

June 30, 2017

VIA RESS, E-MAIL AND COURIER

Ms. Kirsten Walli Ontario Energy Board P.O. Box 2319 2300 Yonge Street, 27th Floor Toronto, ON M4P 1E4

Dear Ms. Walli,

Re: Enbridge Gas Distribution Inc. ("Enbridge") – GTA Project Ontario Energy Board ("Board") Docket No. EB-2012-0451 Conditions of Approval – Final Monitoring Report

On January 30, 2014 the Board issued the Decision and Order for the above noted proceeding which included the Conditions of Approval.

As per paragraph 3.1 of the Conditions of Approval, Enbridge is to provide the Board with a Final Monitoring Report within fifteen months of the in-service date.

Attached please find the Final Monitoring Report for the GTA Project with the exception of the Ashtonbee and Buttonville Stations, which will be reported on separately as per our November 6, 2015 and June 15, 2017 letters to the Board.

Please contact me if you have any questions.

Yours truly,

(Original Signed)

Brian Wikant Technical Manager, Business Development

Attach.

cc: Zora Crnojacki (Chair, OPCC)
Nancy Marconi (Ontario Energy Board)
Andrew Mandyam (Enbridge)
Scott Dodd (Enbridge)

Final Monitoring Report

Enbridge Gas Distribution Inc. GTA Project



Prepared for: Enbridge Gas Distribution Inc.

Prepared by: Stantec Consulting Ltd. 300W-675 Cochrane Drive Markham, Ontario L3R 0B8

File: 160960989

June 30, 2017

Sign-off Sheet

This document entitled Final Monitoring Report was prepared by Stantec Consulting Ltd. for the account of Enbridge Gas Distribution Inc. The material in it reflects Stantec's best judgment in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibilities of such third parties. Stantec accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

Prepared by

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Reviewed by

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Executive Summary

Enbridge Gas Distribution Inc. (EGDI) filed an application with the Ontario Energy Board (OEB) for an order granting leave to construct (LTC) approximately 49.6 kilometers (km) of 36-inch (914.4 mm) and 42-inch (1067 mm) diameter steel pipelines and associated facilities. The OEB granted EGDI the LTC for the 'the GTA Project' along the preferred route which included a requirement for a Final Monitoring Report to be filed to the OEB within fifteen (15) months of the in-service date. This Final Monitoring Report has been prepared in support of the EB-2012-0451 Decision and Order, Appendix G Project Conditions of Approval (OEB 2014) and is limited to the current condition of the right-of-way (ROW) and temporary workspace (TWS) to June 30, 2017. This Final Monitoring Report summarizes the following:

- The status of the monitoring programs conducted in support of the GTA Project that were summarized in the Interim Monitoring Report (Stantec 2016);
- Landowner complaints or issues either unresolved at the filing of the *Interim Monitoring Report* (Stantec 2016) or occurring since the report was filed with the OEB;
- A discussion of the success of mitigation measures which were outlined in the Interim Monitoring Report (Stantec 2016);
- Local by-law non-compliances;
- The current conditions of the ROW and TWS;
- Outstanding commitments and monitoring; and
- Potential residual and cumulative effects as a result of the GTA Project.

Construction and restoration activities were carried out with a high level of respect for the environment and the residents located adjacent to the TWS and ROW. Appropriate mitigation and monitoring measures were implemented during all phases of the GTA Project to assess and minimize potential impacts. Good communication practices and meetings were key to understanding responsibilities, and reduce potential adverse environmental effects.

Currently, the ROW and TWS are in a stable state with minimal bare areas that are expected to naturally fill in over time. None of the monitoring programs identified potential long-term effects from the GTA Project. Six separate sites, as shown on Figures A1 and A2 in Appendix B, require relatively minor follow-up restoration in 2017 that is expected to be completed by July 15, 2017 weather permitting. Additional live staking will be completed in November 2017 during the dormancy period.

Provided that all outstanding commitments identified in this report are addressed and monitoring is completed as required, no significant residual or cumulative effects on environmental and/or socioeconomic features are anticipated as a result of the GTA Project.



Abbreviations

AA Archaeological Assessment
CA Conservation Authority
CH Conservation Halton

CVC Credit Valley Conservation

DFO Department of Fisheries and Oceans

EGDI Enbridge Gas Distribution Inc.

El Environmental Inspector

EPP Environmental Protection Plan

ER **Environmental Report ESA** Endangered Species Act GTA Greater Toronto Area HDD Horizontal Directional Drill HONI Hydro One Network Inc. IFR Inadvertent Fluid Releases Ю Infrastructure Ontario IOC Isolated Open Cut LTC Leave to Construct

MOECC Ministry of the Environment and Climate Change

MNRF Ministry of Natural Resources and Forestry
MTCS Ministry of Tourism, Culture and Sport

NPS Nominal Pipe Size
OEB Ontario Energy Board

PCA Property Condition Assessment

PTTW Permit to Take Water

ROW Right-of-Way SAR Species at Risk

Stantec Stantec Consulting Ltd.
TPZ Tree Protection Zone

TRCA Toronto Region Conservation Authority

TWS Temporary Workspace



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1.0 INTRODUCTION

1.1 BACKGROUND

Enbridge Gas Distribution Inc. (EGDI) filed an application with the Ontario Energy Board (OEB) under section 90 of the Ontario Energy Board Act, 1998, S.O. 1998, c. 15, Schedule B for an order granting leave to construct (LTC) approximately 49.6 kilometers (km) of 36-inch (914.4 mm) diameter and 42-inch (1067 mm) steel pipelines and associated facilities to upgrade the existing distribution system (the GTA Project). The GTA Project was divided into two distinct and disjointed segments identified as Segment A (42-inch and 36-inch tie-in) and Segment B (36-inch). The OEB assigned the application file number EB-2012-0451 for the GTA Project in 2012.

On January 30, 2014, the OEB granted EGDI the LTC for the GTA Project along the preferred route. Included in the conditions of approval for the LTC, was a requirement for EGDI to complete a *Final Monitoring Report* to be filed to the OEB within fifteen (15) months of the inservice date. As reported to the OEB on April 13, 2016, the GTA Project's inservice date was March 31, 2016, making the filing date for the *Final Monitoring Report* with the OEB by June 30, 2017.

1.2 SCOPE

This Final Monitoring Report has been prepared in support of the EB-2012-0451 Decision and Order, Appendix G Project Conditions of Approval (OEB 2014) as described below and is limited to the current conditions of the right-of-way (ROW) and temporary workspace (TWS) to June 30, 2017. The scope of the Final Monitoring Report includes monitoring the conditions of the TWS and ROW, detailing additional work requirements or complaints, and reviewing stakeholder resolutions completed since the Interim Monitoring Report (Stantec 2016) was filed with the OEB on September 30, 2016. As with the Interim Monitoring Report (Stantec 2016), for purposes of this report, the GTA Project denotes the project excluding Buttonville and Jonesville (Ashtonbee) Stations.

The following are the Conditions of Approval: EB-2012-0451 Decision and Order, Appendix G Project Conditions of Approval:

3.0 Monitoring and Reporting Requirements

3.1 Both during and after construction, EGDI shall monitor the impacts of construction, and shall file four copies of both an interim and a final monitoring report with the Board. The interim monitoring report shall be filed within six months of the in-service date, and the final monitoring report shall be filed within fifteen months of the in-service date. EGDI shall attach a log of all complaints that have been received to the interim and final monitoring reports. The log shall record the times of all complaints received, the



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substance of each complaint, the actions taken in response, and the reasons underlying such actions.

- 3.2 The interim monitoring report shall confirm EGDI's adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.
- 3.3 The final monitoring report shall describe the condition of any rehabilitated land and the effectiveness of any mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained."

This report summarizes requirements of Conditions of Approval 3.3 including:

- The status of the monitoring programs conducted in support of the GTA Project that were summarized in the Interim Monitoring Report (Stantec 2016);
- Landowner complaints or issues either unresolved at the filing of the *Interim Monitoring Report (Stantec 2016)* or occurring since the report was filed with the OEB;
- Local by-law non-compliances which have occurred since the filing of the Interim Monitoring Report (Stantec 2016);
- A discussion of the success of mitigation measures which were outlined in the Interim Monitoring Report (Stantec 2016);
- The current conditions of the ROW and TWS;
- Outstanding commitments and monitoring; and
- Potential residual and cumulative effects as a result of the GTA Project as of June 30, 2017.

Monitoring occurred in Spring 2017 (May 23, 24 and 26) to assess the conditions of the ROW and TWS and prepare for submission of the Final Monitoring Report to the OEB. Actively cultivated fields which had previously been assessed as stable in the *Interim Monitoring Report* (2016) were not visited. Sensitive sites (watercourses and wetlands) located within an actively cultivated field were assessed.

Specifically, this report has been compiled to address the requirements described in Section 6.2.2 Monitoring Reports of the Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario - 6th Edition (OEB 2011).

1.3 PROJECT DESCRIPTION

1.3.1 Route

The Project route consisted of two major segments of nominal pipe size (NPS) 42 (Segment A) and NPS 36 (Segment B and Segment A tie-in) of steel pipelines totaling approximately 49.6 km in length.



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Segment A was comprised of a 26.3 km long route of NPS 42 pipe from the Town of Milton to the City of Toronto. Segment B was comprised of a 22.9 km route of NPS 36 pipeline through the City of Vaughan, the City of Markham, and the City of Toronto. In addition to Segments A and B of the pipeline and the associated mainline valves, four station facilities were either constructed or expanded as part of the GTA Project. See Figures A1 and A2 in Appendix A for the location of the GTA Project.

The new pipelines were integrated into the existing EGDI distribution network by the construction of new, and modifications to existing station facilities, as well as tie-ins to existing pipeline sections.

1.3.2 Schedule

Construction of the pipeline commenced in January 2015, and final energization was completed on March 31, 2016. Final clean-up and restoration occurred in the spring and early summer of 2016. Except for some additional seeding in areas which didn't germinate, and planting of trees and shrubs, restoration was completed on June 29, 2016 when the ROW and TWS were stabilized for the growing season. Planting of trees/shrubs and the additional seeding program was postponed until late summer/fall, 2016 (completed between September 6 and October 7, 2016) because of dry and unfavorable weather conditions in the spring of 2016.

1.4 MODIFICATIONS TO THE GTA PROJECT

There were no significant (material) changes or modifications to construction methodology from either approved methods identified in the Environmental Report (ER; Dillon 2012) or permit conditions since the filing of the *Interim Monitoring Report* (Stantec 2016).

1.5 LOCAL BY-LAW ISSUES

There have been no non-compliances with local by-laws because of the GTA Project since the filing of the Interim Monitoring Report (Stantec 2016).



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2.0 CONDITIONS OF THE RIGHT-OF-WAY

2.1 CURRENT CONDITIONS

In spring, 2016 the ROW and TWS was cleaned up and seeded with the appropriate native or cover seeds for permanent stabilization. Supplemental erosion and sediment control (ESC) measures (where applicable) were implemented to provide temporary stabilization until site restoration was completed and stabilized. Final planting of the ROW and TWS occurred between September 6 and October 7, 2016 which included both a seeding program in areas where germination was not sufficient and the completion of the tree and shrub planting program. Sites which were identified as stable during final planting had temporary ESC measures removed from the site.

Disturbed areas have been seeded and planted as per the final restoration plans for the ROW and TWS. See Photos 1 to 8 in Appendix B for the general condition of vegetation establishment for the GTA Project. Vegetation establishment is good and has stabilized the TWS and ROW. There are some bare patches identified throughout which are expected to continue to fill in and naturally re-seed over time (e.g., see Photos 5 and 7). Some vegetation deficiencies and erosion were identified which require additional restoration and have been documented within this section of the Final Monitoring Report.

Some permanent concrete restoration is outstanding for the curbs and sidewalks located within the City of Toronto in Segment B. EGDI was responsible for completing temporary restorations of the curbs and sidewalks but the City of Toronto manages their own final permanent restorations for these structures. EGDI will continue to monitor until such time that the City of Toronto secures a contractor and issues a work authorization to complete final restorations of the concrete curbs and sidewalks. The permanent restorations are anticipated to be completed in 2017 by the City of Toronto.

Some erosion occurred on an area of the ROW approximately 100 m west of Little German Mills Creek (see Site #1a on Figure A2 in Appendix A). The erosion has been incising and creating rills and gullies (see Photo 9 in Appendix B). To address the erosion and bare soil at Site #1a, EGDI will place topsoil to fill in the rills and gullies, provide temporary ESC and stabilization measures, and re-seed disturbed and bare areas between German Mills and Little German Mills Creek where vegetation establishment is poor. The site will be monitored in 2017 until the site is stable with limited potential for erosion.

Areas on both sides of Little German Mills Creek (see Site #1b on Figure A2 in Appendix A) had bare soil which will require additional seeding for stabilization to prevent erosion (see Photo 10 in Appendix B). EGDI will complete the additional restoration at sites 1a and 1b by mid-July 2017.



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The planting of shrubs and trees as per approved restoration plans began in June 2016 but was postponed until September 2016 due to unseasonably hot and dry spring weather. Planting resumed on September 6, 2016 when air temperatures and rainfall were anticipated to be more favorable for plant survival. Tree and shrub planting was completed on October 7, 2016. The general heath of the trees was noted during the site assessment in support of this Final Monitoring Report. Most trees and potted shrubs (estimated at 90%) survived the winter 2016/2017, although a formal survival assessment was not completed. There were areas noted where several live stakes did not survive which were planted for added stabilization. Live stakes may have been outcompeted by other vegetation species (i.e., seeded grass and natural forbs and shrubs) which have assisted in stabilizing the sensitive sites. Overall, sensitive sites have been stabilized and restored with trees and shrubs that survived the winter of 2017. Over time, the ROW and TWS should return to pre-existing conditions.

2.2 STATUS OF MONITORING PROGRAMS

EGDI implemented several monitoring programs to monitor potential effects during construction of the GTA Project. Some of the monitoring programs were required as permit conditions from regulatory authorities, and others were carried out as due diligence measures by EGDI. Table 2-1 provides the status of the monitoring programs outlined in the *Interim Monitoring Report*.

Table 2-1 Outstanding Monitoring and Reporting Requirements

Monitoring Program	Monitoring and Reporting Requirements
Environmental Inspection Program	Regular environmental inspection occurred during the final restoration of the GTA Project and the planting of shrubs and trees in fall 2016. A site visit occurred in Spring 2017 (May 23 to 26, 2017) to document the conditions of the GTA Project in support of the application. Some additional monitoring will be required at recently restored areas until they are stabilized after the filing of the Final Monitoring Report.
Groundwater and Surface Water Monitoring	There was no additional surface water monitoring since the filing of the Interim Monitoring Report (Stantec 2016). EDGI met the conditions of the Permit to Take Water (PTTW) during construction. No water well monitoring was required in support of the GTA Project since no well owners opted to participate in the program prior to construction as detailed in the Interim Monitoring Report (Stantec 2016).
Agricultural	No additional monitoring was completed since the filing of the <i>Interim</i> Monitoring Report (Stantec 2016) as it was determined that depth, compaction, and stoniness in agricultural soils meet pre-construction conditions.
Arborist and Tree Protection Zones	In May 2017, EGDI monitored the condition of the trees within 6 m of the TWS and ROW in the City of Toronto. The post-construction monitoring indicated that the condition of 88% of the trees matched preconstruction conditions. 8% of the trees were removed by the landowners with the remaining 4% exhibiting a decline in condition since the preconstruction assessment occurred. The monitoring concluded that the decline in conditions was not attributed to construction (Dillon 2017).



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Table 2-1 Outstanding Monitoring and Reporting Requirements

Monitoring Program	Monitoring and Reporting Requirements
Property Condition Assessment (PCA)	Follow-up PCAs were completed on all buildings after the construction activity had ceased. No additional assessments were required and there have not been concerns since the filing of <i>Interim Monitoring Report</i> (Stantec 2016).
Vibration	No follow-up vibration monitoring was required supplemental to the vibration monitoring which occurred during the construction phase of the GTA Project as there have been no complaints since the completion of the monitoring program in 2016.
Archaeological Monitoring of Known Archeology Sites	No archaeological monitoring has been completed by Stantec since the filing of the <i>Interim Monitoring Report (Stantec 2016)</i> . The portions of the sites that were not excavated and mitigated, remain subject to avoidance and protection. EGDI has identified the protected portions of the sites in their internal database and they will be avoided in the event of the need for maintenance or repair work to the line near the protected sites.
Required monitoring as per Endangered Species Act (ESA) Permit AU-C-010-14	Restoration is complete and effective. Post-construction monitoring at Fletcher's Creek and the East Don River crossings will continue for an additional four years to comply with permit conditions.
	As per the ESA permit, EGDI will submit annual reports to the Ministry of Natural Resources and Forestry (MNRF) of all activities undertaken in accordance with the permit until January 31, 2020.
Bobolink and Eastern Meadowlark	Bobolink and Eastern Meadowlark habitat assessments have been completed in 2017 on areas of the TWS and ROW where Bobolink and Eastern Meadowlark breeding areas had been identified (see Section 2.3.1.2). The scope of the surveys determined that conditions are stable and vegetation establishment is excellent and it should transition to a suitable environment over time for breeding and conform to the Recovery Strategy for the Bobolink and Eastern Meadowlark in Ontario (McCracken et. al. 2013). Additional monitoring will occur in spring 2018 to assess the suitability of the site for breeding.
Toronto and Region Conservation Authority (TRCA), Credit Valley Conservation (CVC) and Conservation Halton (CH) Conservation Authority (CA) Permits	As of June 2017, watercourse crossings are stabilized and vegetated as discussed in Section 2.3.2. Follow-up monitoring in CA regulated areas will be completed for the sites requiring additional restoration in 2017 as outlined in Section 5.3.

2.2.1 First Nations Monitoring

First Nation field monitors participated in monitoring during the restoration phase as outlined in the *Interim Monitoring Report* (Stantec 2016). EGDI arranged for environmental and archaeological construction monitoring from January 2015 to the completion of planting of shrubs and trees in October 2016. No issues or concerns were identified by First Nation monitors since the filing of the *Interim Monitoring Report* (Stantec 2016).



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2.3 SENSITIVE FEATURES

2.3.1 Species at Risk

ESA permits were required for crossing two Redside Dace watercourses (Fletchers Creek and the East Don River). A MNRF Letter of Advice was provided for the Horizontal Directional Drill (HDD) crossing of Levi Creek (Redside Dace habitat). Monitoring of identified Bobolink and Eastern Meadowlark habitat was completed to conform to the Recovery Strategy for the Bobolink and Eastern Meadowlark in Ontario (McCracken et al. 2013).

2.3.1.1 Redside Dace

Three watercourses crossed by the GTA Project are regulated as Redside Dace habitat including Levi Creek, Fletcher's Creek and the East Don River. All Redside Dace watercourses were crossed by HDD or track-bore as per the MNRF's permit/Letter of Advice (2014) conditions. Previous monitoring and a site visit on May 24, 2017 at the East Don River and May 26, 2017 at Fletcher's Creek indicates that vegetation establishment is sufficient to stabilize the sites. Levi Creek was crossed by HDD methodology and was not affected during construction. No effects to Redside Dace watercourses are anticipated because of the construction and installation of the GTA Project.

2.3.1.2 Eastern Meadowlark and Bobolink

To maintain conformance with the Recovery Strategy for the Bobolink and Eastern Meadowlark in Ontario (McCracken et. al., 2013) for the Bobolink and Eastern Meadowlark, disturbed areas of the ROW and TWS where habitat for Bobolink and Eastern Meadowlark were previously observed (Segment B) were seeded with an appropriate mix. The seed mix consisted of a mix of grasses and legumes/forbs (alfalfa and clover) to create a naturalized breeding habitat following site restoration. Some of the areas required disturbance during final cleanup to repair subsidence over the trench line and were reseeded in June 2016. The site assessment on May 24, 2017 confirmed that the sites have been stabilized with a combination of grasses and/or legumes/forbs (see Photos 11 and 12 in Appendix B). Some areas where both the grasses and legumes/forbs were seeded have resulted in the establishment of either primarily grasses or legumes/forbs and did not have a mix of both (see Photo 12 in Appendix B). A mix of both types of vegetation is preferred with those areas to be monitored in 2018 to confirm that they conform with the Recovery Strategy for the Bobolink and Eastern Meadowlark in Ontario (McCracken et. al., 2013). A combination of the existing seeds and the fertile seed bank in the topsoil and seeds from the adjacent meadows are expected to slowly transition the disturbed areas to favorable breeding conditions.

2.3.2 Watercourse Crossings

Watercourses were regulated by CAs and were stabilized as per approved stabilization plans and CA permits. Restored watercourses were stabilized with native seed mixes and shrubs, live stakes, and other appropriate mechanical measures to promote the long-term stability of each



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watercourse, see *Interim Monitoring Report* (Stantec 2016). Monitoring for the Final Monitoring Report assessed potential in-stream or bank issues such as vegetation establishment, nick points, scour or channel down-cutting at watercourse crossings identified within the ER. During the site visits on May 23, 24 and 26, 2017 in support of the Final Monitoring Report, watercourse crossings were generally stable and restored to the expectations of the permit conditions (see Photos 13 to 19 in Appendix B). There were no obvious signs of erosion or concerns with the morphology of the channels except for the following issues:

- One channel, (Mullet Creek; Site #2 on Figure A1 in Appendix A) was noted to require some restoration measures (see Photo 20 in Appendix B). Seeding and shrub planting (live staking) will occur in fall 2017, under appropriate seasonal conditions, to promote stabilization of the bank.
- ATV traffic was noted through Spring Creek Tributary 1 and adjacent to Etobicoke Creek (see Photos 21 and 22 of Appendix B). EGDI has notified Infrastructure Ontario of the concern.
- Sparse vegetation (see Photo 23 in Appendix B) was observed at Mimico Creek (Site #3 on Figure A1, Appendix A). The site will require additional seed for stabilization which will be completed by July 15, 2017.

2.3.2.1 Etobicoke Creek Top of Bank Encroachment

The Interim Monitoring Report (Stantec 2016) identified a top of bank encroachment at Etobicoke Creek which required additional monitoring. Grading for a bore pit and bridge footing had encroached closer to the top of bank (approximately 2 m away) than what was approved by the TRCA. Thus, active erosion of the banks was noted along the channel.

During construction, a geotechnical engineer conducted a follow-up assessment, and determined that the erosion was surficial and did not appear to be impacting the stability of the slope. The engineer provided recommendations which were immediately implemented. On May 26, 2017, the restored area has stabilized with approximately 90% survival rate of the dogwood and willow live stakes, and approximately 70% germinated seed (see Photos 13 to 14 in Appendix B). There were no signs of supplemental erosion or bank failure during the site visit.

2.3.3 Wetland Crossings

All wetlands were crossed by Isolated Open Cut (IOC) methodology. Within wetlands along the ROW, only the trench line was disturbed (stripped), and all other workspace was matted and underlain by geotextile to minimize impacts to wetland. Any water removed from the trench in the wetlands was placed back into aquifer for the wetland to prevent draining. Water withdrawals were monitored as per the Ministry of Environment and Climate Change (MOECC) PTTW conditions, see *Interim Monitoring Report* (Stantec 2016).

Restoration of the wetlands included backfilling the trench (subsoil then topsoil/organic matter), seeding the trench line with an approved native seed mix and leaving the work-side (matted area) for natural recovery. During the May 23, 24 and 26, 2017 site assessments, wetlands were assessed for ponding, general changes to the class of wetlands, potential blockages or potential disruptions of flow and subsidence. There were no noted change or deficiencies to the



Conditions of the Right-of-Way June 30, 2017

conditions of the wetlands within the ROW during the site assessments. Wetlands appear stable and there are no obvious concerns with their condition within the GTA Project.

EGDI completed some follow-up maintenance work at a wetland near Beaver Creek Tributary 1 (Site #4 on Figure A2 in Appendix A) which is located within a TRCA regulated area (see Photo 24 in Appendix B). EGDI will work the topsoil to provide a suitable rooting medium for vegetation and revegetated it to TRCA permit conditions by July 15, 2017.

A small soccer field (Site #5 on Figure A2 in Appendix A) was restored in 2016 (see Photo 25 in Appendix B). The soccer field is located within a TRCA regulated wetland area that is seasonally wet and had some minor subsidence over the pipeline. EGDI will add topsoil over the trench line to bring it to the surrounding grade and seed with an appropriate mix by July 15, 2017. The site will be monitored until it meets pre-existing conditions.

2.3.4 Archaeology

The Interim Monitoring Report (Stantec 2016), identified subsidence within the buffer for the Reaman archaeological site when the pipeline was installed by HDD methodology beneath the site. The subsidence/sinkhole was discovered during routine monitoring in 2015. The subsidence was backfilled with an unshrinkable backfill overlain with clean fill and covered with topsoil. The site visit on May 24, 2017 revealed that there has been no additional subsidence within the Reaman archaeological site or the buffer (see Photo 26 in Appendix B). No additional restoration is required.



Stakeholder Relations and Complaint Log June 30, 2017

3.0 STAKEHOLDER RELATIONS AND COMPLAINT LOG

3.1 SUMMARY OF OUTSTANDING COMPLAINTS

EGDI has tracked and responded to comments and complaints received throughout the duration of the construction and post-construction periods. EGDI managed a communication log for the GTA Project to track complaints received and the correspondence and actions executed to resolve the complaints. This log is a living document in which content is added as complaints, actions and resolutions are managed.

This section of the Final Monitoring Report describes complaints received after the filing of the Interim Monitoring Report (Stantec 2016) and the status of the unresolved complaints documented in the Interim Monitoring Report (Stantec 2016). The log includes the following content for the above-mentioned complaints:

- Issue the overarching issue raised in the complaint received
- Date the date that the complaint was received by EGDI
- Concern further detail regarding the specific concerns of the complaint
- Resolution details of the actions implemented to achieve a resolution
- Status identification if the actions for resolution are complete, or on-going

During the construction and restoration phases of the GTA Project, there were 203 recorded complaints received by EGDI and four complaints received in spring 2017, after filing of the *Interim Monitoring Report* (Stantec 2016). Of the 203 recorded complaints received during construction and restoration, 200 were addressed prior to the filing of the *Interim Monitoring Report*; Appendix F (Stantec 2016) and are not included in this report. Table 3-1 describes the three outstanding complaints as of September 30, 2016, and the four additional complaints received in spring 2017. As of June 30, 2017, of the 207 complaints received, two complaints remain open and are pending resolution. For complaint #200, EGDI is waiting for additional information from the landowner and for complaint #207, EGDI is arranging a meeting with the homeowner to discuss and resolve the issue.



Stakeholder Relations and Complaint Log June 30, 2017

Table 3-1 Landowner Complaint and Resolutions Log Table

Item	Issue	Date	Concern	Resolution	Status
200	Easement Expiry	12-Apr-16	Business owner complained about topsoil left on his property. Despite initial compensation for soil removal that was agreed to and paid, the owner has claimed that further topsoil was stored and that the site was used for an additional four months beyond the expiry of the original property use agreement.	EGDI requested documentation to support the business owner's claims on August 25, 2016, but to date, have not received anything.	Open
202	Trees	20-Sep-16	Tenant expressed concern that tree replacements at their property were no longer viable.	As agreed with the tenant, EGDI has planted cedars along the west and east fence lines of the daycare playground, to the satisfaction of the business (see Photo 27 in Appendix B).	Completed
203	Property Damage	1-Aug-16	Business owner re-submitted a claim dated August 1, 2016, for damages that he reported in June and July 2015. The business owner expressed concern that construction work caused upstream flooding onto private property which damaged a pedestrian footbridge, loss of business and the that construction allowed trespassers to damage the property.	EGDI worked with the business owner to determine appropriate resolution and have settled the claim to the satisfaction of the business owner.	Completed
204	Trees	25-Apr-17	Resident expressed concern about a tree in their backyard.	EGDI contacted the resident by phone and email in May 2017 to establish an appointment to assess the tree by a qualified arborist. After review of past arborist reports and the completion of the final arborist assessment in May 2017, it was determined that the tree was in poor health prior to construction and was not impacted by construction. Communication was sent to the landowner.	Completed

Stakeholder Relations and Complaint Log June 30, 2017

Table 3-1 Landowner Complaint and Resolutions Log Table

Item	Issue	Date	Concern	Resolution	Status
205	Drainage	23-May-17	Resident expressed concern about poor drainage in the ROW behind their house (Site #6 on Figure A1, Appendix A).	EGDI visited the resident to ascertain the issue and document the drainage concerns. As part of finishing restoration, drainage will be fixed at the property. Anticipated to be completed by July 15, 2017. No further issues are expected.	Completed
206	Rocks on Agricultural Field	7-Jun-17	Tenant farmer expressed concerned about excessive rocks that had been left on the ROW after construction restoration was completed.	EDGI met with tenant farmer who will coordinate having someone remove the excess rocks. EGDI agreed to compensate the tenant former for incurred costs to remove the rocks.	Completed
207	Planted Trees	15-Jun-17	Homeowner expressed concern about the brown areas/spots on the Emerald Cedars that were planted by Enbridge along the inside of their fence line in 2016.	The cedars were assessed by a qualified arborist and confirmed to be in good condition with some brown areas/spots at this time. The growth of the Cedars appears to be impacted by the adjacent large deciduous tree. In 2016, the arborist had recommended against planting the cedars at this location because of the large deciduous tree and its impacts to the growth of the cedars but the homeowner insisted on wanting the cedars in that location.	Open
				Meeting with the resident to discuss the assessment is scheduled for week of July 3, 2017.	

Project Effects Summary June 30, 2017

4.0 PROJECT EFFECTS SUMMARY

4.1 RESIDUAL AND CUMULATIVE EFFECTS

Important components that reduced the overall potential for residual and cumulative effects from the GTA Project included:

- pre-construction planning and consultation with regulators and other stakeholders;
- environmental inspection;
- monitoring during construction;
- contingency planning;
- designing appropriate environmental protection measures to be effective in both the short and long term; and
- responding and addressing stakeholder's concerns along the ROW in a timely manner.

Residual effects are those that remain following the implementation of mitigation measures or post-construction restoration. Cumulative effects are those that can occur in the combination of interactions of effects on the same project; the combination of interactions of effects on this project with other projects; and the combination of effects over time in the same space.

Mitigation for cumulative effects were described in the ER and included avoiding constraints where possible, implementing specific construction methodologies (i.e., HDD, Track-bore or Direct Pipe) and timing construction to avoid important breeding/spawning windows. A total of fourteen potential other projects were noted in the ER that could interact with the GTA Project, seven in Segment A and seven in Segment. B. These were not considered in the ER to contribute to potential cumulative effects. Based on the monitoring of the construction, which occurred in the previously disturbed ROW and TWS, and the restoration of the site to pre-construction conditions, there are were no identified cumulative effects to the natural environment from the construction activities to date with these fourteen projects.

Appendix C presents the predicted effects, a brief discussion on the success of the mitigation measures and the current residual project effects related to the GTA Project. Identified potential effects are based on current conditions.

Upon completion of the outstanding restoration in this Final Monitoring Report, no significant residual or cumulative effects on environmental and/or socio-economic features from the GTA Project were identified during follow-up monitoring or are expected.

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Outstanding Commitments June 30, 2017

5.0 OUTSTANDING COMMITMENTS

5.1 8TH LINE CULVERT REPLACEMENT

The Interim Monitoring Report (Stantec 2016) indicated that on October 21, 2015, while investigating an issue unrelated to the GTA Project, a CH Regulations Officer identified a culvert, which had been replaced by EGDI along a Hydro-One road, as a violation under O. Reg. 162/06 (Conservation Authorities Act, R.S.O. 1990, c. C. 27). The Regulations Officer indicated that no further work was to be completed on the culvert and no application was to be filed for a permit until after a Notice of Violation had been issued. As of June 1, 2017, EGDI has not received a Notice of Violation from CH and does not expect that one will be received as the violation occurred almost 2 years earlier.

5.2 COMPLAINT LOG COMMITMENTS

There are currently two outstanding landowner complaints waiting for the landowner follow up.

5.3 MONITORING PROGRAMS

The following monitoring is on-going at the time of filing of the Final Monitoring Report:

- 1. Post-construction monitoring at Fletcher's Creek and the East Don River crossings will continue for an additional four years to comply with conditions set forth by the MNRF.
- 2. Monitoring of the Eastern Meadowlark and Bobolink habitat will occur to determine the success of the revegetation program to produce suitable breeding habitat.
- 3. EGDI will monitor the six locations requiring restoration in 2017 until stabilized.

No other monitoring is required for the GTA Project.



Resources June 30, 2017

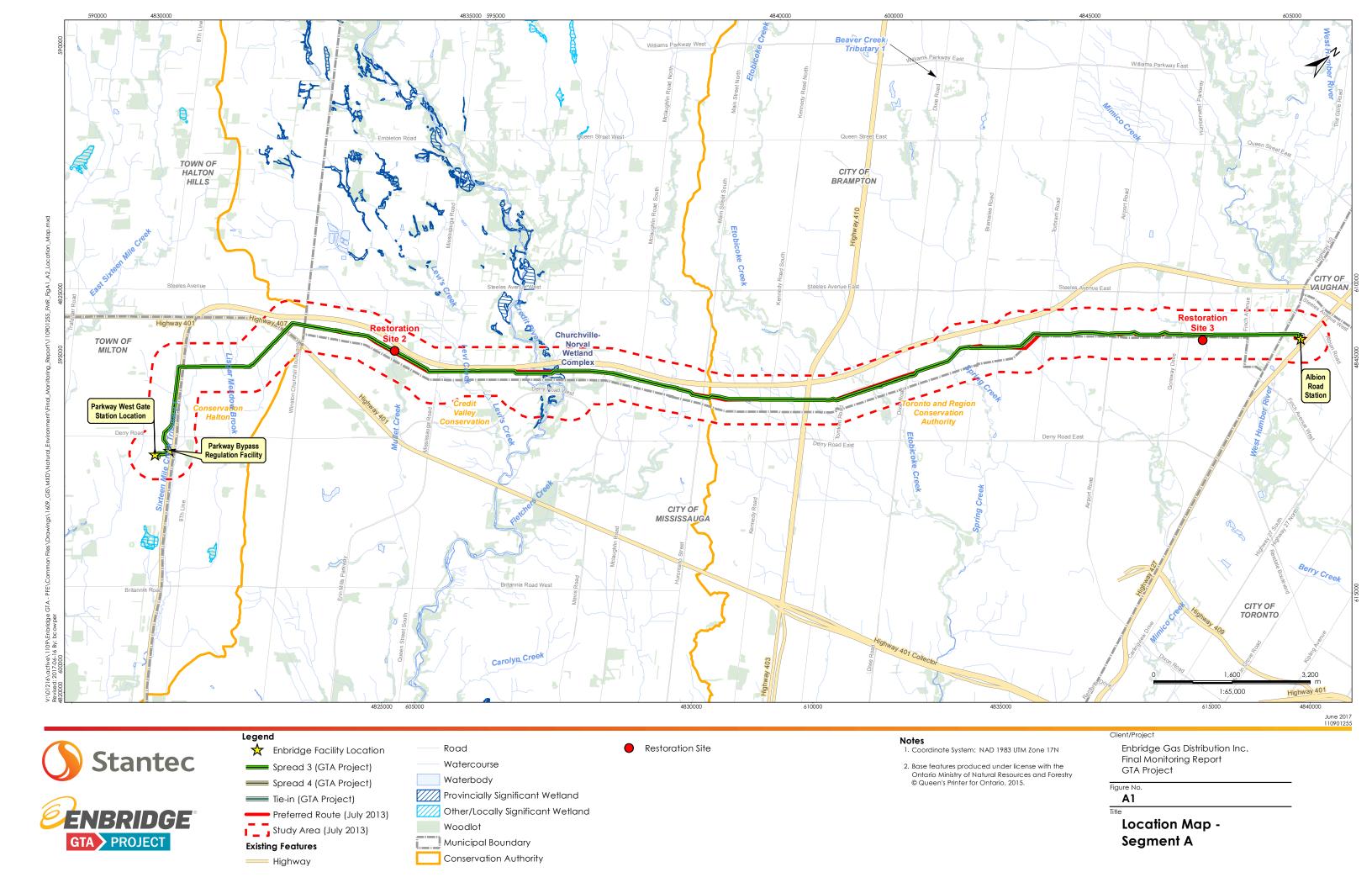
6.0 RESOURCES

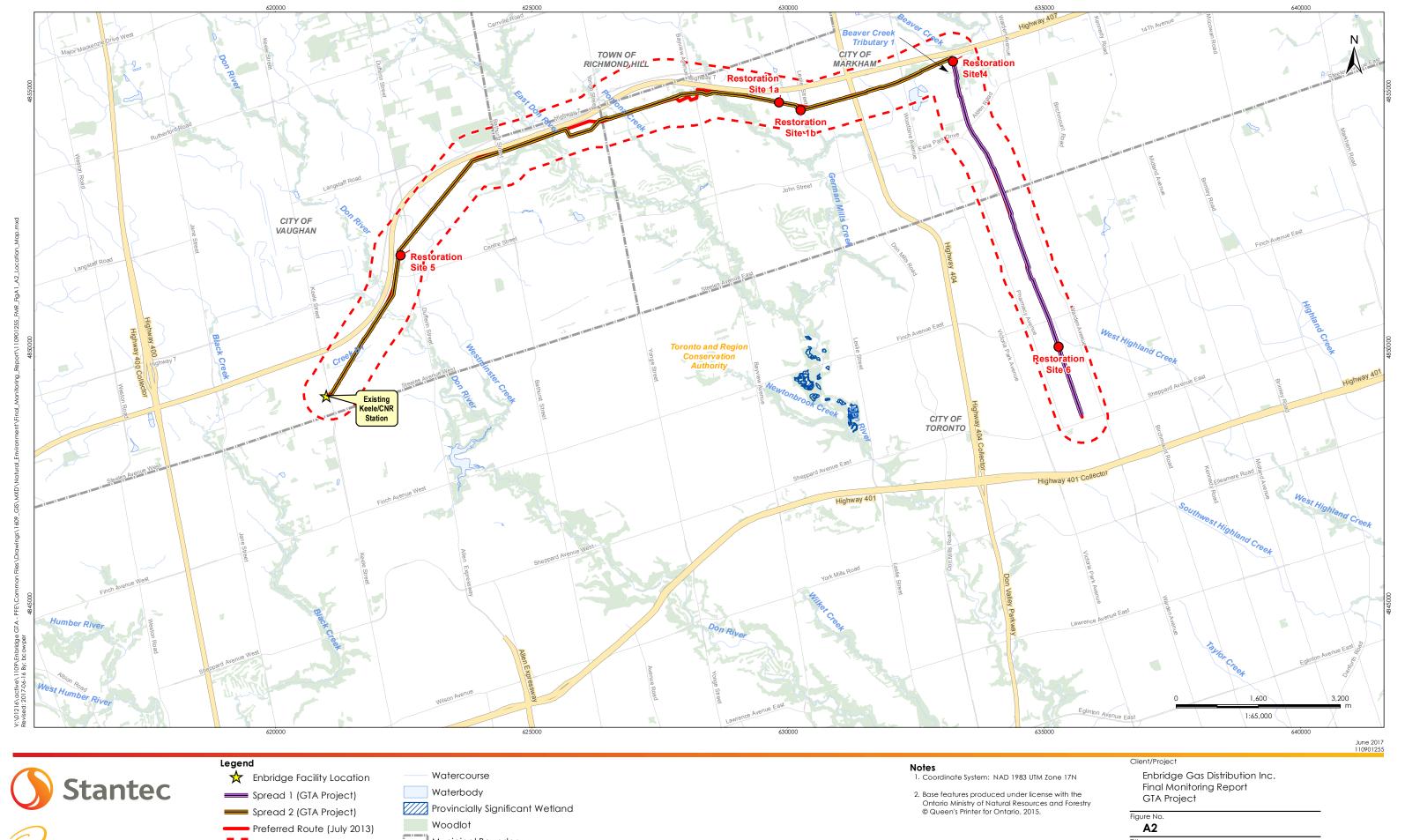
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6.1

APPENDIX A FIGURES







Study Area (July 2013) **Existing Features**

---- Highway

Road

Municipal Boundary Conservation Authority Restoration Site

Location Map -Segment B

APPENDIX B PHOTOS





Photo 1 – General vegetation establishment and tree planting along the ROW and in the TWS (May 2017)



Photo 2 - General vegetation establishment along the ROW and in the TWS near Etobicoke Creek (May 2017)





Photo 3 – General vegetation establishment along the ROW and in the TWS at the west end of Segment B (May 2017)



Photo 4 – General vegetation establishment along the ROW and in the TWS (May 2017)





Photo 5 – General vegetation establishment with some bare areas expected to fill in (May 2017)



Photo 6 – General vegetation establishment along the ROW and in the TWS (May 2017)





Photo 7 – General vegetation establishment backing residential properties (May 2017)



Photo 8 – General vegetation establishment backing residential properties (May 2017)





Photo 9 – Rills and gullies requiring remediation between Little German Mills and German Mills Creek, Site #1A (May 2017)



Photo 10 – Bare patches requiring some additional seeding to prevent erosion on the east side of Little German Mills Creek, Site #1B (May 2017)





Photo 11 – Restored Eastern Meadowlark and Bobolink breeding habitat (May 2017)



Photo 12 – Restored Eastern Meadowlark and Bobolink breeding habitat (May 2017)





Photo 13 – Stabilization of bank at Etobicoke Creek (May 2017)



Photo 14 - Etobicoke Creek watercourse crossing (May 2017)





Photo 15 – Beaver Creek Tributary 2 watercourse crossing (May 2017)



Photo 16 – Little German Mills Creek watercourse crossing (May 2017)





Photo 17 – German Mills Creek Watercourse crossing (May 2017)



Photo 18 – German Mills Creek watercourse crossing (May 2017)





Photo 19 – Spring Creek watercourse crossing (May 2017)



Photo 20 - Mullet Creek watercourse crossing (May 2017)





Photo 21 - ATV traffic through Spring Creek Tributary 1 (May 2017)



Photo 22 – ATV traffic adjacent to Etobicoke Creek (May 2017)





Photo 23 – Vegetation establishment near Mimico Creek requiring additional seeding (May 2017)



Photo 24 – Restoration required at the wetland near Beaver Creek Tributary 1 (May 2017)





Photo 25 – Soccer field with subsidence requiring restoration to address subsidence on the ROW (May 2017)



Photo 26 – Former subsidence location in Reaman archaeological site buffer (May 2017)





Photo 27 – Cedars planted for commercial property after tenant complaint (May 2017)



APPENDIX C PROJECT EFFECTS SUMMARY



Table C-1 Project Effects Summary

Environmental Features	Predicted Effect (Environmental Report)	Mitigation Measures	Residual Effects
Physical Environmen	t		
Physiography, Topography and Surficial Geology	Effects associated with trenching and land grading: • Slope instability • Potential soil erosion • Increase in downstream sedimentation No long-term impacts are anticipated.	Mitigation measures were implemented during construction as appropriate to prevent significant slope instability or erosion. ESC measures were proactive and on-going throughout construction to stabilize slopes and soil which resulted in minimized erosion to topsoil into the surrounding area and resulting deposition of sediment.	Trenching, HDD entry and exit pits, and bore pits excavated during construction were determined to have no significant net effect as predicted. Slopes have revegetated and stabilized. There was no observed slope instability and sites have been stabilized. Provided that outstanding restoration documented in this report is implemented as discussed, no residual effects were identified because of construction.
Groundwater	Effects associated with trenching and trenchless technologies include potential impacts to shallow and deep aquifers. No significant net effects were anticipated.	Required permits were acquired and regulatory consultation occurred prior to, and during construction. Mitigation measures and permit commitments were applied as appropriate during the construction phases of the GTA Project and were successful in mitigating potential effects.	Permit conditions were implemented during construction with monitoring programs occurring to assess the potential effects. Project effects were determined to have no significant net effect as predicted. No residual effects were encountered.
Bedrock	Increased vibration, dust and noise from construction vehicles, and drill equipment. No significant net effects were anticipated.	Bedrock was only encountered during HDD's. The construction technique used did not require specific mitigation due to bedrock.	Since interaction with bedrock was limited to HDD activities, no effects encountered.
Seismicity	No significant net effects were anticipated.	No blasting was necessary during construction.	No significant residual effects occurred because of the GTA Project.

Table C-1 Project Effects Summary

Environmental Features	Predicted Effect (Environmental Report)	Mitigation Measures	Residual Effects
Natural Environment			
Atmospheric Resources	Air emissions release from vehicles and equipment and dust during dry conditions. No significant net effects were anticipated.	Air emissions were minimized where possible by reducing vehicles on the ROW and limiting idling where possible. Dust impacts were limited during construction and mitigated by not constructing during high wind events and utilizing water suppression where necessary.	Effects on atmospheric resources were localized and temporary as predicted with no significant net effects occurring.
Surface Water, Wetlands, Fish and Aquatic Habitat	Potential predicted impacts include: • increased sediment loading (i.e., suspended or depositional sediment) • changes in channel morphology • alteration and removal of fish habitat, including streambank and riparian vegetation • potential for spills or contamination of the watercourse during construction • flow disruption or blockage of fish passage during construction • release of deleterious substances into the watercourse No significant net effects were anticipated.	Pipeline crossing techniques were completed as per the construction techniques and mitigation measures proposed in the ER. Restoration including tree and shrub planting was proactive and occurred after completion of the crossings to stabilize the watercourse and work areas. The requirements for new vehicle crossings of watercourses were minimized by using existing crossings wherever possible. Permits were obtained for all crossings (pipeline and vehicle) with all permit and ER mitigation measures implemented as required and were successful in limiting potential effects from construction. Although there were some minor stormwater surges during construction, all crossings were completed as required with minimal residual impacts identified during construction (i.e., temporary sediment releases during storm water events).	All crossings were completed as per permit conditions and followed ER mitigations and methodologies, EPP construction techniques and followed site specific mitigation and recommendations. No significant net effects were observed to surface water, wetlands, fish and aquatic habitat as the result of construction during follow-up monitoring. Any residual impacts were determined to be temporary and reversible. No long-term residual effects were observed.

Table C-1 Project Effects Summary

Environmental Features	Predicted Effect (Environmental Report)	Mitigation Measures	Residual Effects
Churchville-Norval Wetland Complex	Potential affect to vegetation; fish and wildlife movement within wetland environment. No significant net effects were anticipated.	The Churchville-Norval Wetland Complex was crossed by open-cut in Fall 2015 thereby limiting impacts to breeding birds and breeding amphibians. All mitigation measures were implemented as per permit conditions and the ER and were successful in limiting impacts to the wetland. The wetland has completely revegetated and stabilized and should transition to the pre-existing vegetation composition over time.	The crossing was completed as per permit conditions and ER methodologies, and site specific land grading. No significant net effects occurred to the Churchville-Norval Wetland Complex as the result of construction; therefore, no residual effects were identified during monitoring.
Terrestrial Habitat and Vegetation	Individual tree and shrub removal and temporary removal of wetland vegetation. No significant net effects were anticipated.	On-going restoration was completed after installation to limit long-term effects and provide stabilization along the ROW. All permit and ER mitigation measures were implemented as indicated. Tree and shrub planting of native species was completed in September 2016.	The ROW has revegetated and will continue to transition to pre-existing conditions over time. There will be a net loss in forested habitat; however, TWS should transition and mature over time. There were no significant residual effects observed during monitoring.
Wildlife	Potential effects during construction: Temporary vegetation removal effect on wildlife habitat noise from construction activities temporarily disturbing local wildlife trenching activities creating pit falls Construction associated with this project will have limited impact on local wildlife.	Activities were scheduled to avoid impacts to species as per permit and ER mitigation measures and conditions. Trees were cleared outside of breeding bird windows where possible or nest sweeps were completed prior to clearing to avoid impacts to avian species. Wildlife encounters occurred during the GTA Project with turtles and other species crossing the ROW and were removed from the ROW or allowed to passively leave on their own when possible.	Wildlife mortality was limited during construction to common species which would not affect the population (i.e., groundhogs) with sensory effects both short terms and temporary and limited to the construction phase of the GTA Project. Follow-up monitoring did not identify significant net effects which occurred because of the GTA Project.

Table C-1 Project Effects Summary

Environmental Features	Predicted Effect (Environmental Report)	Mitigation Measures	Residual Effects
Species at Risk (SAR)	Removal of vegetation affecting foraging and breeding habitat No significant net effects were anticipated.	Impacts to SARs were limited by implementing mitigation measures from the ER (Dillon 2012) and ensuring permit conditions for species at risk were adhered to during construction including mowing nesting areas outside of the breeding bird window for avian SARs known to nest in specific areas. Restoration and seeding was also completed to encourage use by SARs post-restoration including seeding previously identified Eastern Meadowlark and Bobolink habitat with species that will support future nesting. No other potential impacts to SARs were noted along the ROW.	There were no documented direct impacts to SARs from construction of the pipeline. SAR Redside Dace habitat was not disturbed and Bobolink/Meadowlark habitat has been replaced and will be monitored to meet the requirements of the Recovery Strategy for the Bobolink and Eastern Meadowlark in Ontario (McCracken et. al., 2013). During monitoring, there were no observed significant net effects from the GTA Project.
Agriculture and Soils	Soil compaction, mixing and acceleration of erosion result from land clearing and equipment movement. No significant net effects were anticipated.	Mitigation measures were implemented as per the ER (Dillon 2012) to reduce impacts to soils with topsoil stripping monitored by qualified individuals. Mitigation measures were successful in limiting potential admixing by limiting construction during wet weather. Where construction had the potential to result in compacted or impacted soils, both subsoil and at times topsoil was decompacted where necessary to limit overall effects. Areas of pre-existing contaminated soil were removed during the GTA Project.	The removal of contaminated soil from the TWS will have positive effects to the soil conditions of the TWS. Final monitoring did not identify a significant net effect on agriculture or soils; therefore, no residual effects are anticipated.
Socio-Economic Env	ironment		
Noise	Construction noise impacts were anticipated to be minor, temporary and localized and will not result in health impacts.	Construction occurred within populated areas on a six-day rotation and did not occur on Sunday's or statutory holidays as per the ER (Dillon 2012) unless urgent work was required. Noise complaints that were received were dealt with immediately by EGDI. Details can be found in the Interim Monitoring Report (Stantec 2016).	Noise was temporary and localized during construction. Any complaints were addressed and; therefore, there were no net effects to the health of residents.

Table C-1 Project Effects Summary

Environmental Features	Predicted Effect (Environmental Report)	Mitigation Measures	Residual Effects
Access Modifications and Restrictions	Disruption to traffic flow and access. No significant net effects were anticipated.	EGDI executed the appropriate mitigation measures which included having an experienced traffic control contractor staged throughout the GTA Project for equipment moving into/out of the ROW.	There were no accidents or incidents during construction. All original access was restored to pre-existing conditions; as such, there were no significant net effects associated with the GTA Project. Follow-up monitoring did not identify residual effects.
Traffic Disruption	Increase in the amount of truck traffic during the pipeline construction. No significant net effects were anticipated.	EGDI adhered to traffic restrictions (timing of lane closures and timing of truck traffic) on main roadways as imposed by the municipalities and contracted a traffic control contractor to limit impacts to traffic within each of the municipalities where required. Traffic control mitigation measures were successful in mitigating potential interactions with vehicles using municipal infrastructure.	EDGI traffic disruption for the GTA Project was minor, temporary and localized with no accidents or incidents. No significant net effects were associated with the GTA Project during construction. No residual effects were identified during construction or follow-up monitoring.
Vibration	Localized vibration caused by typical construction activities. No significant net effects were anticipated.	As per the mitigation measures in the ER (Dillon 2012), EGDI conducted vibration monitoring at sensitive locations in Segment B of the GTA Project. During monitoring, there was one recorded vibration above City of Toronto guidelines.	Based on the results of the vibration monitoring program, no significant net effects were associated with the GTA Project during construction. No residual effects were identified during follow-up monitoring.
Construction Waste	Production of non- hazardous construction wastes and hazardous wastes from equipment fuels and lubricants. No significant net effects were anticipated.	All construction waste was collected and removed from the construction sites daily as per mitigation measures identified in the ER (Dillon 2012) including cleaning up waste that was located on-site prior to construction commencing.	Since all waste was removed from the site during and after construction was completed, there were no significant net effects associated with the GTA Project. Follow-up monitoring did not identify residual effects.

Table C-1 Project Effects Summary

Environmental Features	Predicted Effect (Environmental Report)	Mitigation Measures	Residual Effects
Bentonite Drilling Mud	Seepage of bentonite drilling mud resulting in reduced surface groundwater quality. No significant net effects were anticipated.	Bentonite drilling mud was managed by reducing volumes by using a centrifuge and solidifying the waste and hauling off-site as per the mitigation measures in the ER (Dillon 2012). During drilling, Inadvertent Fluid Returns (IFR) on the ROW were immediately cleaned up. There were no IFRs directly into watercourses or other sensitive features during drilling.	Since all bentonite drilling mud was removed from the site during and after construction was completed and no bentonite slurry directly entered a watercourse, there were no significant net effects associated with the GTA Project. Follow-up monitoring did not identify residual effects.
Hydrostatic Test Water	Potential contamination of surface and groundwater from release of test waters. No significant net effects were anticipated.	PTTWs were obtained for water usage and disposal during hydrostatic tests for both segments of the line and were performed to the standards set out in the permit conditions with no incidents occurring during discharge.	Hydrostatic test water discharge was completed consistent with PTTW conditions with no incidents, there were no significant net effects associated with the GTA Project. Follow-up monitoring did not identify residual effects.
Aesthetics	Visual nuisance to the residents. No significant net effects were anticipated.	The pipeline has revegetated since reclamation was completed in 2016 and as per ER (Dillon 2012) and permitting conditions, should transition to pre-existing conditions over time.	The ROW and TWS have been stabilized and should transition to pre-existing conditions over time. There will be no significant net effects associated with the GTA Project. No residual effects were identified during monitoring.
Existing and Planned Land Use	Potential creation of dust, noise, and construction affecting land uses. No significant net effects were anticipated.	EGDI completed consultation to potentially affected parties both prior to and during the construction phase of the GTA Project and logged landowner complaints during construction. Complaints were mitigated included installing temporary fence where necessary to limit potential interactions between existing properties.	Mitigation measures in the ER (Dillon 2012) and commitments during consultation were adhered to during construction with no residual concerns; therefore, no significant net effects were realized during the construction of the GTA Project. No residual effects were identified during monitoring.

Table C-1 Project Effects Summary

Environmental Features	Predicted Effect (Environmental Report)	Mitigation Measures	Residual Effects
Existing Third Party Linear Infrastructure Corridors and Other Infrastructure	Interference with existing Third Party infrastructure corridors and infrastructure during construction. No significant net effects were anticipated.	Prior to crossing or excavating within the vicinity of all existing third party above and below ground linear infrastructure, the appropriate owners of the facilities were consulted. Construction proceeded to the owner's satisfaction with mitigation measures implemented as agreed upon by the facilities owner and EGDI.	All crossings and work within the vicinity of existing third party linear infrastructure was executed to the satisfaction of the owner, there were no significant net effects realized during the construction of the GTA Project. No residual effects were identified during monitoring.
Population and Demographics	The Project will result in a net positive to residents in the GTA and secure continued safe and reliable access to natural gas to meet future population growth.	No mitigation measures were required implemented to address population or demographics.	The net positive effect was realized during energization of the GTA Project as a secure, reliable source of natural gas is now available to existing and future customers in the GTA.
Economic Activities, Employment and Labour Force	The Project was beneficial to the GTA from the creation of additional employment and economic "spin offs" for local business owners.	No mitigation measures were required to be implemented to address economic activities, employment and labour force.	The net positive effect was realized during the construction phase of the GTA Project.
Tourism and Recreation	Potential to restrict access to recreational facilities. Net effects were not anticipated.	As per the mitigation measures in the ER (Dillon 2012), access to all recreation facilities was maintained during the construction of the GTA Project except for the use of one soccer field in Segment B for the duration of construction. The soccer field was restored in Spring 2016 but has required some additional restoration to make it suitable for future use.	Since access to recreational facilities was maintained and, once the soccer field affected by the construction is restored to pre-existing conditions, there are no net effects associated with the GTA Project. No other residual effects were identified during follow-up monitoring.

Table C-1 Project Effects Summary

Environmental Features	Predicted Effect (Environmental Report)	Mitigation Measures	Residual Effects
First Nation and Metis Communities	Potential to impact harvesting rights in the area. Potentially finding/disturbance of First Nation or Métis artifacts. No significant net effects were anticipated.	There were two incidents during construction including the excavation prior to a Stage 2 AA (see the Interim Monitoring Report (Stantec 2016) and some subsidence within the buffer for the Reaman Archaeological Site, which was successfully repaired. Affected First Nation and regulatory agencies were consulted to determine appropriate mitigation measures to address the incidents which were executed to the satisfaction of the interested parties.	First Nation and Metis Community consultation was proactive and ongoing during construction and incidents were mitigated to the satisfaction of the interested parties; therefore, no significant net effects were realized during the construction of the GTA Project. No residual effects were identified during follow-up monitoring.
Archaeological and Heritage Resources	Potential to impact on archaeological Site at 5 locations. No significant net effects were anticipated.	Existing known resources were delineated and avoided during construction with Stage 2 AA completed prior to excavation within all TWS areas. Two incidents did occur during construction (see Interim Monitoring Report, Stantec, 2016) which were addressed to the satisfaction of the interested parties.	Stage 2 AAs were completed prior to disturbance with incidents mitigated to the satisfaction of the interested parties; therefore, no significant net effects were realized to archaeological and heritage resources during the construction of the GTA Project. No residual effects were identified during follow-up monitoring.
Community Services	Impeded access to community services No significant net effects were anticipated.	Project traffic restrictions were implemented (timing of lane closures and timing of truck traffic) on roadways as imposed by the municipalities and Project traffic control to limit impacts to traffic. Traffic control mitigation measures were successful in maintaining flow of traffic to community services.	EGDI traffic disruption for the GTA Project was generally minor, temporary and localized and in compliance with the municipalities' restrictions; therefore, no significant net effects to community services were associated with the GTA Project during construction. No residual effects were identified during construction of follow-up monitoring.
Planning Policies	No significant net effects were anticipated.	Through the planning process of the GTA Project, EGDI consulted with municipal planning agencies and completed the GTA Project in compliance with Official Plan policies and Zoning By-Laws as well as conformance with provincial plans including the Parkway Belt West Plan.	Since EGDI consulted with the appropriate regulatory bodies regarding the GTA Project, there were no significant net effects realized on planning policies and no residual effects identified during follow-up monitoring.

Table C-1 Project Effects Summary

Environmental Features	Predicted Effect (Environmental Report)	Mitigation Measures	Residual Effects
Waste Disposal and Potentially Contaminated Sites	Contaminants that may be present in the study areas may be exposed during trenching and land grading. No significant net effects were anticipated.	Potentially contaminated sites, underground tanks, etc., were identified both prior to and discovered during construction of the GTA Project. Sites (soil, groundwater, and air) were sampled as appropriate to determine the means to address the areas of potential contamination.	Contaminated soils were addressed during construction in compliance with Ontario legislation and disposed of offsite where required. No significant net effects were realized during construction of the GTA Project. No residual effects were identified during follow-up Monitoring.