

Rideau Lakes Solar Project

Stage 1 and 2 Archaeological Assessment Report August 15, 2011



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Stage 1 and 2 Archaeological Assessment Rideau Lakes Solar Project (FIT – F58Q7J8) Township of Rideau Lakes United Counties of Leeds and Grenville, Ontario

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Executive Summary:

Under a contract awarded in May of 2010, **Archaeological Research Associates Ltd. (ARA)** carried out a Stage 1 and 2 archaeological assessment of the proposed **Rideau Lakes Solar Project** on part Lot 25, Concession 2, in the Township of Rideau Lakes, United Counties of Leeds and Grenville, Ontario. This work was completed under contract to **Hatch Ltd.** in advance of a Renewable Energy Act (REA) application.

The assessment was conducted in mid July and early August of 2010. Research indicated a moderate potential for the presence of pre-Contact archaeological sites and high potential for the presence Historic-era archaeological sites in the study area. In advance of field work, legal *Permission to Enter* (PTE) was granted by the property owner. During the study, 3 potentially-significant Historic-era findspots were identified. In consultations between ARA, the proponent, and MTC, it was determined that the findspots could be protected by avoidance and buffering. Accordingly, it is recommended that the project be allowed to proceed without further heritage concerns.

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Acknowledgements:

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1.0 Introduction

Under a contract awarded in May of 2010, Archaeological Research Associates Ltd. (ARA) carried out a Stage 1 and 2 archaeological assessment of the proposed Rideau Lakes Solar **Project** in the Township of Rideau Lakes, United Counties of Leeds and Grenville, Ontario. This assessment was conducted in mid July and early August of 2010 under licence# P-007, PIF # P007-246-2010. The work was completed under contract to **Hatch Ltd.** as a component of the screening process outlined in **Ontario Regulation 359/09**, which governs **Renewable Energy Approvals** under the provincial **Environmental Protection Act** (EPA). The archaeological assessment was carried out in order to:

- Identify any known archaeological sites that might be found near or within the study area;
- Empirically determine the presence of any unknown archaeological resources which may be extant within the study area; and
- If identified, suggest appropriate strategies for the protection and management of these sites.

The assessment was carried out in accordance with the provisions of the *Ontario Heritage Act* (A.S.O. 1990), and *Draft Standards and Guidelines for Consultant Archaeologists* (Ministry of Culture 2009). All records pertaining to this assessment are currently housed in a storage facility located at Archaeological Research Associates Ltd.'s office at 97 Gatewood Road in Kitchener, Ontario.

The Ministry of Tourism and Culture is asked to review the results and recommendations presented in this report.

2.0 Location

The study area is a 50 ha parcel of land, located in Crosby South Ward, Township of Rideau Lakes, United Counties of Leeds and Grenville, Ontario (see Figures 1-3). Rectangular in shape, it is historically described as being located on Lot 25, Concession 2, of the Township of South Crosby, Leeds County, Ontario. The closest water source is a small un-named creek that runs approximately 250 metres north of the study area, and which eventually drains into Bass Bay.

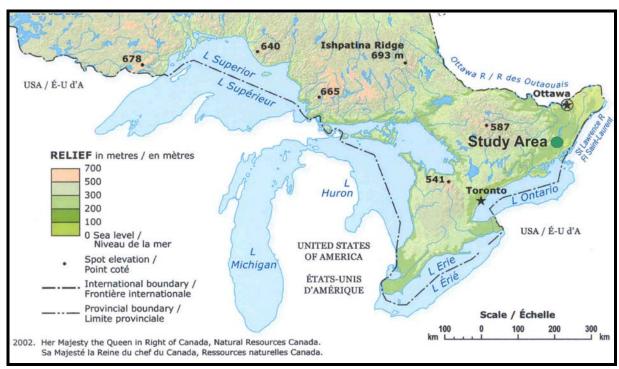


Figure 1: Location of Study Area in the Province of Ontario

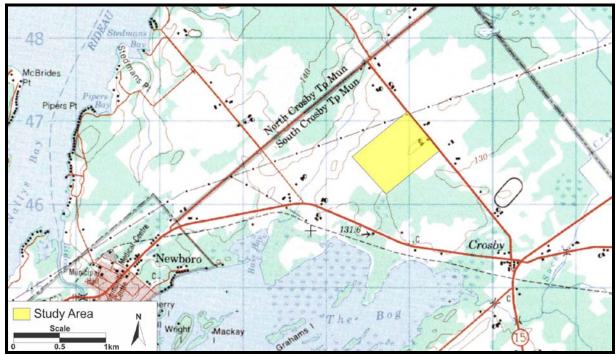
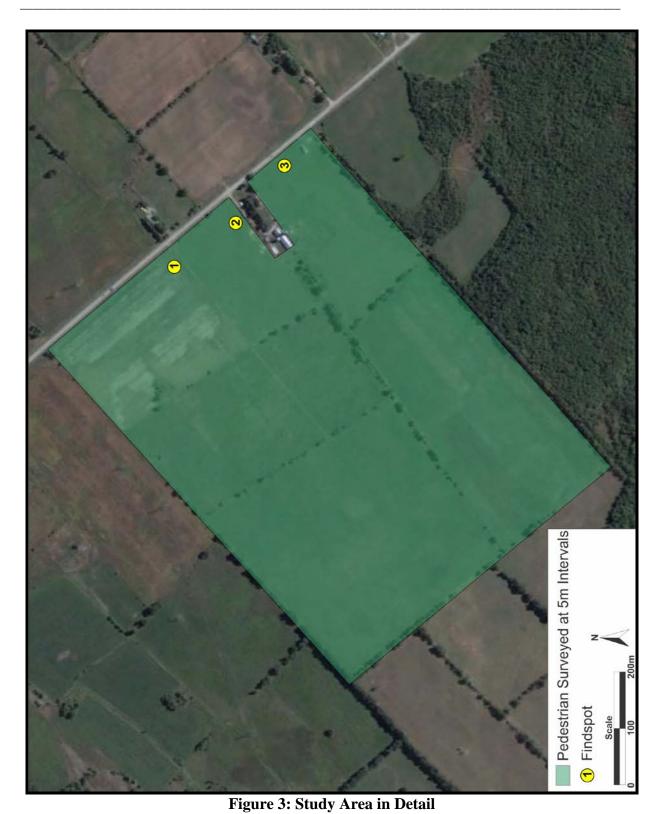


Figure 2: Location of Study Area in the Township of Rideau Lakes



Stage 1-2 Archaeological Assessment, Rideau Lakes Solar Farm (FIT – F58Q7J8), United Counties of Leeds and Grenville, Ontario.

Archaeological Research Associates Ltd.

3.0 Geography

It has long been understood that environment plays a key role in determining site location, particularly in small societies with non-complex, subsistence-oriented economies. The local environment of the study area lies within the Great Lakes-St. Lawrence Forest. The Great Lakes-St. Lawrence Forest is a transitional zone between the southern deciduous forest and coniferous boreal forest. Vegetation here consists of a mixture of coniferous trees, such as eastern white pine, red pine, eastern hemlock and white cedar, and deciduous trees, such as yellow birch, sugar and red maple basswood and red oak (MNR 2009). In the upper Great Lakes region it is believed that the First Nations used some 500 plant species as food, food flavourings, drinks, medicines, building materials, fibres, dyes, and basketry (Mason 1981: 59). As such, it is clear that vegetation played an important role in the site selection processes employed by pre-Contact Aboriginal groups. Furthermore, this vegetation served as home and food for a wide range of game animals such as white tailed deer, turkey, passenger pigeon, cottontail rabbit, elk, muskrat, and beaver (Ibid:60).

Physiographically, the study area is located within the Smiths Falls Limestone Plain. This region contains the largest and most continuous tract of shallow soil over limestone in Southern Ontario. Bogs dominate many of the townships in the region, including the Township of Rideau Lakes (Chapman and Putnam 1984:197). The area consists of a mixture of limestone bedrock, granite knobs, clay flats and sand beds (Ibid:196). The soils of the project lands include Napanee Clay and Tennyson Sandy Loam (Gilespie, et al. 1968:Map).

4.0 Archaeological Potential

The archaeological potential of the study area was assessed using its soils, hydrology and landforms as considerations. Young et al. (1995) note that, "*either the number of streams and/or stream order is <u>always</u> a significant factor in the positive prediction of site presence" (1995:23). They further note that certain types of landforms, such as moraines, seem to have been favoured by different groups throughout prehistory (Ibid:33). According to several researchers, such as Janusas (1988:1), "<i>The location of early settlements tended to be dominated by the proximity to reliable and potable water resources.*" Site potential modeling studies (Peters 1986; Pihl 1986) have found that most prehistoric archaeological sites are located within 300 metres of remnant or extant water sources.

While many of these studies do not go into detail as to the basis for this pattern, Young et al. (1995) suggest that the presence of streams is a significant attractor for a host of plant, game, and fish species which in turn encourage human settlement in an area. Conversely, it must be understood that non-habitational sites (e.g. burials, lithic quarries, kill sites, etc.) may be located anywhere. Potential modeling appears to break down when it comes to these idiosyncratic sites,

many of which have more significance than their habitational counterparts as a result of their relative rarity.

With the development of integrated 'complex' economies in the Historic (or Euro-Canadian) era, settlement tended to become less dependent upon local resource production and more tied to wider economic networks. As such, proximity to transportation routes became the most significant predictor of site location. In the early Historic era (pre-1850), when transport by water was the norm, sites tended to be situated along major rivers and creeks - the 'highways' of their day. With the opening of the interior of the Province to settlement after about 1850, sites tended to be located along historically-surveyed roads.

Bearing these factors in mind, it is clear that the study area would have a moderate potential for containing pre-Contact sites; largely due to its distance from potable water (at least 250 metres). The property's potential for Historic-era sites is high given that Narrows Lock Road is a historically-surveyed thoroughfare. Furthermore, Miles & Co.'s *Illustrated Historical Atlas of the Counties of Leeds and Grenville* (1879) shows a structure present on Lot 25, Concession 2 (see Section 6 below).

5.0 Previous Archaeological Research

An archival search was conducted using the Ontario Ministry of Tourism and Culture Archaeological Sites Database in order to determine the presence of any registered heritage resources which might be located on or within a 2 kilometre radius of the study area. It was found that there are no registered sites within these limits. The overall lack of sites in the area is most likely the result of a paucity of research in the area, as opposed to representing any meaningful settlement patterns.

6.0 Historic Land Use Summary

The first settlers in the Region were the Paleo-Indian people who arrived after the retreat of the Wisconsinan glaciers, approximately 9,000 B.C. (Warrick 2004:83). For the next 1,500 years or so, the Paleo-Indians lived as hunter-gatherers in the boreal-like landscapes of southern Ontario. Because of the low biotic productivity of this environment, it is believed that human groups ranged over very wide territories in order to live sustainably (Ellis & Deller 1990:52). Traditionally, Paleo-Indians have been conceptualized as 'big game hunters' who lived on caribou and other Pleistocene megafauna. However, given the poor preservation of these sites (which are mostly understood only from stone tool and debris from their manufacture), much about the lifeways of these people remains unknown (Ibid.:38). In general, the impacts that humans left on their environment at these times were small (less than 200 square metres), ephemeral, and fleeting (Ibid.:51).

Beginning around 8,000 B.C., the biotic productivity of the environment began to increase as the climate warmed and the watershed was colonized by deciduous forest. As a result, more opportunities arose for the exploitation of both animal and plant food sources. The resulting broad-based economy was the basis for the archaeological cultures that are referred to as 'Archaic'. During this period (roughly 8,000 B.C. - 800 B.C.), there was an explosion in the number and variety of raw materials, tool forms, site types, and the number of sites themselves. Because Archaic sites are more recent than Paleo-Indian ones, preservation tends to be better. Artifacts composed of bone, shell, and even wood are not unheard of. During the late Archaic period, heavy wood-working tools appear, suggesting that people were building shelters or other objects, such as transportation aids (Ellis et al. 1990:66-67). It is clear from the toolkits that have been unearthed that Archaic peoples had an encyclopaedic understanding of the environment that they inhabited. The number and density of the sites that have been found suggest that the environment was exploited in a successful and sustainable way over a considerable period of time. The success of Archaic lifeways is attested to by clear evidence of steady population increases over time. Eventually, these increases set the stage for the final period of Pre-Contact occupation - the Woodland Period (Ibid.).

The Terminal Archaic/Early Woodland transition for the Rideau Lakes area was characterized by the presence of the Broad Point Culture Phase. It is so named because the lithic assemblage consists of broad corner-removed stemmed broadpoints. Several sites around Rideau Lakes have been identified as belonging to the Broad Point Culture Phase. It has been suggested that the Broad Point Culture Phase gave way to the Meadowood Complex of the Early Woodland Period (800 B.C. – 0 A.D.), however, there are no known sites belonging to the Meadowood Complex in the area (Watson 1982:33).

The Middle Woodland period (roughly 0 A.D. - 500 A.D.) saw the emergence of the Point Peninsula Complex, stretching from south-central Ontario to Quebec (Ibid:157). The Wyght site near Rideau Lake is the only example of a Point Peninsula site near the study area. It is suggested that the people of this complex lived in large macroband sites on lakeshores and rivers during the spring, summer, and fall; probably with an emphasis on fishing. During the winter, they would disperse into microbands and live on stored food and occasional hunting (Ibid: 164).

During the Middle to Late Woodland transition (ca. A.D. 400) the first rudimentary evidence of maize (corn) horticulture appears in Ontario. In Eastern Ontario, the Wyght site shows a cultural continuity from the Point Peninsula Complex to the later archaeological cultures (Ibid 187). During the Late Woodland Period (roughly A.D. 1000 to A.D. 1650) maize horticulture allowed for population increases which in turn lead to larger settlement sizes, higher population densities, and increased social complexity among the peoples involved. Beginning around A.D. 1000, early Iroquoians were living in small villages comprised of a number of longhouses, producing pottery with decorated incised rims, and using pipes to smoke tobacco. Essentially, the lifeways that were observed by the first Europeans to venture into the area were in place by this time. By

1450, it is possible to differentiate between the archaeologically-represented groups that would become the Huron, Neutral, and St. Lawrence Iroquois of the early Contact period (Ibid.:446).

By the Late Woodland Period, there is no evidence of settlement in the Rideau Lakes area. No villages have been found. The area was most likely used as a hunting ground by people living in the St. Lawrence Valley. It has been suggested that the Iroquoians overhunted the Rideau Lakes area, forcing Algonquian hunter-gatherers to hunt elsewhere (Watson 1982:49).

The Early Contact Period

Jacques Cartier was the first European to travel the St. Lawrence River in 1534. Here he encountered 300 St. Lawrence Iroquoians at the tip of the Gaspe Peninsula. Cartier travelled further up the St. Lawrence River the following year. He encountered two permanent settlements at the present locations of Quebec City and Montreal. Cartier's accounts of the people are the only accounts of the St. Lawrence Iroquois at the time of contact (Ibid: 385). When Samuel de Champlain came to the St. Lawrence in 1603 the St. Lawrence Iroquois had disappeared and the land was occupied by Algonquian speaking people (The Contact Period 2010). The disappearance of the St. Lawrence Iroquois has been attributed to the introduction of European disease and warfare with other Native groups. It has been suggested that the St. Lawrence Iroquois were attacked and dispersed by the New York Iroquois. (Jamieson 1990:403). The St. Lawrence Iroquois refugees proceeded to join with the Huron and Algonquians. A large population influx on Huron sites in the Trent Valley is indicated by a large number of St. Lawrence Iroquoian ceramics recovered solely from areas of village expansion (Ibid: 403).

The first European to venture into what would become southern Ontario was Etienne Brulé, who was sent by Samuel de Champlain to visit the area and to learn the language and customs of the First Nations there. Champlain himself made two trips to Ontario, first in 1613 and later from 1615 to 1616 (Vaugeois et al. 2004:182). The Iroquoian peoples encountered by Champlain included the Huron (or Wendat as they called themselves), the Petun, and "la nation neutre" (the Neutrals). While the former groups were concentrated in the northern part of Simcoe County and the Grey-Bruce region respectively, the Neutrals occupied the territory immediately west of Lake Ontario and across the Niagara Peninsula.

The first half of the 17th Century saw a marked increase in trading contacts between the First Nations and European colonists. It also led to increasing factionalism and tension between the First Nations as different groups vied for control of the lucrative fur trade. In what would become Ontario, the Wendat (Huron), the Petun (Tobacco), and their Anishnabeg trading partners allied themselves with the French. In what would become New York State, the League of the Haudenosaunee, often referred to as the Six Nations (which included the Mohawk, Cayuga, Onondaga, Oneida, Seneca, and Tuscarora Nations) allied themselves with the English. Interposed between the belligerents, the Neutral Nation declined to align itself with either group.

Tensions boiled over in 1649. The resulting conflict led to demise of the Neutral Nation as a distinct cultural entity and the dispersal of the Wendat and Petun Nations (Lennox & Fitzgerald 1990:456, Ramsden 1990:384). The remnants of the latter settled in Quebec (the modern-day community of Wendake), near Lake St. Claire (where they were known as the Wyandot), and in the area of Michilimackinac. Many were probably adopted into the nations of the Haudenosaunee (Ibid.). By 1651, most of southern Ontario was little more than the underpopulated hunting grounds of the Six Nations Iroquois (Lajeunesse 1960:xxxii).

The land tenure vacuum that was created by the dispersal of the Wendat and Neutral Nations allowed Algonkian-speaking Anishinabeg peoples to migrate to the north shores of Lake Erie and Lake Ontario by about AD 1700. Europeans called these people the "Mississaugas", mistaking the name of a single clan (the *Ma-se-sau-gee*) for that of the entire group (Smith 2002b: 107). At this time, Haudenosaunee settlements appear to have contracted back into New York state, possibly due to fur trade-related tensions between the League and their Anishnabeg neighbours (Warrick 2005:1).

The Historic Era

Throughout the 1700's and early 1800's, Anishnabeg peoples hunted, fished, gardened and camped across southern Ontario, but the footprint left by these people on the landscape they inhabited was exceedingly light. Archaeological sites dating to this time period are both rare and difficult to detect (Warrick 2005:1).

The Mississaugas had been stalwart allies of the French up to and including the 7 Years War. After 1760, they forged a new alliance with the English. This relationship endured the English defeat at the end of the American War of Independence (1775-1783) and set the tone for the refugee movement of the United Empire Loyalists and the Six Nations into Canada (Smith 2002b:109).

The Constitutional Act (sometimes called the Canada Act) of 1791 created the Provinces of Upper Canada and Lower Canada (Craig 1993:17). John Graves Simcoe, the first Lieutenant Governor of the Province, initiated several schemes to populate and protect the newly-created province as the ongoing threat of war with the United States required the borders to be populated quickly. A settlement strategy that relied on the creation of shoreline communities and effective transportation links between the settlements was employed. In 1792, the first legislature of Upper Canada changed the names of the Districts to Eastern, Midland, Home and Western respectively (Walker 1939:90).

County of Leeds

The first settlers of Leeds County were United Empire Loyalists who left the United States following the American Revolution. In anticipation of their arrival, Governor General Haldimand ordered new townships to be laid out along the St. Lawrence River. Samuel Holland, the Surveyor General for Canada, was tasked with this responsibility. Holland delegated the work to several surveyors. Townships 6-8 would eventually become a part of Leeds County (Miles & Co. 1879:7).

After the creation of Upper and Lower Canada, new townships were surveyed and more settlers came to the area (Ibid.:7). In 1798, Johnstown District was created from the Eastern District. This new district encompassed the area of Leeds County (Ibid.: 8).

Township of Rideau Lakes (including former Township of South Crosby)

The first three concession lines were surveyed by Lewis Grant in 1795. Following the survey, 43 land grants were given to Loyalists. However, by 1800 only Walter Davis and his family were settled in the township. In 1806, Reuben Sherwood completed the survey of the township, as well as verifying the earlier survey. By this point, the Davis family was joined by the Halladay and Haskin families (McKenzie 1973:51; Warren 1997:7).

By 1815, the population had risen to 126. In 1835 it was 622 and by 1851 it had climbed to 1,550. The original settlers came from the United States. They were later joined by Scottish and English settlers. An influx of Irish settlers was also seen, particularly in the 1840's as Ireland was being ravaged by the potato famine (Warren 1997:8-23).

The beginning of the 19th century saw many unpleasant interactions between Aboriginal groups and European settlers. By the 1830s, the Mississaugas started to move out of the area. By this time, their population had diminished to half of what it had been at the start of the century; largely due to smallpox and other introduced diseases. Furthermore, an increased European presence over the years led to a decrease in available game in the area. As a result, famine struck many (Warren 1997:4).

During the construction of the Rideau Canal, the area experienced an increase in settlement and development as commerce and opportunity increased. By 1877, the population of South Crosby had grown to 1,915 (Leavitt and Turner 1879; Township of Rideau Lakes 2010). In the following years, the Rideau Canal played an important role in the development of Township of South Crosby (Warren 1997:1)

Lot 25, Concession 2

The Crown patented the property to James Wickwire on the last day of the year in 1806. In 1828 the land was purchased by Thomas Cannon. In 1861, the Cannon family sold the front half of the lot to Jesse D. Knowlton. This lot contained three buildings in 1862. The western end, which is not in the study area, had two building belonging to James Cannon and J. Cannon. There was a building owned by J. D. Knowlton at eastern end. Miles & Co.'s *Illustrated Historical Atlas of the Counties of Leeds and Grenville* (1879) shows this building in the study area (see Figure 4).

The properties changed hands several times over the following years. The rear part of the lot was granted to James E. Kelly in 1951. The front part of the lot was granted to James Stout by the Knowlton family in 1913. In 1945, the Stout family sold this land to James H. Barker.

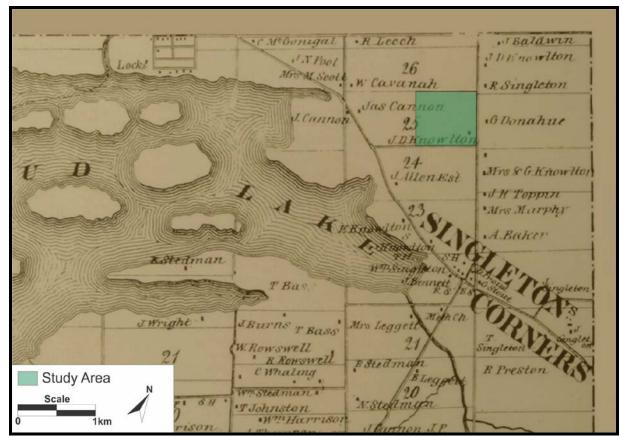


Figure 4: Section from Miles & Co.'s Counties of Leeds and Grenville (1879)

7.0 Field Methods

Given that the study area was in areas that were under cultivation (see Plate 1), Ministry of Tourism and Culture guidelines (Draft 2009) required that the study area be assessed using the pedestrian survey method. In this strategy, crewmembers traversed the study area along parallel transects established at intervals of either 5 or 10 metres, depending upon the archaeological potential of the property. In this case, the subject property was felt to have a moderate to high archaeological potential and, as such, was surveyed at 5 metre intervals (see Plate 2). If cultural materials were encountered in the course of the survey, the transect interval would be closed to 1 metre and a close inspection of the ground would be conducted for 20 metres in all directions (see Plate 3). All identified diagnostic artifacts and a representative sample of non-diagnostic artifacts are collected for analysis. All remaining artifacts are left *in situ* until a proper Stage 3 Controlled Surface Collection (CSC) can be performed.

Artifacts that may indicate the presence of significant cultural deposits include bone, charcoal, lithics (stone tools and refuse generated by their production and use), ceramics, glass, and metal. Archaeological features such as pits, foundations, and other non-portable remains may also be detected during a Stage 2 survey. Any archaeological materials encountered are flagged, mapped, photographed and collected for further analysis. Artifact locations are recorded on topographic maps, in field notes and at +/- 5 metres accuracy on a Garmin eTrex Legend, WAAS-enabled GPS (using the **WGS-84** coordinate system). Any artifacts recovered are sent to the ARA office at 97 Gatewood Road in Kitchener, Ontario for processing, cataloguing, analysis and curation. All project photographs, mapping materials, and field notes are stored at the same facility.



Plate 1: View of Soil Conditions at Time of Survey

Archaeological Research Associates Ltd.



Plate 2: View of Crewmembers Conducting Pedestrian Survey at 5 Metre Intervals



Plate 3: Crewmembers Conducting Pedestrian Survey at 1 Metre Intervals, Findspot 2

8.0 **Results and Recommendations**

The Stage 2 archaeological assessment of the proposed Rideau Lakes Solar Project was conducted on July 19th and August 9th of 2010. Legal *Permission to Enter* (PTE) and recover artifacts on project lands was granted by the landowner. Key personnel involved during the assessment were P.J. Racher, Project Director; H.T Brown, Field Director; and 7 additional crewmembers. All cultivated lands were pedestrian surveyed at 5 m intervals (see Figure 3). Field conditions were excellent with a mixture of sunny and cloudy skies.

During the Stage 2 archaeological assessment, 3 findspots which yielded archaeological materials were located. The following is a description of each:

<u>Findspot 1</u>

Description: A historic-era scatter, 20 x 20 m in size, consisting of 50+ surface artifacts. Architectural materials such as nails, window glass, brick and mortar were present. A stone lined well is located 5 m to the east of the scatter. The well has an interior diameter of 1.5 m and is approximately 27 ft deep. The combination of the architectural material and the presence of a well suggest that this was once to location of a homestead.

Location: Eastern edge of the study area, 20 m west of Narrows Lock Road.

GPS Co-ordinates: N 44° 40'06.6" W 076° 16'21.8"

UTM Co-ordinates: 18N X399304 Y4946829

Materials Identified: Nails, Ceramics, Glass.

Diagnostics: Machine cut nails, wheat pattern vitrified white earthenware.

The machine cut nail, easily distinguished by its rectangular shape was put into production in 1790 and was discontinued in the 1880s (Carter 1968). Vitrified earthenware or 'ironstone' in Ontario is dated to the 1840s and became the most popular type of ceramic tableware during the 1870s and 1880s. However, the wheat pattern on ironstone was developed in 1858 and continued to be produced into the 20^{th} Century (Adams 1995:102).

Cultural Affiliation: Euro-Canadian Homestead, mid to late 19th Century.

Recommendation: Avoidance. Stage 3 Assessment if avoidance is not possible.

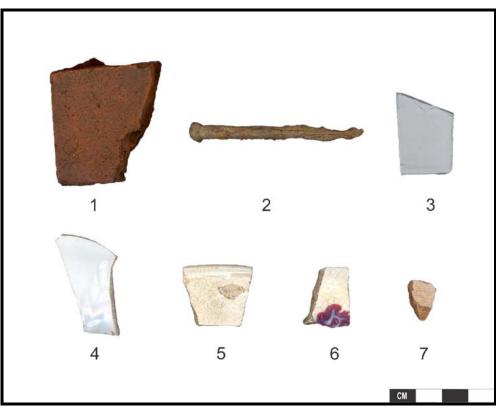


Plate 4: Sample of Artifacts Recovered from Findspot 1 (1: Red Brick; 2: Machine Cut Nail; 3: Window Pane Glass; 4: Wheat Patterned Vitrified White Earthenware; 5: Plain Whiteware; 6: Stamped Whiteware; 7: Glazed Coarse Red Earthenware)

Findspot 2

Description: A historic-era scatter, $15 \ge 25$ m in size, consisting of 35 surface artifacts. No architectural material was found within the scatter. Findspot 2 is likely a diffuse midden associated with the house located 20 m south of the findspot.

Location: The scatter is located 40 m west of Narrows Lock Rd, beside the fence line approximately 20 m north of the house which is still standing on the property.

GPS Co-ordinates: N 44° 40'02.7" W 076° 16'18.6"

UTM Co-ordinates: 18N X399345 Y4946756

Materials Identified: Ceramics, glass.

Diagnostics: Vitrified white earthenware, late palette white earthenware.

Ironstone or vitrified earthenware in Ontario is dated to the 1840s and became a cheap and popular form of tableware during the 1870s and 1880s (Adams 1995:102). Late palette whiteware included bright and vibrant colours as well as the use of black and red and are dated post 1830 (Carter, Refined Earthenwares, ND).

Cultural Affiliation: Euro-Canadian, mid to late 19th Century.

Recommendation: Avoidance. Stage 3 Assessment if avoidance is not possible.

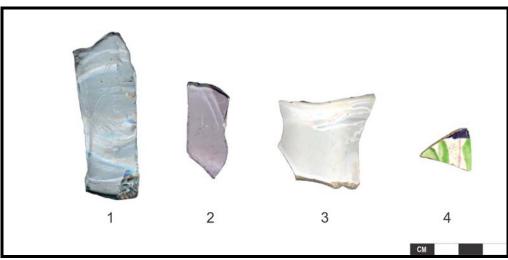


Plate 5: Sample of Artifacts Recovered from Findspot 2

(1: Unidentifiable Bottle Glass; 2: Window Pane Glass; 3: Moulded Vitrified White Earthenware; 4: Late Palette Painted Whiteware)

Findspot 3

Description: A historic-era scatter, 5 x 15 m in size, consisting of 15 surface artifacts. **Location:** Eastern edge of the study area, adjacent to the fence line beside Narrows Lock Road. **GPS Co-ordinates:** N 44° 40'00.0" W 076° 16'13.9"

UTM Co-ordinates: 18N X399406 Y4946706

Materials Identified: Ceramics, Glass.

Diagnostics: Green scalloped shell edged pearlware, black and blue transferwares, early palette painted earthenware.

Green shell-edged pearlware first appears around 1800, and the tableware continued to be produced for decades until a decline in popularity caused production to cease in 1835 (Noel Hume 1969:394-395; Kenyon 1991:4-5). Early palette wares typically employed the use of one colour, such as blue, but can also include brown, yellow, and green (Adams 1995: 103). Black transfer on refined white earthenware was the first colour to survive the glost burning process after cobalt blue and is dated post 1829 (Carter, Dating by Transfer Print, ND). Blue transfer as well as black and brown are most common between 1850 and 1890 (Adams 1995: 103).

Cultural Affiliation: Euro-Canadian, early to mid 19th Century.

Recommendation: Avoidance. Stage 3 Assessment if avoidance is not possible.

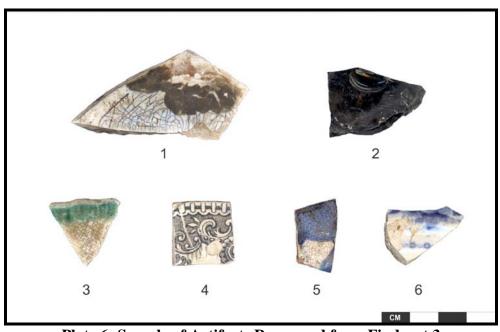


Plate 6: Sample of Artifacts Recovered from Findspot 3 (1: Unidentifiable Whiteware; 2: Alcohol Bottle Glass; 3: Green Scalloped Shell Edged Pearlware; 4: Black Transferware; 5: Early Palette Painted Whiteware; 6: Blue Transferware)

In sum, Findspots 1-3 have the potential to be archaeologically significant. However, each of the sites lies well away from lands to be impacted by project activities. Accordingly, and in consultation with the proponent and MTC, it was agreed that the findspots could be protected by a combination of avoidance and a project buffer of 20m (see Appendix A). As a result, it is recommended that the project be allowed to proceed without further heritage concerns.

This report is filed with the Minister of Tourism and Culture as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18. The report will be reviewed to ensure that the licenced consultant archaeologist has met the terms and conditions of their archaeological licence, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario.

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*. This condition provides for the potential for deeply buried or enigmatic local site areas not typically identified in evaluations of potential.

The Cemeteries Act requires that any person discovering human remains must immediately notify the police or coroner and the Registrar of Cemeteries, Ministry of Small Business and Consumer Services. All work in the vicinity of the discovery will be suspended immediately. Other government staff may be contacted as appropriate; however, media contact should not be made in regard to the discovery.

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, except by a person holding an archaeological licence.

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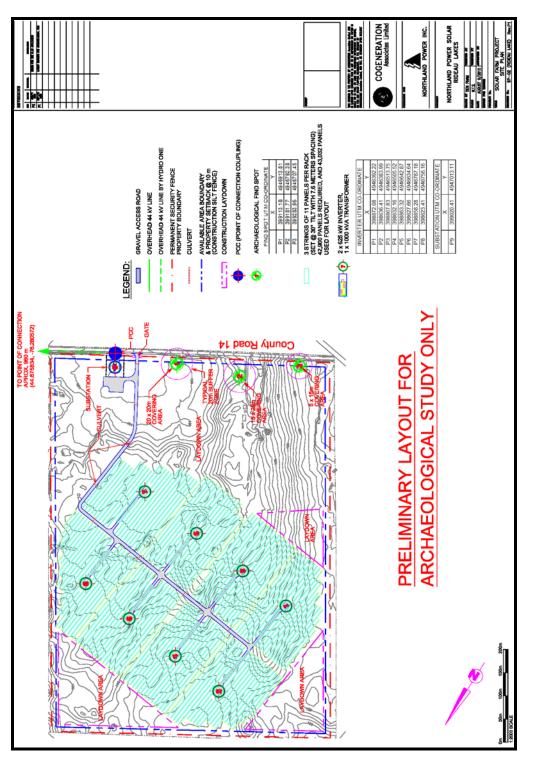
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Appendix A: Project Drawing Showing Proposed Property Impacts, Findspot Locations, and Protective Buffers

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Appendix B: Artifact Registry

					Material		Group						Datable Attribute	Datable		
Record	Stage	Findspot	Date	Frequency	Code	Material	Code	Group	Class Code	Class Name	Object Code	Object Name	Code	Attribute Name	Comments	Fire Evidence
1		Findspot 1	19-Jul-10	1	15	Metal	12	Architectural	121	Nails	316	Nails	4	Unidentifiable	Too fragmented	n
2		Findspot 1	19-Jul-10	1	15	Metal	12	Architectural	121	Nails	316	Nails	411	Cut		n
3	Stage 2	Findspot 1	19-Jul-10	1	12	Glass	12	Architectural	120	Window Glass	229	Pane Glass	4	Unidentifiable	Flat glass	n
4	Stage 2	Findspot 1	19-Jul-10	1	11	Ceramic	10	Food Preparation/Consumption	102	Tableware	4	Unidentifiable	143	Refined White EW - moulded	Unidentifiable rim pattern	n
5	Stage 2	Findspot 1	19-Jul-10	1	11	Ceramic	10	Food Preparation/Consumption	102	Tableware	4	Unidentifiable	137	Refined White EW - painted	Blue/red paint, Unidentifiable pattern	n
6	Stage 2	Findspot 1	19-Jul-10	1	11	Ceramic	10	Food Preparation/Consumption	100	Cooking/Storage	4	Unidentifiable	13	Coarse Red EW - glazed	Beige glaze	n
7	Stage 2	Findspot 1	19-Jul-10	2	11	Ceramic	10	Food Preparation/Consumption	102	Tableware	4	Unidentifiable	155	Vitrified White EW	Plain?	n
8	Stage 2	Findspot 1	19-Jul-10	1	11	Ceramic	10	Food Preparation/Consumption	102	Tableware	4	Unidentifiable	161	Vitrified White EW - moulded	Moulded, wheat	n
9	Stage 2	Findspot 2	19-Jul-10	1	11	Ceramic	10	Food Preparation/Consumption	102	Tableware	4	Unidentifiable	161	Vitrified White EW - moulded	Moulded, wheat	n
10	Stage 2	Findspot 2	19-Jul-10	1	11	Ceramic	10	Food Preparation/Consumption	4	Unidentifiable	4	Unidentifiable	155	Vitrified White EW		n
11	Stage 2	Findspot 2	19-Jul-10	1	11	Ceramic	10	Food Preparation/Consumption	102	Tableware	4	Unidentifiable	137	Refined White EW - painted	Blue, pink, green floral	n
12	Stage 2	Findspot 2	19-Jul-10	2	12	Glass	4	Unidentifiable	109	Unspecified Glass Container	4	Unidentifiable	317	Unknown moulded	Aqua container glass	n
13	Stage 2	Findspot 2	19-Jul-10	1	12	Glass	18	Medicinal/Hygiene	180	Pharmaceutical	4	Unidentifiable	4	Unidentifiable	Lavender container glass	n
14	Stage 2	Findspot 3	19-Jul-10	1	11	Ceramic	10	Food Preparation/Consumption	102	Tableware	4	Unidentifiable	134	Refined White EW - other transfer	Black transfer, geometric rim design	n
15	Stage 2	Findspot 3	19-Jul-10	1	11	Ceramic	10	Food Preparation/Consumption	102	Tableware	4	Unidentifiable	137	Refined White EW - painted	blue/green floral	n
16	Stage 2	Findspot 3	19-Jul-10	1	11	Ceramic	10	Food Preparation/Consumption	102	Tableware	4	Unidentifiable	137	Refined White EW - painted	blue paint, unidentifiable pattern	n
17	Stage 2	Findspot 3	19-Jul-10	1	11	Ceramic	10	Food Preparation/Consumption	102	Tableware	4	Unidentifiable	137	Refined White EW - painted	Red paint, unidentifiable pattern	n
18	Stage 2	Findspot 3	19-Jul-10	1	11	Ceramic	10	Food Preparation/Consumption	102	Tableware	213	Flatware	113	Pearlware - edged	Green edged, scalloped	n
19	Stage 2	Findspot 3	19-Jul-10	1	11	Ceramic	10	Food Preparation/Consumption	4	Unidentifiable	4	Unidentifiable	10	Ceramic	Too fragmented, fire heated, unidentifiable body paste	У
20	Stage 2	Findspot 3	19-Jul-10	1	11	Ceramic	4	Unidentifiable	4	Unidentifiable	4	Unidentifiable	10	Ceramic	Fire heated, unidentifiable	у
21	Stage 2	Findspot 3	19-Jul-10	1	12	Glass	10	Food Preparation/Consumption	107	Glass Beverage Containers	4	Unidentifiable	4	Unidentifiable	Unknown alcohol bottle	n
22	Stage 2	Findspot 3	19-Jul-10	1	11	Ceramic	10	Food Preparation/Consumption	102	Tableware	4	Unidentifiable	133	Refined White EW - blue transfer	Floral?	n