#### Ministry of Tourism, Culture and Sport

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#### Ministère du Tourisme, de la Culture et du Sport

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# 27 April 2012

Thomas Bird Environmental Services Project Manager NextEra Energy Canada, ULC 5500 North Service Road, Suite 205 Burlington, ON L7L 6W6

RE: NextEra Bornish Energy Centre. East Williams, West Williams and Adelaide Townships, Middlesex County.FIT-F2BNU4R. 39EA019, P218-097-2011 & P319-013-2012, 057-534-2009 & P057-613-2010

### Dear Proponent:

This letter constitutes the Ministry of Tourism and Culture's written comments as required by s. 22(3)(a) of O. Reg. 359/09 under the *Environmental Protection Act* regarding archaeological assessments undertaken for the above project.

Based on the information contained in the report(s) you have submitted for this project, the Ministry believes the archaeological assessment complies with the *Ontario Heritage Act*'s licensing requirements, including the licence terms and conditions and the Ministry's 1993 Archaeological Assessment Technical Guidelines (P057-534-2009 & P057-613-2010) or the 2011 Standards and Guidelines for Consultant Archaeologists (P218-097-2011 & P319-013-2012). Please note that the Ministry makes no representation or warranty as to the completeness, accuracy or quality of the Report(s).\*

The report(s) recommends the following:

### PIF # P218-097-2011 & P319-013-2012, 18 April 2012, Received 18 April 2012

# 5.1 Location 1

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

5.2 Location 2 (AgHk-95)

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

#### 5.3 Location 3

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

### 5.4 Location 4 (AgHk-96)

The Stage 2 assessment of Location 4 (AgHk-96) revealed a spatially discrete cluster of mid-to-late 19th century historic Euro-Canadian cultural material. The most common types of ceramic artifacts recovered from Location 4 (AgHk-96) were mid-to-late 19th century ironstone. Given the abundance of this material and the site's location on historic mapping, it is recommended that Location 4 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site. The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1. of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 4 (AgHk-96) should also be conducted as part of the Stage 3 assessment.

# 5.5 Location 5 (AgHk-97)

The Stage 2 assessment of Location 5 (AgHk-97) revealed a spatially discrete cluster of mid-to-late 19th century historic Euro-Canadian cultural material. The most common

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

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

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

# 5.7 Location 7 (AgHk-118)

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

### 5.8 Location 8

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

# 5.9 Location 9 (AgHk-99)

The Stage 2 assessment of Location 9 (AgHk-99) resulted in the recovery of a precontact Aboriginal Middle Woodland projectile point (circa 100 B.C. to 200 A.D.). Despite the intensification of survey intervals no additional artifacts were recovered.

Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 9 (AgHk-99).

# 5.10 Location 10 (AgHj-6)

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

### 5.11 Location 11 (AgHj-7)

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

### 5.12 Location 12 (AgHj-8)

The Stage 2 assessment of Location 12 (AgHj-8) revealed a spatially discrete cluster of late 19th to early 20th century historic Euro-Canadian cultural material. A variety of fragile, breakable items, such as ceramics and glass, were collected. Given the abundance of this material, it is recommended that Location 12 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site. The Stage 3 assessment should employ both the controlled surface

pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 12 (AgHj-8) should also be conducted as part of the Stage 3 assessment.

#### 5.13 Location 13 (AgHk-100)

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

#### 5.14 Location 14 (AgHk-101)

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

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

### 5.15 Location 15 (AgHk-102)

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

# 5.16 Location 16 (AgHk-103)

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

### 5.17 Location 17 (AgHk-104)

The Stage 2 assessment of Location 17 (AgHk-104) revealed a spatially discrete cluster of mid-to-late 19th century historic Euro-Canadian cultural material. The most common ceramic type recovered from Location 17 (AgHk-104) was mid-to-late 19th century ironstone. Given the abundance of these artifacts, it is recommended that Location 17 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site. The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 17 (AgHk-104) should also be conducted as part of the Stage 3 assessment.

## 5.18 Location 18 (AgHk-105)

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

### 5.19 Location 19 (AgHk-119)

Given that the Stage 2 assessment of Location 19 (AgHk-119) resulted in the recovery of a spatially discrete area yielding pre-contact Aboriginal artifacts, it is recommended that a Stage 3 archaeological assessment be conducted in advance of any ground disturbance activities to further test the nature and density of the site. The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the

Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011) to further test the nature and density of this site. Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. The already existing program of Aboriginal engagement should be continued during the Stage 3 archaeological assessment.

### 5.20 Location 20 (AgHk-106)

The Stage 2 assessment of Location 20 (AgHk-106) revealed a spatially discrete cluster of mid-to-late 19th century historic Euro-Canadian cultural material. The most common types of ceramic artifacts recovered from Location 20 (AgHk-105) were mid-to-late 19th century ironstone and whiteware. Given the abundance of these artifacts, it is recommended that Location 20 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site. The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 20 (AgHk-105) should also be conducted as part of the Stage 3 assessment.

## 5.21 Location 21 (AgHk-107)

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

previous background study concerning the land use and occupation history specific to Location 21 (AgHk-107) should also be conducted as part of the Stage 3 assessment.

### 5.22 Location 22 (AgHk-108)

The Stage 2 assessment of Location 22 (AgHk-108) revealed a spatially discrete cluster of mid-to-late 19th century historic Euro-Canadian cultural material. The most common ceramic type recovered from Location 22 (AgHk-108) was mid-to-late 19th century ironstone. Given the abundance of these artifacts, it is recommended that Location 22 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site. The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 22 (AgHk-108) should also be conducted as part of the Stage 3 assessment.

# 5.23 Location 23 (AgHk-109)

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

### 5.24 Location 24 (AgHk-110)

Given that the Stage 2 assessment of Location 24 (AgHk-110) resulted in the recovery of a spatially discrete area yielding pre-contact Aboriginal artifacts, it is recommended that a Stage 3 archaeological assessment be conducted in advance of any ground

disturbance activities to further test the nature and density of the site. The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011) to further test the nature and density of this site. Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. The already existing program of Aboriginal engagement should be continued during the Stage 3 archaeological assessment.

## 5.25 Location 25 (AgHk-111)

The Stage 2 assessment of Location 25 (AgHk-111) revealed a spatially discrete cluster of mid-to-late 19th century historic Euro-Canadian cultural material. The ceramic types recovered from Location 25 (AgHk-111) include mid-to-late 19th century ceramics and mid 19th-century black glass. Given the abundance of these artifacts, it is recommended that Location 25 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site. The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 25 (AgHk-111) should also be conducted as part of the Stage 3 assessment.

### 5.26 Location 26 (AgHk-117)

Given that the Stage 2 assessment of Location 26 (AgHk-117) resulted in the recovery of a spatially discrete area yielding a pre-contact Aboriginal Paleo-Indian multi-tool, it is recommended that a Stage 3 archaeological assessment be conducted in advance of any ground disturbance activities to further test the nature and density of the site. The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011) to further test the nature and density of this site. Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid surrounding the identified tool and should be excavated by hand to a depth of five

centimetres within the subsoil. In addition, at least 20% of the total number of units tested should be screened using a three millimetre mesh size instead of the standard six millimetre mesh. The already existing program of Aboriginal engagement should be continued during the Stage 3 archaeological assessment.

### 5.27 Location 27 (AgHk-112)

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

#### 5.28 Location 28

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

#### 5.29 Location 29

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

#### 5.30 Location 30

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

#### 5.31 Location 31 (AgHk-116)

The Stage 2 assessment of Location 31 (AgHk-116) revealed a spatially discrete cluster of mid-to-late 19th century historic Euro-Canadian cultural material. The ceramic types recovered from Location 31 (AgHk-116) include mid-to-late 19th century ironstone. Given the abundance of these artifacts, it is recommended that

Location 31 be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site. The Stage 3 assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of

Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area should be reploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 31 (AgHk-116) should also be conducted as part of the Stage 3 assessment.

#### 5.32 Location 32

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

#### 5.33 Location 33

The Stage 2 assessment of Location 33 resulted in the recovery of a single pre-contact Aboriginal artifact, a retouched flake. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 33.

# 5.34 Location 34 (AgHk-114)

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

### 5.35 Location 35 (AgHk-115)

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

#### 5.36 Location 36

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

5.37 Archaeological Sites Previously Documented by ASI

5.37.1 P16 (AgHk-82)

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

5.37.2 P17 (AgHk-83)

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

# 5.37.3 P19 (AgHk-85)

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

# 5.37.4 P20 (AgHk-86)

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

### 5.37.5 P30 (AgHk-93)

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

#### 5.37.6 P26 (AgHk-90)

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

## 5.37.7 P31 (AgHk-93)

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

# 5.38 Summary

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

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

Location	Borden Number	Affiliation	Stage 3 Recommended?
1		Pre-contact Aboriginal	No
2	AgHk-95	Pre-contact Aboriginal	Yes
3	ğ	Pre-contact Aboriginal	No
4	AgHk-96	Historic Euro-Canadian	Yes
5	AgHk-97	Historic Euro-Canadian	Yes
6	AgHk-98	Middle Woodland	No
7	AgHk-118	Middle-to-Late Archaic	No
8	J	Pre-contact Aboriginal	No
9	AgHk-99	Middle Woodland	No
10	AgHj-6	Pre-contact Aboriginal	Yes
11	AgHj-7	Pre-contact Aboriginal	Yes
12	AgHj-8	Historic Euro-Canadian	Yes
13	AgHk-100	Historic Euro-Canadian	Yes
14	AgHk-101	Historic Euro-Canadian	Yes
15	AgHk-102	Historic Euro-Canadian	Yes
16	AgHk-103	Historic Euro-Canadian	Yes
17	AgHk-104	Historic Euro-Canadian	Yes
18	AgHk-105	Historic Euro-Canadian	Yes
19	AgHk-119	Middle-to-Late Archaic	Yes
20	AgHk-106	Historic Euro-Canadian	Yes
21	AgHk-107	Multi-component	Yes
22	AgHk-108	Historic Euro-Canadian	Yes
23	AgHk-109	Historic Euro-Canadian	Yes
24	AgHk-110	Pre-contact Aboriginal	Yes
25	AgHk-111	Historic Euro-Canadian	Yes
26	AgHk-117	Paleo-Indian	Yes
27	AgHk-112	Historic Euro-Canadian	No
28		Pre-contact Aboriginal	No

29		Historic Euro-Canadian	No
30	AgHk-113	Pre-contact Aboriginal	No
31	AgHk-116	Historic Euro-Canadian	Yes
32		Pre-contact Aboriginal	No
33		Pre-contact Aboriginal	No
34	AgHk-114	Historic Euro-Canadian	Yes
35	AgHk-115	Historic Euro-Canadian	Yes
36		Pre-contact Aboriginal	No
P16 (ASI)	AgHk-82	Pre-contact Aboriginal	Yes
P17 (ASI)	AgHk-83	Pre-contact Aboriginal	Yes
P19 (ASI)	AgHk-85	Pre-contact Aboriginal	No
P20 (ASI)	AgHk-86	Pre-contact Aboriginal	No
P26 (ASI)	AgHk-90	Pre-contact Aboriginal	Yes, but not impacted by wind farm
P30 (ASI)	AgHk-93	Pre-contact Aboriginal	No
P31 (ASI)	AgHk-94	Pre-contact Aboriginal	Yes, but not impacted by wind farm

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

# PIF # PIF P057-534-2009 & P057-613-2010, 24 April 2012, Received 25 April 2012

- No further archaeological assessment is recommended on the following proposed facilities of the Bornish Wind Farm Project (based on the August 2010 layout): T1, T2, T3, T4, T5, T6, T7, T8, T9, T10, T11, T12, T13, T14, T15, T16, T18, T20, T21, T22, T23, T24, T25, T26, T28, T29, T30, T31, T32, T33, T34, T35, T37, T38, T39, T40, T41, T42, T43, T44, T45, T46, T47, T48 and T49;
- Further archaeological assessment is recommended for T17, T18, T19, T27 and T36 due to the presence of significant archaeological sites in close proximity to these facilities or their associated access roads/crane paths (see Recommendation 6 below).
- 3. No further assessment is recommended on the following pre-contact Aboriginal sites determined to have limited or no cultural heritage value or interest: Sites P1, P2, P3, P4, P6, P9, P10, P11, P12, P14, P15, P19, P20, P21, P22, P23, P25, P27, P29 and P30;
- 4. No further archaeological assessment is recommended at Site P5 (AgHk-77), Site P8 (AgHk-79), and Site P24 (AgHk-88) as the revised facilities (based on the August 2010 layout) are more than 30 m from site limits;
- 5. No further archaeological assessment is recommended at Site H1 (AgHk-63), Site H2 (AgHk-64) and Site H3 (AgHk-65), as the revised facilities (based on the August 2010 layout) are more than 30 m from site limits;
- 6. It is recommended that the remaining four (4) archaeological sites documented during the Stage 2 property assessment be subject to Stage 3 site specific assessment if they are to be located within the Project limits as they all meet the criteria for requiring a Stage 3 site-specific assessment (see MTC's 2011 Standards and Guidelines for Consultant Archaeologists (S & G), Section 2.2

Analysis: Determining the requirements for Stage 3 assessment. The type of site as per S & G Section 2.2 and the detailed Stage 3 requirements for each site as per S & G Section 3 and S & G Section 7.8.4, Standard 1c are as follows:

a. Stage 3 is recommended for Site P17 (AgHk-83), Site P26 (AgHk-90) and Site P31 (AgHk-31) or portions thereof located within the Project lands based on S & G Section 2.2, Standard 1.a.i.(1). The Stage 3 assessment must be carried out according to the criteria for small precontact Aboriginal sites where it is not yet evident that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4.

The Stage 3 site-specific assessment for these sites includes:

- historical documentation per S & G Section 3.1, Standard 1.a-b, if necessary;
- controlled surface pick-up of the site area: surface preparation may be required if ground conditions have deteriorated since the Stage 2 property assessment was conducted; and
- test unit (1 m square unit) excavation at 5 m intervals across the site plus an additional 20% of focused sampling;
- b. The Stage 2 property assessment identified one (1) pre-contact Aboriginal archaeological site— Site P16 (AgHk-82)—dating to the Early Archaic period that meets the criteria for requiring a Stage 3 site specific assessment based on S & G Section 2.2, Standard 1.a.i.(1). The Stage 3 assessment must be carried out according to the criteria for a small, precontact Aboriginal site where it is not yet evident that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4.

The Stage 3 site-specific assessment for this site includes:

- historical documentation per S & G Section 3.1, Standard 1.a-b, if necessary;
- controlled surface pick-up of the site area: surface preparation may be required if ground conditions have deteriorated since the Stage 2 property assessment was conducted; and
- test unit (1 m square unit) excavation at 5 m intervals across the site plus an additional 20% of focused sampling. Due to the early time period of the site, a 20% sample of the excavated units must be screened through 3 mm mesh to facilitate the recovery of small, potentially diagnostic artifacts.
- 7. Should design changes or temporary workspace requirements result in the inclusion of previously unassessed lands, these lands should be subjected to Stage 2 property assessment to determine if cultural remains are present.

The Ministry is satisfied with these recommendations.

This letter does not waive any requirements which you may have under the Ontario Heritage Act. A separate letter addressing archaeological licensing obligations under the Act will be sent to the archaeologist who completed the assessment and will be copied to you.

This letter does not constitute approval of the renewable energy project. Approvals of the project may be required under other statutes and regulations. It is your responsibility to obtain any necessary approvals or licences.

Please feel free to contact me if you have questions or require additional information.

Sincerely,

lan Hember Archaeology Review Officer