



Alison Evans
Advisor, Regulatory Applications
Regulatory Affairs

tel 416 495 5499
egiregulatoryproceedings@enbridge.com

Enbridge Gas Inc.
500 Consumers Road
North York, Ontario M2J 1P8
Canada

VIA Email and RESS

November 18, 2020

Ms. Christine Long
Registrar
Ontario Energy Board
2300 Yonge Street, Suite 2700
Toronto, Ontario, M4P 1E4

Dear Ms. Long:

**Re: Enbridge Gas Inc. ("Enbridge Gas")
Ontario Energy Board ("Board") File No.: EB-2018-0306
Stratford Reinforcement Project ("Project")**

On March 28, 2019 the Board issued its Decision and Order for the above noted proceeding which included, as Schedule B, several Conditions of Approval.

Per Schedule B, Sections 5. and 6. (b) in the aforementioned Decision and Order, Enbridge Gas is to provide the Board with a Post Construction Financial report and Final Monitoring Report within fifteen months after the in-service date. Please find enclosed a copy of the Post Construction Financial and Final Monitoring reports for the Stratford Reinforcement project.

Please contact me if you have any questions.

Yours truly,

Alison Evans
Advisor Regulatory Applications
Regulatory Applications & Strategy

**STRATFORD REINFORCEMENT PROJECT
FINAL MONITORING REPORT
EB-2018-0306**

Prepared by: Enbridge Gas Inc.
Environmental Planning
November 2020

TABLE OF CONTENTS

Stratford Reinforcement Project
Final Monitoring 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)	4
3.3 Condition 4.0).....	4
3.4 Condition 6.0) a).....	4
Condition 6.0) b).....	5
b) i	5
b) ii.....	5
b) iii.....	6
b) iv.....	6
<i>Monitoring Programs</i>	6
b) v.....	7
4.0 Summary	7

TABLE 1..... Potential Impacts and Mitigation Measures

APPENDIX A..... Location Map

APPENDIX B..... Conditions of Approval

APPENDIX C..... Executive Certification

1.0 INTRODUCTION

This Final Monitoring Report is provided pursuant to the Ontario Energy Board (Board) Decision and Order in the EB-2018-0306 proceeding. The Decision and Order granted Enbridge Gas Inc. (Enbridge Gas) leave to construct the Stratford Reinforcement Project (the Project). The Project consists of the construction of approximately 10.8 kilometres of new NPS 12-inch diameter natural gas pipeline to increase the capacity of the Forest-Hensall-Goderich Transmission System, which services portions of Middlesex, Lambton, Perth and Huron Counties.

The Project commenced from the existing Enbridge Gas Beachville Transmission Station in the Township of Zorra in the County of Oxford and terminated at a new valve site where the Project interconnects with the existing NPS 8-inch Stratford Pipeline on the south side of the Perth-Oxford Road. A new launcher station was built east of 41st Line Road opposite of the Beachville Transmission Station and a new receiver site built on the west side of 41st Line Road along the new NPS 12-inch pipeline.

The Project was required to accommodate forecasted growth in the number of general service and contract customers. The Project also eliminates pressure-related constraints in the area. A map of the pipeline route is included in Appendix A.

The OEB's Decision and Order for the Project specified several conditions of approval (COA). The COAs can be found in Appendix B of this report. The specific COAs addressed in this report are as follows:

1.0 *Enbridge Gas ("Enbridge Gas") shall construct the facilities and restore the land in accordance with the OEB's Decision and Order in EB-2018-0306 and these Conditions of Approval.*

3.0 *Enbridge Gas 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.*

4.0 *Enbridge Gas shall advise the OEB of any proposed change to OEB-approved construction or restoration procedures. Except in an emergency, Enbridge Gas shall not make 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, Enbridge Gas 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 Enbridge Gas' 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 construction;*
- iv. include a log of all complaints received by Enbridge Gas, 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 fifteen 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 Enbridge Gas' 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 Enbridge Gas, 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

Enbridge Gas was granted leave to construct the Stratford Reinforcement Project on March 28, 2019. Construction began on May 21, 2019 with the pipeline placed into service on September 14, 2019 and cleanup for the year completed on September 27, 2019.

Construction was initiated from the Beachville Transmission Station located on the 41st Line Road in the County of Oxford and progressed in a northerly direction to the new valve site located on Perth Oxford Road according to the following order of operations: topsoil removal, stringing, welding, joint coating, directional drilling, trenching, lowering-in, tie-ins, backfilling, testing and clean-up.

Enbridge Gas returned to the right-of-way in the spring of 2020 to complete the following activities: repair subsidence on the right-of-way, perform a general overview of the right-of-way tree planting and completed any additional clean-up required.

3.0 POTENTIAL IMPACTS AND MITIGATION

3.1 Condition 1.0

Enbridge Gas ("Enbridge Gas") shall construct the facilities and restore the land in accordance with the OEB's Decision and Order in EB-2018-0306 and these Conditions of Approval.

Enbridge Gas has complied with all conditions imposed by the Board's Decision and Order in EB-2018-0306 and the COAs associated with that Decision and Order during construction of the Project. Enbridge Gas has restored the land according to the evidence provided in support of its application.

3.2 Condition 3.0

Enbridge Gas 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.

Enbridge Gas has implemented all recommendations and mitigation measures outlined in the Environmental Report (ER) filed in the proceeding, along with all directives identified by the Ontario Pipeline Coordinating Committee (OPCC) review. Table 1 summarizes the construction effects and general mitigation measures carried out during construction. All mitigation techniques used throughout construction were also implemented during cleanup activities as required.

3.3 Condition 4.0

Enbridge Gas shall advise the Board of any proposed change to Board-approved construction or restoration procedures. Except in an emergency, Enbridge Gas 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.

No changes to the Board-approved construction or restoration procedures were required for the Project.

3.4 Condition 6.0

Both during and after construction, Enbridge 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 Enbridge Gas' 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 construction;*
- iv. *include a log of all complaints received by Enbridge Gas, 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.*

The previously filed Post Monitoring Report included the required certifications from a senior executive, described the construction effects and general mitigation measures employed during construction and provided a description of the successfully completed monitoring programs initiated both prior to and during construction.

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:

- i. provide a certification, by a senior executive of the company, of Enbridge Gas' adherence to Condition 3;*

One electronic (searchable PDF) version of this Final Monitoring Report has been filed with the OEB. Enbridge Gas has implemented all the recommendations of the Environmental Report filed in the proceeding, and all the recommendations and directives identified by the OPCC review. Executive certification can be found in Appendix C to this report.

- ii. describe the condition of any rehabilitated land;*

The majority of the pipeline right-of-way within the road allowance was installed using the horizontal directional drill method which allowed much of the pipeline corridor to be undisturbed. Those areas that were disturbed have been successfully revegetated. All watercourse crossings are stable and re-vegetated. No deficiencies in compliance have been identified.

- 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*

3.4.1 Monitoring Programs

3.4.1.1 Soybean Cyst Nematodes

Prior to construction, all impacted agricultural fields were sampled for Soybean Cyst Nematodes (SCN) with negative results. No additional mitigation measures were required.

3.4.1.2 Archaeological Assessment

Enbridge Gas retained the services of AECOM Canada Ltd. to conduct a Stage 1 and Stage 2 archaeological assessment along the pipeline route. The assessment identified no archaeological potential in the construction area.

3.4.1.3 Watercourse Monitoring

It was necessary to cross six (6) watercourses regulated by the Upper Thames Region Conservation Authority (UTRCA). Five (5) of the crossings were performed using the horizontal directional drill (HDD) method and one (1) the dam and pump method. All crossings were completed under permits acquired from the UTRCA.

Watercourses were protected prior to, during and following construction by installing sediment fencing and erosion control matting where necessary. Disturbed areas adjacent to the watercourses were seeded immediately following the installation of the pipeline. All affected watercourses were reviewed in the spring of 2020 and found to be re-habilitated and stable.

3.4.1.4 Turtle Relocation

On June 20, 2019 a Snapping Turtle was observed nesting in an agricultural field within the footprint of the new launcher station located on 41st Line Road. AECOM

was contacted and obtained authorization from the Ministry of Natural Resources and Forestry to collect and transport the eggs to the Hobbistee Wildlife Refuge. The release of the 33 hatchlings was completed on September 5, 2019 within a suitable habitat in the same general area as the nesting site.

No post construction monitoring programs were required or performed.

- v. *include a log of all complaints received by Enbridge Gas, 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.*

To date no complaints have been received by Enbridge Gas for the Project. Enbridge Gas will continue to monitor the state of the land and environment and will address any landowner concerns, if they should arise.

4.0 SUMMARY

This Final Monitoring Report has been prepared pursuant to the COAs contained in the Board Decision and Order for the EB-2018-0306 proceeding. The report in conjunction with the previously filed Post Construction Report provides confirmation that Enbridge Gas has implemented all the recommendations of the Environmental Report filed in the proceeding and all recommendations and directives identified by the Ontario Pipeline Coordinating Committee review. This report also confirms that Enbridge Gas successfully rehabilitated the land disturbed from construction with no outstanding concerns. It is anticipated that these mitigation measures and rehabilitation efforts will effectively eliminate any long-term impacts to the environment.

“Table 1”

Potential Impacts and Mitigation Measures

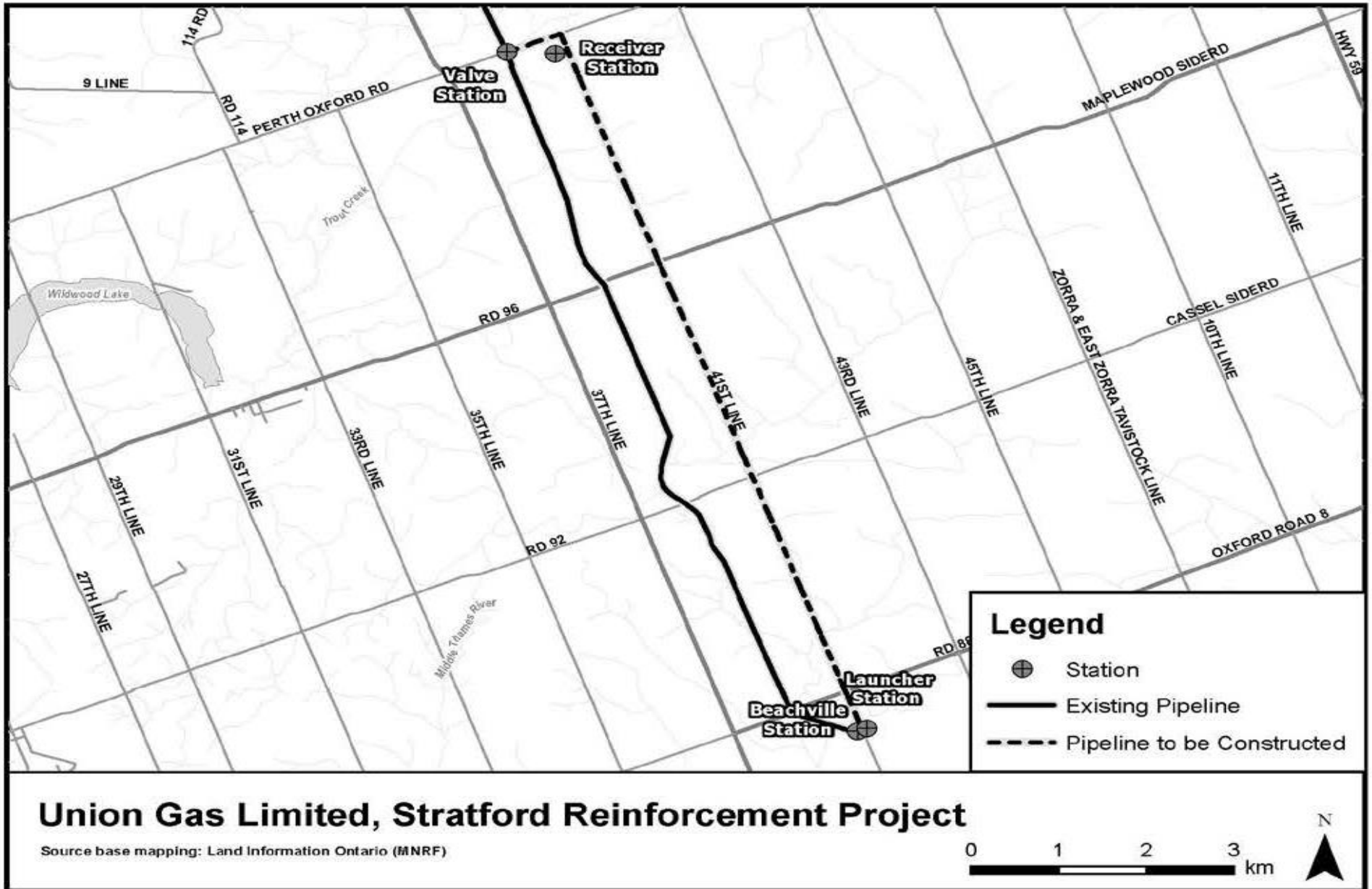
TABLE 1: MITIGATION SUMMARY

Issue	Potential Impact	Proposed Mitigation
a) Archaeology	Disturbance to cultural heritage resources.	<ul style="list-style-type: none"> Prior to any activities associated with the project, an archaeological survey was completed. No artifacts were found during the survey or construction.
b) Species At Risk (SAR)	Encountering SAR	<ul style="list-style-type: none"> Followed recommendations as outlined in the conditions imposed in the “Letter of Proponent” issued by the Ministry of Natural Resources and Forestry. A Snapping Turtle nest was encountered. Eggs were successfully hatched and young released.
c) Soybean Cyst Nematodes (SCN)	Spread of SCN to non impacted agricultural lands.	<ul style="list-style-type: none"> All agricultural fields affected during construction were tested for SCN with negative results. No further mitigation is required.
d) Landowner Concerns	Disruption to landowners	<ul style="list-style-type: none"> Enbridge Gas provided the affected landowners with the telephone numbers of Company personnel. A Landowner Relations Program was established to track complaints during construction. To date there have been no complaints entered into the complaint tracking system.
e) Watercourses	Water quality concerns	<ul style="list-style-type: none"> Enbridge Gas adhered to Company specifications for watercourse crossings. Enbridge Gas obtained permits from the Upper Thames Region Conservation Authority for all watercourse crossings.
f) Roadways	Disruption to local citizens and businesses	<ul style="list-style-type: none"> At least one lane of traffic was always maintained. Flag persons and warning devices were used to notify traffic of the construction zone.
g) Public Safety	Public safety concerns	<ul style="list-style-type: none"> Company inspectors ensured public safety on construction site. Ensured proper signage and flag persons if required.
h) Construction Equipment	Disruption to landowners and tenants	<ul style="list-style-type: none"> Equipment was stored well off the shoulder of the road when not in use.
i) Construction Noise	Disturbance to landowners and tenants	<ul style="list-style-type: none"> Construction was carried out during daylight hours whenever possible. Ensured equipment was properly muffled.
j) 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 (Ministry of the Environment, Conservation and Parks Spills Action Centre at 1-800-268-6060) No reportable spills were recorded during construction

Appendix A

Location Map

GENERAL LOCATION MAP STRATFORD REINFORCEMENT PROJECT



Appendix B

Conditions of Approval

SCHEDULE B – CONDITIONS OF APPROVAL

Application under Section 90 of the OEB Act

Enbridge Gas Inc.

EB-2018-0306

1. Enbridge Gas Inc. (Enbridge Gas) shall construct the facilities and restore the land in accordance with the OEB's Decision and Order in EB-2018-0306 and these Conditions of Approval.
2. (a) Authorization for leave to construct shall terminate 18 months after the decision is issued, unless construction has commenced prior to that date.

(b) Enbridge Gas shall give the OEB notice in writing:
 - i. of the commencement of construction, at least ten days prior to the date construction commences;
 - ii. of the planned in-service date, at least ten 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. Enbridge Gas 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.
4. Enbridge Gas shall advise the OEB of any proposed change to OEB-approved construction or restoration procedures. Except in an emergency, Enbridge Gas 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. Concurrent with the final monitoring report referred to in Condition 6(b), Enbridge Gas shall file a Post Construction Financial Report, which shall provide a variance analysis of project cost, schedule and scope compared to the estimates filed in this proceeding, including the extent to which the project contingency was utilized. Enbridge Gas shall also file a copy of the Post Construction Financial Report in the proceeding where the actual capital costs of the project are proposed to be included in rate base or any proceeding where Enbridge Gas proposes to start collecting revenues associated with the project, whichever is earlier.

6. Both during and after construction, Enbridge Gas 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 Enbridge Gas' 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 Enbridge Gas, 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 fifteen 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 Enbridge Gas' 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 Enbridge Gas, 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.
7. Enbridge Gas shall designate one of its employees as project manager who will be responsible for the fulfillment of these conditions, and shall provide the employee's name and contact information to the OEB and to all the appropriate landowners as well clearly posted on the construction site.
8. The OEB's designated representative for the purpose of these of Approval shall be the OEB's Manager of Supply and Infrastructure.

Appendix C

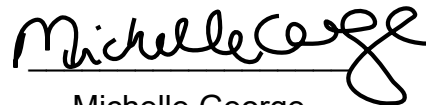
Executive Certification

**2019 Stratford Reinforcement Project
EB-2018-0306****Decision and Order****March 28, 2019**

I hereby certify Enbridge Gas Inc. has complied with the Decision and Order, EB-2018-0306, Schedule B, Conditions 6. b) i. and 3.

Oct 15, 2020

Date



Michelle George

Vice President, Engineering & STO
Enbridge Gas Inc.Condition 6.

Both during and after construction, Enbridge Gas 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:

- 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, the following June 1, which shall
 - i. provide a certification, by a senior executive of the company, of Enbridge Gas' adherence to Condition 3;**

Condition 3

Enbridge Gas 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.



POST CONSTRUCTION FINANCIAL REPORT
2019 Stratford Reinforcement Project EB-2018-0306

In compliance with the Ontario Energy Board Order EB-2018-00306 and Condition 5, the following is a report on the capital pipeline and station cost for the 2019 Stratford Reinforcement Project

The Project actual cost was \$24,796,716 or 13% lower than estimated. The following explains any significant variances.

	Estimated			Actuals			Variance			Variance %		
	Mainline	Stations	<u>Total</u>	Mainline	Stations	<u>Total</u>	Mainline	Stations	<u>Total</u>	Mainline	Stations	<u>Total</u>
Materials	\$2,155,087	\$451,000	<u>\$2,606,087</u>	\$2,113,853	\$491,968	<u>\$2,605,821</u>	-\$41,234	\$40,968	<u>-\$266</u>	-2%	9%	<u>0%</u>
Construction & Labour ⁽¹⁾	\$16,782,000	\$2,018,000	<u>\$18,800,000</u>	\$15,319,451	\$2,805,118	<u>\$18,124,569</u>	-\$1,462,549 ⁽¹⁾	\$787,118 ⁽¹⁾	<u>-\$675,431</u> ⁽¹⁾	-9% ⁽¹⁾	39% ⁽¹⁾	<u>-4%</u> ⁽¹⁾
Contingency ⁽²⁾	\$2,656,435	\$494,000	<u>\$3,150,435</u>				-\$2,656,435	-\$494,000	<u>-\$3,150,435</u> ⁽²⁾	-100%	-100%	<u>-100%</u> ⁽²⁾
Interest During Construction ⁽³⁾	\$261,000	\$39,000	<u>\$300,000</u>	\$126,735	\$1,706	<u>\$128,440</u>	-\$134,265 ⁽³⁾	-\$37,294 ⁽³⁾	<u>-\$171,560</u> ⁽³⁾	-51% ⁽³⁾	-96% ⁽³⁾	<u>-57%</u> ⁽³⁾
Total ⁽⁴⁾	<u>\$21,854,522</u>	<u>\$3,002,000</u>	<u>\$24,856,522</u>	\$17,560,039	\$3,298,791	<u>\$20,858,830</u>	-\$4,294,483	\$296,791	<u>-\$3,997,692</u> ⁽⁴⁾	-20%	10%	<u>-16%</u> ⁽⁴⁾
Indirect Overheads ^{(5) (6)}			\$3,683,478 ⁽⁵⁾			\$3,937,886 ⁽⁶⁾			\$254,408 ⁽⁶⁾			7% ⁽⁶⁾
Total Capital Costs ⁽⁴⁾			<u>\$28,540,000</u>			<u>\$24,796,716</u>			<u>-\$3,743,284</u> ⁽⁴⁾			<u>-13%</u> ⁽⁴⁾

(1) Actual construction & Labour costs for the pipeline were lower than estimated which were based upon historical average unit cost.

(1) Actual construction & Labour costs for the stations were higher than estimated due to the complex nature of the tie-in work that took place within the stations' compounds.

(2) Contingency was not utilized since risks, mostly associated with the numerous trenchless installations, did not materialize during execution.

(3) Original Interest During Construction (IDC) calculation accounted for the use of Contingency, which did not occur.

(4) Overall cost was lower mostly due to lower than estimated construction costs and the release of contingency.

(5) Estimated Indirect Overheads was based on average 15% of the total costs (excluding IDC) which changes from year to year.

(5) At the time of filing, Indirect Overheads were not shown separately.

(6) Based on actual Indirect Overheads charged to the project as of October 31st 2020 reflecting an average of 19.1%