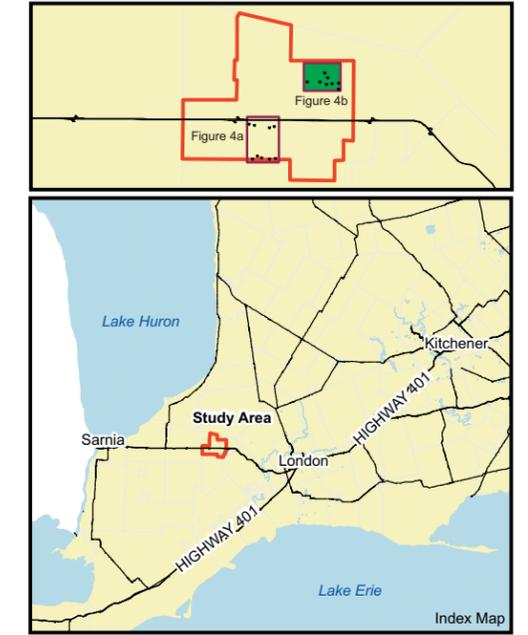


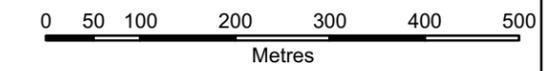


- LEGEND**
- Turbine Layout 38
 - Access Road
 - Collector Cable
 - Major Road
 - Local Road
 - Watercourse, Permanent
 - Watercourse, Intermittent
 - Proposed Laydown / Staging Area
 - Waterbody, Permanent
 - Archaeological Location, Stage 3 Fieldwork Conducted and Stage 4 Archaeological Assessment Recommended
 - Archaeological Location, Stage 3 Fieldwork Conducted and No Further Archaeological Work Recommended



REFERENCE

Base Data - MNR NRVIS, obtained 2004, CANMAP v2006.4
 Produced by Golder Associates Ltd under licence from Ontario Ministry of Natural Resources, © Queens Printer 2009
 Air Photo - Spring 2006 First Base Solutions.
 Datum: NAD 83 Projection: UTM Zone 17N

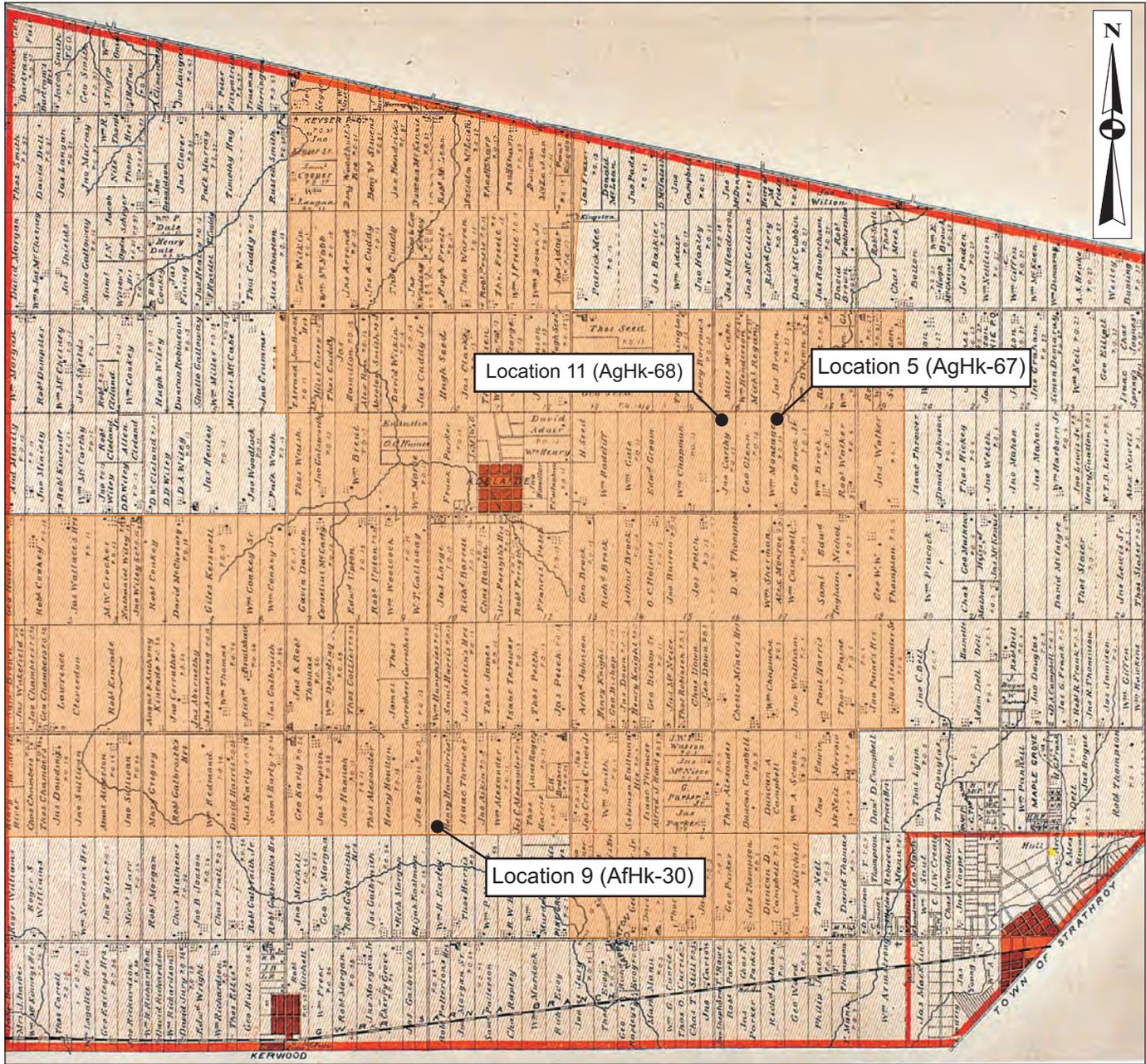


PROJECT STAGE 3 ARCHAEOLOGICAL ASSESSMENT
 NEXTERA ADELAIDE WIND FARM
 GEO. TWP. OF ADELAIDE, MIDDLESEX COUNTY, ONTARIO

TITLE
**LOCATION OF SITES SUBJECT TO
 STAGE 3 ARCHAEOLOGICAL ASSESSMENT**

	PROJECT NO. 10-1151-0038	SCALE AS SHOWN	REV. 0
	DESIGN PP 05 Mar. 2008		
	GIS PP 16 Nov. 2009		
	CHECK		
	REVIEW		

FIGURE 4B



LEGEND

- Study Area
- Approximate Location of Historic Euro-Canadian Site Requiring Stage 3 Assessment

REFERENCE

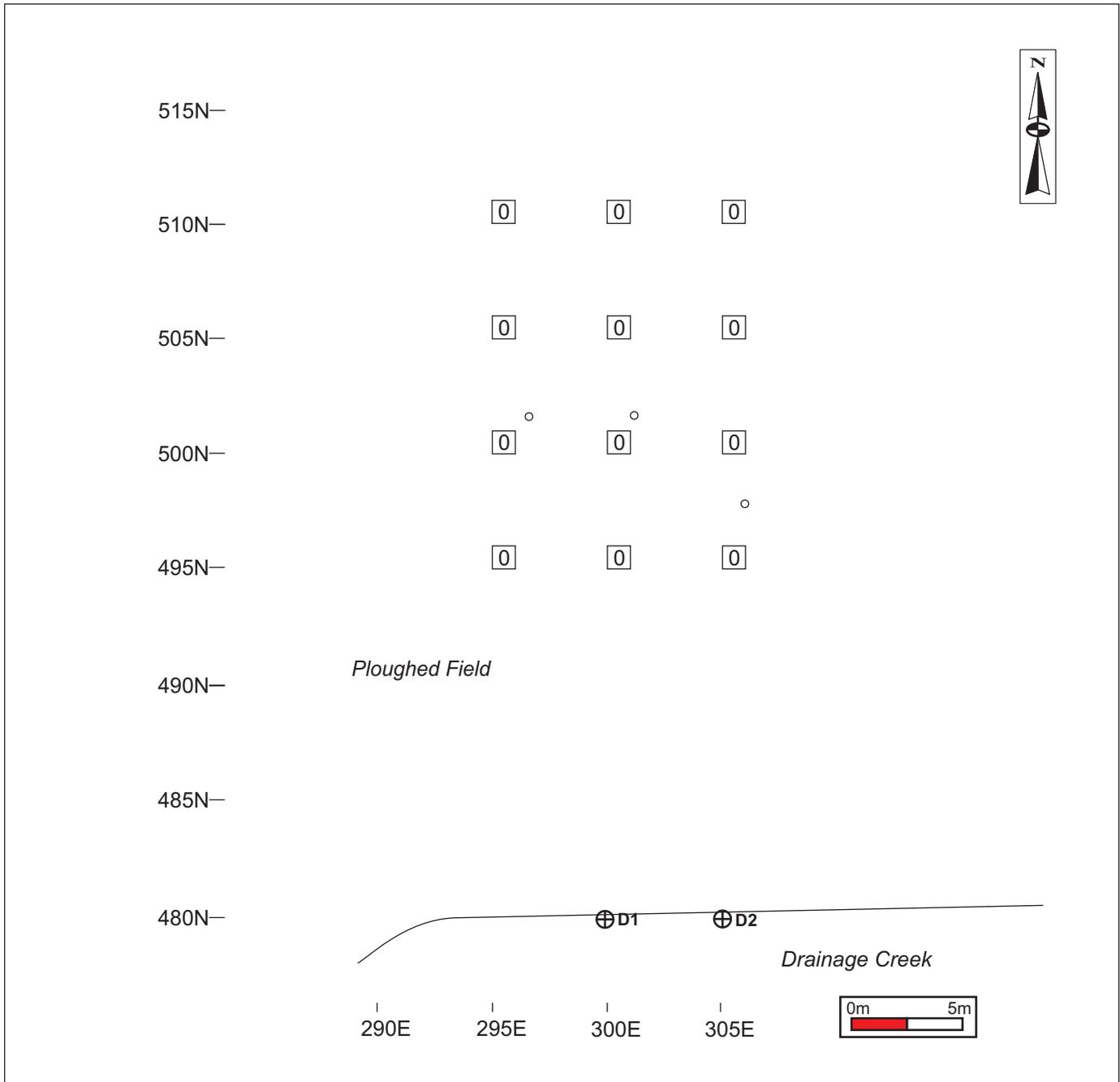
DRAWING BASED ON
 H.R. Page and Company
 1878 *Illustrated Historical Atlas of the County of Middlesex*.
 1972 reprint. Edward Phelps, Sarnia.

NOTES

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

ALL LOCATIONS ARE APPROXIMATE.

PROJECT		Stage 3 Archaeological Assessment	
NextEra Adelaide Wind Farm		Township of Adelaide, Middlesex County, ON	
TITLE		Location of Historic Euro-Canadian Sites Subject to Stage 3 Assessment on a Portion of the 1878 Historic Map of the Township of Adelaide	
PROJECT No.	10-1151-0038-40000	FILE No.	1011510038-40000-R01005
CADD	IJ	SCALE	NOT TO SCALE. REV.
CHECK		Apr. 13/09	
Golder Associates		FIGURE 5	



LEGEND

- Stage 2 Surface Find
- Stage 3 Unit Excavated
- 88 Number of Artifacts
- ⊕ Datum Stake

REFERENCE

DRAWING BASED ON
Field Director's Notes

NOTES

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ALL LOCATIONS ARE APPROXIMATE.

PROJECT		Stage 3 Archaeological Assessment NextEra Adelaide Wind Farm Township of Adelaide, Middlesex County, ON	
TITLE			
Location 2 (AgHk-29) Excavation Results			
PROJECT No.	10-1151-0038-40000	FILE No.	1011510038-40000-R01006
CADD	IJ	Apr. 5/10	SCALE AS SHOWN REV.
CHECK			FIGURE 6





3.2 Location 3 (AgHk-66)

The Stage 2 investigation of Location 3 (AgHk-66) found that the site consisted of a 15 metre (along the north-south axis) by 35 metre (along the west-east axis) scatter of two Kettle Point chert flakes, one biface manufactured from Kettle Point chert and one projectile point manufactured from Onondaga chert. Due to the fact that Location 3 was a spatially discrete area producing pre-contact Aboriginal cultural material, some of which dates to the Late Archaic, it was recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest.

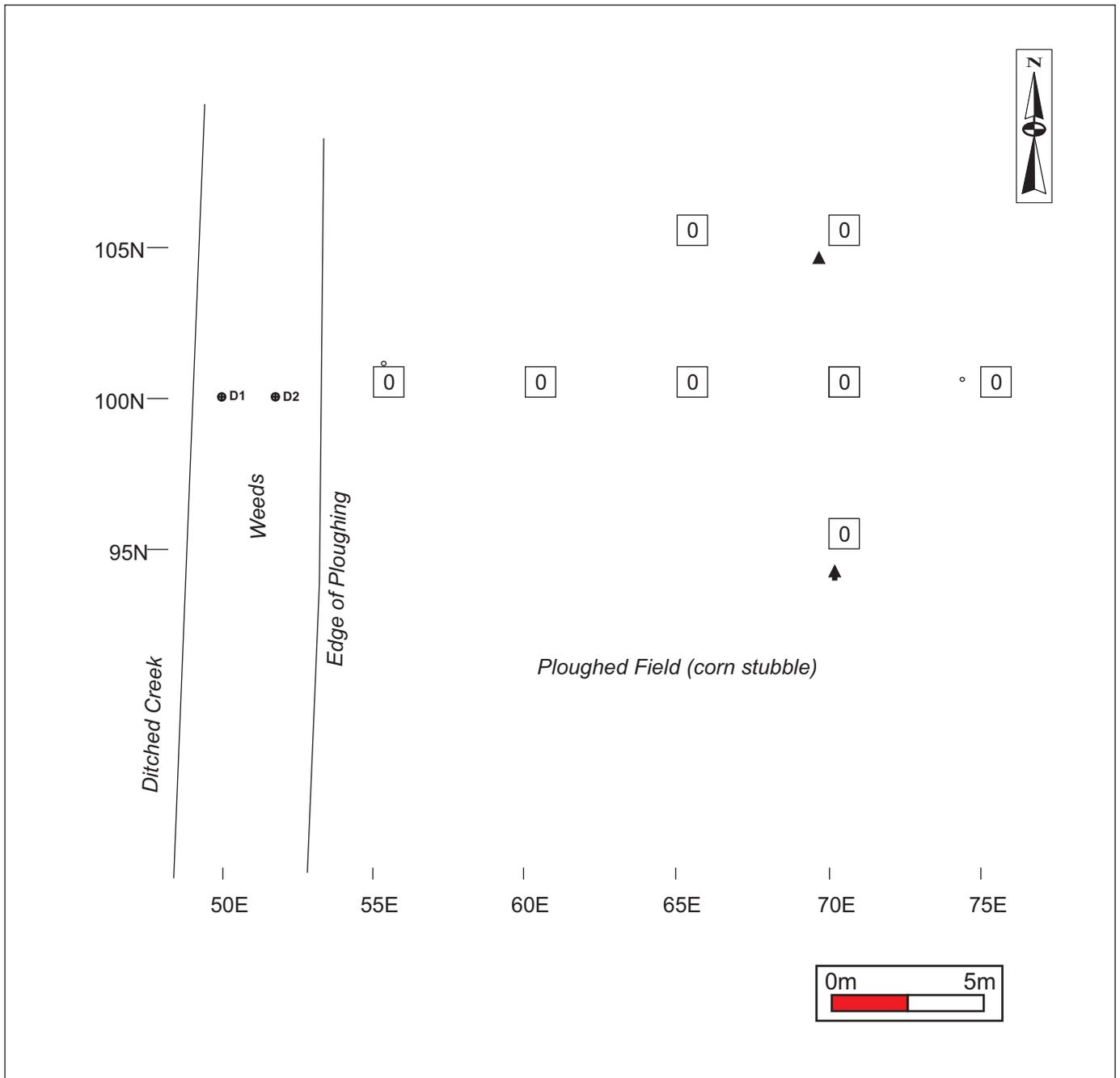
The Stage 3 assessment of Location 3 (AgHk-66) was conducted on March 26th, 2010. The site was relocated using flags left indicating the Stage 2 finds, as well as GPS co-ordinates. The weather was cloudy, cool and windy. Visibility was excellent and at no time were conditions detrimental to the recovery of archaeological remains. Eight one-metre square units were strategically placed around higher artifact concentrations as determined by the Stage 2 archaeological assessment of Location 3 (AgHk-66). The one-metre square units ranged from 18 to 33 centimetres deep. No artifacts were recovered during the Stage 3 surface collection or unit excavation. Figure 7 illustrates the Stage 3 surface collection as well as the location and rate of artifact return for each one-metre unit excavated.

As no cultural material was recovered during the Stage 3 excavations, the cultural heritage value or interest of the site was judged to be low. The cultural heritage value or interest of this site has been sufficiently documented and no further archaeological assessment is recommended.

3.3 Location 5 (AgHk-67)

3.3.1 Site Summary

The Stage 2 investigation of Location 5 (AgHk-67) found that the site consisted of a 20 metre by 20 metre scatter of mid-to-late 19th century domestic debris. A total of 60 domestic Euro-Canadian artifacts were recovered during the Stage 2 assessment including fragments of ironstone ceramic and a late 19th century diagnostic bottle finish. Due to the fact that Location 5 (AgHk-67) consisted of a spatially discrete cluster of mid-to-late 19th century Euro-Canadian material, it was recommended that the site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest.



LEGEND

- Stage 2 Surface Find
- ▲ Stage 2 Projectile Point Surface Find
- ▲ Stage 2 Biface Surface Find
- Stage 3 Unit Excavated
- 00 Number of Artifacts
- ⊕ Datum Stake

REFERENCE

DRAWING BASED ON
Field Director's Notes

NOTES

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ALL LOCATIONS ARE APPROXIMATE.

PROJECT		Stage 3 Archaeological Assessment NextEra Adelaide Wind Farm Township of Adelaide, Middlesex County, ON	
TITLE			
Location 3 (AgHk-66) Excavation Results			
PROJECT No.	10-1151-0038-40000	FILE No.	1011510038-40000-R01007
CADD	IJ	Apr. 5/10	SCALE AS SHOWN REV.
CHECK			FIGURE 7





The Stage 3 assessment of Location 5 (AgHk-67) was conducted on March 25th and March 26th, 2010. The weather was cloudy and cold. Visibility was excellent and at no time were conditions detrimental to the recovery of archaeological remains. Fourteen one-metre square units were strategically placed around higher artifact concentrations as determined by the Stage 2 archaeological assessment of Location 5 (AgHk-67). The one-metre square units ranged from 20 to 37 centimetres deep and yielded between one and 97 artifacts. Figure 8 illustrates the Stage 3 surface collection as well as the location and rate of artifact return for each one-metre unit excavated. The Stage 3 excavation of Location 5 (AgHk-67) resulted in the recovery of 270 Euro-Canadian artifacts: 240 domestic, 21 structural, four miscellaneous metal, two miscellaneous, two recent material and one faunal. Each artifact class is discussed in greater detail below. Table 1 provides a summary of the Stage 3 artifacts recovered from Location 5 (AgHk-67). Appendix A provides a complete catalogue listing of the Stage 3 recoveries.

Table 1: Stage 3 Artifact Summary for Location 5 (AgHk-67)

Artifact Class	Frequency	%
domestic	240	88.89
structural	21	7.78
miscellaneous metal	4	1.48
miscellaneous	2	0.74
recent material	2	0.74
faunal	1	0.37
Total Stage 3 Artifacts	270	100.00

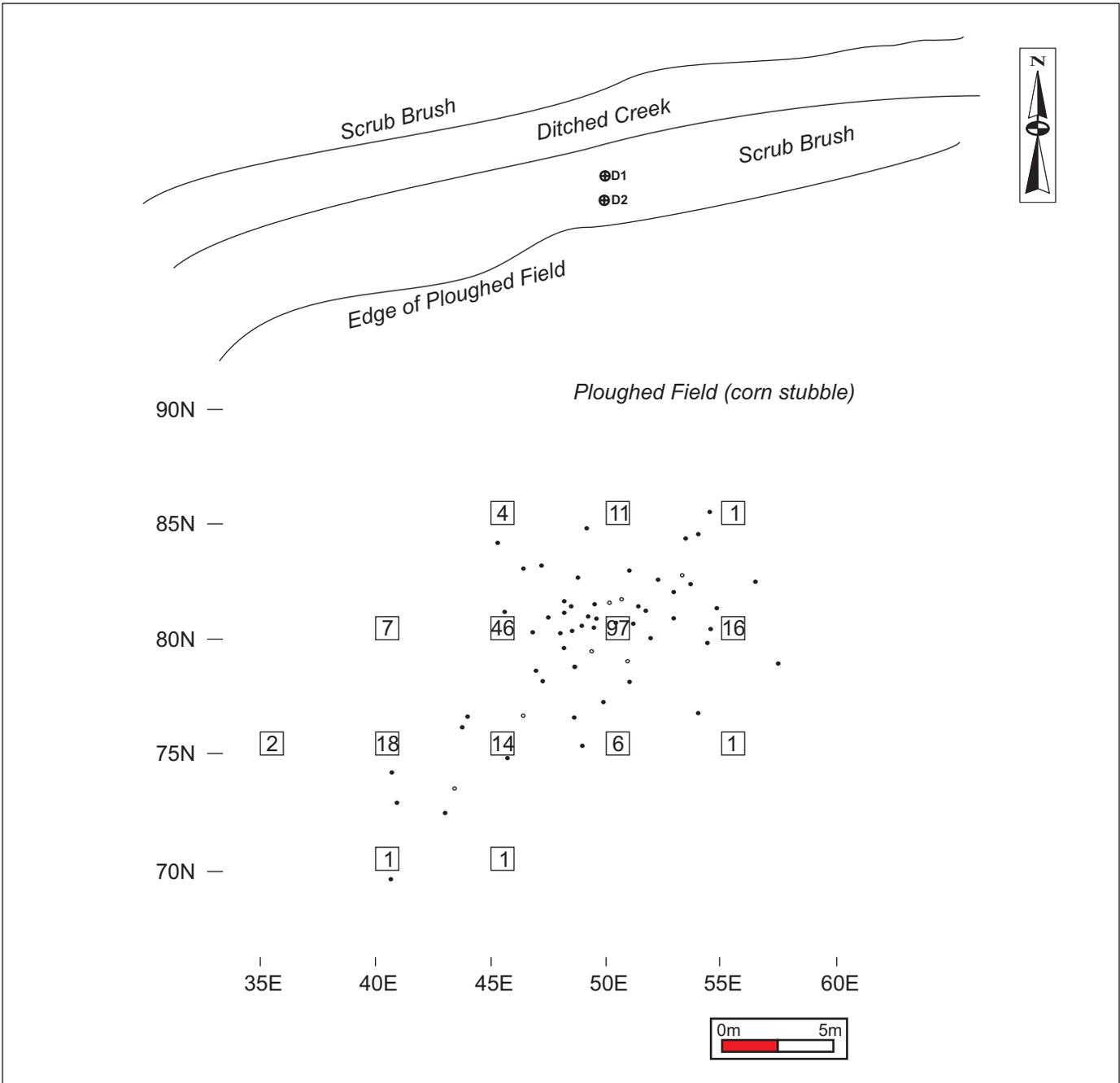
3.3.2 Artifact Description

3.3.2.1 Domestic Artifacts

A total of 240 domestic artifacts were recovered from the Stage 3 excavations at Location 5 (AgHk-67). This collection includes 139 fragments of domestic glass bottle and 101 fragments of ceramic.

Ceramic Artifacts

A total of 101 fragments of ceramic hollowwares and flatwares were collected during the Stage 3 assessment of Location 5 (AgHk-67), including 46 ironstone, 33 utilitarian, 11 semi-porcelain, four porcelain, three miscellaneous unidentified ceramics, two whitewares, one fragment of English majolicaware and one fragment of rockinghamware. Table 2 provides a breakdown of the ceramic assemblage by ware type, while Table 3 provides a more detailed breakdown of the ceramic assemblage by decorative style.



LEGEND

- Stage 2 Surface Find
- Stage 3 Surface Find
- Stage 3 Unit Excavated
- 88 Number of Artifacts
- ⊕ Datum Stake

REFERENCE

DRAWING BASED ON
Field Director's Notes

NOTES

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IN CONJUNCTION WITH ACCOMPANYING TEXT.

ALL LOCATIONS ARE APPROXIMATE.

PROJECT		Stage 3 Archaeological Assessment NextEra Adelaide Wind Farm Township of Adelaide, Middlesex County, ON	
TITLE		Location 5 (AgHk-67) Excavation Results	
PROJECT No.	10-1151-0038-40000	FILE No.	1011510038-40000-R01008
CADD	IJ	SCALE	AS SHOWN REV.
CHECK	Apr. 5/10	FIGURE 8	
			



STAGE 3 ARCHAEOLOGICAL ASSESSMENT NEXTERA ADELAIDE WIND FARM

Table 2: Summary of Ceramic Collection According to Ware Type, Location 5 (AgHk-67)

Artifact	Frequency	%
ironstone	46	45.54
utilitarian	33	32.67
semi-porcelain	11	10.89
porcelain	4	3.96
ceramic, miscellaneous	3	2.97
whiteware	2	1.99
majolicaware	1	0.99
rockinghamware	1	0.99
Total	101	100.00

Table 3: Summary of Ceramic Collection According to Decorative Style, Location 5 (AgHk-67)

Artifact	Frequency	%
ironstone, plain	32	31.68
earthenware, red	31	30.69
porcelain, semi	11	10.89
ironstone, transfer printed	8	7.92
ironstone, moulded	6	5.94
porcelain, plain	4	3.96
ceramic, miscellaneous unidentified	3	2.97
earthenware, yellow	2	1.99
majolicaware, English	1	0.99
rockinghamware	1	0.99
whiteware, plain	1	0.99
whiteware, transfer printed	1	0.99
Total	101	100.00

Ironstone

Ironstone or graniteware is a variety of refined white earthenware introduced in the 1840's that became extremely popular in Upper Canada by the 1860's (Kenyon 1985). It is usually much thicker than other whiteware, and often decorated with raised moulded designs of wheat or fruit. Ironstone was the most common type of ceramic recovered from Location 5 (AgHk-67) with 46 fragments, comprising 45.54% of the total Stage 3 ceramic artifact recoveries. The ironstone assemblage included 32 fragments classified as plain or undecorated (Plate 7:1). One of these fragments (Plate 7:2) bears a partial maker's mark representing Mellor, Taylor and Co., ceramic manufacturers operational in Burslem, England from 1887 to 1904 (Birks 2010).



STAGE 3 ARCHAEOLOGICAL ASSESSMENT NEXTERA ADELAIDE WIND FARM

The ironstone assemblage also included eight transfer print decorated fragments and six with moulded decorations. Of the transfer printed assemblage, six are decorated in various shades of green with floral motifs, and two are decorated in a brown floral motif (Plate 7:3). Five of the moulded fragments are indeterminate on account of being small and fragmentary, while one is decorated with the wheat design (Plate 7:4). The wheat pattern dates from the 1860's well into the latter part of the 19th century. The wheat design, also referred to as "Ceres", was the most popular ironstone pattern produced (Kenyon 1985).

Plate 7: Location 5 (AgHk-67) Examples of Ceramics (actual size)





Utilitarian Earthenware

In addition to the tableware, 33 utilitarian ceramic pieces were recovered including 31 fragments of red earthenware (27 lead glazed and four plain), and two fragments of plain 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.

Semi-Porcelain

Eleven of the fragments in the ceramic assemblage from Location 5 (AgHk-67) have been identified as semi-porcelain (Plate 7:5). During the first half of the 19th century, the English improved pottery techniques resulting in the production of durable and decorative wares with trade names such as semi-porcelain. This hard earthenware sought to emulate imported porcelains but lacked true translucency. In 1850, semi-porcelains were reintroduced and this vitreous, hard-glazed white earthenware resembling bone china soon dominated the marketplace (Hughes 1961).

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 a light. Because of its high cost, porcelain is extremely rare on 19th century sites in Ontario, however by the turn of the century it becomes relatively common, as production techniques were developed in Europe which greatly reduced costs. Four fragments of plain white, low-grade porcelain (Plate 7:6) were recovered from Location 5 (AgHk-67).

Undetermined Ceramic Type

Three of the ceramic pieces recovered from Location 5 (AgHk-67) could not be catalogued into a specific ceramic-ware classification. These pieces are so heavily damaged and fragmentary that it is impossible to accurately identify them by ceramic type. In order to avoid altering the separate ceramic totals, percentages and ultimately the temporal data for the site the damaged pieces were simply classified as miscellaneous unidentified ceramics.



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 1830's. Early whiteware tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19th century. During Stage 3 excavations, two fragments of whiteware were recovered from Location 5 (AgHk-67): a single fragment of plain whiteware (Plate 7:7) and one fragment of green transfer print decorated ware (Plate 7:8). Transfer printed whiteware became popular quite early in the 19th century and involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay. Before 1830, almost all transfer printed wares were blue. After 1830, colours such as light blue, black, brown, green, purple and red became more common.

English Majolicaware

English majolicaware was introduced to the English public by Herbert Minton in 1851. These rich, jewel-toned earthenwares were inspired by the Italian and French produced maiolica of the Renaissance period. Inspired by nature, English majolica often utilized plants, animals and fruits as subject matter (Karmason and Stacke 2002). The fragment in the Location 5 (AgHk-67) assemblage is decorated in a rich glossy green (Plate 7:9).

Rockinghamware

A single fragment in the ceramic assemblage has been identified as earthenware with a Rockingham glaze (Plate 7:10). Rockinghamware became popular in the 1840's and continues to be manufactured in limited quantities today (Adams 1994:100).

Glass Artifacts

During the Stage 3 excavation of Location 5 (AgHk-67), 139 fragments of domestic glass were collected. The colours of bottle glass represented in this collection include 37 clear, 34 amber, 31 aqua, 19 olive, and 18 sun coloured amethyst. According to Lindsey (2010), sun-coloured amethyst glass contains manganese oxide and turns amethyst due to a chemical reaction caused by sun exposure. This glass generally dates from 1890 to 1920. Other than the sun coloured glass, due to the fragmentary nature of the bottle glass shards, most can only be classified according to colour and the colour of bottle glass alone is very limited with regards to providing dates of manufacture for glass bottles (Lindsey 2010). The assemblage also includes fragments of moulded glass including one body shard of amber glass bearing a partial moulded crown, as well as two fragments bearing moulded numbers on the base. None of these fragments could be traced to a particular manufacturer.



Diagnostic finishes in the assemblage include one fragment of amber glass with a straight brandy finish dating to after 1890 (Plate 8:1), one olive fragment with a mineral/double oil finish dating from 1860 to 1880's (Plate 8:2), and one fragment of aqua glass with a possible club sauce finish dating from 1850 to the 1930's (Plate 8:3). One fragment of clear glass has wide prescription finish from 1850 to 1870 (Plate 8:4), and another is identified as a patent finish dating from the mid-19th century to the early 20th century (Plate 8:5).

Plate 8: Location 5 (AgHk-67) Examples of Diagnostic Bottle Finishes (actual size)



3.3.2.2 Structural Artifacts

The structural assemblage from Location 5 (AgHk-67) consists of 21 artifacts or 7.78% of the total Stage 3 assemblage. This collection contains: 15 fragments of temporally-undiagnostic red brick, five fragments of window glass, and a single unidentified nail.

The window glass assemblage from Location 5 (AgHk-67) includes five shards in total. Four shards measure at 3.0 millimetres thick, and one shard measures 1.5 millimetres thick. Ian Kenyon (1980) provides a pre-1850 date for window panes that have an average thickness of less than 1.6 millimetres. Window pane thickness increased throughout the 19th century as the trend shifted towards using larger windows when building homes. The majority of these window glass shards date to the late 19th century or later. However, the window glass assemblage from Location 5 (AgHk-67) is very small and thus unreliable as a diagnostic mechanism.



3.3.2.3 *Miscellaneous Metal Artifacts*

The Location 5 (AgHk-67) assemblage contains four fragments of miscellaneous metal. This includes a heavily corroded fragment of metal container or bucket, one fragment of wire, a single piece of metal strapping and one corroded fragment. None of these items are temporally diagnostic.

3.3.2.4 *Miscellaneous Artifacts*

Two fragments of charcoal were collected as a sample during the Stage 3 excavation of Location 5 (AgHk-67). These two fragments represent whole branches that were burnt and are not representative of burnt domestic wood. The Location 5 (AgHk-67) soil matrix was mottled with charcoal and this may indicate that at some point brushing, clearing and burning of the area was instituted to make way for use of the land as agricultural field.

3.3.2.5 *Recent Material*

Two fragments of obviously late 20th and early 21st century material were recovered: a clay pot fragment and a shard of modern bottle glass.

3.3.2.6 *Faunal Remains*

Stage 3 excavations at Location 5 (AgHk-67) produced one fragment of faunal material – a single fragment of avian bone.

3.3.3 *Land Registry Data for Location 5 (AgHk-67)*

Location 5 is located in the west half of Lot 17, Concession 1 N.E.R., Geographic Township of Adelaide, Middlesex County, Ontario. The patent was given to Joseph Perry in 1836, who sold the property to Lawrence Laurason in 1843. The property passed quickly from Lawrence Laurason to John Burke in 1846 and then to Joseph Montague in 1847. The property stayed in possession of the Montague family for three decades, during which time it was divided into two parcels, one for 1/6 of the 200 acres and the other for 5/6 of the 200 acres. William Montague deeded the 5/6 parcel to Charles Sifton in 1878 and Rhoda Montague deeded the 1/6 parcel to Charles Sifton in 1883. The complete parcel was then sold by Mary Sifton, the spouse or descendant of Charles Sifton, to Henry Tarrant in 1903. Table 4 illustrates the Land Registry data for the west half of Lot 17, Concession 1 N.E.R., Geographic Township of Adelaide from original Crown patent to 1903.



STAGE 3 ARCHAEOLOGICAL ASSESSMENT NEXTERA ADELAIDE WIND FARM

Table 4: Land Registry data for the west half of Lot 17, Concession 1 N.E.R., Geographic Township of Adelaide

No.	Instrument	Dated	Grantor	Grantee	Remarks
	patent	1836	The Crown	Joseph Perry	
6508	bargain and sale	Feb. 1843	Joseph Perry	Lawrence Laurason	all 200 acres
8356	bargain and sale	Jun. 1846	Lawrence Laurason and wife	John Burke	and other lands
9	bargain and sale	Nov. 1847	John Burke and wife	Joseph J. Montague	west half
3671	quit claim and bargain and sale	Mar. 1868	Amelia Montague	W.C. Montague	west half
3898	quit claim	May 1869	Wm. C. Montague	Thos. E. Montague	west half
3997	mortgage	Oct. 1869	Thos. E. Montague	James D. Dewan	west half
5193	deed	Nov. 1874	John W. Montague and wife	William C. Montague	undivided 1/6 int. in west half
5938	deed	Mar. 1878	Wm. Montague and wife	Charles G. Sifton	undivided 5/6 int. in west half
7127	deed	Nov. 1882	Walter H. Montague and wife	Rhoda Montague	undivided 1/6 int. in west half
7130	deed	Jun. 1883	Rhoda Montague	Charles G. Sifton	undivided 1/6 int. in west half
10445	bargain and sale	Jan. 1903	Mary I.C. Sifton	Henry Tarrant	west half

3.3.4 Summary

The artifacts collected from Location 5 (AgHk-67) represent a range of late 19th century Euro-Canadian cultural material. The soil matrix is two distinct layers, including a bottom layer of light brown clay with remnants of charcoal from burnt brush and 19th century debris. This indicates the site was brushed and burned in the 19th century in order to prepare the soil for agricultural use. The isolated nature of the site (far from concession roads), the nature of the artifacts (fragile, breakable domestic items only) and lack of personal and structural material indicates that this site is a mid-to-late 19th century refuse dump ploughed under during preparation of the site for agriculture. Given the very high percentage of late 19th century ironstone, semi-porcelain and white porcelain (60.39%), diagnostic glass indicating a post-1850 date, and the lack of structural material, the cultural heritage value or interest of this site is judged to be low. The cultural heritage value or interest of this site has been sufficiently documented and no further archaeological assessment is recommended.



3.4 Location 7 (AgHj-5)

3.4.1 Site Summary

The Stage 2 investigation of Location 7 (AgHj-5) found that the site consisted of a 25 metres (along the north-south axis) by 20 metres (along the west-east axis) scatter of pre-contact Aboriginal material. The site produced a scatter of 18 chert flakes (17 Kettle Point and one Onondaga). Due to the fact that Location 7 (AgHj-5) was a spatially discrete area producing pre-contact Aboriginal cultural material, it was recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest.

The Stage 3 assessment of Location 7 (AgHj-5) was conducted on November 16th, 2009. The weather was overcast and mild. Visibility was excellent and at no time were conditions detrimental to the recovery of archaeological remains. Eighteen one-metre square units were strategically placed around higher artifact concentrations as determined by the Stage 2 archaeological assessment of Location 7 (AgHj-5). The one-metre square units ranged from 16 to 26 centimetres deep. Figure 9 illustrates the Stage 3 surface collection as well as the location and rate of artifact return for each one-metre unit excavated. Stage 2 finds for Location 7 (AgHj-5) were left *in situ*, and are thus are not included on the Figure 9 excavation results map. The Stage 3 assessment of Location 7 (AgHj-5) produced 91 artifacts including one complete biface, a single utilized flake, 85 pieces of chipping detritus and a small assemblage of faunal remains. The chipping detritus total includes the 15 pieces recovered during Stage 3 surface collection. Table 5 provides a summary of the recovered artifacts from the Stage 3 excavations, while Appendix A provides the complete catalogue listing for all of the Stage 3 recoveries.

Table 5: Stage 3 Artifact Summary for Location 7 (AgHj-5)

Artifact Class	Frequency	%
chipping detritus	85	93.40
faunal	4	4.40
biface	1	1.10
utilized flake	1	1.10
Total Stage 3 Artifacts	91	100.00



3.4.2 Artifact Description

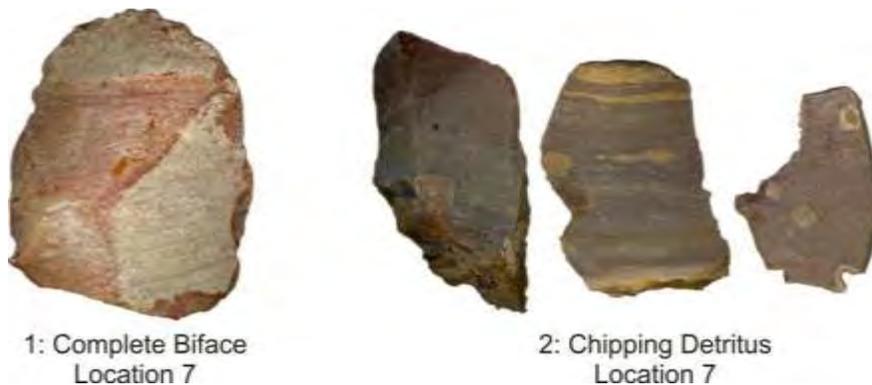
3.4.2.1 Chipped Stone Debitage and Flake Tools

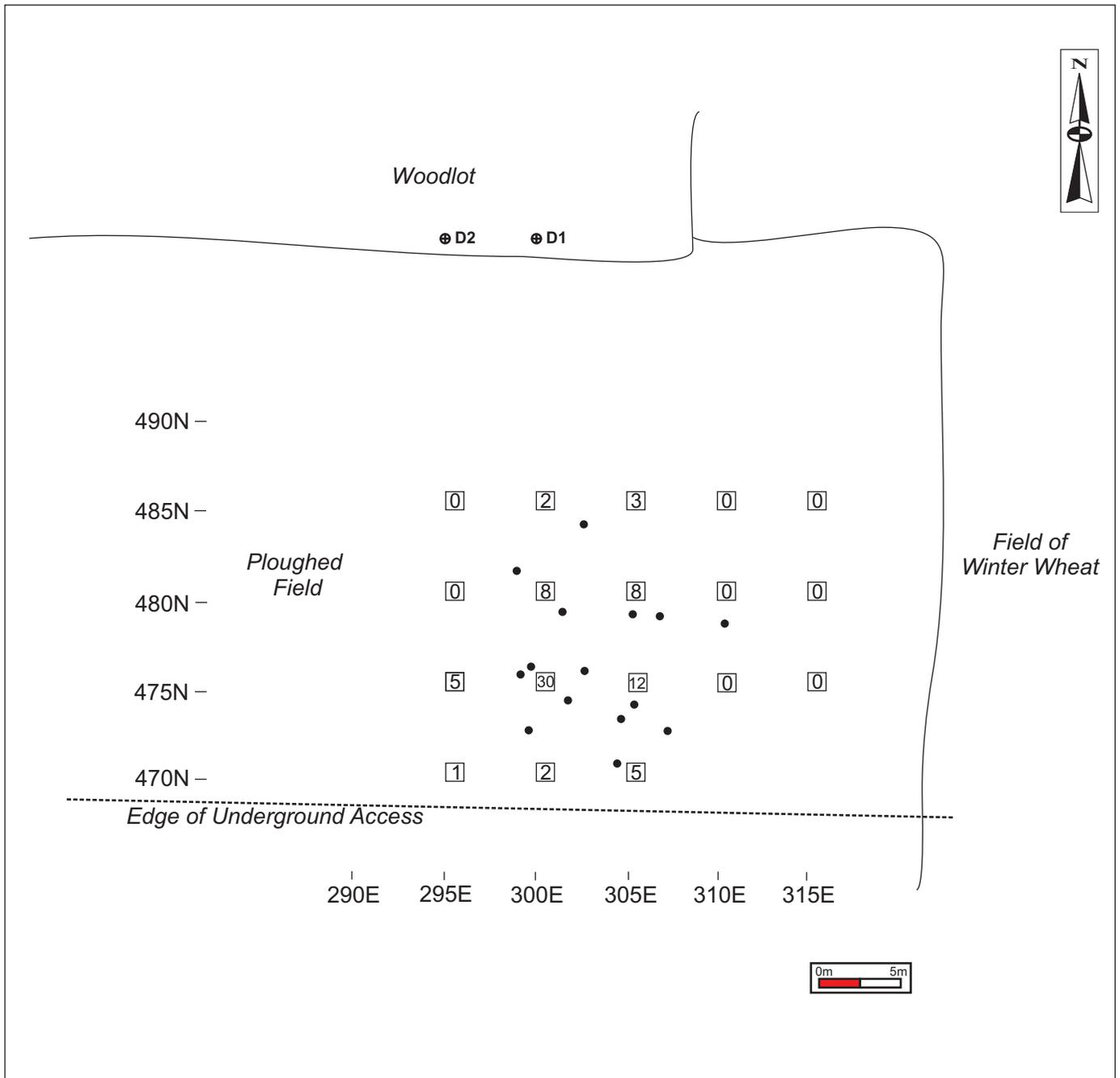
Chipped stone debitage and flake tools comprise the main bulk of artifacts recovered during the Stage 3 assessment of Location 7 (AgHj-5), including 85 pieces of chipping detritus (Plate 9:2) and a single utilized flake. All of the identifiable lithic raw material collected during Stage 3 assessment of Location 7 (AgHj-5) is Kettle Point chert. Kettle Point chert is 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.

3.4.2.2 Chipped Stone Tools

The only chipped lithic tool recovered during the Stage 3 excavations was a single, complete biface (Plate 9:1) Manufactured on a primary flake of Kettle Point chert. The biface measures 38 millimetres long, 31 millimetres long, and 9 millimetres thick.

Plate 9: Location 7 (AgHj-5) Examples of Pre-Contact Material Culture (actual size)





LEGEND

- Stage 3 Surface Find
- Stage 3 Unit Excavated
- 88 Number of Artifacts
- ⊕ Datum Stake
- Edge of Underground Access

REFERENCE

DRAWING BASED ON
Field Director's Notes

NOTES

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

ALL LOCATIONS ARE APPROXIMATE.

PROJECT		Stage 3 Archaeological Assessment NextEra Adelaide Wind Farm Township of Adelaide, Middlesex County, ON	
TITLE		Location 7 (AgHj-5) Excavation Results	
PROJECT No.	10-1151-0038-40000	FILE No.	1011510038-40000-R01009
CADD	IJ	Apr. 5/10	SCALE AS SHOWN REV.
CHECK			FIGURE 9





3.4.3 Summary

Location 7 (AgHj-5) yielded a scatter of 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 of this site is recommended. Until the Stage 4 archaeological assessment has been conducted, the site area will be surrounded by snow fence at a 20 metre buffer extending past the limits of the site as delineated by the Stage 3 test units excavated. Until this site has been excavated, all staff related to the Next Era Adelaide Wind Farm project will be instructed to avoid the site area as buffered and marked out. The Stage 4 assessment should consist of the block excavation in one-metre units of the area of greatest artifact densities, followed by shovel shining the site area in order to uncover all subsurface posts or cultural features.

3.5 Location 9 (AfHk-30)

3.5.1 Site Summary

The Stage 2 investigation of Location 9 (AfHk-30) found that the site consisted of a diffuse 30 metre by 30 metre scatter of 19th century domestic debris. A total of 14 Euro-Canadian artifacts were recovered during the Stage 2 assessment - all domestic artifacts including 10 fragments of ceramic and four shards of glass. Due to the fact that Location 9 (AfHk-30) consisted of a spatially discrete cluster of early-to-late 19th century Euro-Canadian material, it was recommended that the site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest.

The Stage 3 assessment of Location 9 (AfHk-30) was conducted on March 29th, 2010. The weather was cloudy and mild. Visibility was excellent and at no time were conditions detrimental to the recovery of archaeological remains. Twenty-four one-metre square units were strategically placed around higher artifact concentrations as determined by the Stage 2 archaeological assessment of Location 9 (AfHk-30). The one-metre square units ranged from 17 to 26 centimetres deep and yielded between zero and 19 artifacts. Figure 10 illustrates the Stage 3 surface collection as well as the location and rate of artifact return for each one-metre unit excavated. The Stage 3 excavation of Location 9 (AfHk-30) resulted in the recovery of 73 Euro-Canadian artifacts: 34 domestic, 34 recent material, four miscellaneous metal and one structural. Each artifact class is discussed in greater detail below. Table 6 provides a summary of the Stage 3 artifacts recovered from Location 9 (AfHk-30). Appendix A provides a complete catalogue listing of the Stage 3 recoveries.

Table 6: Stage 3 Artifact Summary for Location 9 (AfHk-30)

Artifact Class	Frequency	%
domestic	34	46.58
recent material	34	46.58



Artifact Class	Frequency	%
miscellaneous metal	4	5.48
structural	1	1.36
Total Stage 3 Artifacts	73	100.00

3.5.2 Artifact Description

3.5.2.1 Domestic Artifacts

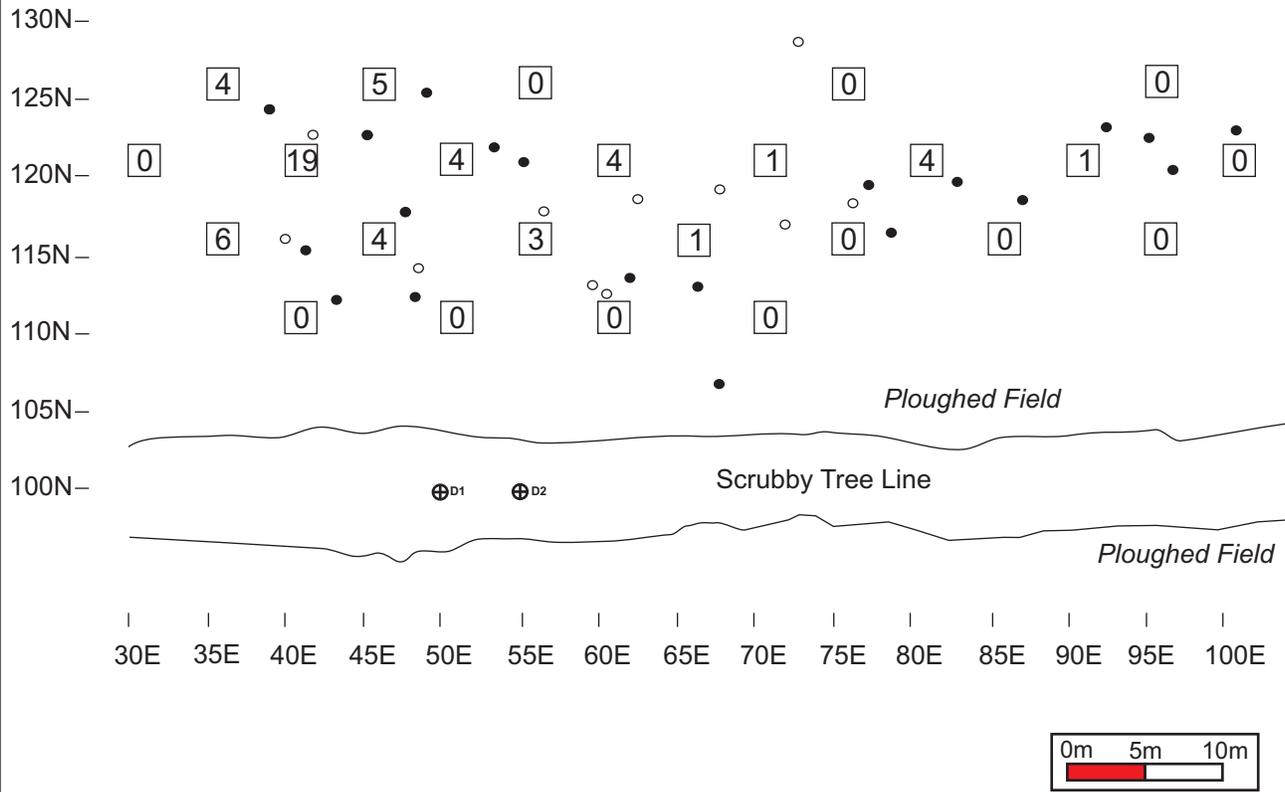
A total of 34 domestic artifacts were recovered from the Stage 3 excavations at Location 9 (AfHk-30). This collection includes 23 fragments of domestic glass bottle and 11 fragments of ceramic.

Ceramic Artifacts

A total of 11 fragments of ceramic hollowwares and flatwares were collected during the Stage 3 assessment of Location 9 (AfHk-30), including: three ironstone, two whiteware, two semi-porcelain, two rockinghamware, one porcelain and one utilitarian earthenware. Table 7 provides a more detailed breakdown of the ceramic assemblage by decorative style.

Table 7: Summary of Ceramic Collection According to Decorative Style, Location 9 (AfHk-30)

Artifact	Frequency	%
ironstone, plain	3	27.27
porcelain, semi	2	18.18
rockinghamware	2	18.18
earthenware, red	1	9.09
porcelain, hand painted	1	9.09
whiteware, plain	1	9.09
whiteware, transfer printed	1	9.09
Total	11	100.00



LEGEND

- Stage 2 Surface Find
- Stage 3 Surface Find
- Stage 3 Unit Excavated
- 88 Number of Artifacts
- ⊕ Datum Stake

REFERENCE

DRAWING BASED ON
Field Director's Notes

NOTES

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

ALL LOCATIONS ARE APPROXIMATE.

PROJECT		Stage 3 Archaeological Assessment NextEra Adelaide Wind Farm Township of Adelaide, Middlesex County, ON	
TITLE			
Location 9 (AfHk-30) Excavation Results			
PROJECT No.	10-1151-0038-40000	FILE No.	1011510038-40000-R01010
CADD	IJ	Apr. 5/10	SCALE AS SHOWN REV.
CHECK			FIGURE 10
			



Ironstone

Three fragments of plain ironstone (Plate 10:1) were collected during the Stage 3 excavation of Location 9 (AfHk-30). Ironstone or graniteware is a variety of refined white earthenware introduced in the 1840's that became extremely popular in Upper Canada by the 1860's (Kenyon 1985). It is usually much thicker than other whiteware, and often decorated with raised moulded designs of wheat or fruit.

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 1830's. Early whiteware tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19th century. During Stage 3 excavations, two fragments of whiteware were recovered from Location 9 (AfHk-30): a single fragment of plain whiteware (Plate 10:2), and one fragment of faded green overglaze transfer print decorated ware (Plate 10:3). Transfer printed whiteware became popular quite early in the 19th century and involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay. Before 1830, almost all transfer printed wares were blue. After 1830, colours such as light blue, black, brown, green, purple and red became more common.

Semi-Porcelain

Two of the fragments in the ceramic assemblage from Location 9 (AfHk-30) have been identified as semi-porcelain. During the first half of the 19th century, the English improved pottery techniques resulting in the production of durable and decorative wares with trade names such as semi-porcelain. This hard earthenware sought to emulate imported porcelains but lacked true translucency. In 1850, semi-porcelains were reintroduced and this vitreous, hard-glazed white earthenware resembling bone china soon dominated the marketplace (Hughes 1961). One of the fragments in the assemblage is plain (Plate 10:4) while the other is a fragment of pierced dish with transfer print and hand tinting (Plate 10:5).



Plate 10: Location 9 (AfHk-30) Examples of Ceramics (actual size)



Rockinghamware

Two fragments in the ceramic assemblage have been identified as earthenware with a Rockingham glaze (Plate 10:6). Rockinghamware became popular in the 1840's and continues to be manufactured in limited quantities today (Adams 1994:100).



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 a light. Because of its high cost, porcelain is extremely rare on 19th century sites in Ontario, however by the turn of the century it becomes relatively common, as production techniques were developed in Europe which greatly reduced costs. A single fragment of porcelain with a faded overglaze hand painted in pink and yellow was recovered from Location 9 (AfHk-30) (Plate 10:7).

Utilitarian Earthenware

In addition to the tableware, a single fragment of plain utilitarian red earthenware was collected. 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.

Glass Artifacts

During the Stage 3 excavation of Location 9 (AfHk-30), 23 fragments of domestic glass were collected. The colours of bottle glass represented in this collection include 16 clear, six amber, and one fragment of olive. Due to the fragmentary nature of the bottle glass shards, they can only be classified according to colour and the colour of bottle glass alone is very limited with regards to providing dates of manufacture for glass bottles (Lindsey 2010).

3.5.2.2 Recent Material

Stage 3 excavations at Location 9 (AfHk-30) produced 34 fragments of obviously late 20th and early 21st century material. This assemblage includes a variety of modern bottle glass, fragments of a glass mug and clay pot, as well as a plastic lid. Considering the roadside location of the site, this amount of modern intrusive material is to be expected.

3.5.2.3 Miscellaneous Metal Artifacts

The Location 9 (AfHk-30) assemblage contains four fragments of miscellaneous metal. This includes two heavily corroded fragments of metal wire, a fragment of a flathead screwdriver and a metal wedge. None of these items are temporally diagnostic.



3.5.2.4 Structural Artifacts

The structural assemblage from Location 9 (AfHk-30) consists of a single fragment of temporally undiagnostic red brick.

3.5.3 Land Registry Data for Location 9 (AfHk-30)

Location 9 is located on the west half of Lot 10, Concession 3 S.E.R., Geographic Township of Adelaide, Middlesex County, Ontario. The following summarizes the existing archival records concerning the 19th century occupation for this area. The west half of Lot 10 has been owned by Humphries' from patent well through the 20th century, with a portion being deeded to a church in 1888. The rest of the land was owned by Humphries men up until the death of Henry Humphries, who left his land to Bridget Humphries in his will. Table 8 illustrates the Land Registry data for the west half of Lot 10, Concession 3 S.E.R., Geographic Township of Adelaide from original patent to 1909.

Table 8: Land Registry data for the west half of Lot 10, Concession 3 S.E.R., Geographic Township of Adelaide

No.	Instrument	Dated	Grantor	Grantee	Remarks
	patent	1849	The Crown	John Humphries	west half
3743	bargain and sale	Oct. 1867	John Humphries and wife	Henry Humphries	east half of west half
3744	bargain and sale	Oct. 1867	John Humphries and wife	William Humphries	west half of west half
8075	deed	Dec. 1888	William and Caroline Humphries	Trustees of Bethesda Methodist Church	part of west half
8675	deed	Oct. 1893	William Humphries	Joseph Henry Humphries	west half of west half excerpt
9215	deed	Feb. 1898	Joseph Henry Humphries	Henry Humphries	west half of west half
10886	probate of will	Aug. 1909	Henry Humphries	Bridget Humphries	west half of lot 10 for herself, her heirs and assigns forever



3.5.4 Summary

The artifacts collected from Location 9 (AfHk-30) represent a late 19th century and 20th century Euro-Canadian cultural material. Given the small percentage of ceramic artifacts (15.06%), the lack of personal items and structural material, and the site's proximity to the road and high percentage of intrusive, recent material (46.58%), the cultural heritage value or interest of this site is judged to be low. The cultural heritage value or interest of this site has been sufficiently documented and no further archaeological assessment is recommended.

3.6 Location 11 (AgHk-68)

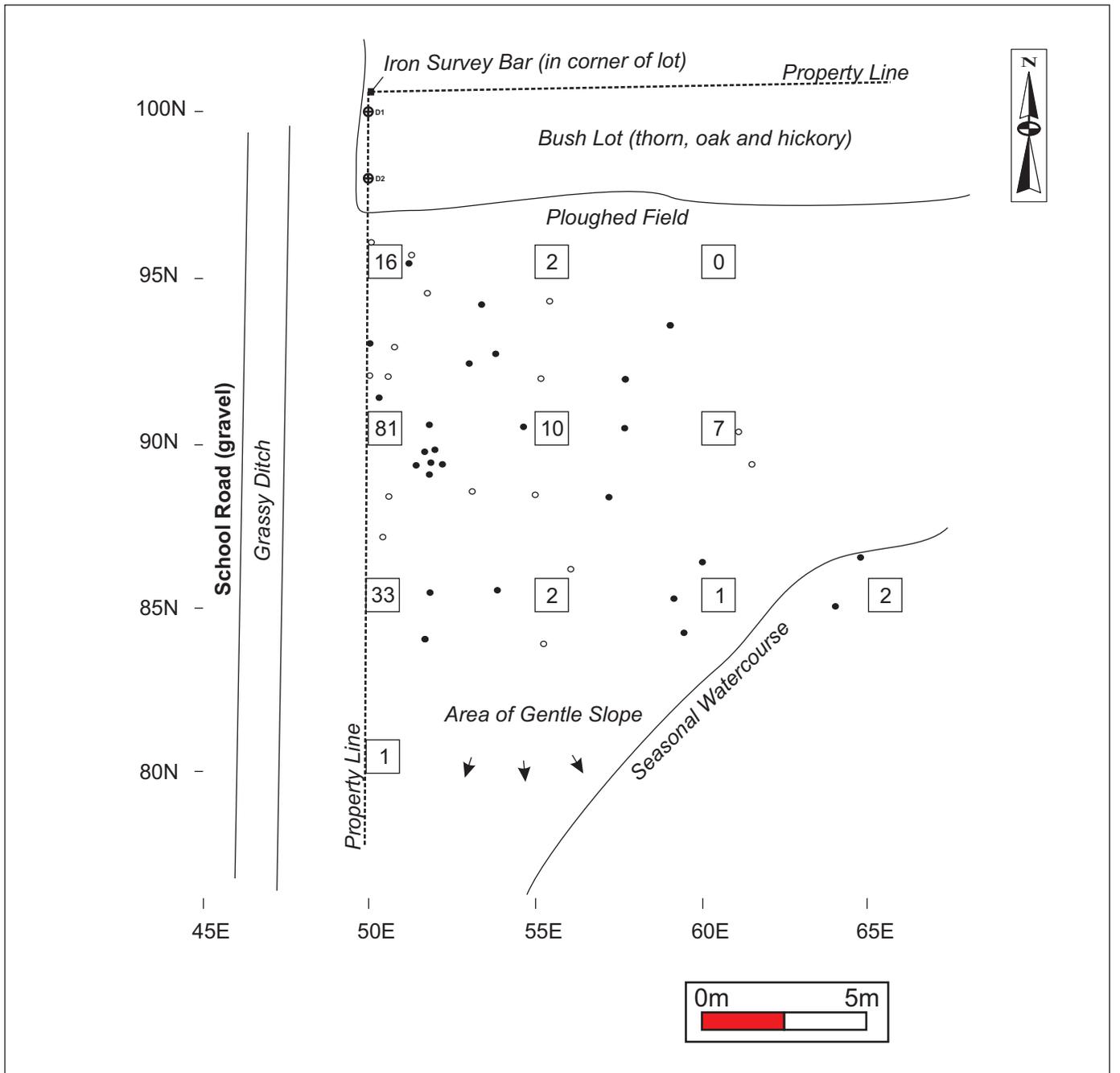
3.6.1 Site Summary

The Stage 2 investigation of Location 11 (AgHk-68) found that the site consisted of a 10 metre by 10 metre scatter of mid-to-late 19th century domestic debris. A total of 27 Euro-Canadian artifacts were recovered during the Stage 2 assessment including 25 domestic and two structural. Due to the fact that Location 11 (AgHk-68) consisted of a spatially discrete cluster of mid-to-late 19th century Euro-Canadian material, it was recommended that the site be subject to a Stage 3 archaeological investigation to further evaluate its cultural heritage value or interest.

The Stage 3 assessment of Location 11 (AgHk-68) was conducted on March 24th, 2010. The weather was sunny and mild. Visibility was excellent and at no time were conditions detrimental to the recovery of archaeological remains. Eleven one-metre square units were strategically placed around higher artifact concentrations as determined by the Stage 2 archaeological assessment of Location 11 (AgHk-68). The one-metre square units ranged from 8 to 20 centimetres deep and yielded between one and 81 artifacts. Figure 11 illustrates the Stage 3 surface collection as well as the location and rate of artifact return for each one-metre unit excavated. The Stage 3 excavation of Location 11 (AgHk-68) resulted in the recovery of 172 Euro-Canadian artifacts: 152 domestic, 12 recent material, four structural, and four miscellaneous metal. Each artifact class is discussed in greater detail below. Table 9 provides a summary of the Stage 3 artifacts recovered from Location 11 (AgHk-68). Appendix A provides a complete catalogue listing of the Stage 3 recoveries.

Table 9: Stage 3 Artifact Summary for Location 11 (AgHk-68)

Artifact Class	Frequency	%
domestic	152	88.37
recent material	12	6.98
structural	4	2.33
metal, miscellaneous	4	2.33
Total Stage 3 Artifacts	172	100.00



LEGEND

- Stage 2 Surface Find
- Stage 3 Surface Find
- Stage 3 Unit Excavated
- 88 Number of Artifacts
- ⊕ Datum Stake
- Property Line

REFERENCE

DRAWING BASED ON
Field Director's Notes

NOTES

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

ALL LOCATIONS ARE APPROXIMATE.

PROJECT		Stage 3 Archaeological Assessment NextEra Adelaide Wind Farm Township of Adelaide, Middlesex County, ON	
TITLE			
Location 11 (AgHk-68) Excavation Results			
PROJECT No.	10-1151-0038-40000	FILE No.	1011510038-40000-R01011
CADD	IJ	Apr. 5/10	SCALE AS SHOWN REV.
CHECK			FIGURE 11
			



3.6.2 Artifact Description

3.6.2.1 Domestic Artifacts

A total of 152 domestic artifacts were recovered from the Stage 3 excavations at Location 11 (AgHk-68). This collection includes 109 fragments of domestic glass and 43 fragments of ceramic.

Ceramic Artifacts

A total of 43 fragments of ceramic hollowwares and flatwares were collected during the Stage 3 assessment of Location 11 (AgHk-68), including: 15 ironstone, 14 utilitarian, eight whiteware, three semi-porcelain and three porcelain. Table 10 provides a breakdown of the ceramic assemblage by ware type, while Table 11 provides a more detailed breakdown of the ceramic assemblage by decorative style.

Table 10: Summary of Ceramic Collection According to Ware Type, Location 11 (AgHk-68)

Artifact	Frequency	%
ironstone	15	34.88
utilitarian	14	32.56
whiteware	8	18.60
semi-porcelain	3	6.98
porcelain	3	6.98
Total	43	100.00

Table 11: Summary of Ceramic Collection According to Decorative Style, Location 11 (AgHk-68)

Artifact	Frequency	%
ironstone, plain	12	27.91
earthenware, red	12	27.91
whiteware, plain	6	13.95
ironstone, transfer printed	3	6.98
porcelain, semi	2	4.65
porcelain, plain	2	4.65
semi-porcelain, transfer printed	1	2.33
porcelain, transfer printed	1	2.33
earthenware, yellow	1	2.33



Artifact	Frequency	%
whiteware, flow transfer printed	1	2.33
whiteware, sponged	1	2.33
stoneware, salt glazed	1	2.33
Total	43	100.00

Ironstone

Fifteen fragments of ironstone were collected during the Stage 3 excavation of Location 11 (AgHk-68). Ironstone or graniteware is a variety of refined white earthenware introduced in the 1840's that became extremely popular in Upper Canada by the 1860's (Kenyon 1985). It is usually much thicker than other whiteware, and often decorated with raised moulded designs of wheat or fruit. Of the 15 fragments in the assemblage, 12 are plain (Plate 11:1) and three are decorated with brown or green transfer printed floral decoration (Plate 11:2).

Utilitarian Earthenware

In addition to the tableware, fourteen fragments of utilitarian earthenwares were collected. This includes 12 fragments of red earthenware (seven lead glazed and five plain), one fragment of lead glazed yellow earthenware, and one fragment of grey-bodied clear salt glazed stoneware. 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.

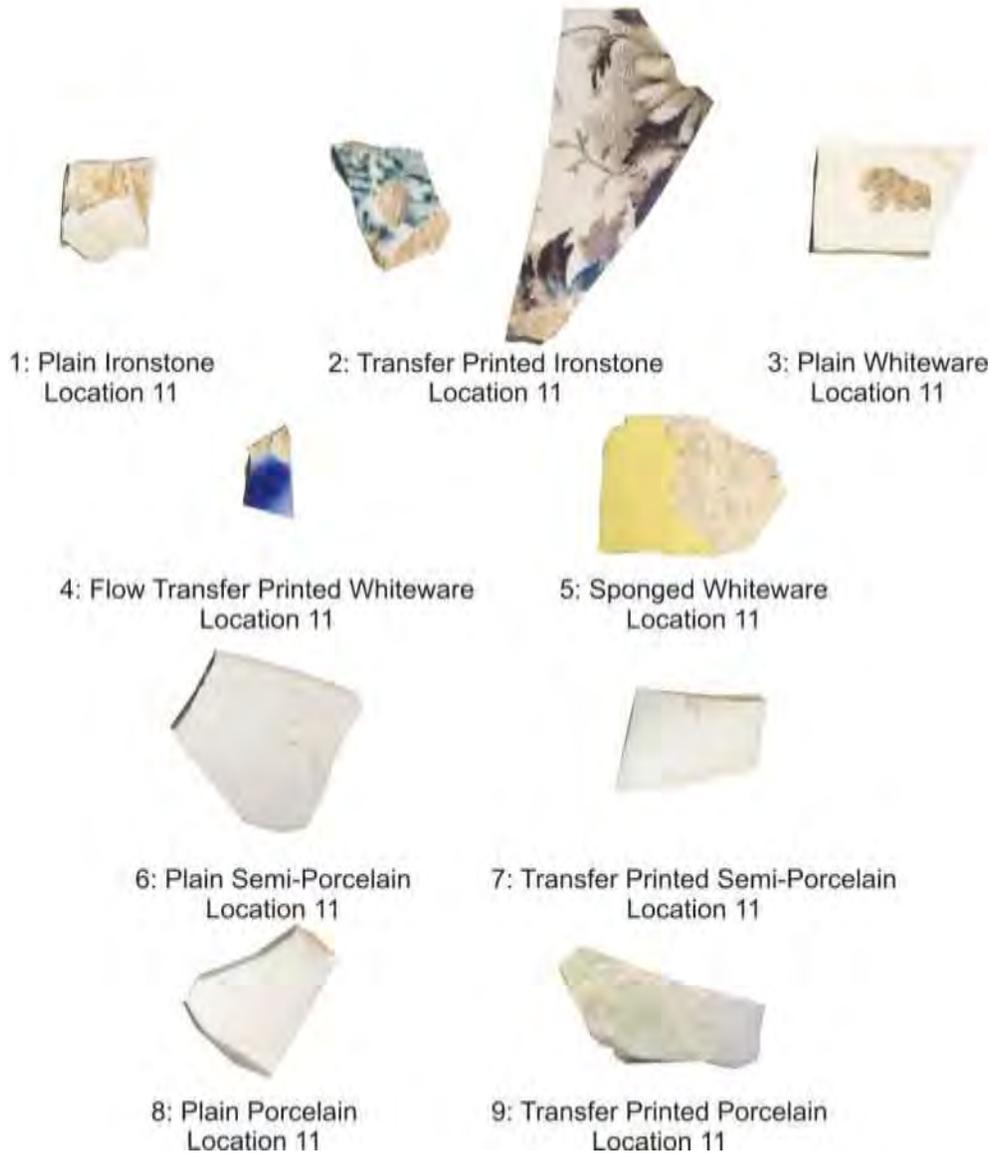
White Earthenware

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 1830's. Early whiteware tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19th century. During Stage 3 excavations, eight fragments of whiteware were recovered from Location 11 (AgHk-68) including six plain fragments (Plate 11:3), one fragment of blue flow transfer printed (Plate 11:4) and one yellow sponge decorated fragment (Plate 11:5)

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 1840's and 1850's, with a later revival in the 1890's. Sponged 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 1840's and remained common until the 1870's.



Plate 11: Location 11 (AgHk-68) Examples of Ceramics (actual size)



Semi-Porcelain

Three of the fragments in the ceramic assemblage from Location 11 (AgHk-68) have been identified as semi-porcelain. During the first half of the 19th century, the English improved pottery techniques resulting in the production of durable and decorative wares with trade names such as semi-porcelain. This hard earthenware sought to emulate imported porcelains but lacked true translucency.



In 1850, semi-porcelains were reintroduced and this vitreous, hard-glazed white earthenware resembling bone china soon dominated the marketplace (Hughes 1961). Two fragments in the assemblage are plain (Plate 11:6), and one fragment bears a green transfer printed pattern (Plate 11:7).

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 a light. Because of its high cost, porcelain is extremely rare on 19th century sites in Ontario, however by the turn of the century it becomes relatively common, as production techniques were developed in Europe which greatly reduced costs. Three fragments of plain porcelain were recovered from Location 11 (AgHk-68) (Plate 11:8). Two are plain and a single fragment bears the faint remnants of overglaze transfer print pattern (Plate 11:9).

Glass Artifacts

During the Stage 3 excavation of Location 11 (AgHk-68), 109 fragments of domestic glass were collected. This includes 98 fragments of domestic bottle glass, eight fragments of temporally undiagnostic glass dish, and three fragments of white glass.

The colours of bottle glass represented in this collection include 41 clear, 21 aqua, 15 olive, 12 amber, seven violet, and two fragments of sun coloured amethyst. According to Lindsey (2010), sun-coloured amethyst glass contains manganese oxide and turns amethyst due to a chemical reaction caused by sun exposure. This glass generally dates from 1890 to 1920. Otherwise, the colour of bottle glass alone is very limited with regards to providing dates of manufacture for glass bottles (Lindsey 2010).

Diagnostic bottle finishes in the assemblage include one clear crown cap finish dating to post 1892 (Plate 12:1), one amber small mouth external thread with continuous mould seam dating to the 20th century (Plate 12:2), and one 1 amber patent finish dated to post 1850 (Plate 12:3).

Plate 12: Location 11 (AgHk-68) Examples of Diagnostic Bottle Finishes (actual size)





The white bottle glass or “milk glass” was likely manufactured after 1870. Milk glass was most commonly used for cosmetic containers, toiletry bottles or cream jars. The opaque white glass was very commonly used for such products dating from about 1870 through to the 20th century (Lindsey 2010).

3.6.2.2 Recent Material

Stage 3 excavations at Location 11 (AgHk-68) produced 12 fragments of obviously late 20th and early 21st century material. This assemblage includes a variety of modern bottle glass, fragments of clay pot, as well as plastic and rubber. Considering the roadside location of the site, this amount of modern intrusive material is to be expected.

3.6.2.3 Structural Artifacts

The structural assemblage from Location 11 (AgHk-68) consists of four artifacts, including two cut nails, a temporally undiagnostic black glazed ceramic doorknob and a single fragment of window glass. The cut nails (Plate 13:1) were “cut” from flat sheets of iron; hence, the nail is of even thickness when viewed from the side, not tapered on all sides like hand made nails. The head is usually square and flat. Invented about 1790, cut nails were in common use from the 1830s until the 1890’s (Adams 1994:92). While window glass thickness is usually temporally diagnostic, the assemblage from Location 11 (AgHk-68) contains only one fragment and thus the assemblage is not large enough to discern a rough date of site occupation.

Plate 13: Location 11 (AgHk-68) Examples of Cut Nails (actual size)



3.6.2.4 Miscellaneous Metal Artifacts

The Location 11 (AgHk-68) assemblage contains four fragments of miscellaneous metal. This includes three heavily corroded fragments and a small metal cap. None of these items are temporally diagnostic.



3.6.3 Land Registry Data for Location 11 (AgHk-68)

Location 11 is located on the west half of Lot 16, Concession 1 S.E.R., Geographic Township of Adelaide, Middlesex County, Ontario. The Crown patent for this lot was granted to Thomas Scatcherd in 1866. The owner of the land changes many times throughout the 19th century. Although 1 ¼ acres were conveyed for a school section in 1890, it was not until 1896 that the lot was divided when the Thompson family deeded the property to Thomas Petch. Thomas Petch owned this land until 1911 when he sold it to Marley Petch. Table 12 illustrates the Land Registry data for the west half of Lot 16, Concession 1 S.E.R., Geographic Township of Adelaide from original patent to 1911.

Table 12: Land Registry data for the west half of Lot 16, Concession 1 S.E.R., Geographic Township of Adelaide

No.	Instrument	Dated	Grantor	Grantee	Remarks
	patent	Sept. 1866	The Crown	Thomas Scatcherd	all
4394	deed	Jan. 1869	Thomas Scatcherd and wife	Daniel Macfie	all
4396	conveyance	May 1871	Daniel Macfie	John Cameron	all
5520	conveyance	Jan. 1876	John Cameron	Ephraim J. Parke	lot 16 subject to a mortgage
8219	deed	Jul. 1889	E. Jones Parke and wife	David M. Thompson	lot
8245	conveyance	May 1890	David M. Thompson	School Section No. 10	1 ¼ acres
8603	deed	May 1890	D. M. Thompson	Ephraim J. Parke	lot except 1 ¼ acres
8817	deed	Oct. 1895	Ephraim J. Parke and wife	Bertha M. Thompson	
9089	deed	Dec. 1896	Bertha M. and George Thompson	Thomas Petch	west half of lot
11147	bargain and sale	Mar. 1911	Thomas Petch and wife	Marley Petch	west half of lot 16 and other lands

3.6.4 Summary

The artifacts collected from Location 11 (AgHk-68) represent mid-to-late 19th century Euro-Canadian cultural material. Given the nature of the artifacts (88.37% fragile, breakable domestic glass and ceramic) and lack of personal items and structural material, this site represents a mid-to-late 19th century refuse dump. The cultural heritage value or interest of this site is judged to be low. The cultural heritage value or interest of this site has been sufficiently documented and no further archaeological assessment is recommended.



4.0 RECOMMENDATIONS AND ADVICE ON COMPLIANCE WITH LEGISLATION

The Stage 3 assessment has been completed for the six documented locations. Three of these sites are pre-contact Aboriginal sites and three are historic Euro-Canadian sites. The following recommendations are made concerning these six locations:

- Loc 2 (AfHk-29) and Location 3 (AgHk-66) yielded no additional pre-contact Aboriginal material remains and therefore their cultural heritage value or interest was deemed to be low and also sufficiently documented. **Stage 4 archaeological mitigation of these sites is not recommended.**
- Location 5 (AgHk-67), Location 9 (AfHk-30) and Location 11 (AgHk-68) yielded mid-to-late 19th and 20th century material culture, but the nature of the assemblages – high percentages of breakable domestic items (glass and ceramic) and low percentages of personal and structural items – indicate that these sites are isolated mid-to-late 19th century domestic middens and therefore the cultural heritage value or interest of these sites was deemed to be low and also sufficiently documented. **Stage 4 archaeological mitigation of these sites is 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 of this site is recommended.** Until the Stage 4 archaeological assessment has been conducted, the site area will be surrounded by snow fence at a 20 metre buffer extending past the limits of the site as delineated by the Stage 3 test units excavated. Until this site has been excavated, all staff related to the Next Era Adelaide Wind Farm project will be instructed to avoid the site area as buffered and marked out. The Stage 4 assessment should consist of the block excavation in one-metre units of the area of greatest artifact densities, followed by shovel shining the site area in order to uncover all subsurface posts or cultural features.

This assessment was undertaken in order to meet the requirements of an environmental assessment conducted under the Renewable Energy Approval (REA) process, as outlined in Ontario Regulation 359/09 section 22(3). The Ontario Ministry of Tourism and Culture is asked to review the results presented and to accept this report into the Provincial Register of archaeological reports. **A partial clearance for the NextEra Adelaide Wind Farm study area is being requested, except for Location 7 (AgHj-5).** Additional archaeological assessment is still required at Location 7 (AgHj-5), hence the archaeological site recommended for further archaeological fieldwork remains 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.

This Stage 3 assessment was undertaken in order to meet the requirements of an environmental assessment conducted under the Renewable Energy Approval (REA) process, as outlined in Ontario Regulation 359/09 section 22(3), on behalf of Air Energy TCI Inc. and NextEra Energy Canada, ULC. The Ontario Ministry of Tourism and Culture is asked to review the results presented and to accept this report into the Provincial Register of archaeological reports.



STAGE 3 ARCHAEOLOGICAL ASSESSMENT NEXTERA ADELAIDE WIND FARM

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.

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

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

The Cemeteries Act requires that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries, Ministry of Consumer Services.

GOLDER ASSOCIATES LTD.

ORIGINAL SIGNED

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Project Archaeologist

JM/JAW/IJ/sc

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Associate, Senior Archaeologist

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10 - (draft) nextera adelaide wind farm stage 3.docx



5.0 IMPORTANT INFORMATION AND LIMITATIONS OF THIS REPORT

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

This report has been prepared for the specific site, design objective, developments and purpose described to Golder, by Air Energy TCI Inc. and by NextEra Energy Canada, ULC. The factual data, interpretations and recommendations pertain to a specific project as described in this report and are not applicable to any other project or site location.

The information, recommendations and opinions expressed in this report are for the sole benefit of the Client. No other party may use or rely on this report or any portion thereof without Golder's express written consent. If the report was prepared to be included for a specific permit application process, then upon the reasonable request of the Client, Golder may authorize in writing the use of this report by the regulatory agency as an Approved User for the specific and identified purpose of the applicable permit review process. Any other use of this report by others is prohibited and is without responsibility to Golder. The report, all plans, data, drawings and other documents as well as electronic media prepared by Golder are considered its professional work product and shall remain the copyright property of Golder, who authorizes only the Client and Approved Users to make copies of the report, but only in such quantities as are reasonably necessary for the use of the report by those parties. The Client and Approved Users may not give, lend, sell, or otherwise make available the report or any portion thereof to any other party without the express written permission of Golder. The Client acknowledges the electronic media is susceptible to unauthorized modification, deterioration and incompatibility and therefore the Client cannot rely upon the electronic media versions of Golder's report or other work products.

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

Special risks occur whenever archaeological investigations are applied to identify subsurface conditions and even a comprehensive investigation, sampling and testing program may fail to detect all or certain archaeological resources. The sampling strategies incorporated in this study comply with those identified in the Ministry of Tourism and Culture's Archaeological Assessment Technical Guidelines (1993) (Stages 1-3 and Reporting Format).



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APPENDIX A

Stage 3 Artifact Catalogue



APPENDIX A STAGE 3 ARTIFACT CATALOGUES

Location 2 (AfHk-29)

No artifacts were recovered during the Stage 3 archaeological assessment.

Location 3 (AgHk-66)

No artifacts were recovered during the Stage 3 archaeological assessment.

Location 5 (AgHk-67)

Cat #	Context	Level	Depth (cm)	Artifact	Freq.
11	55E 75N:01		0-23	glass, bottle	1
12	50E 85N:01	1	0-20	glass, window	1
13	50E 85N:01	1	0-20	recent material	1
14	50E 85N:01	1	0-20	ironstone, transfer printed	1
15	50E 85N:01	1	0-20	ironstone, moulded	1
16	50E 85N:01	1	0-20	porcelain	1
17	50E 85N:01	1	0-20	glass, bottle	4
18	50E 85N:01	2	20-32	nail, unidentified	1
19	50E 85N:01	2	20-32	whiteware	1
20	45E 85N:01		0-37	glass, bottle	2
21	45E 85N:01		0-37	ironstone	1
22	45E 85N:01		0-37	faunal	1
23	35E 75N:01		0-32	brick	1
24	35E 75N:01		0-32	porcelain, semi	1
25	55E 85N:01		0-28	glass, bottle	1
26	45E 75N:01		0-21	glass, bottle	11
27	45E 75N:01		0-21	earthenware, red	1
28	45E 75N:01		0-21	rockinghamware	1
29	45E 75N:01		0-21	ironstone	1
30	45E 80N:01		0-33	ironstone	4
31	45E 80N:01		0-33	porcelain, semi	3
32	45E 80N:01		0-33	ceramic, misc. unidentified	3
33	45E 80N:01		0-33	whiteware, transfer printed	1
34	45E 80N:01		0-33	metal, wire	1
35	45E 80N:01		0-33	earthenware, red	7



APPENDIX A STAGE 3 ARTIFACT CATALOGUES

Cat #	Context	Level	Depth (cm)	Artifact	Freq.
36	45E 80N:01		0-33	brick	7
37	45E 80N:01		0-33	glass, bottle	20
38	surface collection		0	earthenware, red	10
39	surface collection		0	earthenware, yellow	1
40	surface collection		0	glass, window	1
41	surface collection		0	glass, bottle	20
42	surface collection		0	porcelain	2
43	surface collection		0	porcelain, semi	3
44	surface collection		0	ironstone	4
45	surface collection		0	ironstone, transfer printed	1
46	surface collection		0	ironstone, moulded	3
47	45E 70N:01		0-29	recent material	1
48	40E 70N:01		0-25	glass, bottle	1
49	40E 75N:01	1	0-23	brick	3
50	40E 75N:01	1	0-23	porcelain	1
51	40E 75N:01	1	0-23	glass, bottle	7
52	40E 75N:01	2	23-31	brick	4
53	40E 75N:01	2	23-31	glass, bottle	1
54	40E 75N:01	2	23-31	charcoal	2
55	50E 75N:01		0-24	glass, bottle	6
56	40E 80N:01		0-25	ironstone, moulded	1
57	40E 80N:01		0-25	ironstone	1
58	40E 80N:01		0-25	majolica	1
59	40E 80N:01		0-25	glass, bottle	2
60	40E 80N:01		0-25	glass, window	1
61	40E 80N:01		0-25	earthenware, red	1
62	55E 80N:01	1	0-25	metal, strapping	1
63	55E 80N:01	1	0-25	metal, container	1
64	55E 80N:01	1	0-25	ironstone, moulded	1
65	55E 80N:01	1	0-25	ironstone	1
66	55E 80N:01	1	0-25	glass, bottle	7
67	55E 80N:01	2	25-30	ironstone	2
68	55E 80N:01	2	25-30	earthenware, red	1
69	55E 80N:01	2	25-30	glass, bottle	2
70	50E 80N:01		0-25	earthenware, red	11
71	50E 80N:01		0-25	earthenware, yellow	1
72	50E 80N:01		0-25	metal, misc. unidentified	1
73	50E 80N:01		0-25	porcelain, semi	4
74	50E 80N:01		0-25	ironstone, transfer printed	6



APPENDIX A STAGE 3 ARTIFACT CATALOGUES

Cat #	Context	Level	Depth (cm)	Artifact	Freq.
75	50E 80N:01		0-25	ironstone	18
76	50E 80N:01		0-25	glass, bottle	54
77	50E 80N:01		0-25	glass, window	2

Location 7 (AgHj-5)

Cat. #	Context	Depth (cm)	Artifact	Freq.
500	305E 475N: 1	0-26	chipping detritus	11
501	305E 475N: 1	0-26	faunal	1
502	305E 470N: 1	0-21	chipping detritus	3
503	305E 470N: 1	0-21	faunal	2
504	295E 475N:1	0-23	chipping detritus	5
505	305E 485N: 1	0-20	chipping detritus	2
506	305E 485N: 1	0-20	faunal	1
507	305E 480N: 1	0-20	chipping detritus	7
508	305E 480N: 1	0-20	biface	1
509	300E 475N: 1	0-21	chipping detritus	30
510	300E 485N: 1	0-16	chipping detritus	1
511	300E 485N: 1	0-16	utilized flake	1
512	300E 470N: 1	0-17	chipping detritus	2
513	300E 480N: 1	0-17	chipping detritus	8
514	295E 470N: 1	0-20	chipping detritus	1
515	surface collection	0	chipping detritus	15

Location 9 (AfHk-30)

Cat #	Context	Depth (cm)	Artifact	Freq.
8	45E 115N:01	0-21	glass, bottle	4
9	65E 115N:01	0-21	recent material	1
10	55E 115N:01	0-23	recent material	3
11	90E 120N:01	0-20	metal, misc. hardware	1
12	35E 125N:01	0-21	recent material	3
13	35E 125N:01	0-21	earthenware, red	1
14	80E 120N:01	0-21	glass, bottle	2
15	80E 120N:01	0-21	metal, wire	2
16	60E 120N:01	0-21	porcelain, semi	1



APPENDIX A STAGE 3 ARTIFACT CATALOGUES

Cat #	Context	Depth (cm)	Artifact	Freq.
17	60E 120N:01	0-21	recent material	3
18	35E 115N:01	0-24	recent material	6
19	70E 120N:01	0-21	recent material	1
20	50E 120N:01	0-23	glass, bottle	2
21	50E 120N:01	0-23	recent material	1
22	50E 120N:01	0-23	rockinghamware	1
23	45E 125N:01	0-26	recent material	2
24	45E 125N:01	0-26	rockinghamware	1
25	45E 125N:01	0-26	ironstone	1
26	45E 125N:01	0-26	brick	1
27	40E 120N:01	0-24	glass, bottle	15
28	40E 120N:01	0-24	recent material	1
29	40E 120N:01	0-24	ironstone	2
30	40E 120N:01	0-24	whiteware, transfer print	1
31	surface collection	0	porcelain	1
32	surface collection	0	porcelain, semi	1
33	surface collection	0	whiteware	1
34	surface collection	0	recent material	13
35	surface collection	0	metal, misc. hardware	1

Location 11 (AgHk-68)

Cat #	Context	Depth (cm)	Artifact	Freq.
11	50E 90N:01	0-13	recent material	2
12	55E 95N:01	0-12	glass, bottle	1
13	55E 95N:01	0-12	recent material	1
14	55E 85N:01	0-20	glass, bottle	2
15	50E 80N:01	0-12	glass, bottle	1
16	65E 85N:01	0-16	earthenware, red	2
17	55E 90N:01	0-20	earthenware, red	1
18	55E 90N:01	0-20	whiteware	1
19	55E 90N:01	0-20	nail, cut	1
20	55E 90N:01	0-20	glass, bottle	7
21	60E 85N:01	0-15	metal, misc. unidentified	1
22	60E 85N:01	0-15	glass, bottle	1
23	60E 90N:01	0-10	whiteware, flow transfer printed	1
24	60E 90N:01	0-10	glass, bottle	1



APPENDIX A STAGE 3 ARTIFACT CATALOGUES

Cat #	Context	Depth (cm)	Artifact	Freq.
25	60E 90N:01	0-10	glass, dish	4
26	60E 90N:01	0-10	recent material	1
27	50E 95N:01	0-20	glass, dish	4
28	50E 95N:01	0-20	glass, bottle	6
29	50E 95N:01	0-20	ironstone	1
30	50E 95N:01	0-20	porcelain	1
31	50E 95N:01	0-20	recent material	4
32	50E 85N:01	0-13	glass, window	1
33	50E 85N:01	0-13	recent material	4
34	50E 85N:01	0-13	earthenware, red	5
35	50E 85N:01	0-13	metal, misc. unidentified	1
36	50E 85N:01	0-13	ironstone	3
37	50E 85N:01	0-13	porcelain	1
38	50E 85N:01	0-13	glass, white	1
39	50E 85N:01	0-13	doorknob	1
40	50E 85N:01	0-13	glass, bottle	15
41	50E 85N:01	0-13	earthenware, yellow	1
42	surface collection	0	glass, bottle	12
43	surface collection	0	ironstone, transfer printed	1
44	surface collection	0	porcelain	1
45	surface collection	0	ironstone	2
46	50E 90N:01	0-13	glass, bottle	52
47	50E 90N:01	0-13	stoneware, salt glazed	1
48	50E 90N:01	0-13	glass, white	2
49	50E 90N:01	0-13	metal, misc. unidentified	2
50	50E 90N:01	0-13	nail, cut	1
51	50E 90N:01	0-13	whiteware	5
52	50E 90N:01	0-13	whiteware, sponged	1
53	50E 90N:01	0-13	earthenware, red	4
54	50E 90N:01	0-13	ironstone, transfer printed	2
55	50E 90N:01	0-13	porcelain, semi	3
56	50E 90N:01	0-13	ironstone	6

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APPENDIX B

Aboriginal Engagement



APPENDIX B ABORIGINAL ENGAGEMENT

The Stage 3 archaeological assessment of the NextEra Adelaide Wind Farm has involved consultation with and involvement of First Nations groups whose traditional territories are affected by the study area. The study area falls within the Treaty Number 21 and 27½ areas which were treaties negotiated between the Ojibwa and the British Crown. Dean Jacobs of the Walpole Island Heritage Centre (Nin.da.waab.jig) was contacted by Jim Wilson, M.A. from Golder Associates Ltd., after initial contact with Mark Gallagher from Air Energy TCI Inc., at the beginning of November 2009. Dean Jacobs provided the names of possible First Nations monitors who could participate in the Stage 2 pedestrian survey and Stage 3 test unit excavation. Leroy Altman was contacted by Golder and subsequently participated in the Stage 3 test unit excavation. He was not present during Stage 3 test unit excavations on November 16th, 2009 at Location 7 (AgHj-5) but attended during the Stage 3 archaeological assessment of Location 2 (AfHk-29) on December 5th, 2009. During the 2010 portion of the Stage 3 archaeological assessment, Leroy Altman was also contacted and participated. He was initially contacted on March 18th, 2010 and then on March 22nd, 2010. He participated on March 23rd, 2010 during the Stage 2 archaeological assessment only. He was also contacted daily between March 24th, 2010 and March 29th, 2010, but was unable to participate due to other commitments. However, Josh White was contacted on March 23rd, 2010 and he participated between March 24th, 2010 and March 29th, 2010 during the Stage 3 archaeological assessments of Locations 3 (AgHk-66), 5 (AgHk-67), 9 (AfHk-30), and 11 (AgHk-68).

With the expanding role that First Nations engagement is taking in Ontario Cultural Resource Management, it is expected and understood that the involvement of First Nations will continue if any Stage 4 archaeological assessment is to be conducted within this study area.

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