ORIGINAL REPORT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT

NextEra Energy Canada, ULC Bluewater Wind Energy Centre Huron County, Ontario

Submitted to:

Mr. Marc Rose AECOM Canada Ltd. 300 Town Centre Boulevard, Suite 300 Markham, ON L3R 5Z6 Tel: (905) 477-8400 ext. 388 Fax: (905) 477-1456

Licensee: Jim Wilson M.A.

Licence Number: P001

PIF Number: P001-609-2010

FIT Number: FIT-FJI7S7X

Report Number: 10-1151-0201-1000-1100-

R01

Distribution:

4 Copies - AECOM Canada Ltd.

1 Copy + 1 CD Copy- Ontario Ministry of Tourism,

Culture and Sport

2 Copies - Golder Associates Ltd.







Executive Summary

A Stage 1 archaeological background study was conducted by Golder Associates Ltd. on behalf of AECOM Canada Ltd. for NextEra Energy Canada, ULC's proposed Bluewater Wind Energy Centre. This assessment was undertaken in order to meet the requirements for an application for a Renewable Energy Approval, as outlined in Ontario Regulation 359/09 section 22(3) of the *Environmental Protection Act*.

The objective of the Stage 1 assessment was to compile all available information about the known and potential cultural heritage resources within the study area and to provide specific direction for the protection, management and/or recovery of these resources, consistent with Ministry of Tourism, Culture and Sport guidelines (Government of Ontario 2009).

Golder applied archaeological potential criteria commonly used by the Ontario Ministry of Tourism, Culture and Sport to determine areas of archaeological potential within the study area. The archaeological potential for Aboriginal and Euro-Canadian sites was deemed to be moderate to high on these properties. For pre-contact Aboriginal sites this assessment is based on the presence of nearby potable water sources, level topography, agriculturally suitable soils, and known archaeological sites. For post-contact Aboriginal sites this assessment is based on the presence of nearby potable water sources, level topography, and historic Euro-Canadian anecdotal evidence. The determination of historic Euro-Canadian archaeological potential is based on the documentation indicating occupation from the middle of the 19th century onwards as well as the presence of historic transportation routes. As a result, Stage 2 archaeological assessment is recommended for potential wind turbine sites and their associated infrastructure.

Further Stage 2 archaeological assessment is recommended for any areas to be impacted by turbine construction, access road construction, or other infrastructure construction related activities. The Ontario Ministry of Tourism, Culture and Sport is asked to review the results presented and 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.

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.



February 13, 2012 Report No. 10-1151-0201-1000-1100-R01



Table of Contents

1.0	INTRO	DUCTION	1		
2.0	PROJECT BACKGROUND				
3.0	BACKGROUND RESEARCH				
	3.1	The Natural Environment	4		
	3.2	Pre-contact Aboriginal Archaeological Resources and Surveys	8		
	3.3	Post-contact Aboriginal Archaeological Resources and Surveys	10		
	3.4	Historic Euro-Canadian Archaeological Resources and Surveys	13		
	3.4.1	Survey and Early Settlement	13		
	3.4.1.1	Stanley Township	13		
	3.4.1.2	Hay Township	19		
	3.4.1.3	Tuckersmith Township	23		
	3.4.2	Summary	26		
4.0	PROPE	RTY INSPECTION	27		
5.0	RESULTS				
	5.1	Potential for Pre-contact Aboriginal Archaeological Sites	32		
	5.2	Potential for Historic Archaeological Sites	34		
6.0	RECOM	MMENDATIONS	35		
7.0	ADVIC	E ON COMPLIANCE WITH LEGISLATION	36		
8.0	REFER	ENCES CITED	37		
9.0	IMPOR	TANT INFORMATION AND LIMITATIONS OF THIS REPORT	41		
	LES				
Tabl	e 1: Prop	erties within the Bluewater Wind Energy Centre, Huron County	4		
Tabl	e 2: Regi	stered Archaeological Sites Located within the Study Area	9		
Tabl	e 3: Culti	ural Chronology for the Huron County Area	9		
Tabl		oric Properties with Potentially Significant Structures According to the Map of Stanley Township in the 79 Illustrated Historical Atlas of the County of Huron	16		
Tabl	e 5: Histo	oric Properties with Potentially Significant Structures According to the Map of Hay Township in the 1879 ustrated Historical Atlas of the County of Huron	21		





Table 6: Historic Properties with Potentially Significant Structures According to the Map of Tuckersmith To the 1879 Illustrated Historical Atlas of the County of Huron	wnship in
the fore magnated risterioury tade of the county of risterior	20
FIGURES	
Figure 1: Location of Study Area	2
Figure 2: Soils of the Study Area	6
Figure 3: Treaty Boundaries Based on Morris 1943.	12
Figure 4: A Portion of the 1835 Map of Stanley Township	14
Figure 5: A Portion of the 1879 Map of Stanley Township	15
Figure 6: A Portion of the 1837 Map of Hay Township	20
Figure 7: A Portion of the 1879 Map of Hay Township	22
Figure 8: A Portion of the 1835 Map of Tuckersmith Township	24
Figure 9: A Portion of the 1879 Map of Tuckersmith Township	25
Figure 10: Plate Number and Photographic Direction	31
Figure 11: Archaeological Potential of the Study Area	33
PLATES	
Plate 1: Bannockburn River Looking North	7
Plate 2: Silver Creek Looking South	8
Plate 3: Streetscape of Blake, Looking Southwest from Kippen Road	17
Plate 4: Streetscape of Brucefield, Looking Southeast	18
Plate 5: Former Site of the Methodist Church, Looking South	19
Plate 6: Wetlands on Kippen Road, Looking South	27
Plate 7: Hydro Corridor, Looking North from Centennial Road	28
Plate 8: Typical Lot Line Looking West from Bronson Line	28
Plate 9: Gentle Rolling Landscape Looking North from Crystal Springs Road	29
Plate 10: Flat Landscape with Woodlot in Background Looking North from Centennial Road	29
Plate 11: Hydro Station Looking North from Hensall Road	30
Plate 12: Aggregate Pit Located on the North Side of Crystal Springs Road	30





Project Personnel

Project Director Jim Wilson, M.A. (P001), Principal

Project Manager Jeffrey Muir, B.A. (R304)

Licensed Field Director Tracie Carmichael, B.A., B.Ed. (R278)

Report Production Amanda Laprise, B.A., Jeffrey Muir, B.A. (R304), Tracie Carmichael,

B.A., B.Ed. (R278)

Graphics Production Amanda Laprise, B.A., Paul Pengelly, Jeffrey Muir, B.A. (R304)

Office Assistants Stacey Carson

Senior Review Jim Wilson, M.A. (P001), Principal

Acknowledgments

Proponent Contact Marc Rose, MES, MCIP, RPP, AECOM Canada Ltd., Thomas

Bird, NextEra Energy Canada, ULC

Ministry of Tourism, Culture and Sport Robert von Bitter, Shari Prowse, M.A.

Ministry of Natural Resources Lisa Casselman





1.0 INTRODUCTION

A Stage 1 archaeological background study was conducted by Golder Associates Ltd. (Golder) on behalf of AECOM Canada Ltd. (AECOM) for NextEra Energy Canada, ULC's (NEEC) proposed Bluewater Wind Energy Centre (Figure 1). This assessment was undertaken in order to meet the requirements for an application for a Renewable Energy Approval, as outlined in Ontario Regulation 359/09 section 22(3) of the *Environmental Protection Act*.

The objective of the Stage 1 assessment was to compile all available information about the known and potential cultural heritage resources within the study area and to provide specific direction for the protection, management and/or recovery of these resources, consistent with Ministry of Tourism, Culture and Sport guidelines in force at the time that the PIF was issued (Government of Ontario 1993).

The site visit component of the Stage 1 assessment was conducted on August 4, 2010 under archaeological consulting licence P001, issued to Jim Wilson, M.A., by the Ontario Ministry of Tourism, Culture and Sport. Golder applied archaeological potential criteria commonly used by the Ontario Ministry of Tourism, Culture and Sport to determine areas of archaeological potential within the study area. The archaeological potential for Aboriginal and Euro-Canadian sites was deemed to be moderate to high on these properties. For pre-contact Aboriginal sites this assessment is based on the presence of nearby potable water sources, level topography, agriculturally suitable soils, and known archaeological sites. For post-contact Aboriginal sites this assessment is based on the presence of nearby potable water sources, level topography, and historic Euro-Canadian anecdotal evidence. The determination of historic Euro-Canadian archaeological potential is based on the documentation indicating occupation from the middle of the 19th century onwards as well as the presence of historic transportation routes. As a result, Stage 2 archaeological assessment is recommended for potential wind turbine sites and their associated infrastructure.

Further Stage 2 archaeological assessment is recommended for any areas to be impacted by turbine construction, access road construction, or other infrastructure construction related activities. The Ontario Ministry of Tourism, Culture and Sport is asked to review the results presented and 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.



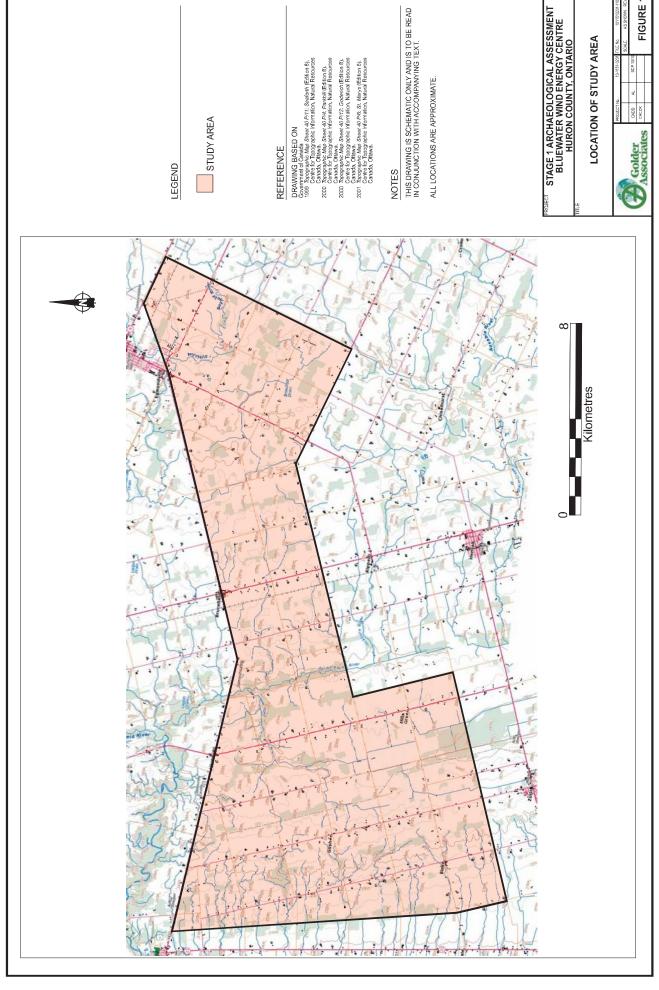


FIGURE 1



2.0 PROJECT BACKGROUND

In compliance with the provincial standards and guidelines set out in the *Archaeological Assessment Technical Guidelines* (Government of Ontario 1993), the Stage 1 Archaeological Overview/Background Study included:

- a review of the land use history, including pertinent historic maps;
- a property inspection of the study area; and
- an examination of the Ontario Archaeological Sites Database (ASDB) to determine the presence of known archaeological sites in and around the study area.

In addition to the property inspection of the study area, background research was conducted at the Ministry of Tourism, Culture and Sport Office in Toronto, the Crown Land Survey Records Office at the Ministry of Natural Resources in Peterborough, the University of Western Ontario Map and Data Library, and Golder's corporate library.





3.0 BACKGROUND RESEARCH

3.1 The Natural Environment

The study area is a large 19,500 hectare parcel located in the Geographic Townships of Stanley, Hay and Tuckersmith, Huron County, Ontario. Table 1 outlines the various lots and concessions within each township that the study area encompasses.

Table 1: Properties within the Bluewater Wind Energy Centre, Huron County

Geographic Township	Concession	Lot
	1 to 5	6 to 15
	6	3 to 15, part 16
	7	3 to 17
	8	3 to 19
	9	3 to 20
	10	3 to 22
Stanley	11 to 12	3 to 24
	13	3 to 15
	Bayfield Range F	9 to 11
	Bayfield Range G	6 to 8
	Bayfield Road South	6 to 25
	Lake Road East	part 1 to 9
	South Boundary	10 to 26, part 27
Цем	6 to 14	26 to 28
Hay	North Boundary	10 to 27
	1 to 4	21 to 30
	5	23 to 30
	6	26 to 30
	7	29
	1 Huron Road Survey	1 to 5, part 6
Tuckersmith	2 Huron Road Survey	1 to 7, part 8 to 10
	3 Huron Road Survey	1 to 10, part 11 to 13
	4 Huron Road Survey	1 to 13, part 14
	5 to 8 Huron Road Survey	1 to 14





The study area is situated within three physiographic regions: the Stratford Till Plain, the Horseshoe Moraines, and the Huron Slope (Chapman and Putnam 1984).

The Stratford Till Plain physiographic region is a:

...broad clay plain of 1,370 square miles, extending from London in the south to Blyth and Listowel in the north with a projection toward Arthur and Grand Valley. It is an area of ground moraine interrupted by several terminal moraines. The moraines are more closely spaced in the southwestern portion of the region; consequently that part resembles the Mount Elgin Ridges....Throughout the area the till is fairly uniform, being a brown calcareous silty clay whether on the ridges or the more level ground moraine. It is a product of the Huron ice lobe. Some of the silt and clay is calcareous rock flour, probably a good deal of it coming from previously deposited varved clays of the Lake Huron Basin.

(Chapman and Putnam 1984:133)

The Horseshoe Moraines physiographic region runs

From the edge of the escarpment in the Town of Caledon [and] the moraines trend somewhat west of the Niagara Escarpment forming a belt of moderately hilly relief....Associated with the moraines is a system of old spillways with broad gravel terraces and swampy floors.....Good cross-sections of this landscape may be seen along Highway 7 from Rockwood to Georgetown.

(Chapman and Putnam 1984:128)

The Huron Slope physiographic region occupies

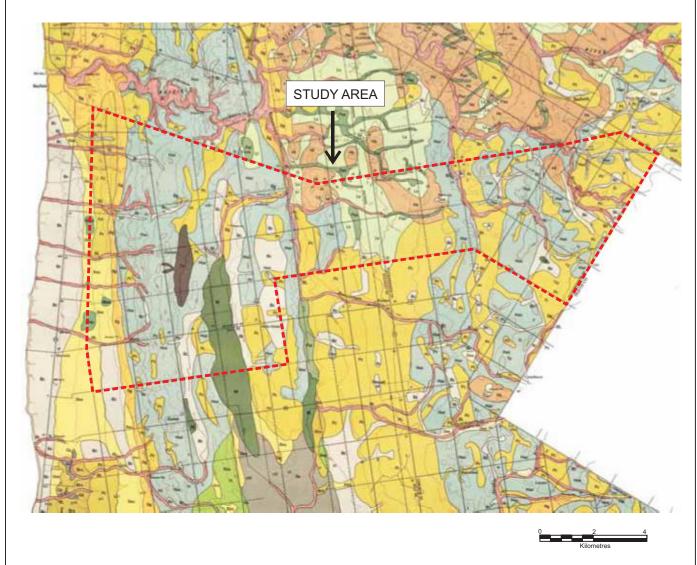
...an area of about 1,000 sq miles along the eastern side of Lake Huron,[where] the land between the Algonquian shorecliff and the Wyoming moraine slopes gently upward from 600 feet to 850 or 900 feet a.s.l. It is essentially a clay plain modified by a narrow strip of sand, and by the twin beaches of glacial Lake Warren which flank the moraine...Farmers generally emphasize the raising of livestock, grazing is featured, and grass farms...are common.

(Chapman and Putnam 1984:160-161)

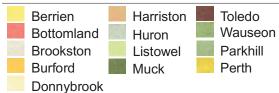
The study area has thirteen soils series present. The two major soil series are the Perth series (Perth clay loam) and the Huron series (Huron clay loam) (Figure 2). The Perth soils are well suited to growing modern day crops such as beets, corn and cabbage (Hoffman *et al.* 1952: 48). Perth clay is described as imperfectly drained and tends to yield fairly even during dry seasons due to the soil's reserve supply of moisture. Huron clay series are susceptible to erosion because of their presence within sloped areas (Hoffman *et al.* 1952:45). Modern day crops are generally wheat, cereal grains and corn (Hoffman *et al.* 1952: 45). Both series would be suitable for pre-contact Aboriginal practices, but not ideal given the drainage and erosion issues.







LEGEND



REFERENCE

DRAWING BASED ON

Hoffman, D.W., N.R. Richards and F.F. Morwick
1952 Soil Survey of Huron County. Report Number 13 of the
Ontario Soil Survey. Experimental Farms Service, Canada
Department of Agriculture and the Ontario Agricultural
College, Guelph.

NOTES

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

ALL LOCATIONS ARE APPROXIMATE.

PROJECT STAGE 1 ARCHAEOLOGICAL ASSESSMENT BLUEWATER WIND ENERGY CENTRE HURON COUNTY, ONTARIO

TITLE

SOILS OF THE STUDY AREA

-
Golder
Associates
- Importante

٦	PROJECT	No.	10-1151-0201	FILE No.	1011510201-1100-R01002	
1				SCALE	AS SHOWN REV.	
1	CADD	AL	AUG 6/10			
1	CHECK			FIGURE 2		



There are many potable water sources associated with the study area (Figure 1). The Bayfield River runs approximately 1.5 kilometres north of the study area and many of its tributaries transect the study area. The Bannockburn River (Plate 1) runs through the middle of the study area and numerous small creeks, mostly draining into Lake Huron, run through at various locations (Plate 2). Lake Huron is located approximately two kilometres to the west of the study area.

Plate 1: Bannockburn River Looking North





Plate 2: Silver Creek Looking South



3.2 Pre-contact Aboriginal Archaeological Resources and Surveys

In order that an inventory of archaeological resources could be compiled, the registered archaeological site records kept by the Ontario Ministry of Tourism, Culture and Sport were consulted. In Ontario, information concerning archaeological sites is stored in the ASDB maintained by the Ministry of Tourism, Culture and Sport. This database contains archaeological sites registered according to the Borden system. Under the Borden system, Canada is divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13 kilometres east to west and approximately 18.5 kilometres north to south. Each Borden Block is referenced by a four-letter designator and sites within a block are numbered sequentially as they are found. The study area under review is located in Borden Blocks AjHj, AjHj and AiHi.

According to the ASDB (personal communication, Robert von Bitter 2010; Government of Ontario n.d.), there are 12 registered archaeological sites located within the limits of the study area. Table 2 summarizes the nature of these sites. Ten of the registered sites are pre-contact Aboriginal and the other two are multi-component sites.





Table 2: Registered Archaeological Sites Located within the Study Area

Borden Number	Site Name	Site Type	Culture
AjHi-5	Boren 1	Campsite	Pre-contact Aboriginal
AjHi-6	Boren 2	Campsite	Middle Woodland
AjHi-7	Boren 3	Campsite	Pre-contact Aboriginal
AjHi-8	Boren 4	Campsite	Pre-contact Aboriginal
AjHi-9	Fidom	Campsite	Pre-contact Aboriginal
AjHj-1	Deer Track	Campsite	Archaic/historic Euro-Canadian
AjHj-2	Ferguson	Campsite/House	Pre-contact Aboriginal/historic Euro-Canadian
AjHj-3	Kaastra	Campsite	Woodland
AjHj-4	-	Findspot	Pre-contact Aboriginal
AjHj-5	-	Findspot	Pre-contact Aboriginal
AjHj-6	-	Findspot	Pre-contact Aboriginal
AjHi-1	Tighe	Campsite	Pre-contact Aboriginal

Nine of the sites are undefined pre-contact Aboriginal sites including three findspots. The rest are all campsites, including the three with temporally diagnostic artifacts of which one site is an Archaic site, one is a Woodland site, and one is a Middle Woodland site.

Table 3 provides a general outline of the culture history for Huron County (based on Ellis and Ferris 1990). Previous archaeological assessments and research surveys have demonstrated that Huron County was extensively utilized by pre-contact Aboriginal peoples.

Table 3: Cultural Chronology for the Huron County Area

Period	Characteristics	Time	Comments
Early Paleo-Indian	Early Paleo-Indian Fluted Projectiles		spruce parkland/caribou hunters
Late Paleo-Indian	Hi-Lo Projectiles	8400 - 8000B.C.	smaller but more numerous sites
Early Archaic Kirk and Bifurcate Base Points		8000 - 6000 B.C.	slow population growth
Middle Archaic	Brewerton-like points	6000 - 2500 B.C.	environment similar to present
Late Archaic	Lamoka (narrow points)	2000 - 1800 B.C.	increasing site size
	Broadpoints	1800 - 1500 B.C.	large chipped lithic tools
	Small Points	1500 - 1100B.C.	introduction of bow hunting





Period Characteristics		Time	Comments
Terminal Archaic	Hind Points	1100 - 950 B.C.	emergence of true cemeteries
Early Woodland	Meadowood Points	950 - 400 B.C.	introduction of pottery
Middle Woodland	Dentate/Pseudo-Scallop Pottery	400 B.C A.D.500	increased sedentism
	Princess Point	A.D. 550 - 900	introduction of corn
Late Woodland	Early Ontario Iroquoian	A.D. 900 - 1300	emergence of agricultural villages
	Middle Ontario Iroquoian	A.D. 1300 - 1400	long longhouses (100m +)
	Late Ontario Iroquoian	A.D. 1400 - 1650	tribal warfare and displacement
Contact Aboriginal	Various Algonkian Groups	A.D. 1700 - 1875	early written records and treaties
Historic	Euro-Canadian	A.D. 1796 - present	European settlement

3.3 Post-contact Aboriginal Archaeological Resources and Surveys

The study area within Huron County was most likely occupied by Algonkian-speaking groups who also exhibited cultural influence from Iroquoian-speaking groups, both before and after European contact. Generally, the precontact Aboriginal presence in much of southern Ontario reflects occupation by Northern Iroquoian speakers. During and following the Iroquois Wars of the mid-17th century and the dispersal of the Iroquoian-speaking Huron-Petun and Neutral, a considerable reduction in the extent of territory occupied by Iroquoian speakers occurred in southern Ontario. Beginning about 1690, Algonkian speakers from northern Ontario began to move southwards (Ferris 2009; Rogers 1978:761; Schmalz 1991). It has been presumed that occupation of Huron County before about 1690 would have been by Iroquoians, but the Middle Woodland Saugeen Complex, known best from locations just north of Huron County in the Saugeen River valley such as the Donaldson site, is most often interpreted as Algonkian (Fiedel 1999), arguing for an occupation of Huron County by Algonkian speakers for millennia. Dating somewhat later than the Donaldson site, Wright (1974:303; Fox 1990:461) believed that the isolated occurrence of a palisaded village in neighbouring Bruce County at the Middle Ontario Iroquoian-like (Middleport substage) Nodwell site established a case for immigration by the Iroquoian-speaking Huron. More recently, however, Rankin (2000) has argued that the Nodwell village represents a short-lived sedentary farming experiment by hunter-gatherers, probably indigenous Algonkian speakers, who may have been ancestral to the Odawa (see also Warrick 2008:159). French missionaries indicated relatively close ties between the Odawa and the Huron-Petun (Fox 1990; cf. Feest and Feest 1978:773).

Ferris (1999:119-120) has also pointed out the potential misuse in the literature of the designation "Huron" to describe sites in Huron and Bruce County. As Koenig (2005:61-61) indicates, there are some who argue that the ancestors of those Algonkian speaking First Nations now occupying the shores of Lake Huron and Bruce Peninsula only arrived in the mid-1800s, relating to known relocations from the U.S. and the establishment of reserves (Surtees 1971:48). 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). Still, archaeological sites in Huron County point to much earlier settlement, probably by at





least some of their ancestors. So, during the Late Woodland period, there is evidence that the study area could have been inhabited by Algonkian- or Iroquoian-speaking groups, or a combination of groups.

While, it is difficult to trace ethnic affiliation during the period of initial contact between Aboriginal and European groups, Koenig states that "there is no doubt that some native groups regularly occupied sites on the [Bruce] peninsula at the end of [the early historic] period" (2005:62). Feest and Feest (1978:772-773) imply that the Bruce Peninsula was Odawa territory from 1616 and early 17th century French glass trade beads at the Glen and Cripps sites on the northern tip of the Bruce Peninsula appear to attest to this (Fox 1990:465-466). Fox not only points to Odawa (or Ottawa) settlement on the Bruce Peninsula during the mid-1600s at Hunter's Point, but also to sites in the southern Bruce County littoral such as the Hunter site on the Saugeen Reserve, dating about 1600 (1990:462, 472), as well as the Inverhuron-Lucas site (1990:463). Abandonment of this area by the Odawa seems to have occurred, at least briefly, in the mid-1600s due to the Iroquois Wars (Fox 1990:472).

By 1690, Algonkian speakers from the north appear to have begun to repopulate Huron and 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). Although noted as "MIS" (i.e. Mississauga), Tanner (1987:Plate 13) shows First Nation occupation at the mouth of the Saugeen River in the late 1700s. Villages, sometimes temporary, fishing camps and portage trails were documented by surveyors and other Euro-Canadian visitors and settlers (Koenig 2005:62).

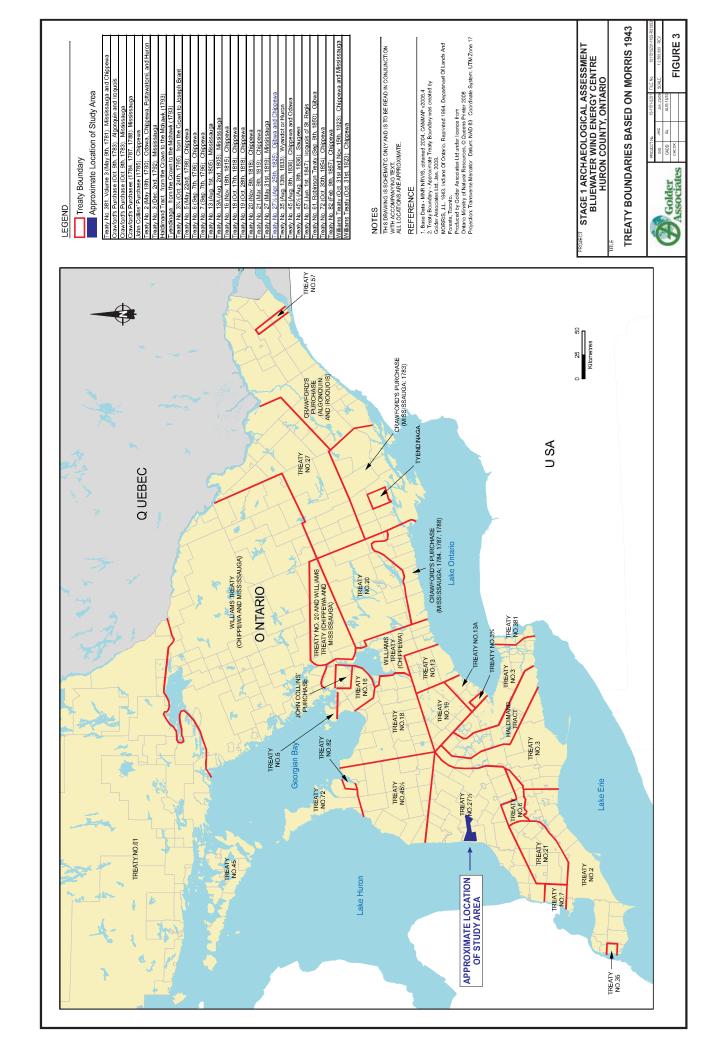
The study area also first enters the historic record when the Ojibwa and Chippewa First Nations entered into Treaty 27½,

...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)

While it is difficult to exactly delineate treaty boundaries today, Figure 3 provides an approximate outline of the limits of Treaty Number 27½.







Historical Euro-Canadian records also mention that while the Huron Tract was being surveyed, First Nations guides were often employed because of their knowledge of the land. These historical mentions claim that First Nations groups often travelled through Huron County for hunting and gathering but never stayed very long (Hay Township Book Committee (HTBC) 1996:3). They also were known to help settlers clear their land and open roads and aid in advising women on medicinal herbs and medicines for the sick (HTBC 1996:3). First Nations groups were also known to have lived at a temporary campsite north of Egmondville just outside of the study area as they traversed a seasonal route between the Lake Erie shoreline in the summer and the Saugeen Peninsula in the winter (Campbell 1968). Despite the presence of later Aboriginal groups within the study area, no archaeological sites have been registered with the ASDB for this area.

3.4 Historic Euro-Canadian Archaeological Resources and Surveys3.4.1 Survey and Early Settlement

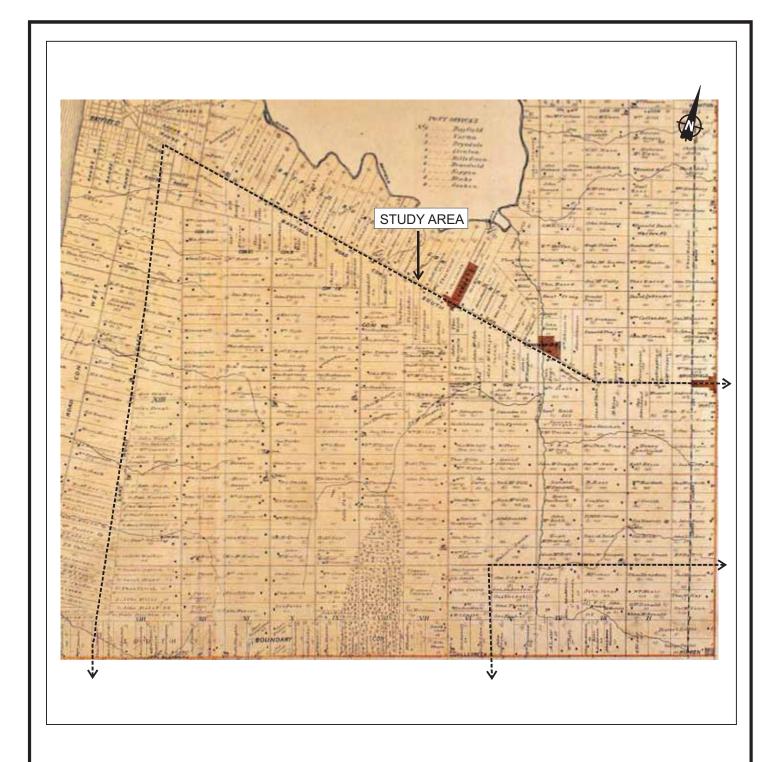
The Euro-Canadian creation and settlement of Huron County was largely due to the Canada Company (itself formed in 1824) purchasing a large parcel of land known as the Huron Tract and preparing it for settlement by British settlers. The Huron Tract was mostly surveyed by Deputy Provincial Surveyor John McDonald on behalf of the Canada Company. All three townships within the study area were surveyed by John McDonald in 1835 and are discussed separately below.

3.4.1.1 Stanley Township

The township was surveyed by John McDonald (McDonald 1835) using the "2400 acre section" system. John McDonald created rectangular 200 acre lots in this township, with the fronts of the lots fronting onto road allowances (Figure 4). The settlers of the township were mostly English Protestants and Scottish Catholics with some Germans of different religious denominations (Scott 1966:158). There were often arguments as to where families would settle, ending up with each denomination getting there own concession (Scott 1966:158). This phenomenon has been preserved today in the names of the roads, such as Babylon Line where the Catholics resided and Goshen Line where the Protestants resided (Scott 1966: 158). Rev. Mr. Cooper was the first Euro-Canadian settler of the township in 1833 when he settled on the London Road (Scott 1966: 158-159).

A good resource for identifying potential historic Euro-Canadian archaeological sites is the 1879 *Illustrated Historical Atlas of the County of Huron* (Belden 1879). The Stanley Township map provides both the names of the landowners and the majority of structures as they were located on properties in the last half of the 19th century (Figure 5). In addition to houses, the structures noted include brickyards, cemeteries, churches, hotels, manufactories, mills and schools. Table 3 lists those lots that hold a structure other than a house, along with the name of the owner. 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.





REFERENCE

DRAWING BASED ON
Belden, H. and Company
1879 Illustrated Historical Atlas Of Huron County.
1972 reprint. Ross Cumming, Owen Sound.

NOTES

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

ALL LOCATIONS ARE APPROXIMATE.

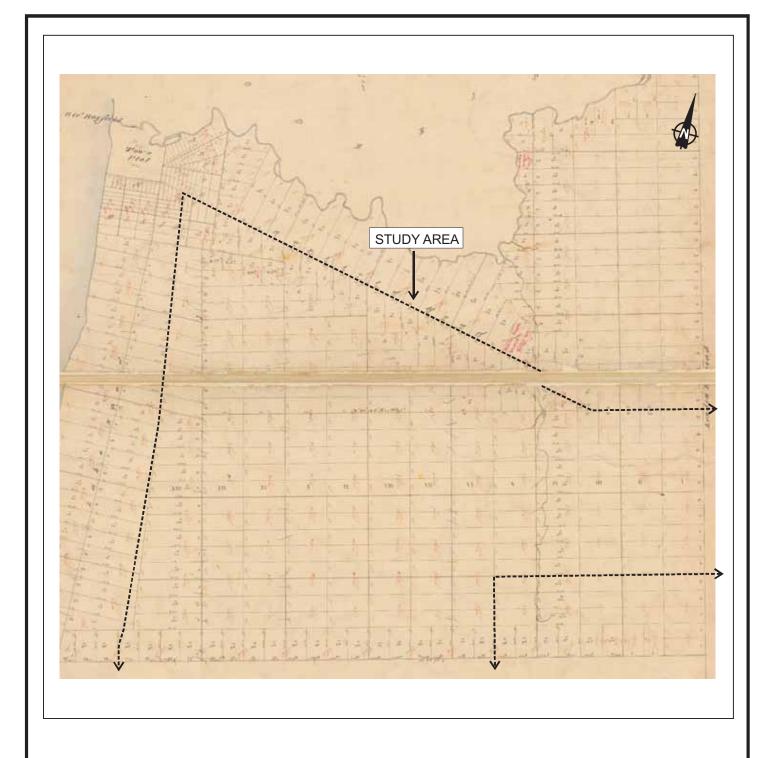
PROJECT STAGE 1 ARCHAEOLOGICAL ASSESSMENT BLUEWATER WIND ENERGY CENTRE HURON COUNTY, ONTARIO

TITLE

A PORTION OF THE 1879 MAP OF STANLEY TOWNSHIP



PROJECT No.		10-1151-0201		1011510201-1100-R01005
			SCALE	NOT TO SCALE REV.
CADD	AL	AUG 13/10		
CHECK			F	FIGURE 5



REFERENCE

DRAWING BASED ON

McDonald, John
1835b Stanley Township. Map on file with the Ministry of Natural
Resources Crown Land Survey Records Office,
Peterborough, Ontario.

NOTES

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

ALL LOCATIONS ARE APPROXIMATE.

PROJECT STAGE 1 ARCHAEOLOGICAL ASSESSMENT **BLUEWATER WIND ENERGY CENTRE HURON COUNTY, ONTARIO**

A PORTION OF THE 1835 MAP **OF STANLEY TOWNSHIP**



PROJECT No.		10-1151-0201		1011510201-1100-R01004
			SCALE	NOT TO SCALE REV.
CADD	AL	AUG 13/10		
CHECK			F	FIGURE 4



Table 4: Historic Properties with Potentially Significant Structures According to the Map of Stanley Township in the 1879 *Illustrated Historical Atlas of the County of Huron*

Structure	Lot	Concession	Status
School House	6	3	Still standing, now a home
Cheese Factory	13	6	No longer standing
School House	6 and 7	7	No longer standing
Saw Mill	14	7	No longer standing
Grist Mill	14	7	No longer standing
School House	13	8	No longer standing
Church	15	9	No longer standing
Church	14	10	No longer standing
Cemetery	12	11	No longer standing
Church	10	11	No longer standing
Saw Mill	7	13	No longer standing
School House	10	13	No longer standing
Church	11	South Boundary	No longer standing
School House	21 and 22	South Boundary	Still standing, now a home
Church	23	South Boundary	No longer standing

Blake

Blake is located on the South Boundary Concession of Stanley Township on Lots 23 and 24, on the border of Stanley and Hay Townships (Figure 5). The settlement of Blake was originally named Berne by its founder, Gottlieb Merner. He had purchased a one acre lot where he built a general store (HTBC 1996: 89) and was the location of the first post office in 1863. The community's name was changed to Blake in 1877 (HTBC 1996: 90). There were many businesses in the town such as a grist mill, a feed store, blacksmith shop, a pump shop and the Blake Butter Manufacturing Company (HTBC 1996: 91). The population in 1865 was 60 residents but the community did not thrive. By the late 20th century the population had dropped to 24 residents (HTBC 1996: 91). Plate 4 shows Blake today, with nothing but residential homes remaining. Given the abandonment and destruction of former village buildings over time, significant archaeological resources could exist.





Plate 3: Streetscape of Blake, Looking Southwest from Kippen Road



Brucefield

Brucefield is located on the town line of Tuckersmith and Stanley Townships (Figures 7 and 9). Brucefield was one of the first post offices to open in the township in 1851 with the first postmaster being Donald McMillan (Scott 1966: 160). After the coming of the railways it became an important village, with a school, church, two hotels, a tannery and a steam saw mill (Scott 1966:160). There are a small number of mid-19th century structures remaining in the once important village of Brucefield (Plate 3), but since the community has contracted since its initial settlement, significant archaeological resources could exist.





Plate 4: Streetscape of Brucefield, Looking Southeast



Hills Green

Hills Green was located on the town line between Stanley and Hay townships and was named after the Hill family who lived on Lot 11, Concession North Boundary. The community name is variously spelled "Hill's Green", "Hills Green" or "Hillsgreen". In 1864 a post office was opened at Hills Green and was operated out of the general store. By 1876 this community housed 50 residents. At the height of this community (*circa* 1880) there was a dry hotel and Presbyterian Church at the southwest corner, a general store/post office, cider mill, blacksmith shop and Orange Hall/Town Hall at the southeast corner and a Methodist Church and shoemaker's shop at the northeast corner (HTBC 1996:98).

During the first half of the 20th century the various businesses and community buildings started to disappear. The Orange Hall and Presbyterian Church were both demolished, and the Methodist Church was briefly used as a chopping mill and later dismantled and moved to a local farmer's property (Plate 5). The post office officially closed in 1914. The Hills Green general store was the only business that survived into the second half of the 20th century. It was operated as a store until 1981 and was dismantled in 1995 (HTBC 1996:99).

Only a few houses remain today at the crossroads where the community of Hills Green once flourished. Due to the fact that all of the businesses and former community buildings have been demolished significant archaeological resources could exist in the general area of this former hamlet.









Varna

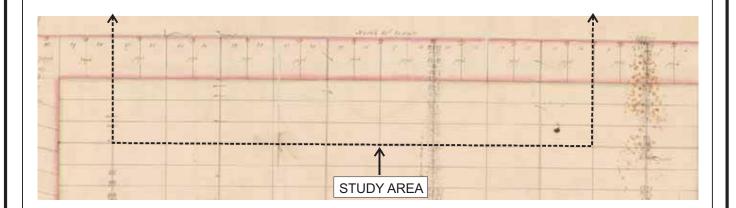
Varna is located on the Bayfield North and South Concessions on Lots 18 and 19, Stanley Township. Varna was the second village to have a post office in 1855. Josiah Secord was the first postmaster, also having founded Varna in 1854 and owned the first store where the post office was located (Scott 1966:160). Community growth centered on the town hall that was erected (Scott 1966:160). By 1860 Varna had a grist mill, two steam saw mills, a cabinet factory, two hotels, three churches, and a school (Scott 1966:160-161), but has contracted significantly by the present day (Plate 6). Given the abandonment and destruction of former village buildings over time, significant archaeological resources could exist.

3.4.1.2 Hay Township

John McDonald (McDonald 1835) surveyed the majority of the township in 100-acre lots (Figure 6), where the concession roads and side roads are one and one quarter miles apart (HTBC 1996:6). The only exception to the 100-acre lots survey is the Lake Range Concessions East and West (HTBC 1996:6). The Canada Company soon realized after their purchase of land in Hay Township that it was rather difficult to clear and settle on these properties. They then decided to lease the land for five or ten year periods, to immigrants who had little or no money (HTBC 1996:4).







REFERENCE

DRAWING BASED ON

McDonald, John

1837 Hay Township. Map on file with the Ministry of Natural Resources Crown Land Survey Records Office, Peterborough, Ontario.

NOTES

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

ALL LOCATIONS ARE APPROXIMATE.

PROJECT STAGE 1 ARCHAEOLOGICAL ASSESSMENT **BLUEWATER WIND ENERGY CENTRE HURON COUNTY, ONTARIO**

A PORTION OF THE 1837 MAP **OF HAY TOWNSHIP**



٦	PROJECT No.		10-1151-0201	FILE No.	1011510201-1100-R01006
				SCALE	NOT TO SCALE REV.
	CADD	AL	AUG 13/10		
ı	CHECK			l F	FIGURE 6



The first wave of Euro-Canadian settlement began with the arrival of British families in 1833. The first two settlers were John C. Hillock (or Hullock) and Andrew McConnell (HTBC 1996:21). The second stage was the settlement of French-Canadians. This occurred in the 1840's after French-Canadian loggers who had temporarily come to Hay Township for work returned with their families to settle. This group was best known most for its settlement at St. Joseph, outside of the study area (Scott 1966:58). They were the first loggers to come to the township in 1830's who later settled permanently in the 1840's (Scott 1966:58). The third stage was the arrival of German immigrants in the 1850's. They settled mostly along the eastern and western borders of the township (HTBC 1996:30).

A good resource for identifying potential historic Euro-Canadian archaeological sites is the 1879 *Illustrated Historical Atlas of the County of Huron* (Belden 1879). The Hay Township map provides both the names of the landowners and the majority of structures as they were located on properties in the last half of the 19th century (Figure 7). In addition to houses, the structures noted include brickyards, cemeteries, churches, hotels, manufactories, mills and schools. Table 3 lists those lots that hold a structure other than a house, along with the name of the owner. 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.

Table 5: Historic Properties with Potentially Significant Structures According to the Map of Hay Township in the 1879 *Illustrated Historical Atlas of the County of Huron*

Structure Lot		Concession	Status
Church	28	7	No longer standing
Cemetery	28	7	No longer standing
Cemetery	28	12	No longer standing







STUDY AREA

REFERENCE

DRAWING BASED ON
Belden, H. and Company
1879 Illustrated Historical Atlas Of Huron County.
1972 reprint. Ross Cumming, Owen Sound.

NOTES

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

ALL LOCATIONS ARE APPROXIMATE.

PROJECT STAGE 1 ARCHAEOLOGICAL ASSESSMENT BLUEWATER WIND ENERGY CENTRE HURON COUNTY, ONTARIO

TITLE

A PORTION OF THE 1879 MAP OF HAY TOWNSHIP

PROJECT No.		10-1151-0201	FILE No.	1011510201-1100-R01007
			SCALE	NOT TO SCALE REV.
CADD	AL	AUG 13/10		
CLIECK				TOUDE 7

FIGURE 7



3.4.1.3 Tuckersmith Township

John McDonald used the 1000 acre sectional system, which divided the lots into 100 acre parcels, when surveying the township (Figure 8). Tuckersmith got its name from one the original directors of the Canada Company, Mr. Martin Tucker Smith (Scott 1966:145). In 1830 it was apparent that there would be little or no settlement in the area if there was not a proper road going through the land. The Canada Company contracted Anthony Van Egmond and his son, Constant, to build the Huron Road (Scott 1966:50-51). The road was finished in 1832, but after a very short time it was noted that it was poorly drained and therefore the corduroy was torn up and replaced by turnpike (Scott 1966:52). Early Euro-Canadian settlement was slower than anticipated but did increase in the next few years. Over half of the initial settlers of the area were of Scottish origin and were Presbyterians, just over a third of the settlers were Methodist and Anglicans who were mostly of English origin and the remainder of the settlers were Roman Catholics of Irish origin (Scott 1966:145).

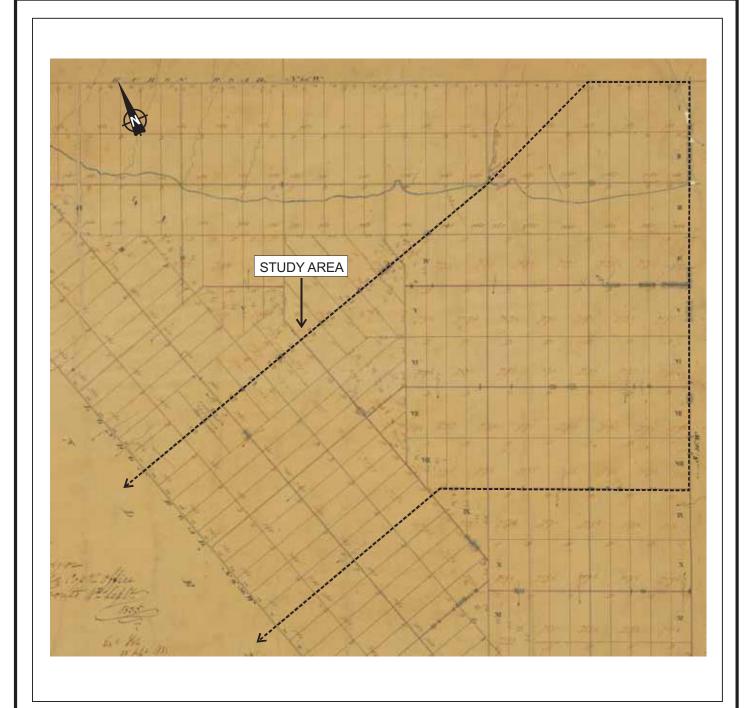
The Brantford Buffalo Railway came through Tuckersmith in the 1858 (Andreae 1997:127). It later became known as the Buffalo and Lake Huron Railway (Scott 1966:232). It is still operating today but is now known as the Goderich-Exeter railway.

A good resource for identifying potential historic Euro-Canadian archaeological sites is the 1879 *Illustrated Historical Atlas of the County of Huron* (Belden 1879). The Tuckersmith Township map provides both the names of the landowners and the majority of structures as they were located on properties (Figure 9). In addition to houses, the structures noted include brickyards, cemeteries, churches, hotels, manufactories, mills and schools. Table 3 lists those lots that hold a structure other than a house, along with the name of the owner. 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.

Table 6: Historic Properties with Potentially Significant Structures According to the Map of Tuckersmith Township in the 1879 *Illustrated Historical Atlas of the County of Huron*

Structure	Lot	Concession Status	
School House	5	4 Huron Road Survey	No longer standing, modern building in its place
Cemetery	23	5	No longer standing
Cemetery	27	1	Still standing





REFERENCE

DRAWING BASED ON

McDonald, John

1835c *Tuckersmith Township*. Map on file with the Ministry of Natural Resources Crown Land Survey Records Office, Peterborough, Ontario.

NOTES

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

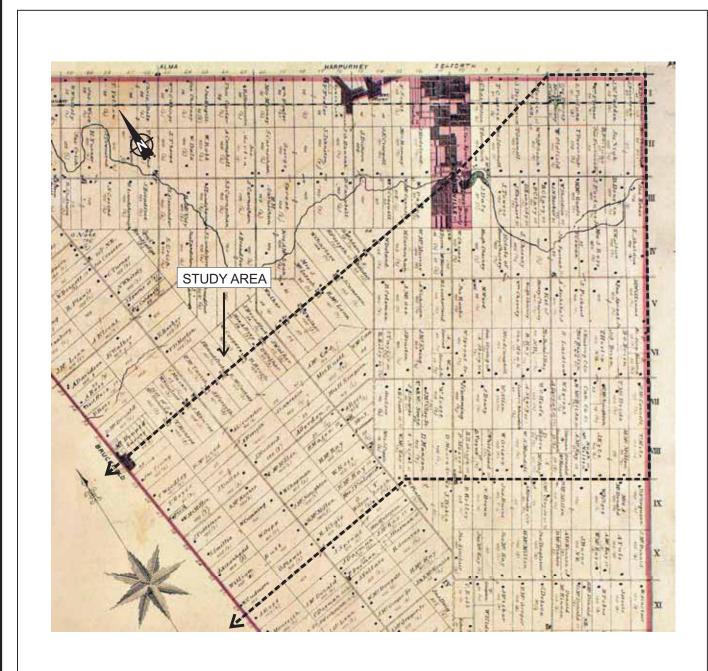
ALL LOCATIONS ARE APPROXIMATE.

PROJECT STAGE 1 ARCHAEOLOGICAL ASSESSMENT **BLUEWATER WIND ENERGY CENTRE HURON COUNTY, ONTARIO**

A PORTION OF THE 1835 MAP OF TUCKERSMITH TOWNSHIP



PROJECT No. 10-1151-0201		FILE No.	1011510201-1100-R01008		
			SCALE	NOT TO SCALE REV.	
CADD	AL	AUG 13/10			
CHECK			FIGURE 8		



REFERENCE

DRAWING BASED ON
Belden, H. and Company
1879 Illustrated Historical Atlas Of Huron County.
1972 reprint. Ross Cumming, Owen Sound.

NOTES

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

ALL LOCATIONS ARE APPROXIMATE.

PROJECT STAGE 1 ARCHAEOLOGICAL ASSESSMENT BLUEWATER WIND ENERGY CENTRE HURON COUNTY, ONTARIO

TITLE

A PORTION OF THE 1879 MAP OF TUCKERSMITH TOWNSHIP



PROJECT No. 10-1151-0201		FILE No.	1011510201-1100-R01009		
			SCALE	NOT TO SCALE REV.	
CADD	AL	AUG 13/10			
CHECK			FIGURE 9		



Egmondville

Egmondville is located on Concession 3 of the Huron Road Survey on Lots 10 and 11, Tuckersmith Township (Figure 9). The community was founded by Constant Van Egmond, who wanted to regain the wealth his father had lost and to build a village mindful of similar sized settlements in England (Scott 1966:146-147). Constant built a large brick house overlooking the Bayfield River where he opened a grist and flour mill. His brother Leopold operated a saw mill and a woollen mill (Scott 1966:147). The Van Egmond family dominated the majority of the industry but other families such as the Jacksons, Watsons, Bawtenhimers, Cunninghams and Dicksons ran the taverns, brewery, and several shops (Scott 1966:147-148). Egmondville was at its height from 1840 to 1860, but after the railway was built north of the area Egmondville began to decline (Scott 1966:148). Industries and families began to move to Seaforth, which was just north of Egmondville. The Van Egmond family lost most of there influence and failed to keep up with developing technologies so that they were forced to close what industries they had left (Scott 1966:148). Given the abandonment and destruction of former village buildings over time as the settlement contracted, significant archaeological resources could exist.

3.4.2 Summary

Euro-Canadian settlement extends back to the early 19th century within the study area. All three townships – Stanley, Hay, and Tuckersmith – retain evidence for the historic 19th century road grid and lot system. Numerous communities within the study area have existed since the middle of the 19th century and have contracted over time in many cases. These contractions indicate that significant archaeological resources from abandoned and now disappeared structures could exist.





4.0 PROPERTY INSPECTION

The study area was visually evaluated on August 4th, 2010. Figure 10 illustrates where each photograph was taken and if necessary which direction the photograph was taken within the study area. Visibility was excellent and the weather was partly cloudy but bright when the photographs were taken. The figures illustrate wetlands within the study area (Plate 6), a hydro corridor through the study area (Plate 7), a typical lot line (Plate 8), a typical gentle rolling landscape within the study area (Plate 9), an example of flat landscape, where turbines are probably to be located, with woodlots in the background (Plate 10), and the occasional area of disturbance such as a hydro station (Plate 11) or an aggregate pit (Plate 12).

Plate 6: Wetlands on Kippen Road, Looking South





Plate 7: Hydro Corridor, Looking North from Centennial Road



Plate 8: Typical Lot Line Looking West from Bronson Line



Plate 9: Gentle Rolling Landscape Looking North from Crystal Springs Road



Plate 10: Flat Landscape with Woodlot in Background Looking North from Centennial Road

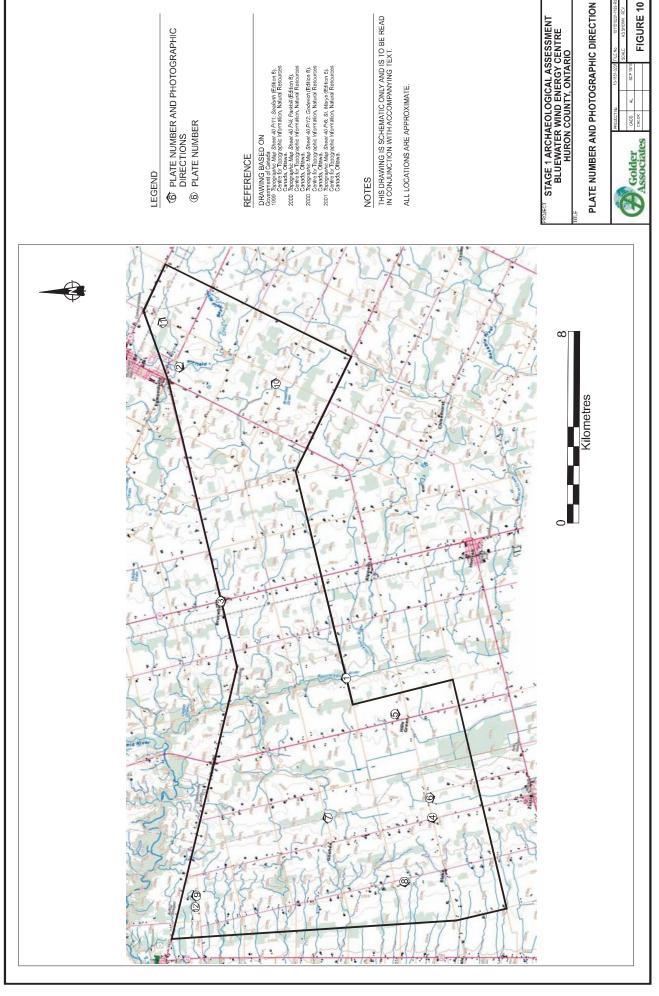


Plate 11: Hydro Station Looking North from Hensall Road



Plate 12: Aggregate Pit Located on the North Side of Crystal Springs Road







SCALE AS SHOWN REV.	FIGURE 10			
	SEP 15/10			
	ΑL			



5.0 RESULTS

5.1 Potential for Pre-contact Aboriginal Archaeological Sites

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Archaeological potential criteria commonly used by the Ministry of Tourism, Culture and Sport (Government of Ontario 1997) were applied to determine areas of archaeological potential within the study area. These variables include: distance to various types of water sources, soil texture and drainage, glacial geomorphology, 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).

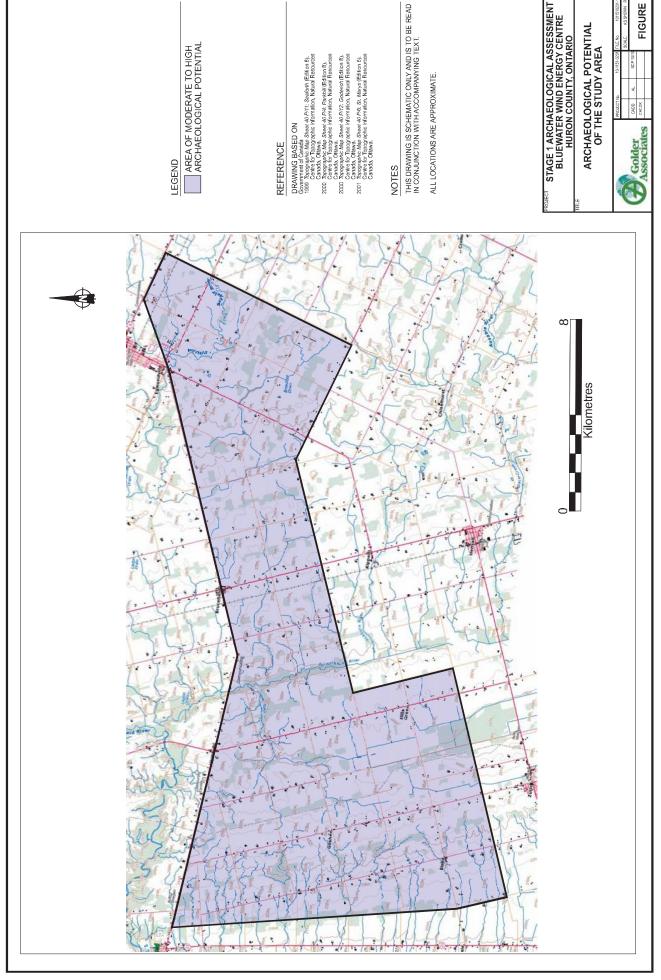
In archaeological potential modeling, a distance to water criterion of 300 metres is generally employed for primary water courses, including lakeshores, rivers and large creeks, while a criterion of 200 metres is applied to secondary water sources, including swamps and small creeks. Bayfield River runs approximately 1.5 kilometres north of the study area and many of its tributaries transect the study area. Bannockburn River runs through the middle of the study area and numerous small creeks, mostly draining into Lake Huron, run through at various locations. Lake Huron is located approximately two kilometres to the west of the study area.

Soil texture can be an important determinant of past settlement, usually in combination with other factors such as topography. The study area is fairly level with no areas of steep slope that would not be suitable for settlement. With respect to soil texture, Aboriginal groups preferred well drained lighter (sandy) soils to heavier soils. The soils of the study area are imperfectly drained soils that are primarily clay. Although some areas might have been swampy in the past due to the imperfect drainage and relatively level topography, the rest of the study area would have been suitable for pre-contact aboriginal agriculture, although not ideal. Therefore, these soils provide further archaeological potential for Aboriginal sites within the study area.

Nine of the sites are undefined pre-contact Aboriginal sites including three find spots. The rest are all campsites, including the three with temporally diagnostic artifacts of which one site is an Archaic site, one is a Woodland site, and one is a Middle Woodland site. Their presence establishes the possibility for other pre-contact Aboriginal activity within the study area and the surrounding environment.

When the above noted archaeological potential criteria are applied to the study area, the archaeological potential for pre-contact Aboriginal sites is deemed to be moderate to high (Figure 11). This assessment is due to the presence of potable water sources and previously known archaeological sites; the level land without areas of steep slope; and the agriculturally suitable soils. While some areas of modern disturbance exist (for example, Plates 11 and 12), they can be further evaluated during any Stage 2 archaeological assessment of areas that have been generally deemed to be of archaeological potential.





SCALL ASSHUMN RLV.	FIGURE 11		
	SEP 10/10		
	AL		



5.2 Potential for Historic Archaeological Sites

The criteria used by the Ontario Ministry of Tourism, Culture and Sport to determine potential for historic archaeological sites include the presence of: 1) particular, resource-specific features that would have attracted past subsistence or extractive uses; 2) areas of initial, non-Aboriginal settlement; 3) early historic transportation routes; and 4) properties designated under the Ontario Heritage Act (Government of Ontario 1997:14).

The area has been the location of generalized agricultural practices in the past and is still used in that fashion today. There is evidence of Euro-Canadian settlement extending back to the early 19th century, during the initial settlement of Stanley, Hay and Tuckersmith Townships. The 19th century road grid is still in use. Five small communities located within the study area have decreased in size since the 19th century and may have left behind significant archaeological remains. In addition, there is historical evidence that First Nations people were living in the area during the initial phase of European settlement giving aid to the new settlers. On account of these factors the post-contact Aboriginal and Euro-Canadian historic archaeological potential for the study area is judged to be moderate to high. While some areas of modern disturbance exist (for example, Plates 11 and 12), they can be further evaluated during any Stage 2 archaeological assessment of areas that have been generally deemed to be of archaeological potential.





6.0 RECOMMENDATIONS

Golder applied archaeological potential criteria commonly used by the Ontario Ministry of Tourism, Culture and Sport to determine areas of archaeological potential within the study area. The archaeological potential for Aboriginal and Euro-Canadian sites was deemed to be moderate to high on these properties. For pre-contact Aboriginal sites this assessment is based on the presence of nearby potable water sources, level topography, agriculturally suitable soils, and known archaeological sites. For post-contact Aboriginal sites this assessment is based on the presence of nearby potable water sources, level topography, and historic Euro-Canadian anecdotal evidence. The determination of historic Euro-Canadian archaeological potential is based on the documentation indicating occupation from the middle of the 19th century onwards as well as the presence of historic transportation routes. As a result, Stage 2 archaeological assessment is recommended for potential wind turbine sites and their associated infrastructure.

Further Stage 2 archaeological assessment is recommended for any areas to be impacted by turbine construction, access road construction, or other infrastructure construction related activities. The Ontario Ministry of Tourism, Culture and Sport is asked to review the results presented and 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.





7.0 ADVICE ON COMPLIANCE WITH LEGISLATION

This report is submitted to the Ministry 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.





8.0 REFERENCES CITED

Andreae, Christopher

1997 Lines of Country: An Atlas of Railway and Waterway History in Canada. The Boston Mill Press, Erin.

Belden, H. and Company

1879 Illustrated Historical Atlas of the County of Huron. 1972 reprint. Ross Cumming, Owen Sound.

Campbell, Isabelle

1968 From forest to thriving hamlets. Huron Expositor, Seaforth.

Chapman, Lyman John and Donald F. Putnam

1984 *The Physiography of Southern Ontario.* 3rd ed. Ontario Geological Survey Special Volume 2. Ontario Ministry of Natural Resources, Toronto.

Ellis, Chris J. and Neal Ferris (editors)

1990 *The Archaeology of Southern Ontario to A.D. 1650.* Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5.

Feest, Johanna and Christian Feest

1978 Ottawa. In *Handbook of North American Indians. Volume 15, Northeast*, edited by Bruce Trigger, pp. 772-786. Smithsonian Institution Press, Washington.

Ferris, Neal

- 1999 What's in a Name? The Implications of Archaeological Terminology Used in Nonarchaeological Contexts. In *Taming the Taxonomy: Toward a New Understanding of Great Lakes Archaeology*, edited by Ronald Williamson and Christopher Watts, pp. 111-121. Eastendbooks, Toronto.
- 2009 The Archaeology of Native-Lived Colonialism: Challenging History in the Great Lakes. University of Arizona Press, Tucson.





Fiedel, Stuart

1999 Algonquians and Iroquoians: Taxonomy, Chronology and Archaeological Implications. In *Taming the Taxonomy: Toward a New Understanding of Great Lakes Archaeology*, edited by Ronald Williamson and Christopher Watts, pp. 193-204. Eastendbooks, Toronto.

Fox, William

1990 The Odawa. In *The Archaeology of Southern Ontario to A.D. 1650*, edited by Chris Ellis and Neal Ferris, pp. 457-473. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5. London Chapter, Ontario Archaeological Society, London, ON.

Koenig, Edwin

2005 Cultures and Ecologies: A Native Fishing Conflict on the Saugeen-Bruce Peninsula. University of Toronto Press, Toronto.

Government of Canada

- 1999 *Topographic Map Sheet 40 P/11: Seaforth* (Edition 8). Centre for Topographic Information, Natural Resources Canada, Ottawa.
- 2000 Topographic Map Sheet 40 P/4: Parkhill (Edition 8). Centre for Topographic Information, Natural Resources Canada, Ottawa.
- 2000 Topographic Map Sheet 40 P/12: Goderich (Edition 8). Centre for Topographic Information, Natural Resources Canada, Ottawa.
- 2001 Topographic Map Sheet 40 P/6: St. Marys (Edition 6). Centre for Topographic Information, Natural Resources Canada, Ottawa.

Government of Ontario

- 1993 Archaeological Assessment Technical Guidelines (Stages 1-3 & Reporting Format). Ministry of Culture, Tourism and Recreation, Cultural Programs Branch, Archaeology and Heritage Planning, Toronto.
- 1997 Conserving a Future for Our Past: Archaeology, Land Use Planning & Development in Ontario. Ministry of Citizenship, Culture and Recreation, Archaeology and Heritage Planning Unit, Toronto.
- n.d. Ontario Archaeological Sites Database Files. Heritage Operations Unit, Ministry of Culture, Toronto.





Hay Township Book Committee (HTBC)

1996 Hay Township Highlights, 150 Years of Diversified Progress. The Corporation of the Township of Hay,

Hoffman, D.W., N.R. Richards and F.F. Morwick

1952 *Soil Survey of Huron County.* Report Number 13 of the Ontario Soil Survey. Experimental Farms Service, Canada Department of Agriculture and the Ontario Agricultural College, Guelph.

McDonald, John

- 1835a Part of Stanley, Hay, and Stephen 1835. Notebook on file with the Ministry of Natural Resources Crown Land Survey Records Office, Peterborough, Ontario.
- 1835b *Stanley Township.* Map on file with the Ministry of Natural Resources Crown Land Survey Records Office, Peterborough, Ontario.
- 1835c *Tuckersmith Township.* Map on file with the Ministry of Natural Resources Crown Land Survey Records Office, Peterborough, Ontario.
- 1837 *Hay Township*. Map on file with the Ministry of Natural Resources Crown Land Survey Records Office, Peterborough, Ontario.

Morris, J.L.

1943 Indians of Ontario. 1964 reprint. Department of Lands and Forests, Government of Ontario.

Orr, Sandra

1993 Huron: Grand Bend to Southampton. The Boston Mills Press. Erin.

Rankin, Lisa

2000 Interpreting Long-term Trends in the Transition to Farming: Reconsidering the Nodwell Site, Ontario, Canada. British Archaeological Reports International Series 830. British Archaeological Reports, Oxford.

Rogers. E.S.

1978 Southeast Ojibwa. In *Handbook of North American Indians. Volume 15, Northeast*, edited by Bruce Trigger, pp. 760-771. Smithsonian Institution Press, Washington, D.C.





Schmalz, Peter S.

1991 The Ojibwa of Southern Ontario. University of Toronto Press, Toronto.

Scott, James

1966 The Settlement of Huron County. Ryerson Press, Toronto.

Surtees, Robert

1971 The Original People. Holt, Rinehart and Winston, Toronto.

Tanner, Helen (editor)

1987 Atlas of Great Lakes Indian History. University of Oklahoma Press, Norman.

Warrick, Gary

2008 A Population History of the Huron-Petun, A.D. 500-1650. Cambridge University Press, Cambridge.

Wilson, J.A. and M. Horne

1995 *City of London Archaeological Master Plan.* City of London, Department of Planning and Development, London.

Wright, J.V.

1974 *The Nodwell Site.* Archaeological Survey of Canada Paper No. 22. National Museums of Canada, Ottawa.





9.0 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 heritage resource 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 AECOM Canada Ltd. 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.





Report Signature Page

GOLDER ASSOCIATES LTD.

Jeffrey Muir, B.A. Project Archaeologist James A. Wilson, M.A. Principal, Senior Archaeologist

AL/JM/JAW/am

n:\active\2010\1151\10-1151-0201 nextera -3 wind farms archaeology - on\reports\final\stage 1 reports\bluewater\1011510201-1000-1100-r01 feb 13 12 - bluewater wind energy centre stage 1.docx



At Golder Associates we strive to be the most respected global group of companies specializing in ground engineering and environmental services. Employee owned since our formation in 1960, we have created a unique culture with pride in ownership, resulting in long-term organizational stability. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees now operating from offices located throughout Africa, Asia, Australasia, Europe, North America and South America.

Africa + 27 11 254 4800
Asia + 852 2562 3658
Australasia + 61 3 8862 3500
Europe + 356 21 42 30 20
North America + 1 800 275 3281
South America + 55 21 3095 9500

solutions@golder.com www.golder.com

Golder Associates Ltd. 2390 Argentia Road Mississauga, Ontario, L5N 5Z7 Canada

T: +1 (905) 567 4444

