

February 28, 2018

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”)
2016 Maley Replacement Project
Board File # EB-2016-0222**

Pursuant to Condition 6. (a) iv. of the Board’s Conditions of Approval for the above-noted project, attached please find Union’s Post Construction Report.

Sincerely,

[original signed by]

Shelley Bechard
Administrative Analyst, Regulatory Projects

cc: Z. Crnojacki
N. Marconi
Regulatory Library

**SUDBURY MALEY DRIVE REPLACEMENT PROJECT
POST CONSTRUCTION REPORT
EB-2016-0222**

Prepared by: Union Gas Limited
Environmental Planning
February 2018

TABLE OF CONTENTS

Sudbury Maley Drive Replacement Project
Post Construction Report

	<u>Page No.</u>
1.0 Introduction	1
2.0 Background	3
3.0 Potential Impacts and Mitigation	3
3.1 Condition 1.0)	3
3.2 Condition 3.0)	3
3.3 Condition 4.0)	4
3.4 Condition 6.0)	4
a) i	5
a) ii	5
a) iii	5
3.4.1 Monitoring Programs	5
3.4.1.1 Species at Risk	5
3.4.1.2 Archaeological Assessment	6
3.4.1.3 Watercourse Monitoring	6
a) iv	6
a) v	7
Condition 6.0) b)	7
4.0 Summary	8
TABLE 1.....	Potential Impacts and Mitigation Measures
APPENDIX A.....	Location Map
APPENDIX B.....	Conditions of Approval
APPENDIX C.....	Letter to the OEB – Change to Construction
APPENDIX D.....	Executive Certification
APPENDIX E.....	Photo Inventory

1.0 INTRODUCTION

This Post Construction Report is provided in compliance with the Ontario Energy Board (“Board”) Order EB-2016-0222 granting Union Gas Limited (“Union”) “Leave to Construct” to replace a section of NPS 10 inch natural gas pipeline with 1,955 metres of new NPS 12 inch pipeline and to replace an 854 metre section of the existing NPS 12 inch natural gas pipeline (the Project) in the City of Greater Sudbury (City).

The pipeline replacements were necessary due to the City’s scheduled construction of a four-lane extension of Maley Drive with work commencing in 2016. In order to facilitate the construction of the roadways, the City required Union to relocate portions of its NPS 10 and NPS 12 Sudbury Lateral pipelines in areas where the current location of the pipelines are in conflict with the new location of Maley Drive.

The requirements for and details of this report are outlined in the specific conditions issued by the Board in its Order dated June 29, 2016 as listed below. The Conditions of Approval can be found in Appendix B.

Accordingly, the purpose of this Post Construction Report is to fulfill these conditions.

- 1.0 Union Gas Limited (Union) shall construct the facilities and restore the land in accordance with the OEB’s Decision and Order in EB-2016-0222 and these Conditions of Approval.*
- 3.0 Union shall implement all the recommendations of the Environmental Protection Plan in the proceeding.*
- 4.0 Union Gas shall advise the OEB of any proposed change to OEB-approved construction or restoration procedures. Except in an emergency, Union shall not make any such change without prior notice to and written approval of the OEB. In the event of an emergency, the OEB shall be informed immediately after the fact.*

6.0 *Both during and after construction, Union Gas shall monitor the impacts of construction, and shall file with the Board one paper copy and one electronic (searchable PDF) version of each of the following reports:*

a) a post construction report, within three months of the in-service date, which shall:

- i. provide a certification, by a senior executive of the company, of Union's adherence to Condition 1;*
- ii. described any impact or outstanding concerns identified during construction;*
- iii. describe the actions taken or planned to be taken to prevent or mitigate any identified impacts of the construction;*
- iv. include a log of all complaints received by Union, including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions and;*
- v. provide a certification, by a senior executive of the company, that the company has obtained all other approvals, permits, licences and certificates required to construct, operate and maintain the proposed project.*

b) a final monitoring report, no later than 15 months after the in-service date or where the deadline falls between December 1 and May 31, following June 1, which shall:

- i. provide a certification, by a senior executive of the company, of Union's adherence to Condition 3;*
- ii. describe the condition of any rehabilitated land;*
- iii. describe the effectiveness of any actions taken to prevent or mitigate and identified impacts of construction.*
- iv. include the results of any analyses and monitoring programs and any recommendations arising therefrom; and*
- v. include a log of all complaints received by Union, including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions.*

2.0 BACKGROUND

Union was granted approval to construct the Sudbury Maley Drive Replacement Project on November 10, 2016. The NPS 12 inch pipelines commenced at a tie-in to the existing NPS 10 inch Sudbury Lateral Line approximately 530 metres east of Notre Dame Ave. and proceeded west across Notre Dame Ave. From this point the pipeline continued south crossing Turner Ave. and LaSalle Blvd. then west on the south side of LaSalle Blvd. to the end point with the following order of operations: stringing, welding, joint coating, trenching, directional drilling, lowering-in, tie-ins, backfilling, testing and clean-up. . A map of the pipeline route is included in Appendix A.

Union will return to the right-of-way in spring 2018 to complete the following activities: repair any subsidence on the right-of-way, perform a general overview of the right-of-way and complete any additional clean-up that was required.

3.0 POTENTIAL IMPACTS AND MITIGATION

3.1 Condition 1.0

Union Gas Limited (“Union”) shall construct the facilities and restore the land in accordance with the Board’s Decision and Order in EB-2015-0013 and these Conditions of Approval.

With exception to the changes indicated in Condition 4.0, Union has complied with all conditions imposed by the Board during construction of the pipeline and has restored the land according to the evidence in support of its application.

3.2 Condition 3.0

Union shall implement all the recommendations of the Environmental Report filed in the proceeding, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee review.

Union has implemented all recommendations and mitigation measures outlined in the Environmental Review (ER) along with all directives identified by the OPCC.

3.3 **Condition 4.0**

Union Gas shall advise the Board of any proposed change to Board-approved construction or restoration procedures. Except in an emergency, Union shall not make such change without prior notice to and written approval of the Board. In the event of an emergency, the Board shall be informed immediately after the fact.

Union submitted 2 “Request to Vary” during construction of the project.

- 1) Union Gas forwarded a letter dated June 28, 2017 to the OEB with a “Request to Vary” for the project. The change included;

The need to acquire additional temporary lands in the vicinity of La Salle Boulevard in order to complete directional drilling of La Salle Boulevard.

- 2) Union Gas forwarded a letter dated October 11, 2017 to the OEB with a “Request to Vary” for the project. The change included;

Union proposed to change the wall thickness of the pipe used for the Project. Union is proposing to change the wall thickness from 6.4 mm to 7.1 mm. Union was unable to purchase 6.4 mm pipe and purchased the 7.1 mm pipe instead. This change in wall thickness is allowed under the CSA code and TSSA regulations.

Copies of the letters sent to the Ontario Energy Board informing them of the changes and the OEB responses can be found in Appendix C.

3.4 **Condition 6.0**

Both during and after construction, Union Gas shall monitor the impacts of construction, and shall file with the Board one paper copy and one electronic (searchable PDF) version of each of the following reports:

a) *post construction report, within three months of the in-service date, which shall:*

- i. *provide a certification, by a senior executive of the company, of Union's adherence to Condition 1;*

One paper copy and one electronic (searchable PDF) version of this Post Construction Report is provided to the Board. This report is certified by Paul Rietdyk, Vice President of Engineering, Construction and STO, confirming that Union has constructed the facilities and restored the land in accordance with the Board's Decision and the Conditions of Approval in Order EB-2016-022. The letter of certification can be found in Appendix D.

- ii. *described any impact or outstanding concerns identified during construction*
- iii. *describe the actions taken or planned to be taken to prevent or mitigate any identified impacts of the construction;*

Table 1 summarizes the construction effects and general mitigation measures carried out during construction. All mitigation techniques used throughout construction will also be implemented during cleanup activities as required.

3.4.1 Monitoring Programs

3.4.1.1 Species at Risk

During construction there was the possibility that the Blanding Turtle, which is a provincially threatened species and therefore has general habitat protection under the Endangered Species Act, may be encountered. Union worked closely with the Ministry of Natural Resources and Forestry to formulate a mitigation plan to be implemented during construction. Mitigation included restrictions on vegetation removal, exclusion fencing and monitoring. Observations of the construction area were performed daily with no Blanding Turtles observed.

3.4.1.2 Archaeological Assessment

Woodland Heritage Services Limited conducted a Stage 1 and Stage 2 archaeological assessment in August 2011, as part of the City of Sudbury's pre-construction activities for the expansion on of Maley Drive which included the pipeline construction area. No archaeological or cultural heritage resources were located and no artifacts were discovered during construction.

3.4.1.3 Watercourse Monitoring

It was necessary to cross four (4) watercourses regulated by Conservation Sudbury as part of the project. Two (2) crossings were performed using the horizontal directional drill (HDD) method and two (2) using the dam and pump method under permits acquired from the Conservation Authority.

Watercourses were protected prior to, during and following construction by installing sediment fencing, and erosion control matting. Disturbed areas adjacent to the watercourses were seeded immediately following the installation of the pipeline.

Watercourses that were susceptible to erosion were checked after excessive rainfall to verify the effectiveness of the sediment control devices. These watercourses will be reviewed for stability and vegetation re-establishment in the spring of 2018.

- iv. *include a log of all complaints received by Union, including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions and:*

Union's Complaint Tracking System which identifies the current status of landowner complaints received as a result of pipeline construction, was in effect. A complaint is identified as a concern raised by a landowner that has not been resolved to the landowner's satisfaction within three (3) working days.

During construction, a few concerns were raised to Union and their Contractor. These issues were minor in nature and were dealt with by Union and the Contractor in an expeditious manner. Union will continue to monitor the state of the land and environment and will address any additional landowner concerns if they should arise.

- v. *provide a certification, by a senior executive of the company, that the company has obtained all other approvals, permits, licences and certificates required to construct, operate and maintain the proposed project.*

Paul Rietdyk, Vice President of Engineering Construction and STO, has certified that the company has obtained all other approvals, permits, licences, and certificates required to obstruct, operate and maintain the project and is confirmed by their signed letter of approval found in Appendix D.

Union Gas obtained the following environmental permits for construction:

❖ **Conservation Sudbury - Watercourse Crossings**

- Application under Section 28 of the Conservation Authorities Act
43-08- 3060-4611

❖ **Ministry of Natural Resources and Forestry**

- **Letter of Advise**
- Endangered Species Act – Avoidance Strategy for Blanding Turtle

b) *a final monitoring report, no later than fifteen months after the in-service date or where the deadline falls between December 1 and May 31, following June 1, which shall:*

- provide a certification, by a senior executive of the company, of Union's adherence to Condition 3;*
- describe the condition of any rehabilitated land;*
- describe the effectiveness of any actions taken to prevent or mitigate and identified impacts of construction.*

- iv. *include the results of any analyses and monitoring programs and any recommendations arising therefrom; and*
- v. *include a log of all complaints received by Union, including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions.*

A final monitoring report will be prepared to evaluate the success of the monitoring programs and if necessary outline areas in need of additional restoration as well as any outstanding issues if they should arise.

4.0 SUMMARY

This Post Monitoring Report has been prepared as per conditions in the Board Order EB-2016-0222. The report provides an outline of Unions' compliance with the commitments of its witnesses, the measures implemented during construction to minimize disturbance to the environment and a description of Unions' monitoring programs. It is anticipated that these measures will effectively eliminate any long-term impacts to the environment.

“Table 1”

Potential Impacts and Mitigation Measures

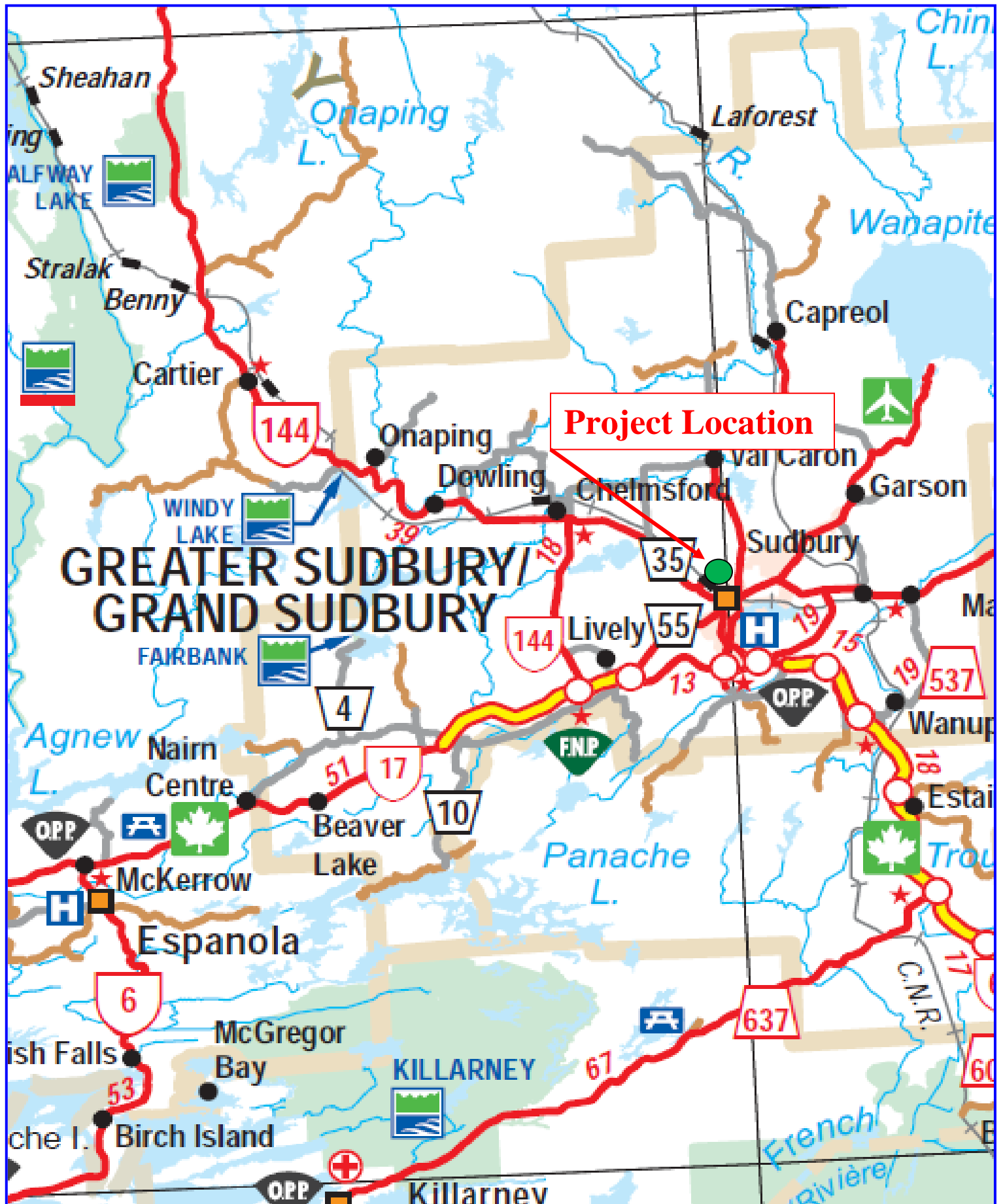
TABLE 1: MITIGATION SUMMARY

Issue	Potential Impact	Proposed Mitigation
a) Archaeology	Disturbance to cultural heritage resources.	<ul style="list-style-type: none"> Following a Stage 1 and Stage 2 assessment, it was determined the area had a low archaeological potential. No artifacts were found during construction.
b) Species At Risk (SAR)	Encountering SAR	<ul style="list-style-type: none"> Followed recommendations outlined in Environmental Report and the Ministry of Natural Resources Letter of Advice.
c) Landowner Concerns	Disruption to Area Residents	<ul style="list-style-type: none"> A Landowner Relations Program was established to track complaints during construction. To date there have been no complaints entered into the complaint tracking system.
d) Watercourses	Water quality concerns	<ul style="list-style-type: none"> Union adhered to Company specifications for watercourse crossings. Union obtained permits from the Conservation Sudbury.
e) Road Side Ditches	Water quality concerns	<ul style="list-style-type: none"> Ensured ditches were returned to pre-construction condition as quickly as possible.
f) Roadways	Disruption to local traffic and residents.	<ul style="list-style-type: none"> All paved roadways bored if practical. Union maintained one lane of traffic open if possible. Traffic controls were implemented as required.
g) Public Safety	Public safety concerns	<ul style="list-style-type: none"> During construction it was necessary to restrict access to the watercourse and trails. Signage and fencing were used to restrict the use of the trail. Company inspectors ensured public safety on construction site. Ensured proper signage and flag persons if required.
h) Construction Equipment	Disturbance to area residents	<ul style="list-style-type: none"> Equipment was stored well off road shoulders or in a nearby yard when not in use.
i) Construction Noise	Disturbance to area residents	<ul style="list-style-type: none"> Construction was carried out during daylight hours whenever possible. Ensured equipment was properly muffled.
j) Traffic	Disruption to local citizens	<ul style="list-style-type: none"> At least one lane of traffic was maintained at all times. Flag persons and warning devices were used to notify traffic of the construction zone in accordance with Ministry of Transportation standards.
k) Fuel Storage and Handling	Improper fuel storage and handling may cause spillage and possible contamination of soil.	<ul style="list-style-type: none"> Fuel was not stored near watercourses (i.e. Within 50 metres). Spill clean-up materials were stored on site and available in the event of a spill. Spills or leakage were to be reported to the appropriate authority immediately. No reportable spills were recorded during construction.

Appendix A

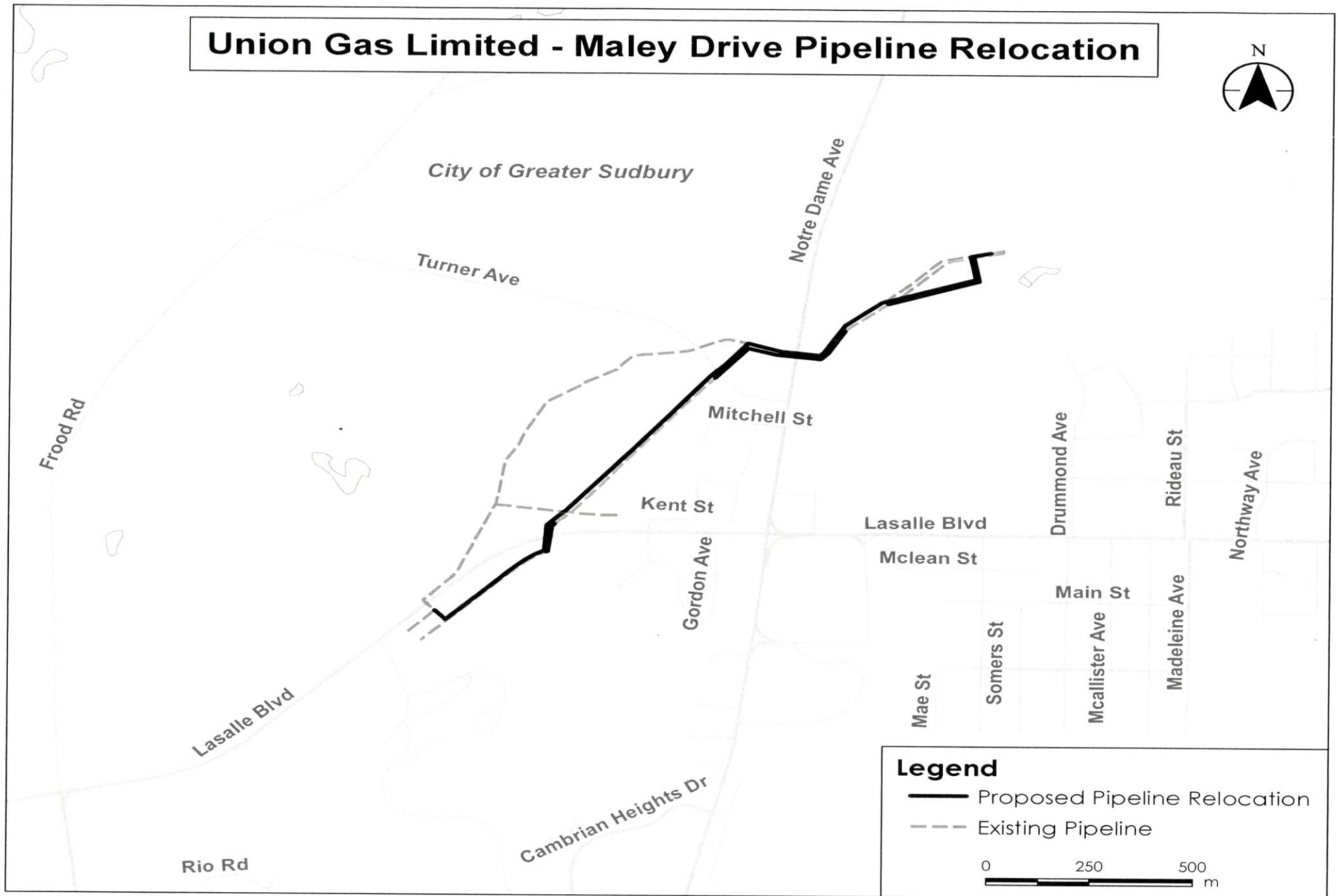
Location Maps

GENERAL LOCATION MAP SUDBURY MALEY DRIVE REPLACEMENT



GENERAL LOCATION MAP

SUDBURY MALEY DRIVE REPLACEMENT PROJECT



Appendix B

Conditions of Approval

Leave to Construct Conditions of Approval
Application under Section 90 of the *Ontario*
Energy Board Act, 1998

Union Gas Limited

EB-2016-0222

1. Union Gas Limited (Union) shall construct the facilities and restore the land in accordance with the OEB's Decision and Order in EB-2016-0222 and these Conditions of Approval.
2.
 - a) Authorization for leave to construct shall terminate 12 months after the decision is issued, unless construction has commenced prior to that date.
 - b) Union shall give the OEB notice in writing:
 - i. of the commencement of construction, at least 10 days prior to the date construction commences;
 - ii. of the planned in-service date, at least 10 days prior to the date the facilities go into service;
 - iii. of the date on which construction was completed, no later than 10 days following the completion of construction; and
 - iv. of the in-service date, no later than 10 days after the facilities go into service.
3. Union shall implement all the recommendations of the Environmental Protection Plan filed in the proceeding.
4. Union shall advise the OEB of any proposed change to OEB-approved construction or restoration procedures. Except in an emergency, Union shall not make any such change without prior notice to and written approval of the OEB. In the event of an emergency, the OEB shall be informed immediately after the fact.
5. Union shall file, in the proceeding where actual capital costs of the project are proposed to be included in rate base, a Post Construction Financial Report, which shall indicate the actual capital costs of the project and shall provide an explanation of any significant variances from the cost estimates filed in this proceeding.
6. Both during and after construction, Union shall monitor the impacts of construction, and shall file with the OEB one paper copy and one electronic (searchable PDF) version of each of the following reports:
 - a) a post construction report, within three months of the in-service date, which shall:

- i. provide a certification, by a senior executive of the company, of Union adherence to Condition 1;
 - ii. describe any impacts and outstanding concerns identified during construction;
 - iii. describe the actions taken or planned to be taken to prevent or mitigate any identified impacts of construction;
 - iv. include a log of all complaints received by Union, including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions; and
 - v. provide a certification, by a senior executive of the company, that the company has obtained all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project.
- b) a final monitoring report, no later than 15 months after the in-service date, or, where the deadline falls between December 1 and May 31, the following June 1, which shall:
- i. provide a certification, by a senior executive of the company, of Union adherence to Condition 3;
 - ii. describe the condition of any rehabilitated land;
 - iii. describe the effectiveness of any actions taken to prevent or mitigate any identified impacts of construction;
 - iv. include the results of analyses and monitoring programs and any recommendations arising therefrom; and
 - v. include a log of all complaints received by Union, including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions.

Appendix C

Letters to the OEB – Change to Construction



An Enbridge Company

June 28, 2017

RESS and Courier

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Walli,

**Re: Union Gas Limited ("Union")
2016 Sudbury Maley Replacement Project
Board File # EB-2016-0222**

Please find attached Change Request 1, for the above-noted project.

Union believes that this change is not significant and would appreciate your timely review and approval of this request, as construction is in progress.

In the event that you have any questions or would like to discuss in more detail, please do not hesitate to contact me at 519-436-5457.

Sincerely,

[original signed by]

W. T. (Bill) Wachsmuth, RPF
Senior Administrator, Regulatory Projects

cc: Nancy Marconi, OEB
Zora Crnojacki, OEB

REQUEST TO VARY

Project Name: Sudbury Maley Replacement Project

OEB file Number: EB-2016-0222

Request to Vary: 1

Description and Rationale for Change

In order to facilitate construction of the proposed facilities Union is proposing to obtain additional temporary lands in the vicinity of La Salle Boulevard. This additional land is required to complete the directional drilling of La Salle Boulevard.

Construction and Restoration Practices

These lands will be used to string and weld the pipe required for the crossing of LaSalle Boulevard. They will be returned to their current condition once construction has been completed.

Environmental

No new environmental mitigation measures will be required.

Consultation

Union has discussed the additional temporary lands the Vale Canada Limited. Vales have not identified any concerns.

Lands

Vale has agreed to amend their current agreement with Union to include the additional temporary lands.

Costs

These additional temporary land rights will increase the costs of the project by approximately \$2,500. These additional costs can be covered by the contingencies identified in Union's pre-filed evidence.

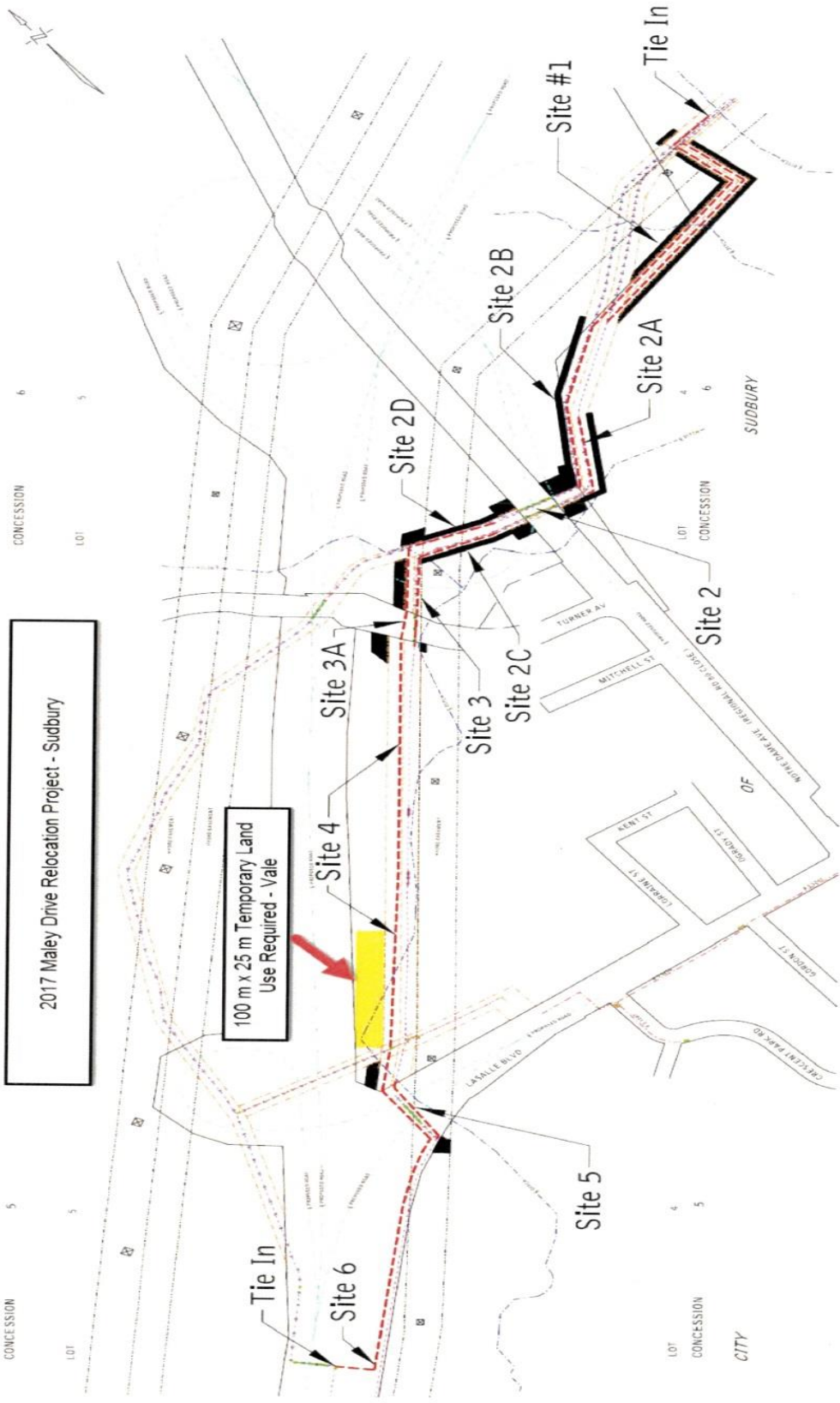
Schedule

This change will not result in a change to the in-service date of the project.

Attachments

A map showing the location of the additional temporary lands is attached at Schedule 1.

2017 Maley Drive Relocation Project - Sudbury



Ontario Energy
Board
P.O. Box 2319
27th. Floor
2300 Yonge Street
Toronto ON M4P 1E4
Telephone: 416-481-1967
Facsimile: 416-440-7656
Toll free: 1-888-632-6273

Commission de l'énergie
de l'Ontario
C.P. 2319
27e étage
2300, rue Yonge
Toronto ON M4P 1E4
Téléphone: 416-481-1967
Télécopieur: 416-440-7656
Numéro sans frais: 1-888-632-6273



BY E-MAIL

June 28, 2017

Union Gas Limited
W.T. (Bill) Wachsmuth, RPF
Senior Administrator, Regulatory Projects
50 Keil Drive North
P.O. Box 2001
Chatham ON N7M 5M1
bwachsmuth@uniongas.com

Dear Mr. Wachsmuth:

**Re: 2016 Sudbury Maley Replacement Project – EB-2016-0222
Request to Vary
Change Request No. 1**

The Ontario Energy Board (OEB) is in receipt of your letter dated June 28, 2017 and where Union Gas Limited (Union Gas) advised the OEB of a change to the 2016 Sudbury Maley Replacement Project (Change Request No. 1).

The change pertains to the need to acquire additional temporary lands in the vicinity of La Salle Boulevard in order to complete directional drilling of La Salle Boulevard. Union Gas has discussed acquisition of additional temporary land rights from Vale Canada Limited (Vale). Union Gas indicated that Vale expressed no concerns about granting the additional temporary land rights to Union Gas. Union Gas estimated that this change will increase the costs of the project by about \$2,500.

As the Manager, Applications Policy and Climate Change, I have been delegated the authority of the OEB under section 6 of the *Ontario Energy Board Act, 1998* to determine whether Union Gas' proposals will result in material change to the leave to construct granted by the OEB in the EB-2016-0222 proceeding. I have been further granted the authority to approve any changes that I have concluded are not material.

I note that the estimated incremental costs presented therein can be covered by the contingencies contained in the EB-2016-0222 proceeding. I also note that the actual costs of the project will be reported to the OEB in the Post-Construction Financial Report.

Union Gas stated that this change will not modify the construction or land restoration methods, or environmental mitigation measures and consultation. Union Gas also noted that the in-service date will remain as planned.

Based on my review of the information provided, I find that the described change does not materially impact the leave granted by the OEB to construct the pipeline. I hereby approve the proposed change.

Yours truly,

Original signed by

Pascale Duguay
Manager, Applications Policy and Climate Change



October 6, 2017

RESS

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Walli,

**Re: Union Gas Limited ("Union")
2016 Sudbury Maley Replacement Project
Board File # EB-2016-0222**

Please find attached Change Request 2, for the above-noted project.

Union believes that this change is not significant and would appreciate your timely review and approval of this request, as construction is in progress.

In the event that you have any questions or would like to discuss in more detail, please do not hesitate to contact me at 519-436-5457.

Sincerely,

[original signed by]

W. T. (Bill) Wachsmuth, RPF
Senior Administrator, Regulatory Projects

cc: Nancy Marconi, OEB
Zora Crnojacki, OEB
Ritchie Murray, OEB

REQUEST TO VARY

Project Name: Sudbury Maley Replacement Project
OEB file Number: EB-2016-0222
Request to Vary: 2

Description and Rationale for Change

Union is proposing to change the wall thickness of the pipe used for the Project. Union is proposing to change the wall thickness from 6.4 mm to 7.1 mm. Union was unable to purchase 6.4 mm pipe and purchased the 7.1 mm pipe instead. This change in wall thickness is allowed under the CSA code and TSSA regulations.

Construction and Restoration Practices

There is no change to the Construction and Restoration Practices.

Environmental

No new environmental mitigation measures will be required.

Consultation

No consultation was required for this change.

Lands

There are no new lands required for this change.

Costs

The change in wall thickness increases the Project costs by approximately \$65,000. This cost increase can be covered under project contingencies.

Schedule

This change will not result in a change to the in-service date of the project.

Attachments

A revised schedule 6 is attached at Schedule 1.

Sudbury Maley Drive Project DESIGN AND PIPE SPECIFICATIONS

Design Specifications: NPS 12

Class Location (existing)	-	Class 2&3
Design Class Location	-	Class 3
Design Factor	-	0.8
Location Factor (Road)	-	0.625
Maximum Design Pressure	-	6895 kPa
Maximum Operating Pressure	-	3723 kPa (current) 6895 kPa (future)
Test Medium	-	Water
Test Pressure	-	9653 kPa
Valves/Fittings	-	PN 100
Minimum Depth of Cover (Road)	-	1.2 m

Pipe Specifications:

Size	-	NPS 12
Outside Diameter	-	323.9 mm
Wall Thickness	-	7.1 mm
Grade	-	359 MPa
Type	-	Electric Resistance Weld
Description	-	C.S.A. Standard Z245.1-14
Category	-	Cat. I, M5C
Coating	-	FBE, Dual Layer FBE
% SMYS	-	49% at design & future MOP

Ontario Energy Board
P.O. Box 2319
27th Floor
2300 Yonge Street
Toronto ON M4P 1E4
Telephone: 416-481-1967
Facsimile: 416-440-7656
Toll free: 1-888-632-6273

Commission de l'énergie
de l'Ontario
C.P. 2319
27^e étage
2300, rue Yonge
Toronto ON M4P 1E4
Téléphone: 416-481-1967
Télécopieur: 416-440-7656
Numéro sans frais: 1-888-632-6273



BY E-MAIL

October 11, 2017

Union Gas Limited
Bill Wachsmuth
Senior Administrator, Regulatory Projects
50 Keil Drive North
P.O. Box 2001
Chatham ON N7M 5M1
bwachsmuth@uniongas.com

Dear Mr. Wachsmuth:

**Re: Sudbury Maley Replacement Project, EB-2016-0222
Request to Vary
Change Request No. 2**

The Ontario Energy Board (OEB) is in receipt of your letter dated October 6, 2017 where Union Gas Limited (Union) proposed a change to the Sudbury Maley Replacement Project (Project) (Change Request No. 2).

Union proposes to change the wall thickness of the pipe used from 6.4 mm to 7.1 mm as Union was unable to purchase 6.4 mm pipe.

Union stated that the increase in wall thickness is allowed under the governing CSA standard and the TSSA Act and Regulations.

Union also stated that this change will not modify the project's construction or restoration methods, environmental mitigation measures, consultation, land requirements or schedule. The change will increase the project costs by approximately \$65,000.

As the Manager, Applications Policy and Climate Change, I have been delegated the authority of the OEB under section 6 of the Ontario Energy Board Act, 1998 to determine whether Union's proposal will result in material changes to the leave to construct granted by the OEB in the EB-2016-0222 proceeding. I have been further granted the authority to approve any changes that I have concluded are not material.

Based on my review of the information provided, I will approve the requested change in wall thickness conditionally upon receiving written confirmation from the TSSA that this change is in compliance with the applicable CSA standard and TSSA Act and Regulation. With respect to the increased costs of the pipeline, I note that the incremental amount can be covered under the Project contingencies.

Yours truly,

Original Signed by

Pascale Duguay
Manager, Applications Policy and Climate Change

Appendix D

Executive Certification



SUDBURY MALEY DRIVE REPLACEMENT PROJECT
EB-2016-0222

I hereby certify Union Gas Limited has complied the Decision and Order, Schedule B, EB-2016-0222, Section 6 (a) (i).

A handwritten signature in black ink, appearing to read "Paul Rietdyk", written over a horizontal line.

Paul Rietdyk

2018.02.26
Date

Vice President – Engineering, Construction,
Storage and Transmission Operations

Condition 6 a) i.

- a) a post construction report, within three months of the in-service date, which shall:
 - i. Provide a certification, by a senior executive of the company, of Union's adherence to Condition 1;

Condition 1

Union Gas Limited (Union) shall construct the facilities and restore the land in accordance with the Board's Decision and Order in EB-2016-0222 and these Conditions of Approval.



SUDBURY MALEY DRIVE REPLACEMENT PROJECT
EB-2016-0222

I hereby certify Union Gas Limited has complied the Decision and Order, Appendix B, EB-2016-0222 Section 6 (a) (v).

A handwritten signature in black ink, appearing to read "Paul Rietdyk", written over a horizontal line.

Paul Rietdyk

Vice President – Engineering, Construction,
Storage and Transmission Operations

2018.02.26
Date

Condition 6 (a) (v).

- a) a post construction report, within three months of the in-service date, which shall:
- v. Provide a certification, by a senior executive of the company, that the company has obtained all other approvals, permits, licenses, and certificates required to construct, operate and maintain the proposed project.

Appendix E

Photo Inventory



Large wooden mats were used to access remote areas preventing disturbance and rutting to the native soil leaving roots systems intact allowing for fast re-vegetation.



The possibility of encountering the Blanding Turtle which is a Species at Risk found in the area, required protective fencing to be established along all watercourses to restrict their access to the construction area.



Following the stringing and welding of the pipeline, the joints are sand blasted to remove any impurities and rust. For safety, the worker must wear protective clothing and a helmet with a separate air supply.



Following the sand blasting, an epoxy coating is applied to a specified thickness that will protect the joint.



During construction some areas contained rock outcrops needed to be removed to allow for the trench. Two methods of removal were employed. In areas of dense rock, holes were drilled in the rock and blasting performed.



In areas of less dense or fractured rock a hoe ram attached to an excavator was used. This equipment is similar to a large jack hammer.



In areas where rock may have been removed to form the trench, a protective cover known as “rock shield” is wrapped around the pipe. prior to installation to protect it during backfilling,



Once the section of pipeline is protected, the pipeline is lowered into the trench.



Following the regrading of the easement, the disturbed areas were hydro seeded and silt fencing established on the slopes to minimize the possibility of sediment entering a watercourse.



Once the pipeline is installed across a watercourse, silt fencing and erosion control matting is installed to control the migration of sediment.