Appendix C

Agency Consultation

Appendix C1. MNR and MTCS Confirmation Letters

Appendix C2. Additional Agency Comments

Appendix C1. MNR and MTCS Confirmation Letters

Ministry of
Natural Resources
Renewable Energy Operations Team
300 Water Street
4th Floor, South Tower
Peterborough, Ontario K9J 8M5

Ministère des
Richesses naturelles

Ontario

February 7, 2013

Jericho Wind, Inc.
390 Bay Street, Suite 1720
Toronto, ON, M5H 2Y2

RE: NHA Confirmation for Jericho Wind Energy Centre

Dear Tom Bird:

In accordance with the Ministry of the Environment's (MOE's) Renewable Energy Approvals (REA) Regulation (O.Reg.359/09), the Ministry of Natural Resources (MNR) has reviewed the Natural Heritage Assessment and Environmental Impact Study Report for the Jericho Wind Energy Centre project located in the Municipalities of Lambton Shores and North Middlesex and the Township of Warwick, and submitted by Jericho Wind, Inc on February 7, 2013. The Natural Heritage Assessment and Environmental Impact Study Report also includes the Parkhill Interconnect Renewable Energy Approval Application – Natural Heritage Assessment and Environmental Impact Study Report (Appendix A).

In accordance with Section 28(2) and 38(2)(b) of the REA regulation, MNR provides the following confirmations following review of the natural heritage assessment:

1. The MNR confirms that the determination of the existence of natural features and the boundaries of natural features was made using applicable evaluation criteria or procedures established or accepted by MNR.
2. The MNR confirms that the site investigation and records review were conducted using applicable evaluation criteria or procedures established or accepted by MNR, if no natural features were identified.
3. The MNR confirms that the evaluation of the significance or provincial significance of the natural features was conducted using applicable evaluation criteria or procedures established or accepted by MNR.
4. The MNR confirms that the project location is not in a provincial park or conservation reserve.
5. The MNR confirms that the environmental impact study report has been prepared in accordance with procedures established by the MNR.

In accordance with Section 28(3)(c) and 38(2)(c), MNR also offers the following comments in respect of the project.

<u>Preconstruction Monitoring</u>
In accordance with Appendix D of MNR's NHA Guide, a commitment has been made to complete pre-construction assessment(s) of habitat use for the following candidate significant wildlife habitats, the results of which will be submitted to MNR:

- Waterfowl (Tundra Swan) Stopover and Staging Areas (WSST-01, WSST-31 and WSST-37);
- Waterfowl (Aquatic) Stopover and Staging Areas (WSSA-01 and WSSA-02);
- Raptor Wintering Area (RWA-01);
- Bat Maternity Colonies (BMA-051, BMA-090A, BMA-090B, BMA-098, BMA-102B, BMA-120, BMA-145, BMA-147, BMA-179, BMA-188, BMA-214 and BMA-297);
- Turtle Wintering Areas (TWH-01, TWH-02, TWH-03, TWH-04, TWH-05, TWH-06, TWH-07 and TWH-08);
- Reptile Hibernacula (RH-01, RH-02, RH-03 and RH-04);
- Bald Eagle and Osprey Nesting, Foraging and Perching Habitat (BEN-01 Jericho and BAL-001 Parkhill Interconnect);
- Turtle Nesting Habitat (TNH-02);
- Seeps and Springs (SS-01);
- Amphibian Woodland Breeding Habitat (AWO-01, AWO-02, AWO-03, AWO-04, AWO-05, AWO-06, AWO-08, AWO-09, AWO-10, AWO-11, AWO-12, AWO-13, AWO-16, AWO-17, AWO-19 and AWO-20);
- Amphibian Wetland Breeding Habitat (AWE-01, AWE-02, AWE-03, AWE-04 and AWE-05);
- Amphibian Movement Corridors (AMC-01).

MNR has reviewed and confirmed the assessment methods and the range of mitigation options. Pending completion of the assessments and determination of significance, the appropriate mitigation is expected to be implemented, as committed to in the environmental impact study.

Turbine 9

If pre-construction assessment(s) indicate Turbine 9 is located in Significant Wildlife Habitat for Waterfowl (Tundra Swan) Stopover and Staging Areas (WSST-37), **MNR does not support the construction of this turbine**.

Post-Construction Monitoring

A commitment has been made in the Environmental Impact Study to conduct post-construction monitoring and if determined necessary, implement mitigation measures. For the Jericho Wind Energy Centre this includes the following significant natural features, the results of which will be submitted to MNR:

- Bat Maternity Colonies (BMA-143, BMA-155, BMA-168, BMA-216, BMA-217 and BMA-382);

The following candidate significant natural features will also be monitored post-construction if they are deemed significant during pre-construction surveys, the results of which will be submitted to MNR:

- Waterfowl (Tundra Swan) Stopover and Staging Areas (WSST-01, WSST-31 and WSST-37);
- Raptor Wintering Area (RWA-01);
- Bat Maternity Colonies (BMA-051, BMA-090A, BMA-090B, BMA-098, BMA-102B, BMA-120, BMA-145, BMA-147, BMA-179, BMA-188, BMA-214 and BMA-297)
- Reptile Hibernacula (RH-01, RH-03 and RH-04)
- Bald Eagle and Osprey Nesting, Foraging and Perching Habitat (BEN-01 Jericho and BAL-001 Parkhill Interconnect);
- Turtle Nesting Habitat (TNH-02);

- Amphibian Woodland Breeding Habitat (AWO-01, AWO-02, AWO-03, AWO-04, AWO-05, AWO-06, AWO-08, AWO-09, AWO-10, AWO-11, AWO-12, AWO-13, AWO-16, AWO-17, AWO-19 and AWO-20);
- Amphibian Wetland Breeding Habitat (AWE-01, AWE-02, AWE-03, AWE-04 and AWE-05);
- Amphibian Movement Corridors (AMC-01).

In addition to the NHA and EIS, an Environmental Effects Monitoring Plan (EEMP) that address post-construction mortality monitoring and mitigation for birds and bats must be prepared and implemented. Environmental Effects Monitoring Plans for birds and bats must be prepared in accordance with MNR Guidelines and should be reviewed by MNR in advance of submitting a REA application to MOE in order to minimize potential delays in determining if the application is complete. Comments provided by the MNR with respect to the EEMP must be submitted as part of the application for a REA.

This confirmation letter is valid for the project as proposed in the natural heritage assessment and environmental impact study, including those sections describing the Environmental Effects Monitoring Plan and Construction Plan Report. Should any changes be made to the proposed project that would alter the NHA, MNR may need to undertake additional review of the NHA.

Where specific commitments have been made by the applicant in the NHA/EIS with respect to project design, construction, rehabilitation, operation, mitigation, or monitoring, MNR expects that these commitments will be considered in MOE's Renewable Energy Approval decision and, if approved, be implemented by the applicant.

In accordance with S.12 (1) of the Renewable Energy Approvals Regulation, this letter must be included as part of your application submitted to the MOE for a Renewable Energy Approval.

Please be aware that your project may be subject to additional legislative approvals as outlined in the Ministry of Natural Resources' *Approvals and Permitting Requirements Document*. These approvals are required prior to the construction of your renewable energy facility.

If you wish to discuss any part of this confirmation letter, please contact Jim Beal at Jim.Beal@ontario.ca or 705-755-3203.

Sincerely,

Kazia Milian
Planning Coordinator
Southern Region MNR

cc Jim Beal, Renewable Energy Operations Team, Coordinator, MNR
Mitch Wilson, District Manager, Aylmer District, MNR
Narren Santos, Environmental Approvals Access & Service Integration Branch, MOE
Zeljko Romic, Environmental Approvals Access & Service Integration Branch, MOE
Jessica MacKay Ward, Ecologist, AECOM

Ministry of Natural Resources
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Ministère des Richesses naturelles

Ontario

February 7, 2013

Jericho Wind, Inc.
390 Bay Street, Suite 1720
Toronto, ON, M5H 2Y2

RE: Modifications to the Jericho Wind Energy Centre Project Location

Dear Mr Tom Bird,

The Ministry of Natural Resources (MNR) has received the document dated December 10, 2012 which describes modifications to the Jericho Wind Energy Centre project location made subsequent to MNR's letter confirming the Natural Heritage Assessment in respect of the project.

Upon review of the modifications, MNR is satisfied that the Natural Heritage Assessment requirements of Ontario Regulation 359/09 have been met. Please add this letter as an addendum to the confirmation letter issued February 7, 2013 for the Jericho Wind Energy Centre project.

If you wish to discuss any part of this letter please contact Jim Beal at jim.beal@ontario.ca or 705-755-3203.

Sincerely,

K Milian

Kazia Milian
Planning Coordinator
Southern Region MNR

cc Jim Beal, Renewable Energy Operations Team, Coordinator, MNR
Mitch Wilson, District Manager, Aylmer District, MNR
Narren Santos, Environmental Approvals Access & Service Integration Branch, MOE
Zeljko Romic, Environmental Approvals Access & Service Integration Branch, MOE
Jessica MacKay Ward, Ecologist, AECOM

Ministry of
Natural Resources
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Ministère des
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Ontario

February 7, 2013

Jericho Wind, Inc.
390 Bay Street, Suite 1720
Toronto, ON, M5H 2Y2

RE: Modifications to the Jericho Wind Energy Centre Project Location #2

Dear Mr Tom Bird,

The Ministry of Natural Resources (MNR) has received the document dated January 2013 and received January 29, 2013 which describes modifications to the Jericho Wind Energy Centre project location made subsequent to MNR's letter confirming the Natural Heritage Assessment in respect of the project.

Upon review of the modifications, MNR is satisfied that the Natural Heritage Assessment requirements of Ontario Regulation 359/09 have been met. Please add this letter as an addendum to the confirmation letter issued February 7, 2013 and re-confirmation letter issued February 7, 2013 for the Jericho Wind Energy Centre project.

If you wish to discuss any part of this letter please contact Jim Beal at jim.beal@ontario.ca or 705-755-3203.

Sincerely,

Kazia Milian
Planning Coordinator
Southern Region MNR

cc Jim Beal, Renewable Energy Operations Team, Coordinator, MNR
Mitch Wilson, District Manager, Aylmer District, MNR
Narren Santos, Environmental Approvals Access & Service Integration Branch, MOE
Zeljko Romic, Environmental Approvals Access & Service Integration Branch, MOE
Jessica MacKay Ward, Ecologist, AECOM

Ministry of Tourism, Culture and Sport

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January 30, 2013

Christopher Andreae
Associate
Golder Associates Ltd.
309 Exeter Road, Unit #1
London, Ontario N6L 1C1

Project:	**Proposed Jericho Wind Energy Centre**
OPA Reference Number:	**FIT-FRZYKJA**
Report Title:	**Heritage Assessment Report**
Applicant:	**Jericho Wind, Inc.**
Location:	**Municipality of Warwick, Lambton County and Municipality of North Middlesex, Middlesex County, ON**
MTCS File No.:	**PLAN-00EA078**

Dear Christopher Andreae:

This office has reviewed the above-mentioned report (the "Report"), which has been submitted to this ministry as required under O. Reg. 359/09, as amended (Renewable Energy Approvals under the *Environmental Protection Act*) (the "REA regulation"). This letter constitutes the Ministry of Tourism, Culture and Sport (the "Ministry") comments for the purposes of section 23(3)(a) of the REA regulation regarding the heritage assessment undertaken for the above project.

The Report recommends the following:

> **7.0 RECOMMENDATIONS**
>
> The participating parcels were all determined to represent vernacular cultural heritage landscapes that are characterized by a homogeneous land use pattern of pastures, agricultural fields, woodlots and associated farmsteads. Due to the typical nature of the landscape, cultural heritage value or interest was not identified according to O. Reg. 09/06.
>
> A total of 81 participating properties were identified as containing structures over the age of 40 years. These properties contained a total of 118 potential built heritage resources; 66 residences, 51 barns and one institutional structure. Of these potential resources, 89 (42 houses, 46 barns and one institutional building) were identified as having cultural heritage value or interest according to O. Reg. 09/06. No further mitigation is recommended as it was determined that there are no anticipated direct or indirect impacts as a result of the undertaking.
>
> The recommendations contained in this report are based on current provincial regulations and guidelines pertaining to the approvals process for wind energy projects in Ontario.

Based on the information contained in the Report, the Ministry is satisfied that the heritage assessment process and reporting are consistent with the applicable heritage assessment requirements established in s. 23 of O. Reg. 359/09. Please note that the Ministry makes no representation or warranty as to the completeness, accuracy or quality of the heritage assessment report (please see Note 1).

This letter does not waive any requirements under the *Ontario Heritage Act*.

This letter does not constitute approval of the renewable energy project. Approvals or licences for the project may be required under other statutes and regulations. Please ensure that you obtain all required approvals and/or licences.

Please ensure that the proponent is aware that, if new information or substantive project changes arise after issuance of this letter, the applicant should discuss them with you to determine if any additional assessment or reporting is required. If additional reporting or revisions are required, they should be submitted to the Ministry for review. Upon completion of that review, the Ministry will determine if any revisions to the content of this letter are required.

Should you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Paula Kulpa
Team Lead - Heritage Land Use Planning

cc. Thomas Bird, Environmental Services Project Manager
NextEra Energy Canada, ULC

Marc Rose, Senior Environmental Planner
AECOM Canada Ltd.

Doris Dumais, Director
Environmental Approvals Access & Service Integration Branch, Ministry of the Environment

Agatha Garcia-Wright, Director
Environmental Approvals Branch, Ministry of the Environment

Chris Schiller, Manager
Culture Services Unit, Ministry of Tourism, Culture and Sport

Meaghan Rivard, Cultural Heritage Specialist
Golder Associates Ltd.

Note 1: In no way will the Ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional heritage resources are identified or the Report is otherwise found to be inaccurate, incomplete, misleading or fraudulent.

Ministry of Tourism, Culture and Sport

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Ontario

February 1, 2013

Erin Wilson
Golder Associates Ltd.
32 Steacie Drive
Kanata, ON
K2K 2A9

RE: Review and Entry into the Ontario Public Register of Archaeological Reports: Archaeological Assessment Report Entitled, *"Stage 2 Archaeological Assessment, Jericho Wind Inc., Jericho Wind Energy Centre, Additional Report, Various Lots and Concessions, Lambton and Middlesex Counties, Ontario*," Revised Report Dated 23 January 2013, Filed by MTCS Toronto Office on 25January 2013, MTCS Project Information Form Number P366-016-2012, MTCS File Number HD00098

Dear Erin:

This office has reviewed the above-mentioned report, which has been submitted to this ministry as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18.[1] This review has been carried out in order to determine whether the licensed professional consultant archaeologist has met the terms and conditions of their licence, that the licensee assessed the property and documented archaeological resources using a process that accords with the 2011 *Standards and Guidelines for Consultant Archaeologists* set by the

[1] *This letter constitutes the Ministry of Tourism, Culture and Sport's written comments where required pursuant to section 22 of O. Reg. 359/09, as amended (Renewable Energy Approvals under the Environmental Protection Act), regarding the archaeological assessment undertaken for the above-captioned project. Depending on the study area and scope of work of the archaeological assessment as detailed in the report, further archaeological assessment reports may be required to complete the archaeological assessment for the project under O. Reg. 359/09. In that event Ministry comments pursuant to section 22 of O. Reg. 359/09 will be required for any such additional reports.*

[2] *In no way will the ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report(s) or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.*

ministry, and that the archaeological fieldwork and report recommendations are consistent with the conservation, protection and preservation of the cultural heritage of Ontario.[2]

The report documents the Stage 2 assessment of the study area as depicted in Figures 2-1 through 2-14 of the above titled report and recommends the following:

5.1 Location 277 (AgHk-155)

The Stage 2 assessment of Location 277 resulted in the recovery of a scatter of mid-to-late 19th century historic Euro-Canadian artifacts. A total of 107 historic artifacts were recovered from four positive test pits over an approximate 15 metre by five metre area. Location 277 falls within the area previously known as Pine Hill, and is fairly close to the location of Widder Post Office as noted on the the 1880 Illustrated Historical Atlas of the County of Lambton (Belden and Company 1880). This information in addition to the presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed ironstone and whiteware ceramics. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, it is recommended that Location 277 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). The test unit excavation should consist of one metre by one metre square test units laid out in a systematic 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 277 should also be conducted as part of the Stage 3 assessment. Location 277 has been registered with the MTCS under Borden number AgHk-155.

5.2 Location 278

The Stage 2 assessment of Location 278 resulted in the recovery of 18 pre-contact Aboriginal artifacts over a 120 metre by 20 metre area including 17 pieces of chipping detritus and one biface. No areas were identified at Location 154 where 10 non-diagnostic artifacts or one diagnostic and two non-diagnostic artifacts were recovered within an isolated 10 metre by 10 metre area. Given the small number of recovered artifacts over a relatively large spatial area and the lack of diagnostic specimens, the information potential and cultural value of Location 278 was judged to be low. As a result, the site is considered to be sufficiently documented and no further archaeological assessment is recommended for Location 278 (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).

Based on the information contained in the report, the ministry is satisfied that the fieldwork and reporting for the archaeological assessment are consistent with the ministry's 2011 Standards and Guidelines for Consultant Archaeologists and the terms and conditions for archaeological licences. This report has been entered into the Ontario Public Register of Archaeological Reports. Please note that the ministry makes no representation or warranty as to the completeness, accuracy or quality of reports in the register.

Should you require any further information regarding this matter, please feel free to contact me.

Sincerely,

Ian Hember
Archaeology Review Officer

c. Marc Rose, AECOM
Vic Schroter, Ministry of the Environment

Ministry of Tourism, Culture and Sport

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Ontario

February 1, 2013

Erin Wilson
Golder Associates Ltd.
32 Steacie Drive
Kanata, ON
K2K 2A9

RE: Review and Entry into the Ontario Public Register of Archaeological Reports: Archaeological Assessment Report Entitled, *"Stage 2 Archaeological Assessment, Jericho Wind Inc., Jericho Wind Energy Centre, Part of Nauvoo Road ROW Between Hickory Creek Line and Tamarack Line, Lambton County, Ontario*," Revised Report Dated 22 January 2013, Filed by MTCS Toronto Office on 25January 2013, MTCS Project Information Form Number P366-018-2012, MTCS File Number HD00098

Dear Erin:

This office has reviewed the above-mentioned report, which has been submitted to this ministry as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18.[1] This review has been carried out in order to determine whether the licensed professional consultant archaeologist has met the terms and conditions of their licence, that the licensee assessed the property and documented archaeological resources using a process that accords with the 2011 *Standards and Guidelines for Consultant Archaeologists* set by the

[1] *This letter constitutes the Ministry of Tourism, Culture and Sport's written comments where required pursuant to section 22 of O. Reg. 359/09, as amended (Renewable Energy Approvals under the Environmental Protection Act), regarding the archaeological assessment undertaken for the above-captioned project. Depending on the study area and scope of work of the archaeological assessment as detailed in the report, further archaeological assessment reports may be required to complete the archaeological assessment for the project under O. Reg. 359/09. In that event Ministry comments pursuant to section 22 of O. Reg. 359/09 will be required for any such additional reports.*

[2] *In no way will the ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report(s) or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.*

ministry, and that the archaeological fieldwork and report recommendations are consistent with the conservation, protection and preservation of the cultural heritage of Ontario.[2]

The report documents the Stage 2 assessment of the study area as depicted in Figure 2 of the above titled report and recommends the following:

This additional Stage 2 report details the survey results of the northern section of the Nauvoo Road Right-of-Way (ROW) between Hickory Creek Line and Tamarack Line, Warwick Township, Ontario. The boundaries of the ROW were delineated by shapefiles provided to Golder by AECOM. This section of ROW is illustrated in Figure 2. This section of ROW was found to be previously disturbed and no further archaeological assessment is necessary.

Based on the information contained in the report, the ministry is satisfied that the fieldwork and reporting for the archaeological assessment are consistent with the ministry's 2011 Standards and Guidelines for Consultant Archaeologists and the terms and conditions for archaeological licences. This report has been entered into the Ontario Public Register of Archaeological Reports. Please note that the ministry makes no representation or warranty as to the completeness, accuracy or quality of reports in the register.

Should you require any further information regarding this matter, please feel free to contact me.

Sincerely,

Ian Hember
Archaeology Review Officer

c. Marc Rose, AECOM
Vic Schroter, Ministry of the Environment

Ministry of Tourism, Culture and Sport

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February 14, 2013

Scott Martin
Golder Associates Ltd
309 Exeter Road, Unit 1
London, Ontario
N6L 1C1

RE: Review and Entry into the Ontario Public Register of Archaeological Reports: Archaeological Assessment Report Entitled, *"Stage 2 Archaeological Assessment: NextEra Energy Canada, ULC Goshen Wind Energy Centre Huron County, Ontario*," Revised Report Dated 13 February 2013, Received by MTC Toronto Office on 13 February 2013, MTC Project Information Form Number P218-038-2011, MTCS RIMS Number HD00762

Dear Scott:

This office has reviewed the above-mentioned report, which has been submitted to this ministry as a condition of licensing in accordance with Part VI of the Ontario Heritage Act, R.S.O. 1990, c 0.18. This review has been carried out in order to determine whether the licensed professional consultant archaeologist has met the terms and conditions of their licence, that the licensee assessed the property and documented archaeological resources using a process that accords with the 1993 *Archaeological Assessment Technical Guidelines* set by the ministry, and that the archaeological fieldwork and report recommendations are consistent with the conservation, protection and preservation of the cultural heritage of Ontario.[2]

The report documents the Stage 2 assessment of the study area as depicted in Figures 2-1 through 2-71 of the above titled report and recommends the following:

5.1 Location 1

A total of 42 historic Euro-Canadian artifacts were identified on the surface of Location 1. Although only a small sample of ceramics (n=18) were identified and recovered, this total included predominately pre-1900 ironstone ceramics. It is our professional opinion that Location 1 has cultural heritage value or interest. Based on this consideration, Stage 3 assessment is recommended as per Section 2.2, Guideline 2 of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest.

*Given this, **it is recommended that Location 1 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 1 should also be conducted as part of the Stage 3 assessment.

5.2 Location 2

*The Stage 2 assessment of Location 2 resulted in the recovery of an isolated pre-contact Aboriginal end scraper. Given the isolated nature of this recovery, the information potential and cultural value of Location 2 was judged to be low. As a result, the site is considered to be sufficiently documented and **no further archaeological assessment is recommended for Location 2** (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.3 Location 3

*The Stage 2 assessment of Location 3 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 3 was judged to be low. As a result, the site is considered to be sufficiently documented and **no further archaeological assessment is recommended for Location 3** (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.4 Location 4

*The Stage 2 assessment of Location 4 resulted in the recovery of five artifacts over a 20 metre by 20 metre area including three pieces of chipping detritus, one utilized flake and one biface. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 4 was judged to be low. As a result, the site is considered to be sufficiently documented and **no further archaeological assessment is recommended for Location 4** (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.5 Location 5

The Stage 2 assessment of Location 5 resulted in the recovery of 11 pre-contact Aboriginal artifacts over a 60 metre by 30 metre area including 10 pieces of chipping detritus and one utilized flake. Given the small number of recovered artifacts over a large area (60 metre by 30 metres) and the lack of diagnostic specimens, the information potential and cultural value of Location 5 was judged to be low. As a result, the site is considered to be sufficiently

documented and ***no further archaeological assessment is recommended for Location 5*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.6 Location 6

The Stage 2 assessment of Location 6 resulted in the recovery of 37 pre-contact Aboriginal artifacts over a 95 metre by 30 metre area including 34 pieces of chipping detritus, one utilized flakes, one retouched flake and one biface. No areas were identified at Location 6 where 10 non-diagnostic artifacts or one diagnostic and two non-diagnostic artifacts were recovered within an isolated 10 metre by 10 metre area. Given the small number of recovered artifacts over a large spatial area and the lack of diagnostic specimens, the information potential and cultural value of Location 6 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 6*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.7 Location 7

The Stage 2 assessment of Location 7 resulted in the recovery of four pre-contact Aboriginal artifacts over a 65 metre by 30 metre area including three pieces of chipping detritus and one utilized flake. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 7 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 7*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.8 Location 8

The Stage 2 assessment of Location 8 resulted in the recovery of 102 pre-contact Aboriginal artifacts and one 19th century historic artifact over a 175 metre by 90 metre area including 91 pieces of chipping detritus, three bifaces, three utilized flakes, two hammerstones, one core fragment, one retouched flake and one projectile point. Location 8 represents a spatially discrete cluster of pre-contact Aboriginal artifacts likely dating to the Archaic period in southern Ontario; given this the information potential and cultural value of Location 8 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 8*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, small pre-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011). The Stage 3 test unit excavation should begin where the projectile point was identified and expand as necessary based on test unit artifact counts and the Stage 3 CSP. In addition to the site centroid, the GPS coordinates for the projectile point are provided in the supplementary documents*

5.9 Location 9

The Stage 2 assessment of Location 9 resulted in the recovery of an isolated pre-contact Aboriginal projectile point. Given the isolated nature of this recovery, the information potential and cultural value of Location 9 was judged to be low. As a result, the site is considered to be

sufficiently documented and ***no further archaeological assessment is recommended for Location 9*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.10 Location 10

The Stage 2 assessment of Location 10 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 10 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 10*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.11 Location 11

The Stage 2 assessment of Location 11 resulted in the recovery of 23 pre-contact Aboriginal artifacts over an 80 metre by 65 metre area including 18 pieces of chipping detritus, four core fragments and one biface. Given the small number of recovered artifacts over a large spatial area and the lack of diagnostic specimens, the information potential and cultural value of Location 11 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 11*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.12 Location 12

The Stage 2 assessment of Location 12 resulted in the recovery of a 78 metre by 25 metre scatter of mid to late 19th century historic Euro-Canadian artifacts as well as the recovery of one pre-contact Aboriginal artifact. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed ironstone, whiteware and pearlware ceramics. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, ***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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 12 should also be conducted as part of the Stage 3 assessment.

5.13 Location 13

The Stage 2 assessment of Location 13 resulted in the recovery of five pre-contact Aboriginal artifacts over a 22 metre by 12 metre area including two pieces of chipping detritus, one utilized flake, one retouched flake and one core. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 13 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 13*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.14 Location 14

The Stage 2 assessment of Location 14 resulted in the recovery of two pre-contact Aboriginal artifacts 10 metres a part including one utilized flake and one retouched flake. Utilized flakes and retouched flakes are generally considered to be non-diagnostic artifacts. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 14 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 14*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.15 Location 15

The Stage 2 assessment of Location 15 resulted in the recovery of two pre-contact Aboriginal artifacts 13 metres apart, both pieces of chipping detritus. Chipping detritus pieces are generally considered to be non-diagnostic artifacts. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 15 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 15*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.16 Location 16

The Stage 2 assessment of Location 16 resulted in the recovery of an isolated pre-contact Aboriginal end scraper. Given the isolated nature of this recovery, the information potential and cultural value of Location 16 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 16*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.17 Location 20

The Stage 2 assessment of Location 20 resulted in the recovery of 15 pre-contact Aboriginal artifacts over a 50 metre by 25 metre area including 10 pieces of chipping detritus, two bifaces, two utilized flakes and one scraper. No areas were identified at Location 20 where 10 non-diagnostic artifacts or one diagnostic and two non-diagnostic artifacts were recovered within an isolated 10 metre by 10 metre area. Given the small number of recovered artifacts over a large spatial area and the lack of diagnostic specimens, the information potential and cultural value of Location 20 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 20*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.18 Location 21

The Stage 2 assessment of Location 21 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 21 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 21*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.19 Location 22

The Stage 2 assessment of Location 22 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 22 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 22*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.20 Location 23

The Stage 2 assessment of Location 23 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 23 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 23*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.21 Location 24

The Stage 2 assessment of Location 24 resulted in the recovery of 29 pre-contact Aboriginal artifacts over a 120 metre by 100 metre area including 19 pieces of chipping detritus, eight bifaces, one scraper and one utilized flake. No areas were identified at Location 24 where 10 non-diagnostic artifacts or one diagnostic and two non-diagnostic artifacts were recovered within an isolated 10 metre by 10 metre area. Given the small number of recovered artifacts over a large spatial area and the lack of diagnostic specimens, the information potential and cultural value of Location 24 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 24*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.22 Location 25

The Stage 2 assessment of Location 25 resulted in the recovery of 13 pre-contact Aboriginal artifacts over a 12 metre by 10 metre area including 12 pieces of chipping detritus and one projectile point. Location 25 represents a spatially discrete cluster of pre-contact Aboriginal artifacts likely dating to the Late Archaic period in southern Ontario; given this the information potential and cultural value of Location 25 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 25*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

Test units should be excavated as detailed in Table 3.1, small pre-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.23 Location 26

The Stage 2 assessment of Location 26 resulted in the recovery of an isolated pre-contact Aboriginal biface fragment. Given the isolated nature of this recovery, the information potential and cultural value of Location 26 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 26*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.24 Location 27

The Stage 2 assessment of Location 27 resulted in the recovery of 99 pre-contact Aboriginal artifacts over a 125 metre by 100 metre area including 81 pieces of chipping detritus, five projectile points, four bifaces, two retouched flakes, two utilized flakes, two fragments of clay pipes, one fragment of a stone pipe, one core and one chert gun flint. Location 27 represents a spatially discrete multi-component site dating to the Archaic period in southern Ontario; given this the information potential and cultural value of Location 27 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 27*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified through the Stage 3 CSP.*

The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.25 Location 28

The Stage 2 assessment of Location 28 resulted in the recovery of 46 pre-contact Aboriginal artifacts over a 110 metre by 90 metre area including 41 pieces of chipping detritus, two bifaces, one utilized flake, one core fragment, and one projectile point. Location 28 represents a spatially discrete cluster of pre-contact Aboriginal artifacts likely dating to the Early Woodland period in southern Ontario, as well as multiple examples of block shatter and primary flakes, possibly indicating an activity area related to the early stages of the reduction sequence of stone tools; given this the information potential and cultural value of Location 28 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 28*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by*

one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.

Test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified through the Stage 3 CSP. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.26 Location 29

The Stage 2 assessment of Location 29 resulted in the recovery of two pre-contact Aboriginal artifacts, both pieces of chipping detritus found two metres apart. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 29 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 29*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.27 Location 30

The Stage 2 assessment of Location 30 resulted in the recovery of four pre-contact Aboriginal artifacts over a 43 metre by 18 metre area, all pieces of chipping detritus. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 30 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 30*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.28 Location 31

The Stage 2 assessment of Location 31 resulted in the recovery of four pre-contact Aboriginal artifacts over a two metre by two metre area, all pieces of chipping detritus. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 31 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 31*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.29 Location 32

The Stage 2 assessment of Location 32 resulted in the recovery of an isolated pre-contact Aboriginal retouched flake. Given the isolated nature of this recovery, the information potential and cultural value of Location 32 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 32*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.30 Location 33

The Stage 2 assessment of Location 33 resulted in the recovery of ten pre-contact Aboriginal artifacts over a 25 metre by 30 metre area including nine pieces of chipping detritus and one core. An additional 10 pieces of chipping detritus were noted on the surface and left to assist with relocating the site. Despite the non-diagnostic nature of Location 33, the site represents a spatially discrete cluster of pre-contact Aboriginal artifacts; given this the information potential and cultural value of Location 33 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 33*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts.*

The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, small pre-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.31 Location 34

The Stage 2 assessment of Location 34 resulted in the recovery of an isolated pre-contact Aboriginal end scraper. Given the isolated nature of this recovery, the information potential and cultural value of Location 34 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 34*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.32 Location 35

The Stage 2 assessment of Location 35 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 35 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 35*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.33 Location 36

The Stage 2 assessment of Location 36 resulted in the recovery of an isolated pre-contact Aboriginal knife. Given the isolated nature of this recovery, the information potential and cultural value of Location 36 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 36*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.34 Location 37

The Stage 2 assessment of Location 37 resulted in the recovery of six pre-contact Aboriginal artifacts over a 20 metre by 22 metre area including five pieces of chipping detritus and one spokeshave. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 37 was judged to be low. As

a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 37*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.35 Location 38

The Stage 2 assessment of Location 38 resulted in the recovery of seven pre-contact Aboriginal artifacts over a 22 metre by 15 metre area including six pieces of chipping detritus and one projectile point. Location 38 represents a spatially discrete cluster of pre-contact Aboriginal artifacts likely dating to the Late Archaic period in southern Ontario; given this the information potential and cultural value of Location 38 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 38*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

Test units should be excavated as detailed in Table 3.1, small pre-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.36 Location 39

The Stage 2 assessment of Location 39 resulted in the recovery of an isolated pre-contact Aboriginal projectile point. Given the isolated nature of this recovery, the information potential and cultural value of Location 39 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 39*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.37 Location 40

The Stage 2 assessment of Location 40 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 40 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 40*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.38 Location 41

The Stage 2 assessment of Location 41 resulted in the recovery of an isolated pre-contact Aboriginal projectile point. Given the isolated nature of this recovery, the information potential and cultural value of Location 41 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 41*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.39 Location 42

The Stage 2 assessment of Location 42 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 42 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 42*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.40 Location 43

The Stage 2 assessment of Location 43 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 43 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 43*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.41 Location 44

The Stage 2 assessment of Location 44 resulted in the recovery of a 75 metre by 45 metre scatter of mid to late 19th century historic Euro-Canadian artifacts. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed ironstone and whiteware ceramics. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, ***it is recommended that Location 44 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 44 should also be conducted as part of the Stage 3 assessment.

5.42 Location 45

The Stage 2 assessment of Location 45 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 45 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 45*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.43 Location 46

The Stage 2 assessment of Location 46 resulted in the recovery of a 100 metre by 25 metre scatter of mid to late 19th century historic Euro-Canadian artifacts. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed ironstone, whiteware and pearlware ceramics. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, ***it is recommended that Location 46 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 46 should also be conducted as part of the Stage 3 assessment.

5.44 Location 47

The Stage 2 assessment of Location 47 resulted in the recovery of an isolated pre-contact Aboriginal projectile point. Given the isolated nature of this recovery, the information potential and cultural value of Location 47 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 47*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.45 Location 48

The Stage 2 assessment of Location 48 resulted in the recovery of two pre-contact Aboriginal artifacts seven metres apart, both pieces of chipping detritus. Chipping detritus pieces are generally considered to be non-diagnostic artifacts. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 48 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 48*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.46 Location 49

The Stage 2 assessment of Location 49 resulted in the recovery of an isolated historic white clay pipe stem. Given the isolated nature of this recovery, the information potential and cultural value of Location 49 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 49***

(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).

5.47 Location 50

The Stage 2 assessment of Location 50 resulted in the recovery of 31 pre-contact Aboriginal artifacts over a 105 metre by 45 metre area including 30 pieces of chipping detritus and one biface. Eighty pieces of chipping detritus were noted on the surface and left to assist with relocating the site. Despite the non-diagnostic nature of Location 50, the site represents a spatially discrete cluster of pre-contact Aboriginal artifacts; given this the information potential and cultural value of Location 50 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 50*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified through the Stage 3 CSP.*

The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.48 Location 55

The Stage 2 assessment of Location 55 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 55 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 55*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.49 Location 58

The Stage 2 assessment of Location 58 resulted in the recovery of 12 pre-contact Aboriginal artifacts over a 60 metre by 47 metre area including ten pieces of chipping detritus, one utilized flake, and one retouched flake. No areas were identified at Location 58 where 10 non-diagnostic artifacts or one diagnostic and two non-diagnostic artifacts were recovered within an isolated 10 metre by 10 metre area. Given the small number of recovered artifacts over a large spatial area and the lack of diagnostic specimens, the information potential and cultural value of Location 58 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 58*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.50 Location 59

The Stage 2 assessment of Location 59 resulted in the recovery of an isolated pre-contact Aboriginal ground stone celt. Given the isolated nature of this recovery, the information potential and cultural value of Location 59 was judged to be low. As a result, the site is

considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 59*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.51 Location 60

The Stage 2 assessment of Location 60 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 60 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 60*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.52 Location 61

The Stage 2 assessment of Location 61 resulted in the recovery of 30 pre-contact Aboriginal artifacts over a 56 metre by 41 metre area including including 27 pieces of chipping detritus, two biface and one utilized flake. A total of 39 pieces of Kettle Point chipping detritus were noted on the surface and left to assist with relocating the site. Despite the non-diagnostic nature of Location 61, the site represents a spatially discrete cluster of pre-contact Aboriginal artifacts; given this the information potential and cultural value of Location 61 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 61*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, small pre-contact sites.*

The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.53 Location 62

The Stage 2 assessment of Location 62 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 62 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 62*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.54 Location 63

The Stage 2 assessment of Location 63 resulted in the recovery of an isolated pre-contact Aboriginal ground stone celt. Given the isolated nature of this recovery, the information potential and cultural value of Location 63 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 63*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.55 Location 64

The Stage 2 assessment of Location 64 resulted in the recovery of seven pre-contact Aboriginal artifacts over a 15 metre by six metre area including six pieces of chipping detritus and one end scraper. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 64 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 64*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.56 Location 65

The Stage 2 assessment of Location 65 resulted in the recovery of three pre-contact Aboriginal artifacts over a seven metre by one metre area, all pieces of chipping detritus. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 65 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 65*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.57 Location 66

The Stage 2 assessment of Location 66 resulted in the recovery of six pre-contact Aboriginal artifacts over a 26metre by 16 metre area including five pieces of chipping detritus and one core. Two additional pieces of chipping detritus were identified on the surface and left in the field. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 66 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 66*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.58 Location 67

The Stage 2 assessment of Location 67 resulted in the recovery of two pre-contact Aboriginal pieces of chipping detritus located seven metres apart. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 67 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 67*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.59 Location 68

The Stage 2 assessment of Location 68 resulted in the recovery of four pre-contact Aboriginal pieces of chipping detritus over a 33 metre by 10 metre area. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 67 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 68*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.60 Location 69

The Stage 2 assessment of Location 69 resulted in the recovery of four pre-contact Aboriginal artifacts over a 12 metre by five metre area, all pieces of chipping detritus. Given the small

number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 69 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 69*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.61 Location 70

The Stage 2 assessment of Location 70 resulted in the recovery of a 165 metre by 120 metre scatter of late 19th to early 20th century historic Euro-Canadian artifacts. Based on the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), the presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed ironstone and whiteware ceramics. However, given that another historic location was identified on the same lot in close proximity to Location 70 (Location 71), it is likely Location 71 represents the initial area of domestic settlement on the lot and Location 70 represents a later period of occupation. Given this the information potential and cultural value of Location 70 was judged to be low.

As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 70*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1c, Government of Ontario 2011).*

5.62 Location 71

The Stage 2 assessment of Location 71 resulted in the recovery of a 100 metre by 70 metre scatter mid to late 19th century historic Euro-Canadian artifacts. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed ironstone and whiteware ceramics. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, ***it is recommended that Location 71 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 71 should also be conducted as part of the Stage 3 assessment.

5.63 Location 77

The Stage 2 assessment of Location 77 resulted in the recovery of 861 pre-contact Aboriginal artifacts over a 950 metre by 430 metre area in close proximity to the Ausable River. Given that Location 77 likely represents a spatially noteworthy pre-contact Aboriginal site spanning from the Early Archaic through to the Late Woodland, the cultural heritage value and information potential for Location 77 is significant.

As a result, ***further Stage 3 archaeological assessment is recommended for Location 77*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified through the Stage 3 CSP.*

The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.64 Location 78

The Stage 2 assessment of Location 78 resulted in the recovery of an isolated pre-contact Aboriginal core fragment. Given the isolated nature of this recovery, the information potential and cultural value of Location 78 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 78*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.65 Location 79

The Stage 2 assessment of Location 79 resulted in the recovery of an isolated pre-contact Aboriginal ground stone axe. Given the isolated nature of this recovery, the information potential and cultural value of Location 79 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 79*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.66 Location 80

The Stage 2 assessment of Location 80 resulted in the recovery of an isolated pre-contact Aboriginal projectile point. Given the isolated nature of this recovery, the information potential and cultural value of Location 80 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 80*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.67 Location 81

The Stage 2 assessment of Location 81 resulted in the recovery of an isolated pre-contact Aboriginal biface base. Given the isolated nature of this recovery, the information potential and cultural value of Location 81 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 81*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.68 Location 82

The Stage 2 assessment of Location 82 resulted in the recovery of four pre-contact Aboriginal artifacts over a 45 metre by 45 metre area including one piece of chipping detritus, two bifaces, and one possible Late Paleo-Indian projectile point. Given that Location 82 possibly dates to the late Paleo-Indian period, the information potential and cultural value of Location 82 was judged to be significant.

As a result, ***further Stage 3 archaeological assessment is recommended for Location 82*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1b.iii, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site. Given the location represents a possible single component Paleo-Indian site, it is likely a minimum of 20% of the total units must be screen through three millimetre hardware cloth to faciliatate in the recovery of artifacts (Standards and Guidelines for Consultant Archaeologists, Section 3.2.2, Standard 7, Section 3.2.3 Table 3.1, Government of Ontario 2011). The excavation grid should be centred where the Hi-Lo point was recovered and expanded in all directions from this location.

5.69 Location 83

The Stage 2 assessment of Location 83 resulted in the recovery of an isolated pre-contact Aboriginal projectile point. Given the isolated nature of this recovery, the information potential and cultural value of Location 83 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 83*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.70 Location 84

The Stage 2 assessment of Location 84 resulted in the recovery of an isolated pre-contact Aboriginal projectile point perform in the form of a Meadowood cache blade. The occurrence of large caches of well flakes preforms has become a defining characteristic of the Early Woodland Meadowood period (Spence et al. 1990). Because tools like this have previously been recovered in the presence of other near-identical tools, the information potential and cultural value of Location 84 was judged to be significant.

As a result, ***further Stage 3 archaeological assessment is recommended for Location 84*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Guideline 2, Government of Ontario 2011). Prior to conducting the*

field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, small pre-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.71 Location 87

The Stage 2 assessment of Location 87 resulted in the recovery of a scatter (n=22) of late 19th to early 20th century historic Euro-Canadian artifacts over a 56 metre by 25 metre area. A total of 57 historic Euro-Canadian artifacts were identified on the surface of Location 87, with 35 left in the field. Although only a small sample of ceramics (n=17) were recovered, this total included predominately pre-1900 ironstone ceramics. It is our professional opinion that Location 87 has cultural heritage value or interest. Based on this consideration, Stage 3 assessment is recommended as per Section 2.2, Guideline 2 of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest.

Given this, ***it is recommended that Location 87 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 87 should also be conducted as part of the Stage 3 assessment.

5.72 Location 88

The Stage 2 assessment of Location 88 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 88 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 88*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.73 Location 89

The Stage 2 assessment of Location 89 resulted in the recovery of two pre-contact Aboriginal artifacts, both pieces of chipping detritus, found 10 metres apart. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural

value of Location 89 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 89*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.74 Location 90

The Stage 2 assessment of Location 90 resulted in the recovery of an isolated pre-contact Aboriginal retouched flake. Given the isolated nature of this recovery, the information potential and cultural value of Location 90 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 90*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.75 Location 91

The Stage 2 assessment of Location 91 resulted in the recovery of two pre-contact Aboriginal projectile points. Given the small number of recovered artifacts, the information potential and cultural value of Location 91 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 91*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.76 Location 92

The Stage 2 assessment of Location 92 resulted in the recovery of eight pre-contact Aboriginal artifacts over a 58 metre by 22 metre area including seven pieces of chipping detritus and one biface. Given the small number of recovered artifacts over a large spatial area and the lack of diagnostic specimens, the information potential and cultural value of Location 92 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 92*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.77 Location 93

The Stage 2 assessment of Location 93 resulted in the recovery of an isolated pre-contact Aboriginal projectile point. Given the isolated nature of this recovery, the information potential and cultural value of Location 93 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 93*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.78 Location 94

The Stage 2 assessment of Location 94 resulted in the recovery of two pre-contact Aboriginal artifacts, both pieces of chipping detritus, found 7 metres apart. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 94 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 94*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.79 Location 95

The Stage 2 assessment of Location 95 resulted in the recovery of three pre-contact Aboriginal artifacts, all pieces of chipping detritus. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 95 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 95*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.80 Location 96

The Stage 2 assessment of Location 96 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 96 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 96*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.81 Location 97

The Stage 2 assessment of Location 97 resulted in the recovery of two pre-contact Aboriginal artifacts, found two metres apart, including one piece of chipping detritus and one utilized flake. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 97 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 97*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.82 Location 98

The Stage 2 assessment of Location 98 resulted in the recovery of 11 pre-contact Aboriginal artifacts over a 50 metre by 21 metre area including eight pieces of chipping detritus, two utilized flakes, and one abrader. No areas were identified at Location 98 where 10 non-diagnostic artifacts or one diagnostic and two non-diagnostic artifacts were recovered within an isolated 10 metre by 10 metre area. Given the small number of recovered artifacts over a large spatial area and the lack of diagnostic specimens, the information potential and cultural value of Location 98 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 98*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.83 Location 99

The Stage 2 assessment of Location 99 resulted in the recovery of eight pre-contact Aboriginal artifacts over a 18 metre by 13 metre area, all pieces of chipping detritus. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 99 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 99*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.84 Location 101

The Stage 2 assessment of Location 101 resulted in the recovery of 234 pre-contact Aboriginal artifacts over a 405 metre by 270 metre area in close proximity to the Ausable River. Over 300 pieces of chipping detritus were identified on the surface and left in the field. Given that Location 101 likely represents a spatially noteworthy pre-contact Aboriginal site spanning from the Middle Archaic through to the Early Woodland, the cultural heritage value and information potential for Location 101 is significant.

As a result, ***further Stage 3 archaeological assessment is recommended for Location 101*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified through the Stage 3 CSP. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).*

5.85 Location 102

The Stage 2 assessment of Location 102 resulted in the recovery of seven pre-contact Aboriginal artifacts and over a 15 metre by 10 metre area including four pieces of chipping detritus, two utilized flakes, and one projectile point. Six additional pieces of chipping detritus were identified on the surface and left in the field. Location 102 represents a spatially discrete cluster of pre-contact Aboriginal artifacts likely dating to the Middle Archaic period in southern Ontario; given this the information potential and cultural value of Location 102 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 102*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, small pre-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).*

5.86 Location 103

The Stage 2 assessment of Location 103 resulted in the recovery of seven pre-contact Aboriginal artifacts over a 25 metre by 25 metre area including four pieces of chipping detritus, one retouched flake, and two bifaces. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 103 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 103*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.87 Location 104

The Stage 2 assessment of Location104 resulted in the recovery of three artifacts over a 35 metre by 25 metre area, all pieces of chipping detritus. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 104 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 104*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.88 Location 105

The Stage 2 assessment of Location 105 resulted in the recovery of 19 pre-contact Aboriginal artifacts over a 62 metre by 36 metre area including 12 pieces of chipping detritus, four utilized flakes, one graver, one uniface, and one biface. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 105 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 105*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.89 Location 106

The Stage 2 assessment of Location 106 resulted in the recovery of three pre-contact Aboriginal artifacts over a 15 metre by 15 metre area including one piece of chipping detritus, one scraper, and one biface. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 106 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 106*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.90 Location 107

The Stage 2 assessment of Location 107 resulted in the recovery of an isolated pre-contact Aboriginal projectile point. Given the isolated nature of this recovery, the information potential and cultural value of Location 107 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 107*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.91 Location 108

The Stage 2 assessment of Location 108 resulted in the recovery of an isolated pre-contact Aboriginal utilized flake. Given the isolated nature of this recovery, the information potential and cultural value of Location 108 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 108*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.92 Location 109

The Stage 2 assessment of Location 109 resulted in the recovery of an isolated pre-contact Aboriginal artifact, a biface. Given the isolated nature of this recovery, the information potential and cultural value of Location 109 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for***

Location 109 *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.93 Location 110

The Stage 2 assessment of Location 110 resulted in the recovery of a 75 metre by 550 metre scatter mid to late 19th century historic Euro-Canadian artifacts. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed ironstone and whiteware ceramics. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, ***it is recommended that Location 110 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 110 should also be conducted as part of the Stage 3 assessment.

5.94 Location 111

The Stage 2 assessment of Location 111 resulted in the recovery of an isolated pre-contact Aboriginal artifact, a utilized flake. Given the isolated nature of this recovery, the information potential and cultural value of Location 111 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 111*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.95 Location 112

The Stage 2 assessment of Location 112 resulted in the recovery of seven pre-contact Aboriginal artifacts over a 53 metre by 23 metre area including six pieces of chipping detritus and one utilized flake. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 112 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 112*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.96 Location 113

The Stage 2 assessment of Location 113 resulted in the recovery of three pre-contact Aboriginal artifacts over a 18 metre by 6 metre area, all pieces of chipping detritus. Given the small

number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 113 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 113*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.97 Location 114

The Stage 2 assessment of Location 114 resulted in the recovery of 17 pre-contact Aboriginal artifacts over a 28 metre by 22 metre area including 14 pieces of chipping detritus and three retouched flakes; forty more pieces of chipping detritus were identified on the surface and left in the field. Despite the non-diagnostic nature of Location 114, the site represents a spatially discrete cluster of pre-contact Aboriginal artifacts; given this, the information potential and cultural value of Location 114 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 114*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, small pre-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).*

5.98 Location 115

The Stage 2 assessment of Location 115 resulted in the recovery of two pre-contact Aboriginal artifacts located 10 metres apart including one projectile point of indeterminate typology and one biface. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 115 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 115*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.99 Location 116

The Stage 2 assessment of Location 116 resulted in the recovery of 55 pre-contact Aboriginal artifacts over a 168 metre by 132 metre area including 42 pieces of chipping detritus, two scrapers, one denticulate, one core, and eight bifaces. Over 300 pieces of chipping detritus were identified on the surface and left in the field. Despite the non-diagnostic nature of Location 116, the site represents a spatially discrete cluster of pre-contact Aboriginal artifacts; given this, the information potential and cultural value of Location 116 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 116*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified through the Stage 3 CSP. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around*

the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.100 Location 117

The Stage 2 assessment of Location 117 resulted in the recovery of a 33 metre by 23 metre scatter of mid to late 19th century historic Euro-Canadian artifacts. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed ironstone and whiteware ceramics as well as stoneware and window glass artifacts. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, ***it is recommended that Location 117 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 117 should also be conducted as part of the Stage 3 assessment.

5.101 Location 118

The Stage 2 assessment of Location 118 resulted in the recovery of 24 pre-contact Aboriginal artifacts over a 65 metre by 42 metre area including 18 pieces of chipping detritus, two scrapers, two utilized flakes, and two bifaces. Fifty pieces of chipping detritus were identified on the surface and left in the field. Despite the non-diagnostic nature of the site, multiple areas were identified at Location 118 where 10 non-diagnostic artifacts were identified within a 10 metre by 10 metre area. Given this the information potential and cultural value of Location 118 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 118*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1c, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified*

through the Stage 3 CSP. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.102 Location 119

Location 119 includes a collection of separately identified sites (Location 119, Location 120) on JER1098. Each site was identified and recorded separately in the field but spatially overlap on JER1098. Location 119 was a pre-contact Aboriginal scatter (n=31 collected) and Location 120 was a historic Euro-Canadian scatter (n=92 collected); however given the artifacts were scattered amongst each other on the surface within a spatially defined area it was decided to consolidate the locations and report on them as one multi-component site. This revised scatter measures 70 metres north-south and 80 metres east-west. Approximately 150 pieces of chipping detritus were identified on the surface and left in the field to assist with relocating the site; several pieces of fire cracked rock were also identified and left in the field. Approximately 200 non-diagnostic historic artifacts were identified on the surface and left in the field.

Location 119 represents a spatially discrete multi-component site including relatively large quantities of pre-contact Aboriginal and Euro-Candian historic material; given this the information potential and cultural value of Location 119 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 119*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1c, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Although this is a multi-component site it is recommended the Stage 3 follow the test unit placement strategy specified by the MTCS for ploughed-disturbed, large, lithic scatters; test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified through the Stage 3 CSP. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).*

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 119 should also be conducted as part of the Stage 3 assessment.

5.103 Location 121

The Stage 2 assessment of Location 121 resulted in the identification of over 300 pre-contact Aboriginal artifacts over a 240 metre by 165 metre area. A total of 104 artifacts were retained for laboratory analysis. The recovered artifacts include 64 pieces of chipping detritus, 12 bifaces, seven scrapers, three utilized flakes, seven retouched flakes, three cores, one drill, one perforator, one wedge, and five projectile points. Over 200 pieces of chipping detritus were identified on the surface and left in the field. Location 121 represents a spatially discrete cluster

of pre-contact Aboriginal artifacts where a large temporal range is represented in the projectile point assemblage, from the Early Archaic through to the Middle Archaic, indicating the site likely represents multiple occupation episodes; given this the information potential and cultural value of Location 121 was deemed to be significant.

As a result, ***further Stage 3 archaeological assessment is recommended for Location 121*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1c, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified through the Stage 3 CSP. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).*

5.104 Location 126

The Stage 2 assessment of Location 126 resulted in the recovery of 30 pre-contact Aboriginal artifacts over a 140 metre by 100 metre area including 12 pieces of chipping detritus, one perforator, one graver, two scrapers, three cores, one utilized flake, seven bifaces, and three projectile points. Over 200 pieces of Kettle Point chipping detritus and 50 fire cracked rocks were identified on the surface and left in the field to assist with re-locating the site. Location 126 represents a spatially discrete cluster of pre-contact Aboriginal artifacts; given this, the information potential and cultural value of Location 126 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 126*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified through the Stage 3 CSP. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).*

5.105 Location 130

The Stage 2 assessment of Location 130 resulted in the recovery of 470 pre-contact Aboriginal artifacts and 44 historic Euro-Canadian artifacts over a 510 metre by 670 metre area. Approximately 840 pieces of chipping detritus were identified on the surface and left in the field to assist with relocating the site. Given that Location 130 likely represents a spatially noteworthy pre-contact Aboriginal site spanning from the Late Paleo-Indian perido through to the Late Woodland, the cultural heritage value and information potential for Location 130 is

significant. The recovered historic Euro-Canadian artifacts do not include a minimum of 20 that definitively date to pre-1900; therefore the historic Euro-Canadian component of Location 130 is deemed to have low information potential and heritage value.

As a result, ***further Stage 3 archaeological assessment is recommended for the pre-contact Aboriginal component of Location 130****, which spans the entire 510 metre by 670 metre area, prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1c, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified through the Stage 3 CSP. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).*

5.106 Location 133

The Stage 2 assessment of Location 133 resulted in the recovery of an isolated pre-contact Aboriginal artifact, a projectile point of unknown typology. Given the isolated nature of this recovery, the information potential and cultural value of Location 133 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 133*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.107 Location 134

The Stage 2 assessment of Location 134 resulted in the recovery of an isolated pre-contact Aboriginal artifact, a biface. Given the isolated nature of this recovery, the information potential and cultural value of Location 134 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 134*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.108 Location 135

The Stage 2 assessment of Location 135 resulted in the recovery of a 180 metre by 100 metre scatter mid to late 19th century historic Euro-Canadian artifacts. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed ironstone ceramics. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, ***it is recommended that Location 135 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 135 should also be conducted as part of the Stage 3 assessment.

5.109 Location 136

The Stage 2 assessment of Location 136 resulted in the recovery of 20 pre-contact Aboriginal artifacts over a 146 metre by 63 metre area including 16 pieces of chipping detritus, two bifaces, one spokeshave, one retouched flake, and one projectile point. Approximately 75 pieces of chipping detritus were noted and left in the field to assist with re-locating the site. Location 136 represents a spatially discrete cluster of pre-contact Aboriginal artifacts dating to the Middle Archaic. Additionally, multiple areas were identified at Location 136 where 10 non-diagnostic artifacts or one diagnostic and two non-diagnostic artifacts were recovered within a 10 metre by 10 metre area. Given this the information potential and cultural value of Location 136 was deemed to be significant.

As a result, ***further Stage 3 archaeological assessment is recommended for Location 136*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1c, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified through the Stage 3 CSP. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).*

5.110 Location 140

The Stage 2 assessment of Location 140 resulted in the recovery of 23 pre-contact Aboriginal artifacts over a 225 metre by 195 metre area including nine pieces of chipping detritus, five projectile points, three bifaces, four utilized flakes, one graver and one spokeshave.

Location 140 represents a spatially discrete cluster of pre-contact Aboriginal artifacts where a large temporal range is represented in the projectile point assemblage, from the Late Archaic through to the Late Woodland, indicating the site likely represents multiple occupation episodes. Additionally, multiple areas were identified at Location 140 where 10 non-diagnostic artifacts or one diagnostic and two non-diagnostic artifacts were recovered within a 10 metre by 10 metre

area. Given this the information potential and cultural value of Location 140 was deemed to be significant.

As a result, ***further Stage 3 archaeological assessment is recommended for Location 140*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1c, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified through the Stage 3 CSP. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).*

5.111 Location 142

The Stage 2 assessment of Location 142 resulted in the recovery of an isolated pre-contact Aboriginal projectile point. Despite the isolated nature of this recovery, the information potential and cultural value of Location 142 was judged to be significant due to its association with the Late Paleo-Indian period in southern Ontario. As a result, ***further Stage 3 archaeological assessment is recommended for Location 142*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1b.iii, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; given the location represents a possible single component Late Paleo Indian site, it is likely a minimum of 20% of the total units must be screen through three millimetre hardware cloth to faciliatate in the recovery of artifacts (Standards and Guidelines for Consultant Archaeologists, Section 3.2.2, Standard 7, Section 3.2.3 Table 3.1, Government of Ontario 2011).*

5.112 Location 143

The Stage 2 assessment of Location 143 resulted in the recovery of 58 pre-contact Aboriginal artifacts over a 230 metre by 61 metre area including 38 pieces of chipping detritus, four bifaces, six utilized flakes, two scrapers, one core fragment, one spokeshave, and one retouched flake. . Sixty pieces of chipping detritus were noted on the survey and left in the field to assist with relocating the site. Location 143 represents a spatially discrete cluster of pre-contact Aboriginal artifacts. Despite no diagnostic artifacts being recovered, multiple areas were identified at Location 143 where 10 non-diagnostic artifacts were recovered within a 10 metre by 10 metre area. Given this the information potential and cultural value of Location 143 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 143*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1c, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation*

should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified through the Stage 3 CSP. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.113 Location 147

The Stage 2 assessment of Location 147 resulted in the recovery of 58 pre-contact Aboriginal artifacts and eight historic Euro-Canadian artifacts over a 61 metre by 46 metre area. Approximately 40 pieces of chipping detritus were identified on the surface and left in the field to assist with relocating the site. Given that Location 147 likely represents a spatially discrete pre-contact Aboriginal site, the cultural heritage value and information potential for Location 147 is significant. The recovered historic Euro-Canadian artifacts do not include a minimum of 20 that definitively date to pre-1900; therefore the historic Euro-Canadian component of Location 147 is deemed to have low information potential and heritage value.

As a result, ***further Stage 3 archaeological assessment is recommended for the pre-contact Aboriginal component of Location 147*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, small pre-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).*

5.114 Location 148

The Stage 2 assessment of Location 148 resulted in the recovery of a 185 metre by 113 metre scatter mid to late 19th century historic Euro-Canadian artifacts. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed ironstone ceramics as well as nails and button artifacts. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, ***it is recommended that Location 148 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 148 should also be conducted as part of the Stage 3 assessment.

5.115 Location 149

The Stage 2 assessment of Location 149 resulted in the recovery of an isolated pre-contact Aboriginal artifact, a drill. Given the isolated nature of this recovery, the information potential and cultural value of Location 149 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 149*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.116 Location 150

The Stage 2 assessment of Location 150 resulted in the recovery of 134 pre-contact Aboriginal artifacts over a 460 metre by 340 metre. Over 500 pieces of chipping detritus were identified on the surface and left in the field to assist with relocating the site. Given that Location 150 likely represents a spatially noteworthy pre-contact Aboriginal site spanning from the Middle Archaic through to the Late Woodland, the cultural heritage value and information potential for Location 150 is significant.

As a result, ***further Stage 3 archaeological assessment is recommended for Location 150*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified through the Stage 3 CSP. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).*

5.117 Location 151

The Stage 2 assessment of Location 151 resulted in the recovery of a scatter of late 19th century historic Euro-Canadian artifacts. A total of 38 historic Euro-Canadian artifacts were identified on the surface of Location 151. Although only a small sample of ceramics (n=9) were recovered, this total included predominately pre-1900 ironstone ceramics. It is our professional opinion that Location 151 has cultural heritage value or interest. Based on this consideration, Stage 3 assessment is recommended as per Section 2.2, Guideline 2 of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest.

Given this, ***it is recommended that Location 151 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 151 should also be conducted as part of the Stage 3 assessment.

5.118 Location 152

The Stage 2 assessment of Location 152 resulted in the recovery of 18 pre-contact Aboriginal artifacts over a 159 metre by 49 metre area including 12 pieces of chipping detritus, one core, one retouched flake, one utilized flake, one uniface, one scraper, and one projectile point. In addition to the pre-contact artifacts one fragment of 19th century historic ceramic was also recovered Despite the relatively number of artifacts recovered over a large are, Location 152 presents evidence of occupation during the Early Archaic period in southern Ontario; given this the information potential and cultural value of Location 152 was deemed to be significant for the area around the recovered Early Archaic projectile point. As a result, ***further Stage 3 archaeological assessment is recommended for Location 152 in a 10 metre by 10 metre area around the recovered projectile point*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1b.iii, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; given the location represents a possible single component Early Archaic site, it is likely a minimum of 20% of the total units must be screen through three millimetre hardware cloth to faciliatate in the recovery of artifacts (Standards and Guidelines for Consultant Archaeologists, Section 3.2.2, Standard 7, Section 3.2.3 Table 3.1, Government of Ontario 2011). The excavation grid should be centred where the Early Archaic point was recovered and expanded as necessary based on Stage 3 test unit artifact counts and Stage 3 CSP data. In addition to the site centroid, the GPS coordinates for the projectile point are provided in the supplementary documents.*

5.119 Location 153

The Stage 2 assessment of Location 153 resulted in the recovery of a scatter of mid to late 19th century historic Euro-Canadian artifacts. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed ironstone and whiteware ceramics. Based on this

consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, ***it is recommended that Location 153 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 153 should also be conducted as part of the Stage 3 assessment.

5.120 Location 154

The Stage 2 assessment of Location 154 resulted in the recovery of 33 pre-contact Aboriginal artifacts over a 150 metre by 70 metre area including 23 pieces of chipping detritus, two cores, one utilized flake, one biface, two scrapers, two spokeshaves, one graver, and one projectile point. No areas were identified at Location 154 where 10 non-diagnostic artifacts or one diagnostic and two non-diagnostic artifacts were recovered within an isolated 10 metre by 10 metre area. Given the small number of recovered artifacts over a relatively large spatial area, the information potential and cultural value of Location 154 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 154*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.121 Location 155

The Stage 2 assessment of Location 155 resulted in the recovery of an isolated pre-contact Aboriginal projectile point. Given the isolated nature of this recovery, the information potential and cultural value of Location 155 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 155*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.122 Location 156

The Stage 2 assessment of Location 156 resulted in the recovery of an isolated pre-contact Aboriginal Early Archaic projectile point. Despite the isolated nature of this recovery, the information potential and cultural value of Location 156 was judged to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 156*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1b.iii, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled*

surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; given the location represents a possible single component Early Archaic site, it is likely a minimum of 20% of the total units must be screen through three millimetre hardware cloth to faciliatate in the recovery of artifacts (Standards and Guidelines for Consultant Archaeologists, Section 3.2.2, Standard 7, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.123 Location 157

The Stage 2 assessment of Location 157 resulted in the recovery of an isolated pre-contact Aboriginal biface. Given the isolated nature of this recovery, the information potential and cultural value of Location 157 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 157*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.124 Location 158

The Stage 2 assessment of Location 158 resulted in the recovery of three pre-contact Aboriginal artifacts, one piece of chipping detritus and two projectile points. No areas were identified at Location 158 where 10 non-diagnostic artifacts or one diagnostic and two non-diagnostic artifacts were recovered within an isolated 10 metre by 10 metre area. Given the small number of recovered artifacts over a relatively large spatial area, the information potential and cultural value of Location 158 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 158*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.125 Location 159

The Stage 2 assessment of Location 159 resulted in the recovery of a scatter of mid to late 19th century historic Euro-Canadian artifacts. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed ironstone and whiteware ceramics. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, ***it is recommended that Location 159 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 159 should also be conducted as part of the Stage 3 assessment.

5.126 Location 160

The Stage 2 assessment of Location 160 resulted in the recovery of a scatter of mid to late 19th century historic Euro-Canadian artifacts. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed ironstone and whiteware ceramics. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, ***it is recommended that Location 160 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 160 should also be conducted as part of the Stage 3 assessment.

5.127 Location 161

The Stage 2 assessment of Location 161 resulted in the recovery of a scatter of mid-19th to early 20th century historic Euro-Canadian artifacts. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed ironstone and whiteware ceramics. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, ***it is recommended that Location 161 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 161 should also be conducted as part of the Stage 3 assessment.

5.128 Location 162

The Stage 2 assessment of Location 162 resulted in the recovery of a scatter of mid to late 19th century historic Euro-Canadian artifacts. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed ironstone, whiteware and pearlware ceramics. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, ***it is recommended that Location 162 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 162 should also be conducted as part of the Stage 3 assessment.

5.129 Location 164

The Stage 2 assessment of Location 164 resulted in the recovery of an isolated historic artifact, a shell button. Given the isolated nature of this recovery, the information potential and cultural value of Location 164 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 164*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.130 Location 165

The Stage 2 assessment of Location 165 resulted in the recovery of a scatter of mid to late 19th century historic Euro-Canadian artifacts. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed ironstone and whiteware ceramics. Based on this

consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, ***it is recommended that Location 165 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 165 should also be conducted as part of the Stage 3 assessment.

5.131 Location 166

The Stage 2 assessment of Location 166 resulted in the recovery of an isolated pre-contact Aboriginal projectile point. Given the isolated nature of this recovery, the information potential and cultural value of Location 166 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 166*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.132 Location 168

The Stage 2 assessment of Location 168 resulted in the recovery of three pre-contact Aboriginal artifacts over a 12 metre by 5 metre area including three pieces of chipping detritus. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 168 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 168*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.133 Location 169

The Stage 2 assessment of Location 169 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 169 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 169*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.134 Location 170

The Stage 2 assessment of Location 170 resulted in the recovery of a scatter of primarily late 19th century historic Euro-Canadian artifacts. A total of 96 historic Euro-Canadian artifacts were identified on the surface of Location 170. Although only a small sample of ceramics (n=12) were recovered, this total included predominately pre-1900 ironstone ceramics. It is our professional opinion that Location 170 has cultural heritage value or interest. Based on this consideration, Stage 3 assessment is recommended as per Section 2.2, Guideline 2 of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest.

Given this, ***it is recommended that Location 170 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 170 should also be conducted as part of the Stage 3 assessment.

5.135 Location 171

The Stage 2 assessment of Location 171 resulted in the recovery of an isolated pre-contact Aboriginal projectile point. Despite the isolated nature of this recovery, the information potential and cultural value of Location 171 was judged to be significant due to its association with the Early Archaic period in southern Ontario. As a result, ***further Stage 3 archaeological assessment is recommended for Location 171*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1b.iii, Government of Ontario 2011).*

Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; given the location represents a possible single component Paleo-Indian site, it is likely a minimum of 20% of the total units must be screen through three millimetre hardware cloth to faciliatate in the recovery of artifacts (Standards and Guidelines for Consultant Archaeologists, Section 3.2.2, Standard 7, Section 3.2.3 Table 3.1, Government of Ontario 2011). The excavation grid should be centred where the Early Archaic point was recovered and expanded to include where the piece of chipping detritus was recovered.

5.136 Location 172

The Stage 2 assessment of Location 172 resulted in the recovery of an isolated pre-contact Aboriginal biface. Given the isolated nature of this recovery, the information potential and cultural value of Location 172 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 172*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.137 Location 173

The Stage 2 assessment of Location 173 resulted in the recovery of two pre-contact Aboriginal artifacts, one piece of chipping detritus and one biface. No areas were identified at Location 173 where 10 non-diagnostic artifacts were recovered within an isolated 10 metre by 10 metre area. Given the small number of recovered artifacts, the information potential and cultural value of Location 173 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 173*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.138 Location 174

The Stage 2 assessment of Location 174 resulted in the recovery of 10 pre-contact Aboriginal artifacts over a 52 metre by 30 metre area including nine pieces of chipping detritus and one biface. No areas were identified at Location 174 where 10 non-diagnostic artifacts were recovered within an isolated 10 metre by 10 metre area. Given the small number of recovered artifacts, the information potential and cultural value of Location 174 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 174*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.139 Location 175

The Stage 2 assessment of Location 175 resulted in the recovery of 11 pre-contact Aboriginal artifacts over a 60 metre by 42 metre area including nine pieces of chipping detritus, one retouched flake, and one biface. A total of 25 pieces of chipping detritus were noted during the survey but left in the field. No areas were identified at Location 175 where 10 non-diagnostic artifacts were recovered within an isolated 10 metre by 10 metre area. Given the small number of recovered artifacts, the information potential and cultural value of Location 175 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 175*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.140 Location 176

The Stage 2 assessment of Location 176 resulted in the recovery of three pre-contact Aboriginal artifacts over a 30 metre by 20 metre area including three pieces of chipping detritus. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 176 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 176*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.141 Location 177

The Stage 2 assessment of Location 177 resulted in the recovery of an isolated pre-contact Aboriginal utilized flake. Given the isolated nature of this recovery, the information potential and cultural value of Location 177 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 177*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.142 Location 178

The Stage 2 assessment of Location 178 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 178 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 178*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.143 Location 179

The Stage 2 assessment of Location 179 resulted in the recovery of a scatter of late 19th century historic Euro-Canadian artifacts. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed ironstone and whiteware ceramics. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, ***it is recommended that Location 179 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 179 should also be conducted as part of the Stage 3 assessment.

5.144 Location 180

The Stage 2 assessment of Location 180 resulted in the recovery of an isolated pre-contact Aboriginal Early Archaic projectile point. Despite the isolated nature of this recovery, the information potential and cultural value of Location 180 was judged to be significant due to its association with the Early Archaic period in southern Ontario. As a result, ***further Stage 3 archaeological assessment is recommended for Location 180*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1b.iii, Government of Ontario 2011).*

Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; given the location represents a possible single component Early Archaic site, it is likely a minimum of 20% of the total units must be screen through three millimetre hardware cloth to faciliatate in the recovery of artifacts (Standards and Guidelines for Consultant Archaeologists, Section 3.2.2, Standard 7, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.145 Location 181

The Stage 2 assessment of Location 181 resulted in the recovery of 22 pre-contact Aboriginal artifacts over a 77 metre by 28 metre area including 20 pieces of chipping detritus, one biface, and one projectile point. No areas were identified at Location 181 where 10 non-diagnostic artifacts or one diagnostic (for example, the Meadowood projectile point fragment) and two non-diagnostic artifacts were recovered within an isolated 10 metre by 10 metre area. Therefore this site does not meet the criteria for recommending further Stage 3 assessment. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 181*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.146 Location 182

The Stage 2 assessment of Location 182 resulted in the recovery of six pre-contact Aboriginal artifacts over a 20 metre by 20 metre area including six pieces of chipping detritus. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 182 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 182*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.147 Location 183

The Stage 2 assessment of Location 183 resulted in the recovery of four pre-contact Aboriginal artifacts over an 11 metre by 2 metre area including four pieces of chipping detritus. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 183 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 183*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.148 Location 184

The Stage 2 assessment of Location 184 resulted in the recovery of two pre-contact Aboriginal artifacts over a 19 metre by 1 metre area including one piece of chipping detritus and one projectile point. Location 184 represents a piece of chipping detritus and a Hi-Lo projectile point; given this the information potential and cultural value of Location 184 was deemed to be significant due to its association with the Late Paleo-Indian period in southern Ontario. As a result, ***further Stage 3 archaeological assessment is recommended for Location 184*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1b.iii, Government of Ontario 2011).*

Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; given the location represents a possible single component Paleo-Indian site, it is likely a minimum of 20% of the total units must be screen through three millimetre hardware cloth to faciliatate in the recovery of artifacts (Standards and Guidelines for Consultant Archaeologists, Section 3.2.2, Standard 7, Section 3.2.3 Table 3.1, Government of Ontario 2011). The excavation grid should be centred where the Hi-Lo point was recovered and expanded to include where the piece of chipping detritus was recovered.

5.149 Location 185

The Stage 2 assessment of Location 185 resulted in the recovery of an isolated pre-contact Aboriginal retouched flake. Given the isolated nature of this recovery, the information potential and cultural value of Location 185 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 185*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.150 Location 186

The Stage 2 assessment of Location 186 resulted in the recovery of three pre-contact Aboriginal artifacts, two pieces of chipping detritus and one biface. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 186 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 186*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.151 Location 187

The Stage 2 assessment of Location 187 resulted in the recovery of two pre-contact Aboriginal artifacts over an 8 metre by 1 metre area, both pieces of chipping detritus. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 187 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 187*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.152 Location 188

The Stage 2 assessment of Location 188 resulted in the recovery of an isolated pre-contact Aboriginal biface. Given the isolated nature of this recovery, the information potential and cultural value of Location 188 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 188*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.153 Location 189

The Stage 2 assessment of Location 189 resulted in the recovery of 11 pre-contact Aboriginal artifacts over a 35 metre by 30 metre area, all pieces of chipping detritus. No areas were

identified at Location 189 where 10 non-diagnostic artifacts or one diagnostic and two non-diagnostic artifacts were recovered within an isolated 10 metre by 10 metre area. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 189 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 189*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.154 Location 190

The Stage 2 assessment of Location 190 resulted in the recovery of an isolated pre-contact Aboriginal end scraper. Given the isolated nature of this recovery, the information potential and cultural value of Location 190 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 190*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.155 Location 191

The Stage 2 assessment of Location 191 resulted in the recovery of 10 pre-contact Aboriginal artifacts over a 60 metre by 46 metre area including six pieces of chipping detritus, one core, one scraper, and two bifaces. No areas were identified at Location 191 where 10 non-diagnostic artifacts or one diagnostic and two non-diagnostic artifacts were recovered within an isolated 10 metre by 10 metre area. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 191 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 191*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.156 Location 193

The Stage 2 assessment of Location 193 resulted in the recovery of 20 pre-contact Aboriginal artifacts over an 82 metre by 50 metre area including16 pieces of chipping detritus, one retouched flake, and three bifaces. A total of 32 pieces of chipping detritus were noted during the survey but left in the field to assist with re-locating the site. Despite the non-diagnostic nature of Location 193, the site represents a spatially discrete cluster of pre-contact Aboriginal artifacts; additionally, multiple areas at Location 193 were identified where 10 non-diagnostic artifacts were recovered within an isolated 10 metre by 10 metre area. Given this the information potential and cultural value of Location 193 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 193*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Guideline 2, Government of Ontario 2011).*

Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified through the Stage 3 CSP. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and

sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.157 Location 196

The Stage 2 assessment of Location 196 resulted in the recovery of 34 pre-contact Aboriginal artifacts over a 175 metre by 50 metre area including 27 pieces of chipping detritus, one core, two retouched flakes, one utilized flake, one chopper, and two bifaces. Over 100 pieces of chipping detritus were noted during the survey but left in the field to assist with re-locating the site. Despite the non-diagnostic nature of Location 196, the site represents a spatially discrete cluster of pre-contact Aboriginal artifacts; additionally, multiple areas at Location 196 were identified where 10 non-diagnostic artifacts were recovered within an isolated 10 metre by 10 metre area. Given this the information potential and cultural value of Location 196 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 196*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011).*

Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified through the Stage 3 CSP. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.158 Location 197

The Stage 2 assessment of Location 197 resulted in the recovery of five pre-contact Aboriginal artifacts over a 25 metre by 3 metre area including three pieces of chipping detritus, one biface, and one projectile point. Location 197 represents a spatially discrete cluster of pre-contact Aboriginal artifacts that date from the Late Paleo-Indian period in southern Ontario; given this the information potential and cultural value of Location 197 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 197*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1b.iii, Government of Ontario 2011).*

Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; given the location represents a possible single component Paleo-Indian site, it is likely a minimum of 20% of the total units must be screen through three millimetre hardware cloth to faciliatate in the recovery of artifacts (Standards and Guidelines for Consultant Archaeologists, Section 3.2.2, Standard 7, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.159 Location 198

The Stage 2 assessment of Location 198 resulted in the recovery of an isolated pre-contact Aboriginal end scraper. Given the isolated nature of this recovery, the information potential and cultural value of Location 198 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 198*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.160 Location 199

The Stage 2 assessment of Location 199 resulted in the recovery of two pre-contact Aboriginal artifacts over a 2 metre by 1 metre area including one piece of chipping detritus and one projectile point. Location 199 represents a spatially discrete cluster of pre-contact Aboriginal artifacts that date from the Early Archaic period in southern Ontario; given this the information potential and cultural value of Location 199 was deemed to be significant due to its association with the Early Archaic period in southern Ontario. As a result, ***further Stage 3 archaeological assessment is recommended for Location 199*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1b.iii, Government of Ontario 2011).*

Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; given the location represents a possible single component Early Archaic site, it is likely a minimum of 20% of the total units must be screen through three millimetre hardware cloth to faciliatate in the recovery of artifacts (Standards and Guidelines for Consultant Archaeologists, Section 3.2.2, Standard 7, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.161 Location 200

The Stage 2 assessment of Location 200 resulted in the recovery of an isolated pre-contact Aboriginal side/end scraper. Given the isolated nature of this recovery, the information potential and cultural value of Location 200 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 200*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.162 Location 204

The Stage 2 assessment of Location 204 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 204 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 204*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.163 Location 207

The Stage 2 assessment of Location 207 resulted in the recovery of 10 pre-contact Aboriginal artifacts over a 140 metre by 29 metre area including nine pieces of chipping detritus, and one biface. A total of 11 pieces of chipping detritus were noted during the survey but left in the field.

No areas were identified at Location 207 where 10 non-diagnostic artifacts or one diagnostic and two non-diagnostic artifacts were recovered within an isolated 10 metre by 10 metre area. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 207 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 207*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.164 Location 209

The Stage 2 assessment of Location 209 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 209 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 209*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.165 Location 210

The Stage 2 assessment of Location 210 resulted in the recovery of an isolated pre-contact Aboriginal projectile point. Given the isolated nature of this recovery, the information potential and cultural value of Location 210 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 210*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.166 Location 211

The Stage 2 assessment of Location 211 resulted in the recovery of two pre-contact Aboriginal artifacts over a 6 metre by 1 metre area including one utilized flake and one biface. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 211 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 211*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.167 Location 212

The Stage 2 assessment of Location 212 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 212 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 212*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.168 Location 213

The Stage 2 assessment of Location 213 resulted in the recovery of seven pre-contact Aboriginal artifacts over a 50 metre by 8 metre area including five pieces of chipping detritus, one core, and one scraper. Given the small number of recovered artifacts over a large spatial area and the lack of diagnostic specimens, the information potential and cultural value of Location 213 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 213***

(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).

5.169 Location 214

The Stage 2 assessment of Location 214 resulted in the recovery of five pre-contact Aboriginal artifacts over a 20 metre by 18 metre area, all pieces of chipping detritus. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 214 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 214*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.170 Location 215

The Stage 2 assessment of Location 215 resulted in the recovery of an isolated pre-contact Aboriginal biface. Despite the isolated nature of this recovery, the information potential and cultural value of Location 215 was judged to be significant due to its association with the Early Archaic period in southern Ontario. As a result, ***further Stage 3 archaeological assessment is recommended for Location 215*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1b.iii, Government of Ontario 2011).*

Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; given the location represents a possible single component Early Archaic site, it is likely a minimum of 20% of the total units must be screen through three millimetre hardware cloth to faciliatate in the recovery of artifacts (Standards and Guidelines for Consultant Archaeologists, Section 3.2.2, Standard 7, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.171 Location 216

Location 216 represents a lithic scatter comprised of 374 artifacts spread out over a 100 metre by 100 metre area. During the 2012 survey approximately 315 artifacts were noted in the survey and left in the field to assist with re-location. A total of 59 artifacts were recovered, including 44 pieces of chipping detritus, five bifaces, one scraper, one retouched flake, one utilized flake, one graver, three sherds of pottery, and three projectile points. Location 216 represents a spatially discrete cluster of pre-contact Aboriginal artifacts, including pottery fragments, indicating a possibly substantial Woodland period occupation; given this the information potential and cultural value of Location 216 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 216*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011).*

Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified through the

Stage 3 CSP. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.172 Location 218

The Stage 2 assessment of Location 218 resulted in the recovery of six pre-contact Aboriginal artifacts over a 34 metre by 16 metre area, including five pieces of chipping detritus and one retouched flake. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 218 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 218*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.173 Location 219

The Stage 2 assessment of Location 219 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 219 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 219*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.174 Location 220

The Stage 2 assessment of Location 220 resulted in the recovery of two pre-contact Aboriginal artifacts over a 13 metre by 1 metre area including one utilized flake and one biface. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 220 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 220*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.175 Location 221

The Stage 2 assessment of Location 221 resulted in the recovery of a 52 metre by 30 metre scatter mid to late 19th century historic Euro-Canadian artifacts. A total of 113 historic Euro-Canadian artifacts were identified on the surface of Location 221. Although only a small sample of ceramics (n=14) were identified and recovered, all were examples of pre-1900 whiteware and ironstone ceramics. It is our professional opinion that Location 221 has cultural heritage value or interest. Based on this consideration, Stage 3 assessment is recommended as per Section 2.2, Guideline 2 of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest.

Given this, ***it is recommended that Location 221 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 221 should also be conducted as part of the Stage 3 assessment.

5.176 Location 222

The Stage 2 assessment of Location 222 resulted in the recovery of an isolated pre-contact Aboriginal artifact, a biface. Given the isolated nature of this recovery, the information potential and cultural value of Location 222 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 222*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.177 Location 223

The Stage 2 assessment of Location 223 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 223 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 223*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.178 Location 225

The Stage 2 assessment of Location 225 resulted in the recovery of an isolated pre-contact Aboriginal Early Archaic projectile point. Despite the isolated nature of this recovery, the information potential and cultural value of Location 225 was judged to be significant due to its association with the Early Archaic period in southern Ontario. As a result, ***further Stage 3 archaeological assessment is recommended for Location 225*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1b.iii, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; given the location represents a possible single component Early Archaic site, it is likely a minimum of 20% of the total units must be screen through three millimetre hardware cloth to faciliatate in the recovery of artifacts (Standards and Guidelines for Consultant Archaeologists, Section 3.2.2, Standard 7, Section 3.2.3 Table 3.1, Government of Ontario 2011).*

5.179 Location 226

The Stage 2 assessment of Location 226 resulted in the recovery of 11 pre-contact Aboriginal artifacts over a 20 metre by 20 metre area, all pieces of chipping detritus. A total of 12 pieces of chipping detritus were identified during the survey and left in the field. Despite the non-

diagnostic nature of Location 226, the site represents a spatially discrete cluster of pre-contact Aboriginal artifacts; given this the information potential and cultural value of Location 226 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 226*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011).*

Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, small pre-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.180 Location 227

The Stage 2 assessment of Location 227 resulted in the recovery of 22 pre-contact Aboriginal artifacts over a 64 metre by 50 metre area including 20 pieces of chipping detritus, one utilized flake, and one biface. Given the small number of recovered artifacts and the lack of diagnostic specimens, the information potential and cultural value of Location 227 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 227*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.181 Location 236a

The Stage 2 assessment of Location 236a resulted in the recovery of an isolated pre-contact Aboriginal artifact, a piece of chipping detritus. Given the isolate nature of the recovered artifact, the information potential and cultural value of Location 236a was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 236a*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.182 Location 236b

The Stage 2 assessment of Location 236b resulted in the recovery of an isolated pre-contact Aboriginal artifact, a projectile point. Given the isolate nature of the recovered artifact, the information potential and cultural value of Location 236b was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 236b*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.183 Location 238

The Stage 2 assessment of Location 238 resulted in the recovery of two pre-contact Aboriginal artifacts over a 11 metre by 1 metre area, both pieces of chipping detritus. Given the small number of recovered artifacts, the information potential and cultural value of Location 238 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 238*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.184 Location 239

The Stage 2 assessment of Location 239 resulted in the recovery of eight pre-contact Aboriginal artifacts over a 50 metre by 25 metre area, including five pieces of chipping detritus, one biface, one retouched flake and one scraper. Given the small number of recovered artifacts, the information potential and cultural value of Location 239 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 239*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.185 Location 240

The Stage 2 assessment of Location 240 resulted in the recovery of an isolated pre-contact Aboriginal projectile point. Despite the isolated nature of this recovery, the information potential and cultural value of Location 240 was judged to be significant due to its association with the Late Paleo-Indian period in southern Ontario. As a result, ***further Stage 3 archaeological assessment is recommended for Location 240*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1b.iii, Government of Ontario 2011).*

Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; given the location represents a possible single component Paleo-Indian site, it is likely a minimum of 20% of the total units must be screen through three millimetre hardware cloth to faciliatate in the recovery of artifacts (Standards and Guidelines for Consultant Archaeologists, Section 3.2.2, Standard 7, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.186 Location 241

The Stage 2 assessment of Location 241 resulted in the recovery of 15 pre-contact Aboriginal artifacts over a 19 metre by 10 metre area including 11 pieces of chipping detritus, two bifaces, one retouched flake, and one utilized flake. Approximately 30 pieces of chipping detritus were identified on the surface and left in the field. Despite the non-diagnostic nature of Location 241, the site represents a spatially discrete cluster of pre-contact Aboriginal artifacts; given this the information potential and cultural value of Location 241 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 241*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011).*

Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, small pre-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.187 Location 242

The Stage 2 assessment of Location 242 resulted in the recovery of a scatter of mid to late 19th century historic Euro-Canadian artifacts. The presence of more than 20 artifacts dating the

period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed whiteware and ironstone ceramics. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, ***it is recommended that Location 242 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 242 should also be conducted as part of the Stage 3 assessment.

5.188 Location 243

The Stage 2 assessment of Location 243 resulted in the recovery of 13 pre-contact Aboriginal artifacts over an 87 metre by 31 metre area, including 12 pieces of chipping detritus, and one biface. Given the small number of recovered artifacts over a relatively large spatial area, the information potential and cultural value of Location 243 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 243*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.189 Location 244

The Stage 2 assessment of Location 244 resulted in the recovery of 10 pre-contact Aboriginal artifacts over a 48 metre by 15 metre area, all pieces of chipping detritus. Three additional pieces of chipping detritus were identified on the surface and left in the field. Given the small number of recovered artifacts over a relatively large spatial area, the information potential and cultural value of Location 244 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 244*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.190 Location 245

The Stage 2 assessment of Location 245 resulted in the recovery of 25 pre-contact Aboriginal artifacts over a 125 metre by 71 metre including 13 pieces of chipping detritus, one spokeshave, three scrapers, four bifaces, and four projectile points. Approximately 96 pieces of chipping detritus were identified on the surface and left in the field. Location 245 represents a spatially discrete cluster of pre-contact Aboriginal artifacts where a temporal range is represented in the

projectile point assemblage, from Middle Archaic Otter Creek and Brewerton points through to a Late Archaic Innes point; given this the information potential and cultural value of Location 245 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 245*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011).*

Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified through the Stage 3 CSP. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.191 Location 246

The Stage 2 assessment of Location 246 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 246 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 246*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.192 Location 247

The Stage 2 assessment of Location 247 resulted in the recovery of a scatter of mid to late 19th century historic Euro-Canadian artifacts. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed whiteware and ironstone ceramics,a s well as the recovered yellowware, stoneware, pipe stem fragements, machine cut nails and agate button. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, ***it is recommended that Location 247 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of

interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 247 should also be conducted as part of the Stage 3 assessment.

5.193 Location 248

The Stage 2 assessment of Location 248 resulted in the recovery of an isolated pre-contact Aboriginal artifact, a biface. Given the isolated nature of this recovery, the information potential and cultural value of Location 248 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 248*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.194 Location 249

The Stage 2 assessment of Location 249 resulted in the recovery of a sparse scatter of late 19th to early 20th century historic Euro-Canadian artifacts. A total of 94 historic Euro-Canadian artifacts were identified on the surface of Location 249. Although only 14 diagnostic artifacts were identified and recovered, this total included examples pre-1900 whiteware ceramic and machine cut nails. It is our professional opinion that Location 249 has cultural heritage value or interest. Based on this consideration, Stage 3 assessment is recommended as per Section 2.2, Guideline 2 of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest.

Given this, ***it is recommended that Location 249 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 249 should also be conducted as part of the Stage 3 assessment.

5.195 Location 250

The Stage 2 assessment of Location 250 resulted in the recovery of a scatter of mid 19th century historic Euro-Canadian artifacts. Although a sample fewer than 20 artifacts was retained from Location 250, all of the identifiable recovered ceramics (n=10) were examples of pre-1900 whiteware and pearlware ceramics. It is our professional opinion that a Stage 3 assessment of Location 250 would yield a larger sample of pre-1900 artifacts. Based on this

consideration, Stage 3 assessment is recommended as per Section 2.2, Guideline 2 of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest.

Given this, ***it is recommended that Location 250 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 250 should also be conducted as part of the Stage 3 assessment.

5.196 Location 251

The Stage 2 assessment of Location 251 resulted in the recovery of an isolated pre-contact Aboriginal artifact, a biface. Given the isolated nature of this recovery, the information potential and cultural value of Location 251 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 251*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.197 Location 252

The Stage 2 assessment of Location 252 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 252 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 252*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.198 Location 253

The Stage 2 assessment of Location 253 resulted in the recovery of an isolated pre-contact Aboriginal projectile point. Given the isolated nature of this recovery, the information potential and cultural value of Location 253 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 253*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.199 Location 254

The Stage 2 assessment of Location 254 resulted in the recovery of 22 pre-contact Aboriginal artifacts over a 223 metre by 57 metre area, including 22 pieces of chipping detritus, one biface,

one retouched flake, one utilized flake, and one projectile point. Approximately 72 pieces of chipping detritus were identified on the surface and left in the field to assist with relocating the site. Location 254 represents a spatially discrete cluster of pre-contact Aboriginal artifacts with a possible Late Woodland affiliation. Additionally, multiple areas were identified at Location 254 where 10 non-diagnostic artifacts were recovered within a 10 metre by 10 metre area. Given this the information potential and cultural value of Location 254 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 254*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1c, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, Plough-disturbed, large, multi- or single-component lithic scatters. Multiple grids should be placed over areas of artifact concentrations, as identified through the Stage 3 CSP. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site; additional units should be excavated, amounting to 10% of the initial grid unit total, on the periphery of the surface scatter to determine the site extent and sample the site periphery (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).*

5.200 Location 255

The Stage 2 assessment of Location 255 resulted in the recovery of three pre-contact Aboriginal artifacts over a 23 metre by 16 metre area, including two pieces of chipping detritus and one biface. Three additional pieces of chipping detritus were identified on the surface and left in the field. Given the small number of recovered artifacts, the information potential and cultural value of Location 255 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 255*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.201 Location 256

The Stage 2 assessment of Location 256 resulted in the recovery of seven pre-contact Aboriginal artifacts over a 56 metre by 32 metre area including four pieces of chipping detritus and three bifaces. A total of 21 pieces of chipping detritus were identified on the surface and left in the field. Given the small number of recovered artifactsover a relatively large spatial area the information potential and cultural value of Location 256 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 256*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.202 Location 257

The Stage 2 assessment of Location 257 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 257 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 257*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.203 Location 258

The Stage 2 assessment of Location 258 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 258 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 258*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.204 Location 259

The Stage 2 assessment of Location 259 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 259 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 259*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.205 Location 260

The Stage 2 assessment of Location 260 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 260 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 260*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.206 Location 261

The Stage 2 assessment of Location 261 resulted in the recovery of an isolated pre-contact Aboriginal projectile point. Given the isolated nature of this recovery, the information potential and cultural value of Location 261 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 261*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.207 Location 262

The Stage 2 assessment of Location 262 resulted in the recovery of a scatter of mid to late 19th century historic Euro-Canadian artifacts. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed whiteware, ironstone and pearlware ceramics. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, ***it is recommended that Location 262 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 262 should also be conducted as part of the Stage 3 assessment.

5.208 Location 263

The Stage 2 assessment of Location 263 resulted in the recovery of an isolated pre-contact Aboriginal artifact, a biface. Given the isolated nature of this recovery, the information potential and cultural value of Location 263 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 263*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.209 Location 264

The Stage 2 assessment of Location 264 resulted in the recovery of a scatter of 19th century historic Euro-Canadian artifacts. A total of 212 historic Euro-Canadian artifacts were identified on the surface of Location 264. Although only a small sample of ceramics (n=17) were recovered, this total includes examples of pre-1900 ironstone ceramics, namely whiteware and ironstone. It is our professional opinion that Location 264 has cultural heritage value or interest. Based on this consideration, Stage 3 assessment is recommended as per Section 2.2, Guideline 2 of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest.

Given this, ***it is recommended that Location 264 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.*

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 264 should also be conducted as part of the Stage 3 assessment.

5.210 Location 265

The Stage 2 assessment of Location 265 resulted in the recovery of six pre-contact Aboriginal artifacts over a 57 metre by 37 metre area, all pieces of chipping detritus. Three additional pieces of chipping detritus were identified on the surface and left in the field. Given the small number of recovered artifacts, the information potential and cultural value of Location 265 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 265*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.211 Location 266

The Stage 2 assessment of Location 266 resulted in the recovery of 15 pre-contact Aboriginal artifacts over a 114 metre by 77 metre area, including nine pieces of chipping detritus, one biface, one scraper, and four projectile points. Although a small number of artifacts were recovered over a large spatial area, a cluster of artifacts was identified consisting of a diagnostic projectile point and two pieces of chipping detritus within an isolated 10 metre by 10 metre area. The diagnostic projectile point was the Brewerton-like specimen dating to the Middle Archaic period. Given this the information potential and cultural value of Location 266 was judged to be significant, related to this cluster of artifacts.

As a result, ***further Stage 3 archaeological assessment is recommended for Location 266 in the area of clustered artifacts*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, small pre-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011). It is recommended the Stage 3 assessment center on the location of the recovered diagnonstic Middle Archaic point and continue based on Stage 3 test unit artifact counts and the Stage 3 CSP. In addition to the site centroid, the GPS coordinates for the Middle Archaic projectile point are provided in Supplement B.*

5.212 Location 267

The Stage 2 assessment of Location 267 resulted in the recovery of a scatter of late 19th to early 20th century historic Euro-Canadian artifacts. Given the Stage 2 assessment resulted in a small amount of 19th century ceramic material and a relatively large amount of nails and miscellaneous metal fragments, the information potential and cultural heritage value of Location 267 was judged to be low. It is likely the scatter of artifacts is associated with the extant house located immediately west of Location 267. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 267*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1c, Government of Ontario 2011).*

5.213 Location 268

The Stage 2 assessment of Location 268 resulted in the recovery of four pre-contact Aboriginal artifacts over a 35 metre by 32 metre area, including two pieces of chipping detritus, one core, and one projectile point. Six additional pieces of chipping detritus were identified on the surface

and left in the field. Although a small number of artifacts were recovered over a large spatial area, a cluster of artifacts was identified consisting of a diagnostic projectile point and two pieces of chipping detritus within an isolated 10 metre by 10 metre area. Given this the information potential and cultural value of Location 268 was judged to be significant, related to this cluster of artifacts.

As a result, ***further Stage 3 archaeological assessment is recommended for Location 268 in the area of clustered artifacts*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011). Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, small pre-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011). It is recommended the Stage 3 assessment center on the location of the recovered diagnonstic point and continue based on Stage 3 test unit artifact counts and the Stage 3 CSP. In addition to the site centroid, the GPS coordinates for the projectile point are provided in Supplement B.*

5.214 Location 269

The Stage 2 assessment of Location 269 resulted in the recovery of four pre-contact Aboriginal artifacts over a 12 metre by 7 metre area including two pieces of chipping detritus, one biface, and one drill. Given the small number of recovered artifacts, the information potential and cultural value of Location 269 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 269*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.215 Location 270

The Stage 2 assessment of Location 270 resulted in the recovery of a single historic artifact, a piece of transfer-printed whiteware. Given isolated nature of the artifact the information potential and cultural heritage value of Location 270 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 270*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1c, Government of Ontario 2011).*

5.216 Location 271

The Stage 2 assessment of Location 271 resulted in the recovery of a scatter of late 19th to early 20th century historic Euro-Canadian artifacts. Given the Stage 2 assessment did not result in the recovery of a spatially discrete scatter of artifacts mostly dating prior to 1900 (minimum of 20 artifacts) and the location of the scatter in relation to a burn pile, the information potential and cultural heritage value of Location 271 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 271*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1c, Government of Ontario 2011).*

5.217 Location 272

The Stage 2 assessment of Location 272 resulted in the recovery of two pre-contact Aboriginal pieces of chipping detritus, located 10 metres apart. Given the small number of recovered artifacts, the information potential and cultural value of Location 272 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 272*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.218 Location 273

The Stage 2 assessment of Location 273 resulted in the recovery of 16 pre-contact Aboriginal artifacts over a 45 metre by 44 metre area including 14 pieces of chipping detritus, one biface, and one core. A total of 48 pieces of chipping detritus were identified on the surface and left in the field. Despite the non-diagnostic nature of Location 273, the site represents a spatially discrete cluster of pre-contact Aboriginal artifacts; given this the information potential and cultural value of Location 273 was deemed to be significant. As a result, ***further Stage 3 archaeological assessment is recommended for Location 273*** *prior to any ground disturbance activities in the area (Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1a.i, Government of Ontario 2011).*

Prior to conducting the field work, the area will need to be re-ploughed and allowed to weather for the controlled surface collection of artifacts. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil. Test units should be excavated as detailed in Table 3.1, small pre-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

5.219 Location 274

The Stage 2 assessment of Location 274 resulted in the recovery of an isolated pre-contact Aboriginal utilized flake. Given the isolated nature of this recovery, the information potential and cultural value of Location 274 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 274*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.220 Location 275

The Stage 2 assessment of Location 275 resulted in the recovery of an isolated pre-contact Aboriginal piece of chipping detritus. Given the isolated nature of this recovery, the information potential and cultural value of Location 275 was judged to be low. As a result, the site is considered to be sufficiently documented and ***no further archaeological assessment is recommended for Location 275*** *(Standards and Guidelines for Consultant Archaeologists, Section 2.2 Standard 1, Government of Ontario 2011).*

5.221 Location 276

The Stage 2 assessment of Location 276 resulted in the recovery of a scatter of mid to late 19th century historic Euro-Canadian artifacts. The presence of more than 20 artifacts dating the period of use prior to 1900 lends cultural heritage value or interest to the site; these artifacts include the previously discussed whiteware and ironstone ceramics. Based on this consideration, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation

as per Section 2.2 Standard 1c of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. Given this, ***it is recommended that Location 276 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 MTCS' Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area will need to 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 systematic grid and should be excavated by hand to a depth of five centimetres within the subsoil.

Test units should be excavated as detailed in Table 3.1, small pre-contact and post-contact sites. The test units should be excavated at five metre intervals with 20% infill units in areas of interest around the site (Standards and Guidelines for Consultant Archaeologists, Section 3.2.3 Table 3.1, Government of Ontario 2011).

Site specific land registry research to supplement the previous background study concerning the 19th century land use and occupation history specific to Location 276 should also be conducted as part of the Stage 3 assessment.

5.222 Summary of Recommendations

A summary of the above detailed recommendations is provided in the below tables. Following the consolidation of field locations a total of 221 recommendations are made including 148 locations not recommended for further Stage 3 assessment and 73 locations recommended for further Stage 3 assessment. Sites recommended for Stage 3 have been registered with the MTCS; Borden registration numbers are provided below.

Table 1: Summary of Recommendations

Cultural Affiliation	***Sites Recommended for Stage 3***	***Site Not Recommended for Stage 3***
Pre-contact Aboriginal	*45*	*142*
Historic Euro-Canadian	*27*	*6*
Multi-component	*1*	*0*
Total	***73***	***148***

Table 2: Jericho Wind Energy Project Recommendations for Further Stage 3 Archaeological Assessment

Location Number	Cultural Affiliation	Dimensions	Stage 3 Recommendation	Borden Number	Stage 3 Unit Strategy
1	Historic Euro-Canadian	40 m X 25 m	Yes	AgHl-41	5x5 metre grid with 20% infill
2	Pre-contact Aboriginal	Isolated find	No		
3	Pre-contact Aboriginal	Isolated find	No		
4	Pre-contact Aboriginal	20 m X 20 m	No		
5	Pre-contact Aboriginal	60 m X 30 m	No		
6	Pre-contact Aboriginal	95 m X 30 m	No		
7	Pre-contact Aboriginal	65 m X 40 m	No		
8	Pre-contact Aboriginal	175 m X 90 m	Yes	AhHl-76	
9	Pre-contact Aboriginal	Isolated find	No		
10	Pre-contact Aboriginal	Isolated find	No		
11	Pre-contact Aboriginal	80 m X 65m	No		
12	Historic Euro-Canadian	78 m X 25 m	Yes	AgHl-13	5x5 metre grid with 20% infill
13	Pre-contact Aboriginal	22 m X 12 m	No		
14	Pre-contact Aboriginal	10 m X 1 m	No		
15	Pre-contact Aboriginal	12 m X 1 m	No		
16	Pre-contact Aboriginal	Isolated find	No		
20	Pre-contact Aboriginal	50 m X 25 m	No		
21	Pre-contact Aboriginal	Isolated find	No		
22	Pre-contact Aboriginal	Isolated find	No		
23	Pre-contact Aboriginal	Isolated find	No		
24	Pre-contact Aboriginal	120 m X 100 m	No		
25	Pre-contact Aboriginal	12 m X 10 m	Yes	AhHl-77	5x5 metre grid with 20% infill
26	Pre-contact Aboriginal	Isolated find	No		
27	Pre-contact Aboriginal	125 m X 100 m	Yes	AhHl-78	5x5 metre grid with 20% infill, 10% around periphery
28	Pre-contact Aboriginal	110 m X 90 m	Yes	AhHl-79	5x5 metre grid with 20% infill, 10% around periphery
29	Pre-contact Aboriginal	2 m X 1 m	No		
30	Pre-contact Aboriginal	43 m X 18 m	No		
31	Pre-contact Aboriginal	2 m X 2 m	No		
32	Pre-contact Aboriginal	Isolated find	No		
33	Pre-contact Aboriginal	30 m X 25 m	Yes	AhHl-80	5x5 metre grid with

Location Number	Cultural Affiliation	Dimensions	Stage 3 Recommendation	Borden Number	Stage 3 Unit Strategy
					20% infill
34	Pre-contact Aboriginal	Isolated find	No		
35	Pre-contact Aboriginal	Isolated find	No		
36	Pre-contact Aboriginal	Isolated find	No		
37	Pre-contact Aboriginal	22 m X 20 m	No		
38	Pre-contact Aboriginal	22 m X 15 m	Yes	AgHl-14	5x5 metre grid with 20% infill
39	Pre-contact Aboriginal	Isolated find	No		
40	Pre-contact Aboriginal	Isolated find	No		
41	Pre-contact Aboriginal	Isolated find	No		
42	Pre-contact Aboriginal	Isolated find	No		
43	Pre-contact Aboriginal	Isolated find	No		
44	Historic Euro-Canadian	75 m X 45 m	Yes	AgHl-15	5x5 metre grid with 20% infill
45	Pre-contact Aboriginal	Isolated find	No		
46	Historic Euro-Canadian	100 m X 25 m	Yes	AgHl-16	5x5 metre grid with 20% infill
47	Pre-contact Aboriginal	Isolated find	No		
48	Pre-contact Aboriginal	7 m X 1 m	No		
49	Historic Euro-Canadian	Isolated find	No		
50	Pre-contact Aboriginal	105 m X 45 m	Yes	AgHl-17	5x5 metre grid with 20% infill, 10% around periphery
55	Pre-contact Aboriginal	Isolated find	No		
58	Pre-contact Aboriginal	60 m X 47 m	No		
59	Pre-contact Aboriginal	Isolated find	No		
60	Pre-contact Aboriginal	Isolated find	No		
61	Pre-contact Aboriginal	56 m X 41 m	Yes	AgHl-18	5x5 metre grid with 20% infill
62	Pre-contact Aboriginal	Isolated find	No		
63	Pre-contact Aboriginal	Isolated find	No		
64	Pre-contact Aboriginal	15 m X 6 m	No		
65	Pre-contact Aboriginal	7 m X 1 m	No		
66	Pre-contact Aboriginal	25 m X 16 m	No		
67	Pre-contact Aboriginal	7 m X 1 m	No		
68	Pre-contact Aboriginal	33 m X 10 m	No		
69	Pre-contact Aboriginal	12 m X 5 m	No		
70	Historic Euro-Canadian	165 m X 120 m	No		

Location Number	Cultural Affiliation	Dimensions	Stage 3 Recommendation	Borden Number	Stage 3 Unit Strategy
71	Historic Euro-Canadian	100 m X 70 m	Yes	AgHl-19	5x5 metre grid with 20% infill
77	Pre-contact Aboriginal	950 m X 430	Yes	AgHk-140	5x5 metre grid with 20% infill, 10% around periphery
78	Pre-contact Aboriginal	Isolated find	No		
79	Pre-contact Aboriginal	Isolated find	No		
80	Pre-contact Aboriginal	Isolated find	No		
81	Pre-contact Aboriginal	Isolated find	No		
82	Pre-contact Aboriginal	45 m X 45 m	Yes	AhHl-81	5x5 metre grid with 20% infill*
83	Pre-contact Aboriginal	Isolated find	No		
84	Pre-contact Aboriginal	Isolated find	Yes	AhHl-82	5x5 metre grid with 20% infill
87	Historic Euro-Canadian	56 m X 25 m	Yes	AgHl-42	5x5 metre grid with 20% infill
88	Pre-contact Aboriginal	Isolated find	No		
89	Pre-contact Aboriginal	10 m X 1 m	No		
90	Pre-contact Aboriginal	Isolated find	No		
91	Pre-contact Aboriginal	12 m X 1 m	No		
92	Pre-contact Aboriginal	58 m X 22 m	No		
93	Pre-contact Aboriginal	Isolated find	No		
94	Pre-contact Aboriginal	7 m X 1 m	No		
95	Pre-contact Aboriginal	10 m X 9 m	No		
96	Pre-contact Aboriginal	Isolated find	No		
97	Pre-contact Aboriginal	2 m X 1 m	No		
98	Pre-contact Aboriginal	50 m X 21 m	No		
99	Pre-contact Aboriginal	18 m X 13 m	No		
101	Pre-contact Aboriginal	405 m X 270 m	Yes	AgHk-141	5x5 metre grid with 20% infill, 10% around periphery
102	Pre-contact Aboriginal	15 m X 10 m	Yes	AgHk-142	5x5 metre grid with 20% infill
103	Pre-contact Aboriginal	25 m X 25 m	No		
104	Pre-contact Aboriginal	35 m X 25 m	No		
105	Pre-contact Aboriginal	62 m X 36 m	No		
106	Pre-contact Aboriginal	15 m X 15 m	No		
107	Pre-contact Aboriginal	Isolated find	No		
108	Pre-contact Aboriginal	Isolated find	No		
109	Pre-contact Aboriginal	Isolated find	No		

Location Number	Cultural Affiliation	Dimensions	Stage 3 Recommendation	Borden Number	Stage 3 Unit Strategy
110	Historic Euro-Canadian	75 m X 55 m	Yes	AhHl-83	5x5 metre grid with 20% infill
111	Pre-contact Aboriginal	Isolated find	No		
112	Pre-contact Aboriginal	53 m X 23 m	No		
113	Pre-contact Aboriginal	18 m X 6 m	No		
114	Pre-contact Aboriginal	28 m X 22 m	Yes	AgHl-20	5x5 metre grid with 20% infill
115	Pre-contact Aboriginal	10 m X 1 m	No		
116	Pre-contact Aboriginal	168 m X 132 m	Yes	AgHl-21	5x5 metre grid with 20% infill, 10% around periphery
117	Historic Euro-Canadian	33 m X 23 m	Yes	AgHl-22	5x5 metre grid with 20% infill
118	Pre-contact Aboriginal	65 m X 42 m	Yes	AgHl-39	5x5 metre grid with 20% infill, 10% around periphery
119	Multi-component	80 m X 70 m	Yes	AhHl-84	5x5 metre grid with 20% infill, 10% around periphery
121	Pre-contact Aboriginal	240 m X 165 m	Yes	AhHl-85	5x5 metre grid with 20% infill, 10% around periphery
126	Pre-contact Aboriginal	140 m X 100 m	Yes	AhHl-86	5x5 metre grid with 20% infill, 10% around periphery
130	Multi-component	670 m X 510 m	Yes	AhHl-87	5x5 metre grid with 20% infill, 10% around periphery
133	Pre-contact Aboriginal	Isolated find	No		
134	Pre-contact Aboriginal	Isolated find	No		
135	Historic Euro-Canadian	180 m X 100 m	Yes	AgHl-23	5x5 metre grid with 20% infill
136	Pre-contact Aboriginal	146 m X 63 m	Yes	AgHl-39	5x5 metre grid with 20% infill, 10% around periphery
140	Pre-contact Aboriginal	225 m X 195 m	Yes	AhHl-99	5x5 metre grid with 20% infill, 10% around periphery
142	Pre-contact Aboriginal	Isolated find	Yes	AhHl-88	5x5 metre grid with 20% infill*
143	Pre-contact Aboriginal	230 m X 61 m	Yes	AhHl-100	5x5 metre grid with 20% infill, 10% around periphery
147	Pre-contact Aboriginal	61 m X 46 m	Yes	AhHl-89	5x5 metre grid with 20% infill

Location Number	Cultural Affiliation	Dimensions	Stage 3 Recommendation	Borden Number	Stage 3 Unit Strategy
148	Historic Euro-Canadian	185 m X 113 m	Yes	AgHk-143	5x5 metre grid with 20% infill
149	Pre-contact Aboriginal	Isolated find	No		
150	Pre-contact Aboriginal	460 m X 340 m	Yes	AgHk-144	5x5 metre grid with 20% infill, 10% around periphery
151	Historic Euro-Canadian	60 m X 20 m	Yes	AgHl-43	5x5 metre grid with 20% infill
152	Pre-contact Aboriginal	159 m X 49 m	Yes	AhHl-90	5x5 metre grid with 20% infill*
153	Historic Euro-Canadian	100 m X 30 m	Yes	AgHk-145	5x5 metre grid with 20% infill
154	Pre-contact Aboriginal	150 m X 70 m	No		
155	Pre-contact Aboriginal	Isolated find	No		
156	Pre-contact Aboriginal	Isolated find	Yes	AgHl-24	5x5 metre grid with 20% infill*
157	Pre-contact Aboriginal	Isolated find	No		
158	Pre-contact Aboriginal	20 m X 20 m	No		
159	Historic Euro-Canadian	100 m X 85 m	Yes	AgHl-25	5x5 metre grid with 20% infill
160	Historic Euro-Canadian	65 m X 55 m	Yes	AgHl-26	5x5 metre grid with 20% infill
161	Historic Euro-Canadian	72 m X 52 m	Yes	AgHl-27	5x5 metre grid with 20% infill
162	Historic Euro-Canadian	100 m X 30 m	Yes	AhHl-91	5x5 metre grid with 20% infill
164	Historic Euro-Canadian	Isolated find	No		
165	Historic Euro-Canadian	135 m X 35 m	Yes	AgHl-28	5x5 metre grid with 20% infill
166	Pre-contact Aboriginal	Isolated find	No		
168	Pre-contact Aboriginal	12 m X 5 m	No		
169	Pre-contact Aboriginal	10 m x 10 m	No		
170	Historic Euro-Canadian	30 m x 30 m	Yes	AgHl-44	5x5 metre grid with 20% infill
171	Pre-contact Aboriginal	Isolated find	Yes	AgHl-30	5x5 metre grid with 20% infill*
172	Pre-contact Aboriginal	Isolated find	No		
173	Pre-contact Aboriginal	2 m X 1 m	No		
174	Pre-contact Aboriginal	52 m X 30 m	No		
175	Pre-contact Aboriginal	60 m X 42 m	No		
176	Pre-contact Aboriginal	30 m X 30 m	No		
177	Pre-contact Aboriginal	Isolated find	No		

Location Number	Cultural Affiliation	Dimensions	Stage 3 Recommendation	Borden Number	Stage 3 Unit Strategy
178	Pre-contact Aboriginal	Isolated find	No		
179	Historic Euro-Canadian	142 m X 52 m	Yes	AgHl-31	5x5 metre grid with 20% infill
180	Pre-contact Aboriginal	Isolated find	Yes	AgHl-32	5x5 metre grid with 20% infill*
181	Pre-contact Aboriginal	77 m X 28 m	No		
182	Pre-contact Aboriginal	20 m X 20 m	No		
183	Pre-contact Aboriginal	11 m X 2 m	No		
184	Pre-contact Aboriginal	19 m X 1 m	Yes	AhHl-92	5x5 metre grid with 20% infill*
185	Pre-contact Aboriginal	Isolated find	No		
186	Pre-contact Aboriginal	10 m X 10 m	No		
187	Pre-contact Aboriginal	8 m X 1 m	No		
188	Pre-contact Aboriginal	Isolated find	No		
189	Pre-contact Aboriginal	35 m X 30 m	No		
190	Pre-contact Aboriginal	Isolated find	No		
191	Pre-contact Aboriginal	60 m X 46 m	No		
193	Pre-contact Aboriginal	82 m X 50 m	Yes	AgHk-146	5x5 metre grid with 20% infill, 10% around periphery
196	Pre-contact Aboriginal	175 m X 50 m	Yes	AgHk-147	5x5 metre grid with 20% infill, 10% around periphery
197	Pre-contact Aboriginal	25 m X 3 m	Yes	AgHk-148	5x5 metre grid with 20% infill*
198	Pre-contact Aboriginal	Isolated find	No		
199	Pre-contact Aboriginal	Isolated find	Yes	AgHk-149	5x5 metre grid with 20% infill*
200	Pre-contact Aboriginal	Isolated find	No		
204	Pre-contact Aboriginal	Isolated find	No		
207	Pre-contact Aboriginal	140 m X 29 m	No		
209	Pre-contact Aboriginal	Isolated find	No		
210	Pre-contact Aboriginal	Isolated find	No		
211	Pre-contact Aboriginal	6 m X 1 m	No		
212	Pre-contact Aboriginal	8 m X 1 m	No		
213	Pre-contact Aboriginal	50 m X 8 m	No		
214	Pre-contact Aboriginal	20 m X 18 m	No		
215	Pre-contact Aboriginal	Isolated find	Yes	AgHl-33	5x5 metre grid with 20% infill*
216	Pre-contact Aboriginal	100 m X 100 m	Yes	AhHl-93	5x5 metre grid with 20% infill, 10% around

Location Number	Cultural Affiliation	Dimensions	Stage 3 Recommendation	Borden Number	Stage 3 Unit Strategy
					periphery
218	Pre-contact Aboriginal	34 m X 16 m	No		
219	Pre-contact Aboriginal	Isolated find	No		
220	Pre-contact Aboriginal	13 m X 1 m	No		
221	Historic Euro-Canadian	52 m X 30 m	Yes	AgHl-40	5x5 metre grid with 20% infill
222	Pre-contact Aboriginal	Isolated find	No		
223	Pre-contact Aboriginal	Isolated find	No		
225	Pre-contact Aboriginal	Isolated find	Yes	AhHl-94	5x5 metre grid with 20% infill*
226	Pre-contact Aboriginal	20 m X 20 m	Yes	AhHl-95	5x5 metre grid with 20% infill
227	Pre-contact Aboriginal	64 m X 50 m	No		
236a	Pre-contact Aboriginal	Isolated find	No		
236b	Pre-contact Aboriginal	Isolated find	No		
238	Pre-contact Aboriginal	11 m X 1 m	No		
239	Pre-contact Aboriginal	50 m X 25 m	No		
240	Pre-contact Aboriginal	Isolated find	Yes	AgHk-151	5x5 metre grid with 20% infill*
241	Pre-contact Aboriginal	19 m X 10 m	Yes	AgHl-34	5x5 metre grid with 20% infill
242	Historic Euro-Canadian	60 m X 55 m	Yes	AgHl-35	5x5 metre grid with 20% infill
243	Pre-contact Aboriginal	87 m X 31 m	No		
244	Pre-contact Aboriginal	48 m X 15 m	No		
245	Pre-contact Aboriginal	125 m X 71 m	Yes	AhHk-149	5x5 metre grid with 20% infill, 10% around periphery
246	Pre-contact Aboriginal	Isolated find	No		
247	Historic Euro-Canadian	116 m X 70 m	Yes	AgHl-36	5x5 metre grid with 20% infill
248	Pre-contact Aboriginal	Isolated find	No		
249	Historic Euro-Canadian	83 m X 63 m	Yes	AgHl-45	5x5 metre grid with 20% infill
250	Historic Euro-Canadian	83 m X 27 m	Yes	AgHk-156	5x5 metre grid with 20% infill
251	Pre-contact Aboriginal	Isolated find	No		
252	Pre-contact Aboriginal	Isolated find	No		
253	Pre-contact Aboriginal	Isolated find	No		
254	Pre-contact Aboriginal	223 m X 57 m	Yes	AhHl-101	5x5 metre grid with 20% infill, 10% around

Location Number	Cultural Affiliation	Dimensions	Stage 3 Recommendation	Borden Number	Stage 3 Unit Strategy
					periphery
255	Pre-contact Aboriginal	23 m X 16 m	No		
256	Pre-contact Aboriginal	56 m X 32 m	No		
257	Pre-contact Aboriginal	Isolated find	No		
258	Pre-contact Aboriginal	Isolated find	No		
259	Pre-contact Aboriginal	Isolated find	No		
260	Pre-contact Aboriginal	Isolated find	No		
261	Pre-contact Aboriginal	Isolated find	No		
262	Historic Euro-Canadian	30 m X 30 m	Yes	AgHl-37	5x5 metre grid with 20% infill
263	Pre-contact Aboriginal	Isolated find	No		
264	Historic Euro-Canadian	115 m X 100 m	Yes	AgHl-46	5x5 metre grid with 20% infill
265	Pre-contact Aboriginal	57 m X 37 m	No		
266	Pre-contact Aboriginal	114 m X 77 m	Yes	AgHk-157	5x5 metre grid with 20% infill
267	Historic Euro-Canadian	15 m X 10 m	No		
268	Pre-contact Aboriginal	35 m X 32 m	Yes	AgHk-158	5x5 metre grid with 20% infill
269	Pre-contact Aboriginal	12 m X 7 m	No		
270	Historic Euro-Canadian	Isolated find	No		
271	Historic Euro-Canadian	121 m X 96 m	No		
272	Pre-contact Aboriginal	10 m X 1 m	No		
273	Pre-contact Aboriginal	45 m X 44 m	Yes	AhHl-96	5x5 metre grid with 20% infill
274	Pre-contact Aboriginal	Isolated find	No		
275	Pre-contact Aboriginal	Isolated find	No		
276	Historic Euro-Canadian	75 m X 65 m	Yes	AgHk-154	5x5 metre grid with 20% infill

**indicates possible single component Paleo-Indian or Early Archaic site, may require a minimum of 20% units screened through 3 mm hardware cloth*

5.223 Stage 3 Assessment Strategies

The recommended Stage 3 assessments should include the conducting and mapping of controlled surface pick-up surveys and the hand excavation of a series of one-metre square test units. Each one metre test unit should be excavated into the first five centimetres of subsoil with all soil screened through six millimetre hardware cloth to facilitate the recovery of small artifacts. The subsoil surface of each unit should be shovel shined, trowelled and examined for any evidence of subsurface cultural features prior to backfilling. Any subsurface cultural features observed should be recorded, photo-documented, and covered by geo-textile cloth prior to backfilling.

Stage 3 test unit placement strategies have been included in each recommendation above, where appropriate; they have also been listed in Table 329.

In the cases of sites associated with Paleo-Indian or Early Archaic time periods, at least 10% of the test units should be screened through three millimetre hardware cloth if excavated in heavy clay soil, and at least 20% if excavated in sandy soil.

For sites with an Historic Euro-Canadian component, further archival research should be conducted to supplement the Stage 1 background study concerning the land use and occupation history specific to that location.

On sites that have a Pre-contact Aboriginal component, there should be engagement with First Nations groups expressing an interest in the archaeological resources of the area.

5.224 Summary

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 (Government of Ontario 1990b) and may not be altered, or have artifacts removed, except by a person holding an archaeological licence.

The MTCS is asked to provide NEEC with a letter concurring with the recommendations presented herein.

Based on the information contained in the report, the ministry is satisfied that the fieldwork and reporting for the archaeological assessment are consistent with the ministry's 2011 Standards and Guidelines for Consultant Archaeologists and the terms and conditions for archaeological licences. This report has been entered into the Ontario Public Register of Archaeological Reports. Please note that the ministry makes no representation or warranty as to the completeness, accuracy or quality of reports in the register.

Should you require any further information regarding this matter, please feel free to contact me.

Sincerely,

Ian Hember
Archaeology Review Officer

c. Thomas Bird, NextEra
Marc Rose, AECOM
Vic Schroter, Ministry of the Environment

Appendix C2. Additional Agency Comments

Aboriginal Affairs and
Northern Development Canada

From:	Hernandez, Joselen on behalf of SharedMailbox, JERICHO-WIND
To:	Bob Waldon (rdwaldon@bedfordC4.com)
Cc:	Dudek, Derek; Groffman, Ross
Subject:	FW: Request for consultation information - Jericho Wind Energy Centre
Date:	Monday, August 06, 2012 9:21:31 AM

Please see below…

Josie

From: Allison Berman [mailto:Allison.Berman@aadnc-aandc.gc.ca]
Sent: Monday, July 30, 2012 3:52 PM
To: SharedMailbox, JERICHO-WIND
Subject: Request for consultation information - Jericho Wind Energy Centre

Hello Derek,

Your letter was forwarded to me by Mr. Marc-Andre Millaire of Aboriginal Affairs and Northern Development (AANDC), who does not require notification of your project. If you are contacting AANDC as a request for Aboriginal consultation information, please let me know, and I will be happy to provide it.

Please note that future requests for Aboriginal consultation information from AANDC, can be submitted directly to the following mailbox: UCA-CAU@aadnc-aandc.gc.ca. To facilitate a more timely response, specify in your communication that you would like an '**Aboriginal consultation information response**' from the Consultation Information Service.

kind regards,

Allison

Allison Berman
Regional Subject Expert for Ontario
Consultation and Accommodation Unit
Aboriginal Affairs and Northern Development Canada
300 Sparks Street, Room 205,
Ottawa, ON K1A 0H4
Tel: 613-943-5488

Ausable Bayfield
Conservation Authority

Owen, Jennifer

Subject: RE: NextEra BGJ wind projects - follow-up from Aug. 10 meeting

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From: Deschamps, Vince
Sent: Monday, August 16, 2010 12:04 PM
To: gcade@abca.on.ca; abicknell@abca.on.ca
Cc: Rose, Marc; Cushing, Julia; Williams, Melanie D.; Tom Bird
Subject: NextEra BGJ wind projects - follow-up from Aug. 10 meeting

Hi Geoff and Andrew,

Thank for you very much for meeting with Tom Bird and me last week with regards to NextEra Energy Canada's Bluewater, Goshen and Jericho wind energy centres. As we discussed, I'm following up our meeting with this email to provide you with a list of the constraints that we have been using to guide the preliminary turbine alignment to date, as well as to make a formal request for data from the ABCA. To date, the information that we have sourced for our constraints mapping has relied upon the LIO and MNR, NHIC and NRVIS databases. Natural Heritage features that we have mapped include:

- Areas of Natural and Scientific Interest – Earth and Life Sciences
- Provincially and Locally Significant Evaluated Wetlands
- Waterline (rivers)
- Waterpoly (lakes)
- Wooded Areas
- Environmentally Sensitive Areas (ESA)
- Wintering Areas (Deer yards and Bat Hibernacula)
- Conservation Areas
- NHIC Rare Species data

In addition, we have also included anthropogenic features such as roads, utility lines (Hydro and pipelines), railways, transmission corridors, airports, buildings, towers, etc. In our discussion last week, you confirmed that ABCA has the data that we are looking for with regards to aquatic environments. As such, we would like to move forward with our data request to ABCA for these data. Specifically, the information that we are requesting includes:

- Water quality
- Benthics
- Fisheries
- Generic regulation mapping (including floodplain mapping)
- Stream flow (if available and/or different from the Water Survey of Canada)
- Any available terrestrial information that might not be available through the MNR/LIO database (e.g., ESAs, significant species).

If it's any help in isolating the data, I can forward a shape file with the project areas. We don't need the information itself to be mapped, but please ensure that the coordinates are included so that we can do that mapping on our end. As I mentioned, we are following up with the SCRCA to make a similar request for data.

You may also want to note that updated versions of the draft Project Description Report (PDR) are posted regularly at: http://www.canadianwindproposals.com/

In terms of providing a quote for the cost of providing the data, you can send the quote and any invoices to my attention at the address below. Please quote project number 60155032. Can you give me an idea of when the data will be available?

Many thanks Geoff and Andrew, please feel free to contact me if you have any questions. I look forward to working together with you on the projects and will be sure to keep you informed as they progress.

Kind regards,

Vince

Vince Deschamps M.Sc., MCIP, RPP
Senior Environmental Planner
Environment
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C 226.979.1149
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www.aecom.com

Memorandum

To	File	Page	1
CC	Vince Deschamps		
Subject	NextEra Waterbodies Component – Agency Consultation		
From	Nicola Lower and Sarah Aitken		
Date	May 5, 2011	Project Number	60156395

Nicola Lower and Sarah Aitken visited Ausable-Bayfield Conservation Authority (ABCA) and St Clair Region Conservation Authority (SCRCA) on May 3rd 2011. We met with the following staff during these meetings:

Andrew Bicknell, Regulations Co-ordinator, ABCA
Geoff Cade, Supervisor of Water & Planning, ABCA
Tracey Boitson, GIS/CAD Information Systems Specialist, ABCA
Dallas Cundick, Environmental Planner/Regulations Officer, SCRCA

1. Purpose of Visit

To review status of background data available within the three project areas (Goshen, Bluewater, Jericho); To obtain outstanding natural heritage background data; To review proposed aquatic work plan with CAs; To establish consultation process with CAs on the work program to aide in the permitting process.

2. Summary of ABCA Visit

We presented preliminary turbine layouts for all three project areas, and compared areas to ABCA Regulation mapping. We identified that there was a need to obtain accurate jurisdictional (watershed) boundaries. We identified the preliminary locations of several turbines in an area of floodplan (Thedford Klondyke floodplain). Current CA Regulations do not permit any development in these areas. However, staff did acknowledge that they do not have a strong standing or experience on the impact of wind power development and therefore some turbine placements may be permitted. Although it was noted that the related infrastructure, transmission lines and construction footprint would potentially pose the greater impact in such Regulated areas, and such developments are currently not permitted.

It was noted that the number of turbines would potentially result in a large number of permits and this could result in a significant timeline to review. AECOM ecologists discussed the idea of a blanket permit and this was positively received, but not agreed to as it will depend on final turbine layouts and site specific conditions. We discussed the format of such a blanket permit and AECOM ecologists will

be developing generic standards for a number of parameters, such as widths of road corridors, watercrossing, transmission line installation, and associated mitigation and restoration plans. It was agreed that all watercourse crossings were to be culverts, either permanent or temporary, rather than bridge structures. If we require review of the content of this report before final submission of the blanket permit, there will be a fee associated although ABCA has not determined this fee schedule yet.

The CA advised that turbines (including the buffer zone) should stay out of the Regulated Areas. Special attention should be paid to the Thedford-Klondyke floodplain (geotechnical/regulation issues), as well significant valley lands (slope stability issues, protected areas, natural hazard). ABCA noted that if site visits were required to assess impacts (i.e. turbine placements in regulated areas), this would significantly increase the review time for the permitting process.

There is a need to overlay Natural Heritage features, topography and CA regulation mapping to allow for appropriate constraint mapping. ABCA can provide the following:

- ABCA regulation map
- Jurisdictional boundary
- Hazards mapping
- Locally significant features
- Drain classification
- Fisheries info/thermal regimes
- SAR and water quality (if available)

ABCA requires a fee to provide this data and will be providing a cost estimate for approval.

ABCA stated that thermal regime of the watercourse along with habitat mapping would be critical to assessment of impacts, and fish community data would only be required if there was an absence of background data. ABCA have a Level 2 Agreement with Department of Fisheries and Oceans and can review applications for permits under the *Fisheries Act*. The CAs role in this project would largely be related to fisheries, aquatic and floodplain requirements. ABCA also envisage that the greatest impacts to watercourses are likely to arise from associated infrastructure rather than the turbines themselves.

It was noted that ABCA requirements may be very different to Ministry of the Environment (MOE) and they should also be fully consulted on their requirements under the REA.

3. Summary of SCRCA Visit

Some data has already been provided by SCRCA and the preliminary turbine layouts for Jericho were reviewed.

SCRCA agreed to a blanket permit with the same generic standards and mitigation, along with site-specific details where necessary. SCRCA would conduct site visits to review site specific conditions, possibly at the same time as AECOM ecologists. It was noted that fish community assessments are unlikely to be required, unless requested by MOE and MNR.

SCRCA will screen for Species at Risk when the turbine layouts are finalized.

SCRCA will provide AECOM with thermal regimes for watercourses, watercourse names, and locally significant areas.

There is a fee associated with permitting process and it was noted that current fees are $50 per directional drill site and $250 per culvert crossing.

4. Ministry of the Environment

After the meetings with the CA's Nicola Lower and Sarah Aitken contacted Shannon McNeil with MOE (May 5 2011) to follow-up with guidance previously provided regarding the waterbodies component. MOE confirmed that their process is completely process to that of the CA's and MNR and therefore requirements may differ. Workplans for the MOE will at the very least need to meet the basic REA guidelines. MOE will not provide information on the level of detail required this is down to the proponents professional opinion. Ecology staff need to ensure they have sufficient level of detail to provide MOE with enough information to assess negative impacts and the suggested mitigation. MOE are highly unlikely to request additional information (for example, more field surveys), provided the proponent has provided a comprehensive review of the site conditions, impacts and mitigation. MOE stated that the process has developed from that of the EA process, therefore they are very much focused on the 'big picture'.

5. Next Steps

The following outlines the next steps for the Waterbodies/Natural Heritage component of the NextEra Wind Energy Project.

- AECOM staff are working with the Conservation Authorities and MNR to obtain data/mapping
- Nicola and Sarah are finalizing the waterbody workplan for submittal and review by the agencies
- Prepare for field investigations and obtain any required permits to conduct studies.

AECOM
50 Sportsworld Crossing Road, Suite 290 519.650.5313 tel
Kitchener, ON, Canada N2P 0A4 519.650.3424 fax
www.aecom.com

Communication Record

Date	November 22, 2011	Time	11:30 a.m.
Between	Sarah Aitken	and	Geoff Cade
	AECOM		Ausable-Bayfield Conservation Authority
Telephone #	519-235-2610	Project #	60155032
Project Name	NextEra Wind Energy Project		
Subject	Re: Conservation Authorities Act and setback requirements		

I spoke with the Supervisor of Water and Planning - Geoff Cade from Ausable Bayfield Conservation Authority (ABCA) on November 21, 2011. The purpose of the phone call was to discuss the appropriate use of the CA setbacks as outlined in Ontario Regulation 147/06 Section (2b).

I informed him of the setbacks we have been using as outlined in the Technical Guide to Renewable Energy Approvals section 5.1 Setbacks of turbines located 30 m from a watercourse and the development of roads and collection lines within 30 m of a waterbody. I also indicated that we were implementing the 15 m setback outlined in O.Reg 147/06.

Geoff was concerned with the setbacks developed by MOE as these do not take into account local conditions, such as flood lines and potential erosion issues. When developing within the regulation limit, each setback will need to be assessed on site specific conditions. He indicated that for some sites a 30 m setback may not be enough to ensure there will be no flooding/erosion issues caused by the development. This will need to be done through a site visit with ABCA to each site we would like to develop within the Regulation Limit.

He also indicated that for a project of this size, it is likely that the permitting process will be lengthy.

Comments

AECOM
50 Sportsworld Crossing Road, Suite 290 519.650.5313 tel
Kitchener, ON, Canada N2P 0A4 519.650.3424 fax
www.aecom.com

Minutes of Meeting

Date of Meeting	March 16, 2012	Start Time	9:00 a.m.	Project Number	60155032
Project Name	NextEra Wind Energy Centre				
Location	Conference Call				
Regarding	Jericho Transmission Line Crossing of Ausable River				
Attendees	Tom Bird (TB) – NextEra Geoff Cade (GC)– ABCA Marc Rose (MR)– AECOM Nicola Lower (NL)– AECOM Jessica Mackay Ward (JMW) – AECOM Sarah Aitken (SA)- AECOM				
Distribution					
Minutes Prepared By	Sarah Aitken				

PLEASE NOTE: If this report does not agree with your records of the meeting, or if there are any omissions, please advise, otherwise we will assume the contents to be correct.

Transmission Line Permitting

	Action
• ABCA does not see any regulatory issue with the transmission line constructed within the existing road allowance (Thompson Road) • ABCA does not expect any impacts on erosion or flooding from the placement of poles. • Construction of a transmission line within the ABCA regulation limit would be considered minor works and may not trigger permitting under the CA Act	Provide transmission line layouts and description of works to ABCA for them to determine if a permit is required (MR)
• Design Considerations: o centre the water body between the two transmission line poles o keep poles as far back from Ausable River as possible	
• ABCA preference is for Transmission line to be placed within existing road allowance compared to cutting through a natural area	
• If vegetation removal is required, ABCA is not sure whether that will trigger hazard policy (have to look at clear cutting versus trimming tops of trees). Will need to consider the long term goals of the project i.e. maintenance of easement	
• Under the Green Energy Act, ABCA will only be formally looking at these projects with regard to erosion, floodplain, and natural hazards. ABCA defer's to MNR and MOE on natural heritage issues. ABCA will provide advice with	

regards to the ANSI, PSW, but they are not in a position of authority on these things.	
• It is possible that ABCA will have a concern re: impacts to hydrological functions of the wetland, flooding, etc.	
• ABCA defers to MNR re: trimming of trees next to the road allowance, but ABCA does not have an issue with the loss along an existing road allowance when compared to clear-cutting to create a new crossing.	
• G. Cade could not comment on construction of transmission line through ABCA owned land, this would need to be a discussion with the ABCA General Manager.	ABCA (GC) to send shapefiles with ABCA owned lands to JMW/SA

ABCA 147/06 Permitting for Bluewater, Goshen and Jericho

	Action
• ABCA ask that we provide them with information as soon as possible regarding locations of turbines, sub stations, laydown areas, road crossings, collection line crossings. • ABCA will then be able to conduct a cursory review and highlight major issues/red flags • GC noted that ABCA is a relatively small authority and with the number of wind power projects that are in process, there could be bottlenecks in review times, Recommended that information on the layouts are submitted in good time and as early as possible.	Arrange meeting with ABCA to discuss permitting process (MR/TB)
• ABCA will be reviewing permits in regards to the *Fisheries Act* as well as the CA Regulation	

Wong Ken, Michelle

Subject: FW: Jericho Study Area Data Request
Attachments: JerichoData.zip; JerichoDataRequestResponse.pdf; Inv_2235_from_Ausable_Bayfi.pdf

From: Tracey Boitson [mailto:tboitson@abca.on.ca]
Sent: Thursday, July 05, 2012 3:36 PM
To: Aitken, Sarah
Cc: McKenna, Ryan
Subject: RE: Jericho Study Area Data Request

Sarah,

Here is the requested data and invoice.

Tracey McPherson née Boitson
GIS/CAD Information Systems Specialist
Ausable Bayfield Conservation Authority

From: Aitken, Sarah [mailto:Sarah.Aitken@aecom.com]
Sent: Tuesday, May 29, 2012 10:22 AM
To: tboitson@abca.on.ca
Cc: MacKay Ward, Jessica; Owen, Jennifer
Subject: Jericho Study Area Data Request

Hi Tracy,

As you know we are currently undertaking the Natural Heritage/Water bodies Assessments for the Jericho study area, on behalf of NextEra Energy Canada. As part of the Records Review process, we would like to request natural heritage and water bodies information relevant to the project. Since our last data request, NextEra has updated the wind energy centre boundaries and included a transmission line both east of the Ausable River to Haskett Road and we are looking for information (including GIS layers, if available) on the following within or near (approximately 120m) our updated study area (*please see attached map – the new updated Jericho study area.)* :

Fish records – data and fish sampling locations	Fish habitat information
Water quality data	Water quantity data
DFO drain classifications	Benthic invertebrate data
Rare species	Savannahs\Sand Barrens\Tallgrass Prairies
Area of Natural and Scientific Interest (ANSI)	Alvars
Wetlands (evaluated and unevaluated)	Conservation parks/Reserves
Woodlands	Mussel records
Valleylands	Watercourse thermal and flow regimes
Wildlife Habitat	Municipal drains
Percentage of Woodlands	Regulation limits

In addition, I would also like to request some additional data for the original study area (west of the Ausable River). I have included a map which shows the original study area and the data ABCA provided. Specifically if you could provide the DFO drain classifications and floodline mapping for the area west of the Ausable River as well, as this was not in our original data request. Also if you could include any recent fish records for the study area since the last data request that would be greatly appreciated, I have attached the map of fish record locations you sent us from the original data request.

I have attached a shapefile of the most up to date Jericho study area.

Please let me know if you have any questions.

Thank you,
Sarah

Sarah Aitken, B.Sc.(Hons.)
Aquatic Ecologist
Environment
D 519.650.8621 M 519.820.0944
sarah.aitken@aecom.com

AECOM
50 Sportsworld Crossing Road, Suite 290 *New*
Kitchener, ON N2P 0A4
T 519.650.5313 F 519.650.3424

AUSABLE BAYFIELD CONSERVATION

CREATING AWARENESS | TAKING ACTION

June 26, 2012

Sarah Aiken
Aecom
50 Sportsworld Crossing Rd, Suite 290
Kitchener, ON N2P 0A4

Adelaide Metcalfe

Bluewater

Central Huron

Huron East

Lambton Shores

Lucan Biddulph

Middlesex Centre

North Middlesex

Perth South

South Huron

Warwick

West Perth

Atten.: Sarah Aiken

Re: Information Request for NextEra study for Jericho Study Area

We have completed the data and information request for the Jericho Study Area with the boundary provided by Sarah Aitken on May 29, 2012, plus a 120 m buffer, and have this to offer:

- A shapefile of watercourses indicating Thermal Classification/Department of Fisheries and Oceans (DFO) Drain Classification and associated metadata file.
- A shapefile of Natural Heritage Features, mapped using 2006 photography, indicating community type and feature type. If there is a "1" in the Valleyland column of the attribute table it indicates the area is considered a Significant Valleyland. Valleylands, wetlands, woodlands etc. can all be extracted from this layer by selecting those attributed as "1" in their respective column.
- A shapefile of our Regulated Lands under O/Reg 147/06
- A shapefile of ABCA owned conservation lands
- A shapefile of the Regulatory Flood plain with both "Engineered" and "Estimated" regional flood limits. All limits are a representation only. For "Engineered" limits studies must be referred to obtain the flood elevation.
- SAR information is provided in attached table. **Also please be aware the Department of Fisheries and Oceans has identified critical habitat extents for fish and/or mussels designated as Endangered, Threatened or Extirpated on Schedule 1 for the federal SARA. In your study area critical habitat identified includes; the entire portion of the Ausable River as it enters and exits your study area as well as all open portions of the Hobb's-McKenzie Drain watershed.**
- A table of the mussel species found in the study area. Again please be aware in

Conservation ONTARIO Natural Champions

71108 Morrison Line, RR 3 Exeter, Ontario N0M 1S5
P: 519.235.2610 • F: 519.235.1963 • info@abca.on.ca • www.abca.on.ca

AUSABLE BAYFIELD CONSERVATION

CREATING AWARENESS | TAKING ACTION

your study area critical habitat identified includes; the entire portion of the Ausable River as it enters and exits your study area as well as all open portions of the Hobb's-McKenzie Drain watershed.

- A shapefile of our fishing locations and associated list of records in pdf format
- Benthic Summaries in the "Benthic Monitoring Program Summary Report 2000-2007"

For water quality information please refer to our Watershed Report Cards available on our website at http://www.abca.on.ca/reportcard.php. I have included a sub watershed layer at no charge to help relate to the report. We have approximately 9 specific sites we have sampled with different sample years, number of years sampled, and sample parameters. If you require more site specific Water Quality or Benthic information please contact Mari Veliz at our office.

Stream flow data can be obtained from the Water Survey of Canada.

The cost to acquire these 6 data layers and assembled information will be $660 plus tax. You will be required to accept conditions set out in an agreement for use of the data.

If you require any further information please do not hesitate to contact myself, Mari Veliz, or Geoff Cade at this office.

Sincerely,

Tracey McPherson

Tracey McPherson GISP
GIS/CAD Information System Specialist
Ausable Bayfield Conservation Authority

Cc. Geoff Cade, Supervisor of Water & Planning and Mari Veliz, Healthy Watersheds Coordinator Ausable Bayfield Conservation Authority

Adelaide Metcalfe

Bluewater

Central Huron

Huron East

Lambton Shores

Lucan Biddulph

Middlesex Centre

North Middlesex

Perth South

South Huron

Warwick

West Perth

Conservation ONTARIO Natural Champions

71108 Morrison Line, RR 3 Exeter, Ontario N0M 1S5
P: 519.235.2610 • F: 519.235.1963 • info@abca.on.ca • www.abca.on.ca

Canadian Broadcasting Corporation

Wong Ken, Michelle

From: Fajardo, Leo [Leo.Fajardo@fpl.com]
Sent: Friday, December 14, 2012 3:26 PM
To: eoliennes_windturbines@cbc.ca
Cc: Bird, Thomas; Faiella, Benjamin; Groffman, Ross
Subject: RE: Jericho Wind Energy Centre - Lambton County, ON
Attachments: ONJericho_NextEraEnergy_Telecommunications_Interference_Consultation_Rep....pdf

Canada Broadcasting Corporation:

Please find attached the request for review of the proposed Jericho Wind Energy Center in Lambton County. We are looking for specific feedback on the potential impact to your telecommunications operations.

Thank you for your consideration and timely response,

Leo Fajardo
Wind Farm Optimization Analyst
office (561) 304-5733
leo.fajardo@nexteraenergy.com

AECOM

Canadian Coast Guard

Wong Ken, Michelle

From: Fajardo, Leo [Leo.Fajardo@fpl.com]
Sent: Friday, December 14, 2012 2:21 PM
To: coordinator@dfo-mpo.gc.ca; Lee.Goldberg@dfo-mpo.gc.ca
Cc: Bird, Thomas; Groffman, Ross; Faiella, Benjamin
Subject: Jericho Wind Energy Centre - Lambton Shores County, ON
Attachments: ONJericho_NextEraEnergy_Telecommunications_Interference_Consultation_Report_2012-12-24.pdf

Canadian Coast Guard,

Please find the attached request for review for the proposed Jericho Wind Energy Centre located in Lambton Shores County, Ontario. We are looking for specific feedback on the potential impact to your telecommunications and radar operations,

Thank you for your consideration and timely response,

Leo Fajardo
Wind Farm Optimization Senior Analyst
office (561) 304-5733
leo.fajardo@windlogics.com

Canadian Environmental Assessment Agency

Canadian Environmental Assessment Agency

55 St-Clair Avenue East
9th Floor, Room 907
Toronto, Ontario
M4T 1M2

Agence canadienne d'évaluation environnementale

55 Avenue St-Clair Est
9ième étage, pièce 907
Toronto, Ontario
M4T 1M2

September 7, 2010

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

Dear Tom Bird,

Re: Jericho Wind Energy Centre, Lambton Shores, Lambton County, Ontario.

Thank you for sending us a Notice of a Proposal and Public Meeting of May 26, 2010 and providing us a website for downloading the Draft Project Description Report in relation to the above-noted project.

We understand that proposed renewable energy projects requiring a provincial Renewable Energy Approval (REA) are not subject to a provincial environmental assessment (EA) process. As a result, our office will not play a coordination role in relation to your proposed project and staff will not review the draft project description you provided. We typically act as the Federal Environmental Assessment Coordinator for project proposals that are subject to both a provincial EA and federal EA screening concurrently, or for federal EA comprehensive studies.

The requirements of the *Canadian Environmental Assessment Act* (the Act) may apply to your proposed project. The Act applies to federal authorities when they contemplate certain actions or decisions in relation to a project that would enable it to proceed in whole or in part. A federal environmental assessment (EA) may be required when a federal authority is the proponent of the project; provides financial assistance to the proponent; sells, leases or otherwise disposes of federal lands; or issues a permit, licence or any other approval as prescribed in the *Law List Regulations*.

You may wish to check with other potential federal authorities (if applicable) listed in the attachment to this letter about their potential federal EA interests or responsibilities. Please note that you may be advised to contact additional federal authorities based on the nature of your proposal and the environmental setting or may be asked for additional information about your proposal.

.../2

To better assist proponents in understanding the types of information that federal authorities may wish to receive, the Agency has developed an Operational Policy Statement, which provides guidance in preparing project descriptions. This document is available on the Agency's website at:
http://www.ceaa-acee.gc.ca/013/0002/ops_ppd_e.htm

Information on potential federal interests for each type of renewable energy project are identified in the Ontario Ministry of the Environment Renewable Energy Approval (REA) Guide which is found at:
http://www.ene.gov.on.ca/en/business/green-energy/proponents.php

If you have any questions regarding this correspondence, please contact me at 416-954-7357

Sincerely,

Amiel Blajchman
Project Manager
Canadian Environmental Assessment Agency
Ontario Region

Attachment

cc:
Petra Fisher, Ontario Renewable Energy Facilitation Office
May Lyn Trudelle, Environmental Assessment and Approvals Branch, Ontario Ministry of the Environment

.../3

List of Potentially Responsible/Interested Federal Authorities

Federal Authority	Potential EA Interest	Potential Other Interest	REA Plain Language Guide Reference
Correctional Services Canada	X		
Department of National Defence (Land Force Central Area and Defence Construction Canada)	X		
Environment Canada	X		P.44, 52, 61, 69
Fisheries and Oceans Canada	X		P. 43, 52, 61, 68
Health Canada	X		
Indian and Northern Affairs Canada	X		
Infrastructure Canada	X		
Natural Resources Canada	X		P. 45, 53, 62, 69
Parks Canada	X		P. 44, 52, 61, 69
Royal Mounted Police	X	X	P. 43
Transport Canada	X		P. 43, 68
Canadian Broadcasting Corporation		X	P. 43
National Defence (Radio Communication Systems and Air Traffic Control (ATC) Radar Systems)		X	

Canadian Wildlife Service

Owen, Jennifer

Subject: FW: ON NAT MAY 235-MH/02 Canadian Wildlife Service Contact

---

From: Goulet,Jeanette [Ontario]
Sent: Friday, June 10, 2011 1:45 PM
To: 'Olivia.Chung@aecom.com'
Cc: Wildlife Ontario/Faune Ontario
Subject: RE: ON NAT MAY 235-MH/02 Canadian Wildlife Service Contact

Hi Olivia,

This is in response to your request for information sent to Environment Canada's Canadian Wildlife Service - Ontario (CWS-ON), in relation to natural features and wildlife species in the area of Municipality of Bluewater, Huron East Township. We understand that your request is based on a direction within Ontario's Renewable Energy Approvals (REA) process (Ontario Regulation 359/09) for proponents to consult with CWS with respect to records relating to natural features and water bodies.

CWS-ON does not collect and maintain a comprehensive listing of publicly available records that relate to all wildlife, natural features, or water bodies on private lands in Ontario, however, the Ontario Ministry of Natural Resources' Natural Heritage Information Centre (NHIC) is recognized as the authoritative source of data on species and species at risk in Ontario. Therefore, we suggest you consult the NHIC, in Peterborough, for information on species at risk, which may be in the project area, and the local MNR district office closest to the project area, for site-specific information on natural features and more common wildlife species. The Ontario Breeding Bird Atlas is also a good source of information on bird species potentially breeding in your project area: http://www.birdsontario.org/atlas/index.jsp. The *Species at Risk Act* (SARA) Registry may also be useful to consult as it provides an updated list and profiles of Schedule 1 species (including habitat preferences and ranges), and recovery strategies or action plans which identify critical habitat: http://www.sararegistry.gc.ca.

Thank you,

Jeanette

Jeanette Goulet

Senior Environmental Assessment Specialist

Canadian Wildlife Service

Ontario Region

Environment Canada

4905 Dufferin Street

Toronto, ON M3H 5T4

jeanette.goulet@ec.gc.ca

Telephone 416-739-4960

Facsimile 416-739-5845

Government of Canada

Website www.ec.gc.ca

Jeanette Goulet

Spécialiste en evaluation énvironmentale

Service canadien de la faune

Région de l'Ontario

Environnement Canada

4905, rue Dufferin

Toronto (Ontario) M3H 5T4

jeanette.goulet@ec.gc.ca

Téléphone 416-739-4960

Télécopieur 416-739-5845

Gouvernement du Canada

Site Web www.ec.gc.ca

From: Chung, Olivia [mailto:Olivia.Chung@aecom.com]
Sent: Thursday, May 12, 2011 10:19 AM
To: Enviroinfo [NCR]
Subject: ON NAT MAY 235-MH/02 Canadian Wildlife Service Contact

Hi,

I'm currently conducting natural heritage assessment in the Municipality of Bluewater, Huron East Township, South Huron Townships, Municipality of Lambton Shores, Warwick and Brooke-Alvinston Townships, Lambton County that requires contacting the corresponding staff in Canadian Wildlife Service (CWS) for information about the nature features in the area. However, the "contact" and "search" function of the CWS website is broken. Could you please direct me to the appropriate contact(s) asap?

Regards

Olivia Chung

Environmental Engineer-In-Training

Olivia.Chung@aecom.com

AECOM

300 Town Centre Boulevard, Suite 300

Markham, Ontario, Canada L3R 5Z6

T 905-477-8400 ext 351 F 905-477-1456

www.aecom.com

AECOM

Department of
Fisheries and Oceans

Owen, Jennifer

Subject: RE: Species at risk records

From: Gibson, Dave [mailto:Dave.Gibson@dfo-mpo.gc.ca]
Sent: Thursday, April 05, 2012 9:55 AM
To: Lower, Nicola
Subject: RE: Species at risk records

Hi Nicola

Attached are some maps with the species at risk data I have. I have marked these in areas on the maps you sent me:

Area 1 Northern Brook Lamprey Special Concern under SARA and ESA

Area 2 Kidneyshell Mussel Endangered under SARA and ESA
Rainbow Mussel Threatened under ESA and likely to be listed federally this fall
Wavy-rayed Mussel Endangered under SARA and Threatened under ESA

Area 3 Rainbow Mussel Threatened under ESA and likely to be listed federally this fall
Wavy-rayed Mussel Endangered under SARA and Threatened under ESA

Area 4 Rainbow Mussel Threatened under ESA and likely to be listed federally this fall

Note: if site examination shows that appropriate habitat does not exist in these areas then this will be taken into consideration. If you are working outside the marked areas you can assume there are no aquatic species at risk.

Dave Gibson
A/Impact Assessment Biologist
Email/C. élec: dave.gibson@dfo-mpo.gc.ca

From: Lower, Nicola [mailto:Nicola.Lower@aecom.com]
Sent: Wednesday, April 04, 2012 2:27 PM
To: Gibson, Dave
Subject: Species at risk records

Hi Dave

I hope you are doing well.

After our discussion regarding species at risk during the site walk in Hyde Park last week, I have attached two maps of study areas for potential Wind Energy Centres in Huron County.

It would be really helpful if you could let me know if DFO has any species at risk data within these areas. We have contacted MNR and are in process of conducting habitat screenings to determine where species-surveys should be carried out. It would be useful to know if there are additional records that we are not aware of so we can incorporate these in our assessment.

Please let me know if you require further information.

Many thanks for your time.

Kind regards
Nicola

Nicola Lower, M.Sc., Ph.D.
Senior Fisheries Biologist
Environment

D: 519.650.8623
M: 519 502 2087
nicola.lower@aecom.com

AECOM
50 Sportsworld Crossing Road, Suite 290,
Kitchener, ON N2P 0A4, Canada
T 519.650.5313 F 519.650.3424
www.aecom.com

AECOM

Department of National Defense

Wong Ken, Michelle

From: Fajardo, Leo [Leo.Fajardo@fpl.com]
Sent: Friday, December 14, 2012 2:09 PM
To: MARIO.LAVOIE2@forces.gc.ca; windturbines@forces.gc.ca
Cc: Bird, Thomas; Groffman, Ross; Faiella, Benjamin
Subject: Jericho Wind Energy Centre - Lambton Shores County, ON
Attachments: Jericho_NextEraEnergy_Operations_and_Telecommunications_Interference_Consultation_Report_2012-12-14.pdf

Department of National Defense,

Please find the attached request for review for the proposed Jericho Wind Energy Centre located in Lambton Shores County, Ontario. We are looking for specific feedback on the potential impact to your operations, telecommunications and radars,

Thank you for your consideration and timely response,

Leo Fajardo
Wind Farm Optimization Senior Analyst
office (561) 304-5733
leo.fajardo@windlogics.com

Submit Comments to:

Leo Fajardo
Wind Farm Optimization Senior Analyst
NextEra Energy Resources, LLC
700 Universe Blvd.
Juno Beach, FL 33408
Phone: (561) 304-5733
Fax: (561) 691-7319
Email: leo.fajardo@nee.com

With CC to:

Mr. Thomas Bird
Project Manager, Environmental Services
NextEra Energy Canada, ULC
390 Bay Street, Suite 1720
Toronto, Ontario MH5 2Y2
Phone: (905) 335-4904 x15
Fax: (905) 335-5731
Email: Thomas.Bird@nee.com

AECOM

Environment Canada

Wong Ken, Michelle

From: Fajardo, Leo [Leo.Fajardo@fpl.com]
Sent: Friday, December 14, 2012 12:07 PM
To: weatherradars@ec.gc.ca; Carolyn.Rennie@ec.gc.ca
Subject: Jericho Wind Energy Centre - Lambton Shores County, ON
Attachments: ONJericho_NextEraEnergy_Telecommunications_Interference_Consultation_Report_2012-12-24.pdf

Environment Canada,

Please find the attached request for review for the proposed Jericho Wind Energy Centre located in Lambton Shores County, Ontario. We are looking for specific feedback on the potential impact to your telecommunications and radar operations,

Thank you for your consideration and timely response,

Leo Fajardo
Wind Farm Optimization Senior Analyst
office (561) 304-5733
leo.fajardo@windlogics.com

iServ

Wong Ken, Michelle

From: Fajardo, Leo [Leo.Fajardo@fpl.com]
Sent: Friday, December 14, 2012 3:14 PM
To: Mark Fox
Cc: Bird, Thomas; Faiella, Benjamin; Groffman, Ross
Subject: Jericho Wind Energy Centre - Lambton County, ON
Attachments: ONJericho_NextEraEnergy_Telecommunications_Interference_Consultation_Report_2012-12-24.pdf

iServ:

Please find attached the request for review of the proposed Jericho Wind Energy Center in Lambton County. We are looking for specific feedback on the potential impact to your telecommunications and radar operations.

Thank you for your consideration and timely response,

Leo Fajardo
Wind Farm Optimization Analyst
office (561) 304-5733
leo.fajardo@nexteraenergy.com

ISOC

Wong Ken, Michelle

From: Fajardo, Leo [Leo.Fajardo@fpl.com]
Sent: Friday, December 14, 2012 4:05 PM
To: spectrum.cwod@ic.gc.ca
Cc: Bird, Thomas; Groffman, Ross; Faiella, Benjamin
Subject: Jericho Wind Energy Centre - Lambton County, ON
Attachments: ONJericho_NextEraEnergy_Telecommunications_Interference_Consultation_Rep....pdf

ISOC (Central and Western Ontario District):

Please find attached the request for review of the proposed Jericho Wind Energy Center in Lambton County. We are looking for specific feedback on the potential impact to your telecommunications operations.

Thank you for your consideration and timely response,

Leo Fajardo
Wind Farm Optimization Senior Analyst
office (561) 304-5733
leo.fajardo@windlogics.com

City of London Regional
Water Supply Division

Owen, Jennifer

Subject: RE: Setbacks from LHWS easement

From: Henry, Andrew [mailto:AHenry@london.ca]
Sent: Tuesday, August 10, 2010 8:54 AM
To: Derek Dudek
Cc: Walker, John; Kirk, Erin
Subject: RE: Setbacks from LHWS easement

100' total width.

Easements are registered on title if you need verification, and we have copies on file.

A. J. Henry, P.Eng.
ahenry@london.ca

PLEASE NOTE that effective March 22, 2010 our office has relocated to 235 North Centre Road, London.

From: Derek Dudek [mailto:DDudek@IBIGroup.com]
Sent: Tuesday, August 10, 2010 8:47 AM
To: Henry, Andrew
Subject: RE: Setbacks from LHWS easement

Thanks again....is it 100' total width ....or 100' from centerline.

Derek

From: Henry, Andrew [mailto:AHenry@london.ca]
Sent: Tuesday, August 10, 2010 8:37 AM
To: Derek Dudek
Subject: RE: Setbacks from LHWS easement

The easement is mostly 30.48m (100ft) in width, but there is a few areas where it varies due to local conditions.

A. J. Henry, P.Eng.
ahenry@london.ca

PLEASE NOTE that effective March 22, 2010 our office has relocated to 235 North Centre Road, London.

From: Derek Dudek [mailto:DDudek@IBIGroup.com]
Sent: Tuesday, August 10, 2010 8:30 AM
To: Henry, Andrew
Subject: RE: Setbacks from LHWS easement

Thanks Andrew,
One more question....is there an consistent width of this easement....or does it vary in width throughout it's course?

Derek

From: Henry, Andrew [mailto:AHenry@london.ca]
Sent: Tuesday, August 10, 2010 7:44 AM
To: Derek Dudek
Cc: Walker, John; Kirk, Erin
Subject: RE: Setbacks from LHWS easement

Derek;

Neither the Lake Huron or Elgin Area Primary Water Supply Systems have explicit setback requirements beyond the existing easement.

Please note that among other restrictions, permanent structures cannot be erected within the easement and access to the easement, pipeline and associated infrastructure must be maintained at all times.

Please let me know if you have any further questions or comments.

Best regards,

Andrew J. Henry, P.Eng.
Division Manager, Regional Water Supply
Lake Huron & Elgin Area Water Supply Systems
c/o City of London Regional Water Supply Division
235 North Centre Rd., Suite 200
London, Ontario N5X 4E7
T: 519.930.3505 ext.1355
F: 519.474.0451
E: ahenry@london.ca
www.watersupply.london.ca

PLEASE NOTE that effective March 22, 2010 our office has relocated to 235 North Centre Road, London.

From: Derek Dudek [mailto:DDudek@IBIGroup.com]
Sent: Monday, August 09, 2010 2:07 PM
To: Henry, Andrew
Subject: Setbacks from LHWS easement

Hi Andrew,
Just left you a message re: this issue.
My clients are working on background environmental studies for a wind farm project near grand bend and wanted information on what if any setbacks there are from the LHWS easement.
Joe Heyninck from our office didn't think there were any specific setbacks. Can you confirm this?

Derek Dudek MCIP, RPP

IBI Group
Suite 203 - 350 Oxford Street West
London ON N6H 1T3 Canada

tel 519 472 7328 ext 230
cell 519 318 0237
fax 519 472 9354
email ddudek@ibigroup.com
web www.ibigroup.com

AECOM

Ministry of Attorney General

Ministry of the
Attorney General

Crown Law Office
Civil Law

720 Bay Street
8th Floor
Toronto ON M7A 2S9

Tel/Tél: (416) 326-4930
Fax/Téléc.: (416) 326-4181

Ministère du
Procureur général

Bureau des avocats
de la Couronne Droit civil

720 rue Bay
8e étage
Toronto ON M7A 2S9

Please refer to File
S.V.P. Se référer au dossier
No.

Ontario

June 16, 2010

VIA REGULAR MAIL

Tom Bird
Environmental Services Project Manger
NextEra Energy Canada, ULC
5500 North Services Road, Suite 205
Burlington, ON L7L 6W6

Dear Mr. Bird:

Re: Jericho Wind Energy Centre - Municipality of Lambton Shores, Lambton Goshen Wind Energy Centre – Municipalities of Bluewater & South Huron Bluewater Wind Energy Centre – Municipality of Bluewater

Thank you for your Notices, received in our office June 15, 2010. Please be advised that I have not been the contact person on these inquiries for over a year and my name should be removed from your mailing list.

Inquiries and communications such as yours are handled by Aboriginal and Ministry Relationships Branch of the Ministry of Aboriginal Affairs.

I have forwarded your letter to that Branch and ask that you direct further questions to that office. The address is:

Ministry of Aboriginal Affairs
160 Bloor Street East, Suite 900
Toronto, ON M7A 2E6
Tel.: 416-326-4740

Yours truly,

for

E. Ria Tzimas
Counsel
Ministry of the Attorney General
Crown Law Office – Civil

AECOM

Ministry of the Environment

Owen, Jennifer

From: Cushing, Julia
Sent: Monday, July 26, 2010 11:07 AM
To: 'doris.dumais@ontario.ca'
Cc: 'narren.santos@ontario.ca'; 'Samira.Viswanathan@ontario.ca'; Rose, Marc; Deschamps, Vince; 'thomas.bird@nexteraenergy.com'; Williams, Melanie D.
Subject: NextEra Energy Canada's Bluewater, Goshen and Jericho Wind Energy Centre Proposals
Attachments: Bluewater_Draft PDR_June 28.pdf; Goshen_Draft PDR_June 28.pdf; Jericho_Draft PDR_June 28.pdf

Good Morning Ms. Dumais,

NextEra Energy Canada, ULC, together with Canadian Green Power, is proposing to construct three wind energy projects in south-western Ontario. The first is proposed in Bluewater and Huron East Townships, Huron County; the second in Bluewater and South Huron Townships, Huron County; and lastly, the third in Municipality of Lambton Shores, Warwick and Brooke-Alvinston Townships, Lambton County, Ontario. These projects are referred to as the Bluewater Wind Energy Centre, Goshen Wind Energy Centre, and Jericho Wind Energy Centre respectively. Although separate Renewable Energy Approval (REA) applications will be submitted for all three projects, the effects assessment will take into consideration the cumulative effects of these three wind energy centres.

In accordance with the document titled *Guidance for Preparing the Project Description Report* (PDR) as part of an application under Ontario Regulation 359/09, we are submitting to you the Draft Project Description Report for each project. It is our understanding that these reports will be used to identify and provide to us a list of Aboriginal communities that have or may have constitutionally protected rights or otherwise may be interested in any effects of the projects. Could you provide to us a timeframe within which we could expect to receive the list of Aboriginal Communities?

Please note that the draft PDRs are also available for public viewing at www.canadianwindproposals.com. In addition, we will be sending copies of the draft PDRs to the Ministry of Natural Resources, Ministry of Transportation, and the Ministry of Tourism and Culture for their reference.

In addition we are contacting your agency for information and guidance on the requirements related to the preparation of the PDR and the overall process. Specifically, we are interested in receiving information regarding required permits and approvals, any potential constraints, as well as other comments you may have relating to your agency's mandate.

Regards,

Julia Cushing
Environmental Planner
Julia.Cushing@aecom.com

AECOM
300 Town Centre Boulevard, Suite 300
Markham, Ontario, Canada L3R 5Z6
T 905-477-8400 ext 448 F 905-477-1456
www.aecom.com

AECOM

Enter your office # code and F3 key – address will populate (**delete this yellow highlighted text** – remove any yellow highlight if appears in the address)

Communication Record

Date	July 30, 2010	Time	
Between	Julia Cushing	and	Jessica Mayer
	AECOM		MOE
Telephone #		Project #	60119704
Project Name	NextEra Wind Energy Projects		
Subject	DRAFT PDR Requirements		

PLEASE NOTE: **If this communication record does not agree with your records of the meeting, or if there are any omissions, please advise. Otherwise it will be assumed that the contents of this record are correct.**

Comments

- Jessica indicated that the DRAFT PDR's would only be considered sufficient in order for the MOE to provide a list of potentially affected Aboriginal Communities if they included:
    - A specific nameplate capacity
    - A specific turbine make and model
- Julia indicated that it was AECOM's understanding that it would be acceptable to have an "upper limit" for nameplate capacity at this stage as the number of turbines to be sited will not be known until the siting exercises have been completed. This will also depend of the environmental and noise assessments.
- Julia also indicated that at this point, two turbine models are being considered and a turbine model will be selected following the various baseline studies.
- Jessica indicated that this information was required as they needed to provide the Aboriginal Communities with a "footprint" of the Project.

Owen, Jennifer

From: Mayer, Jessica (ENE) [Jessica.Mayer@ontario.ca]
Sent: Monday, August 09, 2010 2:19 PM
To: Cushing, Julia
Cc: Deschamps, Vince; Rose, Marc; Williams, Melanie D.
Subject: RE: NextEra Energy Canada's Bluewater, Goshen and Jericho Wind Energy Centre Proposals

Hi Julia,
I have received the draft PDRs and all are acceptable. I have forwarded your email to our Aboriginal Affairs Branch.
Thank you

Jessica Mayer
Records of Site Condition Officer
Program Support- Approvals and Brownfields
Environmental Assessments and Approvals Branch
Ministry of the Environment
2 St. Clair Ave W, Floor 12A
Toronto, ON M4V 1L5
Phone: (416) 326-2945 Fax: (416) 314-6810

From: Cushing, Julia [mailto:Julia.Cushing@aecom.com]
Sent: August 9, 2010 12:57 PM
To: Mayer, Jessica (ENE)
Cc: Deschamps, Vince; Rose, Marc; Williams, Melanie D.
Subject: FW: NextEra Energy Canada's Bluewater, Goshen and Jericho Wind Energy Centre Proposals

Hello Jessica,

I just wanted to confirm that you received the reports and that the information is now considered sufficient.

Regards,

Julia

From: Cushing, Julia
Sent: Friday, August 06, 2010 4:06 PM
To: 'Mayer, Jessica (ENE)'
Cc: Santos, Narren (ENE); Deschamps, Vince; Rose, Marc; Williams, Melanie D.; 'thomas.bird@nexteraenergy.com'
Subject: RE: NextEra Energy Canada's Bluewater, Goshen and Jericho Wind Energy Centre Proposals

Hi Jessica,

As per our discussion, please find attached the updated PDRs for the Bluewater, Goshen and Jericho Wind Energy Centres. Section 4.0 and 4.1 outline the turbine specifications and the nameplate capacity.

Regards,

Julia

From: Mayer, Jessica (ENE) [mailto:Jessica.Mayer@ontario.ca]
Sent: Tuesday, July 27, 2010 10:20 AM
To: Cushing, Julia
Cc: Santos, Narren (ENE); Mayer, Jessica (ENE)
Subject: FW: NextEra Energy Canada's Bluewater, Goshen and Jericho Wind Energy Centre Proposals

Ms. Cushing,
I have reviewed the draft Project Description Reports for the Jericho Wind Farm and the Goshen Wind Farm. The PDR does not meet the regulatory requirements of the REA Regulation (as per item 10 of Table 1), specifically the following:

1. Components- Turbine specifications are a mandatory component of the draft PDR at this stage.
2. Nameplate Capacity- You must state the total nameplate capacity of each wind project.

For any questions or concerns you may have, please refer to Technical Bulletin One: Guidance for preparing the Project Description Report as part of an application under O. Reg. 359/09. This can be found at the following link: http://www.ebr.gov.on.ca/ERS-WEB-External/displaynoticecontent.do?noticeId=MTA5MTE3&statusId=MTYzODk4&language=en).
Please re-submit a revised PDR as an electronic copy to Narren Santos at narren.santos@ontario.ca and copy me as well.

Thank you

Jessica Mayer
Records of Site Condition Officer
Program Support- Approvals and Brownfields
Environmental Assessments and Approvals Branch
Ministry of the Environment
2 St. Clair Ave W, Floor 12A
Toronto, ON M4V 1L5
Phone: (416) 326-2945 Fax: (416) 314-6810

From: Santos, Narren (ENE)
Sent: July 26, 2010 11:14 AM
To: Mayer, Jessica (ENE)
Subject: FW: NextEra Energy Canada's Bluewater, Goshen and Jericho Wind Energy Centre Proposals

Part two

From: Cushing, Julia [mailto:Julia.Cushing@aecom.com]
Sent: July 26, 2010 11:07 AM
To: Dumais, Doris (ENE)
Cc: Santos, Narren (ENE); Viswanathan, Samira (MEI); Rose, Marc; Deschamps, Vince; thomas.bird@nexteraenergy.com; Williams, Melanie D.
Subject: NextEra Energy Canada's Bluewater, Goshen and Jericho Wind Energy Centre Proposals

Good Morning Ms. Dumais,

NextEra Energy Canada, ULC, together with Canadian Green Power, is proposing to construct three wind energy projects in south-western Ontario. The first is proposed in Bluewater and Huron East Townships, Huron County; the second in Bluewater and South Huron Townships, Huron County; and lastly, the third in Municipality of Lambton Shores, Warwick and Brooke-Alvinston Townships, Lambton County, Ontario. These projects are referred to as the Bluewater Wind Energy Centre, Goshen Wind Energy Centre, and Jericho Wind Energy Centre respectively. Although separate Renewable Energy Approval (REA) applications will be submitted for all three projects, the effects assessment will take into consideration the cumulative effects of these three wind energy centres.

In accordance with the document titled *Guidance for Preparing the Project Description Report* (PDR) as part of an application under Ontario Regulation 359/09, we are submitting to you the Draft Project Description Report for each project. It is our understanding that these reports will be used to identify and provide to us a list of Aboriginal communities that have or may have constitutionally protected rights or otherwise may be interested in any effects of the projects. Could you provide to us a timeframe within which we could expect to receive the list of Aboriginal Communities?

Please note that the draft PDRs are also available for public viewing at www.canadianwindproposals.com. In addition, we will be sending copies of the draft PDRs to the Ministry of Natural Resources, Ministry of Transportation, and the Ministry of Tourism and Culture for their reference.

In addition we are contacting your agency for information and guidance on the requirements related to the preparation of the PDR and the overall process. Specifically, we are interested in receiving information regarding required permits and approvals, any potential constraints, as well as other comments you may have relating to your agency's mandate.

Regards,

Julia Cushing
Environmental Planner
Julia.Cushing@aecom.com

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www.aecom.com

Owen, Jennifer

From: McNeill, Shannon (ENE) [Shannon.McNeill@ontario.ca]
Sent: Wednesday, March 30, 2011 1:36 PM
To: Aitken, Sarah
Subject: RE: REA - Waterbodies component

Hi Sarah,

Here are some answers to your questions which we spoke about on the 28th:

1. For the water quality component are we required to collect in-situ or lab samples to satisfy MOE? Or are these just field observations of potential impacts?

MOE does not require lab samples for the waterbodies report/water assessment. Mostly we are looking for background information that can be done through a records review and site investigation. We are looking for the proponent to describe the existing water quality and how it may be impacted by the project. For example, if there was discharge from your facility you would need to describe existing conditions, the environmental effect and mitigation.

2. For the water quantity component are we required to collect water velocity readings for any watercourse located within the 120 m buffer?

MOE does not require the proponent to collect water velocity reading. Again MOE is looking for background information that can be done through a records review and site investigation. Please make sure you have sufficient information to describe existing conditions, environmental effect and mitigation.

3. Who will review the aquatic field component (fish community, fish habitat), MOE, MNR or the local CA?

MOE reviews the water assessment and the waterbodies report. You may wish to contact both MNR and the local CA as they may have background information that you can use in your report/assessment.

4. Does MOE want to see a field plan prior to field investigations?

MOE does not have the staffing required to review any draft plans or documents. We do require a field plan prior to the investigation.

I hope this answers your questions. Should you have any additional questions or require clarifications pleas le me know.

Senior Project Evaluator
Renewable Energy Team
Environmental Assessment and Approvals Branch
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2 St. Clair West, Floor 12A , Toronto, ON M4V 1L5
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http://www.ene.gov.on.ca/en/business/green-energy/

From: Aitken, Sarah [mailto:Sarah.Aitken@aecom.com]
Sent: March 29, 2011 8:58 AM
To: McNeill, Shannon (ENE)
Subject: REA - Waterbodies component

Hi Shannon,

We spoke quickly yesterday and I was hoping to get your answers in writing so we have them on file.

These questions are regarding the waterbodies technical bulletin. If you could expand on what the MOE requires for each of these parameters that would be greatly appreciated.

1. For the water quality component are we required to collect in-situ or lab samples to satisfy MOE? Or are these just field observations of potential impacts?

2. For the water quantity component are we required to collect water velocity readings for any watercourse located within the 120 m buffer?

3. Who will review the aquatic field component (fish community, fish habitat), MOE, MNR or the local CA?

4. Does MOE want to see a field plan prior to field investigations?

Thanks for your help,

Sarah

Sarah Aitken, B.Sc.(Hons.)

Aquatic Ecologist

Environment

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AECOM

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Ministère de l'Environnement

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Ontario

April 8, 2011

MOE File #: SW-10-WF-0101

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

Dear Mr. Bird:

RE: **Director's Aboriginal Communities List** - Jericho Wind Energy Centre

The Ontario Ministry of the Environment (Ministry) has reviewed the information provided in the Draft of the Project Description Report (PDR) received for the *Jericho Wind Energy Centre.* The Ministry has reviewed the anticipated environmental effects of the project (as described in the PDR) relative to its current understanding of the interests of aboriginal communities in the area.

In accordance with section 14 of Ontario Regulation 359/09 "Renewable Energy Approvals under Part V.0.1 of the Act" (O. Reg. 359/09) made under the *Environmental Protection Act*, please find below the list of aboriginal communities who, in the opinion of the Director:

i) have or may have constitutionally protected aboriginal or treaty rights that may be adversely impacted by the project (s.14(b)(i)):

Aboriginal Community **Common Name:** **Reserve Name:** **Contact Information:**
Chippewas of Kettle and Stony Point Kettle Point 44 RR 2 Forest ON N0N 1J0 Phone (519) 786-2125 Fax (519) 786-2108
Chippewas of the Thames First Nation Chippewas of the Thames 42 RR 1 Muncey ON N0L 1Y0 Phone (519) 289-5555 Fax (519) 289-2230

Aamjiwnaang First Nation Sarnia 45 978 Tashmoo Avenue Sarnia ON N7T 7H5 Phone (519) 336-8410 Fax (519) 336-0382
Bkejwanong Territory Walpole Island First Nation Walpole Island 46 RR 3 Wallaceburg ON N8A 4K9 Phone (519) 627-1481 Fax (519) 627-0440
Oneida Nation of the Thames Oneida 41 RR 2 Southwold ON N0L 2G0 Phone (519) 652-3244 Fax (519) 652-9287

OR

ii) otherwise may be interested in any negative environmental effects of the project (s.14(b)(ii)):

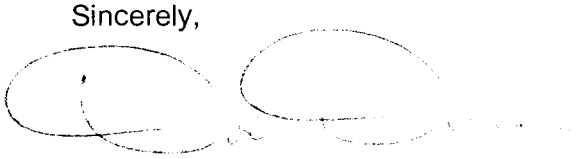
Munsee-Delaware First Nation Munsee-Delaware Nation 1 RR 1 Muncey ON N0L 1Y0 Phone (519) 289-5396 Fax (519) 289-5156
Delaware Nation Moravian of the Thames Moravian 47 RR 3 Thamesville ON N0P 2K0 Phone (519) 692-3936 Fax (519) 692-5522

NOTE: None of the foregoing should be taken to imply approval of this project or the contents of the PDR. This letter only addresses the requirement of the Director to provide a list of aboriginal commuities to you as required pursuant to section 14 of O. Reg. 359/09. You should also be aware that information upon which the above list of aboriginal communities is based is subject to change. Aborginal communities can make assertions at any time, and other developments, for example the discovery of Aboriginal archaeological resources, can occur that may require additional aboriginal communities to be notified. Should this happen, the Ministry will contact you.

Similarly, if you recieve any feedback from any aboriginal communities not included in this list, as part of your consultation, the Ministry would appreciate being notified.

Please contact Narren Santos at (416) 314-8442 should you have any questions or require additional information.

Sincerely,



Doris Dumais
Director – Approvals Program
Environmental Assessment and Approvals Branch

cc: Mansoor Mahmood, Renewable Energy Team, Ministry of the Environment
Joe de Laronde, Aboriginal Affairs Branch, Ministry of the Environment

Owen, Jennifer

From: Aitken, Sarah
Sent: Wednesday, July 20, 2011 3:04 PM
To: Cushing, Julia
Subject: FW: NextEra Waterbodies workplan

Categories: Red Category

From: McNeill, Shannon (ENE) [mailto:Shannon.McNeill@ontario.ca]
Sent: Thursday, May 12, 2011 11:36 AM
To: Aitken, Sarah
Cc: Lower, Nicola; Deschamps, Vince
Subject: RE: NextEra Waterbodies workplan

Hi Sarah,

Thanks. I appreciate you sending your work plan to me for the Waterbodies Reports for NextEra. As I mentioned to you in one of our recent calls, you do not require MOE approval for your work plan. Further, we unfortunately do not have the staff power either to review any draft documents. As long as you meet all the requirements for the Waterbodies Report found in O. Reg 359/09 you should be on the right track.

I will however, keep the work plan on file. I look forward to receiving your submission in the future.

Should you have any further questions please feel free to contact me.

Regards,

Shannon McNeill
Senior Project Evaluator
Renewable Energy Team
Environmental Assessment and Approvals Branch
Ministry of the Environment
2 St. Clair West, Floor 12A , Toronto, ON M4V 1L5
P: 416-326-6089 F: 416-314-8452

http://www.ene.gov.on.ca/en/business/green-energy/

From: Aitken, Sarah [mailto:Sarah.Aitken@aecom.com]
Sent: May 11, 2011 8:47 AM
To: McNeill, Shannon (ENE)
Cc: Lower, Nicola; Deschamps, Vince
Subject: NextEra Waterbodies workplan

Shannon,
Please accept this AECOM work plan for conducting the water assessments and water body reports for the NextEra Bluewater, Goshen and Jericho Wind Energy Centres as required under Ontario Regulation 359/09. Please note that this work plan was developed through correspondence and input from both the local Conservation Authorities in the study area and the review of the Guidance for Preparing Water Assessment and Water Body Reports as part of an Application under O.Reg.359/09.
We anticipate starting our field investigations within the next couple weeks. Please let us know if we require confirmation/comments from MOE prior to the start of field investigations, otherwise we will continue as planned.

If you require a meeting to discuss the workplan or any issues regarding the workplan please let me know as soon as possible so we can schedule a meeting.

Please let me know if you require any further information. I look forward to hearing from you.

Regards,
Sarah

Sarah Aitken, B.Sc.(Hons.)
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Ministry of Natural Resources

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Memorandum

To	April Nix (MNR Guelph)	Page	1
CC	Heather Riddell (MNR Aylmer), Tara Lessard (MNR Clinton)		
Subject	NextEra Bluewater, Goshen and Jericho Wind Energy Centres, Natural Heritage and Water Assessments – Work Plan		
From	Vince Deschamps		
Date	June 8, 2010	Project Number	60155032

As discussed at our June 3rd meeting, our work plan for conducting natural heritage and water assessments of the NextEra Bluewater, Goshen and Jericho Wind Energy Centres is as follows:

1. Undertake Records Reviews

The purpose of the Records Review is to identify preliminary constraints and opportunities that will inform NextEra with regards to selecting preliminary turbine locations. It will also confirm the site investigations that will be required. Specific activities that will be undertaken during the records review include:

- Natural Heritage: Under the REA and Ontario Regulation 359/09, Natural Heritage refers primarily to terrestrial features including wetlands, but excluding aquatic habitat and water bodies. AECOM will conduct a Records Review to identify, delineate and categorize the significance of terrestrial habitats in the study areas in accordance with Section 25 of Ontario Regulation 359/09. The analysis will consist of a desktop review of available literature, online databases and remotely-sensed data, which will be verified and confirmed through consultation with the MNR.

- Water and Water Bodies: As part of the REA, Ontario Regulation 359/09 criteria have been included in Section 30 with respect to water and water bodies, which include lakes, permanent streams, intermittent streams, and seepage areas. To ensure that each project does not impact surface water features, an investigation of the 120 metre radius of the proposed project is required to determine if any water bodies are present (it is not anticipated that there are any lake trout lakes in the project areas). To meet these objectives, AECOM will search and analyze records that relate to water bodies within 120 metres of the project sites by contacting and obtaining mapping and other information from the MNR, the Ausable-Bayfield and St. Clair Conservation Authorities, municipalities and other agencies as required.

In addition, as part of the REA process, AECOM will undertake records review to identify groundwater resources, cultural heritage resources (i.e., Stage 1 Archaeological and built heritage assessments) and sensitive receptors (for noise and shadow flicker analysis) in the three project areas.

2. Prepare Constraints Mapping

Constraints mapping will be prepared in GIS for each project area, based on information collected as part of the records review. Specifically, the mapping will include the following features:

- Wetlands (Provincially Significant and Non-provincially significant), habitats of endangered and threatened species, Life Science Areas of Natural and Scientific Interest (ANSIs) and areas previously identified as significant wildlife habitat, significant woodlands or significant valleylands within 120 metres of the project sites;
- Protected areas (i.e., Pinery Provincial Park, Conservation Reserve, Environmentally Sensitive Areas, Important Bird Areas, etc.) within 120 metres of the project sites;
- Watercourses and water bodies within 120 metres of the project sites;
- Earth Science ANSIs within 50 metres of the project sites;
- Surficial geology;
- Private water wells;
- Known archaeological sites and areas of archaeological potential;
- Designated built heritage features;
- Infrastructure and linear facilities (e.g., roads, utility lines, pipelines, railways, etc.);
- Man-Made Structures (e.g., airports, buildings, towers, etc.);
- Communities and municipal boundaries; and,
- Sensitive noise receptors.

AECOM is utilizing data from Land Information Ontario (LIO), Ministry and Natural Resources (MNR), Natural Heritage Information Center (NHIC), and Natural Resources and Values Information System (NRVIS), and will incorporate additional data provided by MNR and other agencies as appropriate. In addition, AECOM will identify adjacent lands considerations and recommend buffers from ecological features, built features and property lines. These will be mapped in compliance with Ontario Regulation 359/09.

3. Site Investigations

Once NextEra has developed a site layout for each wind energy centre, based on the constraints mapping, AECOM will undertake detailed site investigations to gather additional information about the conditions at and around the turbines and all ancillary facilities, including access roads, underground electrical collection systems, and transformer stations. This information will be used to conduct the assessment of effects associated with each project, and the cumulative effect of all three projects. Specific information regarding site investigations is as follows:

- Natural Heritage: Natural Heritage Site Investigations will satisfy Section 26 of Ontario Regulation 359/09. Site investigations will be undertaken where the project is within 120 metres of any natural feature identified in the records review. The need for, and extent of, field surveys will be largely dependent upon the proximity of the individual turbines and other constructed facilities relative to natural vegetation communities and wildlife habitats. One or more of the following types of field investigations may be required at individual sites:

    - Avian surveys: spring and fall bird migration, breeding birds and winter birds;
    - Bat monitoring, in accordance with MNR's *Draft Bats and Bat Habitats – Guidelines for Wind Power Projects* (March 2010);

- Ecological Land Classification and mapping, to the Vegetation Type level (e.g., FOD5-1 for Dry-Fresh Sugar Maple Deciduous Forest Type);
- One to three-season vegetation inventories;
- Wetland, ANSI boundary delineation and confirmations;
- Breeding amphibian surveys; and,
- Species-specific investigations for Species at Risk.

- Water and Water Bodies: Water Site Investigations will satisfy Section 31 of Ontario Regulation 359/09. Additional site investigations will be conducted to ground truth the locations of surface water features identified during the desktop study, and to determine if any additional water bodies are present. The investigations will identify the boundaries of the water bodies, and the distance of the boundaries to the project.

Site investigations will also determine if there are any corrections needed to features identified during the Records Review stage. Site investigation reporting will include: mapping, weather, dates of surveys, summary of methods, qualifications of investigator etc. as required in the REA.

In addition, as part of the REA process, AECOM will also conduct site visits to ground truth geological mapping and determine the presence of any potential surface water - groundwater interaction areas, as well as to determine the need for confirmatory testing pitting and / or drilling. AECOM will also undertake Stage 2 Archaeological Assessments and detailed reviews of cultural heritage resources identified during the Records Review.

4. Undertake an Effects Assessment

Based on the information collected during the Records Review and subsequent site investigations, an effects assessment will be conducted to identify the effects of constructing and operating the project on the various components of the environment. The evaluation of significance will satisfy Section 27 of Ontario Regulation 359/09. As mentioned previously, our effects assessment will consider the effects of each project on its own and the cumulative effects of all three projects being constructed and operated simultaneously. It will involve the following steps:

- Determine Likely Effects – describe the potential and/or likely effects, both positive and negative, on the existing environment that may occur as a result of the project;
- Identify Mitigation Measures – identify specific mitigation, compensation, or enhancement measures that will need to be implemented to avoid, minimize, or other reduce the severity of any likely adverse effects of the project on the environment and/or the effects of the environment on the project
- Determine Residual (Net) Effects – describe the residual or net effects after the identified mitigation measures have been applied.

During the effects assessment, we will also identify elements of an environmental effects monitoring plan in respect to any negative environmental effects that may result from the installation of the turbines. The assessment of project-related effects will focus on interactions between the project components and natural heritage features and water bodies identified during the records review and site investigations (i.e., features within 120 metres of the project, as per Sections 37-40 of Ontario Regulation 359/09). The need for any additional field surveys will dependent upon the final locations

of the individual turbines and other structures relative to these natural features identified in earlier work, and the type of mitigation required.

In addition, as part of the REA process, AECOM will conduct additional analyses not associated with natural heritage or water bodies, but required under the REA process. These include a Cultural Heritage Analysis, Wind Turbine and Substation Noise Analysis, Shadow Flicker Analysis and Visual Impact Assessment.

5. Confirmation from Ministry of Natural Resources

AECOM intends to consult with the MNR throughout the course of the project. As per Section 28 of Ontario Regulation 359/09, AECOM will also seek written confirmation from the MNR that the Records Review, Site Investigations and Evaluation of Significance have been made using applicable evaluation criteria or procedures established or accepted by the Ministry, as amended from time to time.

Owen, Jennifer

From: Cushing, Julia
Sent: Monday, July 26, 2010 11:37 AM
To: 'daraleigh.irving@ontario.ca'; 'mike.stone@ontario.ca'
Cc: Rose, Marc; Williams, Melanie D.; 'thomas.bird@nexteraenergy.com'
Subject: NextEra Energy Canada's Bluewater, Goshen and Jericho Wind Energy Centre Proposals
Attachments: Jericho_Draft PDR_June 28.pdf; Bluewater_Draft PDR_June 28.pdf; Goshen_Draft PDR_June 28.pdf

Good Morning Ms. Irving and Mr. Stone,

NextEra Energy Canada, ULC, together with Canadian Green Power, is proposing to construct three wind energy projects in south-western Ontario. The first is proposed in Bluewater and Huron East Townships, Huron County; the second in Bluewater and South Huron Townships, Huron County; and lastly, the third in the Municipality of Lambton Shores, Warwick and Brooke-Alvinston Townships, Lambton County, Ontario. These projects are referred to as the Bluewater Wind Energy Centre, Goshen Wind Energy Centre, and Jericho Wind Energy Centre respectively. Although separate Renewable Energy Approval (REA) applications will be submitted for all three projects, the effects assessment will take into consideration the cumulative effects of these three wind energy centres.

In accordance with the recommendation outlined in the document titled *Guidance for Preparing the Project Description Report* (PDR) as part of an application under Ontario Regulation 359/09, we are contacting your agency for information and guidance on the requirements related to the preparation of the PDR and the overall process. Specifically, we are interested in receiving information regarding required permits and approvals, any potential constraints, as well as other comments you may have relating to your agency's mandate. We have included a copy of the draft PDR for each of the projects above to provide you with background information and context for our request.

We have addressed this request to both of you because the Projects fall within the Guelph and Aylmer District MNR jurisdictions. Please note that the draft PDRs are also available for public viewing at www.canadianwindproposals.com.

Regards,

Julia Cushing
Environmental Planner
Julia.Cushing@aecom.com

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Ministère des
Richesses naturelles
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Ontario

August 31, 2010

Vince Deschamps
Senior Environmental Planner
AECOM
512 Woolwich St,
Suite 2 Guelph, ON N1H 3X7

Dear Mr. Deschamps

RE: Background Information Request – Records Review and Work Plan
Bluewater & Goshen Wind Farms, Municipality Bluewater & Huron East Huron County
Jericho Wind Farm, Municipality of Lambton Shores, Township of Warwick

Further to our meeting on June 3 2010, the MNR provides the following additional information and comments for consideration based on the submitted work plan and associated information. It is understood that the area of interest is for NextEra Energy's proposed Bluewater, Goshen and Jericho Wind Farms, which are moving through the renewable energy approvals (REA) process.

About the Renewable Energy Approvals Process

Under the Ministry of the Environment's Regulation for Renewable Energy Approvals (359/09) under the Environmental Protection Act, there are several requirements for Renewable Energy projects that must be met/addressed pertaining to the protection of natural heritage features. You can find the Regulation online at: http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_090359_e.htm

More specifically Sections 24-28 of the Regulation outline natural heritage assessment requirements for renewable energy projects. Section 38 also outlines natural heritage prohibitions and Environment Impact Study requirements.

As per Section 28 of the Regulation, the MNR is required to confirm the following with respect to a natural heritage assessment:

- That the determination of the existence of natural features and the boundaries of natural features was made using applicable evaluation criteria or procedures established by the MNR.
- That the site investigation and records review were conducted using applicable evaluation criteria or procedures established or accepted by the MNR, if no natural features are identified.
- That the evaluation of significance or provincial significance of natural features was conducted using applicable evaluation criteria or procedures established or accepted by the MNR.
- That the project location is not in a provincial park or conservation reserve.
- That the environmental impact assessment report(s) has/have been prepared in accordance with the procedures established or accepted by the MNR.

In addition to the Regulation requirements, proponents are also required to provide additional information as outlined in the MNR's Approvals and Permitting Requirements Document for Renewable Energy Projects

(APRD). The APRD contains direction on items outside of the Regulation that must be addressed for the purpose of the MNR's permits and approvals, including but not limited to petroleum resources and species protected under the *Endangered Species Act, 2007*. This document can be found online at http://www.mnr.gov.on.ca/277097.pdf.

The Natural Heritage Information Centre (NHIC) database may also provide additional natural heritage information. You can submit a request to obtain this information through their website at http://nhic.mnr.gov.on.ca/. To obtain digital mapping that the Ministry has available for the natural features mentioned below; please contact Land Information Ontario (LIO), or visit their website at http://www.mnr.gov.on.ca/en/Business/LIO/index.html.

To obtain more general information about developing renewable energy projects in Ontario, you can also contact the Renewable Energy Facilitation Office (REFO). They can be reached at REFO@ontario.ca or 1-877-440-REFO (7336). You can also visit their website at http://www.mei.gov.on.ca/en/energy/renewable/index.php?page=refo_office.

Natural Heritage Information

Wetlands

With respect to wetlands, parts of the provincially significant Hay Swamp wetland complex are located within the general study area for Goshen and Bluewater. In addition, there are several other wetlands that have been evaluated and identified as not provincially significant within the general study area.

Wetlands located within the study area for the Jericho project include:

- Ausable River Wetland (PSW)
- Bear Creek Source Woodlot (LSW)
- Spicebush Swamp (LSW)
- Thedford Swamp (PSW)
- Warwick Conservation Area (PSW)

Mapping for these features is available through LIO. If you are interested in accessing and reviewing hard copy wetland reports/information for the Bluewater and Goshen study areas, please contact Tara Lessard out of the Clinton Area Office at tara.lessard@ontario.ca or 519-482-3601 to make arrangements. For the Jericho study area, please contact Erin Sanders at the Aylmer District Office at erin.sanders@ontario.ca or 519-773-4715.

Fisheries

There is also hardy copy fisheries information available for a number of the water courses within the Bluewater and Goshen study areas. Please contact Tara Lessard to make arrangements to access this information.

As for the Jericho study area, please see the attached list of fish species survey data for watercourses within the study area.

Areas of Natural and Scientific Interest

The following regionally significant Areas of Natural and Scientific Interest (ANSI) are located within the Goshen and/or Bluewater study areas:

- Bayfield South Life Science ANSI,
- Dashwood Area Earth Science ANSI,
- Khiva Conservation Forest Life Science ANSI, and
- Hay Swamp Life Science ANSI.

The following ANSIs are located within the Jericho study area:

- Ausable River Valley Life ANSI
- Thedford Brickyard Earth ANSI

Mapping of ANSI features is available through LIO.

Woodlands
There are several old "agreement forests" parcels scattered throughout the Bluewater and Goshen study areas, including:

- Hay Swamp Tract,
- Carroll Tract, and
- Coleman Tract.

The following are within the Jericho study area:

- Carroll Tract
- Harpley Tract
- Hay Swamp Tract
- Mahon Tract
- Ratz Tract
- Roy Ratz Tract
- Saddler
- Sharrow Tract
- Sweltzer Tract
- Turnbull Tract
- Webb and Wein Tract

Some of these lands are currently owned/ managed by the Ausable-Bayfield Conservation Authority, the County of Huron or local municipality; as such these agencies may be able to provide additional information pertaining to these sites. The old agreement forest layer is also available through LIO

There are a number of wooded areas within the general study areas, which appear to range from small hedgerow features to larger woodland communities up to over 100 hectares in size. Several of the woodland communities have also been identified as deer wintering areas, which should also be captured as part of the overall NHA in relation to significant wildlife habitat. Mapping is also available for identified deer wintering areas and wooded areas through LIO.

Evaluation of Significance
An evaluation of significance is required for all natural features within 120 m of the project location. If a natural feature, such as woodland or valleyland is not already evaluated/identified as significant, the MNR recommends applying the criteria outlined in the recently updated Natural Heritage Reference Manual – second edition, which can be found online at: http://www.mnr.gov.on.ca/289522.pdf. If a feature is already evaluated for significance, please provide the list of criteria that were used to determine significance.

Post-Construction Monitoring

As part of the Environmental Effects Monitoring Plan, proponents of wind power projects are encouraged to submit detailed bird and bat post-construction monitoring work plans to the MNR for review, along with the NHA reports. The MNR encourages this to ensure that the post-construction monitoring plan meets the guidelines and to ensure that all wind power proponents are conducting post-construction monitoring in a consistent manner across the province.

The Ministry has guidelines to assist proponents in developing appropriate bird and bat monitoring protocols, including the 'Guideline to Assist in the Review of Wind Power Proposals: Potential Impacts to Birds and Bird Habitats' and the recently updated draft 'Bats and Bat Habitats: Guideline for Wind Power Projects'. These documents are available on the Ministry's website at www.mnr.gov.on.ca under the Energy–Windpower – Policies, Procedures and Guidelines section. Please note that the MNR is currently in the process of updating the bird guidelines to reflect the recent changes to the renewable energy approvals process.

Potential Bat Habitat
Further, there are areas of karst that may support potential bat habitat within Huron County. Karst mapping is provided through the Ministry of Northern Development, Mines and Forestry (MNDMF). You will need to contact them directly to obtain available karst data and information.

Information Relating to APRD Requirements

Ministry staff are aware of occurrence records of Species at Risk (SAR) within the study areas. More specifically the Ministry is aware of the following occurrences on and/or immediately adjacent to the following study areas:

Bluewater Wind Farm Study Area:
- Northern Brook Lamprey (Special Concern) in the Bayfield and Bannockburn Rivers
- Milksnake (Special Concern), and
- Goldenseal (Threatened).

Goshen Study Wind Farm Study Area:
- Goldenseal (Threatened),
- Green Dragon (Special Concern),
- Blanding's Turtle (Threatened),
- Eastern Hog-nosed Snake (Threatened), and
- historical record for American Badger (Endangered).

Jericho Wind Farm Study Area:
- Round Pigtoe (Endangered),
- Mudpuppy Mussel (Endangered),
- Northern Riffleshell (Endangered),
- Snuffbox (Endangered),
- Eastern Hog-nosed Snake (Threatened),
- Queensnake (Threatened),
- Spiny Softshell (Threatened),
- Spotted Turtle (Endangered),
- Blanding's Turtle (Threatened),
- Butternut (Endangered),
- Dwarf Hackberry (Threatened),
- Dense Blazing Star (Threatened),
- Eastern Flowering Dogwood (Endangered),
- Heart-leaved Plantain (Endangered),
- Goldenseal (Threatened),
- Prothonotary Warbler (Endangered),
- Loggerhead Shrike (Endangered),
- Hooded Warbler (Special Concern),and
- Acadian Flycatcher (Endangered).

Within these areas of Huron County:
- Butternut (Endangered),
- American Ginseng (Endangered),
- Gray Fox (Endangered),
- Barn Owl (Endangered),
- Wavy-rayed Lamp-mussel (Endangered),
- Queen Snake (Threatened),
- Least Bittern (Threatened),
- Black Redhorse (Threatened),
- Redside Dace (Threatened),
- Eastern Fringed Prairie Orchid (Historical - Threatened),
- Whip-Poor-Will (Threatened),
- Monarch Butterfly (Special Concern),
- Common Nighthawk (Special Concern),
- Short-eared Owl (Special Concern),
- Tuberous Indian Plantain (Special Concern),
- Black Tern (Special Concern),
- Louisiana Water-thrush (Special Concern),
- Eastern Ribbonsnake (Special Concern), and
- Snapping Turtle (Special Concern).

It should also be noted that because the province has not been surveyed comprehensively for the presence of SAR, the absence of an element occurrence does not indicate the absence of the species. Consequently, the presence of element occurrences is useful to flag the presence of a SAR in an area, but is not an appropriate tool to determine whether a species is present at the local (property-scale) level.

Based on the study areas for the Bluewater, Goshen and Jericho projects and given the potential for SAR to occur within this area, natural heritage surveys should include SAR investigations where there is species-appropriate habitat. Ministry staff recommend undertaking a comprehensive botanical inventory of the natural heritage features within the study area for terrestrial systems and include aquatic habitat investigations where appropriate, to inform the development of a map of all vegetation communities and aquatic habitats within the study areas. The vegetation communities should be classified as per the "Ecological Land Classification for Southern Ontario" system, to either the "Ecosite" or "Vegetation Type" level, depending on the habitat specificity of potential SAR within the study area.

This information can then be used to identify potential habitats associated with the list of SAR species provided above. Where potential habitats are identified a more detailed investigation should occur to confirm the presence of SAR species. The survey report for SAR should also describe how each SAR was surveyed for, and provide a rationale for why certain species, if any, appearing on the list provided were not the subject of the survey.

Petroleum Resources
With respect to Petroleum Resources, due to possible safety concerns when selecting turbine locations, it is also recommended that you review the Ontario Oil, Gas and Salt Resources Library for information about known well and pool locations (http://www.ogsrlibrary.com/) of petroleum in the study area. The Ontario Oil, Gas and Salt Resources Library is the most accurate source of petroleum resource information available. Some additional information pertaining to set back requirements from petroleum resource operations is included within the MNR's APRD document.

Fisheries
With respect to fisheries information, this information may be used as part of the water report where applicable, or in the identification of SAR and associated habitat. Other fisheries information should be collected in order to address any possible requirements or approvals such as from the Conservation Authority or Department of Fisheries and Oceans.

General Comments on the Work Plan

Project Location
With respect to the work plan in general it should be noted that references to "project sites" should reflect the definition of project location as defined in the Regulation. While the current work plan identifies the general study area this will also need to be refined to reflect the project location as this information becomes available.

Significant Wildlife Habitat (SWH)
The first bullet in Section 2 identifies that significant wildlife habitat (SWH) will be identified and mapped through the records review and site investigation processes. It is unclear to Ministry staff as to why important bird areas have been identified separately within the second bullet as these features would appear to be significant wildlife habitat. If these areas are being identified separately in relation to federal requirements, please note that permits/ approvals associated with these requirements are separate from the REA process and not part of the NHA submission.

With respect to Section 3 Ministry staff note that while certain field investigations, that may be used as part of the process for identifying SWH and SAR, have been generally identified. However, other types of investigations for taxonomic groups such as reptiles and mammals should also be included.

When reporting on SWH, please ensure that the records review and site investigation discusses 'candidate' SWH within 120 m of the project location and that the evaluation of significance confirms the presence/absence of SWH based on criteria in the Significant Wildlife Habitat Technical Guide where you will see that wildlife habitat is divided into four broad categories:

1) Seasonal concentration areas
2) Rare vegetation communities or specialised habitats for wildlife
3) Habitats of species of conservation concern, excluding the habitats of endangered and threatened species
4) Animal movement corridors.

Wetlands and ANSI Boundaries

Bullet 5 refers to wetland delineation and ANSI boundary delineation and confirmation. It should be understood that while the identification of wetland features occurs as part of the site investigation process, the evaluation of wetland features identified through the site investigation process and located within 120m of the project location form part of the evaluation of significance within the NHA.

It should also be understood that the delineation and confirmation of ANSI features is not part of the NHA process. Where the project location falls within 120m of a provincially significant life science ANSI or 50m of a provincially significant earth science ANSI, the EIS requirements within Section 38 apply. Information relating to regional ANSIs may support the identification of other natural heritage features such as significant wildlife habitat and potential habitat for SAR.

Mapping

In addition to the requirements for reporting of site investigations as per Section 26, mapping of the project location in relation to identified natural features is also required as part of the site investigation. Please refer to Section 26 (3)3 of the Regulation for the mapping requirements. Please ensure that this mapping includes mapping of wildlife habitat and/or 'candidate' SWH identified during site investigation.

Environmental Effects

With respect to Section 4 – Undertake an Effects Assessment, it appears that this section incorporates requirements pertaining to the evaluation of significance and environment impact study report requirements as part of the NHA, and the preparation of the Environmental Effects Monitoring Plan (EEMP). Ministry staff would generally recommend that this section be clarified to separately identify work that will address each of these components. Further, only the evaluation of significance and environment impact study report (where applicable) comprise parts of the NHA submission. The EEMP is a separate report required within the REA process and not a part of the NHA. However, where elements of the NHA are also incorporated into the EEMP, such as with post-construction bird and bat monitoring, Ministry staff may also be able to provide input into the development of these elements.

While the Ministry supports the consideration of cumulative effects of all three projects being constructed and operated simultaneously given the close proximity of the three study areas, it should be understood that for the purposes of the NHA submission to MNR for confirmation, three separate NHA studies will be submitted.

Finally, it is recommended that you also review any other information available from the Counties of Huron and Lambton, the Municipalities of Bluewater, South Huron, and Lambton Shores and the Ausable Bayfield Conservation Authority, if you have not already done so.

I trust this information will be of assistance in the development of the natural heritage assessment.

If you have any questions about the information provided for the Bluewater and Goshen projects please contact April Nix at april.nix@ontario.ca or (519)826-4939 and if you have the same about the information provided for the Jericho project, please contact me.

Sincerely,

Heather Riddell

A/Planning Ecologist, Aylmer District
(519) 773-4723
heather.riddell@ontario.ca

c. April Nix (MNR)
Julia Cushing (AECOM)
Thomas Bird (Nextera)

Owen, Jennifer

From: Aitken, Sarah
Sent: Wednesday, July 20, 2011 2:57 PM
To: Cushing, Julia
Subject: FW: Scientific Collectors Permits

Follow Up Flag: Follow up
Flag Status: Completed

Categories: Red Category

From: Lessard, Tara (MNR) [mailto:Tara.Lessard@ontario.ca]
Sent: Tuesday, September 07, 2010 2:05 PM
To: Aitken, Sarah
Cc: Nix, April (MNR)
Subject: Scientific Collectors Permits

Hi Sarah,

I wanted to follow-up with you via email regarding the phone conversation that we had last week regarding a blanketed Scientific Collector's Permit for the Bluewater/Goshen/Jericho windpower project. Apparently this question has come up around other windpower projects in the district, and the consensus was that the watercourse crossings themselves need to be narrowed down before a SCP can be issued. As I mentioned to you on the phone, a Scientific Collector's Permit can be issued rather quickly, if necessary. However, there may also be species at risk in some of the watercourses, so additional permits may be required for SAR, making it especially important for the specific locations to be narrowed down. SAR permits can take between 3 months and 1 year to be developed/approved, depending on the type of permit, so we would really need to be sure on the location before we went down that route.

Let me know if you have any additional questions.

Tara

Tara Lessard
A/ Area Biologist
Ontario Ministry of Natural Resources
Guelph District – Clinton Area Office
P.O. Box 819
100 Don Street
Clinton, ON
N0M 1L0

Phone: (519) 482-3601
Fax: (519) 482-5031
Email: tara.lessard@ontario.ca

Owen, Jennifer

From: Aitken, Sarah
Sent: Wednesday, July 20, 2011 2:58 PM
To: Cushing, Julia
Subject: FW: Bluewater/Goshen/Jericho Windpower Project

From: Riddell, Heather (MNR) [mailto:Heather.Riddell@ontario.ca]
Sent: Tuesday, January 04, 2011 2:14 PM
To: Aitken, Sarah
Subject: RE: Bluewater/Goshen/Jericho Windpower Project

Thanks for clarifying. We will be able to provide a list of species found at each survey location within the study area.

Cheers,
Heather

Heather Riddell
A/ Planning Ecologist
MNR, Aylmer District
(519) 773-4723

From: Aitken, Sarah [mailto:Sarah.Aitken@aecom.com]
Sent: January 4, 2011 2:09 PM
To: Riddell, Heather (MNR)
Subject: RE: Bluewater/Goshen/Jericho Windpower Project

Hi Heather,
If possible, that would be greatly appreciated!

Thanks,
Sarah

Sarah Aitken, B.Sc.(Hons.)
Aquatic Ecologist
Environment
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sarah.aitken@aecom.com

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512 Woolwich Street, Suite 2 Guelph, ON N1H 3X7
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www.aecom.com

From: Riddell, Heather (MNR) [mailto:Heather.Riddell@ontario.ca]
Sent: Tuesday, January 04, 2011 14:09

To: Aitken, Sarah
Subject: RE: Bluewater/Goshen/Jericho Windpower Project

Hi Sarah,

Just to clarify, you would like fish data on the full reach of each watercourse within the study area?

Thanks & Happy New Year to you!

Heather

Heather Riddell
A/ Planning Ecologist
MNR, Aylmer District
(519) 773-4723

From: Aitken, Sarah [mailto:Sarah.Aitken@aecom.com]
Sent: January 4, 2011 1:48 PM
To: Riddell, Heather (MNR)
Subject: RE: Bluewater/Goshen/Jericho Windpower Project

Hi Heather,
I am in the process of pulling together the fish records for the NextEra Wind Energy Project for the Bluewater/Goshen and Jericho study areas. Attached is a file received from the Aylmer office in August of fish records from the Jericho study area. I have been emailing with Tara Lessard and she advised me that I will need to process any information requests through yourself. Please see communication below.
Please let me know if you have any questions!

Happy New Year!
Sarah

Sarah Aitken, B.Sc.(Hons.)
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www.aecom.com

From: Lessard, Tara (MNR) [mailto:Tara.Lessard@ontario.ca]
Sent: Monday, December 20, 2010 10:22
To: Aitken, Sarah
Subject: RE: Bluewater/Goshen/Jericho Windpower Project

Hi Sarah,

Since the Bluewater/Goshen/Jericho project spans two MNR districts (Aylmer and Guelph), April Nix, Planning Intern out of Guelph, has asked that you send the fish information request to Heather Riddell (Planning Ecologist in Aylmer) who has taken the lead on this project. This will ensure that all of the info requests are being funnelled through the same person. Heather can be reached at heather.riddell@ontario.ca.

Also, I think it will be okay to just narrow down the study area to the waterbody level, and not to the crossing level, assuming there aren't too many of them. A spreadsheet summarizing the info that you are looking for would be great.

Let me know if you have any questions.

Thanks,

Tara

Tara Lessard
A/Area Biologist
Ministry of Natural Resources
Guelph District - Clinton Area Office
Phone: 519-482-3601
Email: tara.lessard@ontario.ca

From: Aitken, Sarah [mailto:Sarah.Aitken@aecom.com]
Sent: December 16, 2010 2:19 PM
To: Lessard, Tara (MNR)
Subject: RE: Bluewater/Goshen/Jericho Windpower Project

Hi Tara,
Thanks for getting back to me!
We are anticipating the turbine layouts to be released end of January/ early February 2011. In preparation for our field investigations we would like to have all existing data available for all three study reaches.
If it makes it easier to combine the data I can create a spread sheet with the waterbodies that are in the study area.
Unfortunately at this point I can't narrow down the study area to the exact crossings.
If you have any questions or concerns please let me know.

Thanks,
Sarah

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From: Lessard, Tara (MNR) [mailto:Tara.Lessard@ontario.ca]
Sent: Wednesday, December 15, 2010 14:14
To: Aitken, Sarah
Subject: Bluewater/Goshen/Jericho Windpower Project

HI Sarah,

I just left you a voicemail about this, but I believe you were looking for fisheries information for the Jericho/Bluewater/Goshen windpower project. If you have narrowed down the waterbodies/crossing locations that you are interested in, that would help tremendously when I summarize the fish info that we have available. Most of the time, consultants send me an excel table with the crossing/waterbody names, and column headings including what information they are after. Sometimes this table is also accompanied by a map, which is helpful.

I'm not sure if this is what you were looking for. If you have other questions, feel free to give me a call.

Tara

Tara Lessard
A/Area Biologist
Ministry of Natural Resources
Guelph District - Clinton Area Office
Phone: 519-482-3601
Email: tara.lessard@ontario.ca

Owen, Jennifer

From: Aitken, Sarah
Sent: Wednesday, July 20, 2011 2:58 PM
To: Cushing, Julia
Subject: FW: Bluewater/Goshen/Jericho Windpower Project
Attachments: Jericho Survey Species Lists.zip

Categories: Red Category

From: Riddell, Heather (MNR) [mailto:Heather.Riddell@ontario.ca]
Sent: Friday, January 14, 2011 10:51 AM
To: Aitken, Sarah
Subject: RE: Bluewater/Goshen/Jericho Windpower Project

Hi Sarah,

Attached is a zipped folder containing species lists from every station within the Jericho project area that contained data. Some stations had no species data.

Please let me know if you require anything else.

Have a nice weekend,

Heather

Heather Riddell
A/ Planning Ecologist
MNR, Aylmer District
(519) 773-4723

From: Aitken, Sarah [mailto:Sarah.Aitken@aecom.com]
Sent: January 4, 2011 2:09 PM
To: Riddell, Heather (MNR)
Subject: RE: Bluewater/Goshen/Jericho Windpower Project

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Sarah

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Thanks & Happy New Year to you!

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Happy New Year!
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Please consider the environment before printing this e-mail.

From: Lessard, Tara (MNR) [mailto:Tara.Lessard@ontario.ca]
Sent: Monday, December 20, 2010 10:22
To: Aitken, Sarah
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Also, I think it will be okay to just narrow down the study area to the waterbody level, and not to the crossing level, assuming there aren't too many of them. A spreadsheet summarizing the info that you are looking for would be great.

Let me know if you have any questions.

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If it makes it easier to combine the data I can create a spread sheet with the waterbodies that are in the study area. Unfortunately at this point I can't narrow down the study area to the exact crossings.
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Thanks,
Sarah

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Tara

Tara Lessard
A/Area Biologist
Ministry of Natural Resources
Guelph District - Clinton Area Office
Phone: 519-482-3601
Email: tara.lessard@ontario.ca

Owen, Jennifer

From: Cushing, Julia
Sent: Tuesday, February 01, 2011 2:21 PM
To: 'heather.riddell@ontario.ca'
Cc: Deschamps, Vince; Rose, Marc; Williams, Melanie D.
Subject: NextEra - Jericho Wind Energy Centre
Attachments: Jericho.zip

Hello Heather,

As per our conversation today, please find attached GIS shapefiles for the Jericho Wind Energy Centre's Study Area boundary and for the existing Petroleum Resources in the Study Area. We have also included an excel document which summarizes these resources.

It is my understanding that you will forward this information to the Petroleum Resource Centre and request that they confirm the accuracy and completeness of this information, and that they provide the boundaries of the operation, whether any decommissioned wells were done so by today's standards and any information on required setbacks.

Could you also please forward to us a template for the Engineer's Report?

Thank you for your assistance, please contact me if you require any additional information.

Regards,

Julia

Julia Cushing
Environmental Planner
Julia.Cushing@aecom.com

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www.aecom.com

Owen, Jennifer

From: Riddell, Heather (MNR) [Heather.Riddell@ontario.ca]
Sent: Monday, February 14, 2011 1:54 PM
To: Cushing, Julia
Subject: RE: NextEra - Jericho Wind Energy Centre
Attachments: Petr.Engi.ReportTemplate-Computer-FINAL-2010-09-03.pdf

Categories: Red Category

Hi Julia,

I forwarded the information you provided to Petroleum Resources Centre for their review. I hope to receive a response within the next few weeks.

Attached is the most current version of the Engineer's Report template. Please note that it requires an engineer's signature.

The template is subject to change, as I am aware the program has been working on revising it over the last little while. If I receive an updated version anytime soon, I will be sure to send it along.

Any questions, please feel free to give me a call.

Cheers,
Heather

Heather Riddell
A/ Planning Ecologist
MNR, Aylmer District
(519) 773-4723

From: Cushing, Julia [mailto:Julia.Cushing@aecom.com]
Sent: February 1, 2011 2:21 PM
To: Riddell, Heather (MNR)
Cc: Deschamps, Vince; Rose, Marc; Williams, Melanie D.
Subject: NextEra - Jericho Wind Energy Centre

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Could you also please forward to us a template for the Engineer's Report?

Thank you for your assistance, please contact me if you require any additional information.

Regards,

Julia

Julia Cushing
Environmental Planner
Julia.Cushing@aecom.com

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www.aecom.com

Owen, Jennifer

From: Riddell, Heather (MNR) [Heather.Riddell@ontario.ca]
Sent: Monday, March 28, 2011 12:18 PM
To: Aitken, Sarah
Cc: Deschamps, Vince; Harkins, Erin (MNR)
Subject: RE: NextEra Wind Energy

Hi Sarah,

The same comment regarding Lake Trout lakes applies for the Jericho project. There are no Lake Trout lakes located in Aylmer District.

Cheers,
Heather

Heather Riddell
A/ Planning Ecologist
MNR, Aylmer District
(519) 773-4723

From: Nix, April (MNR)
Sent: March 28, 2011 12:04 PM
To: Aitken, Sarah
Cc: Deschamps, Vince; Riddell, Heather (MNR); Harkins, Erin (MNR)
Subject: RE: NextEra Wind Energy

Hi Sarah,

With respect to the Bluewater and Goshen sites,

For the water bodies report please note that the Great Lakes are not considered Lake Trout Lakes for the purpose of the Renewable Energy Approvals regulation.
Only those lakes listed in the *Inland Ontario Lakes Designated for Lake Trout Management ,May 2006* (as amended and revised) are considered Lake Trout Lakes for the purpose of the regulation (see document attached).

You should be directing questions regarding Jericho to Heather Riddell in Alymer District.

Cheers,

April

April Nix
Renewable Energy Planning Ecologist
Ministry of Natural Resources, Guelph District
1 Stone Road West
Guelph ON, N1G 4Y2
(P) 519-826-4939
(F) 519-826-6849
email: april.nix@ontario.ca

From: Aitken, Sarah [mailto:Sarah.Aitken@aecom.com]
Sent: March 28, 2011 11:36 AM
To: Nix, April (MNR)

Cc: Deschamps, Vince
Subject: NextEra Wind Energy

Hi April,
We are in the process of completing our records review for the waterbodies requirements for MOE.
It is not anticipated that there are any lake trout lakes in the project areas, however; can you please confirm if there are any within the Jericho, Bluewater or Goshen study areas.

Thankyou,
Sarah

Sarah Aitken, B.Sc.(Hons.)
Aquatic Ecologist
Environment
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Owen, Jennifer

From: Riddell, Heather (MNR) [Heather.Riddell@ontario.ca]
Sent: Friday, April 08, 2011 4:06 PM
To: Cushing, Julia
Cc: Radue, Marianne; Deschamps, Vince; Rose, Marc
Subject: RE: NextEra - Jericho Wind Energy Centre

Categories: Red Category

Hi Julia,

I did receive a response from Petroleum Resources Centre (PRC). I apologize for not passing the message along to you sooner.

PRC compared the well locations you provided on February 1, 2011, with the information they have in their records and the locations did not appear to match. They have recommended that you access the Ontario Oil, Gas and Salt Resources Library to download the most up-to-date well location information.

PRC also advises that the MNR cannot guarantee the accuracy of the data in the Ministry's records as some of the information is historical and may be inaccurate or incomplete. Also, please note that the well data retrieved in the search of the MNR's database are only the wells of which we are currently aware. Other wells may exist in the project area for which we do not have any records.

If any wells, in addition to the wells identified in the database search are encountered during project development, the proponent should contact the Petroleum Resources Centre.

If you have any questions, please contact me.

Regards,
Heather

Heather Riddell
A/ Planning Ecologist
MNR, Aylmer District
(519) 773-4723

From: Cushing, Julia [mailto:Julia.Cushing@aecom.com]
Sent: April 8, 2011 12:43 PM
To: Riddell, Heather (MNR)
Cc: Radue, Marianne; Deschamps, Vince; Rose, Marc
Subject: RE: NextEra - Jericho Wind Energy Centre

Hello Heather,

I wanted to follow up with you about this request we sent you in February regarding petroleum resources in the Jericho study area. Can you confirm when we will receive this information?

Thank you,

Julia

From: Riddell, Heather (MNR) [mailto:Heather.Riddell@ontario.ca]
Sent: Monday, February 14, 2011 1:54 PM

To: Cushing, Julia
Subject: RE: NextEra - Jericho Wind Energy Centre

Hi Julia,

I forwarded the information you provided to Petroleum Resources Centre for their review. I hope to receive a response within the next few weeks.

Attached is the most current version of the Engineer's Report template. Please note that it requires an engineer's signature.

The template is subject to change, as I am aware the program has been working on revising it over the last little while. If I receive an updated version anytime soon, I will be sure to send it along.

Any questions, please feel free to give me a call.

Cheers,
Heather

Heather Riddell
A/ Planning Ecologist
MNR, Aylmer District
(519) 773-4723

From: Cushing, Julia [mailto:Julia.Cushing@aecom.com]
Sent: February 1, 2011 2:21 PM
To: Riddell, Heather (MNR)
Cc: Deschamps, Vince; Rose, Marc; Williams, Melanie D.
Subject: NextEra - Jericho Wind Energy Centre

Hello Heather,

As per our conversation today, please find attached GIS shapefiles for the Jericho Wind Energy Centre's Study Area boundary and for the existing Petroleum Resources in the Study Area. We have also included an excel document which summarizes these resources.

It is my understanding that you will forward this information to the Petroleum Resource Centre and request that they confirm the accuracy and completeness of this information, and that they provide the boundaries of the operation, whether any decommissioned wells were done so by today's standards and any information on required setbacks.

Could you also please forward to us a template for the Engineer's Report?

Thank you for your assistance, please contact me if you require any additional information.

Regards,

Julia

Julia Cushing
Environmental Planner
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Owen, Jennifer

Subject: FW: Next Era ELC/Amphibian field survey protocols

From: Riddell, Heather (MNR) [mailto:Heather.Riddell@ontario.ca]
Sent: Monday, May 16, 2011 3:53 PM
To: Jolly, Dave
Cc: MacKay Ward, Jessica; Nix, April (MNR)
Subject: RE: Next Era ELC/Amphibian field survey protocols

Hi Dave,

The Aylmer and Guelph offices of the MNR reviewed the ELC and amphibian protocols provided for the Nextera projects (Jericho, Goshen and Bluewater) and provide the following recommendations in response.

Amphibian Studies and Candidate SWH

It should be understood that general feature-based criteria found in the Significant Wildlife Habitat Technical Guide (SWHTG) can be used to identify Candidate Significant Wildlife Habitat (SWH) using simple investigation methods such as visual scans. This information should be used to identify natural features, including Candidate SWH.

For the purposes of the site investigation, it is unclear what methods were used to identify the various Candidate SWH amphibian breeding habitats. When applying the SWHTG there are two types of amphibian breeding habitats to separately consider – wetland and woodlands habitats. Each feature (habitat) should be identified and discussed separately in the NHA site investigation and evaluation of significance reports.

Where Candidate SWH meets the habitat-based criteria from the SWHTG and proponents are proposing development in or within 120m of a Candidate SWH, an evaluation of significance is required.

Point Count, Transect, Floristic Studies, Egg mass/larval counts and Observational Studies are examples of methods for evaluating significance of natural features, and must be completed at the appropriate time of year. These methods are intended to document the significance of Candidate SWH, meaning the activity and behaviour, as well as abundance and diversity of specific species using these habitats. These types of studies including amphibian breeding call studies should be reported within the methods and results of the Evaluation of Significance Report.

With respect to the proposed amphibian call studies for the purposes of evaluating the significance of Candidate SWH amphibian breeding habitats, Ministry staff note the following:

1. The proposed method of only two surveys would not include data for the third timing window as per the mash monitoring protocol, and may not accurately capture breeding activity from later breeding amphibian species. Further given the delayed season due to weather conditions so far this year for some species breeding-related activities, it is recommended that observations from all three of the survey windows should be represented.
2. Amphibian call locations should be within/adjacent to each Candidate SWH identified through the site investigation and provide information to support identifying the diversity and abundance of species using the habitat(s).
3. It is unclear how other amphibian species that cannot be monitoring through vocalization studies (such as salamanders) are being considered within the evaluation of significance. Where amphibian woodland habitats are identified as Candidate SWH, evaluations of significance should also capture salamanders when determining the species diversity and abundance of amphibian habitats.
4. The proposed protocol states that surveys will end at 2 a.m., while the marsh monitoring protocol recommends ending surveys at 12 a.m. We recommend adhering to the marsh monitoring program and ending surveys at 12 a.m., as opposed to 2 a.m.

This same approach for identifying Candidate SWH should be applied to all other potential habitats and appropriate evaluations are required where Candidate SWH is in or within 120m of the project location.

Ecological Land Classification (ELC)

We noted that the ELC protocol is proposing that soil samples are only taken “at sites that appear transitional (i.e. where it is unclear whether unit is upland or wetland)….”. The criteria presented dictates “ii) the moisture regime should be >6 (i.e wet) and iii) ground cover should reflect >50% wetland vegetation”. The most recent guidance available, which assists with determining when an ELC community meets the definition of a wetland in Ontario Wetland Evaluation System (OWES), states that when an ELC community has a moisture regime of 5 or more and contains 50% or more wetland plants it is considered a wetland by OWES. Therefore, we suggest that soils data is collected for each community and that the OWES 3rd edition southern manual is utilized to determine if any communities are wetlands. The boundaries of wetlands should also be delineated using OWES, not ELC, i.e. ELC and OWES protocol should not be combined, but used separately as they both serve separate purposes. Where MNR has previously identified/ evaluated wetland features, the boundaries were assigned using OWES; however, if additional information is collected and revisions to an OWES boundary proposed this needs to be communicated within the NHA.

ELC should be completed by individuals who have completed ELC training. Where ELC is being completed to the Ecosite level the field cards should be completed, and included as part of the field notes. This should include soils information.

If any Endangered and/or Threatened species at risk (SAR) species are encountered during ELC surveys, this information is not to be reported within the NHA, but should be provided to the Ministry in a separate report to meet the requirements of Approvals and Permitting Requirements Document (APRD).

It is our understanding that these projects do not currently have a Feed-in Tariff (FIT) contract, but are awaiting the results of Economic Connection Testing (ECT). Given the number of renewable energy applications we are receiving at this time, we are prioritizing our reviews of Natural Heritage Assessments and work plans for renewable energy projects. Those projects that currently have FIT contracts with OPA are being given first priority given the timelines they are required to meet. As such, we will be unable review any additional survey protocols for these projects at this time.

Should the status of these projects change and a FIT contract be awarded to any one of these projects, please let us know and Ministry staff would work to review and provide comments on the work plan at that time.

If you have any questions please let me know.

Regards,

Heather

Heather Riddell
A/ Planning Ecologist
MNR, Aylmer District
(519) 773-4723

From: Jolly, Dave [mailto:Dave.Jolly@aecom.com]
Sent: May 10, 2011 2:08 PM
To: Riddell, Heather (MNR)
Cc: MacKay Ward, Jessica
Subject: RE: Next Era ELC/Amphibian field survey protocols

Thx Heather; I appreciate your attention to this ASAP as it will make our field investigations more accurate and efficient.

From: Riddell, Heather (MNR) [mailto:Heather.Riddell@ontario.ca]
Sent: Tuesday, May 10, 2011 1:54 PM
To: Jolly, Dave
Cc: MacKay Ward, Jessica
Subject: RE: Next Era ELC/Amphibian field survey protocols

Hi Dave,

I'm glad you double-checked because for some reason that email when to my Junkmail filter. I am just seeing it now. I don't know that we will be able to provide a response by tomorrow. We commonly need a couple weeks to review workplans, etc. given our current workload, but I will circulate it with technical staff and try to get back to you soon.

Regards,
Heather

Heather Riddell
A/ Planning Ecologist
MNR, Aylmer District
(519) 773-4723

From: Jolly, Dave [mailto:Dave.Jolly@aecom.com]
Sent: May 10, 2011 1:46 PM
To: Riddell, Heather (MNR)
Cc: MacKay Ward, Jessica
Subject: RE: Next Era ELC/Amphibian field survey protocols

Thx Heather:

I'll take a look at documents to pull out info for our field investigations. Did you receive our ELC/vegetation + Amphibian survey protocols? Any word on when you can get back to me on them as ideally we would like to start field investigations as early as tomorrow?

From: Riddell, Heather (MNR) [mailto:Heather.Riddell@ontario.ca]
Sent: Tuesday, May 10, 2011 1:36 PM
To: Jolly, Dave
Cc: MacKay Ward, Jessica
Subject: RE: Next Era ELC/Amphibian field survey protocols

Hi Dave,

It's called the Wetland Characteristics and Ecological Functions Assessment tool and it's located in Appendix C (Page 80(of the Natural Heritage Assessment Guide (NHAG). Please note that the Significant Wildlife Habitat (SWH) Criteria Schedules are draft and the SWH Technical Guide should be the primary reference to use for criteria for identifying candidate SWH and evaluating Candidate SWH for significance.

Regards,
Heather

Heather Riddell
A/ Planning Ecologist
MNR, Aylmer District
(519) 773-4723

From: Jolly, Dave [mailto:Dave.Jolly@aecom.com]
Sent: May 10, 2011 11:25 AM
To: Riddell, Heather (MNR)
Cc: MacKay Ward, Jessica
Subject: Re: Next Era ELC/Amphibian field survey protocols

Hi Heather:

You mentioned an OWES tool that we might be able to use as a possible short cut to full OWES for Next Era sites. Did I hear that correctly? If so, please provide details or where you can find it in the Natural Heritage Assessment Guide or Significant Wildlife Habitat Ecoregion Criteria Schedules Addendum to Significant Wildlife Habitat Technical Guide.

From: Jolly, Dave
Sent: Monday, May 09, 2011 6:41 PM
To: 'heather.riddell@ontario.ca'
Cc: 'april.nix@ontario.ca'; MacKay Ward, Jessica; Deschamps, Vince; Radue, Marianne
Subject: Re: Next Era ELC/Amphibian field survey protocols

Hello Heather and April:

Please find attached the protocol procedures we are using to perform ELC/vegetation & amphibian surveys for Next Era sites. We have conducted 1 amphibian survey at all sites within the foot print of turbines and few, if any, met the criteria for significant wildlife habitat. Thusly, we feel that only a total of two amphibian surveys would suffice to capture a representative sampling of amphibians found. The timing of this second amphibian survey would be near the end of this month. With regards to following MNR guidelines to determine significant wildlife habitat, valleylands, etc. we would conduct the short version ELC (ie. assessing vegetation to classify polygons) and obtain a soil profile whenever there is some doubt as to whether a site is a wetland. If you could kindly provide your input on this ASAP, preferably by Wednesday so we can begin ELC/vegetation surveys that would be great.

Dave Jolly, B.Sc.
AECOM
Ecologist

(905) 477-8400 ext. 403 Work
Dave.Jolly@aecom.com

Owen, Jennifer

From: MacKay Ward, Jessica
Sent: Thursday, August 25, 2011 4:52 PM
To: Cushing, Julia
Subject: FW: NextEra - Jericho Records Review Request
Attachments: MNRRecordsReviewRequest_Aug232011_Jericho.docx; 60155032 _Jericho_NaturalFeatureRecReview.pdf; JerichoStudyArea.zip

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From: MacKay Ward, Jessica
Sent: Thursday, August 25, 2011 4:37 PM
To: 'Cameron, Amy (MNR)'
Cc: Deschamps, Vince
Subject: NextEra - Jericho Records Review Request

Hello Amy,

Please find attached our records review request form and shapefiles for the Jericho Wind Energy Centre. Please note that the project layout has not been finalized, however a preliminary layout for turbines is represented on the attached map. As the turbine layout is still subject to change and the locations of other project components have not been identified, we are presently conducting the records review for the entire study area, which includes the Jericho Wind Energy Centre (where turbines will be located) as well as the Transmission Line Study Area.

Please do not hesitate to contact me should you require additional information.

Regards,

Jessica

Jessica MacKay Ward, Ph.D.
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Owen, Jennifer

From: Cushing, Julia
Sent: Wednesday, September 07, 2011 1:59 PM
To: 'Cameron, Amy (MNR)'; 'jim.beal@ontario.ca'
Cc: MacKay Ward, Jessica; Rose, Marc
Subject: FW: NextEra - Bluewater Records Review Request
Attachments: 60155032_Bluewater_NaturalFeatureRecReview.pdf; Bluewater_Turbines_and_CLAR_Sept07_2011.zip; Goshen_Turbines_and_CLAR_Sept07_2011.zip; JerichoTurbines_Sept07_2011.zip; 60155032_Jericho_NaturalFeatureRecReview.pdf; 60155032_Goshen_NaturalFeatureRecReview.pdf; MNRRecordsReviewRequest_Aug232011_Bluewater.docx; MNRRecordsReviewRequest_Aug232011_Goshen.docx; MNRRecordsReviewRequest_Aug232011_Jericho.docx

Hi Amy and Jim,

As a follow up to the email Jessica sent you below for each Bluewater, Goshen and Jericho project, I am re-sending you the Records Review Request Forms, now indicating that Marc Rose is the main contact. Please also note that the shapefiles contain turbine locations for all three projects and access road/collection systems for Bluewater and Goshen.

Regards,

Julia

Julia Cushing
Environmental Planner
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From: MacKay Ward, Jessica
Sent: Thursday, August 25, 2011 4:37 PM
To: 'Cameron, Amy (MNR)'
Cc: Deschamps, Vince
Subject: NextEra - Bluewater Records Review Request

Hello Amy,

Please find attached our records review request form and shapefiles for the Bluewater Wind Energy Centre. Please note that the project layout has not been finalized, however preliminary layouts for turbines, access roads and collection lines

are represented on the attached map. As the layouts are still subject to change, we are presently conducting the records review for the entire study area, which includes the Bluewater Wind Energy Centre (where turbines will be located) as well as the Transmission Line Study Area.

Please do not hesitate to contact me should you require additional information.

Regards,

Jessica

Jessica MacKay Ward, Ph.D.
Ecologist
AECOM
300 Town Centre Blvd, Suite 300, Markham, ON, L3R 5Z6
Tel: 905-477-8400 ext. 225
Fax: 905-477-1456
Jessica.MacKayWard@aecom.com

Owen, Jennifer

From: Cushing, Julia
Sent: Monday, January 02, 2012 12:04 PM
To: Owen, Jennifer
Subject: FW: NextEra - Timing of site investigations for NHA reports

Categories: Red Category

For the consultation record.

From: Boos, John (MNR) [mailto:john.boos@ontario.ca]
Sent: Wednesday, September 28, 2011 11:59 AM
To: MacKay Ward, Jessica
Cc: Rose, Marc; Cushing, Julia; Bird, Thomas; Kamstra, James
Subject: RE: NextEra - Timing of site investigations for NHA reports

Jessica,

What you outline below is what we discussed and is accurate.

Soil Data for ELC; although soils are recommended for proper ELC methods, just doing vegetation descriptions to Ecosite is suitable for this process except where there are questions for wetland e.g. wet meadows or lowland woodland/swamp areas. Also utilize soil probes to build the soil profiles, not soil pits.

Prism Sweeps are required when determining if you have >10 large diameter trees within a woodlot or ELC polygon within a larger woodlot that would qualify as a Bat Maternity Roost (Not Hibernacula or winter roosts, these are in caves or mines). This is the only SWH that would require this and only within mature to overmature forest stands.

Some site investigation work can be done during the fall and winter. However there are certain features that may require a seasonal visit to re-confirm or determine if a feature should be considered or is significant. An example is for rare or special concern plant species, some of these are only available during certain times of year. Another example is woodland amphibian breeding habitat, there is a vernal pool consideration of water being present until at least mid July. Anything that requires a seasonality for study could be delayed but would have to be written up into the process for determining significance. This would have to follow the App. D of NHAG process and scenarios would need to be included for all outcomes for the EIS report. We could discuss this further if this is not clear. What you state below can be delayed with commitments to completing work pre-construction.

Hope this helps,

Regards,

John Boos
Renewable Energy Field Advisor - Biologist
705-755-1748

From: MacKay Ward, Jessica [mailto:Jessica.MacKayWard@aecom.com]
Sent: September 27, 2011 9:38 AM
To: Boos, John (MNR)
Cc: Rose, Marc; Cushing, Julia; Bird, Thomas; Kamstra, James
Subject: NextEra - Timing of site investigations for NHA reports

Hi John,

Thank you for the time you spent answering my questions last week regarding our ongoing field work to complete the Site Investigation Reports for the Bluewater, Goshen and Jericho Natural Heritage Assessments. Based on our conversation, I understand the following and would greatly appreciate it if you could please confirm that this is correct with a quick reply to this email.

Soil data:
Soil data is not required to be taken in every ELC polygon. MNR is primarily interested in soils as they relate to the identification of wetlands (although we understand that wetland boundary delineation will follow OWES). We will instruct our field staff to collect soil data only in lowland sites or where the site is potentially a wetland ELC community type.

Prism sweeps:
Prism sweeps are useful in the determination of Bat Hibernacula (Winter Roost and Maternal Colonies), since the criteria for evaluating this type of SWH depends in part on the density of large diameter snags. We will instruct our field staff to collect prism sweep data only in mature forests or sites where there is a relatively high density of large diameter trees.

Timing window for site investigation field work:
Complete site investigations can be undertaken until the leaves are off the trees (generally mid-October), given that it later becomes difficult to see the ground and therefore hard to detected understory plants as well as potential wildlife habitat like vernal pools, rotting logs, etc. After that, partial site investigations can be conducted, including ELC to the ecotype level (as required by MNR) and some indications of candidate significant wildlife habitat. Ideally, this would be done when the ground is not frozen/when there's no snow on the ground, since we can't easily dig soil pits in frozen ground and it obviously becomes very difficult to detect plants/potential habitat features on the ground when it's covered in snow. Depending on the complexity of the site, an additional site visit may be required under more optimal conditions (i.e. in spring/summer). Could you please confirm whether this additional visit can be conducted after submission of the NHA report, provided that a commitment to conduct this work is included in the NHA report and that the EIS lays out mitigation measures that would apply depending on the outcome of the additional field studies?

Many thanks,

Jessica

Jessica MacKay Ward, Ph.D.
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Ministry of Tourism,
Culture and Sport

Owen, Jennifer

From: Cushing, Julia
Sent: Monday, July 26, 2010 11:23 AM
To: 'chris.schiller@ontario.ca'
Cc: Rose, Marc; Williams, Melanie D.; 'thomas.bird@nexteraenergy.com'
Subject: NextEra Energy Canada's Bluewater, Goshen and Jericho Wind Energy Centre Proposals
Attachments: Jericho_Draft PDR_June 28.pdf; Bluewater_Draft PDR_June 28.pdf; Goshen_Draft PDR_June 28.pdf

Good Morning Mr. Schiller,

NextEra Energy Canada, ULC, together with Canadian Green Power, is proposing to construct three wind energy projects in south-western Ontario. The first is proposed in Bluewater and Huron East Townships, Huron County; the second in Bluewater and South Huron Townships, Huron County; and lastly, the third in the Municipality of Lambton Shores, Warwick and Brooke-Alvinston Townships, Lambton County, Ontario. These projects are referred to as the Bluewater Wind Energy Centre, Goshen Wind Energy Centre, and Jericho Wind Energy Centre respectively. Although separate Renewable Energy Approval (REA) applications will be submitted for all three projects, the effects assessment will take into consideration the cumulative effects of these three wind energy centres.

In accordance with the recommendation outlined in the document titled *Guidance for Preparing the Project Description Report* (PDR) as part of an application under Ontario Regulation 359/09, we are contacting your agency for information and guidance on the requirements related to the preparation of the PDR and the overall process. Specifically, we are interested in receiving information regarding required permits and approvals, any potential constraints, as well as other comments you may have relating to your agency's mandate. We have included a copy of the draft PDRs for each of the projects above to provide you with background information and context for our request. Please note that the draft PDRs are also available for public viewing at www.canadianwindproposals.com.

Regards,

Julia Cushing
Environmental Planner
Julia.Cushing@aecom.com

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Ministère des Transports

Bureau du génie
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Ontario

July 29, 2010

AECOM
300 Town Centre Boulevard, Suite 300
Markham, Ontario,
L3R 5Z6

via email only
Julia.Cushing@aecom.com

Attn: Julia Cushing, Environmental Planner

RE: NextEra Energy
Bluewater, Goshen and Jericho Wind Energy Centre Proposals

The Ministry of Transportation (MTO) have reviewed the Draft Project Description Report (the report) for the above-noted Wind Energy Centre Proposals. In addition to the Oversize / Overwidth Permit requirements of MTO noted the Section 6 of the report, the following outlines MTO's general permit requirements established in the *Public Transportation and Highway Improvement Act (PTHIA*), and several project specific requirements / recommendations.

General Requirements

Building and Land Use Permits
When developing sites next to a provincial highway, a Building and Land Use Permit may be required from the MTO. In general, buildings and other structures associated with wind farms must be set back from the highway property line a minimum of 14 m. In the case of wind turbines, the set-back is increased to the height of the mast plus the length of a propeller blade. Please refer to the Project Specific Requirements noted at the end of this letter for the limits of MTO permit control.

Entrance Permits
Existing and proposed access connections to the provincial highway shall require an Entrance Permit which will stipulate the access design, conditions of use, and current ownership. Entrance permits are non-transferable; therefore, new land owners will be required to obtain new Entrance Permits. Where access to a property can be obtained via a municipal road, a new entrance to the provincial highway will not be permitted. Certain visibility and safety concerns must be addressed before an Entrance Permit will be issue. In addition to the above-noted Entrance Permit, a Temporary Entrance Permit may be required for the construction phase, which according to the report would require an 11m wide access road.

Sign Permits
Signs, not limited to temporary construction signs and development signs which are visible from the provincial highway may require a MTO Sign Permit. The type, size, and location of all signs shall be approved by MTO prior to their installation.

…2

Encroachment Permits

MTO Encroachment Permits are required for any construction within the provincial highway right-of-way.

The parallel installation of cables, fibre optics, and hydro poles will not be permitted within the highway right-of-way. Parallel installations shall be setback 14m from the highway right-of-way. MTO may permit a perpendicular crossing of a highway (aerial or buried), the location of which is subject to MTO review and approval. MTO will not permit any open cuts in the highway; all cables shall be bored, and will require MTO review and approval not limited to engineering drawings and geotechnical investigations.

Minor modifications to a provincial highway for equipment transportation, is subject to MTO review and approval and will require a MTO Encroachment Permit. Construction of improvements shall the responsibility of the proponent (financially and otherwise). Typically, modifications to the provincial highway will require the proponent to prepare contract drawings, tender, and construct the improvements. Improvements shall be constructed in accordance with MTO design standards, and shall follow the Class Environmental Assessment for Provincial Transportation Facilities. A legal agreement secured by a Letter of Credit will also be required.

Project Specific Requirements

Bluewater Wind Energy Centre – Huron County

- Highway 4 and Highway 8 may be impacted by the Bluewater Wind Energy Centre.
- Ensure that any reference to London Road is changed to Highway 4.
- MTO Building and Land Use permits are required for all new developments located within 45m of our highway right-of-way and located within a 180m radius of the centreline intersection of Highway 4 and any municipal road.

Goshen Wind Energy Centre – Huron County

- Highway 21 north of Grand Bend is adjacent to the west limit of the Goshen Wind Energy Centre.
- Ensure that any reference to Lakeshore Road is changed to Highway 21;
- MTO Building and Land Use permits are required for all new developments located within 45m of our highway right-of-way and located within a 395m radius of the centreline intersection of Highway 401 and any municipal road.

Jerico Wind Energy Centre – Lambton County

- Highway 401 and Highway 21 may be affected by the Jerico Wind Energy Centre;
- Ensure that any reference to Lakeshore Road is changed to Highway 21;
- MTO Building and Land Use permits are required for all new developments located within 45m of our highway right-of-way and located within a 395m radius of the centreline intersection of Highway 401 and any municipal road;
- Access to Highway 401 shall not be permitted;
- MTO Building and Land Use permits are required for all new developments located within 45m of our highway right-of-way and located within a 395m radius of the centreline intersection of Highway 21 and any municipal road.

The decommissioning of each facility may also require permits from the MTO. MTO should be contacted during the decommissioning stage to see which permits, if any, are required.

…3

Additional information including standard permit conditions, permit application forms, current fee structure may be viewed using the following link:

http://www.mto.gov.on.ca/english/engineering/management/corridor/index.shtml

Please keep us informed as you move through the Renewable Energy Approval (RDA) process. Should you require any clarification to the above, please do not hesitate to call.

Regards,

John Morrisey
Corridor Management Planner
Planning and Design Section
Southwestern Region, London

c. S. McInnis, Head - Corridor Management Section
I. Smyth, Corridor Management Planner - Corridor Management Section
S. Barnabie, Corridor Management Officer - Corridor Management Section
J. Pegelo, Corridor Management Officer – Corridor Management Section
J. Graham-Harkness, Regional Contracts and Operations Engineer – Contracts & Operations Office

Reference: www.canadianwindproposals.com.

AECOM

Natural Resources Canada

Wong Ken, Michelle

From: Fajardo, Leo [Leo.Fajardo@fpl.com]
Sent: Friday, December 14, 2012 2:42 PM
To: Janet.Drysdale@NRCan-RNCan.gc.ca; David.McCormack@NRCan-RNCan.gc.ca
Cc: Bird, Thomas; Faiella, Benjamin; Groffman, Ross
Subject: Jericho Wind Energy Centre - Lambton County, ON
Attachments: ONJericho_NextEraEnergy_Telecommunications_Interference_Consultation_Rep....pdf

NRCan Seismo:

Please find attached the request for review of the proposed Jericho Wind Energy Center in Lambton County. We are looking for specific feedback on the potential impact to your telecommunications and radar operations.

Thank you for your consideration and timely response,

Leo Fajardo
Wind Farm Optimization Analyst
office (561) 304-5733
leo.fajardo@nexteraenergy.com

NAV Canada

Wong Ken, Michelle

From: Fajardo, Leo [Leo.Fajardo@fpl.com]
Sent: Wednesday, December 05, 2012 5:28 PM
To: LandUse@navcanada.ca; chris.csatlos@navcanada.ca; pinonm@navcanada.ca; michelle.bishop@navcanada.ca
Cc: Bird, Thomas; Groffman, Ross; Faiella, Benjamin
Subject: Jericho Wind Energy Centre NAVCAN submission
Attachments: Jericho_Wind_Energy_Center_EN.xls.xls; Jericho NAVCAN Land Use Proposal Supplemental Map 2012-12-04.pdf.pdf; Jericho_Wind_Energy_Centre_Submission_EN.pdf.pdf

Good afternoon,

Please see the attached land use submission form for the Jericho Wind Energy Centre located in Lambton Shores county, Ontario. The submission form is for a total of 97 turbine locations and 7 met towers. Only 92 of the 97 turbine locations and 4 of the 7 met tower locations will be built. The turbine and met tower locations will also be sent to Transport Canada with a proposed lighting plan according to CAR 621. If you need any additional information, please let me know,

Regards,

Leo Fajardo
Wind Farm Optimization Senior Analyst
office (561) 304-5733
leo.fajardo@windlogics.com

Wong Ken, Michelle

From: Csatlos, Christopher [Chris.Csatlos@navcanada.ca]
Sent: Thursday, December 06, 2012 7:33 AM
To: Fajardo, Leo
Cc: Bird, Thomas; Groffman, Ross; Faiella, Benjamin; Pinon, Marcel; Bishop, Michelle
Subject: RE: 12-3230: Jericho Wind Energy Centre

Good morning Leo,

Our file number for the Jericho Wind Energy Centre will be 12-3230.

Regards,

_____
Christopher Csatlos
Supervisor - Land Use Office
Aeronautical Information Services, NAV CANADA
tel +1 613 248 4162
fax +1 613 248 4094
e-mail chris.csatlos@navcanada.ca

From: Fajardo, Leo [mailto:Leo.Fajardo@fpl.com]
Sent: December 5, 2012 5:28 PM
To: Land Use; Csatlos, Christopher; Pinon, Marcel; Bishop, Michelle
Cc: Bird, Thomas; Groffman, Ross; Faiella, Benjamin
Subject: 12-3230 LUF

Good afternoon,

Please see the attached land use submission form for the Jericho Wind Energy Centre located in Lambton Shores county, Ontario. The submission form is for a total of 97 turbine locations and 7 met towers. Only 92 of the 97 turbine locations and 4 of the 7 met tower locations will be built. The turbine and met tower locations will also be sent to Transport Canada with a proposed lighting plan according to CAR 621. If you need any additional information, please let me know,

Regards,

Leo Fajardo
Wind Farm Optimization Senior Analyst
office (561) 304-5733
leo.fajardo@windlogics.com

Rogers Communications

Wong Ken, Michelle

From: Fajardo, Leo [Leo.Fajardo@fpl.com]
Sent: Friday, December 14, 2012 3:30 PM
To: Milan Vujosevic
Cc: Bird, Thomas; Groffman, Ross; Faiella, Benjamin
Subject: Jericho Wind Energy Centre - Lambton County, ON
Attachments: ONJericho_NextEraEnergy_Telecommunications_Interference_Consultation_Rep....pdf

Rogers Communications:

Please find attached the request for review of the proposed Jericho Wind Energy Center in Lambton County. We are looking for specific feedback on the potential impact to your telecommunications operations.

Thank you for your consideration and timely response,

Leo Fajardo
Wind Farm Optimization Analyst
office (561) 304-5733
leo.fajardo@nexteraenergy.com

Royal Canadian Mounted Police

Wong Ken, Michelle

From: Fajardo, Leo [Leo.Fajardo@fpl.com]
Sent: Friday, December 14, 2012 2:15 PM
To: Coordinator@rcmp-grc.gc.ca; alex.beckstead@rcmp-grc.gc.ca
Cc: Bird, Thomas; Faiella, Benjamin; Groffman, Ross
Subject: Jericho Wind Energy Centre - Lambton Shores County, ON
Attachments: ONJericho_NextEraEnergy_Telecommunications_Interference_Consultation_Report_2012-12-24.pdf

Royal Canadian Mountain Police:

Please find attached request for review of a proposed Jericho Wind Energy Centre located in Lambton Shores County, Ontario. We are looking for specific feedback on the potential impact to your communications operations.

Thank you for your consideration and timely response,

Leo Fajardo
Wind Farm Optimization Analyst
office (561) 304-5733
leo.fajardo@nexteraenergy.com

AECOM

St. Clair Region
Conservation Authority

AECOM
50 Sportsworld Crossing Road, Suite 290 519.650.5313 tel
Kitchener, ON, Canada N2P 0A4 519.650.3424 fax
www.aecom.com

Memorandum

To	File	Page	1
CC	Vince Deschamps		
Subject	NextEra Waterbodies Component – Agency Consultation		
From	Nicola Lower and Sarah Aitken		
Date	May 5, 2011	Project Number	60156395

Nicola Lower and Sarah Aitken visited Ausable-Bayfield Conservation Authority (ABCA) and St Clair Region Conservation Authority (SCRCA) on May 3rd 2011. We met with the following staff during these meetings:

Andrew Bicknell, Regulations Co-ordinator, ABCA
Geoff Cade, Supervisor of Water & Planning, ABCA
Tracey Boitson, GIS/CAD Information Systems Specialist, ABCA
Dallas Cundick, Environmental Planner/Regulations Officer, SCRCA

1. Purpose of Visit

To review status of background data available within the three project areas (Goshen, Bluewater, Jericho); To obtain outstanding natural heritage background data; To review proposed aquatic work plan with CAs; To establish consultation process with CAs on the work program to aide in the permitting process.

2. Summary of ABCA Visit

We presented preliminary turbine layouts for all three project areas, and compared areas to ABCA Regulation mapping. We identified that there was a need to obtain accurate jurisdictional (watershed) boundaries. We identified the preliminary locations of several turbines in an area of floodplan (Thedford Klondyke floodplain). Current CA Regulations do not permit any development in these areas. However, staff did acknowledge that they do not have a strong standing or experience on the impact of wind power development and therefore some turbine placements may be permitted. Although it was noted that the related infrastructure, transmission lines and construction footprint would potentially pose the greater impact in such Regulated areas, and such developments are currently not permitted.

It was noted that the number of turbines would potentially result in a large number of permits and this could result in a significant timeline to review. AECOM ecologists discussed the idea of a blanket permit and this was positively received, but not agreed to as it will depend on final turbine layouts and site specific conditions. We discussed the format of such a blanket permit and AECOM ecologists will

be developing generic standards for a number of parameters, such as widths of road corridors, watercrossing, transmission line installation, and associated mitigation and restoration plans. It was agreed that all watercourse crossings were to be culverts, either permanent or temporary, rather than bridge structures. If we require review of the content of this report before final submission of the blanket permit, there will be a fee associated although ABCA has not determined this fee schedule yet.

The CA advised that turbines (including the buffer zone) should stay out of the Regulated Areas. Special attention should be paid to the Thedford-Klondyke floodplain (geotechnical/regulation issues), as well significant valley lands (slope stability issues, protected areas, natural hazard). ABCA noted that if site visits were required to assess impacts (i.e. turbine placements in regulated areas), this would significantly increase the review time for the permitting process.

There is a need to overlay Natural Heritage features, topography and CA regulation mapping to allow for appropriate constraint mapping. ABCA can provide the following:

- ABCA regulation map
- Jurisdictional boundary
- Hazards mapping
- Locally significant features
- Drain classification
- Fisheries info/thermal regimes
- SAR and water quality (if available)

ABCA requires a fee to provide this data and will be providing a cost estimate for approval.

ABCA stated that thermal regime of the watercourse along with habitat mapping would be critical to assessment of impacts, and fish community data would only be required if there was an absence of background data. ABCA have a Level 2 Agreement with Department of Fisheries and Oceans and can review applications for permits under the *Fisheries Act*. The CAs role in this project would largely be related to fisheries, aquatic and floodplain requirements. ABCA also envisage that the greatest impacts to watercourses are likely to arise from associated infrastructure rather than the turbines themselves.

It was noted that ABCA requirements may be very different to Ministry of the Environment (MOE) and they should also be fully consulted on their requirements under the REA.

3. Summary of SCRCA Visit

Some data has already been provided by SCRCA and the preliminary turbine layouts for Jericho were reviewed.

SCRCA agreed to a blanket permit with the same generic standards and mitigation, along with site-specific details where necessary. SCRCA would conduct site visits to review site specific conditions, possibly at the same time as AECOM ecologists. It was noted that fish community assessments are unlikely to be required, unless requested by MOE and MNR.

SCRCA will screen for Species at Risk when the turbine layouts are finalized.

SCRCA will provide AECOM with thermal regimes for watercourses, watercourse names, and locally significant areas.

There is a fee associated with permitting process and it was noted that current fees are $50 per directional drill site and $250 per culvert crossing.

4. Ministry of the Environment

After the meetings with the CA's Nicola Lower and Sarah Aitken contacted Shannon McNeil with MOE (May 5 2011) to follow-up with guidance previously provided regarding the waterbodies component. MOE confirmed that their process is completely process to that of the CA's and MNR and therefore requirements may differ. Workplans for the MOE will at the very least need to meet the basic REA guidelines. MOE will not provide information on the level of detail required this is down to the proponents professional opinion. Ecology staff need to ensure they have sufficient level of detail to provide MOE with enough information to assess negative impacts and the suggested mitigation. MOE are highly unlikely to request additional information (for example, more field surveys), provided the proponent has provided a comprehensive review of the site conditions, impacts and mitigation. MOE stated that the process has developed from that of the EA process, therefore they are very much focused on the 'big picture'.

5. Next Steps

The following outlines the next steps for the Waterbodies/Natural Heritage component of the NextEra Wind Energy Project.

- AECOM staff are working with the Conservation Authorities and MNR to obtain data/mapping
- Nicola and Sarah are finalizing the waterbody workplan for submittal and review by the agencies
- Prepare for field investigations and obtain any required permits to conduct studies.

Owen, Jennifer

From: Aitken, Sarah
Sent: Wednesday, July 20, 2011 2:35 PM
To: Cushing, Julia
Subject: FW: NextEra Wind Energy Centre

Categories: Red Category

From: Dallas Cundick [mailto:dcundick@scrca.on.ca]
Sent: Thursday, May 26, 2011 10:52 AM
To: Aitken, Sarah
Subject: RE: NextEra Wind Energy Centre

Hello Sarah,

I am in discussion with our GIS people to find out if we have all of the data you require.

Could you send me a map of the study area for reference, I cannot seem to find one.

Also, I recalled from our meeting that you may be required to potentially install some new water crossings, or temporary crossings. In a recent meeting with DFO they informed us that if certain works require DFO Authorization they are now required to look at the scope of the entire project, and not just the specific area of the in water works. Once you get a rough idea if any crossings (new culverts etc.) will be required and there approximate location please let me know so I can begin discussion with DFO.

Thanks

Dallas

From: Aitken, Sarah [mailto:Sarah.Aitken@aecom.com]
Sent: May-20-11 2:07 PM
To: Dallas Cundick
Cc: Lower, Nicola
Subject: NextEra Wind Energy Centre

Hi Dallas,

Thanks for meeting with us on the 3rd May, it was a very productive meeting. Sorry for the delay in sending this email, but we have been busy finalizing layouts and fieldwork plans. If you wish to come and visit any of the sites while we are conducting fieldwork, please let me know and we'll make sure we inform you when we'll be out. It would be good to get your input into the scope of our investigations to ensure we are collecting sufficient information, particularly as we hope to submit a blanket permit application for the sites, as we discussed at the meeting.

Below is the list of data that we still require from SCRCA:

- Thermal mapping for the study area;
- Watercourse names;
- any known SAR species within the study area;
- Locally significant areas or natural hazard areas.

It would be very helpful to get this as soon as you have time so we can update our maps prior to fieldwork.

I also noticed on your website that you have a checklist of requirements. Is this available to us? If not, could you provide us with any special requirements that may pertain specifically to this type of development?

If you have any questions please let me know.

Thanks again for your help, and we'll be in touch when we begin fieldwork.

Sarah

Sarah Aitken, B.Sc.(Hons.)
Aquatic Ecologist
Environment
D 519.840.2221 M 519.820.0944
sarah.aitken@aecom.com

AECOM
55 Wyndham Street North, Suite 215
Guelph, ON N1H 7T8
T: (519) 763-7783 F: (519) 763-1668
www.aecom.com

From: Dallas Cundick [mailto:dcundick@scrca.on.ca]
Sent: Thursday, April 28, 2011 13:07
To: Aitken, Sarah
Subject: RE: NextEra Wind Energy Centre

Sounds perfect, see you then

Dallas

From: Aitken, Sarah [mailto:Sarah.Aitken@aecom.com]
Sent: April-28-11 12:54 PM
To: Dallas Cundick
Subject: RE: NextEra Wind Energy Centre

Hi Dallas,
Does 2:00 work for you?

Thanks,
Sarah

Sarah Aitken, B.Sc.(Hons.)
Aquatic Ecologist
Environment
D 519.840.2221 M 519.820.0944
sarah.aitken@aecom.com

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55 Wyndham Street North, Suite 215
Guelph, ON N1H 7T8

T: (519) 763-7783 F: (519) 763-1668
www.aecom.com

From: Dallas Cundick [mailto:dcundick@scrca.on.ca]
Sent: Tuesday, April 26, 2011 10:41
To: Aitken, Sarah
Subject: RE: NextEra Wind Energy Centre

At the office sounds great, just let me know what time you will be arriving.

Dallas

From: Aitken, Sarah [mailto:Sarah.Aitken@aecom.com]
Sent: April-25-11 3:24 PM
To: Dallas Cundick
Subject: RE: NextEra Wind Energy Centre

Hi Dallas,
Thanks for getting back to me.
We have tentatively booked a meeting with ABCA in the morning and was hoping we could meet with you in the afternoon. Could we meet at your office?

Thanks,
Sarah

Sarah Aitken, B.Sc.(Hons.)
Aquatic Ecologist
Environment
D 519.840.2221 M 519.820.0944
sarah.aitken@aecom.com

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55 Wyndham Street North, Suite 215
Guelph, ON N1H 7T8
T: (519) 763-7783 F: (519) 763-1668
www.aecom.com

From: Dallas Cundick [mailto:dcundick@scrca.on.ca]
Sent: Wednesday, April 20, 2011 12:09
To: Aitken, Sarah
Subject: RE: NextEra Wind Energy Centre

Hello Sarah,

It looks like I will be available May 3, 2011. Let me know or the location and time.

Thanks

Dallas

From: Aitken, Sarah [mailto:Sarah.Aitken@aecom.com]
Sent: April-18-11 2:04 PM
To: Dallas Cundick
Subject: NextEra Wind Energy Centre

Hi Dallas

As we discussed, it would be helpful to have a meeting at your earliest convenience to discuss the proposed NextEra wind energy centre and natural heritage requirements. I will try and get further details to you next week in advance of this meeting regarding layouts etc.

We currently have a meeting booked with ABCA for May 3rd and would ideally like to book the same day. I look forward to hearing from you with potential meeting dates.

Kind regards

Sarah

Sarah Aitken, B.Sc.(Hons.)

Aquatic Ecologist

Environment

D 519.763.7783 ext 5146 M 519.820.0944

sarah.aitken@aecom.com

AECOM

512 Woolwich Street, Suite 2 Guelph, ON N1H 3X7

T: (519) 763-7783 F: (519) 763-1668

www.aecom.com

AECOM's Guelph Office is Moving!

Effective April 25, 2011, our new address will be:

55 Wyndham Street North, Suite 215

Guelph, ON N1H 7T8

Main Phone Line (remains unchanged): 519-763-7783

Owen, Jennifer

From: Aitken, Sarah
Sent: Wednesday, July 20, 2011 2:35 PM
To: Cushing, Julia
Subject: FW: NextEra

Categories: Red Category

From: Dallas Cundick [mailto:dcundick@scrca.on.ca]
Sent: Thursday, May 26, 2011 4:18 PM
To: Aitken, Sarah
Subject: RE: NextEra

HI Sarah,

In regard to your request for data that you still require from the SCRCA, are GIS team has confirm that we do not have any new data other than that which was previously sent to:

Vince Deschamps M.Sc., MCIP, RPP
Senior Environmental Planner
Environment
D 519.763.7783 ext.5131
C 226.979.1149
Vince.Deschamps@aecom.com

I have outlined below where the request information can be found:

- Thermal mapping for the study area; *Drain Classification is all we have, found in DFO drain maps.*
- Watercourse names; *this can be found on DFO drain maps.*
- any known SAR species within the study area; *please contact NHIC/MNR.*
- Locally significant areas or natural hazard areas; *please see ESA study previously delivered for ESA's, and no changes to regulation limit as already provided.*

If you require any thing further or have any questions please do not hesitate to contact me.

Thanks

Dallas

From: Aitken, Sarah [mailto:Sarah.Aitken@aecom.com]
Sent: May-26-11 11:43 AM
To: Dallas Cundick
Subject: NextEra

Hi Dallas,
Attached is a map of the study for Jericho with existing data points we have. The study area is outlined in purple.

Please let me know if you require any further information.

Thanks,

Sarah

Sarah Aitken, B.Sc.(Hons.)
Aquatic Ecologist
Environment
D 519.840.2221 M 519.820.0944
sarah.aitken@aecom.com

AECOM
55 Wyndham Street North, Suite 215
Guelph, ON N1H 7T8
T: (519) 763-7783 F: (519) 763-1668
www.aecom.com

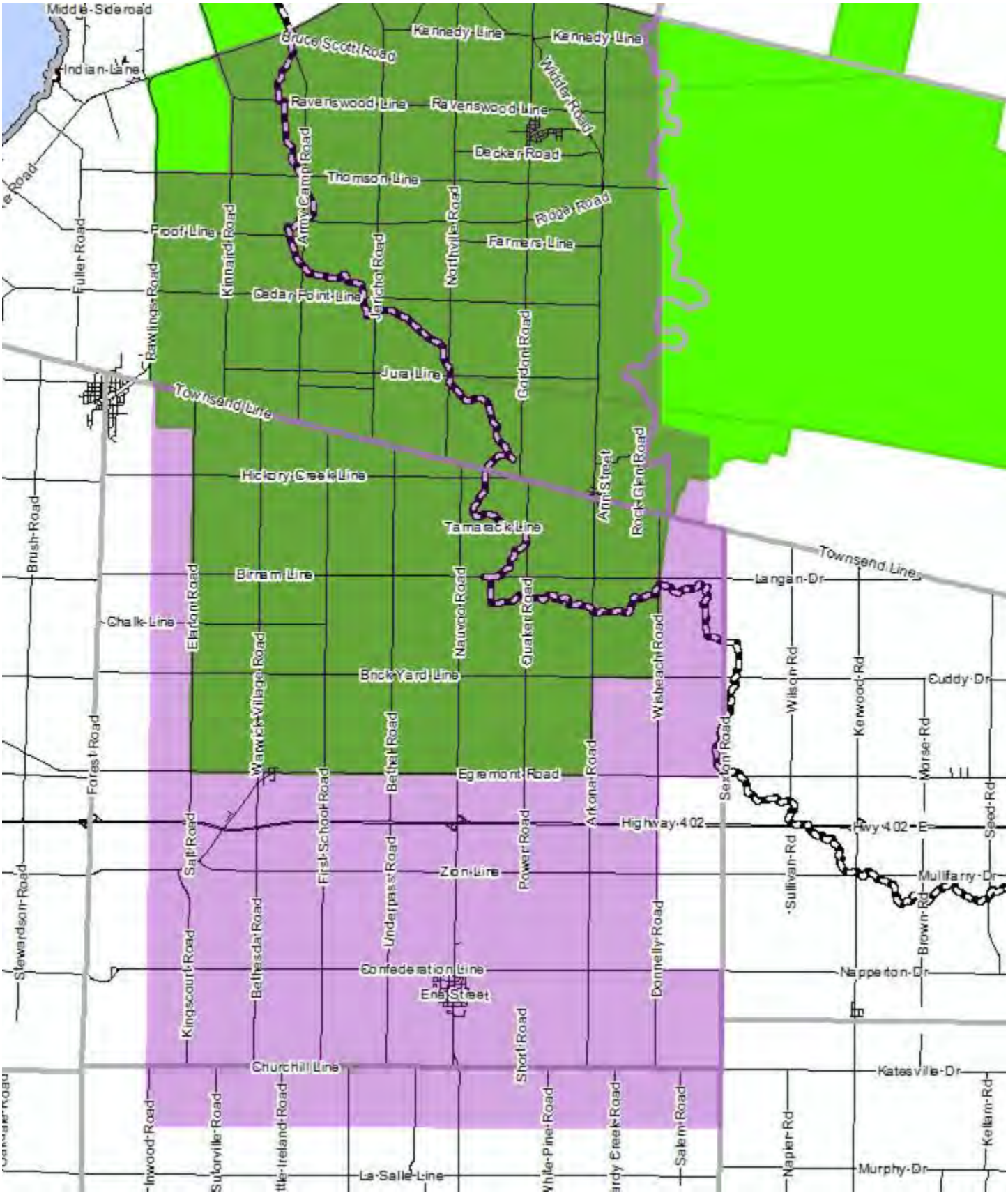
Owen, Jennifer

From: Chris Durand [cdurand@scrca.on.ca]
Sent: Thursday, April 05, 2012 1:47 PM
To: Aitken, Sarah; Dallas Cundick
Cc: Owen, Jennifer
Subject: RE: NextEra Wind Energy Centre - Information Request

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Red Category

Hi Sarah, from the shp file you sent me it appears that your study area has expanded East further into the ABCA watershed. I've compared the 2 study areas and your study has not expanded any further within our watershed (see below with original study area in purple and the recent one you sent in green). You should contact the ABCA for additional data they may have on file.



From: Aitken, Sarah [mailto:Sarah.Aitken@aecom.com]
Sent: Monday, April 02, 2012 10:40 AM
To: Chris Durand; Dallas Cundick

Cc: Owen, Jennifer
Subject: NextEra Wind Energy Centre - Information Request

Hi Chris and Dallas,

As you know AECOM is undertaking the Natural Heritage/Water bodies Assessments for a Renewable Energy Project involving wind energy in Lambton and Middlesex Counties, on behalf of NextEra Energy Canada. The project will be referred to as the Jericho Wind Energy Centre.

Since our last data request (June 2011) the study area has expanded south as well, we have included a transmission line study area. Would it be possible for you to combine the 2011 data request with the new data request into one shapefile? If not I can send you a shapefile with only the new study area. Please let me know if there is any confusion regarding this.

At this time we are requesting information for the new study area, specifically, we are looking for information (including GIS layers, if available) on the following within or near (approximately 120m) our study area (*please see attached shapefile of the Jericho study area)*:

Fish records	Fish habitat information
Water quality data	Water quantity data
Ground water discharge areas	Benthic invertebrate data
Rare species	Savannahs\Sand Barrens\Tallgrass Prairies
Area of Natural and Scientific Interest (ANSI)	Alvars
Wetlands (evaluated and unevaluated)	Conservation parks/Reserves
Woodlands	Watercourse thermal and flow regimes
Valleylands	Municipal drains
Wildlife Habitat	Percentage of Woodlands
Species at Risk	Watercourse names

We understand that your organization may not keep records on some or all of these natural features. We would appreciate a response indicating whether your organization maintains records for any of these (or other Relevant) features.

Please let me know if you have any questions or issues with the shapefile.

Thanks,
Sarah

Sarah Aitken, B.Sc.(Hons.)
Aquatic Ecologist
Environment
D 519.650.8621 M 519.820.0944
sarah.aitken@aecom.com

AECOM
50 Sportsworld Crossing Road, Suite 290 *New*
Kitchener, ON N2P 0A4

AECOM
50 Sportsworld Crossing Road, Suite 290 519.650.5313 tel
Kitchener, ON, Canada N2P 0A4 519.650.3424 fax
www.aecom.com

Minutes of Meeting

Date of Meeting	August 1, 2012	Start Time	10:00	Project Number	60155032
Project Name	NextEra Wind Energy Centre – Jericho Study Area				
Location	Lambton County				
Regarding	St. Clair Region Conservation Authority (SCRCA) O. Reg 171/06 - CA Permitting Process				
Attendees	Dallas Cundick – SCRCA Michelle Fletcher – SCRCA Andrea Garcia – NextEra Tom Bird – NextEra Marc Rose – AECOM Sarah Aitken - AECOM				
Distribution	all				
Minutes Prepared By	Sarah Aitken - AECOM				

PLEASE NOTE: If this report does not agree with your records of the meeting, or if there are any omissions, please advise, otherwise we will assume the contents to be correct.

	Action
• SCRCA advised that a hydrology study be completed to determine the appropriate sizing of culverts	
• SCRCA would like to conduct site visits to confirm and ground truth the SCRCA regulation and flood limit mapping.	AECOM and NextEra to keep SCRCA up to date with layouts
• SCRCA will issue a blanket permit for the infrastructure that is good for 2 years • The permit will require landowner consent • The CA would like to conduct the permitting process while the REA reports are undergoing Draft review by MOE	
• SCRCA recommended we coordinate with the Municipality regarding municipal drains	NextEra to contact local Drainage Engineer
• Permit Application format will consist of – site plan - Setbacks from watercourses - Construction details and engineered drawings, including environmental	

mitigation measures and planting plans	
• Would like to see generic drawings for road crossings, horizontal directional drill crossings, open-cut crossing and transmission line crossings	NextEra to provide to SCRCA once available
• SCRCA would like to see a 5 m setback for entry and exit pits required for construction of collection lines. The closer the pits are the more stringent SCRCA will be with their requirements.	
• After general scan of the study area located within the SCRCA watershed there are no obvious red flags and permitting should be typical.	
• Turbine 99 appears to be in regulation limit however there is no watercourse – SCRCA would like to visit site to ground truth conditions and likely no permit will be required. This situation may also apply to a few other turbines and infrastructure within the SCRCA jurisdiction.	

AECOM

Transport Canada

Wong Ken, Michelle

From: Fajardo, Leo [Leo.Fajardo@fpl.com]
Sent: Friday, December 14, 2012 11:19 AM
To: CASO-SACO@tc.gc.ca
Cc: Bird, Thomas; Faiella, Benjamin; Groffman, Ross
Subject: Jericho Wind Energy Centre Aeronautical Assessment and Obstruction Marking and Lighting
Attachments: Jericho Wind Energy Centre AAFOML 2012-12-14.pdf; TransportCanada Obstacle Clearance Form Supplemental Map December 14 2012.pdf; Wind Turbine Obstruction Assessment Jericho WindFarm 2012-12-14.xls

Good Morning,

Please see the attached Aeronautical Assessment Form for Obstruction Marking and Lighting, and Supplemental Map for the Jericho Wind Energy Centre located in Lambton Shore county, Ontario. The form is for a total of 97 turbine locations and 7 meteorological tower locations. Only 92 of 97 turbine locations and 4 of 7 met tower locations will be built. The turbine and met tower locations have also been set to NAV Canada. If you need any additional information or have any concerns regarding the proposed lighting plan, please let me know,

Regards,

Leo Fajardo
Wind Farm Optimization Senior Analyst
office (561) 304-5733
leo.fajardo@windlogics.com

Wong Ken, Michelle

From: CASO-SACO [CASO-SACO@tc.gc.ca]
Sent: Friday, December 14, 2012 11:19 AM
To: Fajardo, Leo
Subject: RE: Jericho Wind Energy Centre Aeronautical Assessment and Obstruction Marking and Lighting

Your email message sent to the Civil Aviation Services Ontario email account (CASO-SACO@tc.gc.ca<mailto:CASO-SACO@tc.gc.ca>) has been received. Your request will be processed by our office in the order in which it was received and in accordance with our published Civil Aviation Service Standards, available at: http://www.tc.gc.ca/eng/civilaviation/opssvs/servicestandards-549.htm.

To speak with a staff member in our Toronto office regarding your request, please call (416) 952-0230, or call our toll free number 1-800-305-2059, and select option 8. Please note that fee payments can also be made via telephone at the same toll free number, by selecting option 1.

To provide feedback on our service please use our Civil Aviation Issues Reporting System, (CAIRS) found at the following link http://www.tc.gc.ca/CAIRS.

****

Nous accusons réception de votre message envoyé au compte courriel des Services de l'aviation civile de la région de l'Ontario, SACO-CASO@tc.gc.ca<mailto:SACO-CASO@tc.gc.ca>. Notre bureau traitera votre demande dans l'ordre où elle a été reçue et selon les normes de service de l'Aviation civile officielles que vous pouvez consulter à http://www.tc.gc.ca/fra/aviationcivile/opssvs/normesdeservice-549.htm.

Pour parler à un employé de notre bureau à Toronto au sujet de votre demande, veuillez appeler au 416-952-0230, ou au numéro sans frais 1-800-305-2059, et choisir l'option 8. Veuillez noter que vous pouvez également payer des droits par téléphone au même numéro sans frais en choisissant l'option 1.

Pour nous faire part de vos commentaires sur nos services, veuillez utiliser le Système de signalement des questions de l'Aviation civile (SSQAC) qui se trouve au lien suivant : http://www.tc.gc.ca/CAIRS.