## GREENSTONE PIPELINE PROJECT EB-2021-0205

## **POST CONSTRUCTION REPORT**

Prepared By: Enbridge Gas Inc. Environment August 2023

## **TABLE OF CONTENTS**

#### **EB-2021-0205:** Greenstone Pipeline Project Post Construction Report

1.0 Introduction
2.0 Background
3.0 Potential Impacts and Mitigation
3.1 Condition 1
3.2 Condition 3
3.3 Condition 4
3.4 Condition 5
3.5 Condition 7
4.0 Summary

**Table 1 – Potential Impacts and Mitigation Measures** 

Appendix A – Project Mapping

Appendix B – Conditions of Approval

**Appendix C – Executive Certifications** 

**Appendix D – Photograph Inventory** 

## 1.0 INTRODUCTION

This Post Construction Report is provided pursuant to the Ontario Energy Board ("OEB") Decision and Order for the EB-2021-0205 proceeding. In that Decision and Order (dated March 17, 2022), the OEB granted Enbridge Gas Inc. ("Enbridge Gas") leave, pursuant to subsection 90(1) of the *Ontario Energy Board Act, 1998* ("OEB Act") to construct approximately 13 km of Nominal Pipe Size ("NPS") 6-inch steel natural gas pipeline to provide natural gas service to the Greenstone Gold Mine (the "Project").

The Project commenced at the Enbridge Gas Custody Station located adjacent to the TransCanada pipeline, 3.5 km north of the community of Geraldton and terminated south of TransCanada Highway 11 at the Greenstone Gold Mine site. The majority of the pipeline was constructed within road allowances and on Greenstone Gold Mine properties. Please see Appendix A for Project mapping.

The requirements for and details of this Post Construction Report are outlined in the specific conditions issued by the OEB in its EB-2021-0205 Decision and Order as listed below. The complete Conditions of Approval ("COA") can be found in Appendix B of this report. The COA addressed in this report are as follows:

#### **Condition 1**

Enbridge Gas Inc. (Enbridge) shall construct the facilities and restore the land in accordance with the OEB's Decision and Order in EB-2021-0205 and these Conditions of Approval.

#### **Condition 3**

Enbridge Gas Inc. shall obtain all necessary approvals, permits, licenses, certificates, agreements and rights required to construct, operate and maintain the Project.

#### **Condition 4**

Enbridge Gas Inc. 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.

#### **Condition 5**

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

#### **Condition 7**

Both during and after construction, Enbridge Gas Inc. shall monitor the impacts of construction, and shall file with the OEB 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 Inc. 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 Inc., 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.
- 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 Inc. 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
- v. include a log of all complaints received by Enbridge Gas Inc. including the date/time the complaint was received; a description of the complaint; any actions taken to address the complaint; and the rationale for taking such actions.

### 2.0 BACKGROUND

On September 10, 2021, Enbridge Gas applied to the OEB under section 90 of the OEB Act for an order granting leave to construct a natural gas pipeline and associated facilities in the Municipality of Greenstone to provide natural gas service to the Greenstone Gold Mine near the community of Grealdton.

On March 17, 2022 the OEB granted the Project leave to construct based on the following findings:

- There is a need for natural gas service to meet the energy demand of the Greenstone Gold Mine;
- The proposed route for a dedicated pipeline and station facilities to the Project is the preferred route;
- The Project meets the economic test;
- The environmental impacts of the Project are being adequately addressed;
- The OEB approves the forms of landowner agreements related to the construction of the Project;
- Enbridge Gas has satisfied the requirement of the Indigenous Consultation in accordance with the OEB's Environmental Guidelines; and
- The OEB accepts the Standard Conditions of Approval with modification of condition 2(a)(i) to reduce the construction start notice requirement to 5 days from the current 10 days.

Construction was initiated on May 5, 2022 and generally progressed with the following order of operations: flagging/staking, horizontal directional drilling, tie-ins, back filling, and clean-up. Construction and clean-up for the year was completed on November 4, 2022 due to the onset of winter.

Enbridge Gas returned to the right-of-way on April 25, 2023 to continue construction and subsequent clean-up. A general overview was also completed to ensure the 2022 clean-up and restoration measures were successful and that all disturbed areas in proximity to watercourse crossings were stable and re-vegetated. The Project went into service on June 15, 2023 and construction and clean-up activities were completed on August 9 and August 10, 2023, respectively.

Enbridge Gas will return to the right-of-way in spring 2024 to ensure clean-up and restoration measures were successful and address any deficiencies as required. A subsequent Final Monitoring Report will be prepared and submitted to the OEB no later than September 15, 2024.

### 3.0 POTENTIAL IMPACTS AND MITIGATION

#### 3.1 <u>Condition 1</u>

Enbridge Gas Inc. shall construct the facilities and restore the land in accordance with the OEB's Decision and Order in EB-2021-0205 and these Conditions of Approval.

Enbridge Gas constructed the facilities and restored the land in accordance with the OEB's Decision and Order in the EB-2021-0205 proceeding and the Conditions of Approval.

#### 3.2 Condition 3

Enbridge Gas Inc shall obtain all necessary approvals, permits, licenses, certificates, agreements and rights required to construct, operate and maintain the Project.

Enbridge Gas obtained all necessary approvals, permits, licenses, certificates, agreements and rights required to construct, operate and maintain the Project. Please refer to section 3.5, *Condition* 7(a)(v), of this report for more information.

#### 3.3 <u>Condition 4</u>

Enbridge Gas Inc. 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 implemented 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. Please refer to Table 1 to confirm Enbridge Gas's adherence to the recommendations and mitigation measures identified in the Environmental Report.

#### 3.4 <u>Condition 5</u>

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

There were no changes to OEB-approved construction or restoration procedures during the execution of the Project.

#### 3.5 <u>Condition 7</u>

Both during and after construction, Enbridge Gas Inc. shall monitor the impacts of construction, and shall file with the OEB 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 Inc. adherence to Condition 1

One electronic (searchable PDF) version of this Post Construction Report is being filed with the OEB. This report is certified by Jennifer Burnham, Director of Field Services, Growth and Construction that Enbridge Gas has constructed the facilities and restored the land in accordance with the OEB's Decision and Order in the EB-2021-0205 proceeding and the COA. This is confirmed by the executive certification which can be found in Appendix C of this report.

*ii. describe any impacts and outstanding concerns identified during construction;* 

Table 1 of this report summarizes the general 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;* 

Table 1 of this report summarizes 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 Inc., 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

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

There were no complaints received by Enbridge Gas during the construction of the project. Enbridge Gas will continue to monitor the state of the land and will address any landowner or public concerns should they arise.

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.

Jennifer Burnham, Director of Field Services, Growth and Construction, has certified that the company has obtained all other approvals, permits, licences, and certificates required to construct, operate and maintain the Project and is confirmed by the executive certification which can be found in Appendix C of this report.

Enbridge Gas obtained the following environmental permits for construction:

#### Ministry of Natural Resources and Forestry

• Watercourse crossing clearance.

#### Ministry of Heritage, Sport, Tourism and Culture

- Archaeology clearance under File Number 0004574.
- *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 Enbridge Gas Inc. 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 Inc., 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.

One electronic (searchable PDF) version of the Final Monitoring Report will be filed with the OEB no later than September 15, 2024.

### 4.0 <u>SUMMARY</u>

This Post Construction Report has been prepared pursuant to the Conditions of Approval contained in the OEB Decision and Order for the EB-2021-0205 proceeding. This report provides confirmation that Enbridge Gas has constructed the facilities and restored the land in accordance with the OEB's Decision and Order and the COA, and obtained all approvals, permits, licenses, and certificates required to construct, operate and maintain the Project. This report also provides a description of the identified impacts of construction and the actions taken to mitigate such impacts.

It is anticipated that the actions taken by Enbridge Gas to mitigate identified impacts of construction will effectively eliminate long-term impacts to the environment.

## Table 1

# **Potential Impacts and Mitigation Measures**

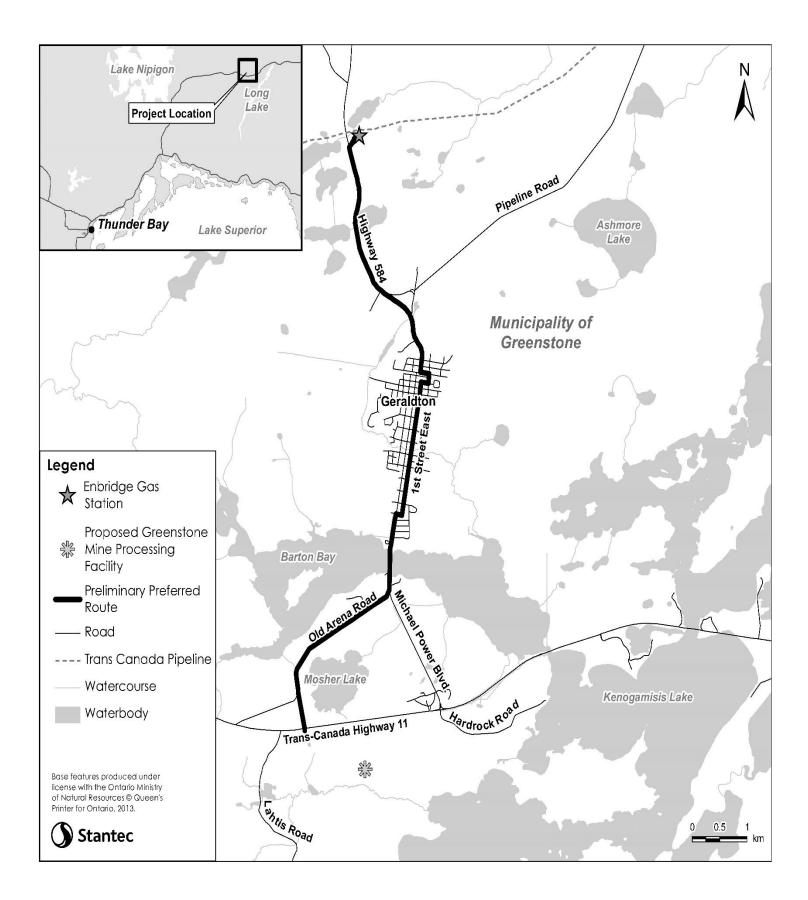
Table 1: Potential Impacts and Mitigation Measures				
Issue	Potential Impact	Mitigation Measure		
Paved/Gravel Driveways and Roadways	Disruption to local traffic and landowners	<ul> <li>All roadways and driveways were bored if practical.</li> <li>If it was not possible to bore driveways and roads, steel plates were on site to provide access to landowners.</li> <li>For driveways that required cutting, the excavation was filled with sand and granular material and compacted.</li> <li>Driveways were repaired as soon as possible.</li> <li>Roadways impacted during construction were repaired using asphalt.</li> </ul>		
Traffic	Disruption to local citizens	<ul> <li>At least one lane of traffic was maintained at all times.</li> <li>Flag persons and warning devices were used to notify traffic of construction in accordance with municipal standards.</li> </ul>		
Public Safety	Public safety concerns	<ul> <li>Enbridge Gas inspectors ensured public safety on the construction site.</li> <li>Proper signage and flag persons were used where required.</li> <li>Construction areas in town were fenced and/or covered with steel plates overnight.</li> </ul>		
Commercial/Retail Businesses and Recreational Areas	Disruption to businesses	<ul> <li>Access to businesses were maintained at all times.</li> <li>The land around businesses and recreational areas were restored as soon as possible.</li> <li>Construction was scheduled with business owners or managers when necessary.</li> </ul>		
Construction Noise	Disturbance to local citizens	<ul> <li>Construction was carried out during daylight hours whenever possible.</li> <li>Equipment was properly muffled.</li> </ul>		
Nuisance Dust	Disturbance to local citizens	- Dust was controlled as required.		
Construction Equipment	Disturbance to local citizens	- Equipment was stored off road shoulders, if possible, when not in use.		

Table 1: Potentia	Table 1: Potential Impacts and Mitigation Measures			
Issue	Potential Impact	Mitigation Measure		
Landowner Concerns	Disruption to landowners	<ul> <li>Enbridge Gas provided impacted landowners with the telephone numbers of supervisory personnel.</li> <li>An Enbridge Gas representative was onsite during construction to address any residents concerns as required.</li> <li>There were no landowner concerns received during construction.</li> </ul>		
Front Yards	Disruption to landowners	<ul> <li>Landowners were notified prior to construction.</li> <li>Lawns and yards will be restored to original condition.</li> </ul>		
Mailboxes	Disruption to landowners and tenants	<ul> <li>Landowners were notified of mailbox disruption when required.</li> <li>Mailboxes were restored as soon as possible, and temporary alternatives were provided if necessary.</li> </ul>		
Underground Utilities	Disruption of services	<ul> <li>Locates were obtained from all utilities.</li> <li>Any damages to utilities were repaired as soon as possible.</li> </ul>		
Archaeology	Disturbance of heritage resources	<ul> <li>An Archaeological Assessment was completed prior to construction.</li> <li>No artifacts were encountered during construction.</li> </ul>		
Water Wells	Disruption to water supply	<ul> <li>A private well monitoring program was implemented prior to construction.</li> <li>There were no impacts to water wells during construction.</li> </ul>		
Trees	Damage to trees Disturbance to wildlife	<ul> <li>Tree and vegetation removal was completed outside of the combined bat roosting and migratory bird nesting season (April 1 – August 31) to avoid disturbance to nesting birds protected under the Migratory Birds Convention Act, 1994 and bats protected by the Endangered Species Act, 2007.</li> </ul>		
Watercourse Crossings	Water quality concerns	<ul> <li>Enbridge Gas complied with the conditions from the Ministry of Natural Resources and Forestry for all watercourse crossings.</li> </ul>		

Issue	npacts and Mitigation Measu Potential Impact	Mitigation Measure
		<ul> <li>Enbridge Gas adhered to all company specifications and the Fisheries and Oceans Canada – endorsed Generic Sediment Control Plan for Horizontal Directional Drill ("HDD") for watercourse crossings.</li> <li>Enbridge Gas initiated a Water Quality Monitoring Program during the HDD crossing of Barton Bay to test for turbidity. No significant changes in turbidity were recorded during the crossing.</li> </ul>
Natural Areas	Sedimentation migration	<ul> <li>Sediment barriers (i.e., silt fencing and filter soxx) were used in areas where there was potential for sediment migration.</li> </ul>
Vegetative Cover	Loss of vegetative cover leading to soil erosion	- Cover was restored by seeding as soon as possible.
Soils: Erosion	Introduction of sediment/silt to adjacent lands	- Disturbed soils were restored as soon as possible after construction.
Roadside Ditches	Water quality concerns	<ul> <li>Ditches were returned to pre- construction condition as quickly as possible.</li> <li>Filter Soxx check dams were installed as required.</li> </ul>
Spills	Public safety issue	<ul> <li>Minor spills were identified during construction.</li> <li>Spill clean-up materials were stored onsite and were available in the event of a spill. If necessary, spills or leaks were reported to the appropriate authority immediately (Ministry of the Environment, Conservation and Parks Spills Action Centre at 1-800-268-6060).</li> </ul>
Contaminated Soils	Dealing with contaminated materials Public safety issue	- No contaminated soils were identified during construction.
Site Restoration	Disturbance to public and private properties	<ul> <li>The construction area was restored as soon as possible upon completion of pipe installation.</li> </ul>

Appendix A

**Project Mapping** 



## **Appendix B**

# **Conditions of Approval**

#### Leave to Construct Application under Section 90 of the OEB Act

#### Enbridge Gas Inc. EB-2021-0205 Conditions of Approval

- 1. Enbridge Gas Inc. shall construct the facilities and restore the land in accordance with the OEB's Decision and Order in EB-2021-0205 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) Enbridge Gas Inc. shall give the OEB notice in writing:
  - i. of the commencement of construction, at least 5 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
  - iv. of the in-service date, no later than 10 days after the facilities go into service
- 3. Enbridge Gas Inc. shall obtain all necessary approvals, permits, licences, certificates, agreements and rights required to construct, operate and maintain the Project.
- 4. Enbridge Gas Inc. 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.
- 5. Enbridge Gas Inc. shall advise the OEB of any proposed change to OEBapproved construction or restoration procedures. Except in an emergency, Enbridge Gas Inc. 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. Concurrent with the final monitoring report referred to in Condition 8(b), Enbridge Gas Inc. 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 Inc. 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 Inc. proposes to start collecting revenues associated with the Project, whichever is earlier.

- 7. Both during and after construction, Enbridge Gas Inc. shall monitor the impacts of construction, and shall file with the OEB 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 Inc. 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 Inc., 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
    - 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
  - 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 Inc. 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
    - v. include a log of all complaints received by Enbridge Gas Inc., including the date/time the complaint was received; a description of the complaint; any actions taken to address the complaint; and the rationale for taking such action.
- 8. Enbridge Gas Inc. shall designate one of their employees as project manager who will be the point of contact for these conditions and shall provide the employee's name and contact information to the OEB and to all affected landowners and shall clearly post the project manager's contact information in a prominent place at the construction site.

# Appendix C

## **Executive Certifications**



### Leave to Construct Application under Section 90 of the OEB Act Enbridge Gas Inc. EB-2021-0205 Conditions of Approval March 17, 2022

I hereby certify that Enbridge Gas Inc. has constructed the facilities and restored the land in accordance with the OEB's Decision and Order in EB-2021-0205 and the Conditions of Approval, as per Condition 7 (a)(i).

2023/08/17

Date

OBL

Jennifer Burnham Director, Field Services, Growth & Construction Enbridge Gas Inc.

#### Condition 7 (a)(i).

- Both during and after construction, Enbridge Gas Inc. shall monitor the impacts of construction, and shall file with the OEB an electronic copy (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 Inc. adherence to Condition 1.

#### Condition 1

Enbridge Gas Inc. shall construct the facilities and restore the land in accordance with the OEB's Decision and Order in EB-2021-0205 and these Conditions of Approval.



### Leave to Construct Application under Section 90 of the OEB Act Enbridge Gas Inc. EB-2021-0205 Conditions of Approval March 17, 2022

I hereby certify that Enbridge Gas Inc. has obtained all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project in accordance with the OEB's Decision and Order in EB-2021-0205, Schedule B, Condition 7 (a)(v).

2023/08/17

Date

OBL

Jennifer Burnham Director, Field Services, Growth & Construction

Enbridge Gas Inc.

Condition 7 (a)(v).

- Both during and after construction, Enbridge Gas Inc. shall monitor the impacts of construction, and shall file with the OEB an electronic copy (searchable PDF) version of each of the following reports:
  - a) A post construction report, within three months of the in-service date, which shall:
    - 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.

# Appendix E

# **Photograph Inventory**



During construction it was necessary to remove areas containing rock outcrops to allow for trench excavation. In areas of dense rock, blasting was required.



Rock outcrops were also removed via hoe-ramming.



In areas where rock was removed to form the trench, a protective cover known as "rock shield" was wrapped around the pipe prior to installation to protect it during backfilling,



Prior to installing the pipe into the trench the pipe is "jeeped". An electrically-charged spring is wrapped around the pipe which detects flaws in the coating. If detected, the flaws are immediately repaired.



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



The pipe is placed on supports to prevent damage to the pipe from rocks.



The pipeline is first backfilled with sand for protection from rocks before the natural fill is added.



Horizontal directional drilling was used for all watercourse crossings and where ground conditions allowed.



At least one lane of traffic was maintained. Flag persons and warning signs were used to notify traffic of construction in accordance with municipal standards.



Upon the installation of the pipeline within the residential streets, safety tape was installed as a precaution in the event future excavations of other utilities are required.



Following the pipeline installation, the streets were repair with compacted gravel and will be covered with asphalt in the summer of 2023.



Open excavations were fenced overnight as a safety measure.