Georgian Sands Pipeline Project: Post-Construction Report EB-2018-0226

Company: Enbridge Gas





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Introduction

On July 25, 2019 the Ontario Energy Board ("OEB"), in its Decision and Order for EB-2018-0226, granted Enbridge Gas Inc. ("Enbridge") leave to construct natural gas pipeline and ancillary facilities required to provide gas distribution service to the future customers of the Georgian Sands planned subdivision in Simcoe County. This project is referred to as the Georgian Sands Pipeline Project ("the Project").

This is the Post-Construction Report ("Interim Report") for the Project.

As part of the Project, Enbridge conducted the studies listed in **Table 1** to inform the design, planning and permitting process, identify environmental and socio-economic impacts potentially resulting from construction, and minimize and mitigate impacts through the application of documented mitigation measures.

Table 1: Studies Completed for Georgian Sands Pipeline Project

REPORT TITLE	CONDUCTED BY:	DATE
Memo: Heritage Overview, Enbridge Gas Distribution Inc., Georgian Sands Pipeline Project	Stantec Consulting Ltd.	September 21, 2018
Stage 1 Archaeological Assessment: Georgian Sands Pipeline Project Part of Various Lots and Concessions, Geographic Township of Flos, Now Township of Springwater, Simcoe County, Ontario	Stantec Consulting Ltd.	October 17, 2018
Proposed Georgian Sands Pipeline Project Final Report Environmental Report	Stantec Consulting Ltd.	November 30, 2018
Email Summary: Georgian Sands Butternut Survey	Stantec Consulting Ltd.	July 12, 2019
Stage 2 Archaeological Assessment: Georgian Sands Pipeline Project Part of Various Lots and Concessions, Geographic Township of Flos, Now Township of Springwater, Simcoe County, Ontario	Stantec Consulting Ltd.	July 16, 2019
Georgian Sands Pipeline: Cultural Heritage Assessment Report	Stantec Consulting Ltd.	July 24, 2019
Water Taking and Discharge Report, Georgian Sands Pipeline Project Final Report	Stantec Consulting Ltd.	August 8, 2019
Georgian Sands Pipeline Project: Environmental Protection Plan Final Report	Stantec Consulting Ltd.	August 9, 2019
Georgian Sands Pipeline Project – Construction Vibration Monitoring Summary	Stantec Consulting Ltd.	May 8, 2020



Pre-Construction Condition Survey – Georgian Sands Pipeline CHR11 – 2940 Vigo Road Phelpston, Ontario	Stantec Consulting Ltd.	June 19, 2020
Post-Construction Condition Survey – Georgian Sands Pipeline CHR11 2940 Vigo Road Phelpston, Ontario	Stantec Consulting Ltd.	June 19, 2020
Pre-Construction Condition Survey – Georgian Sands Pipeline - CHR5 2383 Vigo Road Phelpston, Ontario	Stantec Consulting Ltd.	June 19, 2020
Post-Construction Condition Survey – Georgian Sands Pipeline CHR5 2383 Vigo Road Phelpston, Ontario	Stantec Consulting Ltd.	June 19, 2020

Construction on the Project began on October 15, 2019, construction was initially expected to commence on October 7, 2019, and the pipeline was energized with an in-service date of June 1, 2020. Enbridge filed, in accordance with the Conditions of Approval for the project, notifications of these Project milestones with the OEB.¹

This Post Construction Report was prepared to satisfy the condition 7. a) of the Schedule B - Conditions of Approval set out in the Decision and Order for EB-2018-0226, as follows:

- 7. 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, 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
 - 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

The Certifications required pursuant to conditions 7 a) i) and 7 a) v) are attached as Appendix A to this Interim Report.

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¹ Please refer to the letters filed by Enbridge Gas with the OEB on the following dates September 23, 2019, June 3, 2020 and August 17, 2020.



Project Description

The Project included the installation of approximately 6.4 km of nominal pipe size ("NPS") 6-inch Intermediate Pressure polyethylene natural gas pipeline, as well as 8 m of NPS 8 steel extra high pressure (XHP) pipe to connect the District Station to the existing NPS 8 steel XHP pipeline on Flos Road 4 at Vigo Road. The Project was required to provide gas distribution service to the future customers of the Georgian Sands planned subdivision in Simcoe County. Refer to Appendix B, Figure 1: Final Pipeline Location.

Construction Effects and Mitigation Measures

All construction and rehabilitation activities comply with the Conditions of Approval set out in the OEB Decision and Order for EB-2018-0226, including ensuring that the requirements of all approvals, permits, licenses and certificates are fully addressed. In addition, the Project activities were conducted in accordance with Enbridge's Construction Policies and Procedures, the mitigation measures recommended in Section 4.0 and the monitoring and contingency plans outlined in Section 6.0 of the Georgian Sands Pipeline Project Final Report (Environmental Report or ER). The ER evaluated potential environmental impacts and recommended mitigation measures to reduce and/or eliminate them.

Once pipeline design was complete, the potential impacts, mitigation measures and monitoring requirements were further refined and documented in the Environmental Protection Plan ("EPP") for the Project.

Many of the potential environmental impacts identified in the ER were avoided by locating the pipeline within existing road allowance and previously disturbed utility corridors, as well as using Horizontal Directional Drilling (HDD) for pipeline installation. An Environmental Inspector was assigned to the Project to monitor construction activities for potential environmental concerns, and provide guidance on environmental protection, as required. This contributed to successful Project completion.

A Project Kick-Off meeting was held on October 1st, 2019 to communicate project specific details, including scope, schedule, key contacts, health and safety requirements and environmental requirements. The overview on environmental requirements included regulatory requirements, a review of the Environmental Protection Plan, sensitive features / Species at Risk, key mitigation measures and timing restrictions. In addition, Species at Risk that could potentially be present in the area were reviewed with the team to aid in identification.

CONSTRUCTION WITHIN SPECIES AT RISK HABITAT

As part of the environmental assessment process, Stantec Consulting Ltd. (Stantec) identified the potential for Butternut (*Juglans cinerea*) and Butternut habitat to occur within the Project area. A Butternut survey was completed by Stantec in June 2019 prior to construction to confirm the presence or absence of this species within 25 m of the work area, in particular within the temporary working space. No Butternut trees were identified.

WATER MANAGEMENT

Well Water Monitoring

As part of the Project, a well water monitoring program was developed. One resident was interested in participating in this program; prior to construction, their untreated well water was sampled for metals,

Construction Effects and Mitigation Measures



sulphide, general chemistry, turbidity, inorganic parameters, and bacteriological analysis. Well water results were communicated to the resident. As no complaints regarding well water quality were received from the resident during or after construction, post-construction sampling was not conducted.

Water Taking and Discharge

Based on the water volumes anticipated to be encountered during construction (< 400,000 L/day), an Environmental Activity and Sector Registry (EASR) registration was completed with the Ministry of the Environment, Conservation and Parks (MECP).

During construction, the water taking and discharge plan for the EASR was followed, which included discharging in appropriate locations, measuring water taking and discharge volumes and using erosion and sediment controls.

SPILLS

No spills were reported during construction activities.

DISRUPTION TO RESIDENTS

Enbridge ensured that construction noise levels met the minimum applicable performance standards, and that work was limited to daytime hours (in compliance with noise bylaws).

CULTURAL HERITAGE RESOURCES

Through the completion of a Cultural Heritage Assessment Report, Stantec identified three properties to be at risk for indirect, vibration-related impacts resulting from construction-related ground vibrations:

- 2383 Vigo Road (CHR-5)
- 2873 Flos Road 8 West (CHR-10, cemetery)
- 2940 Vigo Road (CHR-11)

Construction activities included excavation, HDD, and gas pipeline installation along Vigo Road in front of CHR-5 (more than 40 m from the residence foundation) and in front of CHR-11 (more than 24 m from the residence foundation). The cemetery (CHR-10) was further from construction activities than the residence (CHR-11).

Due to the location of the three properties in relation to construction activities, vibration monitoring was conducted when working in proximity to CHR-5 and CHR-11 on November 18, 2019, February 6, 2020 and February 7, 2020. The construction vibration limits used to set a cautionary vibration limit for the project were applied at the foundation of the structures at CHR-5 and CHR-11, and provided a conservative upper limit to safe vibration levels, beyond which the likelihood for potential cosmetic or structural damage increases. The results of the Construction Vibration Monitoring Summary indicate that recorded Peak Particle Velocity levels did not exceed the Project vibration limits during the construction phase, at CHR-5 or CHR-11. As there were no exceedances at these 2 locations, and CHR-10 was further from construction than those recorded, additional readings at CHR-10 were not deemed necessary. No vibration-related complaints were received during the construction phase of the Project.

In addition, a Pre-Construction Condition Survey and Post-Construction Condition Survey were conducted for the same 2 locations, as a precautionary measure to visually identify all existing signs of interior and exterior distress, document any evidence of defects and deficiencies (such as cracks and settlements) prior to the beginning of any Project activities, and establish a reference to the conditions prior to construction. No further follow up was required at these locations.



TRAFFIC DISRUPTION

The Project was constructed within the existing right-of-way (ROW) of municipal roads and road allowances. As a result, vehicular traffic flow along the roadways was modified during construction. Enbridge's contractor utilized their inhouse traffic control expert to develop traffic control plans to coordinate and conduct traffic control along all affected roadways. Traffic control measures included applying traffic restrictions (timing of lane closures) and installing appropriate signage along the affected route. While utilizing temporary lights, vehicles were temporarily restricted as traffic was minimized to one lane.

Weekly field safety meetings were conducted for all on-site personnel which included vigilance around vehicular safety. During winter construction the site was reviewed every morning to determine if it was deemed safe to work. If the road and weather conditions were not suitable or potentially unsafe conditions were forecast, the site was shut down for the day.

INDIGENOUS CONSULTATION

On September 10, 2018, the Ministry of Energy, Northern Development and Mines (MENDM) delegated the procedural aspects of the Crown's duty to consult for the Georgian Sands Project. The September 10, 2018 letter identified six communities to be consulted on the basis that they have or may have constitutionally protected Aboriginal or treaty rights that may be adversely affected by the Project:

- Beausoleil First Nation
- Chippewas of Georgina Island First Nation
- Chippewas of Mnijikaning First Nation (Chippewas of Rama)
- Huron Wendat
- MNO Moon River Metis Council
- MNO Georgian Bay Metis Council

The above Indigenous communities were engaged and consulted with during planning of the Project, including development of the ER. Enbridge gathered information from the above Indigenous groups through outreach (written and verbal) and face to face meetings starting in 2018. Throughout the consultation process, Enbridge offered archaeological monitoring opportunities to the Indigenous groups who expressed an interest, taking into account archaeological potential. As such, one community representative from the Huron Wendat Nation, Rama First Nation and Metis Nation of Ontario participated in the Stage 2 Archaeological assessments.

Prior to, and during construction the identified Indigenous groups did not express any concerns regarding the project. Additionally, Enbridge supported community events and initiatives to help build and continue fostering a long-term relationship between the indigenous groups and Enbridge.

POST CONSTRUCTION SITE CONDITIONS

Impacts to the pipeline corridor were minimized by completing the pipeline installation by HDD where possible. Restoration was required in areas where entry and exit pits were located, along with the surrounding work areas. Restoration along the corridor included topsoil laid over backfilled and restored areas, followed by seeding. These areas were observed during site inspections to ensure appropriate restoration measures were completed and to monitor the success of restoration. Restoration was conducted on an ongoing basis, where possible. No sedimentation or impacts were noted upon any of the watercourse crossings at the site; erosion and sediment control measures functioned as intended, with no notable erosion or sedimentation.

Enbridge Gas Construction Effects and Mitigation Measures



Photos documenting restoration activities were taken and are presented in Appendix C. **Table 2** lists current conditions along the pipeline route and the actions planned for each outstanding issue.



Table 2: Georgian Sands Pipeline Project Conditions and Actions

PHOTO #	LOCATION	CURRENT CONDITION	ACTION		
Photo 1	Soft ditch on Flos Road 8.	Reclaimed and seeded.	None required.		
Photo 2	Sandy embankment on Flos Road 8	Topsoil applied and seeded. Area complete. Topsoil has been added to the site where backfill consisted of sandy soil. Did not observe any potential areas with sedimentation concerns.	None required.		
Photo 3	Sandy embankment just south of Flos Road 8.	Topsoil has been added to the site where backfill consisted of sandy soil. Did not observe any potential areas with sedimentation concerns.	None required.		
Photo 4	Embankment between Flos Road 7 and Flos Road 8.	Areas adjacent to sensitive natural features which may be potentially impacted have been backfilled, seeded, and stabilized with Silt Soxx TM . Silt Soxx TM appears to be functioning as intended. Grading is appropriate with topsoil added to areas where sandy soils are at the surface.	None required.		
Photo 5	Road ditch between Flos Road 6 and Flos Road 5.	Complete. No on-going issues or concerns.	None required.		
Photo 6	Ditch between Flos Road 5 and Flos Road 4.	Reclaimed and seeded. Reclaimed sites generally in very good condition and do not appear to be at risk of erosion or sedimentation.	None required.		



Landowner Comments and Complaints

No comments or complaints were received during the construction phase of this project.

Summary

This Interim Report has been prepared in accordance with the OEB Decision and Order in EB-2018-0226. It documents the post-construction and restoration activities completed as part of the construction of the Project from October 2019 to June 2020. Measures implemented during construction and restoration activities have been successful.

A Final Monitoring Report documenting the remaining site restoration activities will be filed with the OEB no later than September 2, 2021 pursuant to condition 7 b) in the OEB's Conditions of Approval for the Project.



Appendix A

EXECUTIVE CERTIFICATIONS





Georgian Sands Pipeline Project EB-2018-0226

I hereby certify Enbridge Gas Inc. has constructed the facilities and restored the land in accordance with the OEB's Decision and Order in Schedule B, EB-2018-0226, Section 7 (a).

August 28,2020
Date

Neil MacNeil Neil MacNeil

Condition 7 (a)

- 7. 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;
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 - 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 such actions; and
 - 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.

Condition 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-2018-0226 and these Conditions of Approval.

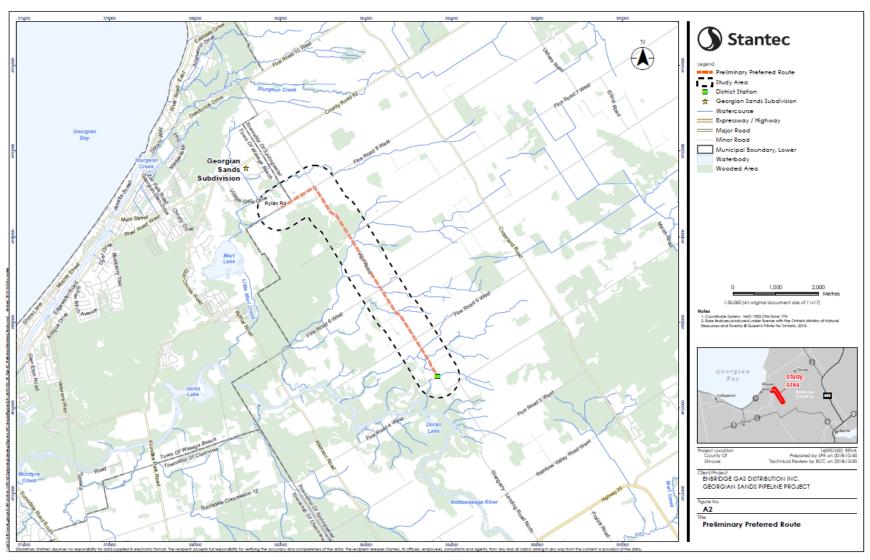


Appendix B

LOCATION MAP



Figure 1: Final Pipeline Location





Appendix C

PHOTO LOG





and seed applied.

August 31, 2020 | D/V1.0 | © Enbridge Gas Inc. | EB-2018-0226





Photo 3: Topsoil and seed placed on sandy embankment just south of Flos Road 8.

Photo 4: Silt Soxx[™] limiting potential for off-site sedimentation between Flos Road 7 and Flos Road 8.



