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North Burgess Solar Project

Draft Stage 1 and 2 Archaeological Assessment Report August 25, 2011





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Stage 1 and 2 Archaeological Assessment North Burgess Solar Project (FIT – F0HJPWL) Township of Tay Valley Lanark County, Ontario

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The Ontario Ministry of Tourism and Culture

By

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Stage 1-2 Archaeological Assessment, North Burgess Solar Project (FIT – F0HJPWL), Lanark County, 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 lands with the potential to be impacted by the proposed North Burgess Solar Project on part Lot 13, Concession 9, in the Township of Tay Valley, Lanark County, Ontario. This work was completed under contract to Hatch Ltd. in advance of a Renewable Energy Approval (REA) application.

The assessment was conducted between mid-August of 2010 and mid-January of 2011. Research indicated a high potential for the presence of both Pre-Contact and Historic-era archaeological sites in the study area. In advance of field work, legal *Permission to Enter* (PTE) was granted by the property owner. In mid-August of 2010, prior to commencement of field work, the son of the former property owners advised Hatch Ltd. that his parents were interred in an unregistered burial location on the subject property. During the study, 3 findspots (1 Pre-Contact and 2 Historic-era) and the probable location of the burial were identified. Findspot 1 consisted of a possible Palaeo-Indian point, Findspot 2 was a unique man-made arrangement of stones, and Findspot 3 was a Historic-era well. Of these, Findspot 1 and Findspot 2 warranted additional study. The Registrar of Cemeteries has been notified about the burial and is working directly with the client to ensure that it is surveyed, protected by a buffer, and registered as a cemetery.

In consultation with both the Ministry of Tourism and Culture and the Proponent, Findspot 1 and Findspot 2 were further investigated in mid-January in order to determine whether they possessed significant cultural heritage value or interest (CHVI). During the investigation, it was found that neither Findspot 1 nor Findspot 2 exhibited any evidence of CHVI. Accordingly, **ARA** suggests that neither of these findspots warrant further investigation. It is recommended that the project, with the exception of the soon-to-be registered cemetery, be released from further heritage concerns.

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 lands with the potential to be impacted by the proposed North Burgess Solar Project in the Township of Tay Valley, Lanark County, Ontario. This assessment was conducted between mid-August and mid-September of 2010, and in mid-January of 2011 under licence #P-007, PIF #P007-244-2010. 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.

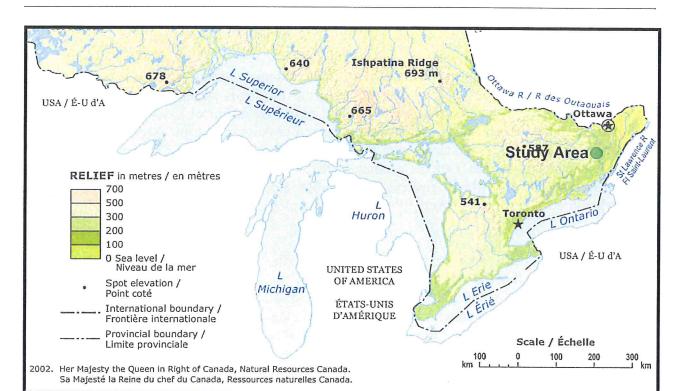
The assessment was carried out in accordance with the provisions of the Ontario Heritage Act (R.S.O. 1990), and the Draft Standards and Guidelines for Consultant Archaeologists (Ministry of Culture 2009). All records pertaining to this assessment are currently housed in a storage facility located at 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 an 80 ha parcel of land, bounded by Narrows Lock Road to the east, Stanley Road to the south and Scotch Line to the northwest in the North Burgess Ward of the Township of Tay Valley, Lanark County, Ontario (see Figures 1-3). Irregular in shape, it is historically described as being located on part Lot 13, Concession 9, in the Township of North Burgess, Lanark County, Ontario.

The nearest water sources are four small unnamed streams which pass through the study area before eventually draining into Grant's Creek and Pike Lake (see Appendix). Grant's Creek lies 250 m west of the study area, while Pike Lake is situated approximately 1.4 km to the southwest. Two beaver dams, located along the western boundary of the property, have caused a large portion of the study area to flood (see Figure 3).



Stage 1-2 Archaeological Assessment, North Burgess Solar Project (FIT - F0HJPWL), Lanark County, Ontario

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

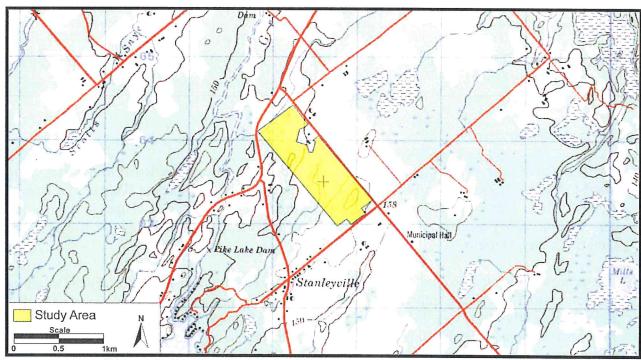


Figure 2: Location of Study Area in the Township of Tay Valley

Archaeological Research Associates Ltd.



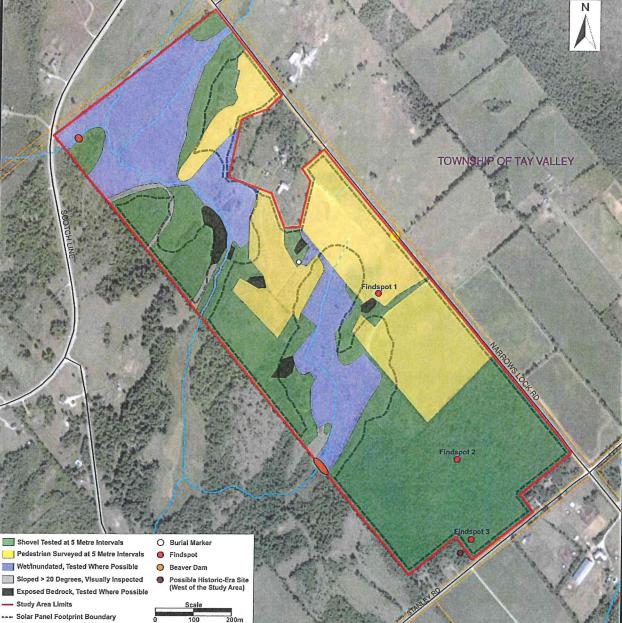


Figure 3: Study Area in Detail

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 (Ontario Ministry of Natural Resources 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 Algonquin Highlands. This region is underlain by granite and other hard Precambrian rocks. Soils are generally shallow and swamps and bogs are commonly found in the region (Chapman and Putnam 1984:211). Soil types on the property include Christy Sandy Loam, Montague Sandy Loam and North Gower Clay Loam (Hoffman et al. 1967:South 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. note that, "*either the number of streams and/or stream order is always 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), "*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 m 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, in its pristine state, would have a high potential for containing Pre-Contact sites. This is largely due to the presence of four small unnamed streams, potable and possibly navigable, which drain into Grants Creek and Pike Lake. The property's potential for Historic-era sites is similarly high given that Narrows Lock Road, Stanley Road and Scotch Line are historically-surveyed thoroughfares.

5.0 Previous Archaeological Research

An archival search was conducted using the Ontario Ministry of Tourism and Culture's Archaeological Sites Database in order to determine the presence of any registered heritage resources which might be located on or within a 2 km 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 pattern.

6.0 Historic Land Use Summary

6.1 Pre-Contact

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 Palaeo-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 and Deller 1990:52). Traditionally, Palaeo-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 sq m) and ephemeral (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 region 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, which has been attested at several sites in the vicinity. 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 (Spence et al. 1990:157). 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. It is possible that the area was used as a hunting ground by people living in the St. Lawrence Valley. However, it has also been suggested that the Iroquoians overhunted the Rideau Lakes area, forcing Algonquian hunter-gatherers to hunt elsewhere (Watson 1982:49).

6.2 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 (Jamieson 1990:385). 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 peoples. The disappearance of the St. Lawrence Iroquois has been attributed to the introduction of European disease and warfare with other Aboriginal groups, and it has been suggested that they there were attacked and dispersed by the New York Iroquois (Ibid.: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.).

The first European explorer 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 the Anishnabeg 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 and 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 (Ramsden 1990:384). 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 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 2002:107). 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).

6.3 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 (Ibid.).

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 2002:109).

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).

6.3.1 Lanark County

The first survey of Lanark County was started by William Fortune in 1774 and completed by John Stegemann in 1797. The survey was for Montague Township in Leeds County, which would eventually become part of Lanark County (McGill 1968:1). The Townships of Elmsley and Burgess were surveyed in the early 1800's. Loyalists gradually settled in these new townships, but the influx of settlers into Burgess was meagre due to the rocky terrain, which proved unfavourable for agriculture (McGill 1968:3).

A military settlement was founded in Lanark County in 1815-1816. British veterans were given land grants in the County and were joined by Scottish and Irish settlers. Further population growth was seen when the construction of the Rideau Canal began in 1827 (Chapman and Putnam 1984:198; Lanark County 2005).

Northern Lanark County was home to a busy lumber industry, while the southern portion of the county was dominated by wheat farming. Near the end of the 19th century these wheat farms gave way to dairy farms. Cheese was the pride of the county and the "Mammoth Cheese", a 22,000 pound specimen, was brought from Perth to the 1893 Chicago World's Fair to advertise the Canadian cheese industry. It brought unique attention to Lanark County, especially after the giant cheese broke through the floor of the building in which it was exhibited. The Canadian cheese industry benefited greatly from this accident, as it was the most reported event during the World's Fair (Ruddick 1943; Lanark County 2005).

6.3.2 Township of North Burgess

North Burgess was originally part of the larger Burgess Township, surveyed in the early 1800's. Burgess was separated in 1842 into two townships. South Burgess was given to Leeds County and North Burgess to Lanark County. Reverend Thomas Burgess gave his name to the township. Burgess attended Oxford University and became the Bishop of Salisbury (Brown 1984:10). As in much of Lanark County, initial settlement was slow due to land being unsuitable for agriculture (McGill 1968:3).

6.3.3 Stanleyville

Stanleyville was named after Michael Stanley, who lived on Lot 15, Concession 8. In 1840 Irish settlers made their homes here (McGill 1968:228). By 1863, the village consisted of a town hall, schoolhouse, and a few houses.

6.3.4 Lot 13, Concession 9

Lot 13 was granted by the Crown to Clossen Eyers in 1816. The land was deeded to William Abercrombie in 1867. Belden and Co.'s *Lanark Supplement* (1880) shows that the property was

still owned by William Abercrombie 13 years later, which is consistent with land registry records (see Figure 4). The map also shows that a structure was built on the property, but this clearly falls outside of the study area.

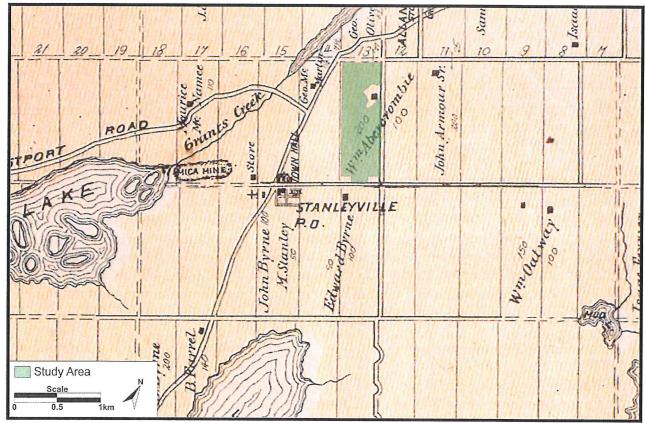


Figure 4: Detail from Belden & Co.'s Lanark Supplement Showing the Study Area (1880)

In 1895, the property was sold to Adam McLean for \$8700.00 by the Abercrombie family. The McLean family divided and sold their land to Patrick White Jr. and James V. Coburn in 1902 and 1906, respectively. In 1908, the White land was sold to the McCaffrey family who in 1914, sold it to John Irwin. In 1945 part of the Coburn land was sold to the Irwin family. The second part of the Coburn land was later deeded to Ulrich Wirths in 1963. By 1979, the property had been divided into four parts. Part 1 was deeded to The Corporation of the County of Lanark, while the other three parts belonged to the Wirths family. In 1997, Ulrich Wirths estate was transferred to his son Michael Carl Wirths. The unregistered burial location in the study area is believed to belong to Ulrich and Charlotte Wirths.

7.0 Field Methods

Given that the study area was comprised of both ploughed lands and areas not under cultivation, it was necessary to utilize both the pedestrian survey method and the test pitting method.

In areas that were under cultivation (see Plate 1), the study area was 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 m, depending upon the archaeological potential of the property. In this case, the subject property was felt to have a high archaeological potential and, as such, was surveyed at 5 m intervals (see Plate 2). If cultural materials were encountered in the course of the survey, the transect interval would be closed to 1 m and a close inspection of the ground would be conducted for 20 m in all directions. 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.

In areas not under cultivation, Ministry of Tourism and Culture guidelines (Ontario Ministry of Culture 2009) required that the study area be assessed using the test pitting method (sometimes referred to as shovel-testing). In this strategy, small regular 'test' pits, 30 cm in diameter, were hand-excavated into subsoil at a prescribed interval of 5 m (see Plates 3-4). All soil materials from each pit were screened through 6 mm mesh and examined for the presence of archaeological materials (see Plate 5). If cultural materials were encountered in the course of the survey, each positive test would be documented. Clustered test pits at a transect interval of 1 m were excavated in areas of high artifact concentrations to further delimit the site. All artifacts recovered from test pits are collected for analysis. All test pits were backfilled upon completion.

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 cultural materials encountered are flagged, mapped, photographed and collected for further analysis. Artifact locations are recorded on topographic maps, in field notes and at +/- 5 m 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 the Time of Survey



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

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Plate 3: View of Crewmembers Shovel Testing at 5 m Intervals



Plate 4: Typical Test Pit, Excavated to Subsoil

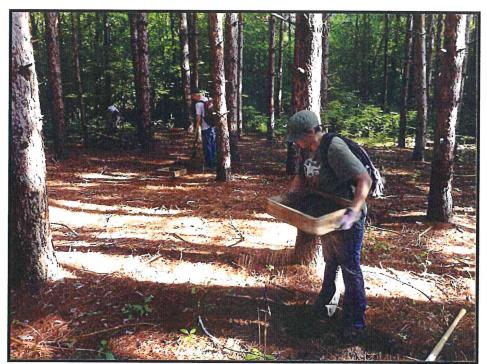


Plate 5: View of Crewmember Screening through 6 mm Mesh

8.0 Results and Recommendations

The Stage 2 archaeological assessment of the proposed North Burgess Solar Project was carried out between August 12th and 26th and on September 21st of 2010, and between January 10th and 12th of 2011. 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 and A.J. Wong, Field Directors; A. Ray, Assistant Field Director; and 11 additional crewmembers. Field conditions were excellent in August and September with a mixture of sunny and cloudy skies, with dry soil for screening. Field conditions for January were much more challenging; with winter weather resulting in the need for heating sources to thaw the soil (see Sections 8.2 and 8.3).

In the course of the assessment all cultivated lands were pedestrian surveyed at 5 m intervals (see Figure 3). In the field it was noted that large portions of land in proximity to the unnamed streams were either wet or completely inundated. This flooding was found to be the result of two beaver dams, located on along the western boundary of the study area (see Plates 6-7). Areas with exposed bedrock and lands sloped greater than 20° were also identified on the property (see Plate 8). Wet or marshy lands and areas with exposed bedrock were tested where possible. Lands sloped greater than 20° were visually inspected. All other uncultivated lands were test pitted at 5 m intervals.

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Plate 6: View of Inundated Area Adjacent to the Southern Beaver Dam



Plate 7: View of Wet/Marshy Area

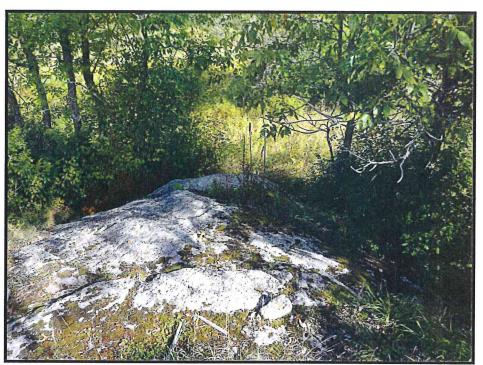


Plate 8: View of Exposed Bedrock

During the Stage 2 archaeological assessment, an unregistered burial and 3 findspots yielding archaeological materials were located. The following is a description of each:

8.1 Unregistered Burial Location

In mid-August of 2010, prior to commencement of field work, the son of the former property owners advised Hatch Ltd. that his parents were interred in an unregistered burial location on the subject property. The GPS co-ordinates provided (N 44° 49'11.94" W 076° 18'35.96") placed the burial 5 m into a field which is currently under cultivation. During the assessment no evidence of a burial was identified at that location. However, a large worked granite stone measuring 90 cm in height, 72 cm width and 55 cm in depth was identified in a small clearing 36 m southeast of this location at GPS co-ordinates N 44° 49'11.7" W 076° 18'34.3" (see Plate 9). This worked stone had a flat western face with no visible inscription, and a rose bush was planted at its base (see Plate 10). This information and additional photographs have been sent to the former property owner for confirmation that this is the burial marker. The Registrar of Cemeteries has been notified and is working directly with the client to ensure that the burial is surveyed, protected by required buffering, and registered as a cemetery.



Plate 9: Location of the Possible Burial Marker in the Small Clearing



Plate 10: Southern View of the Marker, Showing the Worked Surface and Rose Bush

8.2 Findspot 1

Description: A possible late Palaeo-Indian projectile point (see Plate 11). **Location:** In a ploughed field, 125 m southwest of Narrows Lock Road. **GPS Co-ordinates:** N 44° 49'09.0" W 076° 18'24.5" **Materials Identified:** Siliceous sandstone.

Diagnostics: Possible Hi-Lo Projectile Point. No other artifacts were found in the area, despite 3 repeat visits to the location and intensive visual survey.

Cultural Affiliation: Possible Late Palaeo-Indian, dating between 10,500 and 9,500 B.P.



Plate 11: Possible Hi-Lo Projectile Point from Findspot 1, Anterior and Posterior Views

After consultation among ARA, the Ministry of Tourism and Culture and the Proponent, it was agreed that an additional investigation of Findspot 1 should be carried out in order to determine if the point was an isolated find or part of a larger, significant deposit. It was agreed that the excavation could consist of the excavation of a single 1m test unit at the location where the projectile point had been recovered. Given that it was mid-January, freezing weather and snowy conditions required innovative excavation techniques (see Plate 12). Loose snow was shovelled from the surface, and a Tiger torch was used to melt the remaining snow (see Plate 13). The soil in the test unit was then melted using aluminum roasting pans filled with burning charcoal briquettes. This proved remarkably effective (see Plate 14) and allowed the unit to be hand-excavated to a depth of 48 cm, 5 cm of which extended into the subsoil (sees Plate 15-16). Some of the soil was screened through 3mm mesh in the field. However, cold conditions required the remainder to be taken to ARA's office for screening (still through 3mm mesh) (see Plates 17-18).



Plate 12: View of Findspot 1, Showing Test Unit



Plate 13: View of Findspot 1, Showing Initial Heating



Plate 14: View of Findspot 1, Showing Aluminum Pan Heating



Plate 15: View of Findspot 1, Showing Crewmember Excavating the Test Unit

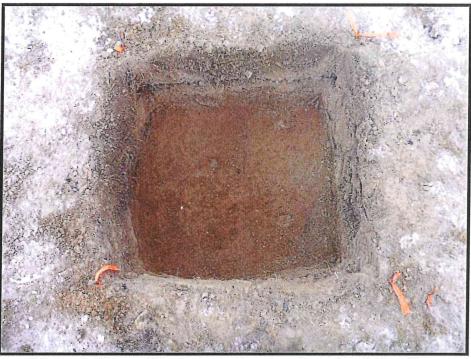


Plate 16: View of Findspot 1, Showing Completed Test Unit



Plate 17: View of Crewmember Screening through 3 mm Mesh in the Field



Plate 18: View of Crewmember Screening through 3 mm Mesh at ARA's Head Office

The excavation of the test unit at Findspot 1 did not result in the discovery of any further artifacts from the location.

Recommendation: Not recommended for further assessment.

8.3 Findspot 2

Description: An irregular man-made arrangement of stones (rectangular in part but oval at one end), of an undetermined function (see Plate 19). The feature measured 3.3×1.5 m externally, and had an interior dimension of 2.5×0.6 m. The arrangement was filled with smaller stones, on top of which lay an unmarked piece of sheet metal. Intensified test pits around the arrangement were all negative.

Location: In the southern woodlot, 235 m southwest of Narrows Lock Road.

GPS Co-ordinates: N 44° 48'55.0" W 076° 18'14.3"

Materials Identified: Stone.

Diagnostics: None.

Cultural Affiliation: Historic or modern. Function undetermined.



Plate 19: View of Irregular Arrangement of Stones, Findspot 2

After consultation among ARA, the Ministry of Tourism and Culture and the Proponent, it was agreed that an additional investigation of Findspot 2 should be carried out in order to determine if the feature possessed significant CHVI. This investigation was carried out using the same techniques described for Findspot (see Plate 20). A blow torch was used to melt the snow on and around the feature. The ground at its eastern end was thawed using aluminum roasting pans filled with burning charcoal briquettes (see Plates 21-22). The unit was then hand-excavated 5 cm into subsoil, which was reached at a depth between 47 and 49 cm (see Plates 23-24). The soil was screened, in the field, using 6 mm mesh (see Plate 25).

The excavation of the eastern end of the feature at Findspot 2 did not result in the discovery of any artifacts of significant CHVI. The sole discovery consisted of a bent wire nail (post 1890). The function of this man-made arrangement of stones must remain enigmatic; it could have served as anything from a hunting blind to a children's 'play' fort.

Recommendation: Not recommended for further assessment.



Plate 20: View of Findspot 2



Plate 21: View of Findspot 2, Showing Initial Heating

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Plate 22: View of Findspot 2, Showing Aluminum Pan Heating



Plate 23: View of Findspot 2, Showing Crewmember Excavating the Test Unit



Plate 24: View of Findspot 2, Showing Completed Test Unit



Plate 25: View of Crewmember Screening through 6 mm Mesh in the Field

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8.4 Findspot 3

Description: A Historic-era stone-lined well, measuring 2.4 m in diameter with an interior diameter of 1.8 m (see Plate 26). Intensified test pits around the well were all negative. This well lies 45 m northeast of what appears to be a Historic-era site with a second stone-lined well. The Historic-era site is situated on the adjacent private property, separated from the study area by a fieldstone fence. No artifacts were recovered from intensified test pits east of this fence line within the study area.

Location: In the southern woodlot, 55 m north of Stanley Road.

GPS Co-ordinates: N 44° 48'48.0" W 076° 18'12.4".

Materials Identified: Stone.

Diagnostics: None.

Cultural Affiliation: Euro-Canadian, 19th Century.



Plate 26: View of Stone Lined Well

Recommendation: Not recommended for further assessment.

8.5 Summary

The Stage 2 archaeological assessment of the study area identified three findspots yielding archaeological materials, along with the probable location of an unregistered burial. The latter is being dealt with according to the provisions of the Ontario Cemeteries Act. It will be registered as a cemetery, buffered, and protected from impacts in accordance with the terms of the Act.

Of the archaeological sites, only Findspot 1 and 2 were initially found to have potential CHVI (cultural heritage value or interest). After consultation with the Ministry of Tourism and Culture and the Proponent, **ARA** carried out additional investigations at these findspots. At each location, no materials indicating CHVI for the findspot were recovered. Findspot 3, a capped stone well, appears to be associated with a historic site that lies outside of the project lands. It yielded no artifacts and appears to be of limited CHVI.

Based on the results of this Stage 1 and 2 archaeological assessment, Archaeological Research Associates Ltd. feels that no further archaeological study of the subject lands would be productive. It is recommended that the project, excluding the cemetery and its buffer, be released from further heritage concerns. A Letter of Concurrence with these recommendations is requested.

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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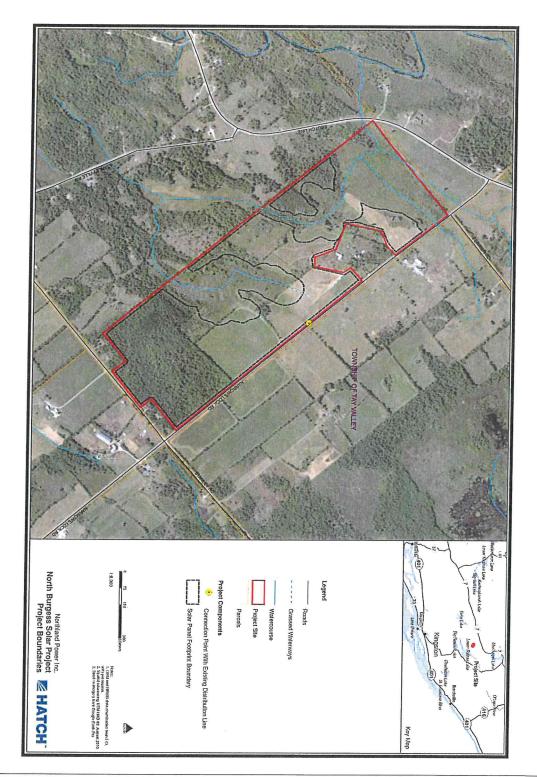
10.0 Artifact Registry

		
Fire Evidence	ц	ц
Comments	Possible Hi-Lo Point	Bent wire nail
L x W x H H	5.2 x 2.6 x 0.6	ı
Datable Attribute Name	Unidentifiable	Wire
Datable Attribute Code	4	412
Object Name	Projectile Point?	Nails
Object	363	316
Class Name	Tools	Nails
Class Code	230	121
Group	Native	Architectural
Group Code	23	12
Material	Quartzite	Ferrous
Freq. Material Code	59	18
Freq.	1	1
Date	12- Aug- 2010	12- Jan- 2011
Record Findspot Date	Findspot 1	Findspot 2
Record	1	23

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Appendix: Map of the North Burgess Solar Project Provided by Hatch Ltd.

