



April 18, 2012

## STAGE 2 ARCHAEOLOGICAL ASSESSMENT

**NextEra Bornish Wind Energy Centre  
Municipality of North Middlesex  
Middlesex County, Ontario**

**Submitted to:**

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REVISED REPORT

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## **Executive Summary**

This Stage 2 archaeological assessment was undertaken in order to meet the requirements for an application for a Renewable Energy Approval, as outlined in Ontario Regulation 359/09 section 22(3) of the Environmental Protection Act. It was conducted on behalf of NextEra Energy Canada, ULC (NEEC) by Golder Associates Ltd. (Golder) for an approximately 492.77 hectare study area located in Middlesex County, Ontario. This area incorporates the proposed turbine locations, underground electric cable corridors, access roads, service roads, vehicle and crane turnarounds, substations, transmission lines, and equipment lay down and set-up locations for the 47 turbines included in the revised NextEra Bornish Wind Energy Centre.

The *Green Energy Act* (2009) enabled legislation governing project assessments and approvals to be altered to allow for a more streamlined Renewable Energy Approval (REA) process. Under Section 22 (1) of the REA, an archaeological assessment must be conducted if the proponent concludes that engaging in the project may have an impact on archaeological resources. Archaeological Services Inc. (2009a, 2009b, 2011) previously determined the potential for the recovery of pre-contact Aboriginal and historic Euro-Canadian archaeological resources within the study area. Currently, Ontario Regulation 359/09 of the Environmental Protection Act governs the REA process for renewable energy projects such as wind, anaerobic digestions, solar, and thermal treatment facilities.

The Stage 2 archaeological assessment, conducted between June 20, 2011 and March 28, 2012, resulted in the identification of 36 sites: 17 pre-contact Aboriginal, 18 historic Euro-Canadian, and one multi-component. **Stage 3 archaeological assessments are recommended to further evaluate the cultural heritage value or interest of 23 sites.** In addition, **two sites identified in previous Stage 2 field work still require Stage 3 archaeological assessment for this project.**

The Ministry of Tourism, Culture and Sport is asked to accept this report into the Ontario Public Register of Archaeological Reports. Additional archaeological assessment is still required; hence the archaeological sites recommended for further archaeological fieldwork 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 license.

*The Executive Summary highlights key points from the report only; for complete information and findings, as well as the limitations, the reader should examine the complete report.*



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### APPENDICES

#### APPENDIX A

Background on Historic Euro-Canadian Artifacts



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## 1.0 PROJECT CONTEXT

### 1.1 Development Context

This Stage 2 archaeological assessment was undertaken in order to meet the requirements for an application for a Renewable Energy Approval, as outlined in Ontario Regulation 359/09 section 22(3) of the Environmental Protection Act. It was conducted on behalf of NextEra Energy Canada, ULC (NEEC) by Golder Associates Ltd. (Golder) for an approximately 492.77 hectare study area located in the Municipality of North Middlesex, Middlesex County, Ontario (Figure 1). The study area is located on various lots and concessions in the Geographic Townships of West Williams and East Williams, Ontario (Figure 1). Table 1 lists the relevant lots located within the study area.

**Table 1: Properties within the NextEra Bornish Wind Energy Centre, Middlesex County**

Geographic Township	Concession	Lot
West Williams	10	1 to 2 and 19 to 21
	11	1 to 21
	12 to 13	1 to 15
	14	1 to 14
	15	1 to 13
	16	1 to 3 and 5 to 12
East Williams	10	1 to 2
	11	1 to 3
	12 to 13	1 to 4
	14	1 to 7
	15	1 to 6
	16	1 to 2

The *Green Energy Act* (2009) enabled legislation governing project assessments and approvals to be altered to allow for a more streamlined Renewable Energy Approval (REA) process. Under Section 22 (1) of the REA, an archaeological assessment must be conducted if the proponent concludes that engaging in the project may have an impact on archaeological resources. Archaeological Services Inc. (2009a, 2009b, 2011) previously determined the potential for the recovery of pre-contact Aboriginal and historic Euro-Canadian archaeological resources within the study area. Currently, Ontario Regulation 359/09 of the Environmental Protection Act governs the REA process for renewable energy projects such as wind, anaerobic digestions, solar, and thermal treatment facilities.

The revised NextEra Bornish Wind Energy Centre will include 47 turbines with a 73.5 megawatt capacity as well as associated infrastructure. This includes collector cable routes, access roads, construction roads, transmission lines, staging areas, and substations. Permission to enter the optioned lots within the study area and to remove archaeological resources was given by Mr. Thomas Bird of NEEC. For the purposes of this Stage 2 assessment, the Ministry of Tourism, Culture and Sport's (MTCS) 2011 *Standards and Guidelines for*



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*Consultant Archaeologists* (Government of Ontario 2011) were followed. The objectives of the Stage 2 assessment were to document archaeological resources present within the study area, to determine whether any of the resources might be artifacts or archaeological sites with cultural heritage value or interest requiring further assessment, and to provide specific Stage 3 direction for the protection, management and/or recovery of the identified archaeological resources (Government of Ontario 2011).

The NextEra Bornish Wind Energy Centre is also associated with the Parkhill Point of Interconnect (POI) which is reported upon separately (Golder 2012). This approximately 18.5 hectare property, located on part of Lot 18, Concession 17 East of Centre Road, in the Geographic Township of East Williams, now Municipality of North Middlesex, Middlesex County, connects the hydro lines on its east side to the proposed Bornish Wind Energy Centre properties (Golder 2012). The associated proposed transmission line route is a parcel of approximately 40.5 hectares, located on part of Lots 3 to 18 and part of Lot 19 East Side of Centre Road, Concession 17 East of Centre Road, part of Lots 3 to 13 and part of Lot 18 East Side of Centre Road, Concession 16 East of Centre Road, and part of Lot 15, Concession 6 East of Centre Road, in the Geographic Township of East Williams and part of Lots 3 to 10 and part of Lot 19 West Side of Centre Road, Concession 17 West of Centre Road and part of Lots 3 to 9 and part of Lot 18 West Side of Centre Road, Concession 16 West of Centre Road, in the Geographic Township of West Williams, now Municipality of North Middlesex, Middlesex County (Golder 2012).



## **1.2 Archaeological Context**

### **1.2.1 The Natural Environment**

The study area is located primarily within the Huron Slope physiographic region, which borders the Horseshoe Moraines to the east and the Huron Fringe to the west (Chapman and Putnam 1984). The Huron Slope is a clay plain located along the eastern side of Lake Huron. It is modified by a narrow strip of sand and by the twin beaches of glacial Lake Warren which flank the Wyoming Moraine. The land within this region slopes gently upward from 600 feet to 850 or 900 feet above sea level. Soil types vary from clays to loams (Chapman and Putnam 1984:160-161).

The western part of the NextEra Bornish Wind Energy Centre falls within the Huron Fringe, which is characterized by a number of beaches, sand dunes, boulder, and gravel bars left behind by glacial Lake Algonquin and Lake Nipissing (Chapman and Putnam 1984:161). The eastern part of the project area falls within the southern-most portion of the Horseshoe Moraines. This region is characterized by the well-drained Huron clay loam and varies in elevation from 800 to 1700 feet above sea level (Chapman and Putnam 1984:127).

The extensive Ausable River system, including Parkhill Creek, traverses the project area and provides potable water for the area. The soils surrounding this river drainage range from mucky clays to silty loams and sands. Depending on the soil types within a given lot, the land has traditionally been used for pasture or for the production of a variety of crops including corn, hay, barley, oats, wheat, beans, sunflowers, celery, onions, sugar beets, and tender fruit (Chapman and Putnam 1984:127-129, 160-162).

### **1.2.2 Previously Known Archaeological Sites and Surveys**

Archaeological Services Inc. (ASI) conducted the Stage 1 background study and property inspection of the proposed project area in 2008 on behalf of GENIVAR, Markham, who authorized this work on behalf of Canadian Greenpower, as part of a larger previously proposed Canadian Greenpower Wind Project for Huron, Middlesex, and Lambton counties (ASI 2009a). Consultation with the Ontario Archaeological Sites Database (ASDB) for this large proposed project area identified 212 registered archaeological sites dating back to the Middle Archaic period (*circa* 6000 to 2500 B.C.), suggesting high archaeological potential (ASI 2009a, 2009b, 2011). Specifically, a single site, AgHk-17 (85-2-1), was previously registered within two kilometres of the proposed Bornish Wind Farm Centre area (Table 2; ASI 2009b, 2011). Further, given that the Ausable River, several small creeks, and minor and seasonal tributaries were identified within the study area, ASI (2009a) identified the potential for documenting pre-contact Aboriginal occupation. Consultation of the illustrated historic atlas also pinpointed several features on the historic landscape within the study area, and when considered in conjunction with the development of transportation routes over the past two centuries, ASI (2009a) again identified potential for the recovery of Euro-Canadian cultural material.

Specifically, ASI (2009a:6; 2009b:4; 2011:3) noted the occupation of lands on either side of Bornish Drive, beginning in 1849, by several Scottish families who had established St. Columba Roman Catholic Church on the northwest corner of Centre Road and Bornish Drive by 1860. The associated church cemetery and a schoolhouse on Lot 9, Concession 12 on the southwest corner of Bornish Drive and Kerwood Road, were the only other documented historic features of note (2009a:6; 2009b:4; 2011:3).



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Given the 2011 layout changes to the NextEra Bornish Wind Energy Centre and the high archaeological potential of the study area, Golder requested another inquiry of the ASDB in order to check if any other previously registered sites would be impacted by turbine construction and maintenance. Three additional pre-contact Aboriginal sites were identified within one kilometre of the revised study area (personal communication, Robert von Bitter, January 27, 2012; Government of Ontario n.d.). Table 2 summarizes these finds, while Table 3 provides a general outline of the culture history of the Middlesex County area, based on Ellis and Ferris (1990).

**Table 2: Registered Archaeological Sites Within One Kilometre of the Study Area**

Borden #	Name	Type	Period
AgHk-4	Wyoming Rapids	village	pre-contact Aboriginal, Middle Woodland Saugeen
AgHk-7	Wyoming Reach	-	pre-contact Aboriginal
AgHk-12	June 21-1	camp site	pre-contact Aboriginal
AgHk-17	85-2-1	lithic scatter	pre-contact Aboriginal

**Table 3: Cultural Chronology for Middlesex County**

Period	Characteristics	Time Period	Comments
Early Palaeo-Indian	Fluted Projectiles	9000 - 8400 B.C.	spruce parkland/caribou hunters
Late Palaeo-Indian	Hi-Lo Projectiles	8400 - 8000 B.C.	smaller but more numerous sites
Early Archaic	Kirk and Bifurcate Base Points	8000 - 6000 B.C.	slow population growth
Middle Archaic	Brewerton-like points	6000 - 2500 B.C.	environment similar to present
Late Archaic	Lamoka (narrow points)	2000 - 1800 B.C.	increasing site size
	Broadpoints	1800 - 1500 B.C.	large chipped lithic tools
	Small Points	1500 - 1100 B.C.	introduction of bow hunting
Terminal Archaic	Hind Points	1100 - 950 B.C.	emergence of true cemeteries
Early Woodland	Meadowood Points	950 - 400 B.C.	introduction of pottery
Middle Woodland	Dentate/Pseudo-Scallop Pottery	400 B.C. - A.D.500	increased sedentism
	Princess Point	A.D. 550 - 900	introduction of corn
Late Woodland	Early Ontario Iroquoian	A.D. 900 - 1300	emergence of agricultural villages
	Middle Ontario Iroquoian	A.D. 1300 - 1400	long longhouses (100m +)
	Late Ontario Iroquoian	A.D. 1400 - 1650	tribal warfare and displacement
Contact Aboriginal	Various Algonkian Groups	A.D. 1700 - 1875	early written records and treaties
Late Historic	Euro-Canadian	A.D. 1796 - present	European settlement

ASI (2009b, 2011) conducted the initial Stage 2 field assessments for the NextEra Bornish Wind Energy Centre in 2009 and 2010. A total of 30 archaeological sites, 27 pre-contact Aboriginal and three historic Euro-Canadian, were identified during these two field seasons (ASI 2009b, 2011), and are summarized in Table 4. In the 2011



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report, it was noted that many of these sites were no longer of cultural heritage value or interest or were avoided by layout revisions. Four sites, however, including P16 (AgHk-82), P17 (AgHk-83), P26 (AgHk-90), and P31 (AgHk-94), could not be avoided, and ASI (2011) recommended Stage 3 archaeological investigation to further assess their cultural heritage value or interest. It should also be noted, that six of ASI's sites, P1 (AgHk-62), H1 (AgHk-63), H2 (AgHk-64), H3 (AgHk-65), P2 (AgHk-74), and P3 (AgHk-75), fall within one kilometre of the 2011 NextEra Bornish Wind Energy Centre layout (personal communication, Robert von Bitter, January 27, 2012; Government of Ontario n.d.). In addition, P19 (AgHk-85) falls within an area resurveyed by Golder in 2011. These sites will be considered below in Sections 4.0 and 5.0.

**Table 4: Archaeological Sites Identified by ASI in 2009 to 2010**

Borden #	Name	Type	Period
AgHk-62	P1	isolated findspot	pre-contact Aboriginal
AgHk-74	P2	isolated findspot	pre-contact Aboriginal, Middle Archaic Brewerton
AgHk-75	P3	isolated findspot	pre-contact Aboriginal, Middle Archaic Otter Creek
AgHk-76	P4	isolated findspot	pre-contact Aboriginal, Middle Archaic Brewerton
AgHk-77	P5	lithic scatter	pre-contact Aboriginal
-	P6	isolated findspot	pre-contact Aboriginal
AgHk-79	P8	lithic scatter	pre-contact Aboriginal
AgHk-80	P9	lithic scatter	pre-contact Aboriginal, Middle Archaic Brewerton
AgHk-81	P10	isolated findspot	pre-contact Aboriginal, Late Woodland
-	P11	isolated findspot	pre-contact Aboriginal
-	P12	isolated findspot	pre-contact Aboriginal
-	P14	isolated findspot	pre-contact Aboriginal
-	P15	isolated findspot	pre-contact Aboriginal
AgHk-82	P16	lithic scatter	pre-contact Aboriginal, Early Archaic Nettling
AgHk-83	P17	lithic scatter	pre-contact Aboriginal, Middle Archaic Otter Creek
AgHk-85	P19	isolated findspot	pre-contact Aboriginal, Middle Archaic Brewerton
AgHk-86	P20	isolated findspot	pre-contact Aboriginal
AgHk-87	P21	isolated findspot	pre-contact Aboriginal
-	P22	isolated findspot	pre-contact Aboriginal
-	P23	isolated findspot	pre-contact Aboriginal
AgHk-88	P24	lithic scatter	pre-contact Aboriginal
AgHk-89	P25	isolated findspot	pre-contact Aboriginal, Middle Archaic Brewerton
AgHk-90	P26	lithic scatter	pre-contact Aboriginal
AgHk-91	P27	lithic scatter	pre-contact Aboriginal
AgHk-92	P29	lithic scatter	pre-contact Aboriginal
AgHk-93	P30	isolated findspot	pre-contact Aboriginal, Middle Archaic Brewerton
AgHk-94	P31	lithic scatter	pre-contact Aboriginal
AgHk-63	H1	homestead	historic Euro-Canadian
AgHk-64	H2	homestead	historic Euro-Canadian





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Borden #	Name	Type	Period
AgHk-65	H3 – Hugh McPhee	homestead	historic Euro-Canadian

Information concerning specific site locations is protected by provincial policy, and is not fully subject to the Freedom of Information Act. The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to all media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The Ministry of Tourism, Culture and Sport will provide information concerning site location to the party or an agent of the party holding title to a property, or to a licensed archaeologist with relevant cultural resource management interests.

Additionally, Golder (2012) recently conducted a Stage 1 and 2 archaeological assessment of the Parkhill POI, which is located northeast of the study area. One pre-contact Aboriginal archaeological site (AgHj-2) was previously registered within 1 kilometre of the POI study area. During the Stage 2 assessment of the Parkhill POI lands, a mid-to-late 19<sup>th</sup> century historic Euro-Canadian site (Location 1, AgHj-9) was documented. Golder (2012) recommended that this site undergo Stage 3 archaeological assessment to further evaluate its cultural heritage value or interest in advance of any ground disturbance activities.

### 1.2.3 Pre-contact Aboriginal Resources and Archaeological Potential

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Golder applied archaeological potential criteria commonly used by the Ontario Ministry of Tourism, Culture and Sport (Government of Ontario 2011) to determine areas of archaeological potential within the region under study. These variables include proximity to previously identified archaeological sites, distance to various types of water sources, soil texture and drainage, glacial geomorphology, elevated topography and the general topographic variability of the area.

Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and, considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils or topographic variability, may also indicate archaeological potential. Finally, extensive land disturbance can eradicate archaeological potential (Wilson and Horne 1995).

In archaeological potential modeling, a distance to water criterion of 300 metres is generally employed. The closest potable water sources in the study area are the Ausable River and its numerous tributaries. These run throughout the study area from west to east, draining from Lake Huron (Figure 1). Lake Huron is also only a few kilometres away from the study area, and was likely frequently visited by pre-contact Aboriginal peoples.

Soil texture can be an important determinant of past settlement, usually in combination with other factors such as topography. The area surrounding the region of interest is mainly glacial till with predominantly clay soils (Chapman and Putnam 1984). These areas of glacial till have been called Horseshoe Moraines (Hagerty and Kingston 1992:11). The soils of the study area consist of Huron Brookston silt loam characterised by moderately well to imperfect drainage (Hagerty and Kingston 1992: Sheet 1). Spring drainage is relatively slow, delaying warming of the soil and restricting root growth (Hagerty and Kingston 1992:52). As such, these soils benefit from



tile drainage “to reach their capability for common field crops (Hagerty and Kingston 1992:52; cf. Brock 1972:586). These soils, therefore, can be considered relatively unsuitable for pre-contact Aboriginal agriculture and do not contribute to the archaeological potential for pre-contact Aboriginal sites.

The study area falls within a climatic region which is slightly cooler, slightly wetter, and providing slightly fewer frost-free days than the surrounding areas of Middlesex County, nearer the shores of Lake Huron and Lake Erie (Hagerty and Kingston 1992:16). This may have presented risks for pre-contact Aboriginal gathering, gardening or agriculture.

The Ontario Ministry of Tourism, Culture and Sport also views the presence of previously registered archaeological resources as a prime indicator of archaeological potential. There are seven pre-contact Aboriginal sites within a one kilometre radius of the study area (Table 2, Table 4). Somewhat further from the study area, but within the Ausable River catchment, however, 24 additional pre-contact Aboriginal sites have been documented by ASI (Table 4). They span from the Early Archaic to the Late Woodland periods, indicating that this area was favoured by pre-contact Aboriginal peoples for over 10,000 years.

Glacial till chert can be found in the moraines of the area (Chapman and Putnam 1984: Figure 16) and relatively high quality Kettle Point chert occurs to the west between Kettle Point and Ipperwash, on Lake Huron. Currently, Kettle Point chert occurs as submerged outcrops extending for approximately 1350 metres into Lake Huron. Secondary deposits of Kettle Point chert have been reported in Essex County and in the Ausable Basin (Eley and von Bitter 1989; Fox 2009:362). Natural resources, such as game, fish, and wild berries, have also been considered plentiful in the pre-contact period (Brock 1972:586; North Middlesex Historical Society 2010a).

Due to the proximity of the study area to the Ausable River, and its tributaries, which functioned as a potable water source, as well as a transportation route, and due to the presence of plentiful natural resources, the potential for pre-contact Aboriginal archaeological resources within the study area was judged to be moderate to high.

#### **1.2.4 Existing Conditions**

The Stage 2 field assessment for the revised NextEra Bornish Wind Energy Centre was conducted from June 20, 2011 to March 28, 2012 under the PIF P218-097-2011 issued to Scott Martin, Ph.D., by the MTCS and the PIF P319-013-2012 issued to Irena Jurakic, M.A., by the MTCS. During the Stage 2 field work, the weather ranged from warm and sunny to cool and overcast and is noted for each location in Section 3.0 below. At no time were the field or weather conditions detrimental to the recovery of archaeological material and visibility was excellent. The study area encompasses approximately 492.77 hectares and consists of ploughed, well-weathered agricultural fields.

### **1.3 Historical Context**

#### **1.3.1 Post-contact Aboriginal Resources and Archaeological Potential**

The post-contact Aboriginal occupation of Southern Ontario was heavily influenced by the dispersal of various Iroquoian-speaking communities by the New York State Iroquois and the subsequent arrival of Algonkian-speaking groups from northern Ontario at the end of the 17<sup>th</sup> century and the beginning of the 18<sup>th</sup> century



(Konrad 1981; Schmalz 1991). By 1690, Algonkian speakers from the north appear to have begun to repopulate Bruce County (Rogers 1978:761). This is the period in which the Mississaugas are known to have moved into southern Ontario and the lower Great Lakes watersheds (Konrad 1981). In southwestern Ontario, however, members of the Three Fires Confederacy (Chippewa, Ottawa and Potawatomi) were immigrating from Ohio and Michigan in the late 1700s (Feest and Feest 1978:778-779).

The southeastern-most portion of the Township of East Williams was ceded to the Crown in 1819 with Treaty 21 (Dunlop *et al.* 2010a; Morris 1943:24-25). The entire study area falls slightly northwest of this treaty boundary, but first enters the Euro-Canadian historic record as part of Treaty No. 27 1/2 with the Ojibway and Chippewa (Figure 2):

*...being an agreement made at Amherstburg in the Western District of the Province of Upper Canada on the 26th of April, 1825, between James Givens, Esquire, Superintendent of Indian Affairs, on behalf of His Majesty King George the Fourth and the Chiefs and Principal Men of the part of the Chippewa Nation of Indians, inhabiting and claiming the tract of land .... Wawanosh Township in the County of Huron was named after Way-way-nosh the principal Chief of the Band making this Treaty.*

(Morris 1943: 26-27)

Treaty No. 27 1/2 was subsequently confirmed on July 10, 1827 as Treaty Number 29 with only a minor change in the legal description of the boundaries of the land surrender (Morris 1943:27). While it is difficult to exactly delineate treaty boundaries today, Figure 2 provides an approximate outline of the limits of Treaty No. 27 1/2.

As of 1836, a small Aboriginal community of about 50 warriors and their families, including Chief Big Bow, are said to have 'squatted' for the winter, hunting game, near what is now the town of Ailsa Craig (North Middlesex District Historical Society 2012). A few Aboriginal residents continued to live in the Township of East Middlesex in 1889 on or near the John Doyle property in the Wylie neighbourhood (Brock 1972:586).

Game was considered plentiful in the area around the study area in the early- to mid-1800s (Brock 1972:586; North Middlesex District Historical Society 2012). In the late 1800s, the odd bear or wolf was still seen in the area.

Due to the proximity of the study area to the Ausable River watershed, which functioned as a potable water and transportation route, the potential for post-contact Aboriginal archaeological resources was judged to be moderate.

### **1.3.2 Historic Euro-Canadian Resources and Archaeological Potential**

The criteria used by the Ontario Ministry of Tourism, Culture and Sport to determine potential for historic Euro-Canadian archaeological sites includes the presence of: previously identified archaeological sites; particular, resource-specific features that would have attracted past subsistence or extractive uses; areas of initial, non-Aboriginal settlement; early historic transportation routes; elevated topography; and properties designated under the *Ontario Heritage Act*.

The lands of the present Townships of East Williams and West Williams were patented in 1830 by the Canada Company, formed in London, England in 1824 to survey, develop and sell land (ASI 2009b:4; Dunlop *et al.*



2010a). Originally united as Williams Township, named after a Canada Company employee, William Williams, the township began to be surveyed in 1831 by John McDonald, with the first six concessions surveyed between the boundary of Lobo Township to the east and the village of Nairn, to the east of the Bornish Wind Energy Centre study area (North Middlesex District Historical Society 2012). Concessions 7 to 20 followed, on a different orientation (North Middlesex District Historical Society 2012). Donald McIntosh, an agent of the Canada Company, established the first grist mill and saw mill in Nairn in 1831 (Brock 1972:586). As of 1835, a small number of Euro-Canadians were settling in the Ailsa Craig area (North Middlesex District Historical Society 2012). In 1842, the first meeting that would appoint council members for the Township of Williams, and become North Middlesex's first local government, was held at Nairn (Dunlop *et al.* 2010a). The Township of West Williams was settled in 1850 by Henry Saul, who began farming on Concession 21, and others took up residence along the Ausable River (Brock 1972:598). Williams Township was subsumed within Middlesex County around 1850 (Dunlop *et al.* 2010b), before being divided into two at Centre Road in 1860, when Nairn was seen to be too distant for those travelling from the western part of the township (Brock 1972:598; Dunlop *et al.* 2012b; Grainger 2002:62). Scottish place names can be attributed to the Scottish descent of many of the original settlers in the study area (Archaeological Services Inc. 2009:4; Grainger 2002:62). Specifically, Brock (1972:586) noted that the area was said to have been settled by "Highland Scotch" in 1833.

Other communities of note within the study area are the hamlet of Bornish, active from 1849 to the mid-20<sup>th</sup> century, but originally named Dalgetta, prior to the Bornish post office opening in 1874 (Grainger 2002:62-65); and the post office of Sable, active from 1860 to 1911 (Grainger 2002:272-274) within the study area. The village of Parkhill is located just north of the study area. It has previously been pointed out (Archaeological Services Inc. 2009:4) that homesteads are frequently found in the area of interest, particularly along settlement roads. Homesteads are visible along roads in the historical atlas from H.R. Page & Co.'s 1878 *Illustrated Historical Atlas of the County of Middlesex*. Figure 3 illustrates a portion of the NextEra Bornish Wind Energy Centre study area on part of H.R. Page & Co.'s (1878) map of the Township of East Williams, while Figure 4 illustrates the remainder of the Bornish Wind Energy Centre study area on part of H.R. Page & Co.'s (1878) map of the Township of West Williams. Individual properties will be highlighted in Section 4.0 below.

The Ontario Ministry of Tourism, Culture and Sport also views the presence of previously registered archaeological resources as a prime indicator of archaeological potential. There are three Euro-Canadian sites within a one kilometre radius of the study area (Table 4) that were identified by ASI during the 2009 field season (ASI 2009b, 2011).

Due to the proximity of the study area to the Ausable River watershed, which functioned as a potable water source and a transportation route, a historic reference to a homestead within the study area, the proximity of the study area to the historic communities of Bornish, Nairn, and Parkhill and to historic transportation routes, the potential for historic Euro-Canadian resources was judged to be high.

### **1.3.3 Recent Reports**

In addition to the existing historic documentation, the properties considered for the Bornish Wind Energy Centre have been reported on in recent archaeological assessments. The Stage 1 archaeological assessment was conducted by Archaeological Services Inc. (ASI) and was entitled *Stage 1 Archaeological Assessment: Canadian Greenpower Wind Project, Counties of Huron, Middlesex and Lambton, Ontario* (ASI 2009a) produced



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by ASI in May 2009 under PIF P057-456-2008. The first part of the Stage 2 archaeological assessment was also conducted by ASI and was entitled *Stage 2 Property Assessment (June 2009 Field Season): Bornish Wind Farm Project Environmental Assessment, East Williams, West Williams, and Adelaide Townships, Middlesex County, Ontario* (ASI 2009b) produced by ASI in October 2009 under PIF P057-534-2009. The second part of the Stage 2 archaeological assessment was again conducted by ASI and was entitled *Stage 2 Archaeological Assessment (Property Assessment): Bornish Wind Farm Project, East Williams, West Williams, and Adelaide Townships, Middlesex County, Ontario* (ASI 2011) produced by ASI in March 2011 under PIF P057-534-2009. Finally, Golder (2012) recently conducted a Stage 1 and 2 Archaeological Assessment of the Parkhill point of interconnect lands to the northeast of the study area. This report was entitled *Stages 1 and 2 Archaeological Assessment, Parkhill Point of Interconnect, Various Lots and Concessions, Geographic Townships of East Williams and West Williams now Municipality of North Middlesex, Middlesex County, Ontario*, and was produced in February 7, 2012 under PIF P319-018-2012.



## **2.0 FIELD METHODS**

Approximately 93% of the project area to be impacted by the NextEra Bornish Wind Energy Centre development was subject to pedestrian survey, 2% was test pitted in wood lots, while the remaining 5% was deemed disturbed by previous construction activities. As per the *Standards and Guidelines for Consultant Archaeologists* (Section 7.8.6, Standard 1a, Government of Ontario 2011), Plates 2 to 41 illustrate a representative sample of parts of the study area that confirm conditions met the requirements for pedestrian survey. Plate locations and photograph directions are provided in the Figure 5 tiles. During the Stage 2 pedestrian survey, the weather ranged from warm and sunny to cool and overcast and is noted for each location in Section 3.0 below. At no time were the field or weather conditions detrimental to the recovery of archaeological material and visibility was excellent.

The disturbed area is located in the municipal right-of-way along Kerwood Road (Plate 1) and under road beds (which will be directionally drilled) where collector cables will be buried. As the study area is characterized by ploughed and well-weathered agricultural fields (Plates 2 to 41), the Stage 2 assessment was conducted using pedestrian survey at five metre intervals (Plate 2, 3, 6, 8, 10, 12, 14, 15, 16, 17, 19, 24, 25, 26, 27, 29, 31, 33, 35, 37, 39). Numerous areas existed within the study area where pedestrian survey was possible, despite conditions visible on aerial photography. These included seasonal watercourses of widths less than one metre and treed windbreaks of widths less than five metres (in ploughed agricultural fields). Their presence did not impact pedestrian survey transects since they were accommodated within the five metre transects.

When archaeological resources were identified, the survey transect was decreased to a one metre interval (Plate 21) and spanned a minimal 20 metre radius around the identified artifact. This approach established if the artifact was an isolated find or if it was part of a larger artifact scatter. If the artifact was part of a larger scatter, the one metre interval was continued until the full extent of the scatter was defined (Government of Ontario 2011).

As some collector cables will be run underneath woodlots by directional drilling, they were assessed by the test pit survey method at 5 metre intervals (Plate 42). Each test pit was approximately 30 centimetres in diameter (Plate 43) and excavated five centimetres into sterile subsoil, examining the pit for stratigraphy, cultural features, or evidence of fill. All soil matrix was screened through six millimetre mesh hardware cloth to facilitate the recovery of small artifacts and then used to backfill the pit. All artifacts were collected according to their associated test pit. In the event that an artifact was encountered in a test pit, eight additional test pits were dug at less than 2.5 metre intervals within a radius of five metres around the initial positive test pit and then an additional one-by-one metre test unit was placed over the initial positive test pit.

During the test pit survey of the woodlots, one area not assessed due to the wet conditions presented by poor drainage in the area (Plate 44). Plate locations and photograph directions are provided in the Figure 5 tiles. During the Stage 2 test pit survey of the wood lots, the weather was sunny and warm. At no time were the field or weather conditions detrimental to the recovery of archaeological material and visibility was excellent.

In order to address concerns about the impact of the wind turbine infrastructure, standalone collector cable corridors or transmission line corridors on private lands were surveyed as 20 metre wide corridors; transmission line corridors, limited to municipal right-of-ways, were surveyed from the road edge to the edge of the right-of way; and all roads or roads with collector cables alongside were surveyed as 60 metre wide corridors. All turbine pads with associated vehicle and crane turnarounds and equipment laydown areas were assessed as a



70 metre radius centred on the turbine. Finally, all substation and laydown areas were assessed with 20 metre buffers.

All formal and diagnostic artifact types were collected and a UTM reading was taken using either a Trimble Recon handheld GPS unit with a Holux GR-271 CF GPS Receiver, using the North American Datum (NAD) 83, with a minimal accuracy of two metres, or a Garmin eTrex Legend handheld GPS unit using the North American Datum (NAD) 83, with a minimal accuracy of five metres. UTM coordinates were recorded for a total of 36 archaeological sites. These are presented in the supplementary documentation (Supplement B). Supplement A illustrates the Stage 2 field assessment methods and results for the study area in detail while Figure 5 illustrates the field assessment methods across the study area.

Three First Nations monitors also participated in the Stage 2 archaeological assessment; their roles are summarized in Supplement C.



### 3.0 STAGE 2 RECORD OF FINDS

The Stage 2 archaeological assessment was conducted employing the methods described in Section 2.0. An inventory of the documentary record generated by fieldwork is provided in Table 5 below and the Stage 2 archaeological assessment results are discussed here. Golder's Stage 2 survey of the proposed NextEra Bornish Wind Energy Centre properties identified a total of 36 locations, 17 pre-contact Aboriginal, 18 historic Euro-Canadian, and one multi-component. A summary of the artifacts collected from each of these sites, their spatial extent, and a description of the artifacts left in the field are provided below. Supplement A, which illustrates the Stage 2 survey methods and results, and Supplement B, which lists the UTM coordinates for each of these locations, are included as supplementary documents to this report.

**Table 5: Inventory of Documentary Record**

Document Type	Current Location of Document Type	Additional Comments
Field Notes	Golder offices in London and Mississauga	In original field book and photocopied in project file
Hand Drawn Maps	Golder offices in London and Mississauga	In original field book and photocopied in project file
Maps Provided by Client	Golder offices in London and Mississauga	Hard and digital copies in project file
Digital Photographs	Golder office in Mississauga	Stored digitally in project file

All of the material culture collected during the NextEra Bornish Wind Energy Centre Stage 2 survey is contained in one banker's box. It will be temporarily housed at Golder's Mississauga office until formal arrangements can be made for their transfer to an Ontario MTCS collections facility.

The 36 archaeological locations include 18 locations with a pre-contact Aboriginal lithic industry component. The chert types identified in the discussion below include:

- **Haldimand chert:** a relatively high quality raw material that outcrops along the Bois Blanc formation between Kohler and Hagersville, as well as in Cayuga, Ontario, occurring as nodules and lenses several centimetres in diameter in limestones and dolomites. It is also widely available from secondary deposits along the eastern Lake Huron shore in Bruce County (Golder 2009). Its colour is typically pale grey to white. The macroscopic structure is homogenous to mottled and sometimes banded and tiny fossils and cavities lined with quartz crystals are common (Luedtke 1992).
- **Kettle Point chert:** a relatively high quality raw material that outcrops between Kettle Point and Ipperwash, on Lake Huron. Currently, Kettle Point occurs as submerged outcrops extending for approximately 1350 metres into Lake Huron. Secondary deposits of Kettle Point chert have been reported in Essex County and in the Ausable Basin.
- **Onondaga chert:** a high quality raw material that outcrops along the north shore of Lake Erie east of the embouchure of the Grand River. This material can also be recovered from secondary glacial deposits across much of southwestern Ontario, east of Chatham. The structure of the chert is usually mottled and streaked, with veins filled with chalcedony or quartz crystals and a shiny lustre (Luedtke 1992).





Finally, a few unidentified chert types and till chert were recovered during the Stage 2 archaeological assessment and are mentioned below.

All chert type identifications were accomplished visually using reference materials located in Golder's Mississauga office. The flake assemblage was subject to morphological analysis following the classification scheme described by Lennox *et al.* (1986) and expanded upon by Fisher (1997), with the exception that no attempt was made to distinguish "primary" from "primary bipolar" flakes.

In addition, the 36 archaeological locations include 19 locations with a historic Euro-Canadian component. For historic Euro-Canadian artifacts, Appendix A provides a more comprehensive discussion of temporally diagnostic Euro-Canadian material culture to supplement the results below.

### **3.1 Location 1**

The Stage 2 pedestrian survey (Plate 25) of the proposed wind energy components on property BOR1691, west of Haskett Road and south of Bornish Drive, resulted in the identification of Location 1. This pre-contact Aboriginal site, examined under sunny and warm conditions on June 20, 2011, consists of one scraper (Plate 45:1) and one piece of chipping detritus (Plate 45:2) spaced 12 metres apart. Table 6 summarizes the recovered artifacts. Both the flake and the scraper were identified along the proposed cable corridor (Figure 5-13; Supplement A: Figure 13). As detailed in Section 2.0, survey intervals were intensified to one metre for a twenty metre radius surrounding both of the finds but no further artifacts were identified.

**Table 6: Location 1 Pre-contact Aboriginal Artifacts**

<b>Artifact</b>	<b>Frequency</b>	<b>%</b>
scraper	1	50.00
chipping detritus	1	50.00
<b>Total</b>	<b>2</b>	<b>100.00</b>

#### **3.1.1 Chipped Lithic Tools**

One side scraper manufactured from a secondary Kettle Point flake was recovered, measuring 49.38 millimetres long, 53.27 millimetres wide and 8.48 millimetres thick. Two edges demonstrated retouch, while the third is classified as utilized.

#### **3.1.2 Chipping Detritus**

A single piece of chipping detritus was recovered at this location, a broken flake manufactured from Kettle Point chert.

#### **3.1.3 Artifact Catalogue**

Table 7 presents the Stage 2 artifact catalogue for Location 1.



**Table 7: Location 1 Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	chipping detritus	1	Kettle Point chert
2	surface collection	0 cm	scraper	1	Kettle Point chert, side scraper, complete, 1 x 3 edges (2 retouch and 1 utilized), small amount of cortex still visible

### 3.2 Location 2 (AgHk-95)

The Stage 2 pedestrian survey (Plate 2) of the proposed wind energy components on property BOR1614 identified Location 2 (AgHk-95) Figure 5-01; (Supplement A: Figure 01). This pre-contact Aboriginal site was documented under sunny and warm conditions on June 20, 2011 and measures approximately 13 metres (along the north-south axis) by 15 metres (along the west-east axis). It consists of 21 artifacts, 10 artifacts of which were collected for analysis (Plate 46). The artifacts left behind were all Kettle Point chert chipping detritus. Table 8 summarizes the recovered pre-contact Aboriginal artifacts. This scatter is located along the proposed collector cable corridor south of Turbine 1.

**Table 8: Location 2 (AgHk-95) Pre-contact Aboriginal Artifacts**

Artifact	Frequency	%
chipping detritus	8	80.00
scraper	1	10.00
biface	1	10.00
<b>Total</b>	<b>10</b>	<b>100.00</b>

#### 3.2.1 Chipped Lithic Tools

Table 9 provides the characteristics of and metrics for the recovered side scraper (Plate 46:1) and biface (Plate 46:2). Both are complete and were manufactured from Kettle Point chert.

**Table 9: Location 2 (AgHk-95) Tool Metrics**

Cat. #	Tool	Material	Length (mm)	Width (mm)	Thickness (mm)	Comments
2	scraper	Kettle Point	31.38	24.60	8.86	complete, side scraper
3	biface	Kettle Point	49.85	33.80	19.20	complete

#### 3.2.2 Chipping Detritus

A total of eight lithic flakes (Plate 46:3), all Kettle Point chert, were collected during the Stage 2 investigation of Location 2 (AgHk-95). Their morphology is presented in Table 10. The sample is completely composed of



secondary, tertiary, and broken flakes, indicating that primary lithic reduction and tool production likely occurred elsewhere.

**Table 10: Location 2 (AgHk-95) Chipping Detritus**

Chert	Secondary		Tertiary		Broken		Total	
	#	%	#	%	#	%	#	%
Kettle Point	1	12.50	5	62.50	2	25.00	8	100.00
<b>Total</b>	<b>1</b>	<b>12.50</b>	<b>5</b>	<b>62.50</b>	<b>2</b>	<b>25.00</b>	<b>8</b>	<b>100.00</b>

### 3.2.3 Artifact Catalogue

Table 11 presents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

**Table 11: Location 2 (AgHk-95) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	chipping detritus	8	Kettle Point chert
2	surface collection	0 cm	scraper	1	Kettle Point chert, side scraper, complete, 1 x 1 edge (retouched), bifacial fragment
3	surface collection	0 cm	biface	1	Kettle Point chert, complete, very blocky and thick

## 3.3 Location 3

While investigating the proposed location of the wind energy components on property BOR1614 on June 20, 2011, the Stage 2 pedestrian survey (Plate 2) also resulted in the recovery of an isolated pre-contact Aboriginal ground stone artifact (Plate 47:1), designated Location 3. This find was identified 5 metres south of the study area edge and 40 metres east of the existing woodlot, near the proposed collector cable corridor south of Turbine 1 (Figure 5-01; Supplement A: Figure 01). Survey intervals were intensified to a one metre radius surrounding the ground stone object, however no other artifacts were identified.

This object is made out of granitic rock and measures 48.76 millimetres long, by 33.46 millimetres wide and 38.68 millimetres thick. One part is rounded, while the other is flat and smooth from grinding. Although its exact function remains unknown, it is likely that it served either as a weight or was used in the manufacture of wood implements.

### 3.3.1 Artifact Catalogue

Table 12 presents the Stage 2 artifact catalogue for Location 3.



**Table 12: Location 3 Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	misc. modified ground stone	1	granitic rock, complete, one part rounded and 1 part flat and smooth (from grinding?); use unknown

### 3.4 Location 4 (AgHk-96)

Location 4 (AgHk-96) was identified on June 22, 2011, an overcast and hot day, during the Stage 2 pedestrian survey of the proposed Turbine 40 pad, access road, and collector cable corridor on BOR1616 (east of Haskett Road and south of Bornish Road) (Figure 5-13; Supplement A: Figure 13). Location 4 (AgHk-96) consists of a 30 metre (along the north-south axis) by 70 metre (along the west-east axis) scatter of approximately 120 fragments of mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris. In total, 23 Euro-Canadian artifacts, which include 19 domestic and four personal, were collected during the Stage 2 assessment (Table 13). Each artifact class is discussed in greater detail below.

**Table 13: Location 4 (AgHk-96) Historic Euro-Canadian Artifacts**

Artifact	Frequency	%
domestic	19	82.61
personal	4	17.39
<b>Total</b>	<b>23</b>	<b>100.00</b>

#### 3.4.1 Domestic Artifacts

A total of 19 domestic artifacts were collected during the Stage 2 assessment of Location 4 (AgHk-96). This collection includes 12 ceramic artifacts and seven fragments of domestic bottle glass.

##### 3.4.1.1 Ceramic Artifacts

In total, 12 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 4 (AgHk-96). Included in this total are 10 fragments of ironstone and two fragments of utilitarian red earthenware. Table 14 provides a detailed breakdown of the ceramic assemblage by decorative style.

**Table 14: Summary of Ceramic Collection According to Decorative Style, Location 4 (AgHk-96)**

Artifact	Frequency	%
ironstone, plain	8	66.67
earthenware, red	2	16.67
ironstone, moulded	1	8.33
ironstone, hand painted	1	8.33
<b>Total</b>	<b>12</b>	<b>100.00</b>



### Ironstone

The most common ceramic type collected during this Stage 2 assessment is ironstone (n=12 or 83.33%). Ironstone or graniteware is a variety of refined white earthenware introduced in the 1830s that became extremely popular in Upper Canada by the 1860s (Kenyon 1985). The Location 4 (AgHk-96) ironstone assemblage includes eight fragments of plain ironstone including hollowware and basal fragments as well as a partial maker's mark indicating that it was manufactured in Burslem, England (Plate 48:1). Also in the assemblage is a fragment that is moulded with maple leaves (Plate 48:2), as well as a single basal hollowware fragment bearing a hand painted black stripe (Plate 48:3).

### Utilitarian Earthenware

A total of two fragments of lead glazed utilitarian red earthenware were collected. These are both fragments of hollowware rim sherd. Red and yellow earthenware vessels were manufactured throughout the late 18<sup>th</sup> and 19<sup>th</sup> centuries and were the most common utilitarian ware in the first half of the 19<sup>th</sup> century, eventually being replaced by more durable stoneware vessels.

#### 3.4.1.2 Glass Artifacts

Seven fragments of domestic bottle glass were recovered from Location 4 (AgHk-96). This assemblage includes three fragments of olive glass, including one diagnostic oil ring finish dating from 1850 to about 1920 (Plate 48:4). Also present are two aqua glass fragments, and one sun coloured amethyst fragment and one amber shard. The presence of sun coloured amethyst glass indicates a date range of 1880 to 1920.

#### 3.4.2 Personal Artifacts

Four fragments of white clay tobacco pipe were collected during the Stage 2 assessment of Location 4 (AgHk-96) including two pipe stem fragments (Plate 48 :5), a pipe elbow (Plate 48:6), and a fragment of pipe bowl (Plate 48:7). White clay pipes were very popular throughout the 19<sup>th</sup> century, with a decline in use by 1880 when they were replaced by briar pipes and cigarettes (Adams 1994:93). Both pipe stem fragments are marked with manufacturer information. One is marked Bannerman Montreal, which was operational from 1858 to 1907 (Plate 48:5 top), and the other is marked Davidson Glasgow, which was operational from 1861 to 1910 (Plate 48:5, bottom).

#### 3.4.3 Artifact Catalogue

Table 15 provides the Stage 2 artifact catalogue for this historic Euro-Canadian site.

**Table 15: Location 4 (AgHk-96) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	earthenware, red	2	lead glazed; hollowware rim fragment



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Cat. #	Context	Depth	Artifact	Freq.	Comments
2	surface collection	0 cm	glass, bottle	1	1 sun coloured amethyst
3	surface collection	0 cm	white clay pipe elbow	1	
4	surface collection	0 cm	white clay pipe stem	1	Bannerman, Montreal 1858 to 1907
5	surface collection	0 cm	white clay pipe bowl	1	
6	surface collection	0 cm	ironstone, moulded	1	maple leaf motif
7	surface collection	0 cm	ironstone	1	hollowware fragment
8	surface collection	0 cm	ironstone, painted	1	hollowware basal fragment with black stripe
9	surface collection	0 cm	white clay pipe stem	1	Davidson, Glasgow 1861 to 1910
10	surface collection	0 cm	ironstone	1	hollowware fragment
11	surface collection	0 cm	ironstone	1	hollowware fragment
12	surface collection	0 cm	ironstone	1	hollowware fragment
13	surface collection	0 cm	ironstone	1	hollowware fragment
14	surface collection	0 cm	ironstone	1	basal fragment
15	surface collection	0 cm	ironstone	1	basal fragment
16	surface collection	0 cm	ironstone	1	partial maker's mark, Burslem
17	surface collection	0 cm	glass, bottle	1	olive, oil ring finish 1850 to 1920
18	surface collection	0 cm	glass, bottle	2	aqua
19	surface collection	0 cm	glass, bottle	3	2 olive, 1 amber

### 3.5 Location 5 (AgHk-97)

Location 5 (AgHk-97), a historic Euro-Canadian site, was identified on June 27, 2011 during the Stage 2 pedestrian survey (Plate 21) of the proposed Turbine 18 pad, access road, and cable corridor on BOR1910, north of Bornish Drive and east of Haskett Road (Figure 5-07; Supplement A: Figure 07). The weather conditions were sunny and warm. Location 5 (AgHk-97) consists of a 75 metre (along the north-south axis) by 25 metre (along the west-east axis) scatter of approximately 65 fragments of mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris. In total, 60 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 58 domestic and two metal (Table 16). Each artifact class is discussed in greater detail below.

**Table 16: Location 5 (AgHk-97) Historic Euro-Canadian Artifacts**

Artifact	Frequency	%
domestic	58	96.67
metal	2	3.33
<b>Total</b>	<b>60</b>	<b>100.00</b>



### 3.5.1 Domestic Artifacts

A total of 58 domestic artifacts were collected during the Stage 2 assessment of Location 5 (AgHk-97). This collection includes 50 ceramic artifacts and eight fragments of domestic bottle glass.

#### 3.5.1.1 Ceramic Artifacts

In total, 50 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 5 (AgHk-97). Included in this total are 31 fragments of ironstone, 14 whitewares and five fragments of utilitarian yellow earthenware. Table 17 provides a summary of the ceramic collection according to ceramic ware type, while Table 18 provides a more detailed breakdown of the ceramic assemblage by decorative style.

**Table 17: Summary of Ceramic Collection According to Ware Type, Location 5 (AgHk-97)**

Artifact	Frequency	%
ironstone	31	62.00
whiteware	14	28.00
utilitarian	5	10.00
<b>Total</b>	<b>50</b>	<b>100.00</b>

**Table 18: Summary of Ceramic Collection According to Decorative Style, Location 5 (AgHk-97)**

Artifact	Frequency	%
ironstone, plain	21	42.00
ironstone, hand painted	7	14.00
whiteware, sponged	7	14.00
earthenware, yellow	5	10.00
whiteware, plain	2	4.00
ironstone, edged	2	4.00
whiteware, edged	2	4.00
whiteware, hand painted	2	4.00
ironstone, flow transfer printed	1	2.00
whiteware, transfer printed	1	2.00
<b>Total</b>	<b>50</b>	<b>100.00</b>

#### Ironstone

The most common ceramic type collected during the Stage 2 assessment is ironstone (n=31 or 62.00%). Ironstone or graniteware is a variety of refined white earthenware introduced in the 1830s that became extremely



popular in Upper Canada by the 1860s (Kenyon 1985). The Location 5 (AgHk-97) ironstone assemblage includes 21 fragments of plain ironstone including hollowware, rim, and basal fragments (49:1). The assemblage also contains seven fragments of hand painted hollowwares in a polychrome floral motif (Plate 49:2) Also in the assemblage are two blue edged fragments. These fragments have a plain edge that is not moulded or incised (Plate 49:3) as well as a single fragment of flow blue transfer printed (Plate 49:4).

### **White Earthenware**

The second most prevalent ceramic type (n=14 or 28.00% of the ceramic collection) at Location 5 (AgHk-97) is whiteware. Whiteware is a variety of earthenware with a near colourless glaze that replaced earlier near white ceramics such as pearlware and creamware by the early 1830s. Seven of the fragments are sponge decorated (5 blue, 2 red and green) (Plate 49:5), two are plain (Plate 49:6), two are hand painted in red (Plate 49:7), and two are blue edged fragments (Plate 49:8), and a single fragment of blue transfer printed (Plate 49:9). Both edged whitewares have plain edges; one fragment is not moulded or incised, however, the other fragment has incised lines.

### **Utilitarian Earthenware**

Five fragments of lead glazed utilitarian yellow earthenware were also collected. These are all fragments of hollowwares. Red and yellow earthenware vessels were manufactured throughout the late 18<sup>th</sup> and 19<sup>th</sup> centuries and were the most common utilitarian ware in the first half of the 19<sup>th</sup> century, eventually being replaced by more durable stoneware vessels.

#### **3.5.1.2 Glass Artifacts**

Eight fragments of domestic bottle glass were recovered from Location 5 (AgHk-97). This assemblage includes three fragments of olive, two aqua fragments including a small rolled lip dating prior to 1870 and a fragment of clear or colourless glass, one sun coloured amethyst, and one fragment of black glass, respectively.

#### **3.5.2 Metal Artifacts**

One small fragment of metal hardware was collected from Location 5 (AgHk-97), a single iron clamp or tong. One small fragment of heavily corroded iron was also collected. It is too corroded to be identified and is temporally non-diagnostic.





**3.5.3 Artifact Catalogue**

Table 19 provides the Stage 2 artifact catalogue for Location 5 (AgHk-97).

**Table 19: Location 5 (AgHk-97) Artifact Catalogue**

<b>Cat. #</b>	<b>Context</b>	<b>Depth</b>	<b>Artifact</b>	<b>Freq.</b>	<b>Comments</b>
1	surface collection	0 cm	earthenware, yellow	5	lead glazed hollowware
2	surface collection	0 cm	ironstone, flow transfer printed	1	blue
3	surface collection	0 cm	ironstone, edged	2	blue - plain edge, not moulded or incised, 1850 to 1897
4	surface collection	0 cm	whiteware, edged	1	blue - plain edge, not moulded or incised 1850 to 1897
5	surface collection	0 cm	whiteware, sponged	2	blue
6	surface collection	0 cm	whiteware, painted	2	red
7	surface collection	0 cm	whiteware, transfer printed	1	blue
8	surface collection	0 cm	whiteware	2	
9	surface collection	0 cm	ironstone	2	basal fragments
10	surface collection	0 cm	ironstone, painted	2	polychrome floral hollowware
11	surface collection	0 cm	glass, bottle	1	sun coloured amethyst
12	surface collection	0 cm	metal, miscellaneous unidentified	1	heavily corroded
13	surface collection	0 cm	metal, miscellaneous hardware	1	clamp/tong
14	surface collection	0 cm	whiteware, edged	1	blue, plain edge with incised lines 1825 to 1891
15	surface collection	0 cm	whiteware, sponged	2	blue
16	surface collection	0 cm	whiteware, sponged	1	blue
17	surface collection	0 cm	whiteware, sponged	2	red and green
18	surface collection	0 cm	ironstone	2	basal fragments
19	surface collection	0 cm	ironstone	1	basal fragments
20	surface collection	0 cm	ironstone	1	rim
21	surface collection	0 cm	ironstone	2	
22	surface collection	0 cm	ironstone	2	
23	surface collection	0 cm	ironstone	1	
24	surface collection	0 cm	ironstone	2	
25	surface collection	0 cm	ironstone	1	
26	surface collection	0 cm	ironstone	1	
27	surface collection	0 cm	ironstone	2	
28	surface collection	0 cm	ironstone	1	
29	surface collection	0 cm	ironstone	2	



Cat. #	Context	Depth	Artifact	Freq.	Comments
30	surface collection	0 cm	ironstone	1	
31	surface collection	0 cm	ironstone, painted	1	polychrome floral hollowware
32	surface collection	0 cm	ironstone, painted	2	polychrome floral hollowware
33	surface collection	0 cm	ironstone, painted	2	polychrome floral hollowware
34	surface collection	0 cm	glass, bottle	1	aqua, rolled lip prior to 1870
35	surface collection	0 cm	glass, bottle	1	aqua
36	surface collection	0 cm	glass, bottle	1	black
37	surface collection	0 cm	glass, bottle	4	1 clear, 3 olive

### 3.6 Location 6 (AgHk-98)

The Stage 2 pedestrian survey (Plate 16) of the proposed wind energy components on property BOR1832 was being conducted on June 27, 2011; the weather was sunny and warm. A pre-contact Aboriginal artifact, designated as Location 6 (AgHk-98), was recovered about 40 metres east of the study area edge and 20 metres north of the field edge, just east of Broken Front Road and south of Elm Tree Drive (Figure 5-16; Supplement A: Figure 16). It was located during the assessment of this property as indicated by a previous layout of the NextEra Bornish Wind Energy Centre. As is detailed in Section 2.0, survey intervals were intensified to one metre for a twenty metre radius surrounding the point, but no further artifacts were identified.

The projectile point is missing one corner of its base (Plate 50:1) and measures 43.69 millimetres long, 27.91 millimetres wide, and 6.68 millimetres thick, with an incomplete basal width of 16.29 millimetres, a shoulder width of 25.38 millimetres, and an inter-notch width of 16.04 millimetres. This point is identified as a Middle Woodland Snyders point (Murphy 1988, Museum of Indian Archaeology n.d.) dating to *circa* 100 B.C. to 200 A.D.

#### 3.6.1 Artifact Catalogue

Table 20 presents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

**Table 20: Location 6 (AgHk-98) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	projectile point	1	Kettle Point chert, nearly complete (missing one corner of stem), well made, Middle Woodland Snyders point

### 3.7 Location 7 (AgHk-118)

The Stage 2 pedestrian survey (Plates 5, 6) of the proposed wind energy project components on property BOR1085 (just west of Roddick Road) resulted in the identification of a single Middle-to-Late Archaic (*ca.* 6000 to 1800 B.C.) Lamoka projectile point (Ellis *et al.* 1990; Justice 1987; Pengelly 1991) designated Location 7 (AgHk-118). This artifact, manufactured from either Haldimand or till chert, was documented on November 9,



2011 during cloudy and mild weather conditions. It is located within the proposed Turbine 13 layout (Figure 5-05; Supplement A: Figure 05). As detailed in Section 2.0, survey intervals were intensified to one metre for a twenty metre radius surrounding the find but no additional artifacts were identified.

The recovered projectile point is complete, but it is rather thick and asymmetrical (Plate 51:1). It measures 54.97 millimetres long, 22.20 millimetres wide and 7.35 millimetres thick with a basal width of 15.48 millimetres and a shoulder width of 21.40 millimetres.

### 3.7.1 Artifact Catalogue

Table 21 presents the Stage 2 artifact catalogue for Location 7 (AgHk-118).

**Table 21: Location 7 (AgHk-118) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	projectile point	1	Haldimand or till chert (white with some brown stippling)?, complete, rather thick and asymmetric, Middle to Late Archaic Lamoka

### 3.8 Location 8

Location 8, a pre-contact Aboriginal site represented by an end scraper manufactured from a piece of water-rolled till chert (Plate 52:1), was identified during the Stage 2 pedestrian survey of the proposed wind energy components on property BOR1630. This scraper was documented on the proposed access road and cable corridor to Turbine 10 (Figure 5-04; Supplement A: Figure 04) on November 14, 2011, under cloudy, but mild weather conditions. Survey intervals were intensified to one metre for a twenty metre radius surrounding the find but no additional artifacts were identified.

The distal edge of the scraper demonstrates retouch, while a fossil is visible on the proximal end (Plate 52:1). It measures 36.45 millimetres long, 31.03 millimetres wide and 10.55 millimetres thick.

### 3.8.1 Artifact Catalogue

Table 22 presents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

**Table 22: Location 8 Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	scraper	1	Kettle Point (?) till chert, complete, end scraper, 1 x 1 edge (retouched), fossil visible on one end



### 3.9 Location 9 (AgHk-99)

The Stage 2 pedestrian survey of the proposed wind energy components on property BOR1221 resulted in the documentation of Location 9 (AgHk-99), an isolated projectile point manufactured from Onondaga chert (Plate 53:1). This find was recorded on November 15, 2011 under sunny, mild weather conditions, as part of the investigation of the road access and cable corridor between Turbines 31 and 32 (Figure 5-12; Supplement A: Figure 12). As described in Section 2.0, survey intervals were intensified to one metre for a twenty metre radius surrounding the find but no additional artifacts were identified.

This projectile point is missing its tip and one shoulder, and it appears that the broken tip was retouched to be used as a scraper (Plate 53:1). It measures approximately 38.24 millimetres long, 32.89 millimetres wide and 6.65 millimetres thick with a basal width of 20.70 millimetres, a shoulder width of 30.32 millimetres, and an inter-notch width of 13.86 millimetres. The measurements are incomplete due to the fragmentary nature of the artifact. This point is identified as a Middle Woodland Snyders point (Murphy 1988, Museum of Indian Archaeology n.d.) dating to *circa* 100 B.C. to 200 A.D.

#### 3.9.1 Artifact Catalogue

Table 23 presents the Stage 2 artifact catalogue for Location 9 (AgHk-99).

**Table 23: Location 9 (AgHk-99) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	projectile point	1	Onondaga chert, mid-section and base, missing tip and one shoulder, tip broke off and edge retouched for use as scraper, Middle Woodland Snyders point

### 3.10 Location 10 (AgHj-6)

Location 10 (AgHj-6) is a pre-contact Aboriginal lithic scatter identified during the Stage 2 pedestrian survey of the proposed wind energy components for property BOR1474 (south of Bornish Drive and west of Springbank Road) (Plates 38, 39) on November 16, 2011. The weather was cloudy and windy. A scatter of approximately 45 artifacts, measuring 25 metres (along the north-south axis) by 25 metres (along the west-east axis) was documented. Several different tool types, including bifaces, scrapers, a graver, and several retouched and utilized flakes (Plate 54), as well as debitage manufactured from Onondaga chert, were identified. Table 24 summarizes the 31 pre-contact Aboriginal artifacts collected from this site, which is located on the proposed road access and cable corridor for Turbine 45 (Figure 5-15; Supplement A: Figure 15).

**Table 24: Location 10 (AgHj-6) Pre-contact Aboriginal Artifacts**

Artifact	Frequency	%
chipping detritus	15	48.39
utilized flake	6	19.35
retouched flake	5	16.13



Artifact	Frequency	%
biface	2	6.45
graver	1	3.23
scraper	2	6.45
<b>Total</b>	<b>31</b>	<b>100.00</b>

### 3.10.1 Chipped Lithic Tools

Table 25 provides the characteristics of, and metrics for, the recovered bifaces (Plate 54:1,3), scrapers (Plate 54:4,5), and graver (Plate 54:2). In addition, five retouched and seven utilized flakes were collected, all of which were manufactured from Onondaga chert.

**Table 25: Location 10 (AgHj-6) Tool Metrics**

Cat. #	Tool	Material	Length (mm)	Width (mm)	Thickness (mm)	Comments
4	biface	Onondaga	37.85	32.04	15.21	complete
5	graver	Onondaga	24.48*	18.05	7.4	flake broken but tool complete
6	biface	Onondaga	33.13*	27.05	12.93	only half present
7	scraper	Onondaga	49.31	23.21	9	complete, side scraper
8	scraper	Onondaga	32.86	26.58	12.38	complete, side scraper

\* measurement on incomplete artifact

### 3.10.2 Chipping Detritus

A total of 15 pieces of chipping detritus (Plate 54:6) was collected during the Stage 2 assessment of this site. All of the recovered material is Onondaga chert, and as is evidenced in Table 26, the entire collected sample is composed of secondary, tertiary, and broken flakes. This suggests that primary reduction and primary tool production likely occurred elsewhere.

**Table 26: Location 10 (AgHj-6) Chipping Detritus**

Chert	Secondary		Tertiary		Broken		Total	
	#	%	#	%	#	%	#	%
Onondaga	3	20.00	1	6.67	11	73.33	15	100.00
<b>Total</b>	<b>3</b>	<b>20.00</b>	<b>1</b>	<b>6.67</b>	<b>11</b>	<b>73.33</b>	<b>15</b>	<b>100.00</b>

### 3.10.3 Artifact Catalogue

Table 27 provides the Stage 2 artifact catalogue for this pre-contact Aboriginal site.



**Table 27: Location 10 (AgHj-6) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	chipping detritus	15	Onondaga chert
2	surface collection	0 cm	utilized flake	6	Onondaga chert, 6 x 1 edge
3	surface collection	0 cm	retouched flake	5	Onondaga chert, 3 x 1 edge, 2 x 2 edge (1 utilized, not retouched)
4	surface collection	0 cm	biface	1	Onondaga chert, complete, 1 retouched edge, thick and blocky, some cortex still present
5	surface collection	0 cm	graver	1	Onondaga chert, fashioned out of a flake (broken) but tool complete, along the pointed edge there is also retouch, and around the other side, evidence of use
6	surface collection	0 cm	biface	1	Onondaga chert, only half present, retouch along one side
7	surface collection	0 cm	scraper	1	Onondaga chert, side scraper, complete, 1 x 1 edge (retouched), small amount of cortex still visible, fashioned out of a large secondary flake
8	surface collection	0 cm	scraper	1	Onondaga chert, end scraper, complete, 1 x 1 edge (retouched), bulbous projection along the retouched edge, some cortex still visible, fashioned out of broken (primary?) flake

### 3.11 Location 11 (AgHj-7)

The Stage 2 pedestrian survey of the proposed wind energy components on property BOR1474 (south of Bornish Drive and west of Springbank Road) (Plates 38, 39) on November 16, 2011, also resulted in the identification of a second pre-contact Aboriginal site, designated Location 11 (AgHj-7). As was noted above, weather was cloudy and windy. A scatter of approximately 41 artifacts, 12 of which were collected, was documented in a 25 metre (along the north-south axis) by 15 metre (along the west-east axis) area along the proposed road access and cable corridor for Turbine 45 (just south of Bornish Drive) (Figure 5-15; Supplement A: Figure 15). A Haldimand biface (Plate 55:1) was identified in conjunction with Onondaga and Kettle Point chipping detritus (Plate 55:3). Table 28 summarizes the recovered artifacts.

**Table 28: Location 11 (AgHj-7) Pre-contact Aboriginal Artifacts**

Artifact	Frequency	%
chipping detritus	7	53.85
utilized flake	4	30.77
biface	1	7.69
graver	1	7.69
<b>Total</b>	<b>13</b>	<b>100.00</b>



### 3.11.1 Chipped Lithic Tools

Table 29 provides the characteristics of, and metrics for, the recovered biface and graver (Plate 55:2). In addition, four utilized flakes were collected, all of which were manufactured out of Onondaga chert.

**Table 29: Location 11 (AgHj-7) Tool Metrics**

Cat. #	Tool	Material	Length (mm)	Width (mm)	Thickness (mm)	Comments
2	biface	Haldimand	50.8	31.2	21.25	complete
4	graver	Onondaga	36.03	18.57	5.49	complete

### 3.11.2 Chipping Detritus

Seven pieces of chipping detritus were collected during the Stage 2 assessment of Location 11. Six of the recovered flakes are Onondaga chert, while the seventh is Kettle Point chert. Primary, secondary, tertiary, and broken flakes are all present, however the latter three are much better represented (85.71%, n=6). This suggests that primary reduction and primary tool production likely occurred elsewhere. Table 30 provides a breakdown of the chipping detritus by morphology and raw material type.

**Table 30: Location 11 (AgHj-7) Chipping Detritus**

Chert	Primary		Secondary		Tertiary		Broken		Total	
	#	%	#	%	#	%	#	%	#	%
Onondaga	1	16.67	3	50.00	1	16.67	1	16.67	6	85.71
Kettle Point	0	0.00	0	0.00	0	0.00	1		1	14.29
<b>Total</b>	<b>1</b>	<b>14.29</b>	<b>3</b>	<b>42.89</b>	<b>1</b>	<b>14.29</b>	<b>2</b>	<b>28.57</b>	<b>7</b>	<b>100.00</b>

### 3.11.3 Artifact Catalogue

Table 31 provides the Stage 2 artifact catalogue for Location 11 (AgHk-7).

**Table 31: Location 11 (AgHj-7) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	stage 2	0 cm	chipping detritus	7	1 Kettle Point chert, 6 Onondaga chert
2	stage 2	0 cm	biface	1	Haldimand chert, complete, thick and blocky
3	stage 2	0 cm	utilized flake	4	Onondaga chert, 4 x 1 edge
4	stage 2	0 cm	graver	1	Onondaga chert, complete, fashioned out of a secondary flake, edge with graver retouched, also 1 utilized edge



### 3.12 Location 12 (AgHj-8)

Location 12 (AgHj-8), a historic Euro-Canadian site, was identified on November 16, 2011 during the Stage 2 pedestrian survey (Plates 34, 35) of the proposed Turbine 23 pad, access road, and cable corridor on BOR1202 (east of Centre Road and north of Bornish Drive) (Figure 5-09; Supplement A: Figure 09). Weather conditions were cloudy and windy. Location 12 (AgHj-8) consists of a 20 metre (along the north-south axis) by 40 metre (along the west-east axis) scatter of approximately 70 fragments of late 19<sup>th</sup> century Euro-Canadian domestic debris. In total, 24 Euro-Canadian artifacts, which include 18 domestic, five recent material and one structural, were collected during the Stage 2 assessment (Table 32). Each artifact class is discussed in greater detail below.

**Table 32: Location 12 (AgHj-8) Historic Euro-Canadian Artifacts**

Artifact	Frequency	%
domestic	18	75.00
recent material	5	20.83
structural	1	4.17
<b>Total</b>	<b>24</b>	<b>100.00</b>

#### 3.12.1 Domestic Artifacts

A total of 18 domestic artifacts were collected during the Stage 2 assessment of Location 12. This collection includes eight ceramic artifacts and 10 fragments of domestic glass.

##### 3.12.1.1 Ceramic Artifacts

In total, eight fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 12 (AgHj-8). Included in this total are five fragments of ironstone, two fragments of dyed earthenware and a single fragment of whiteware. Table 33 provides a detailed breakdown of the ceramic assemblage by decorative style.

**Table 33: Summary of Ceramic Collection According to Decorative Style, Location 12 (AgHj-8)**

Artifact	Frequency	%
ironstone, plain	3	37.50
ironstone, moulded	2	25.00
earthenware, dyed	2	25.00
whiteware, painted	1	12.50
<b>Total</b>	<b>8</b>	<b>100.00</b>





### **Ironstone**

Five fragments of ironstone are part of the Location 12 (AgHj-8) ceramic assemblage. Ironstone is a variety of refined white earthenware introduced in the 1830s that became extremely popular in Upper Canada by the 1860s (Kenyon 1985). The Location 12 (AgHj-8) ironstone assemblage includes three fragments of plain ironstone (Plate 56:1) and two moulded fragments with indeterminate patterns (Plate 56:2).

### **Dyed Earthenware**

A total of two fragments of yellow dyed earthenware were collected during the Stage 2 assessment of Location 12 (AgHj-8) (Plate 56:3). The ware was produced from 1878 to 1893 in Canada, and the late 19<sup>th</sup> century to present elsewhere.

### **White Earthenware**

A single fragment of hand painted whiteware was also collected during the Stage 2 assessment. It is a moulded rim fragment with a scarlet stripe (Plate 56:4).

#### **3.12.1.2 Glass Artifacts**

Ten fragments of domestic glass were recovered from Location 12 (AgHj-8). This assemblage includes seven fragments of bottle glass, two fragments of glass dish, and a single fragment of a scalloped clear or colourless glass tumbler.

Colours present in the glass assemblage include four clear or colourless fragments (including one fragment of a crown glass jar and one fragment with "3 II oz" moulded on it), one amber, one aqua fragment bearing a moulded "...N...", and a single fragment of olive glass. Glass dish fragments in the assemblage include a white fragment and a light green dish stand fragment.

#### **3.12.2 Structural Artifacts**

A single fragment of temporally non-diagnostic red brick was collected during the Stage 2 assessment of Location 12 (AgHj-8).

#### **3.12.3 Recent Material**

Five fragments of recent material were collected during the Stage 2 assessment of Location 12 (AgHj-8). This includes a neck and finish from a 7-Up pop bottle, one clear glass furniture coaster fragment, one clear screw top threaded bottle finish, and two knurled bottle bases dating to post-1940.



### 3.12.4 Artifact Catalogue

Table 34 provides the Stage 2 artifact catalogue for this historic Euro-Canadian site.

**Table 34: Location 12 (AgHj-8) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	brick	1	red; fragment
2	surface collection	0 cm	glass, bottle	1	aqua (moulded with "...N...")
3	surface collection	0 cm	earthenware, dyed	2	yellow
4	surface collection	0 cm	whiteware, painted	1	moulded rim with scarlet stripe
5	surface collection	0 cm	glass, dish	1	white
6	surface collection	0 cm	ironstone	2	
7	surface collection	0 cm	ironstone, moulded	1	hollowware
8	surface collection	0 cm	recent material	1	7 Up bottle
9	surface collection	0 cm	glass, dish	1	basal stand fragment; light green
10	surface collection	0 cm	recent material	4	1 clear glass furniture coaster; 1 screw top threaded finish; 2 knurled basal fragments of clear glass - post 1940
11	surface collection	0 cm	glass, tumbler	1	clear glass tumbler fragment
12	surface collection	0 cm	glass, bottle	1	amber
13	surface collection	0 cm	ironstone	2	
14	surface collection	0 cm	ironstone, moulded	1	hollowware
15	surface collection	0 cm	glass, bottle	5	1 olive, 4 clear or colourless (including 1 x moulded "3 ll oz"; 1 x glass jar lid with moulded crown)

### 3.13 Location 13 (AgHk-100)

Location 13 (AgHk-100), a historic Euro-Canadian site, was identified on November 16, 2011. The weather conditions during the Stage 2 pedestrian survey (Plates 36, 37) of the proposed collector cable corridor on property BOR1316 (which parallels the east side of Centre Road, just south of Bornish Drive) (Figure 5-08; Supplement A: Figure 08) were overcast and windy. Location 13 (AgHk-100) consists of a 40 metre (along the north-south axis) by 30 metre (along the west-east axis) scatter of approximately 225 fragments of mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris. In total, 103 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 87 domestic, 10 structural, four metal, and two personal (Table 35). Each artifact class is discussed in greater detail below.



**Table 35: Location 13 (AgHk-100) Historic Euro-Canadian Artifacts**

<b>Artifact</b>	<b>Frequency</b>	<b>%</b>
domestic	87	84.46
structural	10	9.70
metal	4	3.88
personal	2	1.94
<b>Total</b>	<b>103</b>	<b>100.00</b>

### 3.13.1 Domestic Artifacts

A total of 87 domestic artifacts were collected during the Stage 2 assessment of Location 13 (AgHk-100). This collection includes 51 ceramic artifacts, 33 fragments of domestic glass, and three faunal remains.

#### 3.13.1.1 Ceramic Artifacts

In total, 51 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 13 (AgHk-100). Included in this total are 34 ironstone, seven utilitarian kitchenwares, three Rockingham wares, two whiteware, two pearlware, one yellowware, one dyed earthenware, and one semi-porcelain. Table 36 provides a summary of the ceramic collection according to ware type, while Table 37 provides a more detailed breakdown of the ceramic assemblage by decorative style.

**Table 36: Summary of Ceramic Collection According to Ware Type, Location 13 (AgHk-100)**

<b>Artifact</b>	<b>Frequency</b>	<b>%</b>
ironstone	34	66.67
utilitarian	7	13.73
Rockingham ware	3	5.88
whiteware	2	3.92
pearlware	2	3.92
yellowware	1	1.96
dyed earthenware	1	1.96
semi-porcelain	1	1.96
<b>Total</b>	<b>51</b>	<b>100.00</b>



**Table 37: Summary of Ceramic Collection According to Decorative Style, Location 13 (AgHk-100)**

<b>Artifact</b>	<b>Frequency</b>	<b>%</b>
ironstone, plain	16	31.38
ironstone, moulded	8	15.69
ironstone, flow transfer printed	7	13.73
earthenware, yellow	5	9.80
ironstone, painted	2	3.92
Rockingham ware	3	5.88
pearlware, transfer print	2	3.92
ironstone, edged	1	1.96
earthenware, dyed	1	1.96
earthenware, red	1	1.96
stoneware, salt glazed	1	1.96
semi-porcelain, plain	1	1.96
whiteware, painted	1	1.96
whiteware, transfer printed	1	1.96
yellowware, banded	1	1.96
<b>Total</b>	<b>51</b>	<b>100.00</b>

### **Ironstone**

The most common ceramic type collected during the Stage 2 assessment of this location is ironstone (n=34 or 66.67%). Ironstone, or graniteware, is a variety of refined white earthenware introduced in the 1830s that became extremely popular in Upper Canada by the 1860s (Kenyon 1985). It is usually much thicker than other whiteware and often decorated with raised moulded designs of wheat or fruit. Sixteen fragments of ironstone in the assemblage are plain, with one unidentifiable fragmentary maker's mark and one partial mark from the R. Cochrane company located in Glasgow Scotland and operational from 1856 to 1896 (Plate 57:1). Eight fragments are moulded in a variety of indeterminate patterns (Plate 57:2), seven fragments are flow blue transfer printed (Plate 57:3), two are hand painted in green and brown, respectively (Plate 57:4), and one fragment is blue edged, dating from 1850 to 1897 (Plate 57:5).

### **Utilitarian Earthenware**

A total of seven fragments of utilitarian earthenwares were collected. This includes five fragments of lead glazed yellow earthenware, one lead glazed red earthenware, and one buff paste salt glazed stoneware basal fragment with a clear exterior glaze and an Albany slip interior. Red and yellow earthenware vessels were manufactured throughout the late 18<sup>th</sup> and 19<sup>th</sup> centuries and were the most common utilitarian ware in the first half of the 19<sup>th</sup> century, eventually being replaced by more durable stoneware vessels.



### **Rockingham Ware**

Rockingham ware is similar to yellowware with a yellow paste, but the addition of a second brown coloured manganese glaze results in the body of the ceramic having a mottled appearance. Rockingham wares were used as utilitarian vessels often in the form of crocks, jars, pitchers, and tea pots. Three fragments from a Rockingham ware vessel are in the Location 13 (AgHk-100) ceramic assemblage (Plate 57:6).

### **White Earthenware**

Whiteware is a variety of earthenware with a near colourless glaze that replaced earlier near white ceramics such as pearlware and creamware by the early 1830s. Early whiteware tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19<sup>th</sup> century. Two fragments of whiteware are in the Location 13 ceramic assemblage: one monochromatic blue hand painted fragment (Plate 57:7) and a single fragment of green floral transfer printed (Plate 57:8)

### **Pearlware**

Transfer printing on pearlware was developed as early as 1780, but did not become common in Upper Canada until around 1810 (Kenyon 1985). The early transfer printed pearlwares were most frequently decorated in blue. Other colours, such as black, green, red and purple became popular post-1820. Two fragments of brown transfer printed pearlware are also part of the ceramic assemblage collected from Location 13 (Plate 57:9).

### **Yellowware**

The Location 13 assemblage contains one single fragment from a yellowware hollowware vessel decorated with a blue mochoware motif on a white background (Plate 57:10). Yellowware ceramics were first manufactured in the 1840s, and continue to be manufactured in limited quantities today.

### **Dyed Earthenware**

A single fragment of dyed earthenware with a rose tint was collected during the Stage 2 assessment of Location 13 (AgHk-100) (Plate 57:11). The ware was produced from 1878 to 1893 in Canada, and the late 19<sup>th</sup> century to present elsewhere.

### **Semi-Porcelain**

In 1850, semi-porcelains were reintroduced and this vitreous, hard-glazed white earthenware resembling bone china soon dominated the marketplace (Hughes 1961). The ceramic assemblage from Location 13 contains a single fragment of marked semi-porcelain, with the mark of S Hancock and Sons from Stoke-on-Trent, which was operational from 1857 to 1937 (Plate 57:12).



### **3.13.1.2 Glass Artifacts**

Thirty-three fragments of bottle glass were recovered from Location 13 (AgHk-100). This collection includes 30 fragments of bottle glass, two fragments of white glass (likely dating to the late 19<sup>th</sup> to early 20<sup>th</sup> century) and a single fragment of clear pressed moulded glass dish. Colours present in the bottle glass assemblage include: eight aqua, six sun coloured amethyst, four amber; and four clear or colourless, two black, two olive, two cobalt blue, and a single fragment of rose and green glass, respectively. Generally, aqua coloured glass fragments originate from medical and pharmaceutical products including patent medicine bottles of the 19<sup>th</sup> and 20<sup>th</sup> century (Kendrick 1971). Other diagnostic coloured fragments in the assemblage include the sun coloured amethyst. According to Lindsey (2011), this glass generally dates from 1880 to 1920. The two fragments of “black” glass date from the early-to-mid 19<sup>th</sup> century (Kendrick 1971). Diagnostic finishes in the assemblage include one amber straight brandy finish *circa* 1890 to 1920 (Plate 58:1), one sun coloured amethyst patent finish post-1850 (Plate 58:2) and one crown brand canning jar fragment.

### **3.13.1.3 Faunal Remains**

Three faunal remains were also collected during the Stage 2 assessment. This includes an incisor fragment from a large rodent, likely beaver (*Castor canadensis*); a cut cortical bone fragment from a medium-to-large sized mammal, and a fragment of avian bone.

### **3.13.2 Structural Artifacts**

Ten fragments of structural remains were collected, including seven machine cut nails (Plate 58:3), two heavily corroded nail fragments, and a single piece of window glass measuring 2.0 millimetres thick (indicating that it was likely manufactured post-1850). Machine cut nails were machine cut and have a flat head. They were produced as early as 1790, but did not become prevalent in Ontario until about 1830. They were replaced by wire drawn nails in the 1890s (Adams 1994:92).

### **3.13.3 Metal Artifacts**

Miscellaneous metal hardware in the assemblage includes a flint striker, metal spike, and a fragment of metal wire. None of these artifacts is temporally diagnostic.

### **3.13.4 Personal Artifacts**

Two personal items were collected during the Stage 2 assessment of Location 13 (AgHk-100), two fragments of white clay pipe stem (Plate 58:4). White clay pipes were very popular throughout the 19<sup>th</sup> century, with a decline in use by 1880 when they were replaced by briar pipes and cigarettes (Adams 1994:93). Most white clay pipes found in Upper Canada were manufactured in either Quebec or Scotland; occasionally examples from English, Dutch, French and American makers are also found. One pipe stem is marked McDougall, Glasgow *circa* 1846-1891 (Plate 58:4, top) and the other is identified as a fragmentary Henderson(s), Montreal, which was operational from 1847 to 1876 (Plate 58:4, bottom).



**3.13.5 Artifact Catalogue**

Table 38 presents the Stage 2 artifact catalogue for Location 13 (AgHk-100).

**Table 38: Location 13 (AgHk-100) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	stoneware, salt glazed	1	basal fragment; clear salt glaze with Albany slip interior
2	surface collection	0 cm	faunal remains	3	1 incisor fragment (large rodent, likely beaver ( <i>Castor canadensis</i> )); 1 cut cortical fragment from medium to large mammal; fragment of avian bone
3	surface collection	0 cm	glass, bottle	1	black
4	surface collection	0 cm	glass, dish	1	clear pressed moulded fragment
5	surface collection	0 cm	white clay pipe stem	1	marked McDougall, Glasgow <i>circa</i> 1846 to 1891
6	surface collection	0 cm	pearlware, transfer print	1	brown
7	surface collection	0 cm	Rockingham ware	2	hollowware
8	surface collection	0 cm	earthenware, yellow	5	lead glazed; 3 hollowware
9	surface collection	0 cm	earthenware, red	1	lead glazed
10	surface collection	0 cm	nail, unidentified	2	heavily corroded
11	surface collection	0 cm	nail, cut	1	
12	surface collection	0 cm	ironstone, flow transfer printed	1	blue
13	surface collection	0 cm	glass, white	2	
14	surface collection	0 cm	glass, window	1	2mm
15	surface collection	0 cm	metal, spike	2	
16	surface collection	0 cm	metal, miscellaneous hardware	1	flint striker
17	surface collection	0 cm	metal, wire	1	heavily corroded
18	surface collection	0 cm	yellowware, banded	1	hollowware; blue mochaware motif with white slip banding
19	surface collection	0 cm	whiteware, painted	1	monochromatic blue
20	surface collection	0 cm	whiteware, transfer printed	1	green floral motif
21	surface collection	0 cm	ironstone, painted	1	brown
22	surface collection	0 cm	earthenware, dyed	1	rose
23	surface collection	0 cm	ironstone, moulded	1	handle fragment
24	surface collection	0 cm	ironstone	1	partial maker's mark: "...AL.."



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Cat. #	Context	Depth	Artifact	Freq.	Comments
25	surface collection	0 cm	semi-porcelain	1	partial maker's mark: "...Cock and Sons Porcelain.."; S Hancock and Sons; 2 refit fragments 1857 - 1937
26	surface collection	0 cm	ironstone, edged	1	blue - plain edge, not moulded or incised, 1850 to 1897
27	surface collection	0 cm	glass, bottle	1	black
28	surface collection	0 cm	glass, bottle	1	amber straight brandy finish <i>circa</i> 1890-1920
29	surface collection	0 cm	glass, bottle	2	aqua
30	surface collection	0 cm	glass, bottle	1	aqua, moulded with ". . . EREE"
31	surface collection	0 cm	glass, bottle	2	aqua
32	surface collection	0 cm	glass, bottle	1	aqua
33	surface collection	0 cm	glass, bottle	2	aqua
34	surface collection	0 cm	glass, bottle	1	sun coloured amethyst, paten finish, post 1850
35	surface collection	0 cm	glass, bottle	2	sun coloured amethyst
36	surface collection	0 cm	glass, bottle	1	sun coloured amethyst crown canning jar fragment
37	surface collection	0 cm	glass, bottle	2	sun coloured amethyst
38	surface collection	0 cm	white clay pipe stem	1	Henderson(s), Montreal 1847 to 1876
39	surface collection	0 cm	pearlware, transfer print	1	brown
40	surface collection	0 cm	Rockingham ware	1	
41	surface collection	0 cm	nail, cut	1	
42	surface collection	0 cm	nail, cut	1	
43	surface collection	0 cm	nail, cut	1	
44	surface collection	0 cm	nail, cut	1	
45	surface collection	0 cm	nail, cut	1	
46	surface collection	0 cm	nail, cut	1	
47	surface collection	0 cm	ironstone, flow transfer printed	2	blue
48	surface collection	0 cm	ironstone, flow transfer printed	1	blue
49	surface collection	0 cm	ironstone, flow transfer printed	2	blue
50	surface collection	0 cm	ironstone, flow transfer printed	1	blue
51	surface collection	0 cm	ironstone, painted	1	green





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Cat. #	Context	Depth	Artifact	Freq.	Comments
52	surface collection	0 cm	ironstone, moulded	2	basal fragments
53	surface collection	0 cm	ironstone, moulded	1	basal fragment
54	surface collection	0 cm	ironstone, moulded	1	scalloped teacup base
55	surface collection	0 cm	ironstone, moulded	1	
56	surface collection	0 cm	ironstone, moulded	1	
57	surface collection	0 cm	ironstone, moulded	1	
58	surface collection	0 cm	ironstone	1	1 partial mark : ..."INA..."
59	surface collection	0 cm	ironstone	1	R Cochrane; Glasgow <i>circa</i> 1856 - 1896
60	surface collection	0 cm	ironstone	1	hollowware
61	surface collection	0 cm	ironstone	2	hollowware
62	surface collection	0 cm	ironstone	2	hollowware
63	surface collection	0 cm	ironstone	1	hollowware
64	surface collection	0 cm	ironstone	1	hollowware
65	surface collection	0 cm	ironstone	1	basal fragment
66	surface collection	0 cm	ironstone	2	basal fragments
67	surface collection	0 cm	glass, bottle	13	4 clear, 1 rose, 2 cobalt blue, 2 olive, 1 green, 3 amber

### 3.14 Location 14 (AgHk-101)

The Stage 2 pedestrian survey (Plate 3) of the proposed collector cable corridor on BOR1653, on the east side of Roddick Road, south of Coldstream Road, (Figure 5-01; Supplement A: Figure 01) was conducted on November 28, 2011. Weather conditions were cold and overcast. Location 14 (AgHk-101), a historic Euro-Canadian site, was identified and is a 58 metre (along the north-south axis) by 25 metre (along the west-east axis) scatter of 107 fragments of mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris. The scatter also extends beyond the study area to the north and south. In total, 78 Euro-Canadian artifacts, including 65 domestic and 13 personal, were collected during the Stage 2 assessment (Table 39). Each artifact class is discussed in greater detail below.

**Table 39: Location 14 (AgHk-101) Historic Euro-Canadian Artifacts**

Artifact	Frequency	%
domestic	65	83.34
personal	13	16.66
<b>Total</b>	<b>78</b>	<b>100.00</b>



### 3.14.1 Domestic Artifacts

A total of 65 domestic artifacts were collected during the Stage 2 assessment of Location 14 (AgHk-101). This collection includes 52 ceramic artifacts, 12 fragments of domestic glass, and one faunal remain.

#### 3.14.1.1 Ceramic Artifacts

In total, 52 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 14 (AgHk-101). Included in this total are 40 ironstone, nine whiteware, two utilitarian kitchenwares, and one fragment of Rockingham ware. Table 40 provides a summary of the ceramic collection according to ware type, while Table 41 provides a more detailed breakdown of the ceramic assemblage by decorative style.

**Table 40: Summary of Ceramic Collection According to Ware Type, Location 14 (AgHk-101)**

Artifact	Frequency	%
ironstone	40	76.92
whiteware	9	17.31
utilitarian	2	3.85
Rockingham ware	1	1.92
<b>Total</b>	<b>52</b>	<b>100.00</b>

**Table 41: Summary of Ceramic Collection According to Decorative Style, Location 14 (AgHk-101)**

Artifact	Frequency	%
ironstone, plain	21	40.38
ironstone, transfer printed	6	11.54
ironstone, painted	5	9.62
ironstone, stamped	4	7.69
whiteware, sponged	3	5.77
whiteware, edged	2	3.85
whiteware, painted	2	3.85
earthenware, red	1	1.92
earthenware, yellow	1	1.92
ironstone, banded	1	1.92
ironstone, edged	1	1.92
ironstone, flow transfer printed	1	1.92
ironstone, sponged	1	1.92
Rockingham ware	1	1.92
whiteware, plain	1	1.92



<b>Artifact</b>	<b>Frequency</b>	<b>%</b>
whiteware, transfer printed	1	1.92
<b>Total</b>	<b>52</b>	<b>100.00</b>

### **Ironstone**

The most common ceramic type collected during the Stage 2 assessment of Location 14 is ironstone (n=40 or 76.92%). Ironstone, or graniteware, is a variety of refined white earthenware introduced in the 1830s that became extremely popular in Upper Canada by the 1860s (Kenyon 1985). The ironstone assemblage includes 21 plain undecorated fragments (Plate 59:1), six blue transfer printed, including a fragment of the popular “willow” pattern (Plate 59:2), five hand painted in red or green (Plate 59:3), four stamped (Plate 59 :4), and a single fragment each of blue and brown slip banded (Plate 59:5), blue edged ware (from 1850 to 1897) (Plate 59:6), blue flow transfer printed (Plate 59:7), and blue sponge decorated (Plate 59:8), respectively.

### **White Earthenware**

Whiteware is a variety of earthenware with a near colourless glaze that replaced earlier near white ceramics such as pearlware and creamware by the early 1830s. Early whiteware tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19<sup>th</sup> century. There are nine fragments identified as whiteware in the ceramic assemblage and this includes: three blue sponge decorated fragments (Plate 59:9), two blue edged (Plate 59:10), two hand painted in polychrome floral and blue, respectively (Plate 59:11), one blue transfer printed (Plate 59:12), and one plain fragment (Plate 59:13).

### **Utilitarian Earthenware**

Two fragments of utilitarian earthenware were collected from Location 14 (AgHk-101) including one fragment each of lead glazed yellow and red earthenware. Red and yellow earthenware vessels were manufactured throughout the late 18<sup>th</sup> and 19<sup>th</sup> centuries and were the most common utilitarian ware in the first half of the 19<sup>th</sup> century, eventually being replaced by more durable stoneware vessels.

### **Rockingham Ware**

Rockingham ware is similar to yellowware with a yellow paste, but the addition of a second brown coloured manganese glaze results in the body of the ceramic having a mottled appearance. Rockingham wares were used as utilitarian vessels often in the form of crocks, jars, pitchers and tea pots. A single fragment of Rockingham ware is in the Location 14 (AgHk-101) ceramic assemblage (Plate 59:14).

#### **3.14.1.2 Glass Artifacts**

Twelve fragments of domestic glass were recovered from Location 14 (AgHk-101). This collection includes 11 fragments of bottle glass and a single fragment of a clear pressed moulded glass dish (likely post-1860).



Colours present in the bottle glass assemblage include: five olive, two clear or colourless, and one aqua, one green, one amber and one sun coloured amethyst fragment. Generally, aqua coloured glass fragments originate from medical and pharmaceutical products including patent medicine bottles of the 19<sup>th</sup> and 20<sup>th</sup> century (Kendrick 1971). Other diagnostic coloured fragments in the assemblage include the sun coloured amethyst. According to Lindsey (2011), this glass generally dates from 1880 to 1920.

### 3.14.1.3 Faunal Remains

A single fragment of horse molar (*Equus caballus*) was also collected during the Stage 2 assessment of Location 14 (AgHk-101).

### 3.14.2 Personal Artifacts

Thirteen personal items were collected during the Stage 2 assessment of Location 14 (AgHk-101) including seven fragments of white clay tobacco pipe stem (Plate 60:1), four fragments of pipe bowl (Plate 60:2), one coin (Plate 60:4) and a bell (Plate 60:3).

White clay pipes were very popular throughout the 19<sup>th</sup> century, with a decline in use by 1880 when they were replaced by briar pipes and cigarettes (Adams 1994:93). Most white clay pipes found in Upper Canada were manufactured in either Quebec or Scotland; occasionally examples from English, Dutch, French and American makers are also found. The maker's name may be impressed with the city of manufacture on the opposite side, although this did not become common practice until the 1840s. Two pipe stems are marked Henderson(s), Montreal, operational from 1847 to 1876 (Plate 60:1, top), while the rest of the pipe collection was temporally non-diagnostic. The one coin recovered is a Canadian 1882 One Cent piece. Finally, a single open mouth bell was collected during Stage 2 assessment of Location 14 (AgHk-101). Bells with an aperture of 1.5 to 3.0 inches in diameter are often used on neck and body straps to decorate horse tack (Weed and Kelly 2012).

### 3.14.3 Artifact Catalogue

Table 42 presents the Stage 2 artifact catalogue for Location 14 (AgHk-101).

**Table 42: Location 14 (AgHk-101) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	coin	1	1882 One Cent piece
2	surface collection	0 cm	bell	1	open mouth bell
3	surface collection	0 cm	white clay pipe stem	1	Bannerman, Montreal 1858 to 1907
4	surface collection	0 cm	white clay pipe stem	2	Henderson(s), Montreal 1847 to 1876
5	surface collection	0 cm	ironstone, flow transfer printed	1	blue
6	surface collection	0 cm	ironstone, painted	1	red pinstripe
7	surface collection	0 cm	glass, bottle	1	olive



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Cat. #	Context	Depth	Artifact	Freq.	Comments
8	surface collection	0 cm	white clay pipe stem	1	
9	surface collection	0 cm	white clay pipe bowl	1	
10	surface collection	0 cm	white clay pipe stem	1	
11	surface collection	0 cm	whiteware, sponged	1	blue
12	surface collection	0 cm	white clay pipe stem	1	
13	surface collection	0 cm	whiteware, transfer printed	1	blue
14	surface collection	0 cm	earthenware, yellow	1	
15	surface collection	0 cm	ironstone, transfer printed	1	blue
16	surface collection	0 cm	white clay pipe bowl	1	
17	surface collection	0 cm	ironstone, painted	1	green
18	surface collection	0 cm	ironstone, stamped	1	violet rope and green
19	surface collection	0 cm	white clay pipe bowl	1	
20	surface collection	0 cm	ironstone, edged	1	blue - plain edge; not moulded or incised, 1850 to 1897
21	surface collection	0 cm	ironstone	1	
22	surface collection	0 cm	whiteware, sponged	1	blue hollowware
23	surface collection	0 cm	whiteware	1	
24	surface collection	0 cm	ironstone, transfer printed	1	burnt rim fragment
25	surface collection	0 cm	ironstone, sponged	1	blue
26	surface collection	0 cm	ironstone	1	
27	surface collection	0 cm	white clay pipe bowl	1	
28	surface collection	0 cm	whiteware, painted	1	polychrome floral
29	surface collection	0 cm	ironstone, transfer printed	1	blue
30	surface collection	0 cm	glass, bottle	1	aqua
31	surface collection	0 cm	glass, bottle	9	1 sun coloured amethyst; 1 amber; 4 olive; 2 clear; 1 green
32	surface collection	0 cm	glass, dish	1	clear pressed moulded dish fragment
33	surface collection	0 cm	earthenware, red	1	lead glazed; hollowware rim fragment
34	surface collection	0 cm	Rockingham ware	1	
35	surface collection	0 cm	faunal remains	1	fragment of horse molar ( <i>Equus caballus</i> )
36	surface collection	0 cm	white clay pipe stem	1	
37	surface collection	0 cm	ironstone, transfer printed	1	blue willow pattern
38	surface collection	0 cm	ironstone, painted	2	red pinstripe



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Cat. #	Context	Depth	Artifact	Freq.	Comments
39	surface collection	0 cm	ironstone, stamped	2	blue stamped rope with golden stripe
40	surface collection	0 cm	whiteware, painted	1	blue
41	surface collection	0 cm	whiteware, edged	1	blue - damaged
42	surface collection	0 cm	whiteware, sponged	1	blue hollowware
43	surface collection	0 cm	ironstone, banded	1	blue and brown slip banded hollowware
44	surface collection	0 cm	ironstone	2	basal fragments
45	surface collection	0 cm	ironstone, transfer printed	1	turquoise green
46	surface collection	0 cm	ironstone, transfer printed	1	turquoise blue
47	surface collection	0 cm	ironstone, painted	1	red pinstripe
48	surface collection	0 cm	ironstone, stamped	1	green
49	surface collection	0 cm	whiteware, edged	1	indeterminate type
50	surface collection	0 cm	ironstone	3	basal fragments, hollowwares
51	surface collection	0 cm	ironstone	2	
52	surface collection	0 cm	ironstone	1	
53	surface collection	0 cm	ironstone	2	
54	surface collection	0 cm	ironstone	2	
55	surface collection	0 cm	ironstone	1	lid fragment
56	surface collection	0 cm	ironstone	2	rim fragments
57	surface collection	0 cm	ironstone	1	rim fragment
58	surface collection	0 cm	ironstone	1	rim fragment
59	surface collection	0 cm	ironstone	2	rim fragments



### 3.15 Location 15 (AgHk-102)

Location 15 (AgHk-102) was also identified on November 28, 2011 during the Stage 2 pedestrian survey (Plate 3) of the collector cable corridor on BOR1653, on the east side of Roddick Road, south of Coldstream Road (Figure 5-01; Supplement A: Figure 01). Weather conditions were overcast and cold. Location 15 (AgHk-102) is a 32 metre (along the north-south axis) by 22 metre (along the west-east axis) scatter of 50 fragments of mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris. In total, 31 Euro-Canadian artifacts, including 26 domestic, four structural and one personal, were collected during the Stage 2 assessment (Table 43). Each artifact class is discussed in greater detail below.

**Table 43: Location 15 (AgHk-102) Historic Euro-Canadian Artifacts**

Artifact	Frequency	%
domestic	26	83.88
structural	4	12.90
personal	1	3.22
<b>Total</b>	<b>31</b>	<b>100.00</b>

#### 3.15.1 Domestic Artifacts

A total of 25 domestic artifacts were collected during the Stage 2 assessment of Location 15 (AgHk-102). This collection includes 23 ceramic artifacts, 2 fragments of domestic glass, and one faunal remain.

##### 3.15.1.1 Ceramic Artifacts

In total, 23 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 15 (AgHk-102). Included in this total are 12 whiteware and 11 ironstone. Table 44 provides a detailed breakdown of the ceramic assemblage by decorative style.

**Table 44: Summary of Ceramic Collection According to Decorative Style, Location 15 (AgHk-102)**

Artifact	Frequency	%
ironstone, plain	7	30.43
whiteware, painted	5	21.74
ironstone, edged	3	13.04
whiteware, edged	3	13.04
whiteware, sponged	3	13.04
ironstone, sponged	1	4.35
whiteware, plain	1	4.35
<b>Total</b>	<b>23</b>	<b>100.00</b>



### **White Earthenware**

Twelve whiteware fragments were collected in the form of five hand painted fragments in a variety of polychrome shades (Plate 61:4). In addition, there are three blue edged fragments, including one scalloped edge with an incised line from 1825 to 1891 (Plate 61:5), three blue sponged (Plate 61:6), and a single fragment of plain or undecorated whiteware (Plate 61:7). Whiteware is a variety of earthenware with a near colourless glaze that replaced earlier near white ceramics such as pearlware and creamware by the early 1830s.

### **Ironstone**

Eleven fragments of ironstone ceramic were collected during the Stage 2 assessment of Location 15 (AgHk-102) including seven plain or undecorated fragments (Plate 61:1), three blue edged fragments dating from 1850 to 1897 (Plate 61:2) and a single fragment of blue sponged decorated (Plate 61:3). Ironstone, or graniteware, is a variety of refined white earthenware introduced in the 1830s that became extremely popular in Upper Canada by the 1860s (Kenyon 1985).

#### **3.15.1.2 Glass Artifacts**

Two fragments of domestic glass were recovered from Location 15 (AgHk-102), and include an aqua fragment and an olive fragment. Generally, aqua coloured glass fragments originate from medical and pharmaceutical products including patent medicine bottles of the 19<sup>th</sup> and 20<sup>th</sup> century (Kendrick 1971).

#### **3.15.1.3 Faunal Remains**

One small fragment of mammalian cut and calcined cortical bone was also collected during the Stage 2 assessment of Location 15 (AgHk-102).

### **3.15.2 Structural Artifacts**

Four fragments of window glass, measuring 2.0 millimetres thick, were collected from Location 15 (AgHk-102). While the assemblage of window glass is too small to use as a reliable diagnostic indicator, it may signify that the historic material on site is post-1840. Most window glass made before the mid-1840s tends to be less than 1.6 millimetres thick, while window glass post-1840 is thicker. While this is not true for every fragment, a sample of window glass dating to the first half of the 19<sup>th</sup> century should have an average thickness of 1.1 to 1.4 millimetres compared to about 1.7 to 2.0 millimetres from the last half (Adams 1994:92-93; Kenyon 1980).

### **3.15.3 Personal Artifacts**

A single fragment of white clay tobacco pipe stem was collected from Location 15 (AgHk-102) and it is identified as a Bannerman, Montreal pipe fragment (Plate 61:8). This company was operational from 1858 to 1907.





### 3.15.4 Artifact Catalogue

Table 45 presents the Stage 2 artifact catalogue for Location 15 (AgHk-102).

**Table 45: Location 15 (AgHk-102) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	white clay pipe stem	1	Bannerman, Montreal 1858 to 1907
2	surface collection	0 cm	whiteware	1	
3	surface collection	0 cm	whiteware, painted	1	red and green
4	surface collection	0 cm	whiteware, painted	3	2 blue; 1 red
5	surface collection	0 cm	glass, bottle	1	olive
6	surface collection	0 cm	ironstone, sponged	1	blue
7	surface collection	0 cm	glass, bottle	1	aqua
8	surface collection	0 cm	whiteware, painted	1	polychrome
9	surface collection	0 cm	whiteware, edged	2	blue - 1 plain edge, not moulded or incised 1850 to 1897; 1 scalloped, damaged indeterminate type
10	surface collection	0 cm	whiteware, edged	1	blue - scalloped edge with incised line, 1825 to 1891
11	surface collection	0 cm	whiteware, sponged	1	blue
12	surface collection	0 cm	ironstone	1	
13	surface collection	0 cm	faunal remains	1	small fragment of mammalian cut and calcined cortical bone
14	surface collection	0 cm	whiteware, sponged	2	blue
15	surface collection	0 cm	glass, window	4	2mm
16	surface collection	0 cm	ironstone, edged	3	blue - plain edge, not moulded or incised, 1850 to 1897
17	surface collection	0 cm	ironstone	2	
18	surface collection	0 cm	ironstone	1	
19	surface collection	0 cm	ironstone	1	
20	surface collection	0 cm	ironstone	2	

### 3.16 Location 16 (AgHk-103)

Location 16 (AgHk-103), a historic Euro-Canadian site, was identified on November 28, 2011 during the Stage 2 pedestrian survey of the collector cable corridor on the south side of Coldstream Road, just east of Kerwood Road on BOR1228 (Figure 5-02; Supplement A: Figure 02). The weather conditions were overcast and cold. Location 16 (AgHk-103) is a 62 metre (along the north-south axis) by 23 metre (along the west-east axis) scatter of 40 fragments of mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris. In total, 24 Euro-Canadian artifacts,



including 17 domestic, six personal and one structural, were collected during the Stage 2 assessment (Table 46). In total, 24 Euro-Canadian artifacts were collected during the Stage 2 assessment. Each artifact class is discussed in greater detail below.

**Table 46: Location 16 (AgHk-103) Historic Euro-Canadian Artifacts**

Artifact	Frequency	%
domestic	17	70.83
personal	6	25.00
structural	1	4.17
<b>Total</b>	<b>24</b>	<b>100.00</b>

### 3.16.1 Domestic Artifacts

A total of 17 domestic artifacts were collected during the Stage 2 assessment of Location 16 (AgHk-103). This collection includes 15 ceramic artifacts and two fragments of domestic glass.

#### 3.16.1.1 Ceramic Artifacts

In total, 15 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 16 (AgHk-103). Included in this total are 12 ironstone, two utilitarian kitchenwares, and one whiteware. Table 47 provides a detailed breakdown of the ceramic assemblage by decorative style.

**Table 47: Summary of Ceramic Collection According to Decorative Style, Location 16 (AgHk-103)**

Artifact	Frequency	%
ironstone, plain	5	33.33
earthenware, yellow	2	13.33
ironstone, moulded	2	13.33
ironstone, stamped	2	13.33
ironstone, painted	1	6.67
ironstone, edged	1	6.67
ironstone, flow transfer printed	1	6.67
whiteware, painted	1	6.67
<b>Total</b>	<b>15</b>	<b>100.00</b>

#### Ironstone

Twelve fragments of ironstone ceramic were collected during the Stage 2 assessment of Location 16 (AgHk-103). This includes five plain or undecorated fragments (Plate 62:1), two moulded fragments, including one fragment of popular “wheat” pattern (Plate 62:2), two stamped (one blue and one violet) (Plate 62:3), one red pinstriped hollowware fragment (Plate 62:4), one blue edged, dating from 1850 to 1897 (Plate 62:5), and one



blue flow transfer printed fragment (Plate 62:6), respectively. Ironstone, or graniteware, is a variety of refined white earthenware introduced in the 1830s that became extremely popular in Upper Canada by the 1860s (Kenyon 1985).

### **Utilitarian Earthenware**

Two fragments of utilitarian earthenware were collected from Location 16 (AgHk-103), both lead glazed yellow earthenware. Yellow earthenware vessels were manufactured throughout the late 18<sup>th</sup> and 19<sup>th</sup> centuries and were the most common utilitarian ware in the first half of the 19<sup>th</sup> century, eventually being replaced by more durable stoneware vessels.

### **White Earthenware**

Whitewares are also present on site in the form of a single fragment of green striped ware (Plate 62:7). Whiteware is a variety of earthenware with a near colourless glaze that replaced earlier near white ceramics such as pearlware and creamware by the early 1830s.

#### **3.16.1.2 Glass Artifacts**

Two fragments of domestic glass were recovered from Location 16 (AgHk-103), including an aqua fragment and a green fragment. Generally, aqua coloured glass fragments originate from medical and pharmaceutical products including patent medicine bottles of the 19<sup>th</sup> and 20<sup>th</sup> century (Kendrick 1971).

#### **3.16.2 Personal Artifacts**

Six fragments of personal items were collected from Location 16 (AgHk-103), including three white clay tobacco pipe stems (Plate 62:8), one fragment of tobacco pipe bowl (Plate 62:9), one clay pipe elbow fragment (Plate 62:10), and a single coin, an 1882 One Cent piece (Plate 62:11). One of the pipe stems is marked with a manufacturer's name, McDougall from Glasgow, Scotland, which was operational from 1846 to 1891.

#### **3.16.3 Structural Artifacts**

A single fragment of window glass measuring 2.0 millimetres thick was also collected from Location 16 (AgHk-103). While the assemblage of window glass is too small to use as a reliable diagnostic indicator, it may signify that the historic material on site is post-1840. Most window glass made before the mid-1840s tends to be less than 1.6 millimetres thick, so a sample of window glass dating to the first half of the 19<sup>th</sup> century should have an average thickness of 1.1 to 1.4 millimetres compared to about 1.7 to 2.0 millimetres from the last half (Adams 1994:92-93; Kenyon 1980).



### 3.16.4 Artifact Catalogue

Table 48 provides the Stage 2 artifact catalogue for this historic Euro-Canadian site.

**Table 48: Location 16 (AgHk-103) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	coin	1	1882 One Cent piece
2	surface collection	0 cm	white clay pipe stem	1	McDougall, Glasgow <i>circa</i> 1846-1891
3	surface collection	0 cm	white clay pipe stem	1	
4	surface collection	0 cm	whiteware, painted	1	green stripe
5	surface collection	0 cm	white clay pipe bowl	1	
6	surface collection	0 cm	white clay pipe elbow	1	
7	surface collection	0 cm	ironstone, flow transfer printed	1	blue
8	surface collection	0 cm	ironstone	1	hollowware
9	surface collection	0 cm	ironstone, moulded	1	wheat pattern rim fragment
10	surface collection	0 cm	white clay pipe stem	1	
11	surface collection	0 cm	ironstone, stamped	1	blue
12	surface collection	0 cm	glass, window	1	2mm
13	surface collection	0 cm	glass, bottle	2	1 green; 1 aqua
14	surface collection	0 cm	ironstone, moulded	1	scalloped teacup fragment
15	surface collection	0 cm	ironstone, stamped	1	violet stamped hollowware
16	surface collection	0 cm	earthenware, yellow	2	
17	surface collection	0 cm	ironstone, edged	1	blue - plain edge; not moulded or incised, 1850 to 1897
18	surface collection	0 cm	ironstone, painted	1	red pinstripes; hollowware rim fragments
19	surface collection	0 cm	ironstone	2	basal fragments
20	surface collection	0 cm	ironstone	2	

### 3.17 Location 17 (AgHk-104)

Location 17 (AgHk-104), a historic Euro-Canadian site, was identified on November 28, 2011 during a Stage 2 pedestrian survey of the proposed collector cable corridor (on the south side of Coldstream Road and just east of Kerwood Road) on BOR1437 (Figure 5-02; Supplement A: Figure 02). The weather conditions were overcast and cold. Location 17 (AgHk-104) is a 20 metre (along the north-south axis) by 53 metre (along the west-east axis) scatter of 100 fragments of mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris. In total, 54 Euro-Canadian artifacts, including 40 domestic, eight personal, and six structural, were collected during the Stage 2 assessment (Table 49). Each artifact class is discussed in greater detail below.



**Table 49: Stage 2 Artifact Summary for Location 17 (AgHk-104)**

<b>Artifact</b>	<b>Frequency</b>	<b>%</b>
domestic	40	74.07
personal	8	14.81
structural	6	11.11
<b>Total</b>	<b>54</b>	<b>100.00</b>

### 3.17.1 Domestic Artifacts

A total of 40 domestic artifacts were collected during the Stage 2 assessment of Location 17 (AgHk-104). This collection includes 29 ceramic artifacts and 11 glass artifacts.

#### 3.17.1.1 Ceramic Artifacts

In total, 29 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 17 (AgHk-104). Included in this total are 23 ironstone, two whiteware, two utilitarian kitchenwares, one porcelain and one semi-porcelain. Table 50 provides a summary of the ceramic collection according to ware type, while Table 51 provides a more detailed breakdown of the ceramic assemblage by decorative style.

**Table 50: Summary of Ceramic Collection According to Ware Type, Location 17 (AgHk-104)**

<b>Artifact</b>	<b>Frequency</b>	<b>%</b>
ironstone	23	79.30
whiteware	2	6.90
utilitarian	2	6.90
porcelain	1	3.45
semi-porcelain	1	3.45
<b>Total</b>	<b>29</b>	<b>100.00</b>

**Table 51: Summary of Ceramic Collection According to Decorative Style, Location 17 (AgHk-104)**

<b>Artifact</b>	<b>Frequency</b>	<b>%</b>
ironstone, plain	18	62.05
ironstone, painted	2	6.90
whiteware, painted	2	6.90
earthenware, red	1	3.45
stoneware, salt glazed	1	3.45
ironstone, moulded	1	3.45



<b>Artifact</b>	<b>Frequency</b>	<b>%</b>
ironstone, stamped	1	3.45
ironstone, transfer printed	1	3.45
porcelain	1	3.45
semi-porcelain, painted	1	3.45
<b>Total</b>	<b>29</b>	<b>100.00</b>

### **Ironstone**

The most common ceramic type collected during the Stage 2 assessment of Location 17 is ironstone (n=23 or 79.30%). Ironstone, or graniteware, is a variety of refined white earthenware introduced in the 1830s that became extremely popular in Upper Canada by the 1860s (Kenyon 1985). The ironstone assemblage includes: 18 fragments of plain (Plate 63:1), two hand painted (Plate 63:2), one moulded with an indeterminate pattern (Plate 63:3), one blue stamped (Plate 63:4) and one turquoise floral motif transfer printed (Plate 63:5). The plain ironstone assemblage includes two partial maker's marks, but these are too fragmentary to identify the manufacturer.

### **White Earthenware**

Whiteware is a variety of earthenware with a near colourless glaze that replaced earlier near white ceramics such as pearlware and creamware by the early 1830s. Early whiteware tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19<sup>th</sup> century. Two fragments of hand painted whiteware are in the ceramic assemblage and this includes a violet fragment and a blue fragment (Plate 63:6).

### **Utilitarian Earthenware**

Two fragments of utilitarian earthenwares were collected from Location 17 (AgHk-104), including one fragment of lead glazed red earthenware and one fragment of grey bodied salt glazed stoneware (a hollowware fragment with a whitewashed salt glaze). Red earthenware vessels were manufactured throughout the late 18<sup>th</sup> and 19<sup>th</sup> centuries and were the most common utilitarian ware in the first half of the 19<sup>th</sup> century, eventually being replaced by more durable stoneware vessels.

### **Porcelain**

The Canadian pioneer generally preferred utilitarian earthenwares, but by the mid-19<sup>th</sup> century, English potteries such as Copeland and Minton, were producing porcelains for the Canadian marketplace. Porcelain was not acquired as much as utilitarian ceramics, but it was always in steady demand (Collard 1967:163,175). A single fragment of low grade white porcelain (a basal hollowware fragment) is part of the ceramic assemblage from Location 17 (AgHk-104) (Plate 63:7).



### **Semi-porcelain**

In 1850, semi-porcelains were reintroduced and this vitreous, hard-glazed white earthenware resembling bone china, soon dominated the marketplace (Hughes 1961). The ceramic assemblage from Location 17 (AgHk-104) contains a single fragment of hand painted blue semi-porcelain; it is a basal fragment (Plate 63:8).

#### **3.17.1.2 Glass Artifacts**

Eleven fragments of domestic glass were recovered from Location 17 (AgHk-104). This collection includes 10 fragments of bottle glass and a single fragment of sun coloured amethyst clear pressed moulded glass dish (likely post-1880). Colours present in the bottle glass assemblage include: seven aqua, two sun coloured amethyst, and one amber. Generally, aqua coloured glass fragments originate from medical and pharmaceutical products including patent medicine bottles of the 19<sup>th</sup> and 20<sup>th</sup> century (Kendrick 1971). Other diagnostic coloured fragments in the assemblage include the sun coloured amethyst. According to Lindsey (2011), this glass generally dates from 1880 to 1920.

#### **3.17.2 Personal Artifacts**

Eight personal items were collected during the Stage 2 assessment of Location 17 (AgHk-104) including five fragments of white clay tobacco pipe stem (Plate 64:1), one pipe bowl (Plate 64:2), one pipe elbow (Plate 64:3) and a single clay marble (Plate 64:4). White clay pipes were very popular throughout the 19<sup>th</sup> century, with a decline in use by 1880 when they were replaced by briar pipes and cigarettes (Adams 1994:93). Most white clay pipes found in Upper Canada were manufactured in either Quebec or Scotland; occasionally examples from English, Dutch, French and American makers are also found. The maker's name may be impressed with the city of manufacture on the opposite side, although this did not become common practice until the 1840s. Two pipe stems in the assemblage are marked Dixon, Montreal, operational from 1876 to 1894 (Plate 64:1, top) and the other is identified as a fragmentary William White, Glasgow, which was operational from 1805 to 1955 (Plate 64:1, bottom).

#### **3.17.3 Structural Artifacts**

Six fragments of window glass (one measuring 1.5 millimetres and five measuring 2.0 millimetres thick) were also collected from Location 17 (AgHk-104). While the assemblage of window glass is too small to use as a reliable diagnostic indicator, it may signify that the historic material on site is post-1840. Most window glass made before the mid-1840s tends to be less than 1.6 millimetres thick, while window glass post-1840 is thicker. While this is not true for every sherd, a sample of window glass dating to the first half of the 19<sup>th</sup> century should have an average thickness of 1.1 to 1.4 millimetres compared to about 1.7 to 2.0 millimetres from the last half (Adams 1994:92-93; Kenyon 1980).

#### **3.17.4 Artifact Catalogue**

Table 52 presents the Stage 2 artifact catalogue for Location 17 (AgHk-104).



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**Table 52: Location 17 (AgHk-104) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	clay marble	1	
2	surface collection	0 cm	white clay pipe elbow	1	
3	surface collection	0 cm	white clay pipe stem	1	W White, Glasgow 1805 to 1955
4	surface collection	0 cm	white clay pipe stem	1	
5	surface collection	0 cm	ironstone	1	partial maker's mark: "...celain..Nson L...AND"
6	surface collection	0 cm	ironstone	1	
7	surface collection	0 cm	ironstone, transfer printed	1	turquoise floral motif
8	surface collection	0 cm	ironstone	1	
9	surface collection	0 cm	ironstone, painted	1	polychrome floral hollowware
10	surface collection	0 cm	glass, dish	1	sun coloured amethyst glass; pressed moulded
11	surface collection	0 cm	ironstone, stamped	1	blue hollowware rim
12	surface collection	0 cm	semi porcelain, painted	1	basal fragment; blue; hollowware
13	surface collection	0 cm	white clay pipe stem	1	Dixon Montreal 1876 to 1894
14	surface collection	0 cm	ironstone, moulded	1	indeterminate pattern
15	surface collection	0 cm	glass, bottle	1	aqua
16	surface collection	0 cm	glass, bottle	2	sun coloured amethyst
17	surface collection	0 cm	glass, window	6	1 @ 1.5mm, 5 @ 2mm
18	surface collection	0 cm	porcelain	1	hollowware basal fragment
19	surface collection	0 cm	white clay pipe stem	1	Dixon Montreal 1876 to 1894
20	surface collection	0 cm	white clay pipe bowl	1	
21	surface collection	0 cm	ironstone, painted	1	red striped saucer fragment
22	surface collection	0 cm	whiteware, painted	1	violet
23	surface collection	0 cm	earthenware, red	1	lead glazed
24	surface collection	0 cm	stoneware, salt glazed	1	grey bodied hollowware; whitewashed glaze
25	surface collection	0 cm	ironstone	2	basal fragments
26	surface collection	0 cm	glass, bottle	2	aqua
27	surface collection	0 cm	glass, bottle	1	aqua
28	surface collection	0 cm	glass, bottle	2	aqua
29	surface collection	0 cm	glass, bottle	1	aqua
30	surface collection	0 cm	white clay pipe stem	1	Dixon Montreal 1876 to 1894
31	surface collection	0 cm	whiteware, painted	1	blue
32	surface collection	0 cm	ironstone	1	partial illegible maker's mark





Cat. #	Context	Depth	Artifact	Freq.	Comments
33	surface collection	0 cm	ironstone	1	teacup handle fragment
34	surface collection	0 cm	ironstone	1	rim
35	surface collection	0 cm	ironstone	2	
36	surface collection	0 cm	ironstone	1	
37	surface collection	0 cm	ironstone	1	
38	surface collection	0 cm	ironstone	2	
39	surface collection	0 cm	ironstone	2	
40	surface collection	0 cm	ironstone	1	
41	surface collection	0 cm	ironstone	1	
42	surface collection	0 cm	glass, bottle	1	amber

### 3.18 Location 18 (AgHk-105)

Location 18 (AgHk-105), a historic Euro-Canadian site, was identified on November 15, 2011 during a Stage 2 pedestrian survey of the proposed cable corridor on BOR1764, on the south side of Coldstream Road (Figure 5-02; Supplement A: Figure 02). The weather was a mix of sun and cloud. Location 18 (AgHk-105) is a 20 metre (along the north-south axis) by 40 metre (along the west-east axis) scatter of 152 fragments of mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris. In total, 59 Euro-Canadian artifacts, including 53 domestic, five personal and one metal, were collected during the Stage 2 assessment (Table 53). Each artifact class is discussed in greater detail below.

**Table 53: Location 18 (AgHk-105) Historic Euro-Canadian Artifacts**

Artifact	Frequency	%
domestic	53	89.84
personal	5	8.47
metal	1	1.69
<b>Total</b>	<b>59</b>	<b>100.00</b>

#### 3.18.1 Domestic Artifacts

A total of 53 domestic artifacts were collected during the Stage 2 assessment of Location 18 (AgHk-105). This collection includes 46 ceramic artifacts, four fragments of bottle glass and three faunal remains.



### 3.18.1.1 Ceramic Artifacts

In total, 46 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 18 (AgHk-105). Included in this total are 35 ironstone, seven utilitarian kitchenware, two whiteware and two porcelain. Table 54 provides a summary of the ceramic collection according to ware type, while Table 55 provides a more detailed breakdown of the ceramic assemblage by decorative style.

**Table 54: Summary of Ceramic Collection According to Ware Type, Location 18 (AgHk-105)**

Artifact	Frequency	%
ironstone	35	76.08
utilitarian	7	15.22
whiteware	2	4.35
porcelain	2	4.35
<b>Total</b>	<b>46</b>	<b>100.00</b>

**Table 55: Summary of Ceramic Collection According to Decorative Style, Location 18 (AgHk-105)**

Artifact	Frequency	%
ironstone, plain	20	43.48
ironstone, moulded	5	10.87
ironstone, stamped	5	10.87
earthenware, red	4	8.70
stoneware, salt glazed	3	6.52
ironstone, painted	3	6.52
whiteware, edged	2	4.35
porcelain	2	4.35
ironstone, edged	1	2.17
ironstone, flow transfer printed	1	2.17
<b>Total</b>	<b>46</b>	<b>100.00</b>

### Ironstone

The most common ceramic type collected during Stage 2 assessment is ironstone (n=35 or 76.08%). Ironstone or graniteware is a variety of refined white earthenware introduced in the 1830s that became extremely popular in Upper Canada by the 1860s (Kenyon 1985). The ironstone assemblage includes: 20 plain or undecorated with two illegible makers marks (Plate 65:1), five moulded with indeterminate patterns (Plate 65:2), five stamped (four violet and blue, one blue) (Plate 65:3), three polychrome floral hand painted (Plate 65:4), one blue edged (Plate 65:5), and one fragment of blue flow transfer printed (Plate 65:6).



### Utilitarian Earthenware

Seven fragments of utilitarian earthenwares were collected from Location 18 (AgHk-105), including four fragments of lead glazed red earthenware and three fragments of salt glazed stonewares. Salt glazed stonewares in this assemblage include two fragments of buff bodied stoneware and one grey bodied, both with a clear exterior glaze and Albany slip interior. Red earthenware vessels were manufactured throughout the late 18<sup>th</sup> and 19<sup>th</sup> centuries and were the most common utilitarian ware in the first half of the 19<sup>th</sup> century, eventually being replaced by more durable stoneware vessels.

### White Earthenware

Whiteware is a variety of earthenware with a near colourless glaze that replaced earlier near white ceramics such as pearlware and creamware by the early 1830s. Early whiteware tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19<sup>th</sup> century. Two fragments of blue edged wares, plain edged, not moulded or incised, and likely dating from 1850 to 1897 are present in the Location 18 ceramic assemblage (Plate 65:7).

### Porcelain

The Canadian pioneer generally preferred utilitarian earthenwares, but by mid-19<sup>th</sup> century, English potteries such as Copeland and Minton, were producing porcelains for the Canadian marketplace. Porcelain was not acquired as much as utilitarian ceramics, but it was always in steady demand (Collard 1967:163,175). Two porcelain fragments are part of the ceramic assemblage and one fragment is a teacup handle bearing the faint remnants of gilt (Plate 65:8).

#### 3.18.1.2 Glass Artifacts

Four fragments of domestic glass were recovered from Location 18 (AgHk-105). This collection includes three fragments of bottle glass: one aqua, one olive, and one clear or colourless fragment. Colourless or “clear” glass was relatively uncommon prior to the 1870s but became quite common after the widespread use of automatic bottle machines in the mid-to-late 1910s (Kendrick 1971; Toulouse 1969; Fike 1987). Generally, aqua coloured glass fragments originate from medical and pharmaceutical products including patent medicine bottles of the 19<sup>th</sup> and 20<sup>th</sup> century (Kendrick 1971). There is also a single fragment of white glass in the assemblage, which likely represents a cosmetic or toiletries jar.

#### 3.18.1.3 Faunal Remains

Three small fragments of faunal material were also collected during the Stage 2 assessment of Location 18 (AgHk-105). These include a fragment of a molar or premolar from a medium-to-large Artiodactyl, a fragment tentatively identified as a beaver incisor (*Castor canadensis*), and one small fragment of mammalian cut cortical bone.



### 3.18.2 Personal Artifacts

Five personal artifacts were collected from Location 18 (AgHk-105), including three white clay tobacco pipe stem fragments (Plate 65:9), one fragment of a white bisque porcelain doll head (Plate 65:10), and one button (Plate 65:11). One pipe stem could be identified as a Bannerman, Montreal pipe fragment, operational from 1858 to 1907. The button is a white agate four-hole button measuring 11.0 millimetres in diameter and likely dating post-1840.

### 3.18.3 Metal Artifacts

A single fragment of miscellaneous metal hardware, a valve fragment, was collected from Location 18 (AgHk-105).

### 3.18.4 Artifact Catalogue

Table 56 provides the Stage 2 artifact catalogue for this historic Euro-Canadian site.

**Table 56: Location 18 (AgHk-105) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	metal, miscellaneous hardware	1	valve cap
2	surface collection	0 cm	faunal remains	3	fragment of a molar or premolar from a medium-to-large Artiodactyla; potential fragment of beaver incisor ( <i>Castor canadensis</i> ); one small fragment of mammalian cut cortical bone
3	surface collection	0 cm	earthenware, red	4	lead glazed
4	surface collection	0 cm	stoneware, salt glazed	3	1 grey bodied with clear exterior salt glaze/albany slip interior; 2 buff paste with clear exterior salt glaze/albany slip interior
5	surface collection	0 cm	white clay pipe stem	1	Bannerman, Montreal 1858 to 1907
6	surface collection	0 cm	glass, white	1	
7	surface collection	0 cm	glass, bottle	3	1 aqua; 1 olive; 1 clear or colourless
8	surface collection	0 cm	ironstone	2	hollowware rim fragments
9	surface collection	0 cm	porcelain	1	1 teacup handle fragment with remnants of gilt
10	surface collection	0 cm	porcelain figurine	1	bisque doll head fragment
11	surface collection	0 cm	whiteware, edged	2	blue - plain edge, not moulded or incised, 1850 to 1897
12	surface collection	0 cm	ironstone, edged	1	blue - plain edge, not moulded or incised
13	surface collection	0 cm	ironstone, painted	1	polychrome floral



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Cat. #	Context	Depth	Artifact	Freq.	Comments
14	surface collection	0 cm	ironstone, moulded	1	indeterminate pattern
15	surface collection	0 cm	ironstone, flow transfer printed	1	blue
16	surface collection	0 cm	ironstone, stamped	2	violet and blue
17	surface collection	0 cm	button, agate	1	white; 11mm diameter; 4 hole
18	surface collection	0 cm	white clay pipe stem	1	
19	surface collection	0 cm	white clay pipe stem	1	
20	surface collection	0 cm	ironstone	1	hollowware rim fragment
21	surface collection	0 cm	ironstone	2	hollowware rim fragments
22	surface collection	0 cm	ironstone	1	hollowware rim fragment
23	surface collection	0 cm	ironstone	2	hollowware rim fragments
24	surface collection	0 cm	ironstone	2	
25	surface collection	0 cm	ironstone	1	
26	surface collection	0 cm	ironstone	1	
27	surface collection	0 cm	ironstone	2	
28	surface collection	0 cm	ironstone	1	basal fragment
29	surface collection	0 cm	ironstone	2	basal fragments
30	surface collection	0 cm	ironstone	2	basal fragments
31	surface collection	0 cm	ironstone	1	basal fragment
32	surface collection	0 cm	ironstone	1	partial maker's mark - illegible
33	surface collection	0 cm	ironstone	1	partial maker's mark - illegible
34	surface collection	0 cm	porcelain	1	
35	surface collection	0 cm	ironstone, painted	2	polychrome floral
36	surface collection	0 cm	ironstone, moulded	2	indeterminate pattern
37	surface collection	0 cm	ironstone, moulded	1	indeterminate pattern
38	surface collection	0 cm	ironstone, moulded	1	indeterminate pattern
39	surface collection	0 cm	ironstone, stamped	1	violet and blue
40	surface collection	0 cm	ironstone, stamped	1	violet and blue
41	surface collection	0 cm	ironstone, stamped	1	blue



### 3.19 Location 19 (AgHk-119)

The Stage 2 pedestrian survey of the proposed wind energy components for property BOR1718 on November 15, 2011, resulted in the identification of an isolated, incomplete Middle Archaic (*circa* 6000 to 2500 B.C.) Brewerton Side-Notched projectile point (Ellis *et al.* 1990; Justice 1987; Pengelly 1991) (Plate 66:1) designated Location 19 (AgHk-119) (Figure 5-05; Supplement A: Figure 05). This pre-contact Aboriginal site was identified during sunny and mild weather conditions. It is location within the proposed Turbine 12 layout (Supplement A: Figure 05). As detailed in Section 2.0, survey intervals were intensified to one metre for a twenty metre radius surrounding the find but no additional artifacts were identified. However, 13 metres to the southeast, an isolated Late Archaic (*circa* 1500 to 1100 B.C.) Crawford Knoll point (Ellis *et al.* 1990; Justice 1987; Pengelly 1991) manufactured out of Onondaga chert (Plate 66:2) was identified on property BOR1159 along the proposed road access and cable corridor between Turbines 12 and 48. This find was documented on October 28, 2011. The weather conditions were sunny and mild (Plate 4). Survey intervals were intensified to one metre for a twenty metre radius surrounding the find but no additional artifacts were identified. Given the proximity of these two artifacts, they have been grouped together as a single location.

The Brewerton Side-Notched point, manufactured from of Onondaga chert, is missing its tip, and has an incomplete length of 30.93 millimetres, a width of 22.57 millimetres, and is 5.65 millimetres thick. It has a basal width of 21.16 millimetres, a shoulder width of 22.57 millimetres, and an inter-notch width of 14.08 millimetres.

The Crawford Knoll point has a broken and retouched base and missing tip. This point measures 42.98 millimetres long, by 22.52 millimetres wide, and is 5.46 millimetres thick. It has a basal width of approximately 14.40 millimetres, measured on the incomplete edge, and a shoulder width of 22.51 millimetres.

#### 3.19.1 Artifact Catalogue

Table 57 presents the Stage 2 artifact catalogue for Location 19 (AgHk-119).

**Table 57: Location 19 (AgHk-119) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	projectile point	1	Onondaga chert, tip broken off, Middle Archaic Brewerton side-notched
2	surface collection	0 cm	projectile point	1	Onondaga chert, nearly complete, missing one corner of base which has been reworked, Late Archaic Crawford Knoll

### 3.20 Location 20 (AgHk-106)

Location 20 (AgHk-106), a historic Euro-Canadian site, was identified on November 24, 2011, during the Stage 2 pedestrian survey (Plates 26, 27) of the proposed access road for Turbine 8 on BOR1039, just west of Centre Road and north of Coldstream Road (Figure 5-03; Supplement A: Figure 03). The weather conditions were foggy and cool. Location 20 (AgHk-106) is a 32 metre (along the north-south axis) by 22 metre (along the west-



east axis) scatter of approximately 40 fragments of mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris. In total, 29 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 27 (93.10%) domestic and two (6.90%) personal. Each artifact class is discussed in greater detail below.

### 3.20.1 Domestic Artifacts

A total of 27 domestic artifacts were collected during the Stage 2 assessment of Location 20 (AgHk-106). This collection includes 23 ceramic artifacts and four fragments of bottle glass.

#### 3.20.1.1 Ceramic Artifacts

In total, 23 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 20 (AgHk-106). Included in this total are 15 ironstone and eight fragments of whiteware. Table 58 provides a detailed breakdown of the ceramic assemblage by decorative style.

**Table 58: Summary of Ceramic Collection According to Decorative Style, Location 20 (AgHk-106)**

Artifact	Frequency	%
ironstone, plain	11	47.83
whiteware, stamped	3	13.04
ironstone, moulded	2	8.70
whiteware, plain	2	8.70
ironstone, painted	1	4.35
ironstone, stamped	1	4.35
whiteware, moulded	1	4.35
whiteware, sponged	1	4.35
whiteware, transfer printed	1	4.35
<b>Total</b>	<b>23</b>	<b>100.00</b>

#### Ironstone

Ironstone, or graniteware, is a variety of refined white earthenware introduced in the 1830s that became extremely popular in Upper Canada by the 1860s (Kenyon 1985). The ironstone assemblage includes 15 fragments in total: 11 plain (Plate 67:1), two moulded, including one scalloped teacup fragment (Plate 67:2), and a single fragment of hand painted with a green leaf motif (Plate 67:3), and one green and red stamped (Plate 67:4), respectively. The plain ironstone assemblage includes two fragmentary maker's marks: Meakin, dating to post-1850 and one fragment that is illegibly stamped.



### White Earthenware

Whiteware is a variety of earthenware with a near colourless glaze that replaced earlier near white ceramics such as pearlware and creamware by the early 1830s. Early whiteware tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19<sup>th</sup> century. Eight fragments in the ceramic assemblage have been identified as whitewares including: three stamped (two blue and one green) (Plate 67:5), two plain fragments (Plate 67:6), and one fragment each of blue willow motif transfer printed (Plate 67:7), indeterminate moulded (Plate 67:8), and blue sponged (Plate 67:9).

#### 3.20.1.2 Glass Artifacts

Four fragments of domestic glass were recovered from Location 20 (AgHk-106). This collection includes three fragments of olive bottle glass and one fragment of aqua. Generally, aqua coloured glass fragments originate from medical and pharmaceutical products including patent medicine bottles of the 19<sup>th</sup> and 20<sup>th</sup> century (Kendrick 1971).

#### 3.20.2 Personal Artifacts

Two personal items are in the Location 20 (AgHk-106) artifact assemblage and include one fragment of white clay tobacco stem (Plate 67:10) and one fragmentary pipe bowl with a moulded wreath motif (Plate 67:11).

#### 3.20.3 Artifact Catalogue

Table 59 presents the Stage 2 catalogue for Location 20 (AgHk-106).

**Table 59: Location 20 (AgHk-106) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	whiteware, transfer printed	1	blue willow motif
2	surface collection	0 cm	whiteware, stamped	1	green leaf motif
3	surface collection	0 cm	whiteware, moulded	1	
4	surface collection	0 cm	whiteware, stamped	1	blue
5	surface collection	0 cm	white clay pipe bowl	1	moulded wreath
6	surface collection	0 cm	whiteware	1	
7	surface collection	0 cm	whiteware, sponged	1	blue
8	surface collection	0 cm	whiteware	1	
9	surface collection	0 cm	whiteware, stamped	1	blue
10	surface collection	0 cm	ironstone, stamped	1	green and red
11	surface collection	0 cm	glass, bottle	4	3 olive; 1 aqua
12	surface collection	0 cm	ironstone, moulded	1	indeterminate pattern
13	surface collection	0 cm	white clay pipe stem	1	





Cat. #	Context	Depth	Artifact	Freq.	Comments
14	surface collection	0 cm	ironstone, painted	1	green leaf motif
15	surface collection	0 cm	ironstone	1	partial maker's mark incuse "Meakin" circa post 1850
16	surface collection	0 cm	ironstone, moulded	1	scalloped teacup fragment
17	surface collection	0 cm	ironstone	1	fragments refit with illegible stamp
18	surface collection	0 cm	ironstone	2	
19	surface collection	0 cm	ironstone	1	
20	surface collection	0 cm	ironstone	2	
21	surface collection	0 cm	ironstone	2	
22	surface collection	0 cm	ironstone	1	
23	surface collection	0 cm	ironstone	1	

### 3.21 Location 21 (AgHk-107)

Location 21 (AgHk-107), a historic Euro-Canadian site, was identified on November 24, 2011 also during the Stage 2 pedestrian survey (Plates 26, 27) of the proposed access road for Turbine 8 on BOR1039, just west of Centre Road and north of Coldstream Road (Figure 5-03; Supplement A: Figure 03). The weather conditions were foggy and cool. Location 21 (AgHk-107) is a 33 metre (along the north-south axis) by 13 metre (along the west-east axis) scatter of approximately 40 historic Euro-Canadian artifacts and two pre-contact Aboriginal artifacts. In total, 27 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 25 domestic, one personal, and one structural (Table 60). Each artifact class is discussed in greater detail below.

**Table 60: Location 21 (AgHk-107) Historic Euro-Canadian Artifacts**

Artifact	Frequency	%
domestic	25	86.21
personal	1	3.45
structural	1	3.45
<b>Total Euro-Canadian Artifacts</b>	<b>27</b>	<b>93.10</b>

#### 3.21.1 Domestic Artifacts

A total of 25 domestic artifacts were collected during the Stage 2 assessment of Location 21 (AgHk-107). This collection includes 22 ceramic artifacts and three fragments of domestic glass.



### 3.21.1.1 Ceramic Artifacts

In total, 22 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 21 (AgHk-107). Included in this total are 20 ironstone and two whiteware. Table 61 provides a detailed breakdown of the ceramic assemblage by decorative style.

**Table 61: Summary of Ceramic Collection According to Decorative Style, Location 21 (AgHk-107)**

Artifact	Frequency	%
ironstone, plain	15	68.18
ironstone, painted	3	13.64
whiteware, sponged	2	9.09
ironstone, moulded	1	4.55
ironstone, transfer printed	1	4.55
<b>Total</b>	<b>22</b>	<b>100.00</b>

#### Ironstone

Ironstone, or graniteware, is a variety of refined white earthenware introduced in the 1830s that became extremely popular in Upper Canada by the 1860s (Kenyon 1985). The ironstone assemblage includes 20 fragments in total: 15 plain (Plate 68:1), three hand painted fragments, including one blue, one red and one green hand painted hollowware fragment (Plate 68:2), one green leaf transfer printed fragment (Plate 68:3), and one moulded fragment (Plate 68:4).

#### White Earthenware

Whiteware is a variety of earthenware with a near colourless glaze that replaced earlier near white ceramics such as pearlware and creamware by the early 1830s. Early whiteware tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19<sup>th</sup> century. Two fragments of blue sponged whiteware are in the Location 21 (AgHk-107) ceramic assemblage (Plate 68:5).

### 3.21.1.2 Glass Artifacts

Three fragments of domestic glass were recovered from Location 21 (AgHk-107). This collection includes two fragments of olive bottle glass and a single fragment of jade green pressed moulded glass, which likely represents the base of a small glass dish.

### 3.21.2 Structural Artifacts

A single fragment of window glass measuring 2.0 millimetres was collected from Location 21 (AgHk-107).



### 3.21.3 Personal Artifacts

A single fragment of white clay pipe stem (Plate 68:6) was collected from Location 21 (AgHk-107). White clay pipes were very popular throughout the 19<sup>th</sup> century, with a decline in use by 1880 when they were replaced by briar pipes and cigarettes (Adams 1994:93).

### 3.21.4 Pre-contact Aboriginal Artifacts

In addition, two pre-contact Aboriginal artifacts were collected: a heat treated biface fragment manufactured from Kettle Point chert (Plate 68:8) and a small fragment of tertiary Kettle Point chert chipping detritus (Plate 68:8). The biface fragment consists of one end of the tool, and measures 6.64 millimetres thick, with an incomplete length of 12.89 millimetres and an incomplete width of 23.15 millimetres.

### 3.21.5 Artifact Catalogue

Table 62 presents the Stage 2 artifact catalogue for Location 21 (AgHk-107).

**Table 62: Location 21 (AgHk-107) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	white clay pipe stem	1	
2	surface collection	0 cm	ironstone, painted	1	green hollowware rim fragment
3	surface collection	0 cm	whiteware, sponged	1	blue
4	surface collection	0 cm	biface	1	fragment of one end; burnt Kettle Point chert
5	surface collection	0 cm	chipping detritus	1	Kettle Point chert
6	surface collection	0 cm	ironstone, transfer printed	1	green leaf motif
7	surface collection	0 cm	whiteware, sponged	1	blue
8	surface collection	0 cm	glass, dish	1	jade green; pressed moulded
9	surface collection	0 cm	glass, bottle	2	olive
10	surface collection	0 cm	glass, window	1	2mm
11	surface collection	0 cm	ironstone, moulded	1	indeterminate pattern
12	surface collection	0 cm	ironstone	1	basal fragment
13	surface collection	0 cm	ironstone, painted	2	1 blue; 1 red
14	surface collection	0 cm	ironstone	2	
15	surface collection	0 cm	ironstone	1	
16	surface collection	0 cm	ironstone	2	
17	surface collection	0 cm	ironstone	1	



Cat. #	Context	Depth	Artifact	Freq.	Comments
18	surface collection	0 cm	ironstone	2	
19	surface collection	0 cm	ironstone	1	
20	surface collection	0 cm	ironstone	1	
21	surface collection	0 cm	ironstone	2	
22	surface collection	0 cm	ironstone	2	

### 3.22 Location 22 (AgHk-108)

Location 22 (AgHk-108), a historic Euro-Canadian site, was identified on November 24, 2011 during the Stage 2 pedestrian survey (Plates 18, 19) of the proposed cable corridor on BOR1028, west of Kerwood Road and south of Coldstream Road (Figure 5-01; Supplement A: Figure 01). The weather conditions were foggy and cool. Location 22 (AgHk-108) is a 22 metre (along the north-south axis) by 22 metre (along the west-east axis) scatter of 55 fragments of mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris. In total, 36 Euro-Canadian artifacts were collected during the Stage 2 assessment. This includes 32 domestic, two structural, and two personal items (Table 63). Each artifact class is discussed in greater detail below.

**Table 63: Location 22 (AgHk-108) Historic Euro-Canadian Artifacts**

Artifact	Frequency	%
domestic	32	88.89
structural	2	5.56
personal	2	5.56
<b>Total</b>	<b>36</b>	<b>100.00</b>

#### 3.22.1 Domestic Artifacts

A total of 32 domestic artifacts were collected during the Stage 2 assessment of Location 22 (AgHk-108). This collection includes 30 ceramic artifacts and two glass artifacts.

##### 3.22.1.1 Ceramic Artifacts

In total, 30 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 22 (AgHk-108). Included in this total are 20 fragments of ironstone, six utilitarian kitchenwares, three whitewares and a single fragment of Rockingham ware. Table 64 provides a summary of ceramics according to ware type while Table 65 provides a more detailed breakdown of the ceramic assemblage by decorative style.



**Table 64: Summary of Ceramic Collection According to Ware Type, Location 22 (AgHk-108)**

<b>Artifact</b>	<b>Frequency</b>	<b>%</b>
ironstone	20	66.67
utilitarian	6	20.00
whiteware	3	10.00
Rockingham ware	1	3.33
<b>Total</b>	<b>30</b>	<b>100.00</b>

**Table 65: Summary of Ceramic Collection According to Decorative Style, Location 22 (AgHk-108)**

<b>Artifact</b>	<b>Frequency</b>	<b>%</b>
ironstone, plain	17	56.68
earthenware, yellow	4	13.33
earthenware, red	2	6.67
ironstone, moulded	2	6.67
ironstone, painted	1	3.33
whiteware, plain	1	3.33
whiteware, painted	1	3.33
whiteware, transfer printed	1	3.33
Rockingham ware	1	3.33
<b>Total</b>	<b>30</b>	<b>100.00</b>

### **Ironstone**

Ironstone, or graniteware, is a variety of refined white earthenware introduced in the 1830s that became extremely popular in Upper Canada by the 1860s (Kenyon 1985). The ironstone assemblage includes 20 fragments in total: 17 plain (Plate 69:1), two moulded, including a wheat pattern fragment and a scalloped teacup fragment (Plate 69:2), and one fragment of a blue hand painted hollowware rim (Plate 69:3).

### **Utilitarian Earthenware**

Red and yellow earthenware vessels were manufactured throughout the late 18<sup>th</sup> and 19<sup>th</sup> centuries and were the most common utilitarian ware in the first half of the 19<sup>th</sup> century, eventually being replaced by more durable stoneware vessels. The ceramic assemblage includes four fragments of lead glazed yellow earthenware and two fragments of lead glazed red earthenware.



### **White Earthenware**

Whiteware is a variety of earthenware with a near colourless glaze that replaced earlier near white ceramics such as pearlware and creamware by the early 1830s. Early whiteware tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19<sup>th</sup> century. Three fragments of whiteware are in the ceramic assemblage: a one plain (Plate 69:4), one blue hand painted (Plate 69:5) and one blue transfer printed (Plate 69:6).

### **Rockingham Ware**

Rockingham ware is similar to yellowware with a yellow paste, but the addition of a second brown coloured manganese glaze results in the body of the ceramic having a mottled appearance. Rockingham wares were used as utilitarian vessels often in the form of crocks, jars, pitchers and tea pots. A single fragment from a hollowware Rockingham ware vessel is in the Location 22 (AgHk-108) ceramic assemblage (Plate 69:7).

#### **3.22.1.2 Glass Artifacts**

Two fragments of aqua coloured domestic glass were recovered from Location 22 (AgHk-108). Generally, aqua coloured glass fragments originate from medical and pharmaceutical products including patent medicine bottles of the 19<sup>th</sup> and 20<sup>th</sup> century (Kendrick 1971).

#### **3.22.2 Structural Artifacts**

A single fragment of window glass, measuring 2.0 millimetres thick, was collected from Location 22 (AgHk-108) as well as a single machine cut nail (Plate 69:8). Cut nails were machine cut and have a flat head. They were present as early as 1790, but did not become prevalent in Ontario until 1830. They were replaced by wire drawn nails in the 1890s (Adams 1994:92).

#### **3.22.3 Personal Artifacts**

Two fragments of white clay pipe tobacco pipe were collected from Location 22 (AgHk-108) including one McDougall, Glasgow (*circa* 1846 to 1891) marked pipe stem fragment (Plate 69:9) and a plain tobacco pipe bowl fragment (Plate 69:10). White clay pipes were very popular throughout the 19<sup>th</sup> century, with a decline in use by 1880 when they were replaced by briar pipes and cigarettes (Adams 1994:93).

#### **3.22.4 Artifact Catalogue**

Table 66 provides the Stage 2 artifact catalogue for this historic Euro-Canadian site.



**Table 66: Location 22 (AgHk-108) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	whiteware, painted	1	blue
2	surface collection	0 cm	white clay pipe stem	1	McDougall, Glasgow <i>circa</i> 1846 to 1891
3	surface collection	0 cm	Rockingham ware	1	hollowware
4	surface collection	0 cm	whiteware	1	
5	surface collection	0 cm	whiteware, transfer printed	1	blue
6	surface collection	0 cm	earthenware, red	2	lead glazed; 1 basal fragment
7	surface collection	0 cm	earthenware, yellow	4	lead glazed
8	surface collection	0 cm	glass, bottle	2	aqua
9	surface collection	0 cm	glass, window	1	2.0 mm
10	surface collection	0 cm	ironstone, moulded	2	wheat motif
11	surface collection	0 cm	white clay pipe bowl	1	
12	surface collection	0 cm	ironstone, painted	1	blue rim fragment
13	surface collection	0 cm	ironstone	2	hollowwares
14	surface collection	0 cm	nail, cut	1	
15	surface collection	0 cm	ironstone, moulded	1	scalloped teacup fragment
16	surface collection	0 cm	ironstone	2	hollowwares
17	surface collection	0 cm	ironstone	2	hollowwares
18	surface collection	0 cm	ironstone	1	hollowware
19	surface collection	0 cm	ironstone	1	hollowware
20	surface collection	0 cm	ironstone	1	hollowware
21	surface collection	0 cm	ironstone	2	basal fragments
22	surface collection	0 cm	ironstone	2	
23	surface collection	0 cm	ironstone	1	
24	surface collection	0 cm	ironstone	1	
25	surface collection	0 cm	ironstone	2	

### 3.23 Location 23 (AgHk-109)

Location 23 (AgHk-109), a historic Euro-Canadian site, was also identified on November 24, 2011 during the Stage 2 pedestrian survey (Plates 18, 19) of the proposed cable corridor on BOR1028, west of Kerwood Road and south of Coldstream Road (Figure 5-01; Supplement A: Figure 01). The weather conditions were foggy and cool. Location 23 (AgHk-109) is a 45 metre (along the north-south axis) by 16 metre (along the west-east axis) scatter of 102 historic Euro-Canadian artifacts. In total, 67 Euro-Canadian artifacts, including 54 domestic items, eight personal, four metal and one structural, were collected during the Stage 2 assessment (Table 67). Each artifact class is discussed in greater detail below.



**Table 67: Location 23 (AgHk-109) Historic Euro-Canadian Artifacts**

Artifact	Frequency	%
domestic	54	80.60
personal	8	11.94
metal	4	5.97
structural	1	1.49
<b>Total</b>	<b>67</b>	<b>100.00</b>

### 3.23.1 Domestic Artifacts

A total of 54 domestic artifacts were collected during the Stage 2 assessment of Location 23 (AgHk-109). This collection includes 40 ceramic artifacts, 10 glass artifacts and four faunal remains.

#### 3.23.1.1 Ceramic Artifacts

In total, 40 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 23 (AgHk-109). Included in this total are 33 fragments of ironstone, five utilitarian kitchenwares, and two whiteware. Table 68 provides a summary of ceramics according to ware type while Table 69 provides a more detailed breakdown of the ceramic assemblage by decorative style.

**Table 68: Summary of Ceramic Collection According to Ware Type, Location 23 (AgHk-109)**

Artifact	Frequency	%
ironstone	33	82.50
utilitarian earthenware	5	12.50
whiteware	2	5.00
<b>Total</b>	<b>40</b>	<b>100.00</b>

**Table 69: Summary of Ceramic Collection According to Decorative Style, Location 23 (AgHk-109)**

Artifact	Frequency	%
ironstone, moulded	12	30.00
ironstone, plain	10	25.00
ironstone, stamped	7	17.50
earthenware, red	2	5.00
stoneware, salt glazed	2	5.00
earthenware, yellow	1	2.50
ironstone, edged	1	2.50
ironstone, flow transfer printed	1	2.50





<b>Artifact</b>	<b>Frequency</b>	<b>%</b>
ironstone, painted	1	2.50
ironstone, transfer printed	1	2.50
whiteware, edged	1	2.50
whiteware, flow transfer printed	1	2.50
<b>Total</b>	<b>40</b>	<b>100.00</b>

### Ironstone

Ironstone, or graniteware, is a variety of refined white earthenware introduced in the 1830s that became extremely popular in Upper Canada by the 1860s (Kenyon 1985). The ironstone assemblage includes 33 fragments in total, including 12 moulded, with five wheat pattern, and one moulded grapes and leaves (Plate 70:1). The moulded assemblage also includes three teacup handle fragments and a jug handle fragment. Also in the assemblage are 10 plain fragments (Plate 70:2). Amongst the plain fragments are three maker's marks: one J G Meakin mark dating from (1851) 1859 to 2000 (Plate 70:3, left), one H Burgess mark (Plate 70:3, centre), operational from 1864 to 1892, and one fragmentary Cochrane mark, operational from 1856 to 1896 (Plate 70:3, right). Meakin and Burgess are located in Stoke-on-Trent, England, while Cochrane is based in Glasgow, Scotland. Six fragments are stamped in a variety of monochromatic and polychrome colours as well as a single fragment of stamped blue rope with a gold stripe (Plate 70:4). Also in the assemblage is a single fragment of: blue edged ware, 1850 to 1897 (Plate 70:5), blue flow transfer printed (Plate 70:6), a polychrome floral hollowware fragment (Plate 70:7), and a fragment of a brown transfer printed lid (Plate 70:8).

### Utilitarian Earthenware

The ceramic assemblage includes two fragments of buff paste stoneware with a clear salt glaze, two fragments of lead glazed red earthenware, and a single fragment of lead glazed yellow earthenware. Red and yellow earthenware vessels were manufactured throughout the late 18<sup>th</sup> and 19<sup>th</sup> centuries and were the most common utilitarian ware in the first half of the 19<sup>th</sup> century, eventually being replaced by more durable stoneware vessels.

### White Earthenware

Whiteware is a variety of earthenware with a near colourless glaze that replaced earlier near white ceramics such as pearlware and creamware by the early 1830s. Early whiteware tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19<sup>th</sup> century. Two fragments of whiteware are in the ceramic assemblage: one fragment of blue edged ware dating from 1850 to 1897 (Plate 71:1) and one fragment of blue flow transfer printed ware (Plate 71:2).



### **3.23.1.2 Glass Artifacts**

Ten fragments of bottle glass were recovered from Location 23 (AgHk-109) including: three aqua, two olive, two clear or colourless, two sun coloured amethyst, including one moulded fragment bearing the numerals "331...", and a single fragment of amber glass.

Generally, aqua coloured glass fragments originate from medical and pharmaceutical products including patent medicine bottles of the 19<sup>th</sup> and 20<sup>th</sup> century (Kendrick 1971). Colourless, or "clear," glass was relatively uncommon prior to the 1870s but became quite common after the widespread use of automatic bottle machines in the mid-to-late 1910s (Kendrick 1971; Toulouse 1969; Fike 1987). Colorless glass is usually attained by using the purest sand source possible and by adding "decolorizing agents" to the glass batch to offset the residual iron impurities. The use of manganese, or "glassmakers soap," would neutralize the effects of other impurities in the sand, particularly iron, and render the glass colourless and clear (Hunter 1950). But manganese oxide turns amethyst over time due to a chemical reaction caused by sun exposure. This glass, also known as sun coloured amethyst glass, generally dates from the 1880s to 1920.

### **3.23.1.3 Faunal Remains**

Four faunal specimens were collected from Location 23 (AgHk-109). They are classified as fragments of cortical bone from a medium-to-large mammal. Two of these have cut marks.

### **3.23.2 Personal Artifacts**

Eight personal items in the form of white clay tobacco pipe fragments were collected from Location 23 (AgHk-109). These include five stem fragments, two of which are Henderson(s) of Montreal dating from 1847 to 1876 (Plate 71:3) and three white clay pipe bowl fragments (Plate 71:4). White clay pipes were very popular throughout the 19<sup>th</sup> century, with a decline in use by 1880 when they were replaced by briar pipes and cigarettes (Adams 1994:93).

### **3.23.3 Metal Artifacts**

Three fragments of miscellaneous metal hardware were collected from Location 23 (AgHk-109). They include a metal spike, metal tether peg, and an unidentifiable iron hardware fragment that was heavily corroded. Also, one unidentifiable heavily corroded iron fragment was collected from Location 23 (AgHk-109).

### **3.23.4 Structural Artifacts**

A single machine cut nail defines the structural assemblage (Plate 71:5). Cut nails were machine cut and have a flat head. They were available as early as 1790, but did not become prevalent in Ontario until 1830. They were replaced by wire drawn nails in the 1890s (Adams 1994:92).



**3.23.5 Artifact Catalogue**

Table 70 presents the artifact catalogue for Location 23 (AgHk-109).

**Table 70: Location 23 (AgHk-109) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	glass, bottle	1	aqua
2	surface collection	0 cm	faunal remains	4	fragmentary cortical bone, medium-to-large mammal – two with cut marks.
3	surface collection	0 cm	stoneware, salt glazed	2	buff paste with clear salt glaze; hollowware
4	surface collection	0 cm	earthenware, red	2	lead glazed; 1 hollowware lip fragment
5	surface collection	0 cm	white clay pipe stem	2	Henderson(s), Montreal 1847 to 1876
6	surface collection	0 cm	white clay pipe bowl	2	fish scale decorative motif
7	surface collection	0 cm	ironstone, painted	1	polychrome floral hollowware
8	surface collection	0 cm	ironstone, stamped	2	2 blue
9	surface collection	0 cm	earthenware, yellow	1	
10	surface collection	0 cm	ironstone, transfer printed	1	brown transfer printed lid fragment
11	surface collection	0 cm	ironstone	1	J G Meakin mark (1851) 1859 to 2000
12	surface collection	0 cm	ironstone, moulded	1	wheat motif hollowware fragment
13	surface collection	0 cm	metal, miscellaneous hardware	1	tether peg
14	surface collection	0 cm	nail, cut	1	
15	surface collection	0 cm	metal, spike	1	
16	surface collection	0 cm	white clay pipe stem	1	
17	surface collection	0 cm	ironstone, flow transfer printed	1	blue
18	surface collection	0 cm	whiteware, flow transfer printed	1	blue
19	surface collection	0 cm	whiteware, edged	1	blue - plain edge, not moulded or incised, 1850 to 1897
20	surface collection	0 cm	white clay pipe stem	1	Henderson(s), Montreal 1847 to 1876
21	surface collection	0 cm	ironstone, moulded	2	wheat pattern
22	surface collection	0 cm	metal, miscellaneous unidentified	1	heavily corroded
23	surface collection	0 cm	ironstone, edged	1	blue - plain edge, not moulded or incised, 1850 to 1897



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Cat. #	Context	Depth	Artifact	Freq.	Comments
24	surface collection	0 cm	ironstone, stamped	1	blue rope with gold stripe
25	surface collection	0 cm	ironstone	1	
26	surface collection	0 cm	ironstone, stamped	1	green
27	surface collection	0 cm	white clay pipe stem	1	illegible mark
28	surface collection	0 cm	white clay pipe bowl	1	
29	surface collection	0 cm	metal, miscellaneous hardware	1	heavily corroded
30	surface collection	0 cm	glass, bottle	2	aqua
31	surface collection	0 cm	glass, bottle	1	sun coloured amethyst
32	surface collection	0 cm	glass, bottle	1	sun coloured amethyst moulded "331..."
33	surface collection	0 cm	ironstone, stamped	2	green and red
34	surface collection	0 cm	ironstone, stamped	1	blue and violet
35	surface collection	0 cm	ironstone	1	H Burgess mark 1864 to 1892
36	surface collection	0 cm	ironstone	1	Cochrane mark 1856 to 1896
37	surface collection	0 cm	ironstone	2	
38	surface collection	0 cm	ironstone	2	
39	surface collection	0 cm	ironstone	2	
40	surface collection	0 cm	ironstone, moulded	2	wheat motif hollowware fragment
41	surface collection	0 cm	ironstone, moulded	2	basal fragments
42	surface collection	0 cm	ironstone, moulded	2	teacup handle fragments
43	surface collection	0 cm	ironstone, moulded	1	teacup handle fragment
44	surface collection	0 cm	ironstone, moulded	1	jug handle
45	surface collection	0 cm	ironstone, moulded	1	hollowware fragment, moulded grapes
46	surface collection	0 cm	glass, bottle	5	2 olive, 2 clear, 1 amber

### 3.24 Location 24 (AgHk-110)

Location 24, a pre-contact Aboriginal site, was identified during the Stage 2 pedestrian survey (Plates 7, 8) of the wind energy components for property BOR1104 (Figure 5-06; Supplement A: Figure 06). This lithic scatter, which measures approximately 17 metres (along the north-south axis) by 12 metres (along the west-east axis) was identified on November 24, 2011 as part of the investigation of the proposed Turbine 14 pad, cable corridor, and access road. The weather conditions were cool and foggy. A sample of 14 artifacts from the 20 artifacts observed in the field was collected, including chipping detritus (Plate 72:1), a core (Plate 72:2), and retouched and utilized flakes. The artifacts left behind were all Kettle Point chert chipping detritus. Table 71 summarizes the pre-contact Aboriginal artifacts collected.



**Table 71: Location 24 Pre-contact Aboriginal Artifacts**

Artifact	Frequency	%
chipping detritus	9	64.29
utilized flake	3	21.43
core	1	7.14
retouched flake	1	7.14
<b>Total</b>	<b>14</b>	<b>100.00</b>

### 3.24.1 Chipped Lithic Tools

One retouched flake and two utilized flakes manufactured from Kettle Point chert were collected from Location 24.

### 3.24.2 Chipping Detritus

A total of 9 pieces of chipping detritus manufactured from Kettle Point chert was collected during the Stage 2 assessment of this pre-contact Aboriginal site. Only broken flakes were recovered, suggesting that most primary lithic reduction and primary tool production did not occur at this site.

### 3.24.3 Artifact Catalogue

Table 72 provides the Stage 2 artifact catalogue for Location 24.

**Table 72: Location 24 Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	chipping detritus	9	9 Kettle Point chert
2	surface collection	0 cm	core	1	Kettle Point chert
3	surface collection	0 cm	retouched flake	1	Kettle Point chert, one edge retouched, small amount of cortex present
4	surface collection	0 cm	utilized flake	3	Kettle Point chert, all with one edge utilized

## 3.25 Location 25 (AgHk-111)

Location 25 (AgHk-111), a historic Euro-Canadian site, was identified on December 8, 2011 during the Stage 2 pedestrian survey (Plates 13, 14) of the proposed collector cable corridor, on the east side of Roddick Road and south of Bornish Drive on BOR1578 (Figure 5-05; Supplement A: Figure 05). The weather was sunny and cool. Location 25 (AgHk-111) is a 22 metre (along the north-south axis) by 14 metre (along the west-east axis) scatter of 24 fragments of mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris. In total, six Euro-Canadian artifacts were collected during the Stage 2 assessment, all domestic artifacts. Each artifact class is discussed in greater detail below.



### 3.25.1 Domestic Artifacts

A total of six domestic artifacts were collected during the Stage 2 assessment of Location 25 (AgHk-111). This collection includes four ceramic artifacts, one glass artifact and one faunal remain.

#### 3.25.1.1 Ceramic Artifacts

In total, four fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 25 (AgHk-111). These include two ironstone, one red earthenware, and one fragment of redware. Table 73 provides a detailed breakdown of the ceramic assemblage by decorative style.

**Table 73: Summary of Ceramic Collection According to Decorative Style, Location 25 (AgHk-111)**

Artifact	Frequency	%
ironstone, plain	1	25.00
ironstone, edged	1	25.00
earthenware, red	1	25.00
redware	1	25.00
<b>Total</b>	<b>4</b>	<b>100.00</b>

#### Ironstone

Ironstone, or graniteware, is a variety of refined white earthenware introduced in the 1830s that became extremely popular in Upper Canada by the 1860s (Kenyon 1985). One rim fragment of plain ironstone (Plate 73:1) and one blue edged fragment dating from 1850 to 1897 (Plate 73:2), are in the ceramic assemblage.

#### Utilitarian Earthenware

Red earthenware vessels were manufactured throughout the late 18<sup>th</sup> and 19<sup>th</sup> centuries and were the most common utilitarian ware in the first half of the 19<sup>th</sup> century, eventually being replaced by more durable stoneware vessels. The ceramic assemblage includes a single fragment of lead glazed red earthenware hollowware rim fragment.

#### Redware

Redware is a thin-bodied earthenware covered on both the interior and exterior by a dark reddish-brown, dark brown or black glaze. This type of redware was commonly used in the early 19<sup>th</sup> century for tea pots and mugs. There is a single hollowware rim fragment of redware in the Location 25 (AgHk-111) ceramic assemblage (Plate 73:3).



### 3.25.1.2 Glass Artifacts

A single fragment of black bottle glass was recovered from Location 25 (AgHk-111). “Black” glass generally dates from the early-to-mid 19<sup>th</sup> century. The addition of iron when making glass was common practice up until 1860 and produced dark olive or dark amber glass that became known as “black glass” (Kendrick 1971).

### 3.25.1.3 Faunal Remains

A single faunal specimen was collected from Location 25 (AgHk-111). It is a fragmentary molar or premolar from a medium-to-large Artiodactyl.

## 3.25.2 Artifact Catalogue

Table 74 provides the Stage 2 artifact catalogue for Location 25.

**Table 74: Location 25 (AgHk-111) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	glass, bottle	1	black
2	surface collection	0 cm	ironstone	1	rim fragment
3	surface collection	0 cm	faunal remains	1	fragmentary molar or premolar from a medium-to-large Artiodactyla
4	surface collection	0 cm	earthenware, red	1	hollowware rim fragment; lead glazed
5	surface collection	0 cm	ironstone, edged	1	blue - plain edge, not moulded or incised
6	surface collection	0 cm	redware	1	hollowware rim fragment

## 3.26 Location 26 (AgHk-117)

The Stage 2 pedestrian survey (Plates 13, 14) of the wind components for property BOR1578, east of Roddick Road and south of Bornish Drive, on December 8, 2011, led to the recovery of an isolated lithic multi-tool, designated Location 26 (Figure 5-12; Supplement A: Figure 12). The weather was sunny and cool. The large tool was identified while investigating the proposed Turbine 30 access road and cable corridor. This multi-tool is fashioned from a large secondary flake of Onondaga chert. The edges have been retouched on all sides, indicating use as a side scraper, with the exception of where the striking platform was, and there are several sharpened points, possibly representing graver use along one edge, and knife use along the other side (Plate 74:1). It most closely resembles the Paleo-Indian backed knife described in Gramly and Funk (1990) and Gramly (2000). As detailed in Section 2.0, survey intervals were intensified to one metre for a twenty metre radius surrounding the find but no additional artifacts were identified.

This lithic tool measures 88.36 millimetres long, 56.63 millimetres wide and 11.10 millimetres thick.



### 3.26.1 Artifact Catalogue

Table 75 presents the artifact catalogue for Location 26 (AgHk-117).

**Table 75: Location 26 (AgHk-117) Artifact Catalogue**

Cat. #	Context	Depth (cm)	Artifact	Freq.	Comments
1	surface collection	0	Multi-tool	1	Onondaga chert, complete, side scraper, retouched along all edges with the exception of where the flake platform was, possible graver points at the end, central channel removed (for hafting)?, sharp edge along one side used as knife

### 3.27 Location 27 (AgHk-112)

Location 27 (AgHk-112), a historic Euro-Canadian site, was identified on December 8, 2011 during the Stage 2 pedestrian survey (Plates 13, 14 ) of the proposed Turbine 30 pad, east of Roddick Road and south of Bornish Drive on BOR1578 (Figure 5-12; Supplement A: Figure 12). The weather was sunny and cool. Location 27 (AgHk-112) is a 15 metre (along the north-south axis) by 15 metre (along the west-east axis) scatter of 13 fragments of mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris. In total, three Euro-Canadian artifacts, all domestic, were collected during the Stage 2 assessment. This artifact class is discussed in greater detail below.

#### 3.27.1 Domestic Artifacts

A total of three domestic artifacts were collected during the Stage 2 assessment of Location 27 (AgHk-112). This collection includes two ceramic artifacts and a single fragment of domestic bottle glass.

##### 3.27.1.1 Ceramic Artifacts

In total, two fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 27 (AgHk-112). These include a single fragment of salt glazed stoneware and a fragment of transfer printed whiteware.

#### White Earthenware

Whiteware is a variety of earthenware with a near colourless glaze that replaced earlier near white ceramics such as pearlware and creamware by the early 1830s. The single fragment of whiteware in this assemblage is a turquoise transfer printed hollowware fragment (Plate 75:1).

#### Utilitarian Earthenware

Red and yellow earthenware vessels were manufactured throughout the late 18<sup>th</sup> and 19<sup>th</sup> centuries and were the most common utilitarian ware in the first half of the 19<sup>th</sup> century, eventually being replaced by more durable





stoneware vessels. The Location 27 (AgHk-112) ceramic assemblage includes a single fragment of a buff bodied stoneware hollowware crock fragment with a light grey salt glaze (Plate 75:2).

### 3.27.1.2 Glass Artifacts

A single fragment of aqua bottle glass was recovered from Location 27 (AgHk-112).

### 3.27.2 Artifact Catalogue

Table 76 provides the Stage 2 artifact catalogue for Location 27 (AgHk-112).

**Table 76: Location 27 (AgHk-112) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	stoneware, salt glazed	1	buff bodied hollowware crock fragment; light grey salt glaze
2	surface collection	0 cm	glass, bottle	1	aqua
3	surface collection	0 cm	whiteware, transfer printed	1	turquoise hollowware fragment

## 3.28 Location 28

Location 28, a pre-contact Aboriginal site identified during the Stage 2 survey (Plates 11, 12) of the proposed wind components on property BOR1020, is represented by one secondary flake manufactured from Kettle Point chert (Plate 76:1). The flake was collected on December 8, 2011, under sunny and cool weather conditions, during the investigation of the proposed cable corridor and access road for Turbine 29 pad (west of Roddick Road and south of Bornish Drive) (Figure 5-12; Supplement A: Figure 12). As detailed in Section 2.0, survey intervals were intensified to one metre for a twenty metre radius surrounding the find but no additional artifacts were identified.

### 3.28.1 Artifact Catalogue

Table 77 provides the Stage 2 artifact catalogue for Location 28.

**Table 77: Location 28 Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	chipping detritus	1	Kettle Point chert, secondary flake



### 3.29 Location 29

Location 29, a historic Euro-Canadian site, was also identified on January 10, 2012 during the Stage 2 pedestrian survey (Plate 22) of the proposed road access and cable corridor between Turbines 18 and 19 on property BOR1734, west of Haskett Road (Figure 5-07; Supplement A: Figure 07). The weather conditions were sunny and cold. Location 37 consists of an isolated Canadian 1876 One Cent piece (Plate 77:1). As detailed in Section 2.0, survey intervals were intensified to one metre within a twenty metre radius of the find, but no further artifacts were found.

#### 3.29.1 Artifact Catalogue

Table 78 provides the artifact catalogue for Location 29.

**Table 78: Location 29 Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	coin	1	1876 One Cent piece

### 3.30 Location 30 (AgHk-113)

The Stage 2 pedestrian survey (Plate 41) of the proposed Turbine 44 pad on property BOR2123 (Figure 5-15; Supplement A: Figure 15) led to the identification of two pre-contact Aboriginal lithic tools, a graver of Kettle Point chert (Plate 78:1) and a side scraper of Onondaga chert (Plate 78:2). Designated Location 30 (AgHk-113), this site was documented on January 10, 2012. The weather conditions were partly sunny and cold. The graver and the scraper were located approximately 7 m apart (along the west-east axis) on the proposed Turbine 44 components. Survey intervals were intensified to one metre for a twenty metre radius surrounding the finds but no additional artifacts were identified.

#### 3.30.1 Chipped Lithic Tools

Table 79 provides the characteristics of and metrics for the recovered graver and biface. The graver was utilized along the lateral edges and distal end, in addition to having a retouched graver point. The scraper is steeply retouched along one lateral edge.

**Table 79: Location 30 (AgHk-113) Tool Metrics**

Cat. #	Tool	Material	Length (mm)	Width (mm)	Thickness (mm)	Comments
1	graver	Kettle Point	22.7	26.23	7	complete
2	scraper	Onondaga	44.52	28.01	10.97	complete, side scraper

#### 3.30.2 Artifact Catalogue

Table 80 presents the artifact catalogue for Location 30 (AgHk-113).



**Table 80: Location 30 (AgHk-113) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	graver	1	Kettle Point chert, complete, three retouched edges, 1 sharp point
2	surface collection	0 cm	scraper	1	Onondaga chert, side scraper, complete, one retouched lateral edge

### 3.31 Location 31 (AgHk-116)

Location 31 (AgHk-116), a historic Euro-Canadian site, was identified on January 10, 2012 during the Stage 2 pedestrian survey (Plate 20) of the proposed cable corridor on property BOR2049, on the west side of Haskett Road, just south of Coldstream Road (Figure 5-07; Supplement A: Figure 07). The weather conditions were partly sunny and cold. Location 31 (AgHk-116) is a 45 metre (along the north-south axis) by 20 metre (along the west-east axis) scatter of 69 artifacts of mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris. In total, 34 Euro-Canadian artifacts were collected during the Stage 2 assessment, all domestic items, either ceramic or glass. This artifact class is discussed in greater detail below.

#### 3.31.1 Domestic Artifacts

A total of 34 domestic artifacts were collected during the Stage 2 assessment of Location 31 (AgHk-116). This collection includes 30 ceramic artifacts and four glass artifacts.

##### 3.31.1.1 Ceramic Artifacts

In total, 30 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 31 (AgHk-116). Included in this total are 20 ironstone, six utilitarian earthenwares, and four whiteware. Table 81 provides a detailed breakdown of the ceramic assemblage by decorative style.

**Table 81: Summary of Ceramic Collection According to Decorative Style, Location 31 (AgHk-116)**

Artifact	Frequency	%
ironstone, plain	15	50.00
earthenware, red	3	10.00
ironstone, moulded	3	10.00
stoneware, salt glazed	2	6.67
whiteware, painted	2	6.67
earthenware, yellow	1	3.33
ironstone, painted	1	3.33
ironstone, stamped	1	3.33
whiteware, banded	1	3.33



<b>Artifact</b>	<b>Frequency</b>	<b>%</b>
whiteware, edged	1	3.33
<b>Total</b>	<b>30</b>	<b>100.00</b>

### **Ironstone**

The most common ceramic type collected during the Stage 2 assessment of Location 31 is ironstone. Ironstone, or graniteware, is a variety of refined white earthenware introduced in the 1830s that became extremely popular in Upper Canada by the 1860s (Kenyon 1985). Fifteen fragments of ironstone in the assemblage are plain, with an assortment of hollowware fragments and a basal fragment represented (Plate 79:1). Three fragments are moulded with two wheat motifs and one indeterminate pattern (Plate 79:2). A single fragment is blue hand painted (Plate 79:3), while another is stamped with a blue rope pattern (Plate 79:4).

### **Utilitarian Earthenware**

A total of six fragments of utilitarian earthenwares were collected. This includes three fragments of lead glazed red earthenware, two fragments of salt glazed stoneware, and a single fragment of yellow earthenware. Red and yellow earthenware vessels were manufactured throughout the late 18<sup>th</sup> and 19<sup>th</sup> centuries and were the most common utilitarian ware in the first half of the 19<sup>th</sup> century, eventually being replaced by more durable stoneware vessels. The two stoneware fragments in the assemblage include a single fragment of a jug handle of buff paste with clear salt glaze, and a single fragment of ink bottle, grey bodied with a clear exterior salt glaze.

### **White Earthenware**

Whiteware is a variety of earthenware with a near colourless glaze that replaced earlier near white ceramics, such as pearlware and creamware, by the early 1830s. Early whiteware tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19<sup>th</sup> century. One of the fragments of whiteware is a polychrome floral hand painted rim (Plate 79:5), while the other is a stamped rim (Plate 79:6). There is also a single fragment of blue edged ware that is too damaged to identify temporally (Plate 79:7), as well as a single fragment of polychrome banded hollowware (Plate 79:8).

#### **3.31.1.2 Glass Artifacts**

Four fragments of bottle glass were recovered from Location 31 (AgHk-116). Three aqua fragments and one fragment of olive glass were collected. Generally, aqua coloured glass fragments originate from medical and pharmaceutical products including patent medicine bottles of the 19<sup>th</sup> and 20<sup>th</sup> century (Kendrick 1971).

#### **3.31.2 Artifact Catalogue**

Table 82 provides the Stage 2 artifact catalogue for Location 31 (AgHk-116).



**Table 82: Location 31 (AgHk-116) Artifact Catalogue**

<b>Cat. #</b>	<b>Context</b>	<b>Depth</b>	<b>Artifact</b>	<b>Freq.</b>	<b>Comments</b>
1	surface collection	0 cm	earthenware, yellow	1	rim fragment
2	surface collection	0 cm	ironstone	1	hollowware
3	surface collection	0 cm	ironstone	1	hollowware
4	surface collection	0 cm	earthenware, red	1	lead glazed
5	surface collection	0 cm	whiteware, edged	1	blue - damaged indeterminate type
6	surface collection	0 cm	ironstone, moulded	1	wheat motif; hollowware
7	surface collection	0 cm	ironstone, stamped	1	blue rope pattern
8	surface collection	0 cm	stoneware, salt glazed	1	buff paste with clear salt glaze; jug handle fragment
9	surface collection	0 cm	ironstone, moulded	1	wheat motif; hollowware
10	surface collection	0 cm	earthenware, red	1	lead glazed; basal fragment, hollowware
11	surface collection	0 cm	glass, bottle	1	aqua
12	surface collection	0 cm	earthenware, red	1	lead glazed hollowware
13	surface collection	0 cm	ironstone, moulded	1	indeterminate pattern
14	surface collection	0 cm	ironstone	1	hollowware
15	surface collection	0 cm	ironstone	1	
16	surface collection	0 cm	whiteware, banded	1	polychrome banded hollowware rim
17	surface collection	0 cm	ironstone	1	hollowware
18	surface collection	0 cm	ironstone	1	hollowware
19	surface collection	0 cm	ironstone	1	hollowware
20	surface collection	0 cm	whiteware, stamped	1	polychrome floral motif; hollowware rim
21	surface collection	0 cm	ironstone	1	
22	surface collection	0 cm	ironstone	1	
23	surface collection	0 cm	glass, bottle	1	aqua
24	surface collection	0 cm	ironstone	1	hollowware
25	surface collection	0 cm	ironstone	1	hollowware
26	surface collection	0 cm	whiteware, painted	1	polychrome floral motif; hollowware rim
27	surface collection	0 cm	glass, bottle	1	olive
28	surface collection	0 cm	ironstone	1	hollowware
29	surface collection	0 cm	glass, bottle	1	aqua



Cat. #	Context	Depth	Artifact	Freq.	Comments
30	surface collection	0 cm	ironstone	1	hollowware
31	surface collection	0 cm	stoneware, salt glazed	1	grey bodied with clear exterior salt glaze; fragment of ink bottle
32	surface collection	0 cm	ironstone	1	basal fragment
33	surface collection	0 cm	ironstone, painted	1	blue
34	surface collection	0 cm	ironstone	1	basal fragment; tea cup

### 3.32 Location 32

Location 32, a pre-contact Aboriginal site represented by an isolated Kettle Point lithic flake, was also identified during the Stage 2 pedestrian survey (Plate 41) of the proposed Turbine 44 pad on property BOR2123 (east of Centre Road) (Figure 5-15; Supplement A: Figure 15) on January 10, 2012. The weather conditions were partly sunny and cold. As detailed in Section 2.0, survey intervals were intensified to one metre for a twenty metre radius surrounding the find, but no additional artifacts were identified. In this case, the location of the flake was merely documented; the flake was not collected.

### 3.33 Location 33

The Stage 2 pedestrian survey (Plate 40) of the proposed Turbine 44 access road and cable corridor on property BOR1223 (east of Centre Road and north of Elm Tree Drive) (Figure 5-15; Supplement A: Figure 15) on January 10, 2012, also identified an additional pre-contact Aboriginal site, Location 33. The weather conditions were partly sunny and cold. The site consists of an isolated retouched flake (a single edge exhibits retouch) manufactured from Kettle Point chert. Survey intervals were intensified to one metre for a twenty metre radius surrounding the find, but no additional artifacts were identified. In this case, the location of the retouched flake was merely documented and it remains in the field.

### 3.34 Location 34 (AgHk-114)

Location 34 (AgHk-114), a historic Euro-Canadian site, was also identified during the Stage 2 pedestrian survey (Plate 40) of the proposed cable corridor on property BOR1223, east of Centre Road and north of Elm Tree Drive (Figure 5-15; Supplement A: Figure 15) on January 10, 2012. The weather conditions were partly sunny and cold. Location 34 (AgHk-114) is a 30 metre (along the north-south axis) by 70 metre (along the west-east axis) scatter of 111 artifacts of mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris. In total, 53 Euro-Canadian artifacts, which include 46 domestic, six personal and one structural, were collected during the Stage 2 assessment (Table 83). Each artifact class is discussed in greater detail below.



**Table 83: Location 34 (AgHk-114) Historic Euro-Canadian Artifacts**

Artifact	Frequency	%
domestic	46	86.78
personal	6	9.43
structural	1	1.89
<b>Total</b>	<b>53</b>	<b>100</b>

### 3.34.1 Domestic Artifacts

A total of 46 domestic artifacts were collected during the Stage 2 assessment of Location 34 (AgHk-114). This collection includes 38 ceramic artifacts and eight glass artifacts.

#### 3.34.1.1 Ceramic Artifacts

In total, 38 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 34 (AgHk-114). Included in this total are 36 ironstone and two whiteware. Table 84 provides a detailed breakdown of the ceramic assemblage by decorative style.

**Table 84: Summary of Ceramic Collection According to Decorative Style, Location 34 (AgHk-114)**

Artifact	Frequency	%
ironstone, plain	28	73.69
ironstone, moulded	4	10.53
ironstone, painted	2	5.26
whiteware, plain	2	5.26
ironstone, transfer printed	1	2.63
ironstone, stamped	1	2.63
<b>Total</b>	<b>38</b>	<b>100.00</b>

### Ironstone

The most common ceramic type collected during the Stage 2 assessment of Location 34 (AgHk-114) is ironstone. Ironstone, or graniteware, is a variety of refined white earthenware introduced in the 1830s. It became extremely popular in Upper Canada by the 1860s (Kenyon 1985). Twenty-eight fragments in this assemblage are plain ironstone in predominantly hollowware and basal form (Plate 80:1), while four fragments are moulded, including one fragment of wheat pattern, one fragment with a moulded leaves and floral motif, and two indeterminate patterns (Plate 80:2). Hand painted ironstone in the assemblage includes a fragment with a green stripe and a saucer fragment bearing green and blue striping (Plate 80:3). The ironstone assemblage from Location 34 (AgHk-114) also contains a small turquoise floral printed piece (Plate 80:4) and a blue stamped fragment (Plate 80:5).



## **White Earthenware**

Whiteware is a variety of earthenware with a near colourless glaze that replaced earlier near white ceramics, such as pearlware and creamware, by the early 1830s. Early whiteware tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19<sup>th</sup> century. Two plain fragments of whiteware (Plate 80:6) are in the Location 34 ceramic assemblage.

### **3.34.1.2 Glass Artifacts**

Eight fragments of domestic glass were recovered from Location 34 (AgHk-114). This includes four fragments of bottle glass, an almost complete glass perfume bottle, one fragment of a glass lamp chimney, a pressed moulded clear glass dish fragment, and a single fragment of white glass cosmetic jar. Colours present in the bottle glass assemblage include three aqua (including an aqua double ring finish from 1850 to 1910) (Plate 80:7) and a single fragment of olive glass. The finish of the glass perfume bottle has been broken off but it is otherwise complete (Plate 80:8). It is manufactured out of clear or colourless glass and is also press-moulded, suggesting a post-1860 date.

### **3.34.2 Personal Artifacts**

Six personal items were collected during the Stage 2 assessment of Location 34 (AgHk-114). This includes three fragments of white clay pipe stem (Plate 81:1), one white clay pipe bowl fragment with a moulded leaves or wreath motif (Plate 81:2), a single four-hole white agate button measuring 12.0 millimetres in diameter and a metal chin strap from a 19<sup>th</sup> century military helmet (Plate 81:3). A similar item was identified as a military chin strap by Ron Dale of Parks Canada in regards to artifacts collected during the Stage 4 assessment of the 18<sup>th</sup> century wharf complex at 289 Ricardo Street, Niagara-on-the-Lake, part of historic Fort George (Golder 2010). One pipe stem is marked Bannerman Montreal, which was operational from 1858 to 1907 (Plate 78:1 top), while the other is marked McDougall Glasgow, which was operational from 1846 to 1967 (Plate 81:1, bottom).

### **3.34.3 Structural Artifacts**

A single machine cut nail (Plate 81:4) was collected during the Stage 2 assessment of Location 34 (AgHk-114). Cut nails were machine cut and have a flat head. They were invented as early as 1790, but did not become prevalent in Ontario until 1830. They were replaced by wire drawn nails in the 1890s (Adams 1994:92).

### **3.34.4 Artifact Catalogue**

Table 85 lists the artifacts recovered from Location 34 (AgHk-114).





**Table 85: Location 34 (AgHk-114) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	ironstone	1	
2	surface collection	0 cm	ironstone	1	
3	surface collection	0 cm	ironstone	1	
4	surface collection	0 cm	white clay pipe stem	1	McDougall ; Glasgow 1846 to 1967
5	surface collection	0 cm	ironstone	1	
6	surface collection	0 cm	ironstone	1	
7	surface collection	0 cm	ironstone	1	rim fragment
8	surface collection	0 cm	ironstone	1	basal fragment
9	surface collection	0 cm	ironstone	1	rim fragment
10	surface collection	0 cm	glass, dish	1	pressed moulded clear dish fragment
11	surface collection	0 cm	ironstone	1	rim fragment
12	surface collection	0 cm	ironstone	1	rim fragment
13	surface collection	0 cm	ironstone	1	rim fragment
14	surface collection	0 cm	glass, bottle	1	aqua
15	surface collection	0 cm	ironstone	1	hollowware rim fragment
16	surface collection	0 cm	ironstone	1	rim fragment
17	surface collection	0 cm	ironstone	1	
18	surface collection	0 cm	ironstone, moulded	1	
19	surface collection	0 cm	ironstone	1	rim fragment
20	surface collection	0 cm	ironstone, transfer printed	1	turquoise hollowware floral motif
21	surface collection	0 cm	ironstone	1	hollowware
22	surface collection	0 cm	ironstone	1	hollowware basal fragment
23	surface collection	0 cm	ironstone, moulded	1	leaves and floral rim motif
24	surface collection	0 cm	ironstone, moulded	1	indeterminate pattern
25	surface collection	0 cm	ironstone	1	
26	surface collection	0 cm	glass, bottle	1	olive
27	surface collection	0 cm	ironstone	1	rim fragment
28	surface collection	0 cm	ironstone	1	hollowware
29	surface collection	0 cm	button, agate	1	white 12 mm diameter; 4 holes
30	surface collection	0 cm	whiteware	1	
31	surface collection	0 cm	ironstone	1	rim fragment
32	surface collection	0 cm	ironstone	1	Hollowware
33	surface collection	0 cm	glass, bottle	1	aqua
34	surface collection	0 cm	white clay pipe stem	1	



Cat. #	Context	Depth	Artifact	Freq.	Comments
35	surface collection	0 cm	ironstone	1	tea cup basal fragment
36	surface collection	0 cm	white clay pipe stem	1	Bannerman; Montreal 1858 to 1907
37	surface collection	0 cm	ironstone, moulded	1	wheat pattern hollowware fragment
38	surface collection	0 cm	metal, miscellaneous hardware	1	metal chinstrap from military helmet
39	surface collection	0 cm	ironstone, painted	1	saucer fragment with blue and green stripe
40	surface collection	0 cm	ironstone, painted	1	green pinstripe
41	surface collection	0 cm	glass, bottle complete	1	clear glass - small perfume bottle
42	surface collection	0 cm	ironstone	1	rim fragment
43	surface collection	0 cm	nail, cut	1	
44	surface collection	0 cm	whiteware	1	
45	surface collection	0 cm	white clay pipe bowl	1	moulded wreath motif
46	surface collection	0 cm	glass, chimney lamp	1	crimped lamp chimney end piece
47	surface collection	0 cm	ironstone	1	
48	surface collection	0 cm	ironstone	1	hollowware basal fragment
49	surface collection	0 cm	ironstone, stamped	1	blue
50	surface collection	0 cm	ironstone	1	rim fragment
51	surface collection	0 cm	ironstone	1	flatware basal fragment
52	surface collection	0 cm	glass, white	1	moulded with letters : "...LA."
53	surface collection	0 cm	glass, bottle	1	aqua double ring finish <i>circa</i> 1850 to 1910

### 3.35 Location 35 (AgHk-115)

Location 35 (AgHk-115), a historic Euro-Canadian site, was identified during the Stage 2 pedestrian survey of the proposed access road for Turbine 9 on property BOR2008, on the west side of Centre Road, north of Coldstream Road (Figure 5-03; Supplement A: Figure 03). The weather conditions were partly sunny and cold on the day of the investigation, January 10, 2012. Location 35 (AgHk-115) is an 82 metre (along the north-south axis) by 17 metre (along the west-east axis) scatter of 41 fragments of mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris. In total, 31 Euro-Canadian artifacts, including: 26 domestic, two recent material, two metal and one structural, were collected during the Stage 2 assessment (Table 86). Each artifact class is discussed in greater detail below.



**Table 86: Location 35(AgHk-115) Historic Euro-Canadian Artifacts**

Artifact	Frequency	%
domestic	26	83.87
recent material	2	6.45
metal	2	6.45
structural	1	3.23
<b>Total</b>	<b>31</b>	<b>100.00</b>

### 3.35.1 Domestic Artifacts

A total of 26 domestic artifacts were collected during the Stage 2 assessment of Location 35 (AgHk-115). This collection includes 11 ceramic artifacts and 15 glass artifacts.

#### 3.35.1.1 Ceramic Artifacts

In total, 11 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 35 (AgHk-115). Included in this total are eight ironstone, two utilitarian earthenwares, and one porcelain. Table 87 provides a detailed breakdown of the ceramic assemblage by decorative style.

**Table 87: Summary of Ceramic Collection According to Decorative Style, Location 35 (AgHk-115)**

Artifact	Frequency	%
ironstone, plain	7	63.64
ironstone, moulded	1	9.09
earthenware, red	1	9.09
earthenware, yellow	1	9.09
porcelain, transfer printed	1	9.09
<b>Total</b>	<b>11</b>	<b>100.00</b>

#### Ironstone

The most common ceramic type collected during the Stage 2 assessment of Location 35 is ironstone. Ironstone, or graniteware, is a variety of refined white earthenware introduced in the 1830s that became extremely popular in Upper Canada by the 1860s (Kenyon 1985). Seven fragments of ironstone in the assemblage are plain, with a single fragment bearing a partial royal coat of arms (minus the centre shield) dating it to post-1837 (Plate 82:1). In addition, a single moulded rim fragment of ironstone with a leaf motif was recovered (Plate 82:2).



### **Utilitarian Earthenware**

Two fragments of utilitarian earthenwares were collected: a fragment of lead glazed red earthenware and a fragment of plain yellow earthenware. Red and yellow earthenware vessels were manufactured throughout the late 18<sup>th</sup> and 19<sup>th</sup> centuries and were the most common utilitarian ware in the first half of the 19<sup>th</sup> century, eventually being replaced by more durable stoneware vessels.

### **Porcelain**

The Canadian pioneer generally preferred utilitarian earthenwares, but by the mid-19<sup>th</sup> century, English potteries such as Copeland and Minton, were producing porcelains for the Canadian marketplace. Porcelain was not acquired as much as utilitarian ceramics, but it was always in steady demand (Collard 1967:163,175). A single fragment of low grade white porcelain is present in this ceramic assemblage. It is decorated with an overglaze transfer print floral design with hand tinting (Plate 82:3).

#### **3.35.1.2 Glass Artifacts**

Fifteen fragments of domestic glass were recovered from Location 35 (AgHk-115). This includes 12 fragments of bottle glass, two fragments of glass dish, and one fragment of white glass. Colours present in the bottle glass assemblage include six aqua, three amber (including a glass stopper and a base moulded with “160J”), and three clear or colourless fragments, including one threaded jar mouth fragment.

#### **3.35.2 Recent Material**

Recent material in the assemblage includes a fragment of green 7-Up bottle glass and a small fragment of clear, ribbed glass.

#### **3.35.3 Metal Artifacts**

Miscellaneous metal in the assemblage includes a corroded iron plate fragment and a fence staple. Neither of these artifacts is temporally diagnostic.

#### **3.35.4 Structural Artifacts**

A single fragment of temporally non-diagnostic red brick was collected during the Stage 2 assessment of Location 35 (AgHk-115).

#### **3.35.5 Artifact Catalogue**

Table 88 provides the artifact catalogue for Location 35 (AgHk-115).



**Table 88: Location 35 (AgHk-115) Artifact Catalogue**

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	brick	1	red; fragment
2	surface collection	0 cm	earthenware, red	1	lead glazed
3	surface collection	0 cm	ironstone, moulded	1	moulded leaves; rim fragment
4	surface collection	0 cm	glass, dish	2	clear glass; pressed moulded
5	surface collection	0 cm	earthenware, yellow	1	
6	surface collection	0 cm	metal, miscellaneous unidentified	1	corroded iron plate fragment
7	surface collection	0 cm	ironstone	7	1 partial maker's mark with royal coat of arms ; no centre shield post 1837
8	surface collection	0 cm	recent material	2	1 7-Up bottle glass; 1 ribbed glass fragment
9	surface collection	0 cm	glass, unidentified	1	melted clear glass
10	surface collection	0 cm	glass, white	1	moulded bottle/jar fragment
11	surface collection	0 cm	porcelain, transfer printed	1	overglaze floral transfer print with hand tinting
12	surface collection	0 cm	metal, miscellaneous hardware	1	fence staple
13	surface collection	0 cm	glass, bottle	2	aqua
14	surface collection	0 cm	glass, bottle	1	aqua
15	surface collection	0 cm	glass, bottle	1	aqua
16	surface collection	0 cm	glass, bottle	2	aqua
17	surface collection	0 cm	ironstone	2	
18	surface collection	0 cm	ironstone	2	
19	surface collection	0 cm	ironstone	2	
20	surface collection	0 cm	glass, bottle	5	3 amber (including 1 glass stopper, 1 moulded base with "160J"); 2 clear or colourless (including 1 threaded jar mouth fragment);

### 3.36 Location 36

Location 36, a pre-contact Aboriginal site, was identified based on the recovery of one secondary chert flake manufactured from Kettle Point chert (Plate 83:1) during the Stage 2 pedestrian survey of the proposed wind components on property BOR1305 (Figure 5-11; Supplement A: Figure 11). This investigation of the Turbine 46 pad, access road, and cable corridor, occurred on January 10, 2012. The weather conditions were sunny and cold. Survey intervals were intensified to one metre for a twenty metre radius surrounding the find but no additional artifacts were recovered.



### 3.36.1 Artifact Catalogue

Table 89 provides the Stage 2 artifact catalogue for Location 36.

**Table 89: Location 36 Artifact Catalogue**

<b>Cat. #</b>	<b>Context</b>	<b>Depth</b>	<b>Artifact</b>	<b>Freq.</b>	<b>Comments</b>
1	surface collection	0 cm	chipping detritus	1	Kettle Point chert



## **4.0 ANALYSIS AND CONCLUSIONS**

The Stage 2 assessment of the revised NextEra Bornish Wind Energy Centre study area resulted in the identification of 36 archaeological sites, including 17 pre-contact Aboriginal, 18 historic Euro-Canadian, and one multi-component. Analyses of each location are provided below, determining whether further assessment is recommended. At the end of this section a preliminary indication is provided as to whether any of these sites may require Stage 4 archaeological assessment.

### **4.1 Location 1**

Location 1 consists of one scraper and one chert flake. Both artifacts are temporally non-diagnostic except for the fact that they were produced by pre-contact Aboriginal people. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented. The recovered artifacts do not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

### **4.2 Location 2 (AgHk-95)**

Location 2 (AgHk-95) consists of a small pre-contact Aboriginal lithic scatter of 21 artifacts. A total of 10 Kettle Point artifacts, including one side scraper, one biface, and eight pieces of chipping detritus were collected. Bifacially worked lithic tools were common tool kit accessories in southwestern Ontario from the first post-glacial occupations until they were eventually phased out by European manufactured items. For this reason, tools such as these cannot help place the archaeological site within a specific time period or be assigned to a specific cultural group. However, the archaeological survey documented a spatially discrete pre-contact Aboriginal site which adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario.

Although no diagnostic artifacts were recovered, the presence of over 10 artifacts within the pedestrian survey area lends cultural heritage value or interest to the site. The identified site fulfills the criteria for a Stage 3 archaeological investigation, as per Section 2.2 Standard 1a(i)(3) of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The site has been registered with the Ministry of Tourism, Culture and Sport and has been assigned Borden number AgHk-95.

### **4.3 Location 3**

Location 3 is represented by an isolated miscellaneous modified groundstone artifact. This artifact is temporally non-diagnostic, with the exception that it was manufactured by pre-contact Aboriginal people. However, the archaeological survey identified a spatially discrete pre-contact Aboriginal location that adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. Given the isolated nature of the find, the cultural heritage value or interest of Location 3 is considered to be sufficiently documented. The recovered artifact does not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).



#### **4.4 Location 4 (AgHk-96)**

The artifacts collected during the Stage 2 assessment of Location 4 (AgHk-96) represent a scatter of 120 predominantly mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris including ceramics, bottle glass, and personal items. The most common types of ceramic artifacts recovered from Location 4 (AgHk-96) were mid-to-late 19<sup>th</sup> century ironstone (83.33% of the ceramic assemblage). Considering the fragile nature of the material present (i.e. glass, ceramics, and clay tobacco pipe) and the absence of structural remains, Location 4 (AgHk-96) is interpreted as the remains of a domestic midden.

Spatially, Location 4 (AgHk-96) is located on Lot 4, Concession 12, Geographic Township of West Williams, Middlesex County, Ontario. Angus McLellan is listed as owning this lot on the 1878 map of the Township of West Williams. The location is situated in the south portion of the lot, where there are no structures depicted. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-96.

#### **4.5 Location 5 (AgHk-97)**

The artifacts collected during the Stage 2 assessment of Location 5 (AgHk-97) represent a scatter of 65 predominantly mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris, especially ceramics and bottle glass. The most common types of ceramic artifacts recovered from Location 5 (AgHk-97) were mid-to-late 19<sup>th</sup> century ironstone (making up 62.00% of the ceramic assemblage) and whiteware (making up 28.00% of the ceramic assemblage).

Spatially, Location 5 (AgHk-97) is located on Lot 6, Concession 13, Geographic Township of West Williams, Middlesex County, Ontario. Donald McCormick is listed as owning this lot on the 1878 map of the Township of West Williams. The location is situated in the southwest portion of the lot where a house and orchard are located. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-97.

#### **4.6 Location 6 (AgHk-98)**

Location 6 (AgHk-98) consists of a single, nearly complete Middle Woodland Snyders projectile point, dating to *circa* 100 B.C. to 200 A.D. The archaeological survey documented an isolated pre-contact Aboriginal location





and adds to the body of knowledge concerning land use by Middle Woodland peoples in Ontario. Given the isolated nature of the find, the cultural heritage value or interest of the site is considered to be sufficiently documented. The recovered artifact does not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-98.

#### **4.7 Location 7 (AgHk-118)**

Location 7 (AgHk-118) consists of a single, nearly complete Middle-to-Late Archaic Lamoka projectile point, dating to *circa* 6000 to 1800 B.C.. The archaeological survey documented an isolated pre-contact Aboriginal location and adds to the body of knowledge concerning land use by Archaic peoples in Ontario. Given the isolated nature of the find, the cultural heritage value or interest of the site is considered to be sufficiently documented. The recovered artifact does not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-118.

#### **4.8 Location 8**

Location 8 consists of an end scraper fashioned out of till chert. It possesses a retouched edge, but is temporally non-diagnostic except for the fact that it was produced by pre-contact Aboriginal people. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented. The recovered artifact does not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

#### **4.9 Location 9 (AgHk-99)**

Location 9 (AgHk-99) consists of a fragmentary Middle Woodland Snyders projectile point, dating to *circa* 100 B.C. to 600 A.D., reworked on its tip into a scraper. The archaeological survey documented an isolated pre-contact Aboriginal location and adds to the body of knowledge concerning land use by Middle Woodland peoples in Ontario. Given the isolated nature of the find, the cultural heritage value or interest of the site is considered to be sufficiently documented. The recovered artifact does not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-99.



#### **4.10 Location 10 (AgHj-6)**

Location 10 (AgHj-6) consists of a lithic scatter of approximately 45 artifacts. A sample of 31 artifacts was collected, including seven utilized flakes, five retouched flakes, two biface fragments, two side scrapers, one grave and also secondary, tertiary, and broken chipping detritus, all manufactured out of Onondaga chert. Bifacially worked lithic tools were common tool kit accessories in southwestern Ontario from the first post-glacial occupations until they were eventually phased out by European manufactured items. For this reason, tools such as these cannot help place the archaeological site within a specific time period or be assigned to a specific cultural group. However, the archaeological survey documented a spatially discrete pre-contact Aboriginal site which adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario.

Although no diagnostic artifacts were recovered, the presence of over 10 artifacts within the pedestrian survey area lends cultural heritage value or interest to the site. The identified site fulfills the criteria for a Stage 3 archaeological investigation, as per Section 2.2 Standard 1a(i)(3) of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The site has been registered with the Ministry of Tourism, Culture and Sport and has been assigned Borden number AgHj-6.

#### **4.11 Location 11 (AgHj-7)**

Location 11 (AgHj-7) is another pre-contact Aboriginal lithic scatter. It is represented by approximately 41 items, 12 of which were collected during the Stage 2 analysis. This includes four utilized flakes, one biface, one graver, and seven pieces of chipping detritus. Several different types of lithic material were represented in this assemblage: Onondaga, Kettle Point, and Haldimand or till chert. Bifacially worked lithic tools were common tool kit accessories in southwestern Ontario from the first post-glacial occupations until they were eventually phased out by European manufactured items. For this reason, tools such as these cannot help place the archaeological site within a specific time period or be assigned to a specific cultural group. However, the archaeological survey documented a spatially discrete pre-contact Aboriginal site which adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario.

Although no diagnostic artifacts were recovered, the presence of over 10 artifacts within the pedestrian survey area lends cultural heritage value or interest to the site. The identified site fulfills the criteria for a Stage 3 archaeological investigation, as per Section 2.2 Standard 1a(i)(3) of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The site has been registered with the Ministry of Tourism, Culture and Sport and has been assigned Borden number AgHj-7.

#### **4.12 Location 12 (AgHj-8)**

The 24 artifacts collected from the observed scatter of 70 artifacts during the Stage 2 assessment of Location 12 (AgHj-8) represent a scatter of predominantly late 19<sup>th</sup> to early 20<sup>th</sup> century Euro-Canadian debris, mostly fragile breakable items such as ceramics and glass. Ironstone and whiteware are both represented in the small mid-to-late 19<sup>th</sup> century ceramic collection. Considering the fragile nature of the material collected (i.e. glass and ceramic), and the presence of recent material culture, Location 12 (AgHj-8) is interpreted as the remains of a small domestic midden.



Spatially, Location 12 (AgHj-8) is located on Lot 12, Concession East of Centre Road, Geographic Township of East Williams, Middlesex County, Ontario. John O'Hanley is listed as owning this lot on the 1878 map of the Township of East Williams. The location is situated in the east central portion of the lot, where there are no structures depicted. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHj-8.

#### **4.13 Location 13 (AgHk-100)**

The 103 artifacts collected from the observed scatter of 225 artifacts during the Stage 2 assessment of Location 13 (AgHk-100) represent a range of predominantly mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris including ceramics, bottle glass, and structural remains, with a small assemblage of miscellaneous metal, faunal remains, and personal items. The most common ceramic type collected from Location 13 (AgHk-100) was mid-to-late 19<sup>th</sup> century ironstone (66.67% of the ceramic assemblage) along with very small assemblages of mid-19<sup>th</sup> century whiteware and early 19<sup>th</sup> century pearlware. Other diagnostic artifacts of note were seven machine cut nails dating to the mid-19<sup>th</sup> century, two early 19<sup>th</sup> century black glass fragments and other late 19<sup>th</sup> century glass such as sun coloured amethyst and aqua coloured glass.

Spatially, Location 13 (AgHk-100) is located on Lot 10, Concession East of Centre Road, Geographic Township of East Williams, Middlesex County, Ontario. James Kincaide is listed as owning this lot on the 1878 map of the Township of East Williams. The location is situated in the northwest portion of the lot, where not only a house and structure were located, but also a building (?) associated with the Bornish post office open at that time. The presence of more than 20 artifacts dating the period of use prior to 1900 also lends cultural heritage value or interest to the site, especially the earlier ceramic and glass artifacts. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-100.

#### **4.14 Location 14 (AgHk-101)**

The 78 artifacts collected from the observed scatter of 107 artifacts during the Stage 2 assessment of Location 14 (AgHk-101) represent a range of predominantly mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris including ceramics, bottle glass, and personal items, such as white clay tobacco pipe fragments. The most common ceramic type collected from Location 14 (AgHk-101) was mid-to-late 19<sup>th</sup> century ironstone (76.92% of the ceramic assemblage) along with mid-19<sup>th</sup> century whiteware (17.31% of the ceramic assemblage). Other diagnostic artifacts of note were two white clay pipe stems dating to the mid-19<sup>th</sup> century and late 19<sup>th</sup> century glass such as sun coloured amethyst and aqua coloured glass.



Spatially, Location 14 (AgHk-101) is located on the east half of Lot 12, Concession 14, Geographic Township of West Williams, Middlesex County, Ontario. Hector McIntyre is listed as owning this lot on the 1878 map of the Township of East Williams. The location is situated in the north portion of the lot, adjacent to Coldstream Road, where a house and orchard were located. The presence of more than 20 artifacts dating the period of use prior to 1900 also lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-101.

#### **4.15 Location 15 (AgHk-102)**

The 31 artifacts collected from the observed scatter of 50 artifacts during the Stage 2 assessment of Location 15 (AgHk-102) represent a range of predominantly mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris, including whiteware (52.17% of the ceramic assemblage) and ironstone (47.83% of the ceramic assemblage). Another diagnostic artifact of note is a white clay pipe stem dating to the last half of the 19<sup>th</sup> century.

Spatially, Location 15 (AgHk-102) is located on the west half of Lot 14, Concession 12, Geographic Township of West Williams, Middlesex County, Ontario. Donald McPhee is listed as owning this lot on the 1878 map of the Township of West Williams. The location is situated in the west portion of the lot, adjacent to Roddick Road, where a house was located. The presence of more than 20 artifacts dating the period of use prior to 1900 also lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-102.

#### **4.16 Location 16 (AgHk-103)**

The 24 artifacts collected from the observed scatter of 40 artifacts during the Stage 2 assessment of Location 16 (AgHk-103) represent a range of predominantly mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris, including ironstone ceramics (80.00% of the ceramic assemblage) and a small assemblage of personal items. Most of the assemblage consists of breakable items such as ceramics, bottle and window glass, as well as tobacco pipe fragments.

Spatially, Location 16 (AgHk-103) is located on Lot 8, Concession 14, Geographic Township of West Williams, Middlesex County, Ontario. Hugh Smith is listed as owning this lot on the 1878 map of the Township of East Williams. The location is situated in the north portion of the lot, adjacent to Coldstream Road, where two houses were located. This site might represent the first generation of settlers within the area. The presence of more than 20 artifacts dating the period of use prior to 1900 also lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of



Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-103.

#### **4.17 Location 17 (AgHk-104)**

The 54 artifacts recovered from the observed scatter of 100 artifacts during the Stage 2 assessment of Location 17 (AgHk-104) represent a range of predominantly mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris, including ceramics, bottle glass, and personal items, such as white clay tobacco pipe fragments. The most common types of ceramic artifacts recovered from Location 17 (AgHk-104) were mid-to-late 19<sup>th</sup> century ironstone (79.30% of the ceramic assemblage). Most other diagnostic artifacts date to the mid-to-late 19<sup>th</sup> century as well, such as the two diagnostic white clay pipe stems and the aqua and sun coloured amethyst glass fragments.

Spatially, Location 17 (AgHk-104) is located on the west portion of Lot 7, Concession 14, Geographic Township of West Williams, Middlesex County, Ontario. D. Cameron is listed as owning this lot on the 1878 map of the Township of West Williams. The location is situated in the north portion of the lot, adjacent to Coldstream Road, where one house was located. The presence of more than 20 artifacts dating the period of use prior to 1900 also lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-104.

#### **4.18 Location 18 (AgHk-105)**

The 59 artifacts collected from the observed scatter of 152 artifacts during the Stage 2 assessment of Location 18 (AgHk-105) represent a range of predominantly mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris, especially ceramic and glass artifacts. The most common types of ceramic artifacts recovered from Location 18 (AgHk-105) were mid-to-late 19<sup>th</sup> century ironstone (76.08% of the artifact assemblage) along with a small assemblage of mid-to-late 19<sup>th</sup> century whiteware. Other late 19<sup>th</sup> century artifacts of note include aqua coloured and white glass fragments plus a white clay pipe stem

Spatially, Location 18 (AgHk-105) is located on a portion of Lot 6, Concession 14, Geographic Township of West Williams, Middlesex County, Ontario. A. McIntyre is listed as owning this lot on the 1878 map of the Township of West Williams. The location is situated in the northern portion of the lot, adjacent to Coldstream Road where one house was located. The presence of more than 20 artifacts dating the period of use prior to 1900 also lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-105.



#### **4.19 Location 19 (AgHk-119)**

Location 19 (AgHk-119) consists of a Middle Archaic (*circa* 6000 to 2500 B.C.) Brewerton Side-Notched projectile point and a Late Archaic (*circa* 1500-1100 B.C.) Crawford Knoll projectile point spaced 13 metres apart. The Brewerton Side-Notched Point is manufactured from Onondaga chert and is missing its tip while the Crawford Knoll Point is also manufactured from Onondaga chert and has a broken, retouched base, plus it is missing its tip. The archaeological survey documented two pre-contact Aboriginal diagnostic artifacts in close proximity and adds to the body of knowledge concerning land use by Archaic peoples in Ontario. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Guideline 2 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-119.

#### **4.20 Location 20 (AgHk-106)**

The 29 artifacts collected from the observed scatter of 40 artifacts during the Stage 2 assessment of Location 20 (AgHk-106) represent a range of predominantly mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris, including ceramics, bottle glass and white clay tobacco pipe fragments. The mid-to-late 19<sup>th</sup> century ceramics consist of both ironstone (65.22% of the ceramic assemblage) and whiteware (34.78% of the ceramic assemblage).

Spatially, Location 20 (AgHk-106) is located on Lot 3, Concession 15, Geographic Township of West Williams, Middlesex County, Ontario. The Canada Company is listed as owning this lot on the 1878 map of the Township of West Williams. The location is situated in the southeast corner of the lot, adjacent to Coldstream Road where there are no structures depicted. The presence of more than 20 artifacts dating the period of use prior to 1900 also lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-106.

#### **4.21 Location 21 (AgHk-107)**

The 27 historic Euro-Canadian and 2 pre-contact Aboriginal artifacts collected from the observed scatter of 42 artifacts during the Stage 2 assessment of the multi-component Location 21 (AgHk-107) represent a range of predominantly mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris, mostly ironstone (90.91% of the ceramic assemblage and 20 of the 29 artifacts collected) along with two mid-19<sup>th</sup> century sponged whiteware fragments.

Spatially, Location 21 (AgHk-107) is located on Lot 3, Concession 15, Geographic Township of West Williams, Middlesex County, Ontario. The Canada Company is listed as owning this lot on the 1878 map of the Township of West Williams. The location is situated in the southeast portion of the lot, north of Location 20 where there are no structures depicted. The presence of more than 20 artifacts dating the period of use prior to 1900 also lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and*



*Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-107.

#### **4.22 Location 22 (AgHk-108)**

The 36 artifacts collected from the observed scatter of 66 artifacts during the Stage 2 assessment of Location 22 (AgHk-108) represent a range of predominantly mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris, especially ceramics. The mid-to-late 19<sup>th</sup> century ceramics are mostly mid-to-late 19<sup>th</sup> century ironstone (66.67% of the ceramic assemblage) but also some earlier whiteware (10.00% of the ceramic assemblage).

Spatially, Location 22 (AgHk-108) is located on the eastern portion of Lot 9, Concession 14, Geographic Township of West Williams, Middlesex County, Ontario. John McLellan is listed as owning this lot on the 1878 map of the Township of West Williams. The location is situated in the northeast corner of the lot, adjacent to Coldstream Road where one house was located. The presence of more than 20 artifacts dating the period of use prior to 1900 also lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-108.

#### **4.23 Location 23 (AgHk-109)**

The 67 artifacts collected from the observed scatter of 102 artifacts during the Stage 2 assessment of Location 23 (AgHk-109) represent a range of predominantly mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris, especially ceramics, glass, and white clay pipes. The mid-to-late 19<sup>th</sup> century ceramics are mostly mid-to-late 19<sup>th</sup> century ironstone (82.50% of the ceramic assemblage) but also some earlier whiteware (5.00% of the ceramic assemblage). Other temporally diagnostic artifacts include a mid-to-late 19<sup>th</sup> century cut nail and two mid-19<sup>th</sup> century white clay pipe stems.

Spatially, Location 23 (AgHk-109) is located on the west portion of Lot 9, Concession 14, Geographic Township of West Williams, Middlesex County, Ontario. Neil McIntyre is listed as owning this lot on the 1878 map of the Township of West Williams. The location is situated in the northwest portion of the lot, adjacent to Coldstream Road where one house was located. The presence of more than 20 artifacts dating the period of use prior to 1900 also lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-109.



#### **4.24 Location 24 (AgHk-110)**

Location 24 (AgHk-110) is a pre-contact Aboriginal lithic scatter of 20 artifacts. During the Stage 2 investigation, 14 artifacts were collected: a retouched flake, three utilized flakes, and nine pieces of chipping detritus, all manufactured from Kettle Point chert. All artifacts are temporally non-diagnostic except for the fact that they were produced by a pre-contact Aboriginal people. However, the archaeological survey documented a spatially discrete pre-contact Aboriginal site which adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario.

Although no diagnostic artifacts were recovered, the presence of over 10 artifacts within the pedestrian survey area lends cultural heritage value or interest to the site. The identified site fulfills the criteria for a Stage 3 archaeological investigation, as per Section 2.2 Standard 1a(i)(3) of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The site has been registered with the Ministry of Tourism, Culture and Sport and has been assigned Borden number AgHk-110.

#### **4.25 Location 25 (AgHk-111)**

The six artifacts collected from the observed scatter of 24 artifacts during the Stage 2 assessment of Location 25 (AgHk-111) represent mid-to-late 19<sup>th</sup> century Euro-Canadian ceramics and mid-19<sup>th</sup> century black glass.

Spatially, Location 25 (AgHk-111) is located on the northwest portion of Lot 12, Concession 12, Geographic Township of West Williams, Middlesex County, Ontario. Neil McMullen is listed as owning this lot on the 1878 map of the Township of West Williams. The location is situated on the west portion of the lot, adjacent Roddick Road where one house was located. The presence of more than 20 artifacts dating the period of use prior to 1900 also lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-111.

#### **4.26 Location 26 (AgHk-117)**

Location 26 (AgHk-117) is represented by a unique multi-tool, manufactured out of Onondaga chert. One edge was retouched to be used as a side scraper, while one end has sharp graver-like points, and the other edge is sharp and jagged, likely used as a knife. There also appear to be a couple of channel flakes removed from centre of the tool. This tool is only worked on one side, and is most similar to the backed knife described by Gramly and Funk (1990) and Gramly (2000:6) from the Wight site in Oxford County, Maine. It also demonstrates some similarity to the backed biface from the Thedford II site (Deller and Ellis 1988; Ellis and Deller 1988) and as described by Ellis and Deller (2000:92-95). These tools are commonly recovered from Paleo-Indian occupations throughout Northeastern North America.

Archaeological survey resulted in the documentation of a spatially discrete pre-contact Aboriginal location which adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. Given the time period represented (i.e. *circa* 9000 to 8000 B.C.), the identified site fulfills the criteria for a Stage 3





archaeological investigation, as per Standard1b(iii) of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-117.

#### **4.27 Location 27 (AgHk-112)**

The three artifacts collected from the observed scatter of 13 artifacts during the Stage 2 assessment of Location 27 (AgHk-112) are a late 19<sup>th</sup> to early 20<sup>th</sup> artifact collection. Spatially, Location 27 (AgHk-112) is located on the southwestern portion of Lot 12, Concession 12, Geographic Township of West Williams, Middlesex County, Ontario. Alex McMullen is listed as owning this lot on the 1878 map of the Township of West Williams. The location is situated in the southeastern portion of the lot, southeast of where the house was located on the property. Given the small assemblage size and the late date of the artifacts collected and observed, the cultural heritage value or interest of the site is considered to be sufficiently documented. The recovered artifacts do not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

#### **4.28 Location 28**

A single piece of chipping detritus manufactured from Kettle Point chert was identified at Location 28. This artifact is temporally non-diagnostic, with the exception that it was manufactured by pre-contact Aboriginal people. However, the archaeological survey identified a spatially discrete pre-contact Aboriginal location that adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. Given the isolated nature of the find, the cultural heritage value or interest of the site is considered to be sufficiently documented. The recovered artifact does not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

#### **4.29 Location 29**

A single coin, an 1876 One Cent piece, was identified at Location 29. Given the isolated nature of the find, the cultural heritage value or interest of the site is considered to be sufficiently documented. The recovered artifact does not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

#### **4.30 Location 30 (AgHk-113)**

At Location 30 (AgHk-113), two lithic tools, a graver manufactured on Kettle Point chert and a side scraper fashioned out of Onondaga chert, were identified. Unifacially worked lithic tools were common tool kit accessories in southwestern Ontario from the first post-glacial occupations until they were eventually phased out by European manufactured items. For this reason, tools such as these cannot help place the archaeological site within a specific time period or be assigned to a specific cultural group. However, the archaeological survey documented a spatially discrete pre-contact Aboriginal site which adds to the body of knowledge concerning land



use by pre-contact Aboriginal peoples in Ontario. Given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-113. The recovered artifacts do not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

#### **4.31 Location 31 (AgHk-116)**

The 34 artifacts collected from the observed scatter of 69 artifacts during the Stage 2 assessment of Location 31 (AgHk-116) represent a range of predominantly mid-to-late 19<sup>th</sup> century Euro-Canadian ceramics and bottle glass. The most common type of ceramic artifacts recovered from Location 31 (AgHk-116) was mid-to-late 19<sup>th</sup> century ironstone (66.67% of the ceramic assemblage). Other temporally diagnostic artifacts were the mid-to-late 19<sup>th</sup> century whiteware and the late 19<sup>th</sup> to 20<sup>th</sup> century aqua glass.

Spatially, Location 31 (AgHk-116) is located on the west half of Lot 5, Concession 14, Geographic Township of West Williams, Middlesex County, Ontario. Angus McIntosh is listed as owning this lot on the 1878 map of the Township of West Williams. The location is situated in the southeast portion of the lot, adjacent to Haskett Road and just north of where one house and an orchard were located. The presence of more than 20 artifacts dating the period of use prior to 1900 also lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-116.

#### **4.32 Location 32**

A single piece of chipping detritus manufactured from Kettle Point chert was identified at Location 28. This artifact is temporally non-diagnostic, with the exception that it was manufactured by pre-contact Aboriginal people. However, the archaeological survey identified a spatially discrete pre-contact Aboriginal location that adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. Given the isolated nature of the find, the cultural heritage value or interest of the site is considered to be sufficiently documented. The recovered artifact does not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

#### **4.33 Location 33**

Location 33 consists of an isolated, retouched flake manufactured from Kettle Point chert. This artifact is temporally non-diagnostic, with the exception that it was manufactured by pre-contact Aboriginal people. However, the archaeological survey identified a spatially discrete pre-contact Aboriginal location that adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. Given the isolated nature of the find, the cultural heritage value or interest of the site is considered to be sufficiently documented. The



recovered artifact does not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

#### **4.34 Location 34 (AgHk-114)**

The 53 artifacts collected from the observed scatter of 111 artifacts during the Stage 2 assessment of Location 34 (AgHk-114) represent a range of predominantly mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris, such as ceramics and bottle glass. The most common type of ceramic artifact recovered from Location 34 (AgHk-114) was mid-to-late 19<sup>th</sup> century ironstone (94.74% of the ceramic assemblage). Most of the assemblage consists of domestic refuse, such as ceramic and domestic bottle glass fragments, as well as a small assemblage of personal items including a 19<sup>th</sup> century military artifact.

Spatially, Location 34 (AgHk-114) is located on Lot 8, Concession East of Centre Road, Geographic Township of East Williams, Middlesex County, Ontario. John McDonald is listed as owning this lot on the 1878 map of the Township of East Williams. The location is situated in the western portion of the lot, adjacent Centre Road where one house was located. The presence of more than 20 artifacts dating the period of use prior to 1900 also lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-114.

#### **4.35 Location 35 (AgHk-115)**

The 31 artifacts collected from the observed scatter of 41 artifacts during the Stage 2 assessment of Location 35 (AgHk-115) represent a range of predominantly mid-to-late 19<sup>th</sup> century Euro-Canadian domestic debris, such as ceramics and bottle glass. The most common type of ceramic artifacts recovered from Location 35 (AgHk-115) was mid-to-late 19<sup>th</sup> century ironstone (63.64% of the ceramic collection).

Spatially, Location 35 (AgHk-115) is located on south half of Lot 16, Concession West of Centre Road, Geographic Township of West Williams, Middlesex County, Ontario. Rory McKinnon is listed as owning this lot on the 1878 map of the Township of West Williams. The location is situated in the eastern portion of the lot, adjacent to Centre Road. The presence of more than 20 artifacts dating the period of use prior to 1900 also lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AgHk-115.

#### **4.36 Location 36**

A single piece of secondary chipping detritus manufactured from Kettle Point chert, was identified at Location 36. This artifact is temporally non-diagnostic, with the exception that it was manufactured by pre-contact Aboriginal



people. However, the archaeological survey identified a spatially discrete pre-contact Aboriginal location that adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. Given the isolated nature of the find, the cultural heritage value or interest of the site is considered to be sufficiently documented. The recovered artifact does not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

#### **4.37 Consideration of Previously Identified Archaeological Sites by ASI**

As was noted in Section 1.0, the ASDB identified four pre-contact Aboriginal sites (i.e. AgHk-4, AgHk-7, AgHk-12, and AgHk-17) registered within one kilometre of the study area. An examination of the current NextEra Bornish Wind Energy Centre layout (Figure 5; Supplement A) indicates that these four sites will remain undisturbed.

In addition, the 30 archaeological sites identified during ASI's 2009 to 2010 Stage 2 archaeological assessment for the NextEra Bornish Wind Energy Centre (ASI 2009b, 2011) were considered. The ASDB specifically identified six of these sites – P1 (AgHk-62), P2 (AgHk-74), P3 (AgHk-75), H1 (AgHk-63), H2 (AgHk-64), and H3 (AgHk-65) – although all were examined. Of particular interest were sites P16 (AgHk-82), P17 (AgHk-83), P26 (AgHk-90), and P31 (AgHk-94), for which ASI recommended Stage 3 archaeological assessment (ASI 2011). An examination of the current NextEra Bornish Wind Energy Centre layout indicates that both P16 (AgHk-82) and P17 (AgHk-83) will be affected by the construction of Turbine 42, its access road, and collector cable on BOR1396 (Figure 5-14; Supplement A: Figure 14).

P16 (AgHk-82) is a 25 metre by 30 metre lithic scatter from which 59 lithic artifacts were collected. Included in this collection is a fragment of a Nettling Point, which dates to the Early Archaic period (*circa* 8000 to 6000 B.C.) (ASI 2011:15). This site fits the criteria for a Stage 3 investigation as per Section 2.2 Standard 1a of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

P17 (AgHk-83) is a 30 metre (north-south) by 20 metre (west to east) lithic scatter from which 81 lithic artifacts were collected including a fragment of a Middle Archaic (*circa* 6000 to 2500 B.C.) Otter Creek point (ASI 2011:15,16). This site fits the criteria for a Stage 3 investigation as per Section 2.2 Standard 1a of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

One field resurveyed by Golder, BOR1616 (Figure 5-13, 5-14; Supplement A: Figure 13, 14), was the location of P19 (AgHk-85), an isolated findspot found by ASI (ASI 2011:17). Although the entire field was resurveyed, no infrastructure will impact the vicinity of P19. The artifact recovered was a bifacial end scraper knapped on the distal end of a Middle Archaic Brewerton Corner-Notched projectile point manufactured from Onondaga chert. Since it was an isolated find spot, Golder recovered no additional artifacts during the 2011 pedestrian survey of the property. This site does not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Its cultural heritage value or interest has been sufficiently documented (ASI 2011).

In addition, the current NextEra Bornish Wind Energy Centre layout indicates that the pad for Turbine 40 on BOR2132 overlaps with ASI's (2011) P20 site (AgHk-86) (Figure 5-13, 5-14; Supplement A: Figure 13, 14). This site, which consists of an isolated Kettle Point chert biface fragment (ASI 2011:17), does not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the *Standards and Guidelines for*



*Consultant Archaeologists* (Government of Ontario 2011). Its cultural heritage value or interest has been sufficiently documented (ASI 2011).

Further, this layout also indicates that the collector cable corridor along the east edge of BOR2049 overlaps with ASI's (2011) P30 site (AgHk-93) (Figure 5-7; Supplement A: Figure 7). This site, which consists of a Kettle Point chert biface fragment and a Kettle Point chert Middle Archaic (*circa* 6000 to 2500 B.C.) Brewerton corner-notched point spaced approximately 12 metres apart (ASI 2011:20), does not fulfill any of the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Its cultural heritage value or interest has been sufficiently documented (ASI 2011).

The remaining 26 sites documented by ASI in 2009 and 2010 remain undisturbed by the present NextEra Bornish Wind Energy Centre layout. When considering the current wind farm layout, P26 (AgHk-90) and P31 (AgHk-94) in particular (Figure 5-6, 5-7; Supplement A: Figure 6, 7), previously recommended for Stage 3 archaeological assessment by ASI (2011), are no longer impacted.

#### **4.38 Preliminary Indication of Sites Possibly Requiring Stage 4 Archaeological Assessment**

This preliminary indication of whether any site could be eventually recommended for Stage 4 archaeological assessment is required under the *Standards and Guidelines for Consultant Archaeologists* Section 7.8.3 Standard 2c. No firm recommendation for, or against, Stage 4 archaeological assessment will be made until the forthcoming Stage 3 archaeological assessment has been conducted. In addition, any sites recommended for Stage 3 archaeological assessment but not listed here could still require Stage 4 archaeological assessment pending the outcome of the Stage 3 field work. The following sites could be recommended for Stage 4 should the Stage 3 assessment produce such a determination (Table 90):

**Table 90: Preliminary Indication of Sites Possibly Requiring Stage 4 Archaeological Assessment**

<b>Location</b>	<b>Borden Number</b>	<b>Affiliation</b>	<b>Probable Reason</b>
10	AgHj-6	Pre-contact Aboriginal	Lithic scatter with test units yielding 10 or more artifacts
11	AgHj-7	Pre-contact Aboriginal	Lithic scatter with test units yielding 10 or more artifacts
13	AgHk-100	Historic Euro-Canadian	Portion of occupation could date prior to 1870
15	AgHk-102	Historic Euro-Canadian	Portion of occupation could date prior to 1870
20	AgHk-106	Historic Euro-Canadian	Portion of occupation could date prior to 1870
P16 (ASI)	AgHk-82	Pre-contact Aboriginal	Lithic scatter with test units yielding 10 or more artifacts
P17 (ASI)	AgHk-83	Pre-contact Aboriginal	Lithic scatter with test units yielding 10 or more artifacts



## 5.0 RECOMMENDATIONS

The Stage 2 assessment of the NextEra Bornish Wind Energy Centre resulted in the identification of 36 archaeological sites, including 17 pre-contact Aboriginal, 18 historic Euro-Canadian, and one multi-component. Recommendations for each location are found below.

### 5.1 Location 1

The Stage 2 assessment of Location 1 resulted in the recovery of two pre-contact Aboriginal artifacts, a side scraper and a piece of chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 1.**

### 5.2 Location 2 (AgHk-95)

Given that the Stage 2 assessment of Location 2 (AgHk-95) resulted in the recovery of a spatially discrete area yielding pre-contact Aboriginal artifacts, **it is recommended that a Stage 3 archaeological assessment be conducted in advance of any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) to further test the nature and density of this site. Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid within and surrounding the identified lithic scatter and should be excavated by hand to a depth of five centimetres within the subsoil. The already existing program of Aboriginal engagement should be continued during the Stage 3 archaeological assessment.

### 5.3 Location 3

The Stage 2 assessment of Location 3 resulted in the recovery of an isolated pre-contact Aboriginal miscellaneous modified groundstone artifact. Despite the intensification of survey intervals, no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 3.**

### 5.4 Location 4 (AgHk-96)

The Stage 2 assessment of Location 4 (AgHk-96) revealed a spatially discrete cluster of mid-to-late 19<sup>th</sup> century historic Euro-Canadian cultural material. The most common types of ceramic artifacts recovered from Location 4 (AgHk-96) were mid-to-late 19<sup>th</sup> century ironstone. Given the abundance of this material and the site's location on historic mapping, **it is recommended that Location 4 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in



Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 4 (AgHk-96) should also be conducted as part of the Stage 3 assessment.

### **5.5 Location 5 (AgHk-97)**

The Stage 2 assessment of Location 5 (AgHk-97) revealed a spatially discrete cluster of mid-to-late 19<sup>th</sup> century historic Euro-Canadian cultural material. The most common types of ceramic artifacts recovered from Location 5 (AgHk-97) were mid-to-late 19<sup>th</sup> century ironstone and whiteware. Given the abundance of this material and the site's location on historic mapping, **it is recommended that Location 5 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 5 (AgHk-97) should also be conducted as part of the Stage 3 assessment.

### **5.6 Location 6 (AgHk-98)**

The Stage 2 assessment of Location 6 (AgHk-98) resulted in the recovery of a pre-contact Aboriginal Middle Woodland projectile point (*circa* 100 B.C. to 200 A.D.). Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 6 (AgHk-98).**

### **5.7 Location 7 (AgHk-118)**

The Stage 2 assessment of Location 7 (AgHk-118) resulted in the recovery of an isolated pre-contact Aboriginal Middle-to-Late Archaic (*circa* 6000 to 1800 B.C.) projectile point. Despite the intensification of survey intervals, no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 7 (AgHk-118).**



## **5.8 Location 8**

The Stage 2 assessment of Location 8 resulted in the recovery of pre-contact Aboriginal end scraper. Despite the intensification of survey intervals, no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 8.**

## **5.9 Location 9 (AgHk-99)**

The Stage 2 assessment of Location 9 (AgHk-99) resulted in the recovery of a pre-contact Aboriginal Middle Woodland projectile point (*circa* 100 B.C. to 200 A.D.). Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 9 (AgHk-99).**

## **5.10 Location 10 (AgHj-6)**

Given that the Stage 2 assessment of Location 10 (AgHj-6) resulted in the recovery of a spatially discrete area yielding pre-contact Aboriginal artifacts, **it is recommended that a Stage 3 archaeological assessment be conducted in advance of any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) to further test the nature and density of this site. Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid within and surrounding the identified lithic scatter and should be excavated by hand to a depth of five centimetres within the subsoil. The already existing program of Aboriginal engagement should be continued during the Stage 3 archaeological assessment.

## **5.11 Location 11 (AgHj-7)**

Given that the Stage 2 assessment of Location 11 (AgHj-7) resulted in the recovery of a spatially discrete area yielding pre-contact Aboriginal artifacts, **it is recommended that a Stage 3 archaeological assessment be conducted in advance of any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) to further test the nature and density of this site. Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid within and surrounding the identified lithic scatter and should be excavated by hand to a depth of five centimetres within the subsoil. The already existing program of Aboriginal engagement should be continued during the Stage 3 archaeological assessment.





## 5.12 Location 12 (AgHj-8)

The Stage 2 assessment of Location 12 (AgHj-8) revealed a spatially discrete cluster of late 19<sup>th</sup> to early 20<sup>th</sup> century historic Euro-Canadian cultural material. A variety of fragile, breakable items, such as ceramics and glass, were collected. Given the abundance of this material, **it is recommended that Location 12 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 12 (AgHj-8) should also be conducted as part of the Stage 3 assessment.

## 5.13 Location 13 (AgHk-100)

The Stage 2 assessment of Location 13 (AgHk-100) revealed a spatially discrete cluster of mid-to-late 19<sup>th</sup> century historic Euro-Canadian cultural material. The most common type of ceramic artifacts recovered from Location 13 (AgHk-100) were mid-to-late 19<sup>th</sup> century ironstone along with small assemblages of mid-19<sup>th</sup> century whiteware and early 19<sup>th</sup> century pearlware. Given the abundance of these artifacts and the location's proximity to the hamlet of Bornish, **it is recommended that Location 13 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 13 (AgHk-100) should also be conducted as part of the Stage 3 assessment.

## 5.14 Location 14 (AgHk-101)

The Stage 2 assessment of Location 14 (AgHk-101) revealed a spatially discrete cluster of mid-to-late 19<sup>th</sup> century historic Euro-Canadian cultural material. The most common types of ceramic artifacts recovered from Location 14 (AgHk-101) were mid-to-late 19<sup>th</sup> century ironstone and whiteware. Given the abundance of these artifacts, **it is recommended that Location 14 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of



one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 14 (AgHk-101) should also be conducted as part of the Stage 3 assessment.

### 5.15 Location 15 (AgHk-102)

The Stage 2 assessment of Location 15 (AgHk-102) revealed a spatially discrete cluster of mid-to-late 19<sup>th</sup> century historic Euro-Canadian cultural material. The most common types of ceramic artifacts recovered from Location 15 (AgHk-102) were mid-to-late 19<sup>th</sup> century whiteware and ironstone. Given the abundance of these artifacts, **it is recommended that Location 15 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 15 (AgHk-102) should also be conducted as part of the Stage 3 assessment.

### 5.16 Location 16 (AgHk-103)

The Stage 2 assessment of Location 16 (AgHk-103) revealed a spatially discrete cluster of mid-to-late 19<sup>th</sup> century historic Euro-Canadian cultural material. The most common ceramic type recovered from Location 16 (AgHk-103) was mid-to-late 19<sup>th</sup> century ironstone. Given the abundance of these artifacts, **it is recommended that Location 16 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 16 (AgHk-103) should also be conducted as part of the Stage 3 assessment.

### 5.17 Location 17 (AgHk-104)

The Stage 2 assessment of Location 17 (AgHk-104) revealed a spatially discrete cluster of mid-to-late 19<sup>th</sup> century historic Euro-Canadian cultural material. The most common ceramic type recovered from Location 17 (AgHk-104) was mid-to-late 19<sup>th</sup> century ironstone. Given the abundance of these artifacts, **it is recommended**



that **Location 17 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 17 (AgHk-104) should also be conducted as part of the Stage 3 assessment.

### **5.18 Location 18 (AgHk-105)**

The Stage 2 assessment of Location 18 (AgHk-105) revealed a spatially discrete cluster of mid-to-late 19<sup>th</sup> century historic Euro-Canadian cultural material. The most common type of ceramic artifacts recovered from Location 18 (AgHk-105) was mid-to-late 19<sup>th</sup> century ironstone along with a small assemblage of mid-to-late 19<sup>th</sup> century whiteware. Given the abundance of these artifacts, **it is recommended that Location 18 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 18 (AgHk-105) should also be conducted as part of the Stage 3 assessment.

### **5.19 Location 19 (AgHk-119)**

Given that the Stage 2 assessment of Location 19 (AgHk-119) resulted in the recovery of a spatially discrete area yielding pre-contact Aboriginal artifacts, **it is recommended that a Stage 3 archaeological assessment be conducted in advance of any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) to further test the nature and density of this site. Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. The already existing program of Aboriginal engagement should be continued during the Stage 3 archaeological assessment.



## 5.20 Location 20 (AgHk-106)

The Stage 2 assessment of Location 20 (AgHk-106) revealed a spatially discrete cluster of mid-to-late 19<sup>th</sup> century historic Euro-Canadian cultural material. The most common types of ceramic artifacts recovered from Location 20 (AgHk-106) were mid-to-late 19<sup>th</sup> century ironstone and whiteware. Given the abundance of these artifacts, **it is recommended that Location 20 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 20 (AgHk-106) should also be conducted as part of the Stage 3 assessment.

## 5.21 Location 21 (AgHk-107)

The Stage 2 assessment of Location 21 (AgHk-107) revealed a spatially discrete cluster of mid-to-late 19<sup>th</sup> century historic Euro-Canadian cultural material with a small pre-contact Aboriginal component. The most common ceramic type recovered from Location 21 (AgHk-107) was mid-to-late 19<sup>th</sup> century ironstone. Given the abundance of these artifacts, **it is recommended that Location 21 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 21 (AgHk-107) should also be conducted as part of the Stage 3 assessment.

## 5.22 Location 22 (AgHk-108)

The Stage 2 assessment of Location 22 (AgHk-108) revealed a spatially discrete cluster of mid-to-late 19<sup>th</sup> century historic Euro-Canadian cultural material. The most common ceramic type recovered from Location 22 (AgHk-108) was mid-to-late 19<sup>th</sup> century ironstone. Given the abundance of these artifacts, **it is recommended that Location 22 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre



square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 22 (AgHk-108) should also be conducted as part of the Stage 3 assessment.

### **5.23 Location 23 (AgHk-109)**

The Stage 2 assessment of Location 23 (AgHk-109) revealed a spatially discrete cluster of mid-to-late 19<sup>th</sup> century historic Euro-Canadian cultural material. The most common ceramic type recovered from Location 21 (AgHk-107) was mid-to-late 19<sup>th</sup> century ironstone. Given the abundance of these artifacts, **it is recommended that Location 23 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 23 (AgHk-109) should also be conducted as part of the Stage 3 assessment.

### **5.24 Location 24 (AgHk-110)**

Given that the Stage 2 assessment of Location 24 (AgHk-110) resulted in the recovery of a spatially discrete area yielding pre-contact Aboriginal artifacts, **it is recommended that a Stage 3 archaeological assessment be conducted in advance of any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) to further test the nature and density of this site. Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. The already existing program of Aboriginal engagement should be continued during the Stage 3 archaeological assessment.

### **5.25 Location 25 (AgHk-111)**

The Stage 2 assessment of Location 25 (AgHk-111) revealed a spatially discrete cluster of mid-to-late 19<sup>th</sup> century historic Euro-Canadian cultural material. The ceramic types recovered from Location 25 (AgHk-111) include mid-to-late 19<sup>th</sup> century ceramics and mid 19<sup>th</sup>-century black glass. Given the abundance of these artifacts, it is recommended that **Location 25 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should



employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 25 (AgHk-111) should also be conducted as part of the Stage 3 assessment.

### 5.26 Location 26 (AgHk-117)

Given that the Stage 2 assessment of Location 26 (AgHk-117) resulted in the recovery of a spatially discrete area yielding a pre-contact Aboriginal Paleo-Indian multi-tool, **it is recommended that a Stage 3 archaeological assessment be conducted in advance of any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) to further test the nature and density of this site. Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid surrounding the identified tool and should be excavated by hand to a depth of five centimetres within the subsoil. In addition, at least 20% of the total number of units tested should be screened using a three millimetre mesh size instead of the standard six millimetre mesh. The already existing program of Aboriginal engagement should be continued during the Stage 3 archaeological assessment.

### 5.27 Location 27 (AgHk-112)

The Stage 2 assessment of Location 27 (AgHk-112) revealed a spatially discrete cluster of mid-to-late 19<sup>th</sup> century historic Euro-Canadian cultural material. It is a small assemblage consisting of utilitarian kitchenware, ironstone, and bottle glass. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 27 (AgHk-112).**

### 5.28 Location 28

The Stage 2 assessment of Location 28 resulted in the recovery of a single pre-contact Aboriginal artifact, a piece of chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 28.**



### 5.29 Location 29

The Stage 2 assessment of Location 29 resulted in the recovery of a single 1876 One Cent piece. Despite the intensification of survey intervals, no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 29.**

### 5.30 Location 30

The Stage 2 assessment of Location 30 resulted in the recovery of two pre-contact Aboriginal artifacts, a graver and a side scraper. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 30.**

### 5.31 Location 31 (AgHk-116)

The Stage 2 assessment of Location 31 (AgHk-116) revealed a spatially discrete cluster of mid-to-late 19<sup>th</sup> century historic Euro-Canadian cultural material. The ceramic types recovered from Location 31 (AgHk-116) include mid-to-late 19<sup>th</sup> century ironstone. Given the abundance of these artifacts, it is recommended that **Location 31 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 31 (AgHk-116) should also be conducted as part of the Stage 3 assessment.

### 5.32 Location 32

The Stage 2 assessment of Location 32 resulted in the recovery of a single pre-contact Aboriginal artifact, a piece of chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 32.**

### 5.33 Location 33

The Stage 2 assessment of Location 33 resulted in the recovery of a single pre-contact Aboriginal artifact, a retouched flake. Despite the intensification of survey intervals no additional artifacts were recovered. Given that



the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 33.**

### **5.34 Location 34 (AgHk-114)**

The Stage 2 assessment of Location 34 (AgHk-114) revealed a spatially discrete cluster of mid-to-late 19<sup>th</sup> century historic Euro-Canadian cultural material. The most common ceramic type recovered from Location 34 (AgHk-114) was mid-to-late 19<sup>th</sup> century ironstone. Given the abundance of these artifacts, it is recommended that **Location 34 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 34 (AgHk-114) should also be conducted as part of the Stage 3 assessment.

### **5.35 Location 35 (AgHk-115)**

The Stage 2 assessment of Location 35 (AgHk-115) revealed a spatially discrete cluster of mid-to-late 19<sup>th</sup> century historic Euro-Canadian cultural material. The most common ceramic type recovered from Location 34 (AgHk-115) was mid-to-late 19<sup>th</sup> century ironstone. Given the abundance of these artifacts, it is recommended that **Location 35 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 35 (AgHk-115) should also be conducted as part of the Stage 3 assessment.

### **5.36 Location 36**

The Stage 2 assessment of Location 36 resulted in the recovery of a single pre-contact Aboriginal artifact, a piece of chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 36.**





## 5.37 Archaeological Sites Previously Documented by ASI

### 5.37.1 P16 (AgHk-82)

Given that the Stage 2 assessment of P16 (AgHk-82) by ASI in 2010 resulted in the recovery of a spatially discrete area yielding pre-contact Aboriginal artifacts, **it is recommended that a Stage 3 archaeological assessment be conducted in advance of any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) to further test the nature and density of this site. Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. The already existing program of Aboriginal engagement established by Golder should be continued during the Stage 3 archaeological assessment.

### 5.37.2 P17 (AgHk-83)

Given that the Stage 2 assessment of P17 (AgHk-83) by ASI in 2010 resulted in the recovery of a spatially discrete area yielding pre-contact Aboriginal artifacts, **it is recommended that a Stage 3 archaeological assessment be conducted in advance of any ground disturbance activities to further test the nature and density of the site.** The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) to further test the nature and density of this site. Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. The already existing program of Aboriginal engagement established by Golder should be continued during the Stage 3 archaeological assessment.

### 5.37.3 P19 (AgHk-85)

Given that the Stage 2 assessment of P19 (AgHk-85) by ASI in 2010 resulted in the recovery of a single pre-contact Aboriginal artifact, the cultural heritage value or interest of the site was judged to have been sufficiently documented and **no further archaeological assessment is recommended for P19.**

### 5.37.4 P20 (AgHk-86)

Given that the Stage 2 assessment of P20 (AgHk-86) by ASI in 2010 resulted in the recovery of a single pre-contact Aboriginal artifact, the cultural heritage value or interest of the site was judged to have been sufficiently documented and **no further archaeological assessment is recommended for P20.**



### 5.37.5 P30 (AgHk-93)

Given that the Stage 2 assessment of P20 (AgHk-93) by ASI in 2010 resulted in the recovery of two pre-contact Aboriginal artifacts, the cultural heritage value or interest of the site was judged to have been sufficiently documented and **no further archaeological assessment is recommended for P30.**

### 5.37.6 P26 (AgHk-90)

Given that the Stage 2 assessment of P26 (AgHk-90) by ASI in 2010 resulted in the recovery of a spatially discrete area yielding pre-contact Aboriginal artifacts, **it is recommended that a Stage 3 archaeological assessment be conducted in advance of any ground disturbance activities to further test the nature and density of the site.** However, given that the current NextEra Bornish Wind Energy Centre layout no longer impacts this site, P26 does not require Stage 3 archaeological assessment at this time.

### 5.37.7 P31 (AgHk-93)

Given that the Stage 2 assessment of P31 (AgHk-93) by ASI in 2010 resulted in the recovery of a spatially discrete area yielding pre-contact Aboriginal artifacts, **it is recommended that a Stage 3 archaeological assessment be conducted in advance of any ground disturbance activities to further test the nature and density of the site.** However, given that the current NextEra Bornish Wind Energy Centre layout no longer impacts this site, P31 does not require Stage 3 archaeological assessment at this time.

## 5.38 Summary

The above recommendations determine that 23 of the 36 sites identified by Golder require further Stage 3 assessment. As such, 13 sites identified by Golder are not recommended for further archaeological work for this project. In addition, the current layout resulted in the avoidance of P26 (AgHk-90) and P31 (AgHk-94), which were previously recommended for Stage 3 archaeological assessment for this project by ASI (2011). This layout, however, did not avoid four other sites documented by ASI, of which two sites still require further Stage 3 assessment. Finally, one site documented by ASI, P19 (AgHk-85), was in an area resurveyed by Golder but it requires no further Stage 3 assessment and has been sufficiently documented.

Table 91 provides a breakdown of Golder's recommendations for the NextEra Bornish Wind Energy Centre:

**Table 91: Recommendations for Further Stage 3 Assessment**

Location	Borden Number	Affiliation	Stage 3 Recommended?
1		Pre-contact Aboriginal	No
2	AgHk-95	Pre-contact Aboriginal	Yes
3		Pre-contact Aboriginal	No
4	AgHk-96	Historic Euro-Canadian	Yes



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Location	Borden Number	Affiliation	Stage 3 Recommended?
5	AgHk-97	Historic Euro-Canadian	Yes
6	AgHk-98	Middle Woodland	No
7	AgHk-118	Middle-to-Late Archaic	No
8		Pre-contact Aboriginal	No
9	AgHk-99	Middle Woodland	No
10	AgHj-6	Pre-contact Aboriginal	Yes
11	AgHj-7	Pre-contact Aboriginal	Yes
12	AgHj-8	Historic Euro-Canadian	Yes
13	AgHk-100	Historic Euro-Canadian	Yes
14	AgHk-101	Historic Euro-Canadian	Yes
15	AgHk-102	Historic Euro-Canadian	Yes
16	AgHk-103	Historic Euro-Canadian	Yes
17	AgHk-104	Historic Euro-Canadian	Yes
18	AgHk-105	Historic Euro-Canadian	Yes
19	AgHk-119	Middle-to-Late Archaic	Yes
20	AgHk-106	Historic Euro-Canadian	Yes
21	AgHk-107	Multi-component	Yes
22	AgHk-108	Historic Euro-Canadian	Yes
23	AgHk-109	Historic Euro-Canadian	Yes
24	AgHk-110	Pre-contact Aboriginal	Yes
25	AgHk-111	Historic Euro-Canadian	Yes
26	AgHk-117	Paleo-Indian	Yes
27	AgHk-112	Historic Euro-Canadian	No
28		Pre-contact Aboriginal	No
29		Historic Euro-Canadian	No
30	AgHk-113	Pre-contact Aboriginal	No
31	AgHk-116	Historic Euro-Canadian	Yes
32		Pre-contact Aboriginal	No
33		Pre-contact Aboriginal	No
34	AgHk-114	Historic Euro-Canadian	Yes
35	AgHk-115	Historic Euro-Canadian	Yes
36		Pre-contact Aboriginal	No
P16 (ASI)	AgHk-82	Pre-contact Aboriginal	Yes
P17 (ASI)	AgHk-83	Pre-contact Aboriginal	Yes
P19 (ASI)	AgHk-85	Pre-contact Aboriginal	No
P20 (ASI)	AgHk-86	Pre-contact Aboriginal	No
P26 (ASI)	AgHk-90	Pre-contact Aboriginal	Yes, but not impacted by wind farm
P30 (ASI)	AgHk-93	Pre-contact Aboriginal	No
P31 (ASI)	AgHk-94	Pre-contact Aboriginal	Yes, but not impacted by wind farm



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## STAGE 2 ARCHAEOLOGICAL ASSESSMENT NEXTERA ENERGY CANADA, ULC

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While all of these sites were documented during the Stage 2 archaeological field work conducted within the NextEra Bornish Wind Energy Centre study area, 27 require further Stage 3 assessment. The remaining 16 sites have been sufficiently documented.

The Ministry of Tourism, Culture and Sport is asked to accept this report into the Ontario Public Register of Archaeological Reports. Additional archaeological assessment is still required; hence the archaeological sites recommended for further archaeological field work 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 license.



## **6.0 ADVICE ON COMPLIANCE WITH LEGISLATION**

This report is submitted to the Ontario 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.

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 fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the *Ontario Heritage Act*.

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 Ontario Ministry of Consumer Services.

Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48(1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed from them, except by a person holding an archaeological license.



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## 8.0 IMAGES

*Plate 1: Stage 2, Municipal Right of Way showing disturbance and ditching on the west side of Kerwood Road between Elginfield Road and Coldstream Road in the area of the proposed cable corridor, BOR1654, facing south, October 5, 2011*



*Plate 2: Stage 2, pedestrian survey at 5 metre intervals, facing southeast, BOR1614 (Locations 2 and 3), June 20, 2011*



*Plate 3: Stage 2, pedestrian survey at 5 metre intervals, facing southwest, BOR1653 (Locations 14 and 15), November 28, 2011*



*Plate 4: Stage 2, soil conditions, facing west, BOR1159 (Location 19), October 28, 2011*





**STAGE 2 ARCHAEOLOGICAL ASSESSMENT  
NEXTERA ENERGY CANADA, ULC**

*Plate 5: Stage 2, soil conditions, facing down, BOR1085 (Location 7), November 9, 2011*



*Plate 6: Stage 2, pedestrian survey at 5 metre intervals, facing southeast, BOR1085 (Location 7), November 9, 2011*



*Plate 7: Stage 2, soil conditions, facing east, BOR1104 (Location 24), November 24, 2011*



*Plate 8: Stage 2, pedestrian survey at 5 metre intervals, facing west, BOR1104 (Location 24), November 24, 2011*





**STAGE 2 ARCHAEOLOGICAL ASSESSMENT  
NEXTERA ENERGY CANADA, ULC**

*Plate 9: Stage 2, soil conditions, facing west,  
BOR1813, January 12, 2012*



*Plate 10: Stage 2, pedestrian survey at 5 metre  
intervals, facing south, BOR1813, January 12, 2012*



*Plate 11: Stage 2, soil conditions, facing down,  
BOR1020 (Location 28), December 8, 2011*



*Plate 12: Stage 2, pedestrian survey at 5 metre  
intervals, facing north, BOR1020 (Location 28),  
December 8, 2011*





## STAGE 2 ARCHAEOLOGICAL ASSESSMENT NEXTERA ENERGY CANADA, ULC

*Plate 13: Stage 2, soil conditions, facing down, BOR1578 (Locations 25, 26, and 27), December 8, 2011*



*Plate 14: Stage 2, pedestrian survey at 5 metre intervals, facing south, BOR1578 (Locations 25, 26, and 27), December 8, 2011*



*Plate 15: Stage 2, pedestrian survey at 5 metre intervals, facing north, BOR1105, June 28, 2011*



*Plate 16: Stage 2, pedestrian survey at 5 metre intervals, facing east, BOR1832 (Location 6), June 27, 2011*







**STAGE 2 ARCHAEOLOGICAL ASSESSMENT  
NEXTERA ENERGY CANADA, ULC**

*Plate 17: Stage 2, pedestrian survey at 5 metre intervals, facing northwest, BOR1587, December 15, 2011*



*Plate 18: Stage 2, soil conditions, facing south, BOR1028 (Location 22), November 24, 2011*



*Plate 19: Stage 2, pedestrian survey at 5 metre intervals, facing north, BOR1028 (Location 22), November 24, 2011*



*Plate 20: Stage 2, soil conditions, facing north, BOR2049 (Location 31), January 10, 2012*





## STAGE 2 ARCHAEOLOGICAL ASSESSMENT NEXTERA ENERGY CANADA, ULC

*Plate 21: Stage 2, pedestrian survey at 1 metre intervals, facing southeast, BOR1910 (Location 5), June 27, 2011*



*Plate 22: Stage 2, soil conditions, facing southwest, BOR1734 (Location 37), January 10, 2012*



*Plate 23: Stage 2, soil conditions, facing down, BOR1729, January 10, 2012*



*Plate 24: Stage 2, pedestrian survey at 5 metre intervals, facing west, BOR1729, January 10, 2012*





## STAGE 2 ARCHAEOLOGICAL ASSESSMENT NEXTERA ENERGY CANADA, ULC

*Plate 25: Stage 2, pedestrian survey at 5 metre intervals, facing southwest, BOR1691 (Location 1), June 20, 2011*



*Plate 26: Stage 2, soil conditions, facing east, BOR1039 (Locations 20 and 21), November 24, 2011*



*Plate 27: Stage 2, pedestrian survey at 5 metre intervals, facing southeast, BOR1039 (Locations 20 and 21), November 24, 2011*



*Plate 28: Stage 2, soil conditions, facing east, BOR1379, January 10, 2012*





**STAGE 2 ARCHAEOLOGICAL ASSESSMENT  
NEXTERA ENERGY CANADA, ULC**

*Plate 29: Stage 2, pedestrian survey at 5 metre intervals, facing north, BOR1379, January 10, 2012*



*Plate 30: Stage 2, soil conditions, facing south, BOR1674, November 9, 2011*



*Plate 31: Stage 2, pedestrian survey at 5 metre intervals, facing west, BOR1674, November 9, 2011*



*Plate 32: Stage 2, soil conditions, facing southeast, BOR1426, November 14, 2011*





## STAGE 2 ARCHAEOLOGICAL ASSESSMENT NEXTERA ENERGY CANADA, ULC

*Plate 33: Stage 2, pedestrian survey at 5 metre intervals, facing northwest, BOR1426, November 14, 2011*



*Plate 34: Stage 2, soil conditions, facing down, BOR1202 (Location 12), November 16, 2011*



*Plate 35: Stage 2, pedestrian survey at 5 metre intervals, facing northeast, BOR1202 (Location 12), November 16, 2011*



*Plate 36: Stage 2, soil conditions, facing down, BOR1316 (Location 13), November 16, 2011*





## STAGE 2 ARCHAEOLOGICAL ASSESSMENT NEXTERA ENERGY CANADA, ULC

*Plate 37: Stage 2, pedestrian survey at 5 metre intervals, facing southwest, BOR1316 (Location 13), November 16, 2011*



*Plate 38: Stage 2, soil conditions, facing down, BOR1474 (Locations 10 and 11), November 16, 2011*



*Plate 39: Stage 2, pedestrian survey at 5 metre intervals, facing north, BOR1474 (Locations 10 and 11), November 16, 2011*



*Plate 40: Stage 2, soil conditions, facing southwest, BOR1223 (Locations 33 and 34), January 10, 2012*





## STAGE 2 ARCHAEOLOGICAL ASSESSMENT NEXTERA ENERGY CANADA, ULC

*Plate 41: Stage 2, soil conditions, facing north,  
BOR2123 (Locations 30 and 32), January 10, 2012*



*Plate 42: Stage 2, test-pit survey at 5 metre intervals,  
wood lot, facing south, BOR1305, March 28, 2012*



*Plate 43: Stage 2, test-pit survey at 5 metre intervals,  
woodlot, facing down, BOR1305, March 28, 2012*



*Plate 44: Stage 2, test-pit survey, swampy conditions  
in woodlot, facing south, BOR1305, March 28, 2012*





*Plate 45: Location 1 Pre-contact Aboriginal Artifacts, actual size*



1: Scraper  
Location 1, cat. #2



2: Chipping Detritus  
Location 1, cat. #1

*Plate 46: Location 2 (AgHk-95) Selected Pre-contact Aboriginal Artifacts, actual size*



1: Scraper  
Location 2, cat. #2



2: Biface  
Location 2, cat. #3



3: Chipping Detritus  
Location 2, cat. #1

*Plate 47: Location 3 Pre-contact Aboriginal Artifact, actual size*



1: Miscellaneous Modified Groundstone  
Location 3, cat. #1





*Plate 48: Location 4 (AgHk-96) Historic Euro-Canadian Artifacts, actual size*



1: Plain Ironstone  
Location 4, cat. #7,16



2: Moulded Ironstone  
Location 4, cat. #6



3: Painted Ironstone  
Location 4, cat. #8



4: Oil Ring Finish  
Location 4, cat. #17



5: White Clay Pipe Stems  
Location 4, cat. #4,9



6: White Clay Pipe Elbow  
Location 4, cat. #3



7: White Clay Pipe Bowl  
Location 4, cat. #5