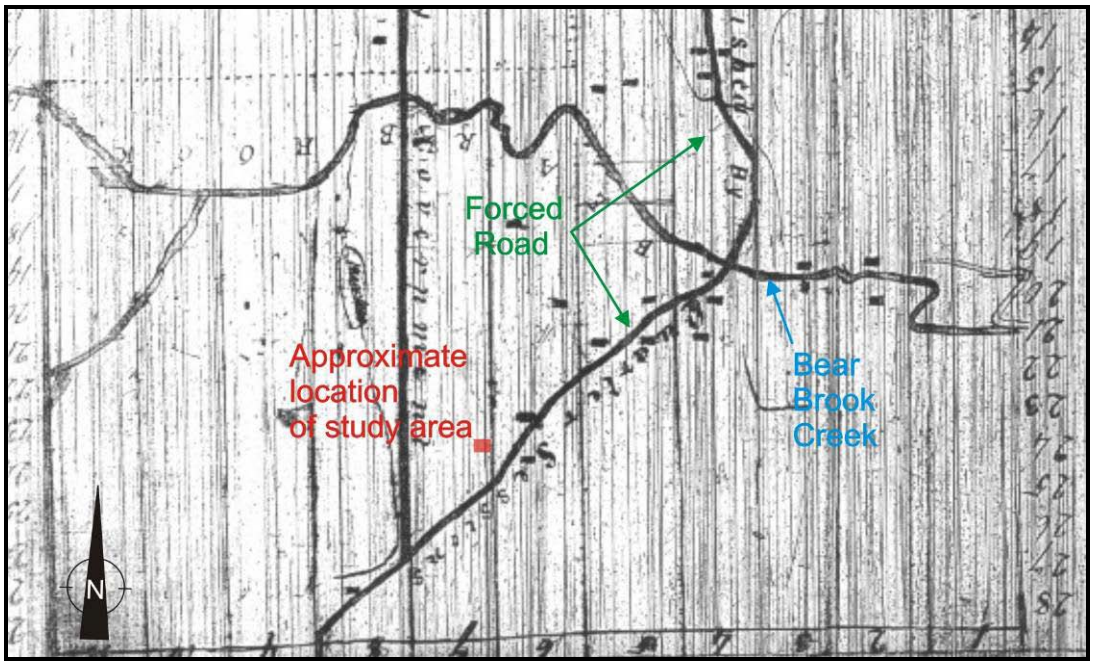


**Figure 6. Southern portion of the map of the Township of Cumberland from the 1840 assessment roll.**

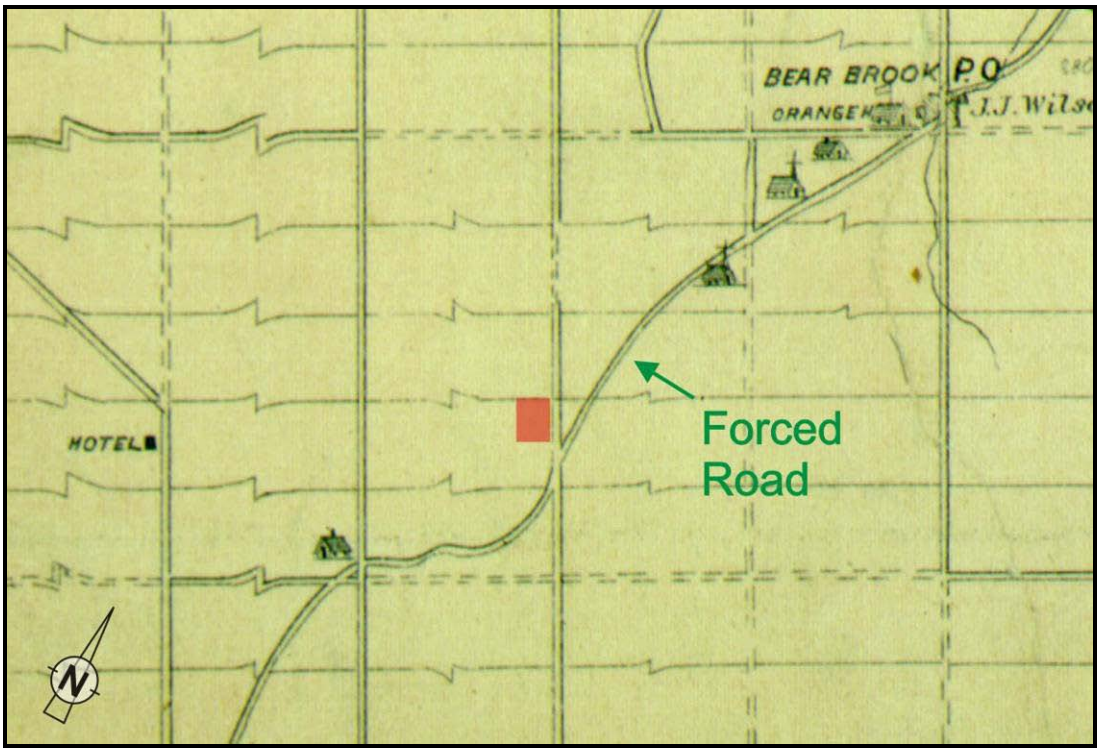


**Figure 7. Portion of the Belden map of Cumberland Township.** (Belden 1881) Study area marked in red.

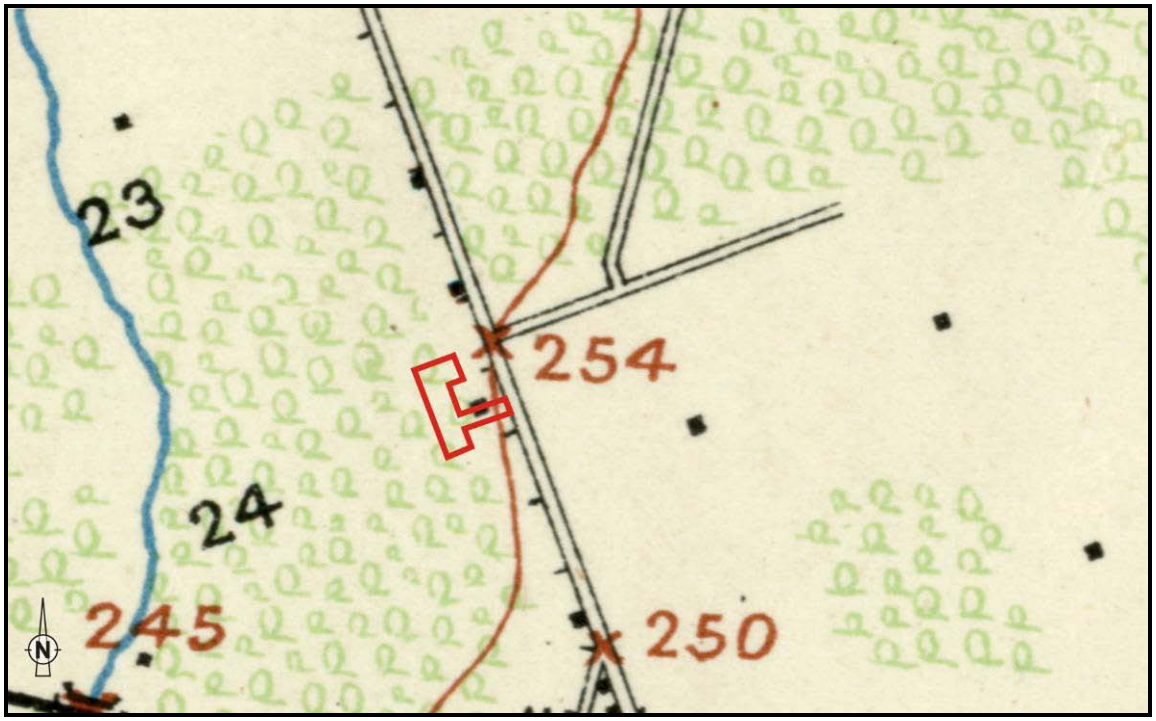


**Figure 8. Location of study area on the 1908 topographic map.** (NTS 1:63630 Russell Sheet no. 16) Study area marked in red.

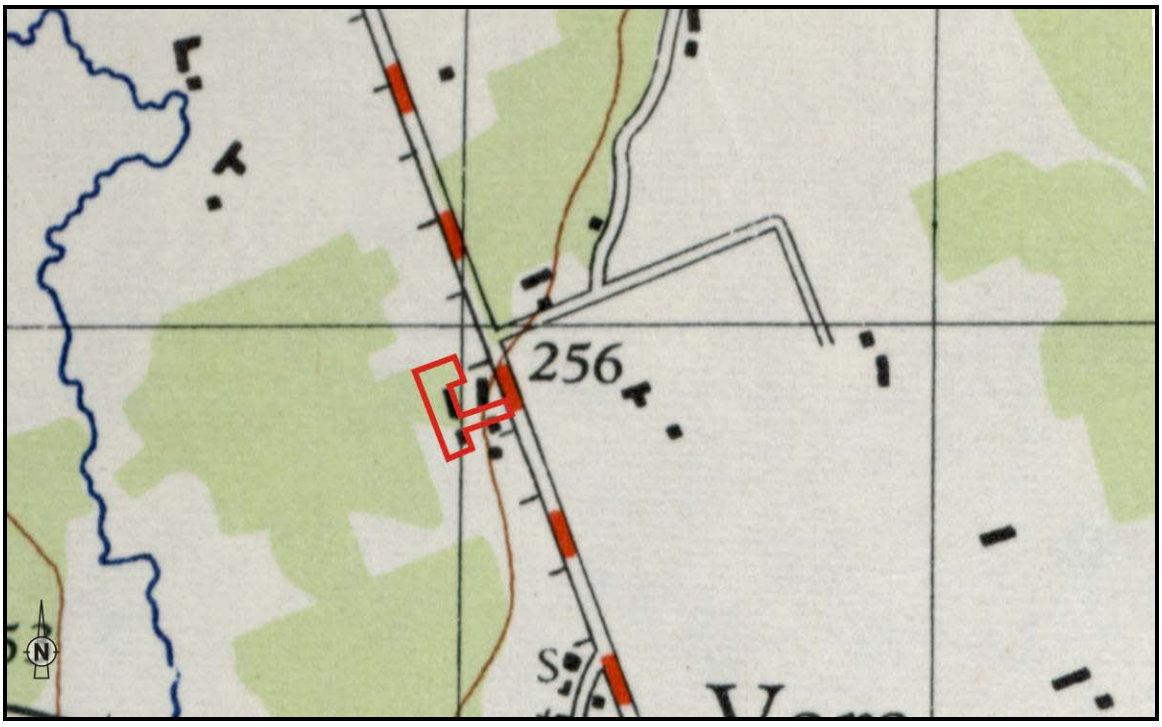


**Figure 9. Location of study area on the 1951 topographic map.** (NTS 1:50000 Russell 31G06 west half) Study area marked in red.


**Figure 10. Study area overlaid on a 1976 aerial photograph.** (base map geoOttawa 2013)


**Figure 11. Study area overlaid on a 1991 aerial photograph.** (base map geoOttawa 2013).

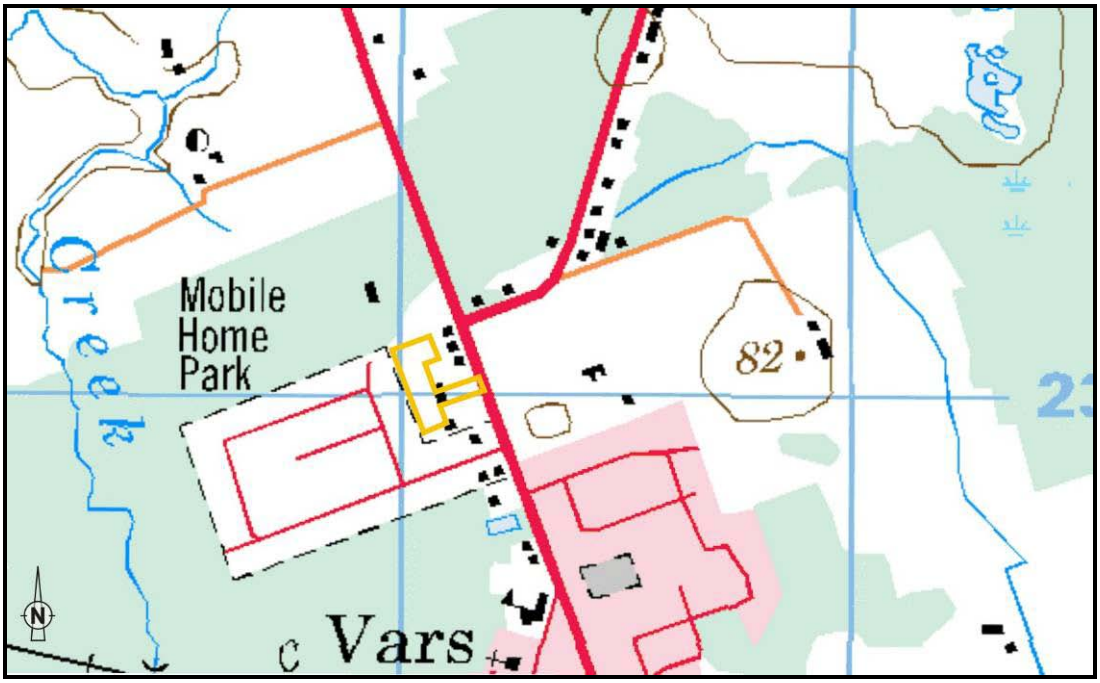


**Figure 12: Location of study area on the 2000 topographic map.** (NTS 1:63630 Russell 31G06) Study area outlined in yellow.

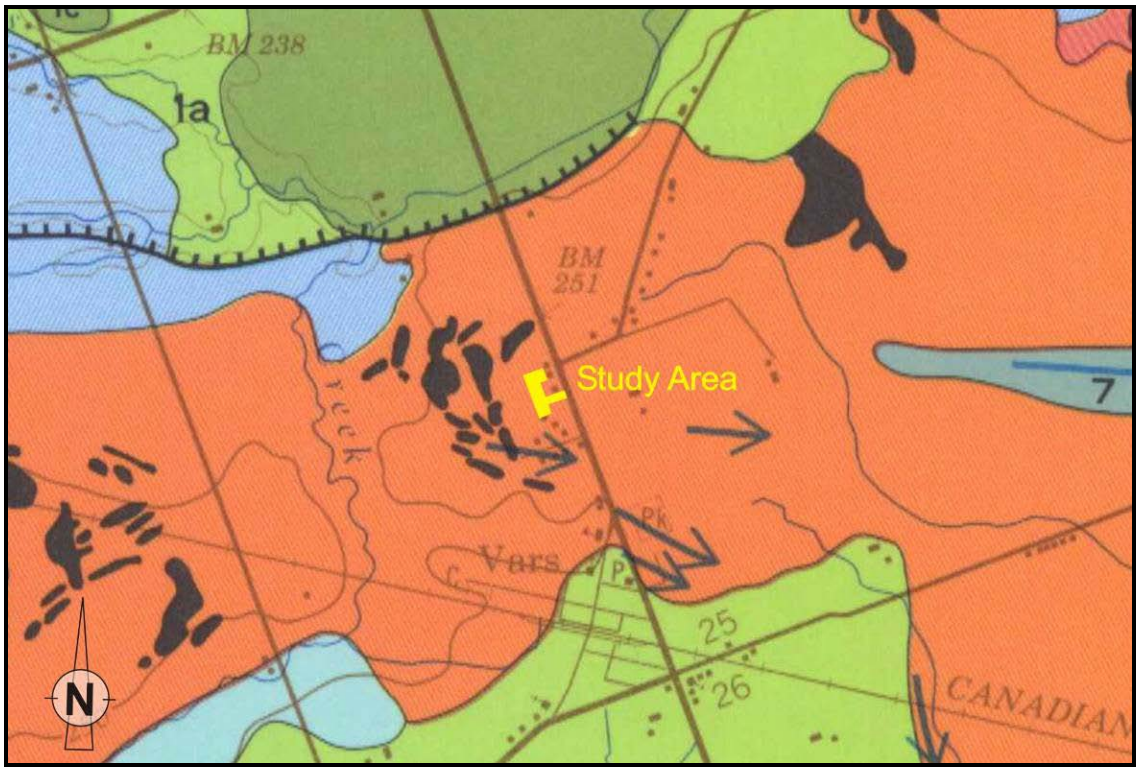


**Figure 13. Portion of the map of surficial geology map.** (GSC 1:50000 Russell 1507A) Orange indicates deltaic and estuarine deposits, black marks west of the study area represent dunes.

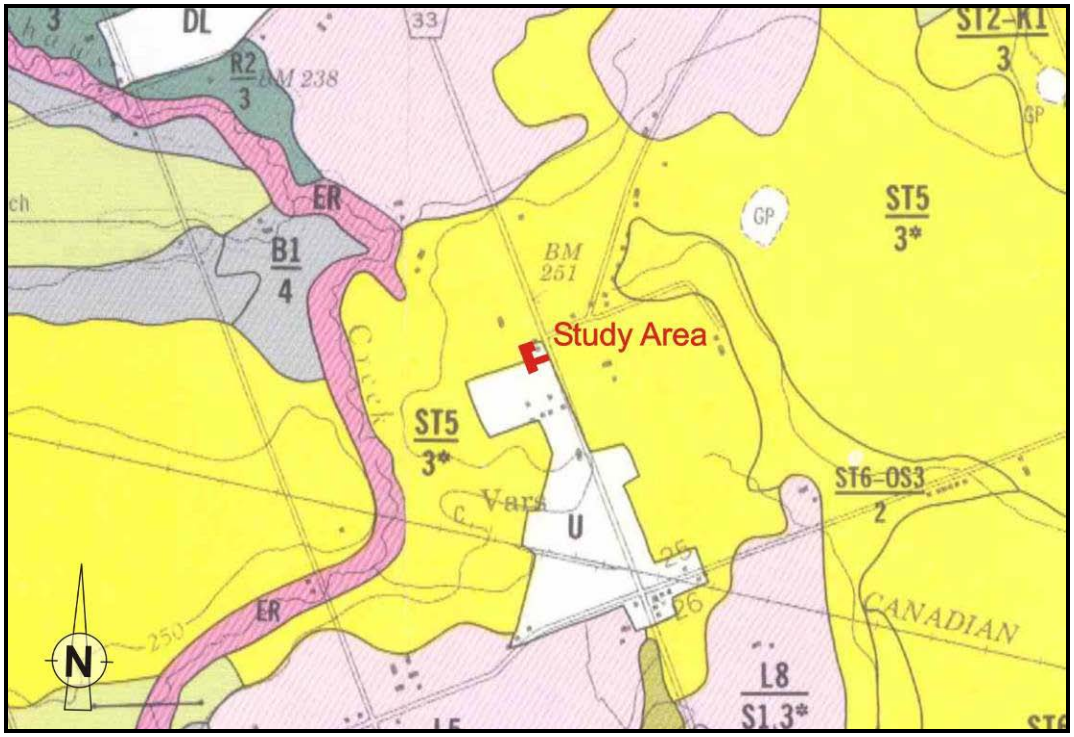


**Figure 14. Segment of the soils map for the Regional Municipality of Ottawa-Carleton.**
(Schut and Wilson 1987) Yellow indicates St. Thomas soil series.

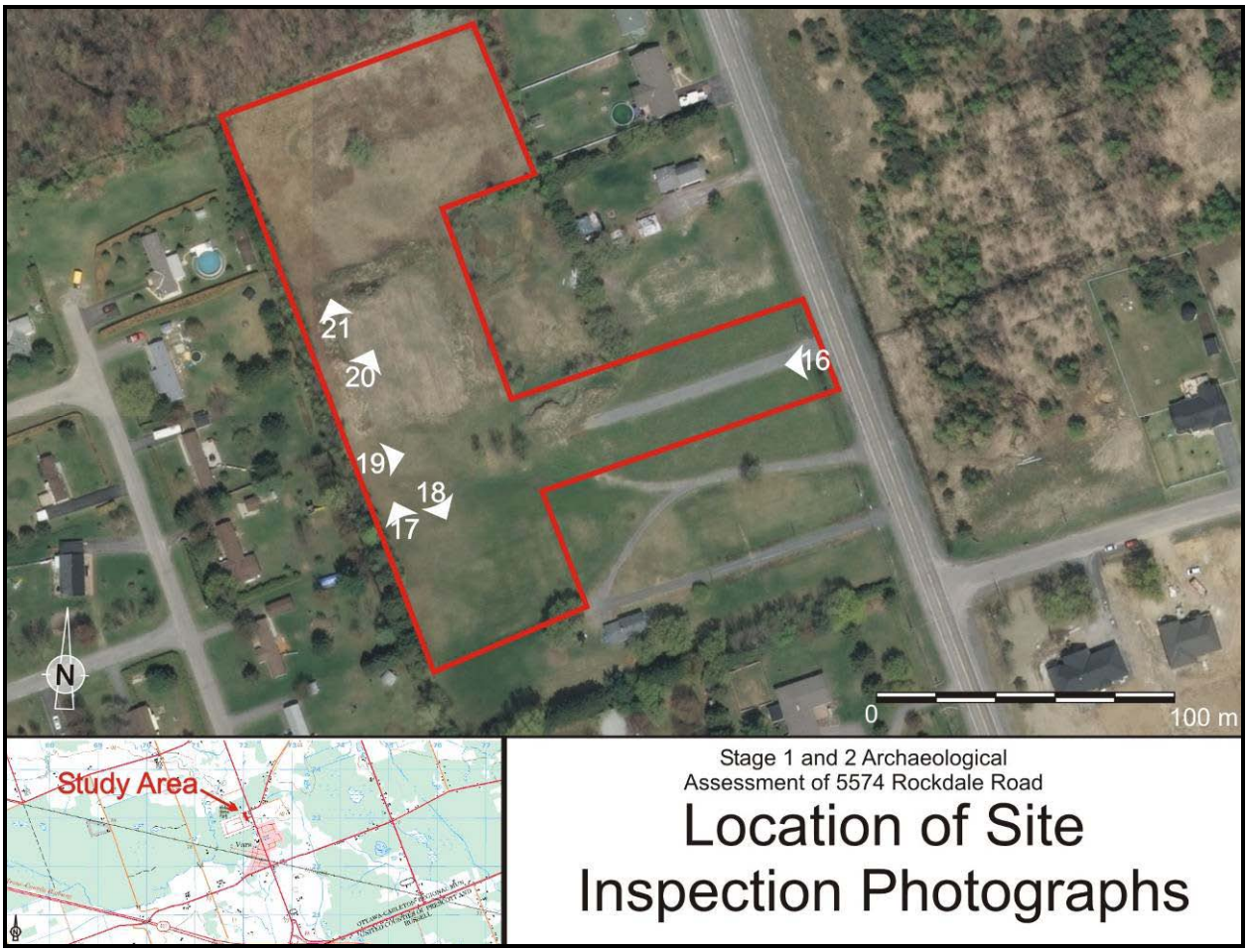


**Figure 15. Location and direction of photographs taken during the Stage 1 site inspection.**
(base map DRAPE 2008-2009) Numbers refer to figure numbers in this report.


**Figure 16. View of the entrance to 5574 Rockdale Road, looking west.** (PR13-27D001)

**Figure 17. View of the study area along the western property line, looking north.** (PR13-27D004)

**Figure 18. View of the study area along the western property line, looking south.** (PR13-27D005)

**Figure 19. View of the study area along the western property line, looking east.** (PR13-27D006)

**Figure 20. View of the study area along the western property line, looking northeast.** (PR13-27D007)

**Figure 21. Tree line along the western edge of the property (on the left side of the photograph), looking north.** (PR13-27D008)

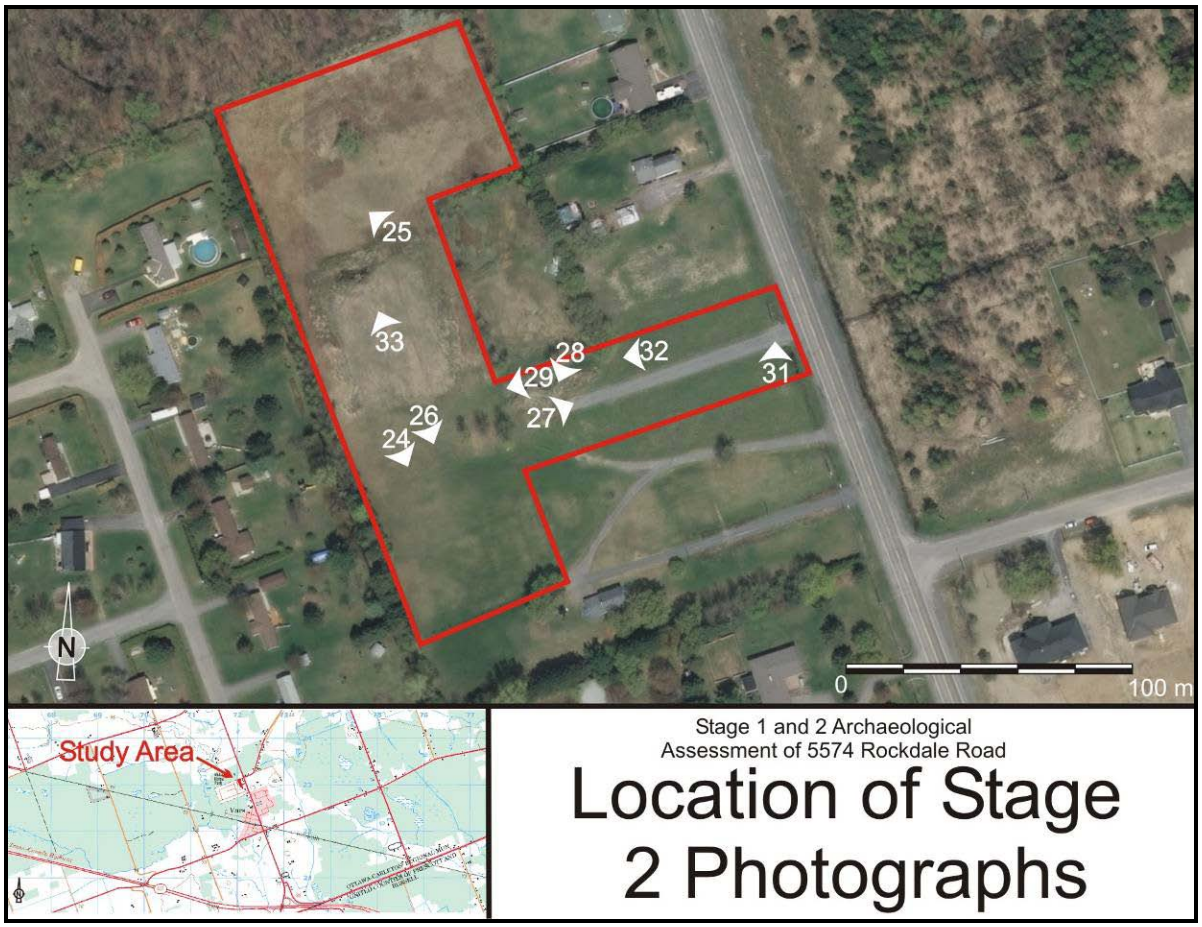


**Figure 22. Location and direction of photographs taken during the Stage 2 assessment.**
(base map DRAPE 2008-2009) Numbers refer to figure numbers within this report.

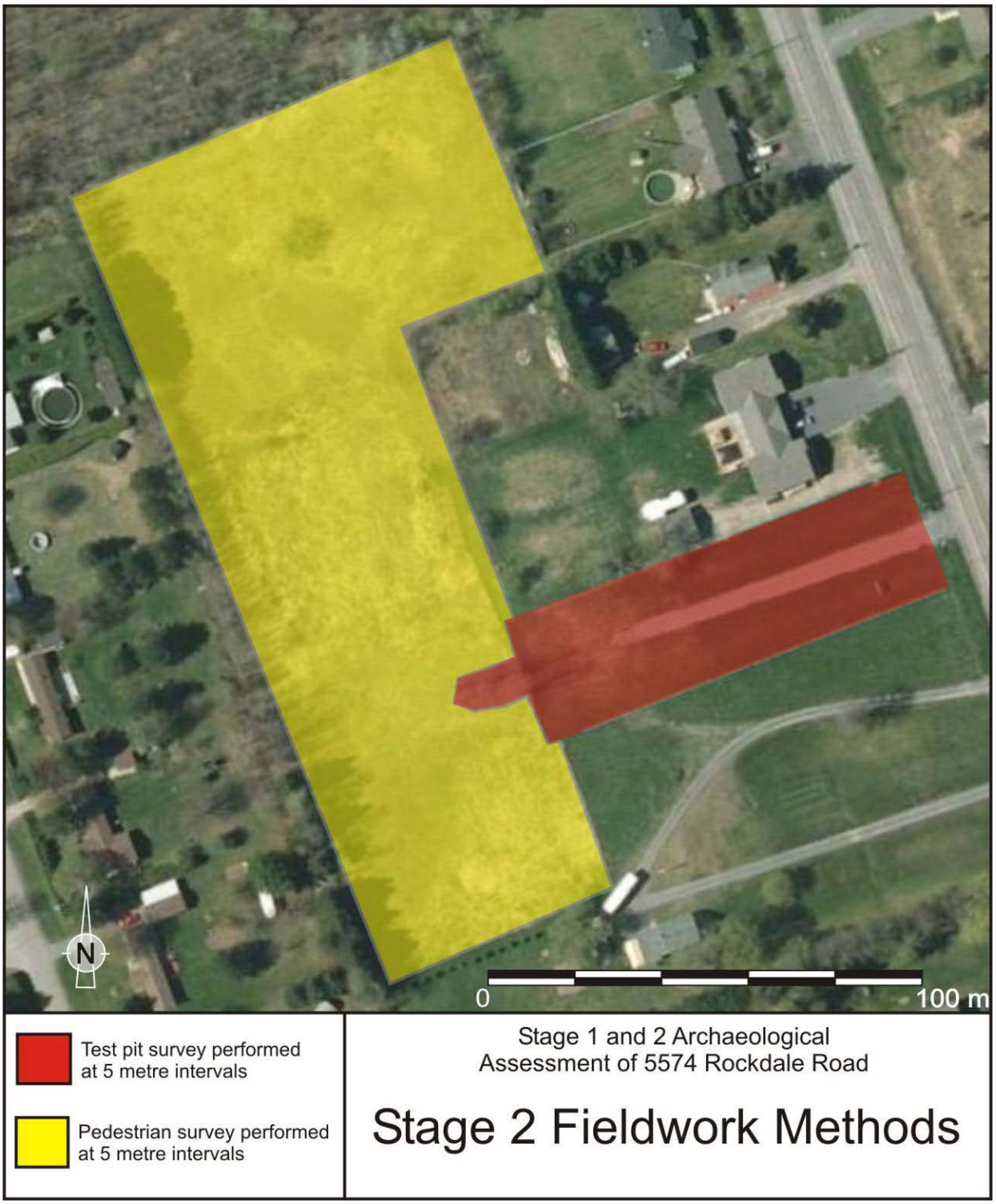


**Figure 23. Satellite image of the study area showing field methods of Stage 2 archaeological assessment.** (base map: 2011 geoOttawa)

**Figure 24. Crew performing pedestrian survey of the ploughed field, looking south.** (PR13-27D026)

**Figure 25. Crew performing pedestrian survey of the ploughed field, looking northwest.** (PR13-27D034)

**Figure 26. Example of the visibility achieved for the ploughed field.** (PR13-27D035)

**Figure 27. Field condition around the laneway subject to test pit survey, looking west.** (PR13-27D021)

**Figure 28. Crew shovel testing unploughed portion of the study area, looking southwest.** (PR13-27D020)

**Figure 29. Typical soil profile of the study area.** (PR13-27D042)


**Figure 30. Location of fill deposits within the study area over a 2011 aerial photograph.**
(base map geoOttawa 2013)

**Figure 31. View of fill deposit in a shovel test pit near Rockdale Road.** (PR13-27D019)

**Figure 32. View of fill the deposit overlying the typical soil stratigraphy towards the western end of the laneway area.** (PR13-27D040)

**Figure 33. View of fill deposit within the ploughed section of the study area.** (PR13-27D033)

# APPENDIX 1: Photographic Catalogue

| Catalogue No. | Description | Dir. |
|---|---|---|
| PR13-27D001 | View of entrance to 5574 Rockdale Road | W |
| PR13-27D002 | View of entrance to 5574 Rockdale Road | W |
| PR13-27D003 | View of the study area along eastern property line | N |
| PR13-27D004 | View of the study area along western property line | N |
| PR13-27D005 | View of the study area along western property line | S |
| PR13-27D006 | View of the study area along western property line | E |
| PR13-27D007 | View of the study area along western property line | NE |
| PR13-27D008 | View of the study area along western property line | N |
| PR13-27D009 | View of farm house originally associated with former barn within study area | SW |
| PR13-27D010 | View of farm house originally associated with former barn within study area | SW |
| PR13-27D011 | View of ploughed field from NW corner of study area | SE |
| PR13-27D012 | Crew shovel testing near Rockdale Road | N |
| PR13-27D013 | Crew shovel testing near Rockdale Road | S |
| PR13-27D014 | Crew shovel testing near Rockdale Road | W |
| PR13-27D015 | Crew shovel testing near Rockdale Road | W |
| PR13-27D016 | New house south of laneway | SW |
| PR13-27D017 | View north along Rockdale road | N |
| PR13-27D018 | Shovel test pit exemplifying fill near Rockdale Road | N |
| PR13-27D019 | Shovel test pit exemplifying fill near Rockdale Road | N |
| PR13-27D020 | Crew shovel testing study area | SW |
| PR13-27D021 | Gravel Laneway | E |
| PR13-27D022 | Ploughed field | S |
| PR13-27D023 | Shovel test pit near westend of laneway near ploughed area | - |
| PR13-27D024 | Shovel test pit near westend of laneway near ploughed area | - |
| PR13-27D025 | Twentieth century ceramic refuse | - |
| PR13-27D026 | Crew field walking ploughed area | S |
| PR13-27D027 | Deposit of ash in charcoal in ploughed area | - |
| PR13-27D028 | Ploughed field | N |
| PR13-27D029 | Twentieth century ceramic refuse, redware | - |
| PR13-27D030 | Twentieth century ceramic refuse, whiteware | - |
| PR13-27D031 | Twentieth century ceramic refuse, bell | - |
| PR13-27D032 | Twentieth century ceramic refuse, bell | - |
| PR13-27D033 | Fill deposit in ploughed area | - |
| PR13-27D034 | Crew field walking ploughed field | NW |
| PR13-27D035 | Average visibility achieved in ploughed area | - |
| PR13-27D036 | Ploughed Field | NE |
| PR13-27D037 | Ploughed Field | S |
| PR13-27D038 | Crew field walking ploughed area | S |
| PR13-27D039 | Test pit north west of lane exemplifying fill deposit overlying buried topsoil and sub soil | - |
| PR13-27D040 | Test pit north west of lane exemplifying fill deposit overlying buried topsoil and sub soil | - |
| PR13-27D041 | Test pit in west end of laneway exemplifying typical soil profile for the study area | - |
| PR13-27D042 | Test pit in west end of laneway exemplifying typical soil profile for the study area | W |

# APPENDIX 2: Glossary of Archaeological Terms

**Archaeology:**
The study of human past by excavation of cultural material.

**Archaeological Sites:**
The physical remains of any building, structure, cultural feature, object, human event or activity which, because of the passage of time, are on or below the surface of the land or water.

**Archaic:**
A term used by archaeologists to designate a distinctive cultural period dating between 8000 and 1000 B.C. in eastern North America. The period is divided into Early (8000 to 6000 B.C.), Middle (6000 to 2500 B.C.) and Late (2500 to 1000 B.C.). It is characterized by hunting, gathering and fishing.

**Artifact:**
An object manufactured, modified or used by humans.

**B.P.:**
Before Present. Often used for archaeological dates instead of B.C. or A.D. Present is taken to be 1951, the date from which radiocarbon assays are calculated.

**Backdirt:**
The soil excavated from an archaeological site. It is usually removed by shovel or trowel and then screened to ensure maximum recovery of artifacts.

**Chert:**
A type of silica rich stone often used for making chipped stone tools. A number of chert sources are known from southern Ontario. These sources include outcrops and nodules.

**Contact Period:**
The period of initial contact between Native and European populations. In Ontario, this generally corresponds to the seventeenth and eighteen centuries depending on the specific area.

**Cultural Resource / Heritage Resource:**
Any resource (archaeological, historical, architectural, artifactual, archival) that pertains to the development of our cultural past.

**Cultural Heritage Landscapes:**
Cultural heritage landscapes are groups of features made by people. The arrangement of features illustrate noteworthy relationships between people and their surrounding environment. They can provide information necessary to preserve, interpret or reinforce the understanding of important historical settings and changes to past patterns of land use. Cultural landscapes include neighbourhoods, townscapes and farmscapes.

**Diagnostic:**
An artifact, decorative technique or feature that is distinctive of a particular culture or time period.

**Disturbed:**
In an archaeological context, this term is used when the cultural deposit of a certain time period has been intruded upon by a later occupation.

**Excavation:**
The uncovering or extraction of cultural remains by digging.

**Feature:**
This term is used to designate modifications to the physical environment by human activity. Archaeological features include the remains of buildings or walls, storage pits, hearths, post moulds and artifact concentrations.

**Flake:**
A thin piece of stone (usually chert, chalcedony, etc.) detached during the manufacture of a chipped stone tool. A flake can also be modified into another artifact form such as a scraper.

**Fluted:**
A lanceolate shaped projectile point with a central channel extending from the base approximately one third of the way up the blade. One of the most diagnostic Palaeo-Indian artifacts.

**Lithic:**
Stone. Lithic artifacts would include projectile points, scrapers, ground stone adzes, gun flints, etc.

**Lot:**
The smallest provenience designation used to locate an artifact or feature.

**Midden:**
An archaeological term for a garbage dump.

**Mitigation:**
To reduce the severity of development impact on an archaeological or other heritage resource through preservation or excavation. The process for minimizing the adverse impacts of an undertaking on identified cultural heritage resources within an affected area of a development project.

**Multicomponent:**
An archaeological site which has seen repeated occupation over a period of time. Ideally, each occupation layer is separated by a sterile soil deposit that accumulated during a period when the

site was not occupied. In other cases, later occupations will be directly on top of earlier ones or will even intrude upon them.

**Operation:**
The primary division of an archaeological site serving as part of the provenience system. The operation usually represents a culturally or geographically significant unit within the site area.

**Palaeo-Indian:**
The earliest human occupation of Ontario designated by archaeologists. The period dates between 9000 and 8000 B.C. and is characterized by small mobile groups of hunter-gatherers.

**Profile:**
The profile is the soil stratigraphy that shows up in the cross-section of an archaeological excavation. Profiles are important in understanding the relationship between different occupations of a site.

**Projectile Point:**
A point used to tip a projectile such as an arrow, spear or harpoon. Projectile points may be made of stone (either chipped or ground), bone, ivory, antler or metal.

**Provenience:**
Place of origin. In archaeology this refers to the location where an artifact or feature was found. This may be a general location or a very specific horizontal and vertical point.

**Salvage:**
To rescue an archaeological site or heritage resource from development impact through excavation or recording.

**Stratigraphy:**
The sequence of layers in an archaeological site. The stratigraphy usually includes natural soil deposits and cultural deposits.

**Sub-operation:**
A division of an operation unit in the provenience system.

**Survey:**
To examine the extent and nature of a potential site area. Survey may include surface examination of ploughed or eroded areas and sub-surface testing.

**Test Pit:**
A small pit, usually excavated by hand, used to determine the stratigraphy and presence of cultural material. Test pits are often used to survey a property and are usually spaced on a grid system.

**Woodland:**
The most recent major division in the prehistoric sequence of Ontario. The Woodland period dates from 1000 B.C. to A.D. 1550. The period is characterized by the introduction of ceramics and the beginning of agriculture in southern Ontario. The period is further divided into Early (1000 B.C. to A.D. 0), Middle (A.D. 0 to A.D. 900) and Late (A.D. 900 to A.D.1550).