April 10, 2012

STAGE 2 ARCHAEOLOGICAL ASSESSMENT

NextEra Adelaide Wind Energy Centre
Various Lots
Concessions 1 to 5 N.E.R. and 1 to 4 S.E.R.
Geographic Township of Adelaide
Middlesex County, Ontario

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 (REA), 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 116 hectare study area located in Middlesex County, Ontario. While previous archaeological work was conducted and reported upon by Golder (2009, 2010a, 2010b) to obtain a recommendation letter from the Ministry of Tourism, Culture and Sport to provide to the Ministry of the Environment as part of the REA submission, this submission was never made and so additional layout changes necessitate this Stage 2 archaeological assessment of additional properties within the previously defined study area. 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 48 turbines included in the revised NextEra Adelaide Wind Energy Centre.

The *Green Energy Act* (2009) enabled legislation governing project assessments and approvals to be altered to allow for a more streamlined 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. Golder (2009, 2010a, 2010b) previously determined a moderate to high 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 July 11, 2011 and January 25, 2012, resulted in the identification of 15 sites: eight pre-contact Aboriginal and seven historic Euro-Canadian. Stage 3 archaeological assessments are recommended to further evaluate the cultural heritage value or interest of six sites.

The Ontario 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 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.

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.

Table of Contents

TABLES

FIGURES

PLATES

APPENDICES

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Acknowledgements

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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 (REA), 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 116 hectare study area located in the Geographic Township of Adelaide, now Township of Adelaide Metcalfe, Middlesex County, Ontario (Figure 1). While previous archaeological work was conducted and reported upon by Golder (2009, 2010a, 2010b) to obtain a recommendation letter from the Ministry of Tourism, Culture and Sport (MTCS) to provide to the Ministry of the Environment as part of the REA submission, this submission was never made and so additional layout changes necessitate this Stage 2 archaeological assessment of additional properties within the previously defined study area. A more detailed discussion of past investigations is presented in Section 1.2 below. The study area has not changed and is located on various lots and concessions in the Geographic Township of Adelaide (now Township of Adelaide Metcalfe); Table 1 lists the relevant lots.

Table 1: Properties within the NEEC Adelaide Wind Energy Centre, Middlesex County

Geographic Township	Concession	Lot
Adelaide	1 North of Egremont Road (N.E.R.)	7 to 19
	2 N.E.R.	part 6 and 7 to 19
	3 and 4 N.E.R.	7 to 12
	5 N.E.R.	part 7 and 8 to 10
	1 and 2 South of Egremont Road (S.E.R.)	1 to 19
	3 S.E.R.	1 to 18
	4 S.E.R.	13 to 17

The *Green Energy Act* (2009) enabled legislation governing project assessments and approvals to be altered to allow for a more streamlined 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. Golder (2009, 2010a, 2010b) previously determined there was potential for the recovery of 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 NEEC Adelaide Wind Energy Centre will include 38 turbines (rated at 1.62 megawatts each) with a 61.56 megawatt capacity as well as associated infrastructure. This includes collector cable routes, access roads, crane turnarounds, construction roads, transmission lines, staging areas, and substations. The remainder of the project's transmission line and the entire point of interconnect are located in the Municipality of North Middlesex; the field work for these components is included as part of the archaeological work completed in relation to the NEEC Bornish Wind Energy Centre (PIFs P218-097-2011 and P319-013-2012; Golder 2012a) and the Parkhill Point of Interconnect (POI) (PIF P319-018-2012; Golder 2012b). None of these lands are within 50 metres of the NEEC Adelaide Wind Energy Centre study area, and as such, will not be impacted by

construction activities associated with this project. 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 MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* 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 NEEC Adelaide Wind Energy Centre is associated with part of the transmission line subsumed within the NEEC Bornish Wind Energy Centre, which is reported upon separately (Golder 2012a), and with the Parkhill Point of Interconnect (POI), which is also reported upon separately (Golder 2012b). The proposed NEEC Bornish Wind Energy Centre includes 47 turbines and associated infrastructure. It consists of properties on various lots and concessions in the Geographic Townships of West Williams and East Williams, now Municipality of North Middlesex, Middlesex County, and covers an approximate area of 492.77 hectares.

The proposed Parkhill POI is situated on an 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, and connects the hydro lines on its east side to the proposed NEEC Bornish and Adelaide Wind Energy Centre properties (Golder 2012b). 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 within the southwestern end of the Horseshoe Moraines (Chapman and Putnam 1984:127-129), specifically the tail end of the Seaforth Moraine (Hagerty and Kingston 1992:11). The two major soil series present are Huron and Brantford. Both are silty clay loams and range from moderately well drained to imperfectly drained within the area of interest. Six other soil series include the well to imperfectly drained Bennington silt loams, the well to imperfectly drained Brant silty loams, the rapid to imperfectly drained Caledon sand loams, the moderately well to imperfectly drained Melbourne silty clay loams, the poorly drained Waterin loamy fine sands, and the well to imperfectly drained Wattford fine sandy loams. The area's topography is nearly level with only some areas of gentle sloping which can contribute to the soils' drainage characteristics as noted here. Most of these soils would have been suitable for pre-contact Aboriginal agriculture given their modern agricultural capability ratings (Hagerty and Kingston 1992:74-96) although they would not be the highest yielding soil types available in Middlesex County. There are potable water sources within the study area, including numerous small streams, such as Adelaide Creek in the western portion and Mud Creek in the eastern portion. The original survey of Egremont Road also noted swampy areas along the route, and a forest cover of basswood, beech, birch, black ash, elm, ironwood, maple, white ash, and white oak (Carroll 1831a).

1.2.2 Previously Known Archaeological Sites and Surveys

A Stage 1 archaeological assessment of the study area (PIF P001-422-2008) was previously conducted on behalf of Air Energy TCI Inc. by Golder (2009) for a parcel of approximately 8275 hectares in the Township of Adelaide Metcalfe, Middlesex County, Ontario (Figure 1). An inquiry of the Ontario Archaeological Sites Database (ASDB) in 2008 identified one archaeological site within one kilometre of the study area. The Armbro site (AfHj-107) is a 10 metre by 15 metre pre-contact Aboriginal lithic scatter containing a drill and chipping detritus recorded by Jacqueline Fisher in 2000 and located just east of the study area. Golder's (2009) Stage 1 assessment determined that the potential for pre-contact Aboriginal and Euro-Canadian sites was moderate to high on these properties. As a result, Stage 2 archaeological assessment was recommended for all areas to be impacted during the construction, operation, and decommissioning phases of the proposed wind energy centre.

The initial Stage 2 archaeological assessment (PIFs P001-452-2008, P001-526-2009, and P084-197-2010) was conducted from September 2008 to March 2010 on behalf of both Air Energy TCI Inc. and NEEC (Golder 2010a). During these investigations, thirteen archaeological sites were recorded (Table 2). Nine of the identified sites are pre-contact Aboriginal and consist of lithic scatters and isolated findspots. Stage 3 archaeological assessments were recommended for three of these nine pre-contact sites, Location 2 (AfHk-29), Location 3 (AgHk-66), and Location 7 (AgHj-5) (Golder 2010a). The remaining four sites represent historic Euro-Canadian occupations. As noted in Table 2, three of the four historic Euro-Canadian sites, Location 9 (AfHk-30), representing early-to-late 19th century occupation, Location 5 (AgHk-67) and Location 11 (AgHk-68), both representing mid-to-late 19th century occupations, required further archaeological assessment (Golder 2010a).

Table 2: Summary of Locations 1 to 13 Investigated by Golder from 2008 to 2010

Location	Borden Number	Description	Date of Stage 3 Assessment	Stage 4 Mitigation Recommended
1	-	Late 19th to 20th century historic Euro-Canadian	N/A	-
2	AfHk-29	Pre-contact Aboriginal – Middle Woodland (*circa* 400 B.C. to A.D. 500)	December 5, 2009	No
3	AgHk-66	Pre-contact Aboriginal – Small Point Late Archaic period (*circa* 1500 to 1100 B.C.)	March 26, 2010	No
4	-	Pre-contact Aboriginal	N/A	-
5	AgHk-67	Mid-to-late 19th century Historic Euro-Canadian	March 25 and 26, 2010	No
6	-	Pre-contact Aboriginal	N/A	-
7	AgHj-5	Pre-contact Aboriginal	November 16, 2009	Yes
8	-	Pre-contact Aboriginal	N/A	-
9	AfHk-30	Early to late 19th century historic Euro-Canadian	March 29, 2010	No
10	-	Pre-contact Aboriginal	N/A	-
11	AgHk-68	Mid-to-late 19th century historic Euro-Canadian	March 24, 2010	No
12	-	Pre-contact Aboriginal	N/A	
13	-	Pre-contact Aboriginal	N/A	

Golder (2010b) conducted the Stage 3 archaeological assessments from November 2009 to March 2010 (PIFs P084-220-2009, P084-221-2009, and P084-198-2010). The Stage 3 excavations resulted in the following recommendations:

- Location 2 (AfHk-29) and Location 3 (AgHk-66) yielded no additional pre-contact Aboriginal material remains. Their cultural heritage value or interest was deemed to be low and sufficiently documented. Stage 4 archaeological mitigation of these sites was not recommended.
- Location 5 (AgHk-67), Location 9 (AfHk-30) and Location 11 (AgHk-68) yielded early-to-late 19th and early 20th century material culture. However, the nature of the assemblages (i.e. high proportions of breakable domestic items such as glass and ceramics and low proportions of personal and structural items) suggests that they are isolated mid-to-late 19th century domestic middens. As such, the cultural heritage value or interest of these sites was deemed to be low, sufficiently documented, and Stage 4 archaeological mitigation was not recommended.
- Location 7 (AgHj-5) yielded pre-contact Aboriginal material remains including a complete biface, 85 fragments of chipping detritus, a utilized flake and faunal remains. Given the number of artifacts recovered,

the cultural heritage value or interest of the site was deemed to be high. Stage 4 archaeological mitigation was recommended for this site, and has yet to be conducted.

In addition, a further inquiry of the ASDB by Golder identified an additional pre-contact Aboriginal site within one kilometre of the study area (personal communication, Robert von Bitter, February 6, 2012; Government of Ontario n.d.). The Wooley site (AfHj-114), is a Late Middle Archaic habitation that was documented and excavated by Archaeologix Inc. in 2003 and is located southeast of the study area. Over 5500 artifacts were recovered and analyzed during the Stage 2, 3 and 4 investigations of the site (Archaeologix Inc. 2003a, 2003b).

To date, no previous fieldwork has been conducted within 50 metres of the study area. However, as was noted above, both past and recent surveys of the Geographic Township of Adelaide have identified a number of pre-contact Aboriginal and historic Euro-Canadian sites. Table 3 provides a general outline of the culture history of Middlesex County, based on Ellis and Ferris (1990).

Table 3: Cultural Chronology of 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
	Broad Points	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 Shell Pottery	400 B.C. - A.D.500	increased sedentism
Late Woodland	Cord-Wrapped Stick Pottery	A.D. 500 - 1000	introduction of corn
	Early Ontario Iroquoian	A.D. 900/1000 - 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

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.

Background research and field work associated with the NEEC Bornish Wind Energy Centre was conducted from 2008 to 2010 by Archaeological Services Inc. (ASI) (ASI 2009a, 2009b, 2011) and in 2011 by Golder (Golder 2012a). Four pre-contact Aboriginal archaeological sites [i.e. AgHk-4 (Wyoming Rapids), AgHk-7 (Wyoming Reach), AgHk-12 (June 21-1), and AgHk-17 (85-2-1)] were previously registered within one kilometre of the NEEC Bornish Wind Energy Centre study area (Golder 2012a). During their Stage 2 archaeological assessment, ASI (2009b, 2011) documented 30 archaeological sites, 27 pre-contact Aboriginal and 30 historic Euro-Canadian. During our subsequent Stage 2 archaeological assessment, Golder (2012) documented 36 additional archaeological sites, 17 pre-contact Aboriginal, 18 historic Euro-Canadian, and one multi-component. Given the present NEEC Bornish Wind Energy Centre layout, Golder (2012a) recommended that 23 of the sites identified during the 2011-2012 [i.e. Locations 2 (AgHk-95), 4 (AgHk-96), 5 (AgHk-97), 10 (AgHj-6), 11 (AgHj-7), 12 (AgHj-8), 13 (AgHk-100), 14 (AgHk-101), 15 (AgHk-102), 16 (AgHk-103), 17 (AgHk-104), 18 (AgHk-105), 19 (AgHk-119), 20 (AgHk-106), 21 (AgHk-107), 22 (AgHk-108), 23 (AgHk-109), 24 (AgHk-110), 25 (AgHk-111), 26 (AgHk-117), 31 (AgHk-116), 34 (AgHk-114), and 35 (AgHk-115)] field seasons undergo Stage 3 archaeological assessment to further evaluate their cultural heritage value or interest in advance of any ground disturbance activities. In addition, two sites previously identified by ASI, P16 (AgHk-82) and P17 (AgHk-83), still require Stage 3 archaeological assessment.

Additionally, Golder (2012b) recently conducted a Stage 1 and 2 archaeological assessment of the Parkhill POI, which is located northeast of the study area and will connect the NEEC Bornish and Adelaide Wind Energy Centre properties to the hydro grid. One pre-contact Aboriginal archaeological site (AgHj-2) was previously registered within one kilometre of the POI study area. During the Stage 2 assessment of the Parkhill POI lands, a mid-to-late 19th century historic Euro-Canadian site (Location 1, AgHj-9) was documented. Golder (2012b) 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 study area. 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 Adelaide Creek in the western portion and Mud Creek in the eastern portion. 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 the Huron and Brantford soils series, which are silty clay loams and range from moderately well drained to imperfectly drained within the area of interest. Most of these soils would have been suitable for pre-contact Aboriginal agriculture given their modern agricultural capability ratings (Hagerty and Kingston 1992:74-96) although they would not be the highest yielding soil types available in Middlesex County.

The study area falls within a climatic region which is slightly warmer, slightly drier, and providing slightly more frost-free days than the adjacent South Slopes area of Middlesex County, but is quite similar to the Lake Huron-Georgian Bay area (Hagerty and Kingston 1992:16). This may have ameliorated 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 two pre-contact Aboriginal sites within a one kilometre radius of the study area. Somewhat further from the study area, but nearby, are the nine pre-contact Aboriginal sites documented by Golder in 2008 and 2009 (Table 2). These range from the Middle Archaic to the Middle Woodland, indicating that this area was favoured by pre-contact Aboriginal peoples between 6000 B.C. and A.D. 500.

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).

Due to the proximity of the study area to Adelaide and Mud Creeks, which functioned as potable water sources, as well as transportation routes, 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 archaeological assessment of the revised NextEra Adelaide Wind Energy Centre study area was conducted from June 29, 2011 to January 25, 2012, under the PIF P218-096-2011, issued to Scott Martin, Ph.D., by the MTCS and the PIF P319-015-2012, issued to Irena Jurakic, M.A., by the MTCS. During the Stage 2 field work, the weather ranged from warm and sunny to cold 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 116 hectares and consists of ploughed, well-weathered agricultural fields and recently disturbed municipal right-of-ways.

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 17th century and the beginning of the 18th 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 area first enters the Euro-Canadian historic record as part of Treaty Nos. 21 and 27½ made between the First Nation inhabitants of the area and the British. Treaty No. 21 was a provisional agreement signed on March 19, 1819, between John Aiken, Esquire, on behalf of His Majesty, and the Principal Men of the Chippewa Nation of Indians (Morris 1943:24). It encompassed the tract of land:

> *Commencing at the northerly side of the River Thames at the south west angle of the Township of London; thence along the western boundary of the Township of London, in a course north 21 degrees, 30 minutes west, twelve miles to the north west angle of the said Township; then on a course about south 62 degrees and 30 minutes west forty-eight miles more or less until it intersects a line on a course produced north two miles from the north east angle of the Shawnee [Sombra] Township; then along the eastern boundary line of the said Township, twelve miles and a half more or less to the northern boundary line of the Township of Chatham; then east twenty-four miles more or less to the River Thames; then along the waters edge of the River Thames against the stream to the place of beginning, reserving a tract of land situate[d] on the northerly side of the River Thames nearly opposite to the northerly angle of the Township of Southwold and south west angle of the Del[a]ware Township containing 15,360 acres; also reserving two miles square distant about four miles above the rapids where the Indians have their improvements and nearly parallel to the Moravian Village containing 5,120 acres*.
>
> (Morris 1943: 24-25)

Treaty No. 21 was further modified in Treaty No. 280½ (Canada 1891: 281-282) and finally confirmed in Treaty No. 25, which modified the method of quantity of payment to the First Nations groups concerned, with some minor variation in the description of the land surrender (Morris 1943: 25).

A small portion of the northwest corner of the Geographic Township of Adelaide was later surrendered in Treaty No. 27½,

> *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. 27½ was subsequently confirmed on July 10th, 1827 as Treaty No. 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 delineate treaty boundaries today, Figure 3 shows the approximate location of the current study area within the relevant Treaty areas.

Due to the proximity of the study area to Adelaide and Mud Creeks, which functioned as potable water sources and transportation routes, 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 first Euro-Canadian settlement of the area began in the 1830s after Egremont Road was laid through the study area in 1831 by the Deputy Surveyor Peter Carroll (Carroll 1831a, Carroll 1831b). This survey lay in the route of Egremont Road along with "three tiers of lots on either side" (Nielsen 1993:6). He then finished the remainder of the survey of the township in 1832 (Nielsen 1993:8).

Close examination of the study area as depicted on the original township map, made by Peter Carroll in Oxford County on December 29, 1831, does not reveal any squatters recorded from before 1831 or any notable First Nations activity in the area.

Two later maps from the 19th century record the Euro-Canadian settlers and illustrate the growth in the study area: the 1862 Tremaine Map (Tremaine 1862) and the 1878 H.R. Page and Company Historical Atlas Map (H.R. Page 1878), which are both further discussed in Golder 2009. The Tremaine Map provides the names of all of the landowners but only illustrates a select number of structures on the properties. However, the later Historical Atlas Map (Figure 3) not only provides the names of the landowners but also the structures on the majority of the properties. Besides houses, the structures noted include brickyards, cemeteries, churches, hotels, manufactories, mills, and schools. Even though locations are only approximate on these maps, they do give an idea of potential for significant archaeological historic remains that could be impacted within the study area. Typically these locations no longer exhibit any visible evidence of their former structure and if they are to be impacted by a wind turbine placement the location would need to be archaeologically assessed to see if there are any archaeological remains. A number of potentially archaeologically significant locations were identified within the study area, as discussed in detail in the Stage 1 archaeological assessment (Golder 2009). In addition, four other communities with potential archaeological resources were identified in the Stage 1 archaeological assessment: Adelaide, Keyser, Mullifarry, and Napperton.

Given evidence for Euro-Canadian settlement in the Geographic Township of Adelaide since the early 19th century plus evidence of abandoned village sites the potential for historic Euro-Canadian archaeological resources was judged to be moderate to high.

1.3.3 Recent Reports

In addition to the existing historic documentation, the properties considered for the NEEC Adelaide Wind Energy Centre have been reported on in recent archaeological assessments. The Stage 1 archaeological assessment was conducted by Golder and was entitled *Stage 1 Archaeological Assessment, Air Energy TCI Adelaide Wind Farm Various Lots, Concession 1 to 5 N.E.R. and 1 to 4 S.E.R., Geographic Township of Adelaide, Middlesex County, Ontario* (Golder 2009), produced by Golder in April 2009 under PIF P001-422-2008. The first Stage 2 archaeological assessment was conducted by Golder and was entitled *Stage 2 Archaeological Assessment, NextEra Adelaide Wind Farm, Various Lots, Concession 1 to 5 N.E.R. and 1 to 4 S.E.R., Geo. Township of Adelaide, Middlesex County, Ontario* (Golder 2010a), produced by Golder in March 2010 under PIFs P001-452-2008, P001-526-2009, and P084-197-2010. A Stage 3 assessment was also conducted by Golder and was entitled *Stage 3 Archaeological Assessment, NextEra Adelaide Wind Farm, Various Lots, Concession 1 to 5 N.E.R. and 1 to 4 S.E.R., Geo. Township of Adelaide, Middlesex County, Ontario* (Golder 2010b), produced by Golder in April 2010 under PIFs P084-220-2009, P084-221-2009 and P084-198-2010.

The properties considered for the NEEC Bornish Wind Energy Centre have also been reported on in recent archaeological assessments. The Stage 1 archaeological assessment was conducted by ASI and was entitled *Stage 1 Archaeological Assessment, Canadian Greenpower Wind Project, Counties of Huron, Middlesex and Lambton, Ontario* (ASI 2009a) produced 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. The third part of the Stage 2 archaeological assessment was conducted by Golder (2012a) in 2011 and 2012 and was entitled *Stage 2 Archaeological Assessment, NextEra Bornish Wind Energy Centre, Municipality of North Middlesex, Middlesex County, Ontario*, and was produced on February 14, 2012 under PIF P218-097-2011 and PIF P319-013-2012.

Finally, Golder (2012b) 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 on February 7, 2012 under PIF P319-018-2012.

2.0 FIELD METHODS

Approximately 76% of the project area to be impacted by the wind farm development was subject to pedestrian survey, while the remaining 24% 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 1 to 20 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 Figure 4 and Supplement A. During the Stage 2 pedestrian survey, the weather ranged from warm and sunny to cold 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 portions of Cuddy Drive (Plate 21), Egremont Drive, Kerwood Road (Plate 22), Seed Road, and Sullivan Road 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 1, 5, 6, 7, 9, 11, 13, 16, 17, 19), the Stage 2 assessment was conducted using pedestrian survey at an interval of five metres (Plates 2, 3, 4, 10, 12, 14, 15, 18, 20). 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 8) and spanned a minimal 20 metre radius around the identified artifact. This approach established if the artifact was an isolated find or rather, 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).

More specifically, 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 and all roads or roads with collector cables alongside were surveyed as 60 metre wide corridors. Collector cable corridors that were limited to municipal right-of-ways were surveyed from the road edge to the edge of the right-of-way and in all cases were deemed disturbed due to ditching and recent disturbance through road construction (Plates 21 and 22 illustrate two such examples). 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 15 archaeological sites. These are presented in the supplementary documentation (Supplement B). Figure 4 illustrates the Stage 2 field assessment methods across the study area, while Supplement A illustrates both the Stage 2 field assessment methods and results.

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

3.0 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 field work is provided in Table 4 below and the Stage 2 archaeological assessment results are discussed here. Golder's Stage 2 survey of the proposed NEEC Adelaide Wind Energy Centre properties identified a total of 15 archaeological sites, eight pre-contact Aboriginal and seven historic Euro-Canadian. 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 4: 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	Stored in project file
Digital Photographs	Golder office in Mississauga	Stored digitally in project file

All of the material culture collected during the NEEC Adelaide Wind Energy Centre Stage 2 archaeological assessment is contained in one banker's box. It will be temporarily housed at Golder's Mississauga office until formal arrangements can be made for its transfer to a MTCS collections facility.

The 15 archaeological sites include eight locations with a pre-contact Aboriginal lithic industry component. The chert types identified in the discussion below include:

- **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 (Eley and von Bitter 1989; Fox 2009:362).
- **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 (Eley and von Bitter 1989; Fox 2009:361-362).

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 15 sites include seven 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 14 (AgHj-10)

The Stage 2 pedestrian survey (Plate 3) of the wind energy components on property ADL1045, west of Robotham Road on the north side of Egremont Drive (Figure 4, Supplement A: Figure 09), resulted in the identification of Location 14 (AgHj-10). This pre-contact Aboriginal site, examined during sunny and hot conditions on July 11, 2011, consists of a single Early Archaic (*circa* 8000 to 6000 B.C.) Kirk corner-notched or Nettling projectile point (Ellis *et al.* 1990; Justice 1987; Pengelly 1991) manufactured from Onondaga chert (Plate 23). This point, identified along the collector cable corridor and access road for Turbine 10 has a narrow base with uneven sides and notching. It measures 38.46 millimetres in length, 26.01 millimetres in width, is 5.22 millimetres thick, with a basal width of 9.94 millimetres, a shoulder width of 25.36 millimetres, and an inter-notch width of 9.80 millimetres. 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.

3.1.1 Artifact Catalogue

Table 5 presents the Stage 2 artifact catalogue for Location 14 (AgHj-10).

Table 5: Location 14 (AgHj-10) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comment
1	surface collection	0 cm	projectile point	1	Onondaga chert, Kirk corner-notched or Nettling (Early Archaic, *circa* 8000 to 6000 B.C.), narrow base, uneven sides and notching

3.2 Location 15

The Stage 2 pedestrian survey (Plate 4) of the proposed wind energy components on property ADL1027 identified Location 15 (Figure 4, Supplement A: Figure 09). This pre-contact Aboriginal site, consisting of an isolated end scraper (Plate 24) manufactured from Kettle Point chert, was documented on July 11, 2011 under sunny and hot conditions. It is fashioned out of a secondary flake (missing its platform), and retouch is visible along two of the edges. The scraper measures 25.29 millimetres long, 28.32 millimetres wide, and is 11.35 millimetres thick. Location 15 lies between the northeastern edge of the proposed Turbine 12 pad and the access road, west of Robotham Road on the north side of Egremont Drive. As detailed in Section 2.0, survey intervals were intensified to one metre within a twenty metre radius of the find but no other artifacts were found.

3.2.1 Artifact Catalogue

Table 6 presents the Stage 2 artifact catalogue for Location 15.

Table 6: Location 15 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comment
1	surface collection	0 cm	scraper	1	Kettle Point chert, end scraper, fashioned out of a secondary flake, retouch visible along two edges, used along these two edges, missing platform

3.3 Location 16

While investigating the proposed location of the wind energy components on property ADL1049 on July 11, 2011, the Stage 2 pedestrian survey (Plate 15) resulted in the recovery of an isolated pre-contact Aboriginal utilized lithic flake (Plate 25), designated Location 16 (Figure 4, Supplement A: Figure 19). This site is located just east of Brown Road and south of Mullifarry Drive, and was identified on a sunny, hot day. The flake is a tertiary piece of chipping detritus with evidence of use along one edge. 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.

3.3.1 Artifact Catalogue

Table 7 presents the Stage 2 artifact catalogue for Location 16.

Table 7: Location 16 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comment
1	surface collection	0 cm	utilized flake	1	Kettle Point chert, one edge, tertiary flake

3.4 Location 17

Location 17 was identified on August 29, 2011, a sunny and hot day, during the Stage 2 pedestrian survey of the proposed access road and collector cable corridor for Turbine 15 on ADL1028 (west of Kerwood Road on the south side of Highway 402) (Figure 4, Supplement A: Figure 13). Location 17 consists of a six metre (along the north-south axis) by 31 metre (along the west-east axis) scatter of approximately 15 fragments of late 19th to early 20th century Euro-Canadian domestic debris. In total, four domestic Euro-Canadian artifacts were collected during the Stage 2 assessment. These are discussed in greater detail below.

3.4.1 Domestic Artifacts

3.4.1.1 Glass Artifacts

Four fragments of domestic glass were recovered from Location 17, including two fragments of pressed moulded white glass (Plate 26:1), a single fragment of white glass, and a single fragment of clear or colourless pressed moulded glass dish (Plate 26:2). Opaque white, or “milk” glass was most commonly used for cosmetic containers, toiletry bottles or cream from about 1870 through to the 20th century (Lindsey 2012). Pressed glass

dishes and dishwares can also be temporally diagnostic; non-leaded pressed glass in a variety of patterns becomes common on Canadian sites post-1860 (Jones and Sullivan 1989:35).

3.4.2 Artifact Catalogue

Table 8 provides the Stage 2 artifact catalogue for this historic Euro-Canadian site.

Table 8: Location 17 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	glass, white	1	
2	surface collection	0 cm	glass, dish	1	clear or colourless geometric pattern pressed moulded glass dish
3	surface collection	0 cm	glass, white	1	pressed moulded white glass
4	surface collection	0 cm	glass, white	1	pressed moulded white glass

3.5 Location 18

The Stage 2 pedestrian survey (Plate 14) of the proposed wind energy components on property ADL1007 identified Location 18 (Figure 4, Supplement A: Figure 15). This pre-contact Aboriginal site was documented under sunny and warm conditions on September 20, 2011 and measures approximately 10 metres (along the north-south axis) by 35 metres (along the west-east axis). It consists of five pieces of chipping detritus (Plate 27), all of which were collected. This small scatter is located along the proposed collector cable corridor between Turbines 23 and 24, east of Brown Road on the south side of Highway 402.

3.5.1 Chipping Detritus

A total of five lithic flakes, all Kettle Point chert, were collected during the Stage 2 investigation of Location 18. Their morphology is presented in Table 9. All stages of the lithic reduction and tool production sequence are represented.

Table 9: Location 18 Chipping Detritus

Chert	Primary		Secondary		Tertiary		Total	
	#	%	#	%	#	%	#	%
Kettle Point	1	20.00	3	60.00	1	20.00	5	100.00
Total	**1**	**20.00**	**3**	**60.00**	**1**	**20.00**	**5**	**100.00**

3.5.2 Artifact Catalogue

Table 10 presents the Stage 2 artifact catalogue for Location 18.

Table 10: Location 18 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comment
1	surface collection	0 cm	chipping detritus	5	Kettle Point chert

3.6 Location 19 (AeHk-42)

Location 19, a historic Euro-Canadian site, was identified on September 20, 2011 during the Stage 2 pedestrian survey of the proposed Turbine 25 access road and collector cable corridor on ADL1040, west of Seed Road on the north side of Mullifarry Drive (Figure 4, Supplement A: Figure 15). The weather conditions were sunny and warm the day of the survey. Location 19 consists of a 10 metre (along the north-south axis) by five metre (along the west-east axis) scatter of 25 fragments of mid-19th century Euro-Canadian domestic debris. In total, 14 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 13 domestic and one structural (Table 11). Each artifact class is discussed in greater detail below.

Table 11: Location 19 (AeHk-42) Historic Euro-Canadian Artifacts

Artifact	Frequency	%
domestic	13	92.86
structural	1	7.14
Total	**14**	**100.00**

3.6.1 Domestic Artifacts

A total of 13 domestic artifacts were collected during the Stage 2 assessment of Location 19. This collection includes eight ceramic artifacts, three glass artifacts and two faunal remains.

3.6.1.1 Ceramic Artifacts

In total, eight fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 19. Included in this total are seven fragments of whiteware and one fragment of utilitarian kitchenware. Table 12 provides a summary of the ceramic collection according to ceramic ware type, while Table 13 provides a more detailed breakdown of the ceramic assemblage by decorative style.

Table 12: Summary of Ceramic Collection According to Ware Type, Location 19 (AeHk-42)

Artifact	Frequency	%
whiteware	7	87.50
utilitarian	1	12.50
Total	**8**	**100.00**

Table 13: Summary of Ceramic Collection According to Decorative Style, Location 19 (AeHk-42)

Artifact	Frequency	%
whiteware, plain	4	50.00
whiteware, painted	3	37.50
earthenware, yellow	1	12.50
Total	**8**	**100.00**

White Earthenware

The most prevalent ceramic type (n=7 or 87.50% of the ceramic collection) at Location 19 is whiteware. Whiteware is a variety of earthenware with a near colorless 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 19th century (Kenyon 1985). Painted whiteware was popular from as early as 1830 through to the 1870s (South 1977; Miller 1991). Three fragments in the ceramic assemblage are plain, undecorated whiteware (Plate 28:1), while three are hand painted (Plate 28:2). Two fragments are teawares, with a black and red pinstripe at the lip respectively and one fragment is blue.

Utilitarian Earthenware

One fragment of yellow earthenware was collected during the Stage 2 assessment. Yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99).

3.6.1.2 Glass Artifacts

Three fragments of domestic bottle glass were recovered from Location 19. This assemblage includes two fragments of olive bottle glass and one fragment of aqua glass exhibiting an open pontil base, indicating a manufacture date preceding 1870 (Lindsey 2012).

3.6.1.3 Faunal Remains

Two fragments of faunal remains were collected at Location 19 (Table 14). This includes a fragmentary incisor, likely from a groundhog (*Marmota monax*) and a fragment of cortical long bone, likely from a large ungulate.

Table 14: Breakdown of Faunal Remains by Specimen

Cat. #	Class	Species	Element	Complete?	Additional comments
12	Mammalia	*Marmota monax*	fragmentary incisor	fragmentary	likely Groundhog/ Woodchuck (*Marmota monax*)

Cat. #	Class	Species	Element	Complete?	Additional comments
13	Mammalia	large-sized	cortical long bone	fragmentary	likely ungulate

3.6.2 Structural Remains

A single fragment of window glass was collected at Location 19 and it measures 1.0 millimetre in thickness. Window glass can be temporally diagnostic as indicated by overall thickness. A sample of window glass dating to the first half of the 19th 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). A single fragment of window glass is too small a sample size to be used as a reliable diagnostic indicator.

3.6.3 Artifact Catalogue

Table 15 provides the Stage 2 artifact catalogue for Location 19.

Table 15: Location 19 (AeHk-42) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	glass, bottle	1	open pontil base; aqua; likely prior to 1870
2	surface collection	0 cm	whiteware	1	
3	surface collection	0 cm	earthenware, yellow	1	
4	surface collection	0 cm	glass, bottle	1	olive
5	surface collection	0 cm	whiteware, painted	1	black pinstripe at lip; teacup
6	surface collection	0 cm	whiteware, painted	1	blue
7	surface collection	0 cm	glass, window	1	1mm thick
8	surface collection	0 cm	whiteware	1	
9	surface collection	0 cm	whiteware, painted	1	red pinstripe at lip; teacup
10	surface collection	0 cm	whiteware	1	
11	surface collection	0 cm	glass, bottle	1	olive
12	surface collection	0 cm	faunal remains	1	incisor fragment, medium sized rodent, likely Groundhog/ Woodchuck (*Marmota monax*)
13	surface collection	0 cm	faunal remains	1	cortical bone fragment; large sized mammal, likely ungulate
14	surface collection	0 cm	whiteware	1	rim fragment

3.7 Location 20 (AgHk-121)

Location 20 (AgHk-121), a historic Euro-Canadian site, was identified on November 10, 2011 during the Stage 2 pedestrian survey (Plate 2) of the proposed Turbine 7 pad on ADL1048 (east of School Road and on the north side of Egremont Drive) (Figure 4, Supplement A: Figure 05). Weather conditions were windy with a mix of sun

and cloud during the survey. Location 20 consists of a 20 metre (along the north-south axis) by 10 metre (along the west-east axis) scatter of approximately 45 fragments of late 19th and early 20th century Euro-Canadian domestic debris. The historic scatter stretches south outside of the boundary currently set for the turbine pad. In total, 15 Euro-Canadian artifacts, which include 12 domestic items and three fragments of recent material, were collected during the Stage 2 assessment (Table 16). Each artifact class is discussed in greater detail below.

Table 16: Location 20 (AgHk-121) Historic Euro-Canadian Artifacts

Artifact	Frequency	%
domestic	12	80.00
recent material	3	20.00
Total	**15**	**100.00**

3.7.1 Domestic Artifacts

A total of 12 domestic artifacts were collected during the Stage 2 assessment of Location 20. This collection includes five ceramic artifacts and seven fragments of domestic glass.

3.7.1.1 Ceramic Artifacts

In total, five fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 20. Included in this total are three utilitarian kitchenwares, one fragment of ironstone, and a single fragment of porcelain. Table 17 provides a detailed breakdown of the ceramic assemblage by decorative style.

Table 17: Summary of Ceramic Collection According to Decorative Style, Location 20 (AgHk-121)

Artifact	Frequency	%
earthenware, red	2	40.00
stoneware, salt glazed	1	20.00
ironstone, moulded	1	20.00
porcelain	1	20.00
Total	**5**	**100.00**

Utilitarian Earthenware

A total of three fragments of utilitarian earthenwares were collected. This includes two fragments of lead glazed red earthenware, and one buff paste salt glazed stoneware fragment with a clear salt glaze. Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99).

Ironstone

A single fragment of moulded ironstone in the form of a scalloped teacup fragment is part of the Location 20 ceramic assemblage (Plate 29:1). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, was widely available in the 1840s, and was extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985).

Porcelain

Porcelain is a type of earthenware fired at such a high temperature that the clay has begun to vitrify; consequently the ceramic is translucent when held up to light. The Canadian pioneer generally preferred utilitarian earthenwares, but by the mid-19th century, English potteries, such as Copeland and Minton, were producing porcelains for the Canadian marketplace. Porcelain was not required 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 part of the ceramic assemblage (Plate 29:2).

3.7.1.2 Glass Artifacts

Seven fragments of domestic bottle glass were recovered from Location 20. Colours present in the glass assemblage include two olive, two sun coloured amethyst, and one fragment of aqua, amber and cobalt blue glass, respectively. The use of manganese, or "glassmaker's 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, known as sun coloured amethyst glass, generally dates from the 1880s to 1920. A single fragment of the sun coloured amethyst glass in the Location 20 assemblage bears a partial valve mark, indicating that it may postdate 1898.

Aqua coloured glass fragments generally originate from medical and pharmaceutical products, including patent medicine bottles of the 19th and 20th century (Kendrick 1971).

3.7.2 Recent Material

Three fragments of modern bottle glass were also collected during the Stage 2 assessment of Location 20.

3.7.3 Artifact Catalogue

Table 18 provides the Stage 2 artifact catalogue for this historic Euro-Canadian site.

Table 18: Location 20 (AgHk-121) Stage 2 Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	glass, bottle	1	olive
2	surface collection	0 cm	ironstone, moulded	1	scalloped teacup fragment

Cat. #	Context	Depth	Artifact	Freq.	Comments
3	surface collection	0 cm	porcelain	1	low grade white porcelain
4	surface collection	0 cm	glass, bottle	1	sun coloured amethyst basal fragment; valve mark after 1898
5	surface collection	0 cm	stoneware, salt glazed	1	buff paste with clear salt glaze
6	surface collection	0 cm	glass, bottle	1	sun coloured amethyst
7	surface collection	0 cm	earthenware, red	2	lead glazed
8	surface collection	0 cm	glass, bottle	3	1 olive, 1 amber, 1 cobalt blue
9	surface collection	0 cm	recent material	3	modern bottle glass
10	surface collection	0 cm	glass, bottle	1	aqua

3.8 Location 21

The Stage 2 pedestrian survey (Plate 2) of the proposed wind energy components on property ADL1048, resulted in the identification of Location 21 (Figure 4, Supplement A: Figure 05) on November 10, 2011. It was identified on the Turbine 7 pad, east of School Road and on the north side of Egremont Drive. The weather conditions were windy, with a mix of sun and cloud conditions. This pre-contact Aboriginal site consists of one retouched flake (Plate 30) manufactured from Kettle Point chert, with one edge demonstrating retouch and another demonstrating use. It was fashioned out of a secondary flake. As detailed in Section 2.0, survey intervals were intensified to one metre within a twenty metre radius of the find but no additional artifacts were found.

3.8.1 Artifact Catalogue

Table 19 presents the Stage 2 artifact catalogue for Location 21.

Table 19: Location 21 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comment
1	surface collection	0 cm	retouched flake	1	Kettle Point chert, 1 x 2 edges retouched, additional edge utilized, fashioned out of a secondary flake

3.9 Location 22 (AgHk-122)

Location 22, a historic Euro-Canadian site, was identified on November 17, 2011. The weather conditions during the Stage 2 pedestrian survey (Plate 2) of the proposed road access and collector cable corridor on property ADL1048 (east of School Road, on the south side of Cuddy Drive) (Figure 4, Supplement A: Figure 05) were cold and sunny. Location 22 (AgHk-122) consists of a 60 metre (along the north-south axis) by 60 metre (along the west-east axis) scatter of approximately 300 fragments of mid-to-late 19th century Euro-Canadian domestic debris. In total, 117 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 99

domestic, six structural, five personal, five recent, and two metal (Table 20). Each artifact class is discussed in greater detail below.

Table 20: Location 22 (AgHk-122) Historic Euro-Canadian Artifacts

Artifact	Frequency	%
domestic	99	84.62
structural	6	5.13
personal	5	4.27
recent material	5	4.27
metal	2	1.70
Total	**117**	**100.00**

3.9.1 Domestic Artifacts

A total of 99 domestic artifacts were collected during the Stage 2 assessment of Location 22. This collection includes 62 ceramic artifacts and 37 glass artifacts.

3.9.1.1 Ceramic Artifacts

In total, 62 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 22. Included in this total are: 28 ironstone, 22 whiteware, five porcelain, five utilitarian and two pearlware. Table 21 provides a summary of the ceramic collection according to ware type, while Table 22 provides a more detailed breakdown of the ceramic assemblage by decorative style.

Table 21: Summary of Ceramic Collection According to Ware Type, Location 22 (AgHk-122)

Artifact	Frequency	%
ironstone	28	45.16
whiteware	22	35.48
porcelain	5	8.06
utilitarian earthenware	5	8.06
pearlware	2	3.24
Total	**62**	**100.00**

Table 22: Summary of Ceramic Collection According to Decorative Style, Location 22 (AgHk-122)

Artifact	Frequency	%
ironstone, plain	17	27.41
whiteware, transfer printed	8	12.90

Artifact	Frequency	%
ironstone, moulded	6	9.68
whiteware, flow transfer printed	5	8.06
whiteware, plain	4	6.45
whiteware, sponged	4	6.45
ironstone, painted	3	4.84
earthenware, yellow	2	3.23
ironstone, transfer printed	2	3.23
pearlware, transfer printed	2	3.23
porcelain, plain	2	3.23
porcelain, painted	2	3.23
stoneware, salt glazed	2	3.23
earthenware, red	1	1.61
porcelain, transfer printed	1	1.61
whiteware, stamped	1	1.61
Total	**62**	**100.00**

Ironstone

The most common ceramic type collected during the Stage 2 assessment of this location is ironstone (n=30 or 48.39%). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). It is usually much thicker than other whiteware and often decorated with raised moulded designs of wheat or fruit.

Seventeen fragments of ironstone in the assemblage are plain or undecorated (Plate 31:1), with two pieces bearing fragmentary Royal Coat of Arms (Plate 31:1) and two partial and fragmentary illegible maker's marks. One of the marked Royal Coat of Arms pieces is too fragmentary to identify as other than 19th century, but the second fragment is missing the centre shield of the Hanovers. This means that it was made during the reign of Queen Victoria and thus postdates 1837 (Birks 2012). Moulded fragments in the assemblage include two wheat pattern teacup fragments, three with indeterminate moulded patterns, and a moulded jug handle fragment (Plate 31:2). The wheat design, also referred to as "Ceres", was the most popular ironstone pattern produced and has a production range of 1859 to present (Sussman 1985:7). Hand painted ironstone in the assemblage includes two hollowware lip fragments with a brown pinstripe and a single fragment of polychrome floral decorated teaware (Plate 31:3). Two fragments in the ironstone are transfer print decorated, including a single fragment of a blue rim and a brown decorated rim (Plate 31:4).

White Earthenware

Whiteware is a variety of earthenware with a near colorless 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 19th century (Kenyon 1985). Twenty-two fragments of whiteware have been identified in the Location 22 (AgHk-122) ceramic assemblage: eight transfer printed, five flow transfer printed, four plain or undecorated, four sponged, and a single fragment of stamped whiteware.

Within the transfer print assemblage, seven fragments are blue including three fragments that refit and represent a teacup, and a single fragment that is green transfer printed (Plate 31:5). Five flow blue transfer printed fragments are in the assemblage including three rim fragments and two fragments that can be identified as hollowware vessels (Plate 31:6). Flow transfer printed whiteware, in which the pigment flows into the glaze due to the introduction of volatile chlorides during firing, became popular in the 1840s and 1850s, with a later revival in the 1890s (Collard 1967:118). Four fragments of whiteware in the assemblage are plain or undecorated (Plate 31:7), but one bears a fragmentary mark of “England” indicating that it is likely post-1850 (Birks 2012).

Four of the fragments in the assemblage are blue sponge decorated (Plate 31:8) and a single fragment is from polychrome stamped teaware (Plate 31:9). Stamped and sponge decorated whiteware ceramics were a form of inexpensive tableware in which a sponge was used to apply an underglaze pigment. All-over sponging became popular by the 1840s and remained common until the 1870s.

Porcelain

The Canadian pioneer generally preferred utilitarian earthenwares, but by the mid-19th 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). Five fragments of low grade white porcelain are part of the ceramic assemblage from Location 22 including two plain, undecorated fragments, two green hand painted dish and lid fragments (Plate 31:10) and a single basal fragment decorated with an overglaze transfer printed floral motif (Plate 31:11).

Utilitarian Earthenware

A total of five fragments of utilitarian earthenwares were collected. This includes two fragments of lead glazed yellow earthenware, two fragments of salt glazed stoneware (one fragment with buff paste, clear exterior salt glaze and Albany slip interior; one fragment with buff paste, light brown exterior salt glaze and clear interior salt glaze), and a single fragment of lead glazed red earthenware. Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels. Stoneware vessels were also produced throughout the 19th century, becoming more durable and refined over time (Adams 1994:99).

Pearlware

Pearlware, sometimes referred to as “China glazed”, is a variety of earthenware that was popular from 1780 to 1840. Pearlware is often difficult to recognize because of its similar appearance to later whiteware ceramics, however, because of the addition of cobalt, the glaze has a light blue to blue-green tint. When placed on white earthenware bisque, this glaze gave the impression of a “whiter” ware than the earlier yellow tinted creamware.

Transfer printing on pearlware was developed as early as 1780, but did not become common in Upper Canada until around 1810. The early transfer printed pearlwares were most frequently decorated in blue (Kenyon 1985). The two fragments of transfer printed pearlware in the assemblage are decorated with dense, blue patterns (Plate 31:12).

3.9.1.2 Glass Artifacts

Thirty-seven glass artifacts were recovered from Location 22. This collection includes 32 fragments of bottle glass, two fragments of glass dish, two fragments of white glass and one fragment of clear lamp chimney glass with a decorated moulded dot edge. Colours present in the bottle glass assemblage include: nine aqua, six clear or colourless, five olive, five sun coloured amethyst, three black, two amber and two cobalt blue.

Diagnostic colours in the assemblage include the aqua glass, generally originating from medical and pharmaceutical products, including patent medicine bottles of the 19th and 20th 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). The “black” glass likely dates from the early-to-mid 19th 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). Sun coloured amethyst glass generally dates from the 1880s to 1920. Opaque white, or “milk” glass was most commonly used for cosmetic containers, toiletry bottles or cream jars and was very commonly used for such products dating from about 1870 through to the 20th century (Lindsey 2012).

Glass dish fragments in the assemblage include a jade green scalloped fragment and one scalloped clear glass fragment. Pressed glass dishes and dishwares can also be temporally diagnostic. Non-leaded pressed glass in a variety of patterns becomes common on Canadian sites after 1860 (Jones and Sullivan 1989:35).

Three fragments of bottle glass in the Location 22 domestic assemblage also bear diagnostic finishes: one aqua string-rim finish from the mid-19th century (Plate 32:1), one clear or colourless glass capseat finish post-1889 (Plate 32:2) and a single fragment of black glass bearing an applied double oil finish dating from 1820 to 1860 (Plate 32:3) (Lindsey 2012).

3.9.2 Structural Artifacts

Five structural remains were collected, including three wire drawn nails (Plate 32:4), two machine cut nails (Plate 32:5), 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).

3.9.3 Personal Artifacts

Five personal items were collected during the Stage 2 assessment of Location 22 including three white agate buttons (Plate 32:6), a fragment of shoe leather with six metal grommets for lacing (Plate 32:7) and a single unmarked white clay pipe stem (Plate 32:8). White clay pipes were very popular throughout the 19th century, with a decline in use by 1880 when they were replaced by briar pipes and cigarettes (Adams 1994:93). Agate buttons are made from pressed ceramic powder manufactured by the "Prosser" process patented in 1840. They became common from the late 1840s onwards. Agate buttons, which are often confused with white glass buttons, are distinguishable due to the dimpled appearance of the back of the button which is a result of the moulding process (Adams 1994:96).

3.9.4 Recent Material

Five fragments of recent material were also collected from Location 22 during Stage 2 assessment including two fragments of drainage pipe, one glass marble, one fragment of modern bottle glass and a fragment of ceramic electrical conductor.

3.9.5 Metal Artifacts

Two metal artifacts were also part of the Stage 2 artifact assemblage including one heavily corroded unidentified fragment of metal and a heavily corroded fragment that is likely part of a hinge. Neither of these artifacts is temporally diagnostic.

3.9.6 Artifact Catalogue

Table 23 presents the Stage 2 artifact catalogue for Location 22.

Table 23: Location 22 (AgHk-122) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	recent material	2	1 glass marble; 1 fragment modern bottle glass
2	surface collection	0 cm	pearlware, transfer printed	1	dense blue; small fragment
3	surface collection	0 cm	whiteware, flow transfer printed	1	blue - hollowware rim
4	surface collection	0 cm	ironstone, transfer printed	2	1 brown, 1 blue - rims
5	surface collection	0 cm	ironstone, moulded	4	2 rims indeterminate patterns, 1 jug handle fragment, 1 assorted indeterminate pattern
6	surface collection	0 cm	ironstone	15	6 basal, 5 assorted, 2 rims, 2 partial maker's marks - illegible stamps,
7	surface collection	0 cm	glass, lamp chimney	1	moulded dot clear or colourless glass rim fragment

Cat. #	Context	Depth	Artifact	Freq.	Comments
8	surface collection	0 cm	glass, indeterminate	1	melted aqua glass
9	surface collection	0 cm	glass, dish	2	1 scalloped jade green fragment, 1 scalloped clear fragment - both pressed moulded
10	surface collection	0 cm	glass, white	2	cosmetic jar fragments
11	surface collection	0 cm	glass, bottle	15	5 olive, 2 amber, 2 cobalt blue, 1 light blue, 5 clear or colourless
12	surface collection	0 cm	stoneware, salt glazed	2	1 buff paste with clear exterior salt glaze and Albany slip interior; 1 buff paste with light brown exterior salt glaze and clear interior salt glaze
13	surface collection	0 cm	earthenware, red	1	lead glazed
14	surface collection	0 cm	earthenware, yellow	2	lead glazed
15	surface collection	0 cm	glass, window	1	2.0mm
16	surface collection	0 cm	metal, miscellaneous hardware	1	heavily corroded; hinge fragment?
17	surface collection	0 cm	metal, miscellaneous unidentified	1	heavily corroded
18	surface collection	0 cm	nail, wire	2	
19	surface collection	0 cm	nail, cut	1	
20	surface collection	0 cm	whiteware	3	
21	surface collection	0 cm	ironstone, painted	2	2 teacup fragment with brown pinstripe - likely from same vessel
22	surface collection	0 cm	whiteware, stamped	1	polychrome stamped teaware
23	surface collection	0 cm	whiteware, sponged	2	blue hollowware
24	surface collection	0 cm	whiteware, transfer printed	1	3 refit blue teacup
25	surface collection	0 cm	button, agate	1	4 hole white
26	surface collection	0 cm	shoe	1	fragment of leather with 6 grommets lacing
27	surface collection	0 cm	white clay pipe stem	1	
28	surface collection	0 cm	porcelain	2	1 base, 1 lip; low grade white porcelain
29	surface collection	0 cm	porcelain, transfer printed	1	overglaze transfer printed floral basal fragment
30	surface collection	0 cm	porcelain, painted	2	green painted dish and lid fragments
31	surface collection	0 cm	nail, cut	1	
32	surface collection	0 cm	glass, bottle	1	aqua; string rim finish circa mid-19th century
33	surface collection	0 cm	ironstone, moulded	1	wheat pattern teacup fragment
34	surface collection	0 cm	whiteware, flow transfer printed	1	blue rim

Cat. #	Context	Depth	Artifact	Freq.	Comments
35	surface collection	0 cm	whiteware, flow transfer printed	1	blue rim
36	surface collection	0 cm	glass, bottle	1	black; applied double oil finish 1820-1860
37	surface collection	0 cm	glass, bottle	1	clear or colourless glass; capseat finish post 1889
38	surface collection	0 cm	button, agate	1	4 hole white
39	surface collection	0 cm	pearlware, transfer printed	1	dense blue; basal fragment
40	surface collection	0 cm	whiteware, transfer printed	1	blue
41	surface collection	0 cm	whiteware, transfer printed	1	blue
42	surface collection	0 cm	whiteware	1	partial maker's mark: "England"
43	surface collection	0 cm	ironstone	1	partial maker's mark: fragmentary Royal Coat of Arms
44	surface collection	0 cm	ironstone	1	partial maker's mark: fragmentary Royal Coat of Arms
45	surface collection	0 cm	recent material	3	2 fragments of drainage pipe; 1 fragment of ceramic electrical conductor
46	surface collection	0 cm	whiteware, flow transfer printed	2	blue - 1 moulded rim fragment; 1 hollowware fragment
47	surface collection	0 cm	ironstone, moulded	1	wheat pattern teacup fragment
48	surface collection	0 cm	whiteware, sponged	2	blue hollowware
49	surface collection	0 cm	glass, bottle	3	2 aqua, 1 sun coloured amethyst
50	surface collection	0 cm	glass, bottle	1	black
51	surface collection	0 cm	glass, bottle	3	1 black, 2 aqua
52	surface collection	0 cm	glass, bottle	3	2 sun coloured amethyst, 1 aqua
53	surface collection	0 cm	glass, bottle	3	1 black, 2 aqua
54	surface collection	0 cm	glass, bottle	3	2 sun coloured amethyst, 1 aqua
55	surface collection	0 cm	button, agate	1	4 hole white; damaged
56	surface collection	0 cm	nail, wire	1	
57	surface collection	0 cm	whiteware, transfer printed	2	blue hollowware
58	surface collection	0 cm	whiteware, transfer printed	3	2 blue, 1 green rim fragment
59	surface collection	0 cm	ironstone, painted	1	polychrome floral teaware

3.10 Location 23 (AfHk-33)

The Stage 2 pedestrian survey (Plate 18) of the proposed wind energy components on property ADL1029 identified Location 23 (AfHk-33) (Figure 4, Supplement A: Figure 13). This pre-contact Aboriginal site was documented under cool and partly overcast conditions on November 28, 2011. It consists of an isolated Middle Archaic Brewerton corner-notched (*circa* 6000 to 2500 B.C.) projectile point (Ellis *et al.* 1990; Justice 1987; Pengelly 1991), fashioned out of Kettle Point chert. The point is missing its tip and one corner of its base is

broken (Plate 33). This point is also very thick in the middle and it appears that the broken tip was re-sharpened and reused. It has an incomplete length of 38.25 millimetres, a width of 29.55 millimetres, a thickness of 10.94 millimetres, an incomplete basal width of 26.86 millimetres, a shoulder width of 29.62 millimetres, and an inter-notch width of 20.51 millimetres. This point was identified on the Turbine 13 components, west of Sullivan Road and south of Highway 402. 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.

3.10.1 Artifact Catalogue

Table 24 presents the Stage 2 artifact catalogue for Location 23 (AfHk-33).

Table 24: Location 23 (AfHk-33) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comment
1	surface collection	0 cm	projectile point	1	Kettle Point chert, Middle Archaic Brewerton corner-notched, *circa* 6000 to 2500 B.C., missing tip, one corner of base broken, very thick in the middle, broken tip re-sharpened and reused

3.11 Location 24 (AgHk-123)

Location 24 (AgHk-123), a historic Euro-Canadian site, was identified on December 13, 2011. The weather conditions during the Stage 2 pedestrian survey (Plate 8) of the proposed collector cable corridor on property ADL1081 (southwest of the intersection of Cuddy Drive and Seed Road) (Figure 4, Supplement A: Figure 03) were cool with a mix of sun and cloud. Location 24 (AgHk-123) consists of a 60 metre (along the north-south axis) by 40 metre (along the west-east axis) scatter of over 700 fragments of mid-to-late 19th century Euro-Canadian domestic debris. The scatter extends on the east-west axis outside of the currently defined study area. It contains red and yellow brick and other structural materials suggesting a demolished residence. In total, 68 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 55 domestic, seven structural, three personal, and three metal (Table 25). Each artifact class is discussed in greater detail below.

Table 25: Location 24 (AgHk-123) Historic Euro-Canadian Artifacts

Artifact	Frequency	%
domestic	55	80.88
structural	7	10.30
personal	3	4.41
metal	3	4.41
Total	**68**	**100.00**

3.11.1 Domestic Artifacts

A total of 55 domestic artifacts were collected during the Stage 2 assessment of Location 24. This collection includes 39 ceramic artifacts, 12 glass artifacts and four faunal remains.

3.11.1.1 Ceramic Artifacts

In total, 39 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 24. Included in this total are: 17 ironstone, 15 whiteware, three utilitarian earthenware, two pearlware and two porcelain. Table 26 provides a summary of the ceramic collection according to ware type, while Table 27 provides a more detailed breakdown of the ceramic assemblage by decorative style.

Table 26: Summary of Ceramic Collection According to Ware Type, Location 24 (AgHk-123)

Artifact	Frequency	%
ironstone	17	43.59
whiteware	15	38.46
utilitarian earthenware	3	7.69
pearlware	2	5.13
porcelain	2	5.13
Total	**39**	**100.00**

Table 27: Summary of Ceramic Collection According to Decorative Style, Location 24 (AgHk-123)

Artifact	Frequency	%
whiteware, painted	7	17.96
ironstone, plain	6	15.39
ironstone, moulded	4	10.26
whiteware, transfer printed	4	10.26
ironstone, flow transfer printed	4	10.26
earthenware, red	2	5.13
ironstone, transfer printed	2	5.13
whiteware, sponged	2	5.13
earthenware, yellow	1	2.56
ironstone, stamped	1	2.56
pearlware, plain	1	2.56
pearlware, transfer printed	1	2.56
porcelain, plain	1	2.56

Artifact	Frequency	%
porcelain, transfer printed	1	2.56
whiteware, edged	1	2.56
whiteware, edged	1	2.56
Total	**39**	**100.00**

Ironstone

The most common ceramic type collected during the Stage 2 assessment of this location is ironstone (n=17 or 43.59%). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). It is usually much thicker than other whiteware and often decorated with raised moulded designs of wheat or fruit. Six fragments are plain or undecorated and there is one partial maker's mark of "Ironstone" (Plate 34:1). Four fragments are flow blue transfer printed and these include fragments of hollowwares and rims (Plate 34:2). Four fragments of ironstone are also moulded with an assortment of motifs (Plate 34:3) and two fragments are transfer print decorated in blue and a polychrome overglaze geometric pattern (Plate 34:4). A single fragment in the ironstone assemblage is blue stamp decorated (Plate 34:5).

White Earthenware

Whiteware is the second most prevalent ceramic type in the Location 24 assemblage (n=15 or 38.46%). Whiteware is a variety of earthenware with a near colorless 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 19th century (Kenyon 1985).

The whiteware assemblage includes seven fragments of assorted hand painted monochromatic blue fragments with a floral motif including two incuse stamped marks (one partial "...7..." and a partial "...F...") (Plate 34:6). These likely represent fragments of the same vessel. Four fragments in the assemblage are blue transfer printed (Plate 34:7), two are blue sponge decorated (Plate 34:8) and two fragments are blue edged whitewares (Plate 34:9). The edged ware assemblage includes the popular 19th century "chickenfoot" pattern as well as a fragment with a scalloped edge and incised straight lines, indicating a temporal range of 1795 to 1840.

Utilitarian Earthenware

A total of three fragments of utilitarian earthenwares were collected. This includes 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 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99).

Pearlware

Pearlware, sometimes referred to as “China glazed”, is a variety of earthenware that was popular from 1780 to 1840. Pearlware is often difficult to recognize because of its similar appearance to later whiteware ceramics, however, because of the addition of cobalt, the glaze has a light blue to blue-green tint. When placed on white earthenware bisque, this glaze gave the impression of a “whiter” ware than the earlier yellow tinted creamware. Two fragments of pearlware are in the Location 24 assemblage, including a single plain, undecorated basal fragment (Plate 34:10) and a single fragment bearing dense blue transfer printed decoration (Plate 34:11).

Porcelain

The Canadian pioneer generally preferred utilitarian earthenwares, but by the mid-19th 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 fragments of low grade white porcelain are part of the ceramic assemblage including one plain, undecorated fragment and a single basal fragment decorated with an overglaze brown transfer print (Plate 34:12).

3.11.1.2 Glass Artifacts

Twelve fragments of bottle glass were recovered from Location 24. This collection includes four bright green fragments, three clear or colourless, two aqua fragments, one cobalt blue and a single fragment of sun coloured amethyst.

Diagnostic colours in the assemblage include the aqua glass, generally originating from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th 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). Sun coloured amethyst glass generally dates from 1880 to 1920.

3.11.1.3 Faunal Remains

Four faunal specimens were also collected during Stage 2 assessment. This includes two small fragments of cortical bone, otherwise unidentifiable, one tooth fragment (premolar or molar from a large ungulate) and a single fragment of cortical long bone from a medium to large mammal, likely an artiodactyl.

Table 28: Breakdown of Faunal Remains by Specimen

Cat. #	Class	Species	Element	Complete?	Additional comments
6	Mammalia	large ungulate	fragmentary tooth	fragmentary	premolar or molar
6	Mammalia	Artiodactyla	cortical bone	fragmentary	-
45	Mammalia	-	cortical long bone	fragmentary	-

3.11.2 Structural Artifacts

Seven fragments of structural remains were collected, including five machine cut nails (Plate 35:1), one wire drawn nail (Plate 35:2) and a single fragment of temporally non-diagnostic red brick. 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).

3.11.3 Personal Artifacts

Three personal items were collected during the Stage 2 assessment of Location 24, including two fragments of slate pencil (Plate 35:3) and a single metal button with a shank (Plate 35:4). The button is marked on the front with the numeral "29," has a metal shank, and the back indicates that it was manufactured by P Tait and Co., Limerick. Tait and Company manufactured buttons for the American Civil War from 1861 to 1865 (UKDFD 2012). This button may be a regimental button representing the Federal Regiment 29th Massachusetts Infantry. This regiment was organized in Newport News, Virginia, mustered in 1861, and disbanded as a unit in 1865. The 29th Massachusetts Infantry was the non-Irish regiment of the Irish Brigade at Antietam. They fought in line between the 63rd and 69th New York regiments in the assault on the Confederate positions in the Sunken Road. (Downey 2012).

3.11.4 Metal Artifacts

Three metal artifacts were part of the Stage 2 artifact assemblage, including two heavily corroded unidentifiable fragments and a small metal valve fragment. None of these artifacts is temporally diagnostic.

3.11.5 Artifact Catalogue

Table 29 presents the Stage 2 artifact catalogue for Location 24 (AgHk-123).

Table 29: Location 24 (AgHk-123) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	brick	1	1/2 of red brick
2	surface collection	0 cm	pearlware	1	flatware basal fragment
3	surface collection	0 cm	earthenware, red	1	lead glazed
4	surface collection	0 cm	earthenware, yellow	1	lead glazed
5	surface collection	0 cm	ironstone, moulded	4	2 handle fragments, 1 scalloped teacup, 1 indeterminate pattern
6	surface collection	0 cm	faunal remains	2	1 tooth fragment (large ungulate); 1 cortical long bone fragment, medium to large mammal, likely Artiodactyl
7	surface collection	0 cm	metal, miscellaneous unidentified	2	heavily corroded

Cat. #	Context	Depth	Artifact	Freq.	Comments
8	surface collection	0 cm	metal, miscellaneous hardware	1	small valve fragment
9	surface collection	0 cm	nail, wire	1	
10	surface collection	0 cm	nail, cut	2	
11	surface collection	0 cm	whiteware, transfer printed	1	basal fragment, blue
12	surface collection	0 cm	ironstone	5	1 handle fragment
13	surface collection	0 cm	slate	2	pencil fragments
14	surface collection	0 cm	button, metal	1	"29" ; marked, metal shank; marked on back: "P Tait and Co., Limerick". Tait and Co. manufacture buttons for the American Civil War from 1861 to 1865; may be regimental button representing the Federal Regiment - 29th Massachusetts Infantry Organized: Newport News, VA; mustered in 12/1861 Disbanded/Mustered out: Alexandria, VA 7/29/1865. The 29th was the non-Irish regiment of the Irish Brigade at Antietam.
15	surface collection	0 cm	ironstone	1	partial maker's mark: "Ironstone"
16	surface collection	0 cm	nail, cut	1	
17	surface collection	0 cm	nail, cut	1	
18	surface collection	0 cm	porcelain, transfer printed	1	hollowware overglaze brown transfer printed
19	surface collection	0 cm	porcelain	1	low grade white
20	surface collection	0 cm	whiteware, transfer printed	1	blue rim
21	surface collection	0 cm	ironstone, transfer printed	1	basal fragment, polychrome overglaze geometric pattern
22	surface collection	0 cm	pearlware, transfer printed	1	hollowware fragment, blue
23	surface collection	0 cm	ironstone, flow transfer printed	1	hollowware, blue
24	surface collection	0 cm	whiteware, transfer printed	1	blue rim
25	surface collection	0 cm	ironstone, flow transfer printed	1	blue rim
26	surface collection	0 cm	whiteware, sponged	1	blue rim
27	surface collection	0 cm	whiteware, transfer printed	1	blue rim
28	surface collection	0 cm	whiteware, painted	1	monochromatic blue floral

Cat. #	Context	Depth	Artifact	Freq.	Comments
29	surface collection	0 cm	ironstone, flow transfer printed	1	blue
30	surface collection	0 cm	ironstone, stamped	1	blue
31	surface collection	0 cm	whiteware, painted	1	monochromatic blue floral
32	surface collection	0 cm	glass, bottle	1	sun coloured amethyst
33	surface collection	0 cm	whiteware, edged	1	blue - damaged/burnt; scalloped edge, incised straight lines 1795 to 1840
34	surface collection	0 cm	whiteware, painted	1	blue - on reverse : incuse stamp :" …7…."
35	surface collection	0 cm	whiteware, sponged	1	blue
36	surface collection	0 cm	whiteware, painted	1	monochromatic blue floral
37	surface collection	0 cm	ironstone, flow transfer printed	1	blue
38	surface collection	0 cm	ironstone, transfer printed	1	blue
39	surface collection	0 cm	earthenware, red	1	lead glazed
40	surface collection	0 cm	whiteware, painted	1	blue - on reverse : incuse stamp :" …F…."
41	surface collection	0 cm	nail, cut	1	
42	surface collection	0 cm	whiteware, painted	1	monochromatic blue floral
43	surface collection	0 cm	whiteware, painted	1	monochromatic blue floral
44	surface collection	0 cm	whiteware, edged	1	blue - chickenfoot pattern
45	surface collection	0 cm	faunal remains	2	cortical fragments; mammal
46	surface collection	0 cm	glass, bottle	8	1 cobalt blue, 4 bright green, 3 clear or colourless
47	surface collection	0 cm	glass, bottle	1	aqua
48	surface collection	0 cm	glass, bottle	2	aqua

3.12 Location 25

The Stage 2 pedestrian survey of the proposed wind energy components on property ADL1097, west of Pike Road on the south side of Highway 402, resulted in the identification of Location 25 (Figure 4, Supplement A: Figure 17). This pre-contact Aboriginal site, examined under cool, partly sunny conditions on December 13, 2011, consists of an isolated secondary lithic flake (Plate 36) manufactured from Kettle Point chert. This flake was located along the proposed access road and collector cable corridor for Turbine 29. As detailed in Section 2.0, survey intervals were intensified to one metre within a twenty metre radius of the find but no additional artifacts were found.

3.12.1 Artifact Catalogue

Table 30 presents the Stage 2 artifact catalogue for Location 25.

Table 30: Location 25 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comment
1	surface collection	0 cm	chipping detritus	1	Kettle Point chert

3.13 Location 26 (AfHk-34)

Location 26 (AfHk-34), a historic Euro-Canadian site, was identified on December 20, 2011. The weather conditions during the Stage 2 pedestrian survey (Plate 12) of the proposed collector cable corridor on property ADL1023 (on the north side of Mullifarry Drive, east of the intersection of Brown Road and Mullifarry Drive) (Figure 4, Supplement A: Figure 15) were cold and clear. Location 26 (AfHk-34) consists of a 75 metre (along the north-south axis) by 55 metre (along the west-east axis) scatter of over 150 fragments of Euro-Canadian domestic debris spanning the 19th century. In total, 117 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 95 domestic, 14 personal, seven structural, and one recent material (Table 31). Each artifact class is discussed in greater detail below.

Table 31: Location 26 (AfHk-34) Historic Euro-Canadian Artifacts

Artifact	Frequency	%
domestic	95	81.20
personal	14	11.97
structural	7	5.98
recent	1	0.85
Total	**117**	**100.00**

3.13.1 Domestic Artifacts

A total of 95 domestic artifacts were collected during the Stage 2 assessment of Location 26. This collection includes 84 ceramic artifacts, seven glass artifacts, three faunal remains and one household artifact.

3.13.1.1 Ceramic Artifacts

In total, 84 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 26. Included in this total are: 53 whiteware, 18 ironstone, five utilitarian earthenware, four pearlware, two redware, one creamware and one porcelain. Table 32 provides a summary of the ceramic collection according to ware type, while Table 33 provides a more detailed breakdown of the ceramic assemblage by decorative style.

Table 32: Summary of Ceramic Collection According to Ware Type, Location 26 (AfHk-34)

Artifact	Frequency	%
whiteware	53	63.10
ironstone	18	21.43
utilitarian earthenware	5	5.95
pearlware	4	4.76
redware	2	2.38
creamware	1	1.19
porcelain	1	1.19
Total	**84**	**100.00**

Table 33: Summary of Ceramic Collection According to Decorative Style, Location 26 (AfHk-34)

Artifact	Frequency	%
whiteware, transfer printed	21	25.00
ironstone, flow transfer printed	15	17.86
whiteware, painted	13	15.49
whiteware, plain	6	7.14
whiteware, edged	5	5.95
stoneware, salt glazed	4	4.76
whiteware, sponged	4	4.76
ironstone, plain	2	2.38
pearlware, plain	2	2.38
redware	2	2.38
whiteware, banded	2	2.38
whiteware, stamped	2	2.38
earthenware, red	1	1.19
ironstone, stamped	1	1.19
pearlware, painted	1	1.19
pearlware, transfer printed	1	1.19
creamware, transfer printed	1	1.19
porcelain, plain	1	1.19
Total	**84**	**100.00**

White Earthenware

Whiteware is the most prevalent ceramic type in the Location 26 assemblage (n=53 or 63.10%). Whiteware is a variety of earthenware with a near colorless 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 19th century (Kenyon 1985).

The whiteware assemblage includes: 21 transfer printed (Plate 37:1), 13 hand painted (Plate 37:2), six plain or undecorated (Plate 37:3), five blue edged (Plate 37:4), four sponge decorated (Plate 37:5), two slip banded (Plate 37:6), and two stamped fragments (Plate 37:7). The transfer printed whiteware assemblage is all blue with an assortment of teacup and hollowware fragments, and rim and jug handle fragments. Eleven hand painted fragments represent polychrome floral decorated teawares with two fragments decorated in monochromatic blue. They are likely teawares as well. The blue edged ware assemblage includes three fragments that have a plain edge, that are not moulded or incised and likely date between 1850 and 1897. Sponge decorated wares in the assemblage include three polychrome fragments and one monochromatic blue. The white and brown slip banded fragments were most likely decorated with slip cabled or marbled techniques. These two fragments are probably from the same hollowware vessel. Finally, the stamped decorated whiteware assemblage includes two brown fragments.

Ironstone

The second most common ceramic type collected during the Stage 2 assessment of this location is ironstone (n=18 or 21.43%). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). Fifteen of the fragments are decorated with blue flow transfer (Plate 37:8). This flow blue assemblage includes many teaware and rim fragments. Two of the fragments of ironstone are plain. One bears the mark of Davenport, an incuse stamp mark *circa* 1850s to 1870s, that is rare in the UK but more prevalent in the United States (Plate 37:9, right). The single fragment of stamped ironstone in the ceramic assemblage belongs to a violet and blue stamped jug handle fragment (Plate 37:10).

Utilitarian Earthenware

A total of five fragments of utilitarian earthenwares were collected. This includes four fragments of salt glazed stoneware and a single fragment of lead glazed red earthenware. Red earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels. Stoneware vessels were also produced throughout the 19th century, becoming more durable and refined over time (Adams 1994:99). The stonewares in this assemblage include three grey-bodied fragments (1 with a clear exterior salt glaze and Albany slip interior, and two with a simple clear salt glaze) as well as one buff coloured paste stoneware with a clear salt glaze.

Pearlware

Pearlware, sometimes referred to as “China glazed”, is a variety of earthenware that was popular from 1780 to 1840. The assemblage includes four fragments of pearlware: two plain, undecorated basal fragments (Plate

38:1), a single fragment of late palette polychrome floral teaware (Plate 38:2) and a delicate, thin paste fragment bearing a black transfer print village pattern (Plate 38:3).

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 19th century for tea pots and mugs and the two fragments in the assemblage are from teaware, including a teapot lid fragment (Plate 38:4).

Creamware

Creamware was developed in the 1760s, but had declined in popularity by 1830. The distinctive feature of 18th century cream coloured ware is its yellow-tinged glaze. Although the pottery was sometimes decorated, more frequently it was left plain, the only embellishment being a moulded border available in number of standardized patterns (Adams 1994: 100). The single delicate fragment of creamware in the assemblage bears the remnants of black transfer printing (Plate 38:5).

Porcelain

The Canadian pioneer generally preferred utilitarian earthenwares, but by the mid-19th 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 hollowware is part of the ceramic assemblage (Plate 38:6).

3.13.1.2 Glass Artifacts

Seven glass artifacts were recovered from Location 26. This collection includes five fragments of bottle glass and two fragments of glass dish. Colours present in the bottle glass assemblage include three aqua, one black and a fragment of clear or colourless glass with a diagnostic patent finish dating post-1850 (Plate 39:1).

Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th 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). “Black” glass dates from the early-to-mid 19th 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).

Glass dish fragments in the assemblage include a small fragment of amber etched glass and one fragment of sun coloured amethyst glass dish that is pressed moulded. Pressed glass dishes and dishwares can also be temporally diagnostic. Non-leaded pressed glass in a variety of patterns became common in Canada post-1860 (Jones and Sullivan 1989:35).

3.13.1.3 Faunal Remains

Three faunal specimens were collected from Location 26, including a small fragment of burned and calcined cortical bone, a fragment of a large mammal tooth, and one second phalanx from a large ungulate.

Table 34: Breakdown of Faunal Remains by Specimen

Cat. #	Class	Species	Element	Complete?	Additional Comments
42	Mammalia	large mammal	fragmentary tooth	fragmentary	large mammal
42	Mammalia	large ungulate	phalanx	complete	second phalanx
42	Mammalia		cortical bone	fragmentary	burned and calcined

3.13.1.4 Household Artifacts

A single fragment of a large serving spoon (minus the handle) was collected from Location 26.

3.13.2 Personal Artifacts

Fourteen items in the Location 26 artifact assemblage are classified as personal items. This includes 11 white clay pipe stem fragments (Plate 39:2), two white clay pipe bowl fragments (Plate 39:3), and a single white agate button (Plate 39:4). Agate buttons are made from pressed ceramic powder manufactured by the "Prosser" process patented in 1840. They became common from the late 1840s onwards (Adams 1994:96).

White clay pipes were very popular throughout the 19th 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. Three of the pipe stem fragments in the assemblage are marked with "Henderson, Montreal" – operational from 1847 to 1876 (Plate 39:2, top). A single fragment is "McDougall, Glasgow" (1846-1967) (Plate 39:2, centre), while another fragment is marked "Murray, Glasgow," which was operational from 1830 to 1861 (Plate 39:2, bottom) (Adams 1994:95).

3.13.3 Structural Artifacts

Seven fragments of structural remains were collected, including two machine cut nails (Plate 39:5), one wire drawn nail (Plate 39:6), one heavily corroded and unidentifiable nail fragment, two fragments of window glass and a single fragment of temporally non-diagnostic red brick. 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).

The window glass fragments measure 1.0 and 2.0 millimetres thick respectively, but the sample size is too small to use as a reliable diagnostic indicator.

3.13.4 Recent Material

A single fragment of modern bottle glass was collected during the Stage 2 assessment of Location 26.

3.13.5 Artifact Catalogue

Table 35 presents the Stage 2 artifact catalogue for Location 26 (AfHk-34).

Table 35: Location 26 (AfHk-34) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	whiteware, edged	1	blue - plain edge, not moulded or incised 1850-1897
2	surface collection	0 cm	white clay pipe stem	1	Henderson Montreal
3	surface collection	0 cm	whiteware, painted	1	polychrome floral teacup
4	surface collection	0 cm	button, agate	1	4 hole white
5	surface collection	0 cm	white clay pipe stem	1	McDougall Glasgow
6	surface collection	0 cm	nail, cut	1	
7	surface collection	0 cm	white clay pipe stem	1	Henderson Montreal
8	surface collection	0 cm	whiteware, edged	1	blue - plain edge, not moulded or incised 1850 - 1897
9	surface collection	0 cm	whiteware, edged	1	blue - scalloped edge with incised curved lines
10	surface collection	0 cm	whiteware, transfer printed	1	blue; teacup fragment, 2 fragments refit
11	surface collection	0 cm	whiteware, painted	1	polychrome floral teacup
12	surface collection	0 cm	pearlware, transfer printed	1	black
13	surface collection	0 cm	glass, bottle	1	clear or colourless; patent finish post 1850
14	surface collection	0 cm	white clay pipe stem	1	Murray Glasgow
15	surface collection	0 cm	ironstone	1	incuse stamp mark - Davenport makers mark; S9 mark rare in the UK, more prevalent in the US, circa 1850's to 1870's
16	surface collection	0 cm	utensil	1	serving spoon fragment; missing handle
17	surface collection	0 cm	brick	1	red; fragment
18	surface collection	0 cm	glass, bottle	3	aqua
19	surface collection	0 cm	recent material	1	modern bottle glass
20	surface collection	0 cm	whiteware, banded	1	white and brown slip banded hollowware fragment; cabled or marbled

Cat. #	Context	Depth	Artifact	Freq.	Comments
21	surface collection	0 cm	redware	1	teapot lid fragment
22	surface collection	0 cm	pearlware	2	basal fragments
23	surface collection	0 cm	whiteware	6	
24	surface collection	0 cm	pearlware, painted	1	late palette floral hollowware
25	surface collection	0 cm	glass, dish	2	1 amber etched glass fragment; 1 sun coloured amethyst pressed moulded fragment
26	surface collection	0 cm	white clay pipe stem	6	
27	surface collection	0 cm	white clay pipe bowl	2	
28	surface collection	0 cm	nail, indeterminate	1	heavily corroded
29	surface collection	0 cm	nail, wire	1	
30	surface collection	0 cm	nail, cut	1	
31	surface collection	0 cm	whiteware, edged	2	blue - 1 x plain edge, not moulded or incised;1 damaged fragment
32	surface collection	0 cm	whiteware, transfer printed	1	blue - teacup rim fragment
33	surface collection	0 cm	glass, window	2	1 @ 1mm, 1 @ 2.0mm
34	surface collection	0 cm	whiteware, stamped	1	brown hollowware
35	surface collection	0 cm	ironstone	1	
36	surface collection	0 cm	ironstone, flow transfer printed	2	blue
37	surface collection	0 cm	ironstone, stamped	1	blue and violet jug handle fragment
38	surface collection	0 cm	porcelain	1	low grade white; hollowware fragment
39	surface collection	0 cm	creamware, transfer printed	1	black; small fragment
40	surface collection	0 cm	whiteware, sponged	3	2 red and green, 1 blue
41	surface collection	0 cm	whiteware, painted	2	polychrome floral teacup
42	surface collection	0 cm	faunal remains	3	1 large second phalanx; 1 tooth fragment; 1 cortical bone fragment, burned/calcined
43	surface collection	0 cm	earthenware, red	1	lead glazed
44	surface collection	0 cm	stoneware, salt glazed	4	3 x grey bodied (1 clear exterior salt glaze with Albany slip interior, 2 clear salt glaze); 1 buff paste with clear salt glaze
45	surface collection	0 cm	glass, bottle	1	black
46	surface collection	0 cm	redware	1	
47	surface collection	0 cm	whiteware, banded	1	white and brown slip banded hollowware fragment; cabled

Cat. #	Context	Depth	Artifact	Freq.	Comments
					or marbled
48	surface collection	0 cm	white clay pipe stem	1	Henderson Montreal
49	surface collection	0 cm	whiteware, stamped	1	brown
50	surface collection	0 cm	whiteware, sponged	1	red and blue hollowware
51	surface collection	0 cm	ironstone, flow transfer printed	2	blue
52	surface collection	0 cm	whiteware, painted	2	polychrome floral teacup
53	surface collection	0 cm	ironstone, flow transfer printed	1	blue - teacup handle fragment
54	surface collection	0 cm	ironstone, flow transfer printed	2	blue
55	surface collection	0 cm	whiteware, painted	1	monochromatic blue - likely teaware
56	surface collection	0 cm	whiteware, transfer printed	2	blue - rim fragments
57	surface collection	0 cm	whiteware, transfer printed	1	blue - rim fragment possibly from chamber pot
58	surface collection	0 cm	whiteware, painted	1	monochromatic blue - likely teaware
59	surface collection	0 cm	whiteware, transfer printed	3	blue - 1 rim fragment
60	surface collection	0 cm	whiteware, transfer printed	2	blue - delicate hollowware fragments
61	surface collection	0 cm	ironstone, flow transfer printed	1	blue - small fragment
62	surface collection	0 cm	whiteware, painted	3	small fragments - polychrome teawares
63	surface collection	0 cm	whiteware, transfer printed	2	blue - 1 damaged rim fragment
64	surface collection	0 cm	whiteware, transfer printed	1	blue - possible jug handle fragment
65	surface collection	0 cm	ironstone, flow transfer printed	1	blue
66	surface collection	0 cm	ironstone, flow transfer printed	1	blue - rim fragment
67	surface collection	0 cm	whiteware, transfer printed	3	blue - delicate floral motifs
68	surface collection	0 cm	whiteware, transfer printed	2	blue - 1 rim fragment
69	surface collection	0 cm	whiteware, painted	2	polychrome floral teacup
70	surface collection	0 cm	ironstone, flow transfer printed	1	blue - rim fragment
71	surface collection	0 cm	ironstone, flow transfer printed	2	blue - 1 rim fragment
72	surface collection	0 cm	ironstone, flow transfer printed	2	blue - rim fragments
73	surface collection	0 cm	whiteware, transfer printed	2	blue
74	surface collection	0 cm	whiteware, transfer printed	1	blue

3.14 Location 27

The Stage 2 pedestrian survey (Plate 20) of the proposed wind energy components on property ADL1058 identified Location 27 (Figure 4, Supplement A: Figure 18). This pre-contact Aboriginal site was documented

under cold, but sunny conditions on January 24, 2012. It consists of an isolated partial biface fashioned out of Onondaga chert (Plate 40). This biface has an incomplete length of 39.37 millimetres, an incomplete width of 33.82 millimetres, and is 8.64 millimetres thick. At its mid-section break, the biface appears to have been reworked and reused. It was located along the proposed collector cable corridor, east of Sullivan Road on the south side of Mullifarry Drive. As detailed in Section 2.0, survey intervals were intensified to one metre within a twenty metre radius of the find but no additional artifacts were found.

3.14.1 Artifact Catalogue

Table 36 presents the Stage 2 artifact catalogue for Location 27.

Table 36: Location 27 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comment
1	surface collection	0 cm	biface	1	Onondaga chert, incomplete, only half present, reworked at mid-break and reused

3.15 Location 28 (AgHk-124)

Location 28 (AgHk-124), a historic Euro-Canadian site, was identified on January 25, 2012. The weather conditions during the Stage 2 pedestrian survey (Plate 10) of the proposed collector cable corridor on property ADL1003 (north of Egremont Drive, east of Morse Road and just northeast of the community of Adelaide) (Figure 4, Supplement A: Figure 03) were cold and clear. Location 28 (AgHk-124) consists of a 25 metre (along the north-south axis) by 49 metre (along the west-east axis) scatter of 70 fragments of mid-to-late 19th century Euro-Canadian domestic debris. In total, 17 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 15 domestic items and two structural (Table 31). Each artifact class is discussed in greater detail below.

Table 37: Location 28 (AgHk-124) Historic Euro-Canadian Artifacts

Artifact	Frequency	%
domestic	15	88.24
structural	2	11.76
Total	**17**	**100.00**

3.15.1 Domestic Artifacts

A total of 15 domestic artifacts were collected during the Stage 2 assessment of Location 28. This collection includes 11 ceramic artifacts and four glass artifacts.

3.15.1.1 Ceramic Artifacts

In total, 11 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 28. Included in this total are six whiteware, three ironstone, and two utilitarian. Table 32 provides a summary of the ceramic collection according to ware type, while Table 33 provides a more detailed breakdown of the ceramic assemblage by decorative style.pp

Table 38: Summary of Ceramic Collection According to Ware Type, Location 28 (AgHk-124)

Artifact	Frequency	%
whiteware	6	54.55
ironstone	3	27.27
utilitarian earthenware	2	18.18
Total	**11**	**100.00**

Table 39: Summary of Ceramic Collection According to Decorative Style, Location 28 (AgHk-124)

Artifact	Frequency	%
whiteware, transfer printed	4	36.37
ironstone, plain	3	27.27
earthenware, red	1	9.09
earthenware, yellow	1	9.09
whiteware, sponged	1	9.09
whiteware, stamped	1	9.09
Total	**11**	**100.00**

White Earthenware

Whiteware is the most prevalent ceramic type in the Location 28 assemblage (n=6 or 55.45%). Whiteware is a variety of earthenware with a near colorless glaze that replaced earlier near-white ceramics such as pearlware and creamware by the early 1830s (Kenyon 1985).

The whiteware assemblage includes: four transfer printed (Plate 41:1), one blue leaf motif stamped (Plate 41:2) and one black sponged (Plate 41:3) ware. In the whiteware transfer printed assemblage there are three brown fragments and a one blue fragment.

Ironstone

The second most common ceramic type collected during the Stage 2 assessment of this location is ironstone. All three fragments are plain and undecorated (Plate 41:4). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985).

Utilitarian Earthenware

A total of two fragments of utilitarian earthenwares were collected. This includes a single fragment each of lead glazed red earthenware and lead glazed yellow earthenware. Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99).

3.15.1.2 Glass Artifacts

Four fragments of domestic bottle glass were recovered from Location 28. Colours present in the bottle glass assemblage include one aqua, a fragment of clear or colourless glass, and a fragment that is likely melted bottle glass. Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th century (Kendrick 1971). Colourless, or "clear" glass was relatively uncommon prior to the 1870s but became quite common after the wide spread use of automatic bottle machines in the mid-to-late 1910s (Kendrick 1971; Toulouse 1969; Fike 1987).

3.15.2 Structural Artifacts

Two fragments of window glass were collected during the Stage 2 assessment of Location 28, both measuring 2.0 millimetres thick. While window glass can be a reliable diagnostic tool, the assemblage collected from Location 28 is too small to use as a reliable diagnostic indicator.

3.15.3 Artifact Catalogue

Table 35 presents the Stage 2 artifact catalogue for Location 28 (AgHk-124).

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	earthenware, yellow	1	lead glazed
2	surface collection	0 cm	ironstone	1	
3	surface collection	0 cm	ironstone	1	
4	surface collection	0 cm	whiteware, transfer printed	1	brown
5	surface collection	0 cm	glass, window	1	2mm
6	surface collection	0 cm	glass, window	1	2mm
7	surface collection	0 cm	whiteware, transfer printed	1	blue
8	surface collection	0 cm	whiteware, transfer printed	1	brown
9	surface collection	0 cm	whiteware, transfer printed	1	brown
10	surface collection	0 cm	ironstone	1	
11	surface collection	0 cm	whiteware, sponged	1	black
12	surface collection	0 cm	whiteware, stamped	1	blue leaf motif
13	surface collection	0 cm	earthenware, red	1	lead glazed
14	surface collection	0 cm	glass, bottle	1	aqua
15	surface collection	0 cm	glass, bottle	2	clear or colourless
16	surface collection	0 cm	glass, bottle	1	melted; likely bottle glass fragment

4.0 ANALYSIS AND CONCLUSIONS

The Stage 2 assessment of the revised NEEC Adelaide Wind Energy Centre resulted in the identification of 15 archaeological sites, including eight pre-contact Aboriginal and seven historic Euro-Canadian. Analyses of each location are provided below, determining whether further assessment is recommended for each site. 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 14 (AgHj-10)

Location 14 (AgHj-10) is represented by an Early Archaic (*circa* 8000 to 6000 B.C.) Kirk corner-notched or Nettling projectile point manufactured on Onondaga chert. It has a narrow base with uneven sides and notching. The recovery of this artifact fulfills the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1b(iii) 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-10.

4.2 Location 15

Location 15 consists of an end scraper fashioned out of a secondary Kettle Point chert lithic flake. It possesses retouch along two edges, 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 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).

4.3 Location 16

A single tertiary utilized flake manufactured from Kettle Point chert was identified at Location 16. This artifact, which has one worked edge, 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).

4.4 Location 17

The artifacts collected during the Stage 2 assessment of Location 17 represent a scatter of 15 fragments of late 19th to early 20th century Euro-Canadian domestic debris. Four fragments of late 19th to early 20th century glass were collected. Artifacts observed in the scatter but not collected include eight fragments of modern terra cotta pot.

Spatially, Location 17 is located on Concession 2 South of Egremont Road, on Lot 4, in the Geographic Township of Adelaide, Middlesex County, Ontario. John Corruthers is listed as owning this portion of the lot on the 1878 map of the Township of Adelaide. The location is situated in the northeastern portion of the lot, where there are no structures depicted. 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).

4.5 Location 18

Location 18 consists of a small lithic scatter of five flakes of chipping detritus. All were manufactured from Kettle Point chert and represent all stages of lithic reduction and tool production. Unifacially and 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, these flakes cannot help place the archaeological site within a specific time period and cannot be associated with 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 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).

4.6 Location 19 (AeHk-42)

The artifacts collected during the Stage 2 assessment of Location 19 represent a scatter of 25 fragments of predominantly mid-19th century Euro-Canadian domestic debris, especially ceramics and bottle glass. Fourteen artifacts were collected from the surface. Domestic items account for most of the artifact assemblage collected from Location 19 (n=13 or 92.86% of the total artifact assemblage). The most common types of ceramic artifacts recovered from Location 19 were mid-19th century whitewares and a fragment of aqua bottle glass with a diagnostic open pontil base dating prior to 1870 was also collected.

Spatially, Location 19 is located on Lot 11, Concession 2 South of Egremont Road, in the Geographic Township of Adelaide, Middlesex County, Ontario. Isaac Thrower is listed as owning this portion of the lot on the 1878 map of the Township of Adelaide. The location is situated in the southeastern tip of this lot where a house and orchard are located. The presence of over 20 artifacts dating the period of use to the mid-to-late 19th century as well as the presence of the historic homestead and orchard on the historic mapping, 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 AeHk-42.

4.7 Location 20 (AgHk-121)

The 15 artifacts collected from the observed scatter of 45 artifacts during the Stage 2 assessment of Location 20 represent predominantly late 19th and early 20th century Euro-Canadian and modern debris, mostly fragile domestic items such as ceramics and glass. The small domestic assemblage of ceramics including utilitarian kitchenware, and single fragments of late 19th to early 20th century moulded ironstone and low grade white porcelain, along with the other observed glass artifacts, represent the remains of a small domestic midden. The assemblage is completely devoid of any other artifact classes.

Spatially, Location 20 is located on Lot 17, Concession 2 North of Egremont Road, in the Geographic Township of Adelaide, Middlesex County, Ontario. James Brown is listed as owning this portion of the lot on the 1878 map of the Township of Adelaide. The location is situated in the south portion of the lot, where there are no structures depicted. Given the material present in the assemblage, the late date of the artifacts collected and observed, the small size of the scatter, and the complete absence of other artifact categories, 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).

4.8 Location 21

A single secondary retouched flake manufactured from Kettle Point chert was identified at Location 21. This artifact, which has two retouched edges and a third exhibiting use, is temporally non-diagnostic, with the exception that it was manufactured by pre-contact Aboriginal people. 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, these flakes cannot help place the archaeological site within a specific time period and cannot be associated with 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 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).

4.9 Location 22 (AgHk-122)

The 117 artifacts collected from the observed scatter of approximately 300 artifacts during the Stage 2 assessment of Location 22 represent a range of predominantly mid-to-late 19th century Euro-Canadian domestic debris including ceramics, bottle glass, personal items such as white clay pipe and agate buttons and structural remains. The most common ceramic type collected from Location 22 was mid-to-late 19th century ironstone

(n=28 or 45.16%) along with a comparable collection of mid-19th century whiteware (n=22 or 35.48%) and a small assemblage of early 19th century pearlware. Other diagnostic artifacts of note were three diagnostic glass finishes (two dating to the mid-19th century and one dating to the late 19th century) as well as the presence of black glass (dating prior to the 1860s).

Spatially, Location 22 is located on Lot 16, Concession 2 North of Egremont Road, in the Geographic Township of Adelaide, Middlesex County, Ontario. Mitchell Regan is listed as owning this portion of the lot on the 1878 map of the Township of Adelaide. The location is situated in the northeast portion of the lot, where a house and orchard are indicated. 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-122.

4.10 Location 23 (AfHk-33)

Location 23 (AfHk-33) consists of a partially complete Middle Archaic Brewerton corner-notched projectile point, dating to *circa* 6000 to 2500 B.C. This point is manufactured from Kettle Point chert, has a broken base and a broken/reworked tip. The archaeological survey documented an isolated pre-contact Aboriginal location and adds to the body of knowledge concerning land use by Middle 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 AfHk-33.

4.11 Location 24 (AgHk-123)

The 68 artifacts collected from the observed scatter of over 700 artifacts during the Stage 2 assessment of Location 24 represent a range of predominantly mid-to-late 19th century Euro-Canadian domestic debris (n=55 or 80.88%). The observed scatter include red and yellow brick fragments and structural remains such as window glass and nails. The presence of observed structural remains indicates the site was a demolished residence. Also in the assemblage are smaller assemblages of structural, faunal and personal items. The most common ceramic types collected from Location 24 were mid-to-late 19th century ironstone (n=17 or 43.59%) and mid-19th century whitewares (n=15 or 38.46%). A small collection of pearlware is also present in the assemblage as is a mid-19th century American Civil War uniform button.

Spatially, Location 24 is located on Lot 12, Concession 2 North of Egremont Road, in the Geographic Township of Adelaide, Middlesex County, Ontario. Hugh Seed is listed as owning this portion of the lot on the 1878 map of the Township of Adelaide. The location is situated in the northeastern tip of the lot, where a house and orchard are indicated. 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-123.

4.12 Location 25

A single piece of secondary chipping detritus manufactured from Kettle Point chert was identified at Location 25. 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).

4.13 Location 26 (AfHk-34)

The 117 artifacts collected from the observed scatter of over 150 artifacts during the Stage 2 assessment of Location 26 represent a range of Euro-Canadian artifacts spanning the 19th century, including domestic, personal items such as white clay pipe stems and agate buttons, structural remains and faunal material. Whiteware dominates the ceramic assemblage with 53.63%, ironstone is secondary with 21.43%, and the assemblage includes a smaller assortment of early 19th century material such as pearlware, redware, and one fragment of creamware. Diagnostic glass in the assemblage such as black glass also lends credence to an earlier 19th century occupation of the site.

Spatially, Location 26 is located on Lot 11, Concession 2 South of Egremont Road, in the Geographic Township of Adelaide, Middlesex County, Ontario. Thomas James is listed as owning this portion of the lot on the 1878 map of the Township of Adelaide. The location is situated in the southwest corner of the lot where a house and orchard are indicated. 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 AfHk-34.

4.14 Location 27

Location 27 is represented by an isolated biface fragment fashioned out of Onondaga chert. It appears to have been reworked and re-used at its mid-break point. 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 this biface cannot help place the archaeological site within a specific time period or be associated with 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 isolated nature of the

find, the cultural heritage value or interest of Location 27 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).

4.15 Location 28 (AgHk-124)

The 17 artifacts collected from the observed scatter of 70 artifacts during the Stage 2 assessment of Location 28 represent a range of mid-to-late 19th century Euro-Canadian domestic debris (n=15 or 88.24%) as well as a smaller assemblage of structural remains (n=2 or 11.76% of the total artifact assemblage). Domestic items include whitewares, ironstone and a small assemblage of utilitarian kitchenwares. Most of the assemblage consists of fragile items such as ceramics, and bottle and window glass.

Spatially, Location 28 is located on Lot 11, Concession 1 North of Egremont Road, in the Geographic Township of Adelaide, Middlesex County, Ontario. No owner is listed on the 1878 map of the Township of Adelaide. The location is situated just north of the community of Adelaide itself. 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-124.

4.16 Preliminary Indication of Sites Possibly Requiring Stage 4 Archaeological Assessment

The 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 (Government of Ontario 2011). 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 2 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 40):

Table 40: Preliminary Indication of Sites Possibly Requiring Stage 4 Archaeological Assessment

Location	Borden Number	Affiliation	Probable Reason
19	AeHk-42	Historic Euro-Canadian	Portion of occupation could date prior to 1870
22	AgHk-122	Historic Euro-Canadian	Portion of occupation could date prior to 1870
24	AgHk-123	Historic Euro-Canadian	Portion of occupation could date prior to 1870
26	AfHk-34	Historic Euro-Canadian	Portion of occupation could date prior to 1870
28	AgHk-124	Historic Euro-Canadian	Portion of occupation could date prior to 1870

5.0 RECOMMENDATIONS

The Stage 2 assessment of the revised NEEC Adelaide Wind Energy Centre layout resulted in the identification of 15 archaeological sites, including eight pre-contact Aboriginal and seven historic Euro-Canadian. Recommendations for each location are found below.

5.1 Location 14 (AgHj-10)

Given that the Stage 2 assessment of Location 14 (AgHj-10) resulted in the recovery of a spatially discrete Early Archaic projectile point, **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). 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. Since this is an Early Archaic site, at least 20% of the total number of units excavated should be screened through mesh with an aperture of no greater than three millimetres. The already existing program of Aboriginal engagement should be continued during the Stage 3 archaeological assessment.

5.2 Location 15

The Stage 2 assessment of Location 15 resulted in the recovery of a 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 15**.

5.3 Location 16

The Stage 2 assessment of Location 16 resulted in the recovery of a single pre-contact Aboriginal utilized 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 16**.

5.4 Location 17

The Stage 2 assessment of Location 17 resulted in the recovery of a small assemblage of late 19th to early 20th century domestic glass debris. Artifacts observed in the scatter included eight fragments of modern terra cotta pot. Given the nature and small size of the artifact assemblage observed, that the cultural heritage value or

interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 17**.

5.5 Location 18

The Stage 2 assessment of Location 18 resulted in the recovery of five pieces of pre-contact Aboriginal 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 18**.

5.6 Location 19 (AeHk-42)

The Stage 2 assessment of Location 19 revealed a spatially discrete cluster of 25 mid-19th century historic Euro-Canadian artifacts, 14 of which were collected for further analysis. Domestic artifacts were the most plentiful including ceramics and glass (n=13 or 92.86% of the total artifact assemblage). The most common types of ceramic artifacts recovered from Location 19 were mid-19th century whitewares (n=7 or 87.50%) and a fragment of aqua bottle glass with a diagnostic open pontil base dating it to prior to 1870. Given the presence of mid-19th century material and the presence of a house and orchard indicated on the historic mapping, **it is recommended that Location 19 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 19 should also be conducted as part of the Stage 3 assessment.

5.7 Location 20 (AgHk-121)

The 15 artifacts collected from the observed scatter of 45 artifacts during the Stage 2 assessment of Location 20 represent predominantly late 19th and early 20th century Euro-Canadian debris, mostly fragile domestic items such as ceramics and glass which represent the remains of a small 20th century domestic midden. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 20**.

5.8 Location 21

The Stage 2 assessment of Location 21 resulted in the recovery of a single pre-contact Aboriginal 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 21**.

5.9 Location 22

The Stage 2 assessment of Location 22 revealed a spatially discrete cluster of over 300 mid-to-late 19th century Euro-Canadian artifacts including ceramics and bottle glass, as well as personal items such as white clay pipe and agate buttons and structural remains. The most common ceramic type collected from Location 22 was mid-to-late 19th century ironstone along with a comparable collection of mid-19th century whiteware and a small assemblage of early 19th century pearlware. Three diagnostic glass finishes were collected (two dating to the mid-19th century and one indicating late 19th century material) as was black glass (dating prior to the 1860s). Given the presence of mid-to-late 19th century material, the size of the scatter, and the presence of a house and orchard indicated on the historic mapping, **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 should also be conducted as part of the Stage 3 assessment.

5.10 Location 23 (AfHk-33)

The Stage 2 assessment of Location 23 (AfHk-33) resulted in the recovery of a pre-contact Aboriginal Middle Archaic projectile point (*circa* 6000 to 2500 B.C.). 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 23**.

5.11 Location 24

The Stage 2 assessment of Location 24 revealed a spatially discrete cluster of over 700 mid-to-late 19th century Euro-Canadian cultural material, domestic debris comprising 80.88% of the total artifacts collected. The observed scatter on site included a high percentage of red and yellow brick fragments and other structural remains indicating Location 24 was the site of a demolished residence. Also in the assemblage are smaller assemblages of structural, faunal and personal artifacts. The most common ceramic types collected from Location 24 were mid-to-late 19th century ironstone and mid-19th century whitewares. A small collection of pearlware is also present in the assemblage as is a mid-19th century American Civil War uniform button. Given the presence of 19th century material spanning the century, the overall size of the scatter and the presence of a house and orchard indicated on the historic mapping, **it is recommended that Location 24 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 24 should also be conducted as part of the Stage 3 assessment.

5.12 Location 25

The Stage 2 assessment of Location 25 resulted in the recovery of a single pre-contact Aboriginal secondary 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 25**.

5.13 Location 26

The Stage 2 assessment of Location 24 revealed a spatially discrete cluster of 150 Euro-Canadian cultural material spanning the entirety of the 19th century including domestic and personal items. Whiteware dominates the ceramic assemblage with 53.63% and the assemblage includes a smaller assortment of early 19th century material such as pearlware, redware and a single fragment of creamware. Diagnostic glass in the assemblage such as black glass also lends credence to an earlier 19th century occupation of the site. Given the presence of material spanning the 19th century, and the presence of a house and orchard indicated on the historic mapping, **it is recommended that Location 26 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 26 should also be conducted as part of the Stage 3 assessment.

5.14 Location 27

The Stage 2 assessment of Location 27 resulted in the recovery of a single pre-contact Aboriginal biface fragment. 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 27**.

5.15 Location 28

The 17 artifacts collected from the observed scatter of 70 artifacts during the Stage 2 assessment of Location 28 represent a range of predominantly mid-to-late 19th century Euro-Canadian domestic debris, including ironstone, whiteware and a small assemblage of utilitarian kitchenwares. Most of the assemblage consists of fragile items such as ceramics, and bottle and window glass.

Given the presence of mid-to-late 19th century Euro-Canadian material culture, **it is recommended that Location 28 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 28 should also be conducted as part of the Stage 3 assessment.

5.16 Summary

The above recommendations determine that six of the 15 identified sites require further Stage 3 assessment. As such, nine sites are not recommended for further archaeological work. Table 41 provides a breakdown of Golder's recommendations for the NEEC Adelaide Wind Energy Centre:

Table 41: Recommendations for Further Stage 3 Assessment

Location	Borden Number	Affiliation	Stage 3 Recommended?
14	AgHj-10	Pre-contact Aboriginal	Yes
15		Pre-contact Aboriginal	No
16		Pre-contact Aboriginal	No
17		Historic Euro-Canadian	No
18		Pre-contact Aboriginal	No
19	AeHk-42	Historic Euro-Canadian	Yes
20	AgHk-121	Historic Euro-Canadian	No
21		Pre-contact Aboriginal	No
22	AgHk-122	Historic Euro-Canadian	Yes
23	AfHk-33	Pre-contact Aboriginal	No
24	AgHk-123	Historic Euro-Canadian	Yes
25		Pre-contact Aboriginal	No
26	AfHk-34	Historic Euro-Canadian	Yes
27		Pre-contact Aboriginal	No
28	AgHk-124	Historic Euro-Canadian	Yes

While all of these sites were documented during the Stage 2 archaeological field work conducted within the proposed NEEC Adelaide Wind Energy Centre study area, six require further Stage 3 assessment. The remaining nine 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 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 licence.

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

This report is submitted to the Minister of Tourism, Culture and Sport as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism, Culture and Sport, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

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, R.S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

Additional archaeological assessment is still required. 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 licence.

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8.0 IMAGES

Plate 1: Stage 2, Soil Conditions, facing north, ADL1048 (Locations 20, 21 and 22), August 29, 2011

Plate 2: Stage 2, Pedestrian Survey at 5 metre intervals, facing northwest, ADL1048 (Locations 20, 21 and 22), November 10, 2011

Plate 3: Stage 2, Pedestrian Survey at 5 metre intervals, facing north, ADL1045 (Location 14), July 11, 2011

Plate 4: Stage 2, Pedestrian Survey at 5 metre intervals, facing north, ADL1027 (Location 15), July 11, 2011

Plate 5: Stage 2, Soil Conditions, facing north, ADL1097 (Location 25), December 13, 2011

Plate 6: Stage 2, Soil Conditions, facing north, ADL1043, November 17, 2011

Plate 7: Stage 2, Soil Conditions, facing north, ADL1081 (Location 24), December 13, 2011

Plate 8: Stage 2, Pedestrian Survey at 1 metre intervals, facing south, ADL1081 (Location 24), December 13, 2011

Plate 9: Stage 2, Soil Conditions, facing north, ADL1003 (Location 28), January 25, 2012

Plate 10: Stage 2, Pedestrian Survey at 5 metre intervals, facing east, ADL1003 (Location 28), January 25, 2012

Plate 11: Stage 2, Soil Conditions, facing east, ADL1023 (Location 26), December 20, 2011

Plate 12: Stage 2, Pedestrian Survey at 5 metre intervals, facing south, ADL1023 (Location 26), December 20, 2011

Plate 13: Stage 2, Soil Conditions, facing east, ADL1007 (Location 18), September 20, 2011

Plate 14: Stage 2, Pedestrian Survey at 5 metre intervals, facing east, ADL1007 (Location 18), September 20, 2011

Plate 15: Stage 2, Pedestrian Survey at 5 metre intervals, facing north, ADL1049 (Location 16), July 11, 2011

Plate 16: Stage 2, Soil Conditions, facing northeast, ADL1033, November 20, 2011

Plate 17: Stage 2, Soil Conditions, facing northeast, ADL1029 (Location 23), November 28, 2011

Plate 18: Stage 2, Pedestrian Survey at 5 metre intervals, facing north, ADL1029 (Location 23), November 28, 2011

Plate 19: Stage 2, Soil Conditions, facing northwest, ADL1058 (Location 27), January 24, 2012

Plate 20: Stage 2, Pedestrian Survey at 5 metre intervals, facing south, ADL1058 (Location 27), January 24, 2012

Plate 21: Stage 2, Municipal Right of Way showing disturbance and ditching on the north side of Cuddy Drive between Seed Road and School Road in the area of the proposed cable corridor, facing east, November 14, 2011

Plate 22: Stage 2, Municipal Right of Way showing disturbance and ditching on the east side of Kerwood Road between Highway 402 and Egremont Drive in the area of the proposed cable corridor, facing north, November 14, 2011

Plate 23: Location 14 (AgHj-10) Pre-contact Aboriginal Artifact, actual size

1: Projectile Point
Location 14, cat. #1

Plate 24: Location 15 Pre-contact Aboriginal Artifact, actual size

1: Scraper
Location 15, cat. #1

Plate 25: Location 16 Pre-contact Aboriginal Artifact, actual size

1: Utilized Flake
Location 16, cat. #1

Plate 26: Location 17 Historic Euro-Canadian Artifacts, actual size

1: White Glass
Location 17, cat. #4

2: Glass Dish
Location 17, cat. #4

Plate 27: Location 18 Pre-contact Aboriginal Artifacts, actual size

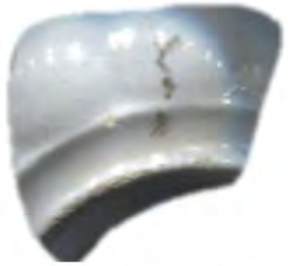
1: Chipping Detritus
Location 18, cat. #1

Plate 28: Location 19 (AeHk-42) Historic Euro-Canadian Ceramics, actual size

1: Plain Whiteware
Location 19, cat. #2,10

2: Painted Whiteware
Location 19, cat. #5,6

Plate 29: Location 20 (AgHk-121) Historic Euro-Canadian Ceramics, actual size



1: Moulded Ironstone
Location 20, cat. #2

2: Porcelain
Location 20, cat. #3

Plate 30: Location 21 Pre-contact Aboriginal Artifact, actual size

1: Retouched Flake
Location 21, cat. #1

Plate 31: Location 22 (AgHk-122) Historic Euro-Canadian Ceramics, actual size

1: Plain Ironstone
Location 22, cat. #6, 44

2: Moulded Ironstone
Location 22, cat. #47

3: Painted Ironstone
Location 22, cat. #59

4: Transfer Printed Ironstone
Location 22, cat. #4

5: Transfer Printed Whiteware
Location 22, cat. #41

6: Flow Transfer Printed Whiteware
Location 22, cat. #34

7: Plain Whiteware
Location 22, cat. #20, 42

8: Sponged Whiteware
Location 22, cat. #48

9: Stamped Whiteware
Location 22, cat. #22

10: Transfer Printed Porcelain
Location 22, cat. #29

11: Painted Porcelain
Location 22, cat. #30

12: Transfer Printed Pearlware
Location 22, cat. #29

Plate 32: Location 22 (AgHk-122) Historic Euro-Canadian Artifacts, actual size

Plate 33: Location 23 (AfHk-33) Pre-contact Aboriginal Artifact, actual size

1: Projectile Point
Location 23, cat. #1

Plate 34: Location 24 (AgHk-123) Historic Euro-Canadian Ceramics, actual size

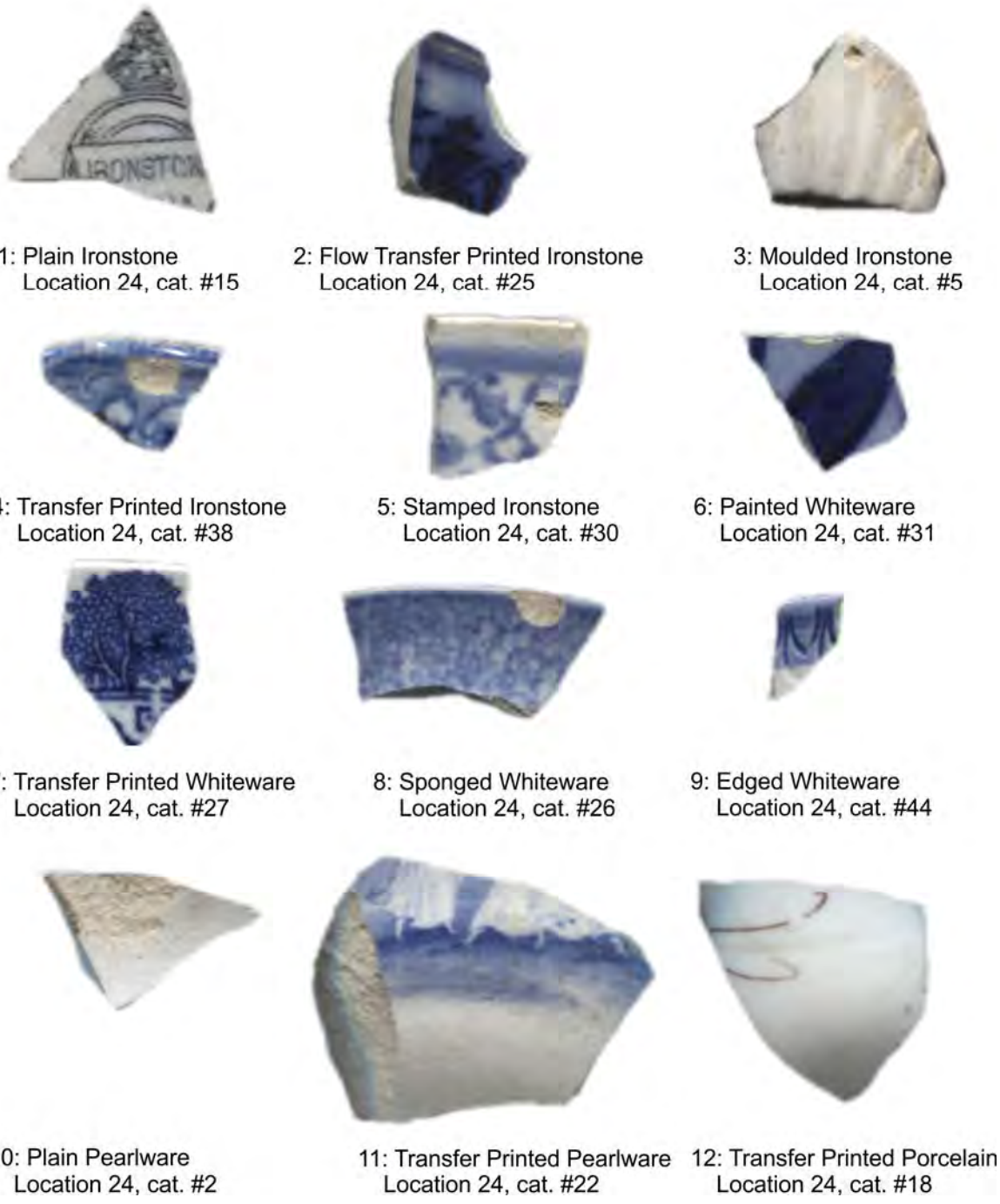
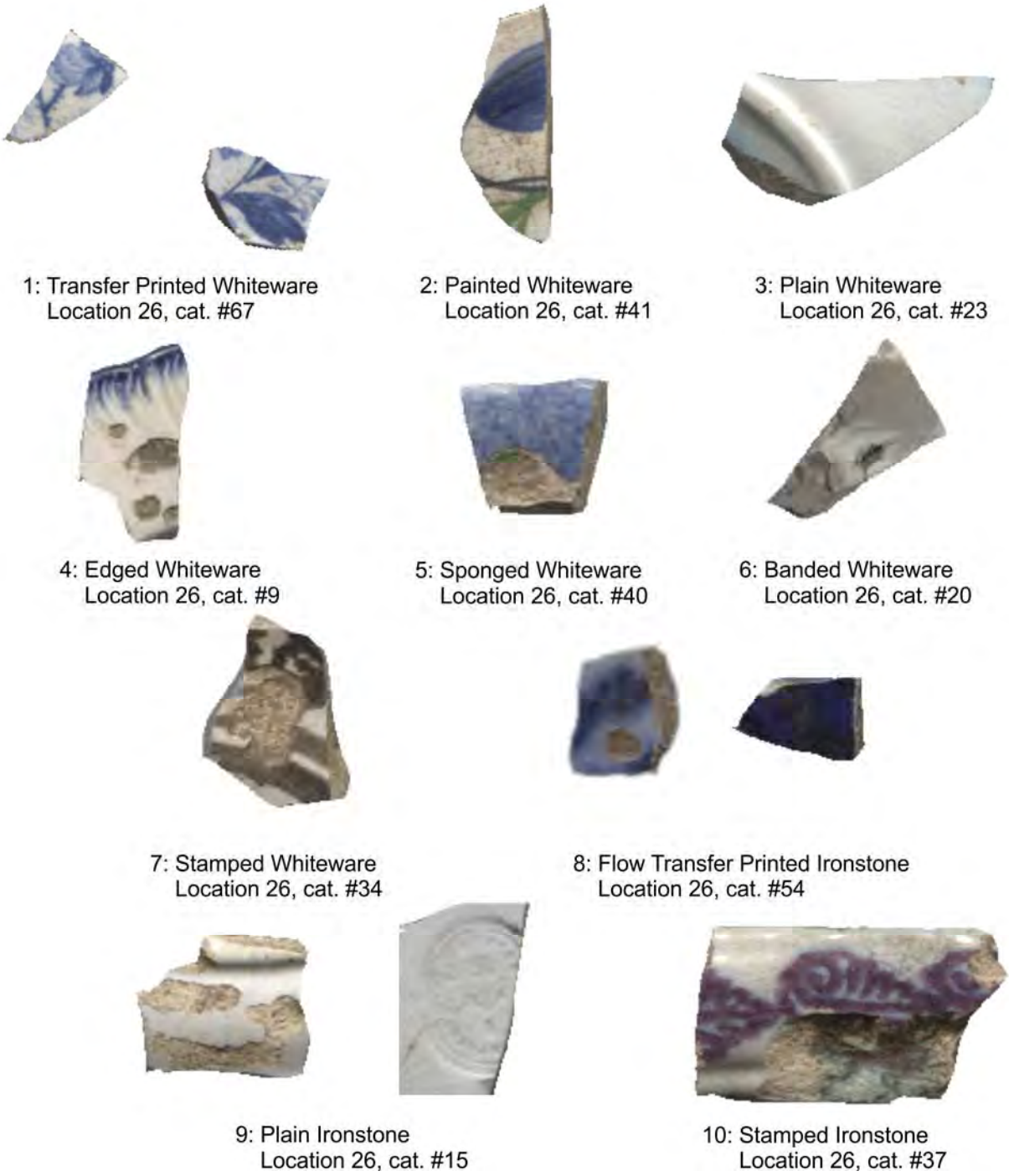


Plate 35: Location 24 (AgHk-123) Historic Euro-Canadian Assorted Artifacts, actual size

Plate 36: Location 25 Pre-contact Aboriginal Artifact, actual size

Plate 37: Location 26 (AfHk-34) Historic Euro-Canadian Ceramic Artifacts, actual size



1: Transfer Printed Whiteware
Location 26, cat. #67

2: Painted Whiteware
Location 26, cat. #41

3: Plain Whiteware
Location 26, cat. #23

4: Edged Whiteware
Location 26, cat. #9

5: Sponged Whiteware
Location 26, cat. #40

6: Banded Whiteware
Location 26, cat. #20

7: Stamped Whiteware
Location 26, cat. #34

8: Flow Transfer Printed Ironstone
Location 26, cat. #54

9: Plain Ironstone
Location 26, cat. #15

10: Stamped Ironstone
Location 26, cat. #37

Plate 38: Location 26 (AfHk-34) Historic Euro-Canadian Ceramic Artifacts, actual size

1: Plain Pearlware
Location 26, cat. #22

2: Painted Pearlware
Location 26, cat. #24

3: Transfer Printed Pearlware
Location 26, cat. #12

4: Redware
Location 26, cat. #46

5: Transfer Printed Creamware
Location 26, cat. #39

6: Plain Porcelain
Location 26, cat. #38

Plate 39: Location 26 (AfHk-34) Historic Euro-Canadian Artifacts, actual size

1: Patent Finish
Location 26, cat. #13

2: White Clay Pipe Stems
Location 26, cat. #2, 5, 4

3: White Clay Pipe Bowl
Location 26, cat. #7

4: Agate Button
Location 26, cat. #4

5: Machine Cut Nails
Location 26, cat. #6, 30

6: Wire Drawn Nail
Location 26, cat. #29

Plate 40: Location 27 Pre-contact Aboriginal Artifact, actual size

1: Biface
Location 27, cat. #1

Plate 41: Location 28 (AgHk-124) Historic Euro-Canadian Ceramics, actual size

1: Transfer Printed Whiteware
Location 28, cat. #4, 7

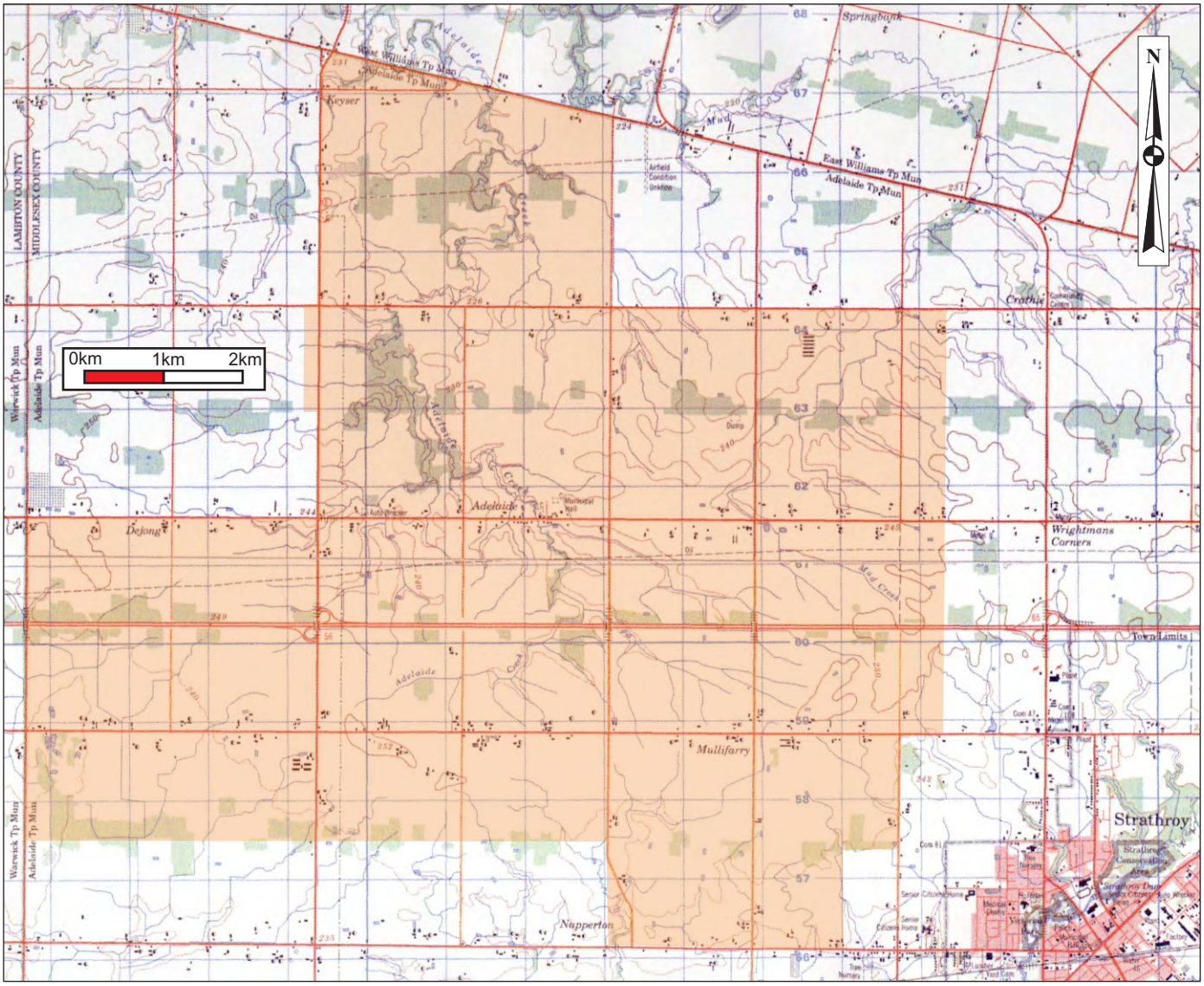
2: Stamped Whiteware
Location 28, cat. #12

3: Sponged Whiteware
Location 28, cat. #11

4: Plain Ironstone
Location 28, cat. #3, 2

9.0 MAPS

All maps will follow on succeeding pages.



LEGEND

Study Area

REFERENCE

DRAWING BASED ON
Government of Canada

1994a *Topographic Map Sheet 40 I/13: Strathroy* (Edition 6). Surveys and Mapping Branch, Department of Energy, Mines and Resources, Ottawa.

1994b *Topographic Map Sheet 40 P/4: Parkhill* (Edition 7). Surveys and Mapping Branch, Department of Energy, Mines and Resources, Ottawa.

NOTES

THIS DRAWING IS SCHEMATIC ONLY AND IS TO BE READ IN CONJUNCTION WITH ACCOMPANYING TEXT.

ALL LOCATIONS ARE APPROXIMATE.

PROJECT

Stage 2 Archaeological Assessment
Adelaide Wind Energy Centre
Middlesex County, Ontario

TITLE

Location of the Study Area

Golder Associates

PROJECT No.		11-1154-0021	FILE No.	1111540021-2000-R01001
			SCALE	AS SHOWN REV.
CADD	JM	FEB 17/12		
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FIGURE 1