

June 15, 2017

BY RESS & Courier

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street
Toronto, Ontario
M4P 1E4

Dear Ms. Walli:

**Re: Union Gas Limited (“Union”)
2017 Panhandle Replacement (Jefferson) Project
Board File # EB-2017-0118**

Further to the interrogatories received in the above noted matter, please find attached two copies of Union’s responses.

Sincerely,

[Original Signed By]

Mary Jane Patrick
Analyst, Land Services
Encl.

cc: Zora Crnojacki

UNION GAS LIMITED

Answers to Interrogatories from
Board Staff

Interrogatory # 1

Ref: Evidence page 5, Lines 14-20: “Project Cost and Economics” and Schedule 3 “Total Estimated Capital Costs”

Preamble:

Union Gas estimated total capital costs for the project at \$1.518 M. Union Gas did not complete a Discounted Cash Flow (DCF) analysis for the project, explaining that this project is needed to update the pipeline design specifications as a result of class location requirements and that there are no new contracts associated with this project.

Questions:

- a) Please provide a breakdown of capital costs for comparable projects currently in-service and recently approved by the OEB.
- b) Please indicate the timing and the method for recovery of the construction costs for the project

Response:

- a) The table below provides a breakdown of capital costs for the replacement projects on the Panhandle system which Union has completed in the past 5 years.

EB#	Project Name	Length	Diameter	Cost	Cost /meter
EB-2012-0432	Panhandle Ojibway	.5 km	NPS 16	\$2.4 M	4800
EB-2013-0407	Panhandle Highway 40	.4 km	NPS 16	\$0.9 M	2250
EB-2013-0420	Panhandle 2014	13 Km	NPS 20	\$29.6 M	2276
EB-2015-0041	Panhandle 2016	2.7 km .5 km	NPS 20 NPS 16	\$9.7 M	3031
EB-2017-0118	Panhandle Jefferson	.6 Km	NPS 16	\$1.52 M	2533

- b) The construction costs for this project will form part of Union’s Rebasing application in 2019.

UNION GAS LIMITED

Answers to Interrogatories from
Board Staff

Interrogatory # 2

Ref: Evidence Page 7, Lines 18-23, page 8, Lines 2-21: “Landowners” and Schedule 10 “Pipeline Easement”.

Preamble:

Union Gas indicated that it would acquire new permanent land rights and temporary land use rights for the project. The two landowners directly affected by the required permanent land rights are The Corporation of the City of Windsor and The Hydro-Electric Power Commission of Ontario. Union Gas also indicated that the negotiations with these landowners are underway and that they may require a different form of permanent easement agreement from the one Union Gas included in the evidence.

According to section 97 of the *Ontario Energy Board Act, 1998* (OEB) Act, “In an application under section 90, 91 or 92, leave to construct shall not be granted until the applicant satisfies the Board that it has offered or will offer to each owner of land affected by the approved route or location an agreement in a form approved by the Board.” Union Gas will therefore require the OEB’s approval of the form of easement agreement that it has offered or will offer to the affected landowners.

In addition to land rights, Union Gas will also need to obtain various crossing permits from Essex Region Conservation Authority and utilities along the proposed pipeline.

Questions:

- a) What is the current status and prospect of negotiations with all the landowners of properties where permanent easements and temporary land use rights are needed?
- b) Please file the form of permanent easement agreement that Union Gas has offered or will offer to The Corporation of the City of Windsor and The Hydro-Electric Power Commission of Ontario.

- c) What is the status of the crossing permits and other approvals Union Gas needs to complete the construction of the project:
-

Response:

- a) Union Gas has reached agreements in principle with the two affected landowners (The Corporation of City of Windsor and The Hydro-Electric Power Commission of Ontario) and the respective parties are currently finalizing language in the paperwork. Upon completion, the agreements will be executed by the parties.
- b) Attached as Schedule 1 is the form of permanent easement agreement Union Gas has offered to the affected landowners. This document is currently being reviewed by legal counsel for the City of Windsor, and Hydro One and changes may be made to the current form of easement.
- c) Union Gas will have all permits and approvals in place prior to construction and thus far two of the four required permits have been secured. The permits and status of same are listed below:

Essex Region Conservation Authority – Approval Pending
Archaeological Approval – Approved
Ministry of Tourism, Culture and Sport – Approval Pending
City of Windsor (Road Entrance) – Approved



PIPELINE EASEMENT

(hereinafter called the "Easement")

Between

(hereinafter called the "Transferor")

and

UNION GAS LIMITED

(hereinafter called the "Transferee")

This is an Easement in Gross.

WHEREAS the Transferor is the owner in fee simple of those lands and premises more particularly described as:

PIN:

Legal Description:

(hereinafter called the "Transferor's Lands").

The Transferor does hereby GRANT, CONVEY, TRANSFER AND CONFIRM unto the Transferee, its successors and assigns, to be used and enjoyed as appurtenant to all or any part of the lands, the right, liberty, privilege and easement on, over, in, under and/or through a strip of the Transferor's Lands more particularly described as:

BEING THE PIN/PART OF THE PIN:

Legal Description:

(hereinafter called the "Lands") to survey, lay, construct, maintain, brush, clear trees and vegetation, inspect, patrol, alter, remove, replace, reconstruct, repair, move, keep, use and/or operate one pipeline for the transmission of Pipeline quality natural gas as defined in The Ontario Energy Board Act S.O. 1998 (hereinafter called the "Pipeline") including therewith all such buried attachments, equipment and appliances for cathodic protection which the Transferee may deem necessary or convenient thereto, together with the right of ingress and egress at any and all times over and upon the Lands for its servants, agents, employees, those engaged in its business, contractors and subcontractors on foot and/or with vehicles, supplies, machinery and equipment for all purposes necessary or incidental to the exercise and enjoyment of the rights, liberty, privileges and easement hereby granted. The Parties hereto mutually covenant and agree each with the other as follows:

1. In Consideration of the sum of XX/100 Dollars (\$) (hereinafter called the "Consideration"), which sum is payment in full for the rights and interest hereby granted and for the rights and interest, if any, acquired by the Transferee by expropriation, including in either or both cases payment in full for all such matters as injurious affection to remaining lands and the effect, if any, of registration on title of this document and where applicable, of the expropriation documents, subject to Clause 12 hereof to be paid by the Transferee to the Transferor within 90 days from the date of these presents or prior to the exercise by the Transferee of any of its rights hereunder other than the right to survey (whichever may be the earlier date), the rights, privileges and easement hereby granted shall continue in perpetuity or until the Transferee, with the express written consent of the Transferor, shall execute and deliver a surrender thereof. Prior to such surrender, the Transferee shall remove all debris as may have resulted from the Transferee's use of the Lands from the Lands and in all respects restore the Lands to its previous productivity and fertility so far as is reasonably possible, save and except for items in respect of which compensation is due under Clause 2, hereof. As part of the Transferee's obligation to restore the Lands upon surrender of its easement, the Transferee agrees at the option of the Transferor to remove the Pipeline from the Lands. The Transferee and the Transferor shall surrender the Easement and the Transferee shall remove the Pipeline at the Transferor's option where the Pipeline has been abandoned. The Pipeline shall be deemed to be abandoned where: (a) corrosion protection is no longer applied to the Pipeline, or, (b) the Pipeline becomes unfit for service in accordance with Ontario standards. The Transferee shall, within 60 days of either of these events occurring, provide the Transferor with notice of the event. Upon removal of the Pipeline and restoration of the Lands as required by this agreement, the Transferor shall release the Transferee from further obligations in respect of restoration.
2. The Transferee shall make to the Transferor (or the person or persons entitled thereto) due compensation for any damages to the Lands resulting from the exercise of any of the rights herein granted, and if the compensation is not agreed upon by the Transferee and the Transferor, it shall

be determined by arbitration in the manner prescribed by the Expropriations Act, R.S.O. 1990, Chapter E-26 or any Act passed in amendment thereof or substitution therefore. Any gates, fences and tile drains curbs, gutters, asphalt paving, lockstone, patio tiles interfered with by the Transferee shall be restored by the Transferee at its expense as closely as reasonably possible to the condition and function in which they existed immediately prior to such interference by the Transferee and in the case of tile drains, such restoration shall be performed in accordance with good drainage practice and applicable government regulations.

3. The Pipeline (including attachments, equipment and appliances for cathodic protection but excluding valves, take-offs and fencing installed under Clause 9 hereof) shall be laid to such a depth that upon completion of installation it will not obstruct the natural surface run-off from the Lands nor ordinary cultivation of the Lands nor any tile drainage system existing in the Lands at the time of installation of the Pipeline nor any planned tile drainage system to be laid in the Lands in accordance with standard drainage practice, if the Transferee is given at least thirty (30) days notice of such planned system prior to the installation of the Pipeline. The Transferee agrees to make reasonable efforts to accommodate the planning and installation of future tile drainage systems following installation of the Pipeline so as not to obstruct or interfere with such tile installation. In the event there is a change in the use of all, or a portion of the Transferor Lands adjacent to the Lands which results in the pipeline no longer being in compliance with the pipeline design class location requirements, then the Transferee shall be responsible for any costs associated with any changes to the Pipeline required to ensure compliance with the class location requirements.
4. As soon as reasonably possible after the construction of the Pipeline, the Transferee shall level the Lands and unless otherwise agreed to by the Transferor, shall remove all debris as may have resulted from the Transferee's use of the Lands therefrom and in all respects restore the Lands to its previous productivity and fertility so far as is reasonably possible, save and except for items in respect of which compensation is due under Clause 2 hereof.
5. It is further agreed that the Transferee shall assume all liability and obligations for any and all loss, damage or injury, (including death) to persons or property that would not have happened but for this Easement or anything done or maintained by the Transferee hereunder or intended so to be and the Transferee shall at all times indemnify and save harmless the Transferor from and against all such loss, damage or injury and all actions, suits, proceedings, costs, charges, damages, expenses, claims or demands arising therefrom or connected therewith provided that the Transferee shall not be liable under the clause to the extent to which such loss, damage or injury is caused or contributed to by the gross negligence or wilful misconduct of the Transferor.
6. In the event that the Transferee fails to comply with any of the requirements set out in Clauses 2, 3, or 4 hereof within a reasonable time of the receipt of notice in writing from the Transferor setting forth the failure complained of, the Transferee shall compensate the Transferor (or the person or persons entitled thereto) for any damage, if any, necessarily resulting from such failure and the reasonable costs if any, incurred in the recovery of those damages.
7. Except in case of emergency, the Transferee shall not enter upon any of the Transferor's Lands, other than the Lands, without the consent of the Transferor. In case of emergency the right of entry upon the Transferor's Lands for ingress and egress to and from the Lands is hereby granted. The determination of what circumstances constitute an emergency, for purposes of this paragraph is within the absolute discretion of the Transferee, but is a situation in which the Transferee has a need to access the Pipeline in the public interest without notice to the Transferor, subject to the provisions of Clause 2 herein. The Transferee will, within 72 hours of entry upon such lands, advise the Transferor of the said emergency circumstances and thereafter provide a written report to Transferor with respect to the resolution of the emergency situation. The Transferee shall restore the lands of the Transferor at its expense as closely as reasonably practicable to the condition in which they existed immediately prior to such interference by the Transferee and in the case of tile drains, such restoration shall be performed in accordance with good drainage practice.
8. The Transferor shall have the right to fully use and enjoy the Lands except for planting trees over the lesser of the Lands or a six (6) meter strip centered over the Pipeline, and except as may be necessary for any of the purposes hereby granted to the Transferee, provided that the Transferor shall not excavate, drill, install, erect or permit to be excavated, drilled, installed or erected in, on, over or through the Lands any pit, well, foundation, building, mobile homes or other structure or installation and the Transferor shall not deposit or store any flammable material, solid or liquid spoil, refuse, waste or effluent on the Lands. Notwithstanding the foregoing the Transferee upon request shall consent to the Transferor erecting or repairing fences, hedges, pavement, lockstone constructing or repairing tile drains and domestic sewer pipes, water pipes, and utility pipes and

constructing or repairing lanes, roads, driveways, pathways, and walks across, on and in the Lands or any portion or portions thereof, provided that before commencing any of the work referred to in this sentence the Transferor shall (a) give the Transferee at least (30) clear days notice in writing describing the work desired so as to enable the Transferee to evaluate and comment on the work proposed and to have a representative inspect the site and/or be present at any time or times during the performance of the work, (b) shall follow the instructions of such representative as to the performance of such work without damage to the Pipeline, (c) shall exercise a high degree of care in carrying out any such work and, (d) shall perform any such work in such a manner as not to endanger or damage the Pipeline as may be required by the Transferee.

9. The rights, privileges and easement herein granted shall include the right to install, keep, use, operate, service, maintain, repair, remove and/or replace in, on and above the Lands any valves and/or take-offs subject to additional agreements and to fence in such valves and/or take-offs and to keep same fenced in, but for this right the Transferee shall pay to the Transferor (or the person or persons entitled thereto) such additional compensation as may be agreed upon and in default of agreement as may be settled by arbitration under the provisions of The Ontario Energy Board Act, S.O. 1998, or any Act passed in amendment thereof or substitution therefore. The Transferee shall keep down weeds on any lands removed from cultivation by reason of locating any valves and/or take-offs in the Lands.
10. Notwithstanding any rule of law or equity and even though the Pipeline and its appurtenances may become annexed or affixed to the realty, title thereto shall nevertheless remain in the Transferee.
11. Neither this Agreement nor anything herein contained nor anything done hereunder shall affect or prejudice the Transferee's rights to acquire the Lands or any other portion or portions of the Transferor's lands under the provisions of The Ontario Energy Board Act, S.O. 1998, or any other laws, which rights the Transferee may exercise at its discretion in the event of the Transferor being unable or unwilling for any reason to perform this Agreement or give to the Transferee a clear and unencumbered title to the easement herein granted.
12. The Transferor covenants that he has the right to convey this Easement notwithstanding any act on his part, that he will execute such further assurances of this Easement as may be requisite and which the Transferee may at its expense prepare and that the Transferee, performing and observing the covenants and conditions on its part to be performed, shall have quiet possession and enjoyment of the rights, privileges and easement hereby granted. If it shall appear that at the date hereof the Transferor is not the sole owner of the Lands, this Easement shall nevertheless bind the Transferor to the full extent of his interest therein and shall also extend to any after-acquired interest, but all moneys payable hereunder shall be paid to the Transferor only in the proportion that his interest in the Lands bears to the entire interest therein.
13. In the event that the Transferee fails to pay the Consideration as hereinbefore provided, the Transferor shall have the right to declare this Easement cancelled after the expiration of 15 days from personal service upon the Manager, Land Services of the Transferee at its Executive Head Office in Chatham, Ontario, (or at such other point in Ontario as the Transferee may from time to time specify by notice in writing to the Transferor) of notice in writing of such default, unless during such 15 day period the Transferee shall pay the Consideration; upon failing to pay as aforesaid, the Transferee shall forthwith after the expiration of 15 days from the service of such notice execute and deliver to the Transferor at the expense of the Transferee, a valid and registrable release and discharge of this Easement.
14. All payments under these presents may be made either in cash or by cheque of the Transferee and may be made to the Transferor (or person or persons entitled thereto) either personally or by mail. All notices and mail sent pursuant to these presents shall be addressed to:

the Transferor at:

and to the Transferee at: Union Gas Limited
P.O. Box 2001
50 Keil Drive North
Chatham, Ontario N7M 5M1
Attention: Manager, Land Services

or to such other address in either case as the Transferor or the Transferee respectively may from time to time appoint in writing.

15. The rights, privileges and easement hereby granted are and shall be of the same force and effect as a covenant running with the Transferor's Land and this Easement, including all the covenants and conditions herein contained, shall extend to, be binding upon and inure to the benefit of the heirs, executors, administrators, successors and assigns of the Parties hereto respectively; and, wherever the singular or masculine is used it shall, where necessary, be construed as if the plural, or feminine or neuter had been used, as the case may be.

16. (a) The Transferee represents that it is registered for the purposes of the Harmonized Goods and Services Tax (hereinafter called "HST") in accordance with the applicable provisions in that regard and pursuant to the Excise Tax Act, (R.S.C., 1985, c. E-15), (hereinafter called "Excise Tax Act"), as amended.

(b) The Transferee covenants to deliver a Statutory Declaration, Undertaking and Indemnity confirming its HST registration number, which shall be conclusive evidence of such HST registration, and shall preclude the Transferor from collection of HST from the Transferee.

(c) The Transferee shall undertake to self-assess the HST payable in respect of this transaction pursuant to subparagraphs 221(2) and 228(4) of the Excise Tax Act, and to remit and file a return in respect of HST owing as required under the said Act for the reporting period in which the HST in this transaction became payable.

(d) The Transferee shall indemnify and save harmless the Transferor from and against any and all claims, liabilities, penalties, interest, costs and other legal expenses incurred, directly or indirectly, in connection with the assessment of HST payable in respect of the transaction contemplated by this Easement. The Transferee's obligations under this Clause shall survive this Easement.

17. The Transferor hereby acknowledges that this Easement will be registered electronically.

Dated this ____ day of _____ 20__.

[Insert name of Individuals or Corporation]

Signature (Transferor)

Print Name(s) (and position held if applicable)

Address (Transferor)

Signature (Transferor)

Print Name(s) (and position held if applicable)

Address (Transferor)

UNION GAS LIMITED

Signature (Transferee)

Mervyn Weishar, Senior Land Specialist
Name & Title (Union Gas Limited)

I have authority to bind the Corporation.

519-436-4673
Telephone Number (Union Gas Limited)

Additional Information: (if applicable):

Property Address:

HST Registration Number:

Choose an item.

Province of Ontario

DECLARATION REQUIRED UNDER
SECTION 50 (3) OF THE PLANNING
ACT, R.S.O. 1990, as amended

I, , of the Choose an item., in the Province of Ontario;

DO SOLEMNLY DECLARE THAT:

- 1. I am a Choose an item., Lands Department of Union Gas Limited, the Transferee in the attached Grant of Easement and as such have knowledge of the matters herein deposed to.
- 2. The use of or right in the land described in the said Grant of Easement being:

PIN/Part of the PIN:

Legal Description:

acquired by Union Gas Limited for the purpose of a hydrocarbon line within the meaning of Part VI of the Ontario Energy Board Act, 1998.

AND I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath, and by virtue of The Canada Evidence Act.

DECLARED before me at the)	
)	
_____)	
)	
in the Province of Ontario)	_____
)	
this ____ day of _____ 20__)	

A Commissioner, etc.

UNION GAS LIMITED

Answers to Interrogatories from
Board Staff

Interrogatory # 3

Ref: Evidence Schedule 14, Letter by the Ministry of Energy to Union Gas, dated January 19, 2017; Schedule 15: *Indigenous Consultation Report, Panhandle Replacement Project (Jefferson)*

Preamble:

The 2016 edition of the OEB Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (OEB Environmental Guidelines) sets out new streamlined procedures and protocols for Indigenous consultation and the duty to consult on natural gas pipeline projects that are subject to the OEB's approval. Union Gas is required to adhere to these procedures and protocols and to file the required documentation with the OEB as part of its evidence in support of its application.

Questions:

- a) Please comment on the letter from the Ministry of Energy found in Schedule 14 and indicate if that letter is a formal delegation of the procedural aspects of the Duty to Consult to Union Gas ?
- b) What other documents (related to the Duty to Consult delegation and environmental assessment) does Union Gas anticipate the Ministry will issue to Union Gas in accordance with the OEB Guidelines?
- c) What is the expected time of Union Gas filing these documents with the OEB?
- d) Please provide an update on the Indigenous consultation and describe how Union Gas is planning to address the concerns raised by First Nations and Métis affected by the proposed project.

Response:

- a) b) c)

The issue of whether or not this project triggered as duty to consult was discussed at a meeting between Ministry of Energy, Ontario Energy Board staff, and Union Gas staff on June 7, 2017 at the Ministry of Energy offices.

The specific location of the project, specific lands impacted by the project, the need for the project and pipeline parameters were reviewed. Based upon that review the Ministry of Energy advised Union Gas that this project did not trigger a duty to consult and as such the Ministry of Energy may not be providing comments on any consultation activities which Union Gas undertook

d) Union has completed the following consultation activities since the leave to construct application has been filed:

- Follow up phone call with Chief Hillier, Chief of Caldwell First Nation (March 16/17). She expressed no concerns or issues with the project. Asked that if any changes made that Union would notify her. Union has agreed.
- Follow up phone call with Jared Macbeth, Project review Coordinator for Walpole Island First Nation (March 22/17). No issues or concerns regarding this project.
- Follow up phone call with Sharilyn Johnston, Environmental Coordinator for Aamjiwnaang First Nation (March 20/17). No issues or concerns regarding this project.
- Follow up phone call with Chief Randall Phillips, Chief of Oneida of the Thames First Nation (March 7/17 and March 20/17). Left voice message. No calls have been returned.

UNION GAS LIMITED

Answers to Interrogatories from
Board Staff

Interrogatory # 4

Ref: Evidence page 10, Lines 19-23 “Environmental”, Schedule 11, “2017 Panhandle Replacement Pipeline Project: Environmental Protection Plan”, Schedule 12, “Summary of Comments”

An Environmental Protection Plan (EPP) was prepared by Union Gas to meet the intent of the OEB Environmental Guidelines. The EPP was provided to members of the Ontario Pipeline Coordinating Committee (OPCC) for review and comments. Union Gas stated in its application that it would file the comments with the OEB as they are received. So far, no comments from the OPCC review are included in the evidence.

Question:

Please file a summary and updates of comments and concerns received from the public consultation and the OPCC review, as well as Union Gas’ responses and planned actions to mitigate each of the issues and address each of the concerns.

Response:

Attached as Schedule 1, is a summary of the comments received during the OPCC review of the project. The schedule also includes a copy of all correspondence received during the OPCC review and Unions response to these comments.

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2017 Panhandle Replacement Pipeline Project

AGENCY	COMMENT	RESPONSE
Essex Region Conservation Authority via Cynthia Casagrande	<p>Email with attached letter dated March 7, 2017</p> <ol style="list-style-type: none"> 1. Portions of the proposed replacement pipeline and working corridor will be located within the limit of the regulated area of the Russette Drain that is under the jurisdiction of the Essex Region Conservation Authority. A permit and/or clearance from ERCA will be required before construction. 2. The Russette Drain is a municipal drain that is under control of the City of Windsor. Any proposed works to and/or adjacent to the Russette Drain may require approval through the <i>Drainage Act</i> process. All inquiries regarding works adjacent to or within a drain and possible <i>Drainage Act</i> approvals should be made with Ms. Anna Godo, P. Eng., Drainage Superintendent, City of Windsor (email address: agodo@citywindsor.ca). 	<p>Email on March 7, 2017</p> <ol style="list-style-type: none"> 1. Thank you for your review and subsequent response. Union Gas will be gathering the necessary information for the permit application in the coming weeks and will contact you with any questions. 2. Union Gas will contact Anna (Godo) to provide her with information on the Project and to receive advice on compliance with the <i>Drainage Act</i>. <p>Email to Anna Godo, Drainage Superintendent, City of Windsor on May 5, 2017</p> <ol style="list-style-type: none"> 1. Referenced the original letter from ERCA and their request to inquire about the Drainage Act. 2. Indicated that we would not be working in the Drain in question and would avoid working in the ERCA regulated area as much as practical. 3. Attached the Environmental Protection Plan and a drawing that outlines the "No Work Zone" around the Drain. 4. Invited her to call to discuss if she had any questions. <p>No response from Anna Godo to date</p>
Ministry of Natural Resources and Forestry via Cara Hernould	<p>1. Voicemail on March 20, 2017</p> <p>Had questions regarding the project and requested a call back.</p> <p>2. Phone conversation on March 22, 2017</p> <p>Inquired as to whether or not this project had been reviewed by the MNRF previously because she had seen "Panhandle" projects before.</p>	<p>1. Voicemail on March 21, 2017</p> <p>Returned the call and requested a call back so we could answer any questions.</p> <p>2. Phone conversation on March 22, 2017</p> <p>Explained that there have been multiple "Panhandle" projects, but this was a new project that would not have been reviewed by the MNRF until now. Also explained that we have an environmental consultant that will be overseeing the Species at Risk portion of the Environmental Assessment.</p>
Ministry of Tourism, Culture and Sport via Joseph Muller	<p>1. Email to Zora Crnojacki, Ontario Energy Board (cc: to Union Gas) dated April 6, 2017</p> <p>The Environmental Protection Plan has been reviewed and the Stage 1-2 archaeological assessment and screening for cultural heritage</p>	<p>1. Email from Zora Crnojaci, Ontario Energy Board (cc: to Union Gas) dated April 6, 2017</p> <p>Thank you for the information on your review.</p>

Schedule 1
EB-2017-0118

AGENCY	COMMENT	RESPONSE
<p>Page 2 of 15</p>	<p>resources will address the preliminary interests of the Heritage Program Unit at the Ministry of Tourism, Culture and Sport.</p> <p>Further work may be required pending the outcomes of the assessment/screening and such work is to be documented in the project file/report.</p> <p>A cluster of 17 archaeological sites were identified on the adjacent Windsor Airport lands.</p> <p>Please continue to circulate the MTCS through the review process.</p>	
<p>Technical Standards and Safety Authority via Kourosh Manouchehri</p>	<p>1. Email to the Project Manager (Amry Al – Amry) dated April 20, 2017</p> <p>Reviewed the environmental package and had one comment:</p> <ul style="list-style-type: none"> - In section 6.1 of the submitted package under Cleaning and Testing, it is referred to pressure test of the new pipe according to the Energy Act. Pressure test of the pipe should be according to CSA Z662-15. 	<p>1. Letter to Kourosh Manouchehri dated May 1, 2017</p> <p>With regards to section 6.1 of the submitted environmental package under Cleaning and Testing, the pressure test of the new pipe will be according to CSA Z662-15 and not according to the Energy Act.</p>

Tomek, Evan

From: Tomek, Evan
Sent: March-07-17 4:52 PM
To: 'Cynthia Casagrande'
Cc: agodo@citywindsor.ca; Dan Jenner
Subject: RE: 2017 Panhandle Replacement Pipeline Project

Thank you for your review and subsequent response Cynthia.

I will be gathering the necessary information for the permit application in the coming weeks and will contact you should I have any questions.

I will also be sure to contact Anna to provide her with information on the Project and to receive advice on compliance with the Drainage Act.

Thanks again,

Evan Tomek, BES

Environmental Planner *on behalf of*
Union Gas Limited | An Enbridge Company
745 Richmond Street | Chatham, ON N7M 5J5
Tel: 519.436.2460 ext 5236904
Cell: 226.229.9598
email: etomek@uniongas.com



From: Cynthia Casagrande [<mailto:CCasagrande@erca.org>]
Sent: March-07-17 10:12 AM
To: Tomek, Evan
Cc: agodo@citywindsor.ca; Dan Jenner
Subject: RE: 2017 Panhandle Replacement Pipeline Project

Dear Evan:

Please find attached the ERCA response to the Union Gas Environmental Protection Plan regarding the 2017 Panhandle Replacement Pipeline Project.

If further information or clarification is required, please do not hesitate to contact this office.

Yours truly,

Cynthia Casagrande
Regulations Coordinator
Essex Region Conservation Authority
360 Fairview Avenue West, Suite 311
Essex ON N8M 1Y6
(519) 776-5209, Ext. 349

From: Tomek, Evan [<mailto:ETomek@uniongas.com>]
Sent: Tuesday, February 28, 2017 4:36 PM
To: Cynthia Casagrande <CCasagrande@erca.org>
Subject: 2017 Panhandle Replacement Pipeline Project

Hi Cynthia,

Per my voicemail sent at approximately 1:30 pm today, I am emailing to notify you of an upcoming pipeline replacement project (2017 Panhandle Replacement Pipeline Project) and to ensure we comply with the regulations. I will be mailing you a hard copy of the Environmental Protection Plan (EPP) prepared for the Project tomorrow, but have attached an electronic copy here as well.

The Project is located within the boundary of the Windsor Airport just east of Jefferson Boulevard on Lots 117 and 118, Concession 3 in the City of Windsor and involves constructing 600 m of NPS 16 inch pipeline and abandoning 250 m of NPS 16 inch pipeline (see EPP for mapping and more project information).

Looking at the ERCA Regulations Mapping, it does not appear that any regulated watercourses will be crossed with the proposed pipeline; however, on the mapping in the EPP you'll see it shows Temporary Land Use in a regulated area and across a regulated watercourse (southeast corner of the work area). The work will be kept on the north side of the watercourse, and silt fence will be installed to ensure the watercourse is protected.

Please advise if there are any permitting requirements as a result of this proposal and please feel free to call if you'd like to discuss.

Thanks,

Evan Tomek, BES

Environmental Planner *on behalf of*
Union Gas Limited | An Enbridge Company
745 Richmond Street | Chatham, ON N7M 5J5
Tel: 519.436.2460 ext 5236904
Cell: 226.229.9598
email: etomek@uniongas.com



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admin@erca.org

P.519.776.5209

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360 Fairview Avenue West
Suite 311, Essex, ON N8M 1Y6

07 March 2017

Mr. Evan Tomek
Environmental Planner
Union Gas Limited
P. O. Box 2001
50 Keil Drive North
Chatham, ON N7M 5M1

Dear Mr. Tomek:

Re: Union Gas Limited
2017 Panhandle Replacement Pipeline Project
City of Windsor
Windsor Airport - East of Jefferson Boulevard
Lots 117 & 118, Concession 3

This office has had an opportunity to review the Environmental Protection Plan (EPP) prepared by Union Gas regarding the above noted project. We have the following information to provide.

From the site plan contained within the report, it appears that portions of the proposed replacement pipeline and working corridor at the southeastern corner of the subject property will be located within the limit of the regulated area of the Russette Drain that is under the jurisdiction of the Essex Region Conservation Authority (ERCA). As such, the above noted lands are subject to our Development, Interference with Wetlands and Alteration to Shorelines and Watercourses Regulations under the *Conservation Authorities Act*, (Ontario Regulation No. 158/06). Prior to any construction or site alteration, or other activities affected by the regulations, the property owner will be required to obtain a Permit and/or Clearance from the ERCA.

In addition, the Russette Drain is a municipal drain that is under the control of the City of Windsor. Any proposed works to and/or adjacent to the Russette Drain may require an approval through the *Drainage Act* process. All inquiries regarding works adjacent to or within a drain and possible *Drainage Act* approvals should be made with Ms. Anna Godo, P. Eng., Drainage Superintendent, City of Windsor (email address: agodo@citywindsor.ca).

If further information or clarification is required, please do not hesitate to contact this office.

Yours truly,

Cynthia Casagrande,
Regulations Coordinator

/cc Ms. Anna Godo, P. Eng., Drainage Superintendent, City of Windsor

Tomek, Evan

From: Tomek, Evan
Sent: May-05-17 11:32 AM
To: agodo@citywindsor.ca
Subject: 2017 Panhandle Replacement Pipeline Project
Attachments: 2017_PRPP_EPP_022317.pdf; PRPP Silt Fencing.docx

Hi Anna,

I am emailing you in regards to Union Gas's proposed 2017 Panhandle Replacement Pipeline Project.

The Essex Region Conservation Authority informed me in a letter dated March 7, 2017 that the Russette Drain is a municipal drain that is under control of the City of Windsor, and any proposed works to and/or adjacent to the Drain may require an approval through the *Drainage Act* process, and to inquire with you about it.

We will not be working in the drain itself, and will avoid working in the ERCA regulated area as much as practical. I have attached a drawing showing our proposed silt fence location, which will be a minimum of 5 m back from the top of the bank and the area beyond the silt fence will be a No Work Zone.

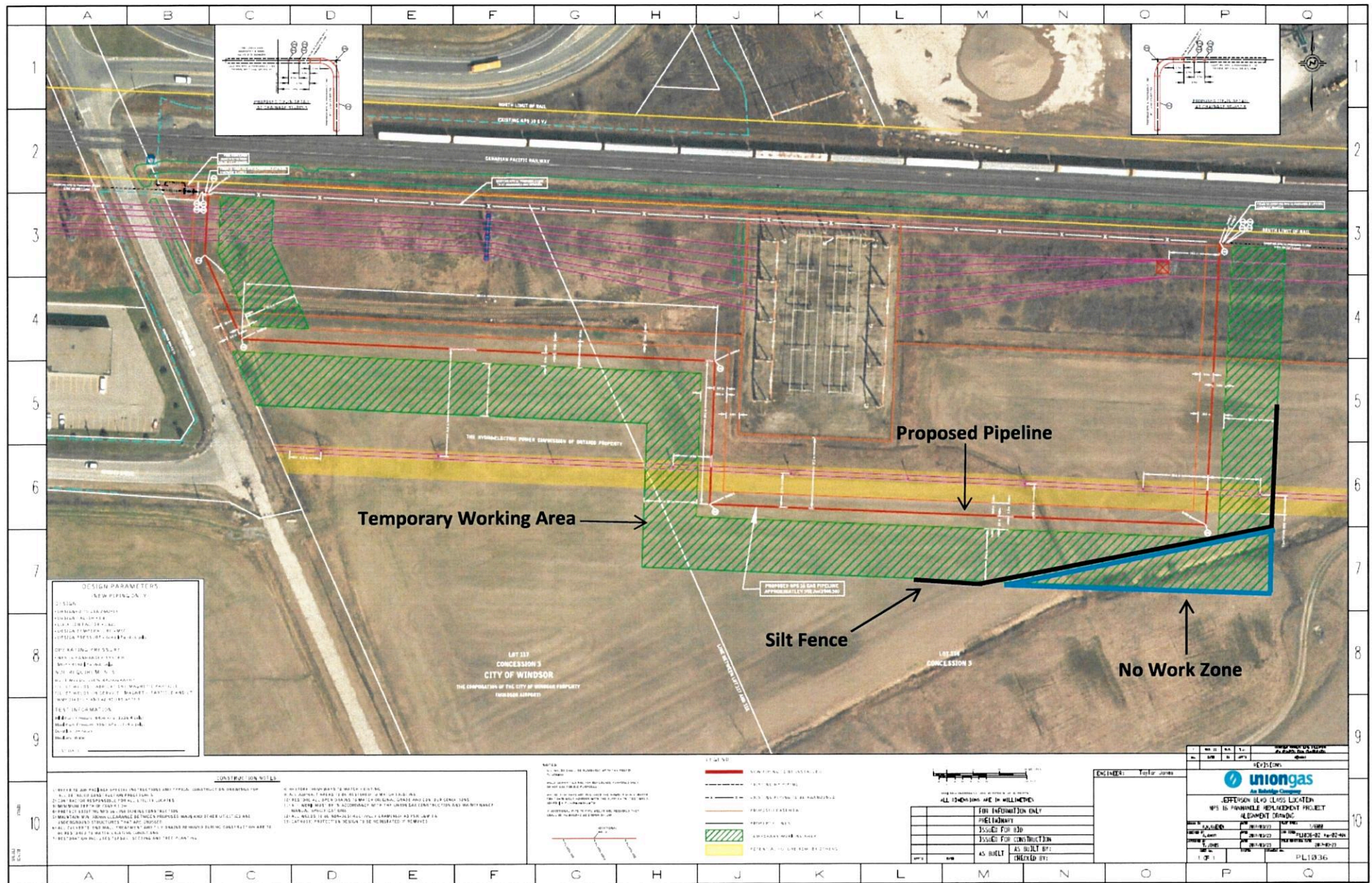
I have also attached the Environmental Protection Plan prepared for the Project for more information.

Please feel free to give me a call if you have any questions or concerns about the project and I will be happy to discuss.

Thanks,

Evan Tomek, BES
Environmental Planner *on behalf of*
Union Gas Limited | An Enbridge Company
745 Richmond Street | Chatham, ON N7M 5J5
Tel: 519.436.2460 ext 5236904
Cell: 226.229.9598
email: etomek@uniongas.com





Tomek, Evan

From: Zora Crnojacki <Zora.Crnojacki@oeb.ca>
Sent: April-06-17 11:42 AM
To: 'Muller, Joseph (MTCS)'
Cc: Tomek, Evan
Subject: RE: 2017 Panhandle replacement pipeline project

Hello Mr. Miller.

Thank you for the information on your review.

Regards,

Zora Crnojacki

Project Advisor
Applications Division
Ontario Energy Board
PO Box 2319
2300 Yonge Street, Suite 2700
Toronto, ON M4P 1E4
416 440 8104



please don't print this e-mail unless you really need to.

From: Muller, Joseph (MTCS) [<mailto:Joseph.Muller@ontario.ca>]
Sent: April-06-17 11:07 AM
To: Zora Crnojacki
Cc: etomek@uniongas.com
Subject: 2017 Panhandle replacement pipeline project

Hello Zora Crnojacki:

I have reviewed the environmental protection plan for the above project and the proposed Stage 1-2 archaeological assessment and screening for cultural heritage resource (built heritage and cultural heritage landscapes) will address the preliminary interests of the Heritage Program Unit at the Ministry of Tourism, Culture and Sport. Further work may be required pending outcomes of the archaeological assessment and cultural heritage screening, and all such work/screening is to be documented in the project file/report. As background information, a cluster of 17 archaeological sites were identified on the adjacent Windsor Airport lands.

Please continue to circulate us through the review process, and contact me if you have any questions or would like to discuss the file. Thank-you for your assistance,

Joe

Joseph Muller, RPP, MCIP

Heritage Planner
Ministry of Tourism, Culture and Sport
Culture Division | Programs and Services Branch | Heritage Program Unit

401 Bay Street, Suite 1700
Toronto, Ontario M7A 0A7

Tel. 416.314.7145 | Fax. 416.212.1802

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From: Kourosh Manouchehri [<mailto:KManouchehri@tssa.org>]
Sent: April-20-17 11:23 AM
To: Al-Amry, Amry
Cc: Zora Crnojacki
Subject: Panhandle Replacement Project within the boundary of Windsor airport

Hi Ahmed,

Referring to our phone conversation this morning, please see attached letter regarding review of the submitted package. As mentioned in the letter, I need technical specification of the pipe for review.

I also reviewed the environmental package and only have one comment as below:

In section 6.1 of the submitted package under Cleaning and testing, it is referred to pressure test of the new pipe according to Energy Act. Pressure test of the pipe should be according to CSA Z662-15.

If you have any question, please contact me.

Regards,



Kourosh Manouchehri, P.Eng., PMP | Engineer

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May 1st, 2017

Kourosh Manuchehri, P.Eng.
Fuel Safety Engineer
Technical Standards & Safety Authority
345 Carlingview Drive
Toronto, ON M9W GN9

RE: 2017 Panhandle Replacement Pipeline Project – Jefferson Site

Dear Mr. Manuchehri,

This is in response to your letter dated April 20, 2017 regarding the 2017 Panhandle Replacement Pipeline Project within the boundary of the Windsor Airport.

Union Gas can confirm that the Oil and Gas Pipeline Systems Code Adoption Document Amendment, document FS-220-16, clause 4.3.4.9 on High Consequence Areas is met for the proposed facilities. Detail of the verification is enclosed with this letter. Union Gas has also enclosed the technical specification as requested.

In addition, with regards to section 6.1 of the submitted environmental package under Cleaning and Testing, the pressure test of the new pipe will be according to CSA Z662-15 and not according to the Energy Act as had been stated in the package.

If you have further questions or requirements please do not hesitate to contact me

Yours Truly,



Ahmed M. Al-Amry P.Eng.

Project Engineer, Engineering Construction
Union Gas Limited | An Enbridge Company
Tel: 519.436.4600 ext 5002882 Cell: 226.229.9548
50 Keil Drive North | Chatham, ON N7M 5M1

High Consequence Area Analysis For Panhandle Replacement Jefferson Site

TSSA CAD requirements

4.3.4.9 High consequence areas

4.3.4.9.1 Definitions

The following definitions apply to the remainder of clause 4.3.4:

Assessment means the use of testing techniques set out in this section to ascertain the condition of a covered pipeline segment.

Covered segment or **Covered pipeline segment** means a segment of oil or gas transmission pipeline located in a high consequence area. The terms “oil”, “gas” and “transmission” are defined in O. Reg. 210/01

High consequence area means

(a) for a gas transmission pipeline, an area defined as:

(i) a Class 3 location under CSA Z662-15, Clause 4.3.3;

(ii) a Class 4 location under Clause 4.3.3;

(iii) any area in a Class 1 or Class 2 location where the potential impact radius is greater than 200 metres and the area within the potential impact circle contains 20 or more buildings intended for human occupancy; or

(iv) any area in a Class 1 or Class 2 location where the potential impact circle contains an identified site; and

(b) for an oil pipeline, an area containing:

(i) a commercially navigable waterway, which means a waterway where a substantial likelihood of commercial navigation exists;

(ii) a high population area, which means an urbanized area, as defined and delineated by the latest Statistics Canada Census, that contains 50,000 or more people or has a population density of at least 385 people per square km;

(iii) an other populated area, which means a place, as defined and delineated by the latest Statistics Canada Census, that contains a concentrated population, such as an incorporated or unincorporated city, town, village, or other designated residential or commercial area; or

(iv) an unusually sensitive area, as defined in company’s pipeline integrity management program.

Identified site means, for Class 1 and Class 2 locations, any of the following areas:

(a) an outside area or open structure that is occupied by 20 or more persons on at least 50 (not necessarily consecutive) days in any 12 month period. Examples include but are not limited to, beaches, playgrounds, recreational facilities, camping grounds, outdoor theaters, stadiums, recreational areas near a body of water, and areas outside a rural building such as a religious facility;

(b) a building that is occupied by 20 or more persons at least five (not necessarily consecutive) days a week for at least 10 (not necessarily consecutive) weeks in any 12 month period. Examples include, but are not limited to, religious facilities, office buildings, community centers, general stores, 4-H facilities, sporting and entertainment facilities; or

(c) a facility occupied by persons who are confined, are of impaired mobility, or would be difficult to evacuate. Examples include but are not limited to hospitals, prisons, schools, day-care facilities, retirement facilities and assisted-living facilities.

Potential impact circle, for natural gas or HVP pipelines systems, is a circle of radius equal to the potential impact radius (PIR).

Potential impact radius (PIR) means the radius of a circle within which the potential failure of a pipeline could have significant impact on people or property, determined by the following formula:
 $r = 0.00313 \text{ times square root of } (pd^2)$
where:

r is the radius of the circular area surrounding the point of failure in metres (m) p is the MOP of the pipeline in kPa d is the nominal diameter of the pipeline in mm

NOTE: 0.00313 is the factor for natural gas based on conversion from a formula used in GRI-00/0189. This number will vary for other gases depending upon their heat of combustion. An operator transporting gas other than natural gas shall refer to ASME/ANSI B31.8 S for the formula to calculate the potential impact radius.

Union Gas Analysis

High Consequence Area Criteria

- There are no class 3 areas along the route of this pipeline
- There are no class 4 areas along the route of this pipeline
- The PIR for this pipeline is calculated as follows;

$$r = 0.00313 \text{ times square root of } (pd^2)$$

$$= .00313 \times (6040 \times 406.4^2)^{.5}$$

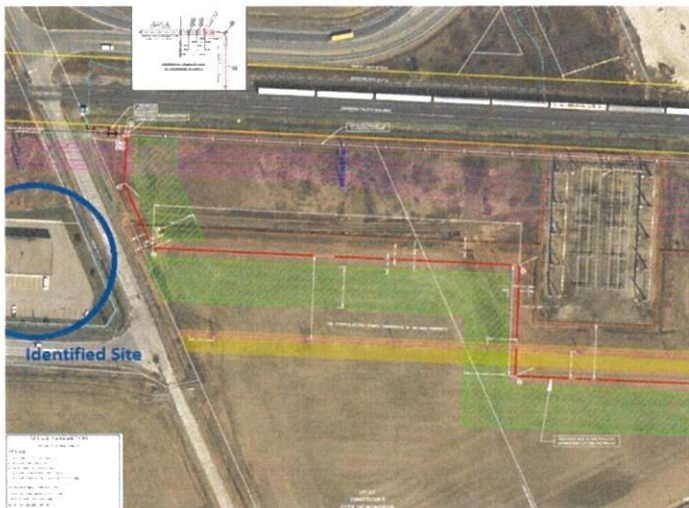
$$= 99$$

Union Gas adds a 10 m buffer to this value so the PIR would be 109 m for HCA

- There is one identified site along the route of this pipeline.

Identified High Consequence Areas

- 1) There is one identified site (commercial building) as shown below along the pipeline replacement section route.



Mitigation of High Consequence Areas

This location and in fact this entire short replacement section has been designed above its current class location requirements; the entire stretch is designed to a class 3 road crossing location ($L=0.625$) where it is only required to be designed to class 2 general location ($L=0.9$).

This line is a part of the Panhandle Pipeline System which is continuously remotely monitored using SCADA systems. The system includes both remotely operable valves at key locations including Dawn, Dover Transmission, Patillo, Belle River, and Ojibway as well as manually operable valves at other locations.

This line has been designed to be integrated into Union Gas' Pipeline Asset Integrity Management Program. It will include inline inspections as part of the regularly scheduled inspections of the Panhandle system. Any anomalies found within these High Consequence Areas are treated with a higher priority.

This line is part of Union Gas Emergency Planning Zone (EPZ) Program. Union Gas mails out brochures to residents residing within the EPZ at a 3 year frequency which includes information on who Union Gas is, emergency preparedness, calling before excavating, detecting a leak and what to do, how Union Gas will respond, and our pipeline operations.

On a more general note, Union Gas also meets with Fire Departments within our franchise once every 3 years. The purpose of this meeting is to provide them with an awareness of our pipeline system and operations, properties of natural gas, our incident command system, and other emergency response items.

2017 Panhandle Jefferson Site Replacement Pipeline Project**DESIGN AND PIPE SPECIFICATIONS****Design Specifications: NPS 16**

Class Location	-	Class 2
Design Class Location	-	Class 3
Design Factor	-	0.8
Location Factor (General)	-	0.700
Location Factor (Roads/Railways)	-	0.625
Maximum Design Pressure	-	6040 kPa
Maximum Operating Pressure	-	4140 kPa
Test Medium	-	Water
Test Pressure	-	Min: 8456 kPa
Valves/Fittings	-	PN 100
Minimum Depth of Cover	-	1.2 m

Pipe Specifications:

Size	-	NPS-16
Outside Diameter	-	406.4 mm
Nominal Wall Thickness	-	Min: 7.1 mm
Grade	-	Min: 359 MPa
Type	-	Electric Resistance Weld
Description	-	CSA Z245.1 (latest edition)
Category	-	Min: Cat. I
Coating	-	Fusion Bond Epoxy
% SMYS	-	48.2%

UNION GAS LIMITED

Answers to Interrogatories from
Board Staff

Interrogatory # 5

Ref: Evidence page 1, paragraph 1

Union Gas applied for leave to construct facilities under section 90(1) of the OEB Act. If Union Gas does not agree to any of the draft conditions of approval noted below, please identify the specific conditions that Union Gas disagrees with and explain why.

For conditions in respect of which Union Gas would like to recommend minor changes, please provide the proposed changes.

Response:

Union Gas can accept the proposed conditions of approval.