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March 31, 2015

VIA RESS, E-MAIL & COURIER

Ms. Kirsten Walli
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 26th Floor
Toronto, ON M4P 1E4

Re: **Enbridge Gas Distribution Inc. ("Enbridge")**
EB-2014-0378 – Storage Wells in Designated Storage Area
Interrogatory Responses

The Ontario Energy Board ("Board") issued Procedural Order No. 1 on March 19, 2015 wherein the Board directed Enbridge to file interrogatory responses by April 1, 2015.

Attached please find Enbridge's responses to the interrogatories from Board Staff which have been filed through the Board's Regulatory Electronic Submission System.

Page 5 of Attachment 1 to the response to Board Staff Interrogatory #3 (Exhibit I, Tab 1, Schedule 3, Attachment 1) has been redacted as it contains personal information which is protected under the *Freedom of Information and Protection of Privacy Protection Act*. The unredacted version of this exhibit is being filed with the Board under separate cover.

For further information about the project, please visit the Other Regulatory Proceedings tab on the Enbridge website at: www.enbridgegas.com/ratecase.

Sincerely,

(ORIGINAL SIGNED)

Shari Lynn Spratt
Supervisor Regulatory Proceedings

Enclosure

BOARD STAFF INTERROGATORY #1

INTERROGATORY

References: Evidence, Letter dated December 17, 2014 to the Ministry of Natural Resources and Forestry (MNRF) from Enbridge.

Preamble:

In the letter from to the MNRF, which accompanied the application for the well drilling licences, Enbridge indicates that the wells will be located on a property owned by Enbridge. The need for the new Injection/Withdrawal (I/W) wells is, according to Enbridge, to replace the Wilkesport Designated Storage Area (DSA) deliverability that will be lost by Enbridge abandoning 5 I/W wells in the Wilkesport DSA. Out of the 5 wells to be abandoned, 2 have been abandoned in 2014 and 3 will be abandoned in 2015.

Questions:

- a. Please discuss if any other property other than Enbridge's will be affected by the drilling and operation of the two proposed wells.
- b. Please explain the timing of planned in-service date for the proposed wells and the timing of the abandonment of the 3 wells in 2015.

RESPONSE

- a. An abandoned public road allowance is used to access the Enbridge property. Two properties abut this road but will not be directly affected. The owners of these properties were given notification of this application and will be further notified of the proposed work scope.
- b. The planned in-service date for the proposed wells is July 31, 2015 to allow for the start of the injection season.

The three existing wells will be abandoned upon completion of the two proposed wells and the associated gathering line (EB-2015-0033). The target date for the abandonment is August/September 2015.

BOARD STAFF INTERROGATORY #2

INTERROGATORY

References: Evidence, Letter dated December 17, 2014 to the MNRF from Enbridge.

Preamble:

In the letter dated December 17, 2014, Enbridge invited the MNRF to contact them if any further information is required.

Question:

Please file and comment of any correspondence with the MNRF, in addition to the materials on the record to date, with regard to well drilling licence applications.

RESPONSE

There have been no questions from MNRF concerning the proposed drilling locations and/or the proposed drilling programs.

There was correspondence concerning the submittal of the application by MNRF to the OEB. The email correspondence is attached.

From: [Kathy McConnell](#)
To: ["Manocha, Jug \(MNRF\)"](#)
Subject: RE: TW 15H and TW 16H Drilling Applications
Date: Wednesday, January 14, 2015 3:47:47 PM

Thank-you

Kathy McConnell
Senior Project Geologist
Enbridge Gas Distribution Inc.
Phone: 519-862-6032

From: Manocha, Jug (MNRF) [mailto:jug.manocha@ontario.ca]
Sent: Wednesday, January 14, 2015 3:33 PM
To: Kathy McConnell
Subject: RE: TW 15H and TW 16H Drilling Applications

Yes.

Jug Manocha, P.Eng.
Operations Engineer
Petroleum Operations Section
Ministry of Natural Resources & Forestry
659 Exeter Road, London, ON
N6E 1L3
Telephone 519-873-4637 Fax 519-873-4645
Email: jug.manocha@ontario.ca

From: Kathy McConnell [<mailto:Kathy.McConnell@enbridge.com>]
Sent: January 14, 2015 2:23 PM
To: Manocha, Jug (MNRF)
Subject: TW 15H and TW 16H Drilling Applications

Jug,

Just wondering if the drilling applications had been forwarded to the OEB?

Kathy

From: [Kathy McConnell](#)
To: ["Van Overberghe, Joe \(MNRF\)"](#)
Subject: RE: Referral to OEB for TW15H and TW16H
Date: Tuesday, January 27, 2015 10:50:30 AM

Joe,

Our Regulatory group has been in contact with Zora Crnojacki at the OEB and they have not received the referral. Ms. Crnojacki has asked the referral be sent to the Board Secretary with the EB-2014-0378 number in the subject line. If you have any questions please let me know.

Kathy McConnell
Senior Project Geologist
Enbridge Gas Distribution Inc.
Phone: 519-862-6032

From: Van Overberghe, Joe (MNRF) [mailto:Joe.VanOverberghe@ontario.ca]
Sent: Tuesday, January 27, 2015 9:07 AM
To: Kathy McConnell; Manocha, Jug (MNRF)
Cc: Douglas, Danielle (MNRF)
Subject: RE: Referral to OEB for TW15H and TW16H

Kathy, it was forwarded on Jan 12. We will send an electronic copy to OEB as a follow up.

From: Kathy McConnell [mailto:Kathy.McConnell@enbridge.com]
Sent: January-27-15 8:02 AM
To: Manocha, Jug (MNRF); Van Overberghe, Joe (MNRF)
Subject: Referral to OEB for TW15H and TW16H

Jug and Joe,

As of January 26th, 2015, the OEB has not received a referral from MNRF for the proposed drilling of TW#15(Horiz.#1), Sombra 3-15-XIII and TW#16(Horiz.#1) Sombra 3-15-XIII. Could you please let me know the date the applications were referred?

Kathy McConnell
Senior Project Geologist
Enbridge Gas Distribution Inc.
Phone: 519-862-6032

BOARD STAFF INTERROGATORY #3

INTERROGATORY

Reference: Application and Evidence EB-2014-0378

Preamble:

In the application and evidence Enbridge does not address potential environmental impacts of well drilling operations.

Question:

Please identify potential environmental impacts of well drilling operations and describe the mitigation and land restoration measures Enbridge plans to implement in relation to the proposed project.

RESPONSE

Enbridge has conducted several studies to address potential environmental impacts of well drilling operations. They include:

1. Baseline Private Water Well Monitoring Program completed by Stantec Consulting Ltd. – completed February 24, 2015. (Attachment 1)
2. Environmental Report Update Letter for Enbridge's Wilkesport Natural gas storage wells TW 15H and TW 16H – completed by Stantec Consulting Ltd. on February 13, 2015. (Attachment 2)
3. The 2014 Stage 1-2 Archaeological Assessment of the Proposed Enbridge Gas Distribution Inc. Wilkesport Storage Well Project, Part of Lot 15, Concession 13, Geographic Township of Sombra, The Corporation of the Township of St. Clair, Lambton County, Ontario by Dillon Consulting Limited – completed January 22, 2015. (EB-2015-0033, Exhibit B, Tab 1, Schedule 4, Attachment)

Enbridge will follow the recommendations presented in the three reports:

1. Water Well Report:
 - Conclusions & Recommendations – Page 2
2. ER Report:
 - Monitoring and Contingency Plans – Page 14
 - Updated Mitigation Measures – Page 15
 - Conclusions – Page 18
3. Archaeological Assessment
 - Recommendations – Page 22



Stantec Consulting Ltd.
49 Frederick Street, Kitchener ON N2H 6M7

February 24, 2015
File: 160950592/10

Attention: Sarah Kingdon-Benson and Kathy McConnell

Enbridge Gas Distribution Inc.
101 Honda Blvd.
Markham, ON L6C 0M6

Dear Ms. Kingdon-Benson and Ms. McConnell,

**Reference: Baseline Private Water Well Monitoring Program
Wilkesport Natural Gas Storage Pool, Lambton County**

Stantec Consulting Ltd. (Stantec) is pleased to provide Enbridge Gas Distribution Inc. (EGD) with the results of the baseline private water well monitoring program completed in the vicinity of the proposed natural gas storage well locations (TW15H and TW16H) for the Wilkesport Storage Pool within Lambton County (Figure 1). EGD plans to commence drilling and well construction of TW15H and TW16H in 2015.

The notification and monitoring program was completed to document water supply in the area, and to complete groundwater quality and quantity monitoring of any active private water wells. The results of the monitoring program would detail baseline groundwater conditions and usage for comparative purposes should groundwater interference complaints arise as a result of the proposed well construction or operation.

RESIDENTIAL NOTIFICATION

Stantec delivered notification letters on January 28, 2015 to all potential private water well owners within a 1 kilometer (km) radius of the proposed TW15H and TW16H locations. This notification area includes the entire footprint of the Wilkesport Designated Storage Area (DSA) (Figure 1). Letters were not delivered to residents whose property was located within the Village of Wilkesport, which is supplied by municipal water. The notification letter detailed the proposed private water well monitoring program and provided contact information for both Stantec and EGD. A copy of the notification letter is included as an attachment.

The notification letters were primarily delivered to mailboxes but when possible, Stantec spoke with the resident directly to confirm their water supply source and to offer water quality sampling of any private water well, if interested. The results of the well survey are discussed below.

PRIVATE/RESIDENTIAL WATER SUPPLY

During the Site visit on January 28, 2015, Stantec confirmed a total of eleven (11) residential/agricultural properties within a 1 km radius of the proposed TW15H and TW16H locations



February 24, 2015

Sarah Kingdon-Benson and Kathy McConnell

Page 2 of 3

**Reference: Baseline Private Water Well Monitoring Program
Wilkesport Natural Gas Storage Pool, Lambton County**

(Table 1). The addresses of the properties are listed on Table 1 and shown on Figure 1. The results of the water well survey are summarized below.

- One (1) property appeared abandoned. A notification letter was not delivered due to the absence of a mailbox or other appropriate location for letter delivery. It is interpreted that there is no water supply at this location.
- Municipal water supply was confirmed at seven (7) locations. Of these locations, three (3) residents confirmed the presence of at least one (1) private water well on their property (Table 1). None of these water wells are currently in use.
- The water supply for the remaining three (3) residences was not confirmed. It is understood that municipal water servicing extends along Baby Road, White Line and Kimball Road. It is interpreted that these three (3) locations are supplied by municipal water.

In 2008, Stantec completed a private water well survey in the vicinity of the Wilkesport Storage Pool as part of a previous EGD project; however, the scope of the 2008 project was smaller. The results of the 2008 well survey are consistent with the 2015 results.

As part of the private well survey, Stantec completed a review of Ministry of the Environment and Climate Change (MOECC) water well records (WWR) within a 1 km radius of the proposed EGD drilling, excluding the Village of Wilkesport. The review indicated eight (8) MOECC WWR within this radius (Figure 1). The records indicate that these wells were installed between 1948 to 1977 and completed to total depths of 37 m to 47 m below ground surface (BGS). The well logs do not include a specific address and the location map is unclear for most locations. Stantec did not attempt to link the MOECC WWR with a specific residence. The results of the door-to-door well survey are considered the most accurate and current status for nearby private wells.

Stantec is not recommending groundwater monitoring at any of the inactive water wells. Typically, a resident will not maintain an inactive water well. The well construction may be allowed to deteriorate and the pumping equipment likely removed. Stantec is not confident that these locations would be representative of groundwater quality within a 1 km radius of the proposed natural gas storage well locations (TW15H and TW16H).

CONCLUSIONS AND RECOMMENDATIONS

The 2015 monitoring program was completed for all potential private water well owners within a 1 km radius of the proposed natural gas storage well locations (TW15H and TW16H) for the Wilkesport Storage Pool.



February 24, 2015

Sarah Kingdon-Benson and Kathy McConnell

Page 3 of 3

**Reference: Baseline Private Water Well Monitoring Program
Wilkesport Natural Gas Storage Pool, Lambton County**

Municipal water supply was confirmed by all residents who were available for comment. There were three (3) residences where water supply was not confirmed during the site visit. Neither EGD nor Stantec have received a call from any resident regarding the program. Based on the extent of servicing in the area, it is assumed that these three (3) residences are supplied by municipal water. No active water supply wells were located within a 1 km radius of the proposed TW15H or TW16H; however, the presence of several inactive wells was confirmed. Due to the absence of active water wells, water quality samples were not obtained as part of the current program.

We trust that this information is suitable for your needs. Please do not hesitate to contact the undersigned should you have any questions or concerns.

Regards,

STANTEC CONSULTING LTD.

A handwritten signature in black ink, appearing to read 'Angela'.

Angela M. Ducharme, M.Sc., P.Geo.
Hydrogeologist
Phone: (519) 585-7366
Fax: (519) 579-4239
angela.ducharme@stantec.com



Lesley Veale, M.Sc., P.Geo.
Hydrogeologist
Phone: (519) 585-7377
Fax: (519) 579-4239
lesley.veale@stantec.com

Attachment: Figure 1 – Site Setting
Table 1 – Private Well Details
Residential Notification Letter dated January 23, 2015

c. Rooly Georgopoulos (Stantec)

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Revised: 2015-02-23 By: sellen

February 2015
160950592



Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2014.
3. Orthoimagery © First Base Solutions, 2015. Imagery taken in 2010.

Legend

- MOE Water Well Record
- ⊕ Proposed Well Location
- 1 km Radius
- Wilkesport DSA
- Watercourse
- Waterbody

Client/Project

Enbridge Gas Distribution Inc.
Wilkesport Storage Pool

Figure No.

1

Title

**Wilkesport Storage Pool
Private Well Survey**

**TABLE 1: PRIVATE WELL DETAILS
ENBRIDGE GAS DISTRIBUTION INC.
WILKESPORT STORAGE POOL
PRIVATE WELL SURVEY**

Address	Letter Delivery Date	Notification Details		Water Supply	Well on Property
[REDACTED]	28-Jan-2015	28-Jan-2015	Spoke with resident.	Municipal	No known wells
[REDACTED]	28-Jan-2015	5-Jun-2008	Spoke with resident.	Municipal	No known wells
[REDACTED]	28-Jan-2015	28-Jan-2015	No answer. Left letter in mailbox.	-	-
[REDACTED]	28-Jan-2015	5-Jun-2008	Spoke with resident.	Municipal	No known wells
[REDACTED]	28-Jan-2015	28-Jan-2015	Spoke with resident.	Municipal	1 inactive private well
[REDACTED]	28-Jan-2015	28-Jan-2015	Property appeared abandoned. No mailbox.	Likely no water supply.	-
[REDACTED]	28-Jan-2015	28-Jan-2015	No answer. Left letter in mailbox.	-	-
[REDACTED]	28-Jan-2015	28-Jan-2015	Spoke with resident.	Municipal	2 inactive private wells
[REDACTED]	28-Jan-2015	28-Jan-2015	No answer. Left letter in mailbox.	-	-
[REDACTED]	28-Jan-2015	28-Jan-2015	Spoke with resident.	Municipal	No known wells
[REDACTED]	28-Jan-2015	5-Jun-2008	Spoke with resident.	Municipal	1 inactive private well
		28-Jan-2015	Spoke with resident.		



January 23, 2015
File: 1609-50592/10

Dear Resident,

**Reference: Private Well Monitoring Program
Wilkesport Storage Pool**

In 2015, Enbridge Gas Distribution Inc.(EGD) plans to conduct drilling activities within the Wilkesport Storage Pool. As part of the Project, EGD will be drilling and installing two (2) natural gas storage wells (TW15H and TW16H) within the Wilkesport Storage Pool. The construction is scheduled to commence in 2015.

Based on a review of the site location, it is interpreted that your residence may be located within 1 km of the proposed TW15H and/or TW16H locations. On behalf of EGD, Stantec Consulting Ltd. (Stantec) is conducting a baseline groundwater monitoring program of any active well within 1 km of the proposed activity. The program is being completed to document existing groundwater conditions. If interested, residents may participate in the monitoring program, which includes water quantity and quality evaluation. Participation is not mandatory. Results of the well monitoring completed at your well will be provided to you in a letter from Stantec.

As part of the monitoring program, Stantec will complete the following:

- Complete a well questionnaire detailing any available information for your private well;
- Collect a water quality sample from a raw water tap and submit it for metals, general chemistry, bacteriological analysis, and dissolved gas; and
- Measure the water level within your residential well, if accessible, under static conditions and during operation of your residential pump.

If you have any questions or concerns regarding the residential sampling or would like to schedule an appointment, please contact Angela Ducharme from Stantec at (519) 585-7366. Should you have any questions or concerns regarding the EGD activity, please contact Kathy McConnell, Senior Project Geologist at 519-862-6032.

Regards,

STANTEC CONSULTING LTD.

A handwritten signature in black ink, appearing to read "A. Ducharme", with a stylized flourish at the end.

Angela M. Ducharme, M.Sc., P.Geo.
Environmental Scientist
Tel: (519) 585-7366
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Stantec Consulting Ltd.
70 Southgate Drive, Suite 1, Guelph ON N1G 4P5

February 13, 2015
File: 160950592

Attention: Sarah Kingdon-Benson
Enbridge Gas Distribution
101 Honda Blvd.
Markham, ON L6C 0M6

Dear Sarah,

Reference: Environmental Report Update Letter for Enbridge's Wilkesport Natural gas storage wells TW15H and TW16H

1 INTRODUCTION

Late in 2007, Enbridge Gas Distribution Inc. (Enbridge) began the planning process for their Tecumseh Storage Enhancement project. It included drilling two new wells in their Kimball-Colinville Storage Pool, drilling two new wells in their Wilkesport Storage Pool and the re-drilling of one well in their Coveny Storage Pool; as well as the construction of associated pads, roads and interconnecting pipelines.

In order to address the environmental concerns related to that project, Stantec Consulting Ltd. (Stantec) was engaged by Enbridge to conduct an environmental study. The resultant Environmental Report (ER) was entitled Environmental Report: Tecumseh Storage Enhancement Project – Storage Infill Drilling and was delivered to Enbridge in March, 2008 and is referred to herein as the "original ER". The original ER was prepared to be consistent with the Ontario Energy Board (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, Fifth Edition (2003)*.

As part of the Tecumseh Storage Enhancement project, Enbridge is now planning to drill two (2) new natural gas storage wells, wells TW15H and TW16H, to be located on one of the same sites identified and discussed in the original ER, their Wilkesport Storage Pool (the site)(**Figure 1**, Appendix A). The site is located approximately 20 km south east of the town of Corunna, Ontario on the west side of Kimball Road on Lot 15, Concession 13, St Clair Township, County of Lambton, Ontario. Well TW15H is connected to a NPS16" pipeline and well TW16H is connected to a NPS10" pipeline. Both of these wells are connected to a NPS 16" gathering pipeline.

The original ER discussed:

- Environmental Study Process;
- Environmental Features in the Study Area;
- Well Development Environmental Management Plan;

Design with community in mind



February 13, 2015
Sarah Kingdon-Benson
Page 2

Reference: Environmental Report Update Letter for Enbridge's Wilkesport Natural gas storage wells TW15H and TW16H

- Cumulative Effects; and
- Monitoring and Contingency Plans.

The new work planned on wells TW15H and TW16H are located entirely within the Wilkesport site that is owned by Enbridge.

2 SCOPE OF WORK

Additional lands are required for the planned 2015 project activities. All work is still confined to be within the legal boundaries of the Enbridge property. The Study Area has been expanded to address the location of well TW15H and TW16H as noted within **Figure 1** (Appendix A).

2.1 REGULATORY CONTEXT

Portions of the land required for the two new wells are regulated by the St. Clair Region Conservation Authority (SCRCA). Based on the location of the 2015 project activities, a permit under the *Conservation Authorities Act* (Ontario Regulation 97/04: Development, Interference with Wetlands and Alterations to Shorelines and Watercourses) will be required.

Enbridge and Stantec will continue to work with MNRF to confirm appropriate mitigation measures to protect the biological features.

2.2 METHODOLOGY

To meet the intent of the 6th Edition (2011) of the OEB Environmental Guidelines, this ER update letter discusses the most recent, current information regarding the natural environment features identified on the Wilkesport site and compares that to what the original ER contained. As well, this ER update letter discusses and compares the potential environmental effects related to project implementation and presents appropriate mitigation measures where additions or changes from the original ER are appropriate. The headings used are consistent with those in the original ER and section references are provided in the subsection titles of this update letter.

3 ENVIRONMENTAL STUDY PROCESS (ER SECTION 2.0)

3.1 CONSULTATION

Enbridge retained Stantec to complete a water well monitoring program for nearby water wells. Stantec contacted all landowners within the study area to confirm their potable water source. See Section 3.3.7 of this letter report for the results of the water well monitoring program. It was confirmed that all residences within the study area are on municipal water. Water wells that were identified within the study area were confirmed to either be inactive or not used for potable water.



February 13, 2015
Sarah Kingdon-Benson
Page 3

Reference: Environmental Report Update Letter for Enbridge's Wilkesport Natural gas storage wells TW15H and TW16H

3.2 ENVIRONMENTAL FEATURES IN THE STUDY AREA (ER SECTION 3.0)

The information presented in the Environmental Features section of the original ER regarding the Wilkesport site remains pertinent. No additions to this section are required.

3.3 WELL DEVELOPMENT ENVIRONMENTAL MANAGEMENT PLAN (ER SECTION 4.0)

The Well Development Environmental Management Plan in the original ER discussed potential impacts to specific environmental features and discussed mitigation measures to minimize the potential impacts. The original ER was aimed at well development and the construction of interconnecting pipelines. The section is divided into the following subsections: the proposed storage pool facilities; well drilling methods; physiography; bedrock geology; mineral, aggregate and petroleum resources; climate; hydrology; agricultural features; biophysical features and socio-economic features. Discussion of the information contained in the original ER including mitigation measures follows.

3.3.1 Proposed Storage Pool Facilities (ER Section 4.1)

The planned project involves the construction of two wells and interconnecting pipe segments as discussed in the introduction and shown on the project mapping (**Figure 1**, Appendix A).

3.3.2 Well Drilling Methods (ER Section 4.2)

The original ER presents rotary drilling and cable tool drilling as two potential drilling methods that may be used for the project. These methods are still used today and the ER section is pertinent to the proposed project. Further discussion is not required.

3.3.3 Physiography (ER Section 4.3.1)

As stated in the original ER, the project does not cross any watercourses and slope stabilization is not considered to be an issue on the site. Therefore, physiography is not anticipated to be a concern during construction or operation of the planned facilities. Specific mitigation measures other than those outlined in the 2008 ER for physiography are not required.

3.3.4 Bedrock Geology (ER Section 4.3.2)

Under the section 'Easement Preparation' (s. 5.4) the 2011 OEB Guidelines require that occupants of all buildings which may be subject to noise and/or vibration due to blasting should be informed preferably 48 hours in advance. They also require that blasting operations be monitored for noise and vibration at all buildings where applicable municipal and/or provincial standards may be exceeded.

Bedrock on the site is expected to be found 34m to 47m. Therefore it is expected to be encountered only during well development drilling, not soil handling or road construction. It is



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Reference: Environmental Report Update Letter for Enbridge's Wilkesport Natural gas storage wells TW15H and TW16H

recommended that in the unlikely occurrence that blasting is required, potentially affected neighbors be notified in accordance with the 2011 OEB Guidelines.

3.3.5 Mineral, Aggregate and Petroleum Resources (ER Section 4.3.3)

No impacts related to this section are anticipated. No additions to the original ER are required.

3.3.6 Climate (ER Section 4.3.4)

The original ER discusses the potential for impacts to agricultural soils during heavy rains at the site. However, since the access road and drill pads are already in place, agricultural land within the study area will not be impacted by wet weather.

3.3.7 Hydrology (ER Section 4.3.5)

The discussion and mitigation discussed in the original ER regarding protecting Bear Creek and tributaries to Bear Creek against sedimentation, spills and leaks is appropriate and should be adhered to.

As indicated in Section, Enbridge retained Stantec to complete a water well monitoring program for nearby water wells. It was confirmed that all residences within the study area are on municipal water. Water wells that were identified within the study area were confirmed to either be inactive or not used for potable water.

3.3.8 Agricultural Features (ER Section 4.3.6)

The soil on the site is mapped as Brookston Clay (**Figure 3**, Appendix A). The Soils sections with mitigation measures in the original ER remain appropriate. However, since the access road and drill pads are already in place, agricultural land within the study area will not be impacted by wet weather.

The project footprint is not mapped as containing artificial tile drainage. For this reason, mitigation measures specific to tile drains are not developed for this project. However, the eastern portion of the property is mapped as containing systematic tile drains.

If tile drains are encountered during construction of the planned project, care must be taken to identify severed drainage tiles as they are encountered. Tiles should be flagged when encountered and where possible, they should be temporarily repaired for the duration of construction in order that internal drainage patterns are not compromised. If this is not feasible, severed tiles should be plugged so that the workspace is not flooded with tile drainage water during rain events.



February 13, 2015
Sarah Kingdon-Benson
Page 5

Reference: Environmental Report Update Letter for Enbridge's Wilkesport Natural gas storage wells TW15H and TW16H

Silt fence should be installed where appropriate to protect stockpiled topsoil and to prevent soils from migrating offsite to sensitive watercourses.

The Wilkesport site was identified as being impacted by soy bean cyst nematodes (SCN). SCN typically lives in the topsoil of impacted fields. Once the topsoil is stripped (not removed from the site), the issue of transfer is greatly reduced or eliminated. Should topsoil be removed from the site, proper disposal will be required. While importing SCN to the site is not a concern, care should be taken to avoid transferring it to other properties. All vehicles should be washed thoroughly after before leaving the site. To avoid the spread of other soil borne pathogens, construction vehicles should arrive clean and free of soil.

3.3.9 Biophysical Features (ER Section 4.3.7)

A review of background material was conducted in 2008 for the original ER. The following natural heritage features on or within 120 m of the Study Area were identified:

- Watercourses (Bear Creek and small tributary with ponding area to the south; Figure 3.1 Stantec 2008); and
- Hazard and Environmental Protection Area (Township of St. Clair, discussed in Section 4.3.7 and shown on Figure 3.1 Stantec 2008).

Subsequently, a review of additional background information was conducted on the same Enbridge property in 2011. This was completed for the Wilkesport Environmental Screening Report (ESR). The following natural heritage features on or within 120 m of the Study Area were identified in the ESR:

- Woodlands (Section 2.2.1 of the ESR, shown on **Figure 1**, Appendix A);
- Significant Woodlands (Section 2.2.1 of the ESR);
- Significant Natural Area #7, McKeough Lands (designated by County of Lambton Official Plan (OP), discussed by Stantec 2011 in Section 2.2.2 of the ESR);
- Watercourses (Section 2.2.3 of the ESR)
- Regulated Lands (Section 2.2.4 of the ESR, shown on **Figure 1**, Appendix A);
- Primary Natural Heritage Corridor (Section 2.2.5 of the ESR, shown on Appendix Map A of Lambton County Official Plan); and
- Locally significant wetland, impacts of which were mitigated through the creation of a new wetland onsite.



February 13, 2015
Sarah Kingdon-Benson
Page 6

Reference: Environmental Report Update Letter for Enbridge's Wilkesport Natural gas storage wells TW15H and TW16H

The County of Lambton's Official Plan is currently under review; however, the 1998 OP is still in effect and as such no update on policy designation is required.

The St. Clair Township Official Plan, including Schedule A that details wetlands and hazard lands, is dated 2000 and 2001, respectively. Therefore, the Township Official Plan reviewed in 2008 by Stantec is still the current OP in effect.

Update to Natural Features

An additional component to the construction of the Wilkesport Meter Station project in 2013, was a cooperative effort between Enbridge and the Ontario Ministry of Natural Resources and Forestry (MNR). It involved the enhancement of a wet area on the property to create a higher quality wetland. The created wetland is outside of the project footprint and is not anticipated to be impacted by the project.

A recent Land Information Ontario (LIO) search was completed in January 2015, and no new natural features were identified within the Study Area.

3.3.9.1 Wildlife Habitat

In 2008, wildlife habitat was discussed in Section 4.3.7 of the ER with rare and species at risk summarized in Tables 4.2-4.3. Results of the 2008 review identified the following:

- Potential presence of rare species in the Study Area including:
 - Plants (Blue Ash, Big Shellbark Hickory, Cream Violet, Crow Spur Sedge, Davis' Sedge, Fog Fruit, Green Dragon, Lizard's Tail, Lowland Brittle Fern, Muskingum Sedge, Nebraska Sedge, Paw paw, Pin Oak, Shumard Oak, Slender Sedge, Spring Avers, Sullivant's Milkweed, Sweet Joe-pye-weed, Swamp Cottonwood, Virginia Bugleweed, Climbing Prairie Rose, Riddell's Goldenrod);
 - Butterflies (Monarch);
 - Odonates (Eastern Amberwing, Flag-tailed Spinyleg, Royal River Cruiser, Blue Tipped Dancer, Halloween Pennant);
 - Fish (Bighorn Buffalo, Blackstripe Topminnow, Greenside Darter, Spotted Sucker);
 - Turtles (Northern Map Turtle);
 - Snakes (Milksnake);
 - Birds (Cerulean Warbler, Yellow-breasted Chat);
- Potential Habitat for Species at Risk in the Study Area including:



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- Plants (Butternut, Kentucky Coffee-tree, Dense Blazing Star, Goldseal);
- Turtles (Blanding's Turtle, Spiny Softshell, Spotted Turtle);
- Snakes (Butler's Gartersnake, Eastern Foxsnake, Queen Snake);
- Birds (Acadian Flycatcher, Barn Owl, Henslow's Sparrow, King Rail, Least Bittern, Northern Bobwhite); and
- Mammals (American Badger, Grey Fox).

In the subsequent 2011 report, Stantec utilized the Significant Wildlife Habitat Technical Guide (SWHTG; MNR, 2000) to detail candidate significant wildlife habitat on or within 120 m of the Study Area. This document supports the Natural Heritage Reference Manual which provides technical guidance for implementing the natural heritage policies of the Provincial Policy Statement, 2005.

Results from the 2011 report in Section 2.2.5.1 identified candidate significant wildlife habitat potentially occurring in or within 120 m of the Study Area:

- Raptor Nesting Habitat;
- Habitat for species of Conservation Concern (Pawpaw, Blue Ash, Rigid Sedge, Spreading Chervil, Lowland Brittle Fern, Red-headed Woodpecker); and
- Amphibian woodland breeding ponds.

This report also assessed habitat suitability to support Species at Risk within the Study Area, concluding that the following species may be present:

- Plants (Butternut, Kentucky Coffee-tree);
- Turtles (Spiny Softshell); and
- Snakes (Butler's Gartersnake, Eastern Foxsnake).

Updated Wildlife Habitat

Additional wildlife habitat is present for reptiles and amphibians within the Study Area due to the creation of the additional wetland pocket in 2013.

Screening for Species at Risk potentially occurring within the Study Area were detailed in the 2011 Environmental Screening Report (ESR) and 2008 ER. Relevant background atlases (e.g., breeding bird, mammal, and herpetofaunal) as well as the Natural Heritage Information Centre (NHIC) database were reviewed for the 2008 ER and 2011 ESR. An updated NHIC database search was conducted for the 2015 project footprint. Four additional species were added to those assessed in 2008 and 2011 and are shown below in **Table 1**.



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Table 1 Species at Risk Potentially Occurring within the Study Area

Species Name	S-Rank	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Description of Breeding Habitat and Known Occurrences	Assessment of Study Area	Proposed Mitigation (if applicable)
BIRDS							
Barn Swallow (<i>Hirundo rustica</i>)	S4B	THR	THR	OBBA	As their name suggests, Barn Swallows nest on walls or ledges of barns as well as on other human-made structures such as bridges, culverts or other buildings (Cadman et al., 2007). Where suitable nesting structures occur, Barn Swallow often forms small colonies, sometimes mixed with Cliff Swallows. Barn Swallows feed on aerial insects while foraging in open habitat (COSEWIC, 2011). Barn Swallows are generally considered grassland species, foraging over meadows, hay, pasture or even mown lawn. They will also frequently forage in woodland clearings, over	Potential nesting structures restricted to existing station. No buildings will be removed during construction. Potentially present within Study Area.	Not applicable.



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Table 1 Species at Risk Potentially Occurring within the Study Area

Species Name	S-Rank	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Description of Breeding Habitat and Known Occurrences	Assessment of Study Area	Proposed Mitigation (if applicable)
Eastern Meadowlark (<i>Sturnella magna</i>)	S4B	THR	THR	OBBA	<p>wetland habitats or open water where insect prey is abundant.</p> <p>Meadowlarks are ground nesting birds (Harrison, 1975), which are often associated with human-modified habitats where they sing from prominent perches such as roadside wires, trees, and fenceposts. As a grassland species the Eastern Meadowlark typically occurs in meadows, hayfields and pastures. However, it will utilize a wider range of habitat than most grassland species, including mown lawn (e.g. golf course, parks), wooded city ravines, young conifer plantations and orchards</p>	Grassland habitat absent. Considered absent from the Study Area.	Not applicable.



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Table 1 Species at Risk Potentially Occurring within the Study Area

Species Name	S-Rank	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Description of Breeding Habitat and Known Occurrences	Assessment of Study Area	Proposed Mitigation (if applicable)
MAMMALS Little Brown Myotis (<i>Myotis lucifugus</i>)	S5	END	END-NS	COSEWIC 2013	(Peck and James 1983). The Eastern Meadowlark is generally tolerant of habitat with early succession of trees or shrubs. As with other grassland species, current threats are primarily the result of expanding urbanization and intensive farming practices (Cadman et al., 2007).	Potential habitat restricted to riparian woodland. May use open areas (i.e. Bear Creek) for foraging.	Not applicable, no trees slated for removal.
						Potentially present within Study Area.	



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Table 1 Species at Risk Potentially Occurring within the Study Area

Species Name	S-Rank	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Description of Breeding Habitat and Known Occurrences	Assessment of Study Area	Proposed Mitigation (if applicable)
Northern Myotis (Myotis septentrionalis)	S3?	END	END-NS	COSEWIC 2013	Syndrome (WNS). A widespread species, the Little Brown Bat is commonly found near waterbodies in buildings, attics, roof crevices and loose bark on trees or under bridges (Eder, 2002). The Northern Long-eared Bat is a resident bat of upland forests of eastern North America, typically foraging for aerial insects in the forest understory. Maternity roosts are located under bark or in buildings with young born in June and July while hibernating colonies typically reside in cave crevices (Reid, 2006).	Potential habitat restricted to riparian woodland. May slated for removal. use open areas (i.e. Bear Creek) for foraging. Potentially present within Study Area.	Not applicable, no trees slated for removal.



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Overall, considering results from 2008, 2011 and 2015, only three wildlife species at risk and two vegetation species at risk are anticipated to be potentially impacted by the 2015 project footprint. This includes:

- Eastern Foxsnake and Butler's Gartersnake;
- Spiny Softshell Turtle; and
- Butternut and Kentucky Coffee-tree (only if work proceeds within 25 m of the woodlot boundary).

Recommended mitigation measures for these species are detailed in Section 5 of this letter report.

3.3.10 Socio-Economic Environment (ER Section 4.3.8)

The following socio-economic environment features were all documented within section 4.3.8 of the 2008 ER.

3.3.10.1 Municipal Structure

No changes from the 2008 ER are anticipated.

3.3.10.2 Population and Institutional Facilities

No changes from the 2008 ER are anticipated.

3.3.10.3 Land Use

The land use on the site is dominantly agriculture with woodlot and wetlands. For the proposed project, the small amount of land associated with the well pads would be permanently removed from agriculture to an industrial land use. Consistent with the original ER, it is not anticipated that the existing land uses will be significantly affected by the proposed project.

3.3.10.4 Natural Heritage

In 2011, the Stage 1&2 Archaeological Survey of the areas of the site to be impacted by that work identified the potential for significant finds to be present on site and required that a Stage 3 assessment be conducted in order for the project to proceed on that location. Subsequently, the archaeological assessment advanced to a Stage 4 archaeological study. After extensive field efforts, a final report was submitted to the Ontario Ministry of Tourism, Culture and Sport (MTCS) in February 2013. The exact location of the field efforts are known to Enbridge, Stantec and the MTCS but will not be disclosed in this update letter. The efforts were outside of the footprint for this planned project.



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In 2014, Enbridge engaged a licensed archaeologist to conduct a Stage 1&2 on the areas of the planned 2015 scope of work, which were not previously assessed for archaeological potential. The conclusion of the latest Stage 1&2 assessments is that no further archaeological investigations are required for the proposed work area. These assessments were entered into the Ontario Public Register of Archaeological Reports by MRCSA (PIF# P316-1084-2014, see **Appendix B**).

3.3.10.5 Land Claims

In the process of completing the original ER the following First Nations were contacted to seek information regarding the status of lands within the Study Area:

- Caldwell First Nation;
- Chippewas of Kettle & Stony Point;
- Chippewas of the Thames;
- Delaware Nation;
- Munsee-Deleware Nation;
- Oneida Nation of the Thames;
- BKejwanong Territory (Walpole Island); and
- Aamjiwnaang First Nations.

At the time of finalizing the original ER, March 2008, no responses were received to confirm the presence of land claims.

In 2011, the Walpole Island and Aamjiwnaang First Nations were requested to provide input regarding their interests on the project site. Based on the result of the archaeological potential assessed for the site, both First Nations groups stated their desire to be onsite during the Stage 3 and subsequent archaeological surveys. Enbridge then entered into a cooperative agreement with both the Walpole Island and Aamjiwnaang First Nations and facilitated their participation in the efforts on site. The result of the Stage 4 survey was that the 2011 project proceeded through to construction.

Since the current planned project footprint has been assessed as low potential for archaeological finds, First Nations groups will not be contacted.

3.3.10.6 Hydrostatic Testing

Hydrostatic testing of all new pipes will be required prior to their operation. A source of water to fill the pipes will be identified in the planning stages of the project. Once a water source is identified,



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any permits should be identified and obtained. In addition, any required mitigation measures, including disposal and/or risk assessment, will be developed.

3.3.10.7 Permits Required (ER Section 4.5)

The site is within the St. Clair Region Conservation Authority (SCRCA) regulated lands. Therefore, a permit from the SCRCA will be required for the project to proceed (**Figure 2**, Appendix A). Discussions have been initiated with the Ontario Ministry of Natural Resources and Forestry (OMNRF) to determine appropriate mitigation measures to protect features in their mandate. Permits and approvals should be secured prior to initiation of the construction. No additional permitting requirements were identified due to the additional Project scope of work.

3.4 CUMULATIVE EFFECTS (ER SECTION 5.0)

The original ER did not identify any cumulative effects related to construction or operation on any of the proposed project sites. Since the project is localized in size and is confined to the Enbridge owned agricultural land, cumulative effects are anticipated to be temporary and low in magnitude. By implementing site-specific protective and mitigative measure, the potential for cumulative effects between this proposed Project and other planned construction projects is considered to be insignificant.

4 MONITORING AND CONTINGENCY PLANS (ER SECTION 6.0)

4.1 MONITORING (ER SECTION 6.1)

The original ER recommended the following general monitoring practices:

- Trained staff should be on-site to monitor construction and should be responsible for ensuring that the mitigation and monitoring requirements within this report are executed effectively. Enbridge should implement an orientation program for inspectors and contractor staff to provide information regarding Enbridge's environmental program and commitments, as well as Safety Education measures;
- Mitigation recommendations made in this report should be incorporated into the contract specifications;
- Contact between landowners and company liaison should be maintained to ensure that the concerns of landowners are quickly addressed; and,
- An inspection of areas affected by the well developments should be conducted approximately one and two years after construction to determine whether any areas require further rehabilitation.

If these recommendations are followed, discussion of further monitoring will not be necessary.



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4.2 CONTINGENCY (ER SECTION 6.2)

Contingency planning is necessary to prevent a delayed or ineffective response to unexpected events or conditions that may occur during construction of the proposed Project. An essential element of contingency planning is the preparation of emergency plans and procedures that can be activated if unexpected events occur. The absence of contingency plans may result in short or long term environmental effects and possibly threaten public safety.

Unexpected events requiring contingency planning that may occur during construction include: extreme climatic events, changes to the construction schedule, and human error. Although unexpected problems are not anticipated to occur during construction, Enbridge and the appropriate contractors should be prepared to take necessary action quickly. The original ER discussed contingency plans for accidental spills, heritage and Archaeological finds, and discovery of contaminated sites. The Inspection staff should identify situations where contingency plans should be implemented. The Contractors should also know when to immediately cease operations. All staff should be made aware of, and know how to implement contingency emergency response measures.

5 UPDATED MITIGATION MEASURES

Given the Project components are restricted to agricultural fields; impact to significant wildlife habitat is not anticipated. It is under current understanding that all work will remain outside the root zone of the adjacent woodlot and that the constructed wetland is not within the construction footprint.

Communication has been initiated with the Ministry of Natural Resources and Forestry (MNRF) to identify appropriate mitigation methods, potentially silt fence or snake fence installed in appropriate locations, to reduce, to the extent possible, the chances of any turtles or snakes from being harmed or harassed as a result of the project. MNRF may require alternate mitigation measures; therefore, the mitigation measures recommended here are preliminary and may be subject to change. If MNRF determines that mitigation is not available to adequately reduce risk of harm to ESA protected species, a permit application may be required under the *Endangered Species Act*, 2007. Mitigation measures outlined below are in addition to those previously presented in the 2008 ER. These are required in order to comply with the newly released MNRF Best Practices Technical Note for Reptile and Amphibian Exclusion Fencing (July 2013). This document details species-specific details on fencing options to exclude reptiles and amphibians from the construction workspace.

The study area for this project is within the known habitat range of the Eastern Foxsnake, a species protected under the *Endangered Species Act*. As such, exclusion fencing details (see details further below) are recommended to comply with MNRF best management practices. The extent of fencing was determined based on known behavior of the Eastern Foxsnake, as it is highly



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mobile species known to travel up to 1 km upon emergence from hibernation sites. During construction, the storage of equipment onsite overnight introduces the risk of foxsnakes moving into the equipment for a warm place to spend the night. In southern Ontario where farming is intensive, linear habitat strips (e.g., drainage canals, riparian zones, hedgerows, etc.) make up the primary habitat for this species – which are present on the Wilkesport site.

In consideration of the highly mobile nature, climbing abilities, and affinity for equipment stored onsite, Stantec has proposed that the workspace boundaries be fully fenced with appropriate snake exclusion fencing (see additional details below). There is still risk of snakes crossing the access road from the woodlot to the north and as such posted speed limits are recommended on the access road to avoid any potential fatalities.

From a wildlife perspective, when possible, construction should occur between November 16 and March 31 when snakes and turtles are hibernating. If this is not feasible, the following avoidance/mitigation measures are recommended:

- All onsite personnel shall be made aware of the potential of Eastern Foxsnake, Butler's Gartersnake, and Blanding's Turtle individuals and habitat, with information fact sheets will form part of the project mobilization meeting and be available to the workers;
- Continual awareness through signage and posted minimum speeds on access roads to prevent vehicular interactions with snakes or turtles that may use roadways for hunting or basking;
 - Daily inspection of equipment stored on-site each morning before equipment is started including a thorough inspection including around engine, caterpillar tracts, etc. is required, as Eastern Foxsnakes and Butler's Gartersnakes may be well concealed;
 - Vehicular traffic to remain on access roads and construction envelope;
- Clearing of vegetation, moving or disturbing brush/log piles or moving old farm machinery should be avoided between April 15 to June 1 and September 15 to November 1 as snakes are less active and therefore less able to flee from harm;
- Qualified onsite inspector to ensure compliance with the finalized mitigation plan;
- If any snake or turtle is observed within the workspace, all machinery and equipment shall maintain an operating distance of 30 m from the individual and allow the individual(s) reasonable time to disperse from the area on its own ability;
- If an ESA protected species persists in the work area, MNRF must be contacted to determine appropriate action;
- MNRF must be contacted as soon as possible to report any observations of SAR;



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- If an injured or deceased SAR individual is found, the specimen shall be placed in a non-airtight container maintained at an appropriate temperature and MNRF SAR staff will be contacted immediately;
- Escort machinery onsite on foot to ensure no snakes are in their path prior to installation of exclusionary fencing, or if equipment is travelling over any natural vegetation or the size of machine provides low visibility;
- Protect habitat components for Butler's Gartersnake (i.e. ant mounds, crayfish burrows) and ensure they remain outside the work space as feasible; and
- Install exclusion fencing (detailed below).

Exclusion Fencing

The extent of exclusion fencing is currently in consultation with the MNRF and will be finalized prior to construction. Exclusionary fencing will be installed to the specifications recommended by the MNRF in their Species at Risk Branch Best Practices Technical Note Reptile and Amphibian Exclusion Fencing (2013) and under the direction of a qualified wildlife biologist:

- Fencing will be installed prior to construction;
- The fence should be buried 10-20 cm in the ground and at least 2 m high as Foxsnakes are excellent climbers;
- Due to the increase in fence height, it is valuable to decrease the distance between posts or install diagonal braces.
- Fencing will be comprised of a light-duty geotextile affixed to stakes that are located on the inside of the work space;
- Where root substrate does not allow fencing to be buried to a depth of 10-20 cm, fencing will be weighted through physical means such as gravel or sand placed on top of the lower portion of the fencing;
- Fencing will be maintained during summer construction (April 1- November 15, or until snakes have returned to their hibernacula, dependent on fall temperatures);
- Daily monitoring of exclusion fencing, equipment and activities during pipe fabrication; and
- Fencing will be removed after construction and cleanup is complete (by November 30).

The project footprint is within the St. Clair Region Conservation Authority (SRCA) regulated area (**Figure 2**, Appendix A). A permit is required to work in this area. The permit should be acquired prior to initiating work efforts.



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6 CONCLUSION

This is an Environmental Report update letter discussed Enbridge's plan to drill two (2) new natural gas storage wells, wells TW15H and TW16H, to be located on one of the same sites identified and discussed in the original ER. The site is located approximately 20 km south east of the town of Corunna, Ontario on the west side of Kimball Road on Lot 15, Concession 13, St Clair Township, County of Lambton, Ontario.

The update letter addresses the ER written by Stantec in 2008 to identify environmental features that may be impacted by work efforts planned and constructed at that time. The new gas storage wells are located on the same parcel as the original work and the bulk of the information contained in the ER remains correct and pertinent to the planned project.

Since the original ER was written, the OEB has revised their guidelines that pertain to the project. This letter was written to meet the intent of the Ontario Energy Board (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, Sixth Edition (2011)*.

The environmental features on the site were updated, where necessary, in this letter. Appropriate mitigation measures for protecting the significant features were discussed and should be implemented. As well, permits should be acquired from the SCRCA and approval for the project should be received from the MNRF prior to the initiation of the work. Anticipated cumulative effects related to the project are not considered to be significant. The contingency and monitoring plans presented in the original ER should be adhered to and implemented in the case of an unplanned event.



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7 CLOSURE

This report has been prepared for the sole benefit of Enbridge and may not be used by any third part without the express written consent of Enbridge. Any use which a third party makes of this report is the responsibility of such third party.

The data presented in this report are in accordance with Stantec's understanding of the Project as it was present at the time of our report. In the event that changes or alterations are made to the Project, Stantec reserves the right to review our data with respect to any such changes.

Respectfully submitted,

STANTEC CONSULTING LTD.

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Attachment:

Appendix A Figures
Appendix B Summary of 2014 Archaeological Assessment

Cc None



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 - Proposed Steel, NPS 16, Natural Gas Pipeline (not part of the ER)
 - Existing Piping
 - Existing Features
 - Watercourse
 - Waterbody
 - Pond



Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry & Queen's Printer for Ontario, 2015.
3. Orthorectified © First Base Solutions, 2015. Imagery taken in 2010.

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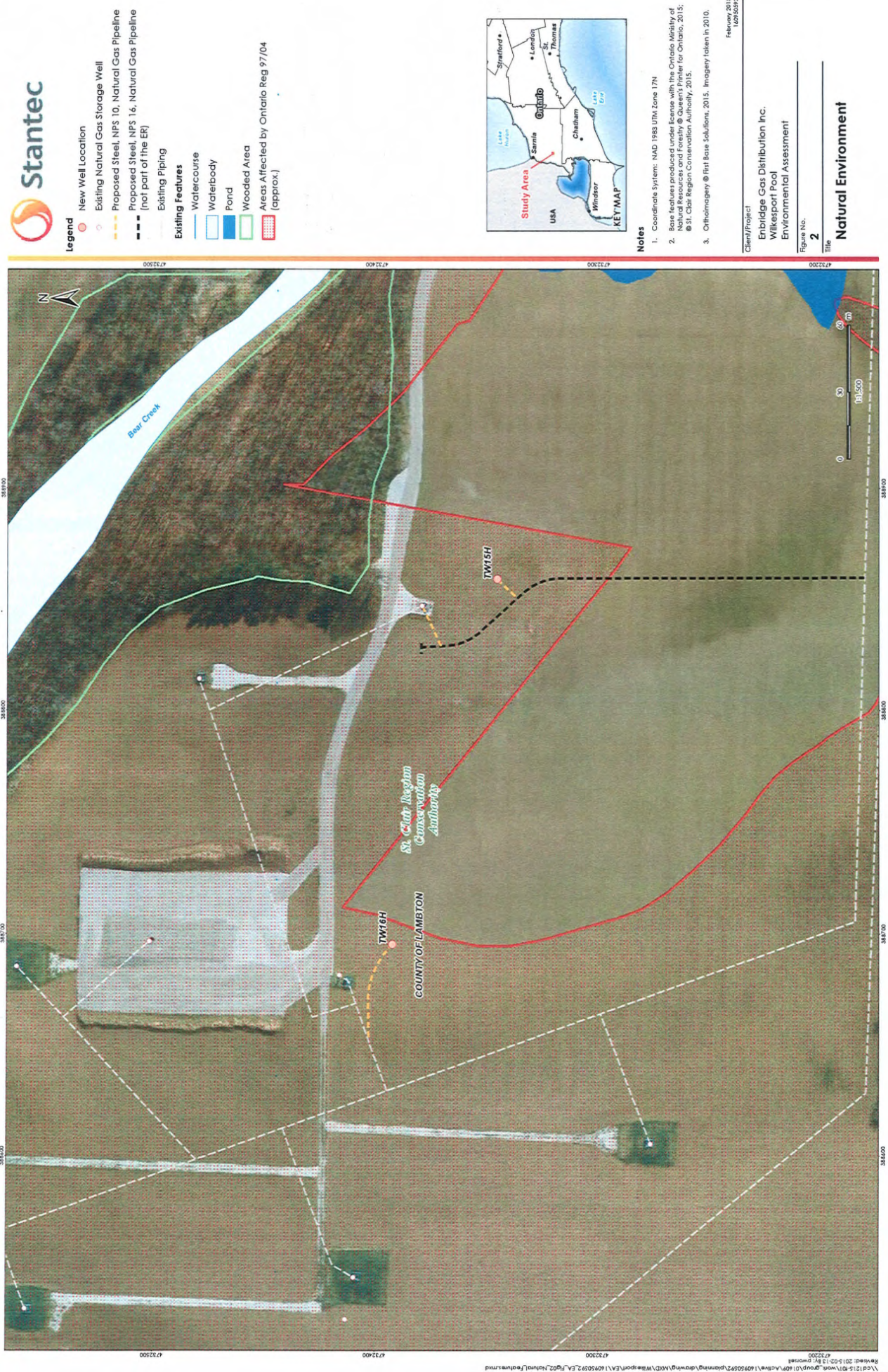
Enbridge Gas Distribution Inc.
Wilketport Pool
Environmental Assessment

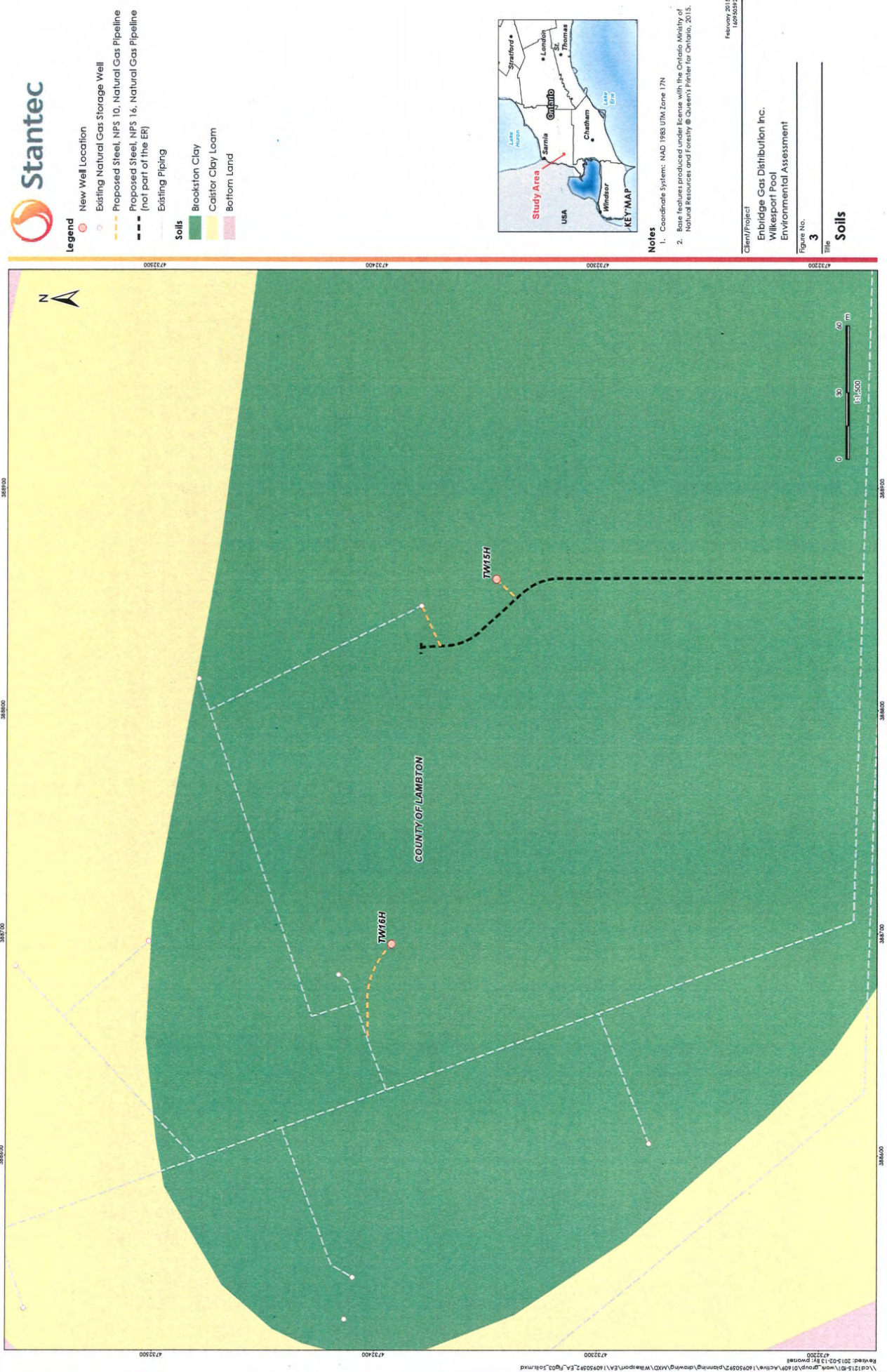
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Project Location









- Legend**
- New Well Location
 - Existing Natural Gas Storage Well
 - Proposed Steel, NPS 10, Natural Gas Pipeline
 - Proposed Steel, NPS 16, Natural Gas Pipeline (not part of the EIR)
 - Existing Piping
 - Existing Features**
 - MCE Water Well Record
 - Plains Midstream Liquid Pipeline
 - Watercourse
 - Waterbody
 - Pond
 - Natural Gas Storage



Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry @ Queen's Printer for Ontario, 2015.
3. Orthorectified @ First Base Solutions, 2015. Imagery taken in 2010.

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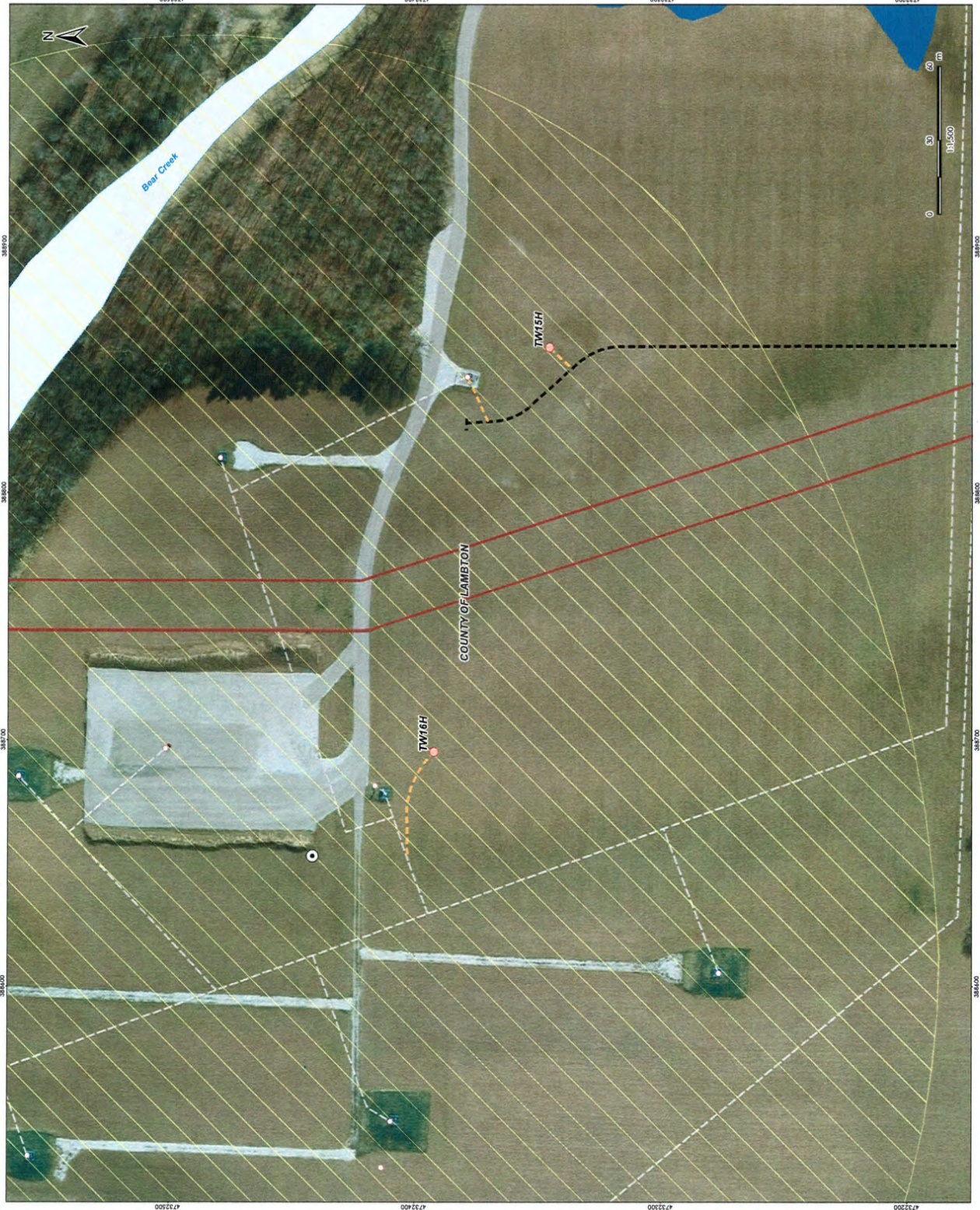
Enbridge Gas Distribution Inc.
Wilketport Pool
Environmental Assessment

Figure No.

4

Title

Socio-Economic Features



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APPENDICES

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Appendix B Summary of 2014 Archaeological Assessment

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Executive Summary
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**The 2014 Stage 1- 2 Archaeological Assessment
of the Proposed Enbridge Gas Distribution Inc.
Wilkesport Storage Well Project,
Part of Lot 15, Concession 13,
Geographic Township of Sombra,
The Corporation of the Township of St. Clair,
Lambton County,
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Licensee: Sherri H. Pearce, Licence #P316
Type of Report: Original

PIF # P316-0284-2014

January 22, 2015

Executive Summary

In the first week of May 2014 D.R. Poulton & Associates Inc. was contracted by Dillon Consulting (Dillon) to conduct a Stage 1 - 2 archaeological assessment of proposed improvements to the Wilkesport Storage Pool, which is located in the Bear Creek floodplain west of Kimball Road in the north half of Lot 15, Concession 13, Geographic Township of Sombra, Lambton County. The project entails the construction of two natural gas storage horizontal wells, pipeline segments to connect them to the existing NPS 16 pipeline, and the decommissioning of four existing natural gas storage wells. This assessment follows a 2012 Stage 1-4 archaeological assessment of the proposed Wilkesport Meter Station and a related 700-metre long NPS 16 pipeline (DPA 2013a, 2013b).

The Ministry assigned the project PIF # P316-0284-2014 issued to Sherri Pearce of D. R. Poulton & Associates. The Stage 1 study identified one site that was located on the property, the Zhashgaa Wiiskbing site (AeHo-147); however, it is more than 225 m to the southeast. The Stage 1 study further determined that the property had moderate to high potential for the discovery of archaeological remains (*cf.* page 15).

The Stage 2 archaeological assessment involved pedestrian survey of the locations for the two new gas storage horizontal wells. It also included the visual assessment of the four existing wells that are to be decommissioned. Fieldwork conducted on May 8 was directed by Sherri Pearce (P316). Fieldwork conducted on December 9 2014 was directed by Lorelyn Giese (R433) and involved the pedestrian survey of the area of the proposed NPS 16 pipeline that will connect the new horizontal wells to the existing NPS 16 pipeline surveyed by D. R. Poulton & Associates in 2012 (*ibid*).

The pedestrian survey of the proposed undertaking was conducted at a 5m interval and included all lands considered to retain archaeological potential (*cf.* page 18). No archaeological remains were discovered (*cf.* page 20). In the absence of any archaeological remains, this report has only one recommendation. It is that no further archaeological investigations or concerns are warranted for the proposed improvements to the Wilkesport Storage Pool (*cf.* page 22).

Ministry of Tourism, Culture and Sport

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Jan 27, 2015

Sherri Pearce (P316)
D. R. Poulton & Associates Inc.
69 Langarth London ON N6J 1P5

**RE: RE: Entry into the Ontario Public Register of Archaeological Reports:
Archaeological Assessment Report Entitled, "The 2014 Stage 1- 2 Archaeological
Assessment of the Proposed Enbridge Gas Distribution Inc. Wilkesport Storage
Well Project, Part of Lot 15, Concession 13, Geographic Township of Sombra, The
Corporation of the Township of St. Clair, Lambton County, Ontario ", Dated Jan 22,
2015, Filed with MTCS Toronto Office on N/A, MTCS Project Information Form
Number P316-0284-2014**

Dear Ms. Pearce:

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 has been entered into the Ontario Public Register of Archaeological Reports without technical review.¹

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 further information, please do not hesitate to send your inquiry to ArchaeologyReports@Ontario.ca.

cc. Archaeology Licensing Officer
Erin Nolan, Enbridge Gas Distribution Inc.
Zora Crnojacki, Ontario Energy Board

¹In 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.

BOARD STAFF INTERROGATORY #4

INTERROGATORY

Reference: EB-2014-0378 Application

Preamble:

Enbridge applied for well drilling licences under section 40(1) of the OEB Act. Should the OEB find the applications in the public interest it would issue a favourable report to the Minister of Natural Resources and Forestry (Report) recommending issuance of well licences.

Question:

Please comment on the attached OEB staff proposed draft conditions of approval. Please note that these conditions are draft version subject to additions or changes.

RESPONSE

Enbridge has reviewed the OEB staff proposed conditions of approval and does not have any concerns or comments.

Enbridge Gas Distribution Inc.

EB-2014-0378

**OEB Staff Proposed Conditions of Approval
Well Drilling Licences Application**

1. General Requirements

- 1.1. Enbridge Gas Distribution Inc. (Enbridge) shall rely on the evidence filed with the Board in EB-2014-0378 proceeding and comply with applicable laws, regulations and codes pertaining to the construction of the proposed wells.
- 1.2. Authorization for the issuance of the drilling licences is limited to twelve months from the date of the Board's Report to the Ministry of Natural Resources and Forestry.
- 1.3. The authority granted under this Order to Enbridge is not transferable to another party without leave of the Board. For the purpose of this condition another party is any party except Enbridge Gas Distribution Inc.

2. Construction Requirements

- 2.1 Enbridge shall construct the facilities and restore the land in accordance with its Application and evidence given to the Board, except as modified by this Order and these Conditions of Approval.
- 2.2 Enbridge shall ensure that the movement of equipment is carried out in compliance with all procedures filed with the Board, and as follows:
 - i) Enbridge shall make reasonable efforts to keep the affected landowner as well as adjacent landowners and their respective tenant farmers, or their designated representatives, informed of its plans and construction activities; and
 - ii) the installation of facilities and construction shall be coordinated so as to minimize disruption of agricultural land and agricultural activities.
- 2.3 Enbridge shall, subject to the recommendation by an independent tile contractor and subject to the landowners approval, construct upstream and downstream drainage headers adjacent to the drilling area and access roads

that cross existing systematic drainage tiles, prior to the delivery of heavy equipment, so that continual drainage will be maintained.

3. Monitoring and Reporting Requirements

- 3.1 Both during and after construction, Enbridge shall monitor the impacts of construction, and shall file four copies of both an interim and a final monitoring report with the Board. The interim monitoring report shall be filed within six months of the in-service date, and the final monitoring report shall be filed within fifteen months of the in-service date. Enbridge shall attach a log of all complaints to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.
- 3.2 The interim monitoring report shall confirm Enbridge's adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.
- 3.3 The final monitoring report shall describe the condition of the rehabilitated land and the effectiveness of the mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

4. Project and Communication Requirements

- 4.1 For the purposes of these conditions, conformity of Enbridge with CSA Z341-10, shall be to the satisfaction of the Ministry of Natural Resources.
- 4.2 Enbridge shall designate one of its employees as project manager who will be responsible for the fulfilment of these conditions, and shall provide the employee's name to the Ministry of Natural Resources and Forestry, the Board and to all appropriate landowners.
- 4.3 The Board's designated representative for the purpose of these Conditions of Approval shall be the Manager, Natural Gas Applications.