



ENBRIDGE GAS INC.

ST. LAURENT PIPELINE PROJECT

April 2019



TABLE OF CONTENTS

Page No.

| | | |
|---------|--|----|
| 1.0 | INTRODUCTION | 1 |
| 1.1 | Description of the Project | 1 |
| 1.2 | Project Need and Justification | 1 |
| 1.3 | Environmental and Cumulative Effects Assessment | 1 |
| 1.4 | Regulatory Framework | 1 |
| 1.4.1 | Ontario Energy Board | 2 |
| 1.4.2 | Canadian Environmental Assessment Act | 2 |
| 1.4.3 | Other Permits, Approvals and/or Notifications | 2 |
| 2.0 | STUDY PROCESS | 4 |
| 2.1 | Study Methodology | 5 |
| 2.1.1 | Phase 1: Identification of Study Area and Environmental Inventory | 5 |
| 2.1.1.1 | Data Sources | 7 |
| 2.1.2 | Phase 2: Environmental Impact Study and Mitigation along the Preferred Route | 8 |
| 2.1.2.1 | Cumulative Effects Assessment | 12 |
| 2.2 | Stakeholder and Indigenous Consultation | 12 |
| 3.0 | PHYSICAL, NATURAL AND SOCIO-ECONOMIC ENVIRONMENT SETTING | 14 |
| 3.1 | Physical Environment | 14 |
| 3.1.1 | Physiography | 14 |
| 3.1.2 | Topography | 14 |
| 3.1.3 | Surficial Geology | 14 |
| 3.1.4 | Groundwater | 16 |
| 3.1.5 | Bedrock | 17 |
| 3.1.6 | Seismicity | 18 |
| 3.2 | Natural Environment | 19 |
| 3.2.1 | Atmospheric Environment | 19 |
| 3.2.1.1 | Climate | 19 |
| 3.2.1.2 | Air Quality | 20 |
| 3.2.2 | Surface Water and Aquatic Habitat | 20 |
| 3.2.3 | Provincially Significant Wetlands | 20 |
| 3.2.4 | Areas of Natural and Scientific Interest and Other Environmentally Significant Areas | 20 |
| 3.2.5 | Terrestrial Habitat and Vegetation | 20 |
| 3.2.6 | Wildlife and Wildlife Habitat | 22 |

| | | |
|----------|--|----|
| 3.2.6.1 | Incidental Wildlife Observations..... | 22 |
| 3.2.6.2 | Significant Wildlife Habitat | 22 |
| 3.2.6.3 | Species of Conservation Concern | 23 |
| 3.2.7 | Species at Risk | 23 |
| 3.3 | Socio-Economic Environment..... | 25 |
| 3.3.1 | Existing and Planned Land Use | 25 |
| 3.3.2 | Socio-economic Characteristics | 27 |
| 3.3.3 | Existing Linear Infrastructure Corridors and Other Infrastructure | 27 |
| 3.3.3.1 | Transportation | 28 |
| 3.3.4 | Existing Residences..... | 28 |
| 3.3.5 | Tourism and Recreation..... | 28 |
| 3.3.6 | Indigenous Communities | 28 |
| 3.3.7 | Archaeological and Cultural Heritage Resources | 28 |
| 3.3.8 | Community Services | 29 |
| 3.3.8.1 | City of Ottawa | 29 |
| 3.3.9 | Waste Disposal Sites..... | 30 |
| 3.3.10 | Potentially Contaminated Sites..... | 30 |
| 3.3.11 | Planning Policies..... | 30 |
| 3.3.11.1 | Provincial Secondary Sources | 30 |
| 3.3.11.2 | Municipal Secondary Sources..... | 30 |
| 4.0 | STAKEHOLDER CONSULTATION PROGRAM..... | 31 |
| 4.1 | Public and Agency Consultation | 31 |
| 4.1.1 | Objectives | 31 |
| 4.1.2 | Contact List..... | 31 |
| 4.1.3 | Website | 32 |
| 4.1.4 | Public Notice | 32 |
| 4.1.5 | Contact Letters..... | 33 |
| 4.1.6 | Public Open House | 33 |
| 4.1.6.1 | Results from Open House..... | 34 |
| 4.1.6.2 | Route Refinements Resulting From Public Input and Preliminary Preferred Route..... | 34 |
| 4.2 | Indigenous Engagement..... | 34 |
| 4.3 | Ongoing Engagement activities | 35 |
| 5.0 | POTENTIAL ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES ALONG THE PREFERRED ROUTE | 36 |
| 6.0 | CUMULATIVE EFFECTS | 44 |
| 6.1 | Methodology | 44 |

| | | |
|---------|---|----|
| 6.2 | Study Area Boundaries..... | 44 |
| 6.3 | Identified Projects..... | 44 |
| 6.4 | Analysis of Cumulative Effects..... | 45 |
| 6.5 | Additive and Magnifying Effects..... | 45 |
| 7.0 | ACCIDENTS AND MALFUNCTIONS..... | 46 |
| 7.1 | Accidents/Malfunctions Considered..... | 46 |
| 7.1.1 | Equipment or Machinery Leaks or Other Spills | 46 |
| 7.1.2 | Pipeline Releases During Operation Resulting in Release of Natural Gas | 46 |
| 7.2 | Effects Assessment and Significance | 46 |
| 7.3 | Summary of Net Effects | 48 |
| 8.0 | EFFECTS OF THE ENVIRONMENT ON THE PROJECT | 49 |
| 8.1 | Environmental Conditions Considered | 49 |
| 8.1.1 | Climate Change | 49 |
| 8.1.2 | Extreme Precipitation, Flooding and Erosion | 49 |
| 8.1.3 | Seismic Activity..... | 49 |
| 8.2 | Effects Assessment and Significance | 49 |
| 8.3 | Summary of Net Effects | 50 |
| 9.0 | INSPECTION AND MONITORING RECOMMENDATIONS..... | 51 |
| 9.1 | Pre-Construction..... | 51 |
| 9.2 | During Construction..... | 52 |
| 9.2.1 | Environmental Inspector | 52 |
| 9.2.2 | Environmental Monitors..... | 52 |
| 9.2.3 | Spills Contingency Plan | 52 |
| 9.3 | Post-Construction | 52 |
| 9.3.1 | Monitoring Reports | 52 |
| 9.3.1.1 | Interim Monitoring Report..... | 52 |
| 9.3.1.2 | Final Monitoring Report..... | 52 |
| 10.0 | SUMMARY AND CONCLUSIONS | 54 |
| 11.0 | REFERENCES AND WORKS CITED..... | 55 |

LIST OF TABLES

| | <u>Page No.</u> |
|---|-----------------|
| Table 1: Other Notifications, Permits and Approvals | 3 |
| Table 2: Key Records and Sources Reviewed | 7 |
| Table 3: Interaction Matrix | 9 |
| Table 4: Water Well Record Locations within 100 m of the PPR | 16 |
| Table 5: Vegetation Observed During ELC Surveys in 2019 | 21 |
| Table 6: Incidental Wildlife Observations | 22 |
| Table 7: Species of Conservation Concern Identified with Potential to Occur within the Vicinity of the Study Area. | 23 |
| Table 8: Species at Risk Listed as Endangered or Threatened with Potential to Occur within the Vicinity of the Study Area | 24 |
| Table 9: Potential Construction and Operation Effects, Mitigation Measures and Net Effects ... | 37 |
| Table 10: Potential Effects, Mitigation Measures and Net Effects Identified as a Result of Accidents and Malfunctions | 47 |
| Table 11: Potential Effects, Mitigation Measures and Net Effects Identified as a Result of Effects of the Environment on the Project | 50 |

LIST OF FIGURES

| | <u>Page No.</u> |
|---|-----------------|
| Figure 1: Environmental Study Process..... | 4 |
| Figure 2: Proposed Pipeline Project Study Area | 6 |
| Figure 3: Natural Environment and Socio-Economic Features and Preferred Pipeline Route | 15 |
| Figure 4: Location of Study Area in Western Quebec Seismic Zone..... | 18 |
| Figure 5: Temperature and Precipitation Graph for 1981 to 2010 Canadian Climate Normals for the City of Ottawa | 19 |
| Figure 6: Website Homepage | 32 |

LIST OF APPENDICES

| | |
|----|--|
| A1 | Stage 1 Archaeological Assessment Report |
| A2 | Cultural Heritage Checklist |
| B | Typical Pipeline Construction Sequence |
| C1 | Notice of Study Commencement and Open House |
| C2 | Newspaper Tear Sheet |
| C3 | Stakeholder and Indigenous Letters |
| C4 | Stakeholder and Indigenous Contact List |
| C5 | Open House Panels and Exit Questionnaire |
| D1 | Public Correspondence |
| D2 | Agency Correspondence |
| D3 | Interest Group Correspondence |
| D4 | Engagement with Indigenous Communities |
| D5 | Open House Exit Questionnaire Correspondence |
| E | Preferred Route Photo Inventory |

LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|----------|--|
| ANSI | Area of Natural and Scientific Interest |
| AR | Alternative Route |
| ARA | Aquatic Resource Area |
| BCR | Band Council Resolution |
| CEAA | Canadian Environmental Assessment Act, 2012 |
| CC | Conservation Coefficients |
| DFO | Fisheries and Oceans Canada |
| Dillon | Dillon Consulting Limited |
| EASR | Environmental Activity and Sector Registry |
| ELC | Ecological Land Classification |
| EMS | Emergency Medical Service |
| Enbridge | Enbridge Gas Inc. |
| END | Endangered |
| EPP | Environmental Protection Plan |
| ER | Environmental Report |
| ESA | Endangered Species Act |
| ESA | Environmentally Sensitive Area |
| GDP | Gross Domestic Product |
| HDD | Horizontal Directional Drill |
| km | Kilometre |
| L | Litres |
| LIO | Land Information Ontario |
| m | Metre |
| masl | Metres Above Sea Level |
| mbgs | Meters Below Ground Surface |
| mm | Millimetre |
| MMAH | Ministry of Municipal Affairs and Housing |
| MNRF | Ministry of Natural Resources and Forestry |
| MOE | Ministry of Energy |
| MECP | Ministry of Environment , Conservation and Parks |
| MTCS | Ministry of Culture, Tourism and Sport |
| MTO | Ministry of Transportation |
| NHIC | Natural Heritage Information Centre |
| Notice | Notice of Commencement |
| NPS | Nominal Pipe Size |
| NRCan | Natural Resources Canada |
| OBBA | Ontario Breeding Bird Atlas |
| O.D. | Outside Diameter |
| OEB | Ontario Energy Board |
| OGS | Ontario Geological Survey |
| OPCC | Ontario Pipeline Coordinating Committee |

| | |
|-------------------|---|
| PAH | Polyaromatic Hydrocarbons |
| PCB | Polychlorinated Biphenyl |
| Project footprint | The permanent pipeline easement as well as potential temporary work space required to accommodate pipeline construction |
| PTTW | Permit to Take Water |
| PSW | Provincially Significant Wetland |
| RVCA | Rideau Valley Conservation Authority |
| SAR | Species at Risk |
| SARA | Species at Risk Act |
| SARO | Species at Risk in Ontario |
| SGRA | Significant Groundwater Recharge Areas |
| The Project | 1.7 km NPS 6 intermediate pressure natural gas pipeline in the City of Ottawa |
| The Study | Environmental and Cumulative Effects Assessment |
| THR | Threatened |
| TMHC | Timmins Martelle Heritage Consultants Incorporated |
| WWIS | Water Well Information System |

EXECUTIVE SUMMARY

Enbridge Gas Inc. (Enbridge) retained Dillon Consulting Limited (Dillon) to undertake an environmental and cumulative effects assessment (the Study) for an approximately 1.7 kilometre (km) nominal pipe size (NPS) 6-inch Intermediate Pressure (IP) polyethylene natural gas pipeline in the City of Ottawa (the Project). Pending regulatory approval, construction of the Project is anticipated to begin in late summer or fall of 2019. The Project has been proposed due to the age and condition of the current pipeline, and to better service 140 customers by transferring customers to an IP system.

The Study was undertaken between December 2018 and February 2019, and the Environmental Report (ER) conforms to the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (7th Edition, 2016)*. The *Canadian Environmental Assessment Act, 2012 (CEAA)* was not triggered for this Project.

The Study involved undertaking an inventory of physical, natural and socio-economic features within the Study Area. This information was used to produce maps identifying features that could be impacted by pipeline construction and operation. A Preferred Route (PR) was then established for the Project. No alternatives could be considered as this pipeline will be servicing customers directly along the route.

The PR for the proposed natural gas pipeline originates approximately 20 m south of Donald Street on St. Laurent Boulevard, continuing north on St. Laurent Boulevard and ending approximately 20 m north of Montreal Road within the City of Ottawa. The proposed replacement would occur within the municipal road right-of-way (ROW), in an effort to minimize potential impacts to the surrounding communities and land uses.

The Study followed two main phases described as follows:

Phase 1: Identification of Study Area and Environmental Inventory

The first step of Phase 1 involved identifying the Study Area. The Study Area boundaries were determined based on the pre-established start and end points of the replacement pipeline and include areas that are most likely to be directly or indirectly affected by the Project. The desktop Study Area included a 250 m radius around the PR; while the field study area includes a 30 m radius around the PR.

Phase 2: Environmental Impact Study and Mitigation along the Preferred Route

This phase involved a detailed assessment of environmental and socio-economic impacts along the PPR. Mitigation measures were identified that conform to Enbridge's *Construction and Maintenance Manual, 2017*, as well as the relevant permitting authority requirements, including the OEB.

Stakeholder involvement was an integral part of the Study and is an important component of a successful study process. Consultation was undertaken with a range of stakeholders, including:

- § Federal Agencies and Members of Parliament;
- § Provincial Agencies and Members of Provincial Parliament;
- § Local and Municipal Agencies including Council;
- § Interest Groups (i.e., School Boards, Conservation Authorities);
- § Corporations (i.e., Hydro One, Infrastructure Ontario, Local Businesses); and,
- § Indigenous communities.

By locating the Project footprint within an existing, previously disturbed municipal road ROW, socio-economic and environmental impacts are minimized.

An effects assessment was also completed as part of the Study. The assessment concluded that while construction of the pipeline will likely have temporary short-term effects (e.g., dust and noise) on residents and businesses in the area, the Project is unlikely to have significant cumulative effects once mitigation measures are applied.

Mitigation measures were recommended to minimize potential negative impacts to the environment. These recommendations, in combination with Enbridge's *Construction and Maintenance Manual, 2017*, should effectively serve to protect environmental features along the PR. The mitigation recommendations contained in this ER, along with Enbridge's construction procedures, should be included in the contract specifications. Use of a qualified Environmental Inspector will also help reduce disturbance to the local environment during pipeline construction activities.

Following the receipt of required permits from government agencies, Enbridge plans to begin construction of the proposed pipeline in summer 2019. Construction is anticipated to take approximately 4-6 months from ground preparation to clean-up and testing, weather permitting. Dillon does not anticipate any long term impacts from the construction and/or operation of the proposed pipeline based on the mitigation measures recommended in this report.

1.0 INTRODUCTION

Enbridge Gas Inc. (Enbridge) retained Dillon Consulting Limited (Dillon) to undertake an environmental and cumulative effects assessment (the Study) for an approximately 1.7 kilometre (km) nominal pipe size (NPS) 6-inch Intermediate Pressure (IP) polyethylene natural gas pipeline in the City of Ottawa (the Project).

Pending regulatory approval, construction of the Project is anticipated to begin in summer 2019 to meet an in-service date of approximately January, 2020.

1.1 DESCRIPTION OF THE PROJECT

The existing natural gas pipeline is proposed to originate approximately 20 m south of Donald Street on St. Laurent Boulevard, continuing north on St. Laurent Boulevard and ending approximately 20 m north of Montreal Road. The pipeline will remain tied into Enbridge's existing network.

The pipeline route is planned to be located mainly within a municipal road ROW, and will require short tie-ins to the existing network at road intersections of St. Laurent Boulevard and McArthur Avenue, Coté Street, and Noranda Street.

Normal depth of ground cover over the pipeline will be approximately 1.2 m; however, it may be installed deeper to provide additional protection in areas where it crosses underneath existing infrastructure (e.g., roads, sewers, rail lines) and other sensitive socio-economic features (e.g., heritage buildings).

Temporary working space and laydown areas will be required adjacent to the proposed location of the pipeline to facilitate the movement and storage of equipment necessary for construction. Enbridge will work with regulators and landowners to identify and secure appropriate working space, as required.

1.2 PROJECT NEED AND JUSTIFICATION

Enbridge has identified the need to replace the existing pipeline on St. Laurent Boulevard due to current pipe conditions and to better serve 140 customers by transferring customers to an IP system.

1.3 ENVIRONMENTAL AND CUMULATIVE EFFECTS ASSESSMENT

Dillon undertook a Study to select a Preliminary Preferred Route (PPR) for the proposed pipeline and to identify any potential environmental and/or socio-economic impacts that the Project could have on the existing environment. Mitigation measures designed to minimize environmental and socio-economic impacts were also developed as part of the Study. The Study results have been documented in this ER, which conforms with the OEB's *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (7th Edition, 2016).

1.4 REGULATORY FRAMEWORK

The Study was prepared to meet the requirements of the OEB. More information on the OEB process is provided below.

1.4.1 Ontario Energy Board

The Project is being planned in accordance with OEB regulations. The OEB acts as a regulatory body to protect the public interest, to determine that the Project is necessary and to ensure that Enbridge obtains the necessary approvals for health, safety and environmental standards and regulations.

In order to gain approval from the OEB, the ER must document that municipal, provincial, and federal agencies, as well as the concerns of Indigenous communities, were considered. In addition, concerns identified by landowners and the public must also be addressed.

Once complete, the ER is circulated to the Ontario Pipeline Co-ordinating Committee (OPCC). The OPCC coordinates the Ontario government's review of natural gas facility projects in Ontario that require approval from the OEB. Its goal is to minimize environmental impacts that could arise from projects by reviewing environmental and routing reports.

If requested, the ER is also circulated to landowners adjacent to the Preferred Preliminary Route (PPR) and to interest groups, such as municipalities, Indigenous communities and conservation authorities. Where possible, all outstanding issues are resolved prior to submission to the OEB.

The OEB may order a written or oral hearing, based upon the complexity of the Project and the level of public concern. Enbridge plans to file a "Leave-to-Construct" Application with the OEB in the spring of 2019. If approved by the OEB, Project construction is planned to start in summer 2019, to meet an in-service date of January, 2020.

1.4.2 Canadian Environmental Assessment Act

Federal government involvement under the *Canadian Environmental Assessment Act, 2012 (CEAA)* is sometimes required for pipeline projects. Federal government involvement can take many forms, however it often involves the granting of an easement or permit should federally-owned land be required to facilitate construction of the pipeline.

Under *CEAA, 2012*, projects that require federal screenings are restricted to those that are identified as "designated projects" as prescribed under *CEAA's* Regulations Designating Physical Activities. The Project is not identified on this list and as such *CEAA* does not apply.

1.4.3 Other Permits, Approvals and/or Notifications

Other notifications, permits and approvals may be required for the Project, as shown in Table 1. An appropriate amount of time should be scheduled to obtain all necessary permits and approvals prior to construction.

Table 1: Other Notifications, Permits and Approvals

| Agency | Notification/Permit/Approval |
|---|---|
| Ministry of Tourism, Culture and Sport (MTCS) | <p>§ Archaeological clearance under the <i>Ontario Heritage Act, 1990</i> is required prior to any ground disturbances and/ or site alterations. A Stage 1 Archaeological Assessment was completed and forwarded to the MTCS for review on March 22, 2019. A copy of the report is included in Appendix A1.</p> <p>§ A MTCS Heritage Checklist was completed to determine if protected heritage properties are present within the Study Area. The checklist review identified a cemetery and buildings over 40 years of age (e.g. Rideau High School, 1957) within the Study Area, but no cultural heritage resources are located within the existing ROW where the replacement pipeline will be installed. Therefore, a Heritage Impact Assessment is not required for this Project. The Cultural Heritage Checklist has been included in Appendix A2.</p> <p>§ A permit to secure easement for installation of the pipeline in a designated road ROW and for crossing of other infrastructure (e.g., water mains, sewers).</p> <p>§ A Road Cut Permit as per City of Ottawa By-Law No. 2003-445 is required before anyone can undertake a road cut, which is defined as: a surface or subsurface cut in any part of a highway made by any means, including excavation, reconstruction, cutting, overlaying, crack sealing, braking, boring, jacking or tunnelling operations.</p> |
| Local Municipalities § City of Ottawa | <p>§ A noise by-law exemption if work is to be completed outside of permitted hours outlined in City of Ottawa Noise By-Law No. 2017-255.</p> <p>§ Authorization from the General Manager of the City of Ottawa's Department of Transportation, Utilities and Public Works or authorized representative to injure and/or remove trees as per City of Ottawa By-Law No. 2003-445.</p> <p>§ Authorization from the Director of the City of Ottawa's Department of Surface Operations of the Public Works and Services Department of the City of Ottawa or authorized designate to injure and/or remove trees as per City of Ottawa By-Law No. 2006-279.</p> |

2.0 STUDY PROCESS

The study process followed two main phases including:

- § Phase 1: Identification of Study Areas and environmental inventory; and,
- § Phase 2: Environmental Impact Study and mitigation along the Preferred Route (PR).

Stakeholder consultation and engagement with Indigenous communities and the public was conducted throughout the Study.

The Study process is illustrated in Figure 1 and described in the following section.

Figure 1: Environmental Study Process

EA PROCESS AND CONSULTATION FLOW CHART



2.1 STUDY METHODOLOGY

The study methodology was designed to achieve the following objectives:

- § Select Study Area;
- § Collect environmental and socio-economic data which could be used to evaluate the route;
- § Provide opportunities for Indigenous communities, agencies, potentially affected landowners and the general public to provide their comments; and,
- § Identify and recommend environmental protection and mitigation measures to be undertaken during pipeline construction.

Typically, the Study process includes the consideration of an alternative route(s) in order to ultimately select a PR for a Project. However, as this is a pipeline replacement project and existing customers need to be serviced along St. Laurent Boulevard, alternative options were not identified.

The study was conducted between December, 2018 and February, 2019.

2.1.1 Phase 1: Identification of Study Area and Environmental Inventory

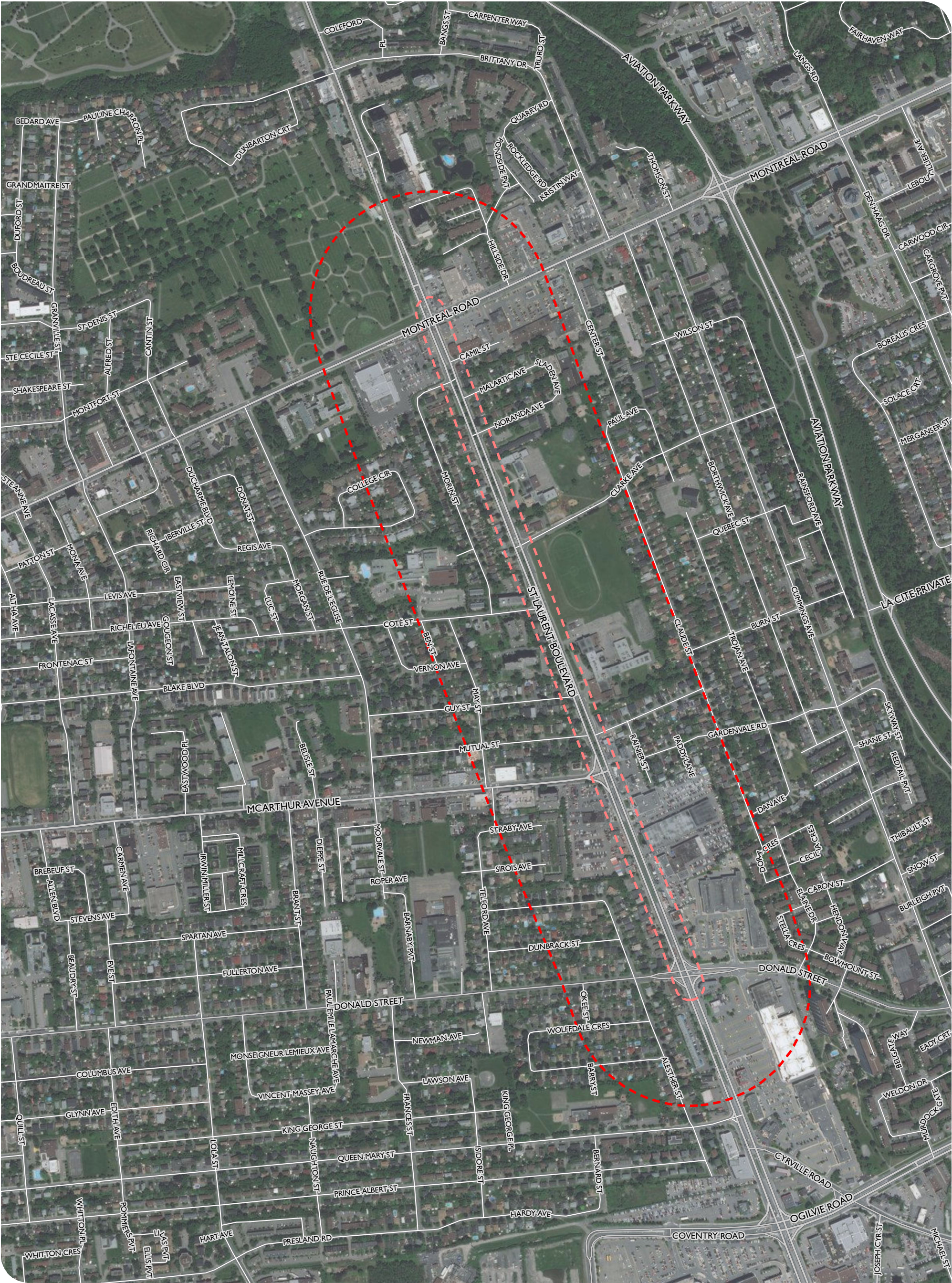
The first step of Phase 1 involved identifying the Study Area. The Study Area boundaries were determined based on the pre-established start and end points of the replacement pipeline and include areas that are most likely to be directly or indirectly affected by the Project. As mentioned, no routing assessment was completed or warranted for the Project since the pipeline will continue to service customers off of St. Laurent Boulevard.

To address potential impacts on indirectly affected stakeholders and landowners, Dillon conducted desktop studies that encompassed 250 m on either side of the PR for a total width of 500 m. The desktop Study Area is shown on Figure 2.

An environmental and socio-economic constraints inventory and a features mapping exercise was first undertaken as a preliminary desktop study. Dillon mapped features based on both primary and secondary sources, contact with local, provincial and federal agencies (including conservation authorities), and discussions with those in attendance at public open houses. Mapping features generally included topographical features, natural environment features, natural hazard information, and land use plans, in accordance with OEB Guidelines and previous experience conducting studies of a similar nature.



The purpose of collecting applicable data to compile features mapping was to assist the Study team, Enbridge, the public, regulatory agencies and interested parties in understanding how the environment may be affected by the Project. Feature maps serve as the baseline for route evaluation and for assessing the potential impacts resulting from construction and/or operation of the pipeline.

To confirm potential impacts on directly affected stakeholders and landowners, Dillon undertook a field program that encompassed 30 m on either side of the proposed route (centreline) for a total width of approximately 60 m (Figure 2). This was done to encompass the permanent pipeline easement as well as potential temporary work space required to accommodate pipeline construction (i.e., the Project footprint).



ENBRIDGE GAS INC.
ST. LAURENT
PIPELINE PROJECT

PROPOSED PIPELINE
PROJECT STUDY AREA
FIGURE 2

-  Field Work Study Area (30 m radius around Preferred Route)
-  Study Area (250 m radius around Preferred Route)




MAP DRAWING INFORMATION:
DATA PROVIDED BY MNRF, CITY OF OTTAWA

MAP CREATED BY: GM
MAP CHECKED BY: WM
MAP PROJECTION: NAD 1983 UTM Zone 18N

0100200400 m

1:7,500



PROJECT: 18xxxxSTATUS: DRAFTDATE: 2019-04-08

2.1.1.1. DATA SOURCES

Primary and secondary source data was collected and used to develop the environmental and socio-economic baseline conditions for the Project. Primary sources include data retrieved during site reconnaissance and field studies, and secondary sources include data obtained through the review of electronic databases, published reports, existing literature, journals, information letters, and information received from Project stakeholders. Proper record-keeping practices were exercised to maintain data and results for future use. Methods used to retrieve information included internet research and correspondence with agencies and other stakeholders. A list of key secondary sources is included in Table 2 below.

Table 2: Key Records and Sources Reviewed

| Source | Records Reviewed |
|---|---|
| PROVINCIAL GOVERNMENT | |
| Natural Heritage Information Centre (NHIC, 2015a), online data accessed January 2019 | <p>GIS Database for species of conservation concern – uses 1 km squares based on the military grid reference system (MGRS).</p> <p>§ Biodiversity Explorer</p> <ul style="list-style-type: none"> ○ Rare species ○ Rare plant communities ○ Natural areas ○ Invasive species ○ Wildlife Concentration Areas <p>§ Ontario Herpetofaunal Summary Atlas</p> <p>§ Ontario Odonata Atlas</p> <p>List of NHIC Squares: 18VR4930, 18VR4931, 18VR4932, 18VR5030, 18VR5031.</p> |
| Ministry of Natural Resources and Forestry Species at Risk in Ontario List (2008), accessed January 2019 | Accessed to determine status of wildlife species as a species of conservation concern or a SAR. |
| Provincial Policy Statement, 2014 | Policies related to the natural environment. |
| FEDERAL GOVERNMENT | |
| Species at Risk Public Registry, accessed January 2019 | Accessed to determine status of wildlife species as a species of conservation concern or a SAR. |
| Fisheries and Oceans Canada Aquatic Species at Risk Map, 2018, online mapping resources accessed January 2019 | Online Aquatic SAR Map. |
| CONSERVATION AUTHORITY | |
| Rideau Valley Conservation Authority | <p>§ Ontario Regulation 174/06.</p> <p>§ Online Regulated Area mapping reviewed.</p> |
| MUNICIPALITY | |
| City of Ottawa Official Plan, 2003 | Relevant policies and schedules. |

| Source | Records Reviewed |
|---|--|
| WILDLIFE ATLASES | |
| Ontario Breeding Birds Atlas (OBBA, 2001) - online data accessed January 2019 | List of Breeding Bird occurrences for Squares 18VR43 and 18VR53. |
| Reptile and Amphibian Atlas accessed via Ontario Nature January 2019 | List of Reptile and Amphibian Species occurrences for Squares 18VR43 and 18VR53. |
| Atlas of Mammals of Ontario – Dobbyn, J. (1994) | Distribution data for mammals. |
| Ontario Butterfly Atlas via Ontario Nature June 2017 | Online Butterfly Atlas reviewed. |

2.1.2 Phase 2: Environmental Impact Study and Mitigation along the Preferred Route

Phase 2 of the process involved a detailed assessment of environmental and socio-economic effects (during construction and operation) and mitigation measures along the PR. The objective of the effects assessment was to:

- § Predict and analyze the nature and extent of Project effects;
- § Identify mitigation measures to protect valued components; and,
- § Determine the significance of any effects remaining following mitigation (i.e., net effects), including the significance of combined effects (where applicable).

Criteria were used to assess the significance of potential net effects. For the purposes of this assessment, a “significant net effect” is the high probability of occurrence of a permanent or long-term residual effect of high magnitude that cannot be technically or economically mitigated.

Mitigation measures were identified that conform to Enbridge’s *Construction and Maintenance Manual, 2017*, as well as the relevant permitting authority requirements including the OEB. The development of the mitigation measures was also based on Dillon’s professional experience and field study, feedback received as part of the consultation program, industry best practices and guidelines provided by local conservation authorities and other agencies, and the Canadian Association of Petroleum Producers’ Pipeline Associated Watercourse Crossings (3rd Edition).

Pending regulatory approval, Enbridge plans to begin construction of the proposed pipeline in summer 2019. Construction will likely take approximately four to six months from ground preparation to clean-up, weather permitting. Construction will involve a number of distinct steps that may have some environmental impacts. These steps typically include (Appendix B):

- § ROW Preparation: Involves staking the pipeline location, identifying where other utilities are located, clearing vegetation (only as required), sweeping for wildlife, placing wildlife exclusion fencing (as required) and grading to allow for the movement of equipment and preparation of workspace. In vegetated areas, topsoil along the ROW is stripped and stored in piles for replacement after construction. Crews re-stake the centre point of trench line/route.
- § Pipe Delivery and Pipe Preparation: Trucks will deliver pipes in sections to avoid having to stack large quantities of pipe. Crews will layout or string sections of the pipe along the ROW.
- § Joining Pipe Sections: Pipes are then fused into one long piece, following the contour of the land. Crews will inspect the joints to confirm the integrity of the joint.

- § Trenching/HDD: Pipeline is installed via open trench or trenchless construction methods. Backhoes are used to dig trenches along staked points. Excavators are also used during this process. Entry and exit pits will be identified for specific trenchless construction activities.
- § Lowering the Pipe: Crews use side booms/cranes to lower the pipe into the trench or through the drilled passage.
- § Backfilling: Excavated material is replaced and large stones are removed from the backfill to prevent pipeline damage. Subsoil and topsoil are then laid over the trench. Anything disturbed by construction (such as fences and pavement) is repaired or replaced. Vegetative cover is replaced by sodding or seeding where required.
- § Testing: The new pipeline will be nitrogen tested. The pipeline is sealed then pressurized with nitrogen and tested at a pressure higher than actual operating pressures. Nitrogen tests check for leaks and confirm pipeline strength.
- § Clean-up: The construction area is carefully cleaned up after the trench/drill hole is completed or backfilled. All construction material and equipment is removed when construction is completed. Final grading of the area is done and excess soil is also removed. Slope stability and re-establishment of vegetation is carefully monitored following construction. Enbridge will complete any reclamation work necessary following pipeline construction.

Temporary facilities for the purpose of the Project may include equipment staging areas, soil stockpile areas, temporary bridges to facilitate watercourse crossings and temporary access roads. Temporary facilities will be required prior to, and during, the construction period. The location of the temporary facilities will be determined by Enbridge and their contractor during construction planning.

Field work completed for the Project included lands located approximately 30 m on either side of the road ROW and can be used to site temporary facilities. When siting temporary facilities, the following criteria should be used to minimize environmental and socio-economic impacts:

- § Identify locations within previously disturbed areas;
- § Select locations close to the area of construction to minimize ground disturbance;
- § Avoid areas with native vegetation;
- § Avoid areas with known cultural heritage/archaeological resources; and,
- § Avoid residential receptors, to the extent possible.

An interaction matrix was developed to identify potential Project interactions with the environment. The matrix was used to guide the assessment and identify applicable features that could potentially be impacted by the Project (Table 3).

Table 3: Interaction Matrix

| Feature | Interaction (Y/N) | Description of Potential Interaction(s) | Description of Potential Effects | Can it be Mitigated (Y/N/Not Applicable) |
|---|-------------------|--|---|--|
| Physiography, Topography, and Surficial Geology | Y | § General construction activities. | § Soil removal, soil erosion. | Y |
| Groundwater | Y | § General construction activities. § Dewatering activities. | § Short-term disruption or alterations to natural groundwater levels and flow patterns resulting from dewatering. | Y |

| Feature | Interaction (Y/N) | Description of Potential Interaction(s) | Description of Potential Effects | Can it be Mitigated (Y/N/Not Applicable) |
|--|-------------------|--|---|--|
| Bedrock | N | § No effects anticipated. | | Not Applicable |
| Seismicity | N | § No effects anticipated. | | Not Applicable |
| Atmospheric Resources | Y | § General construction activities. | § Increase of localized fugitive dust emissions. § Increase in criteria air contaminants emissions. § Temporary and transitory increase in greenhouse gases. | Y |
| Wetlands | N | § No wetlands are present within the Study Area; therefore no effects are anticipated. | | Not Applicable |
| Areas of Natural and Scientific Interest | N | § The St. Laurent / Montreal Road Earth Science ANSI occurs within the fringe of the Study Area; However, the ANSI is located well beyond the limits of the proposed construction activities and therefore no effects are anticipated. | | Not Applicable |
| Surface Water, Fish and Aquatic Habitat | N | § No surface water is present within the Study Area therefore no effects anticipated. | | |
| Terrestrial Habitat and Vegetation | Y | § Vegetation clearing and grubbing. | § Changes to native vegetation composition. § Invasive species and/or weed introduction and spread. § Root damage. § Alteration and removal of marginal terrestrial habitat. | Y |
| Wildlife, Significant Wildlife Habitat and Species at Risk | Y | § General construction activities. § Vegetation clearing and grubbing. | § Impacts on wildlife and bird nesting. § Sensory disturbance from construction noise. § Wildlife injury or mortality. | Y |
| Soils | Y | § General construction activities. § Grubbing, stripping, excavation. § Open trenching. § Loss of topsoil through wind erosion. § Loss of topsoil through surface water erosion. § Soil compaction and rutting. | | Y |

| Feature | Interaction (Y/N) | Description of Potential Interaction(s) | Description of Potential Effects | Can it be Mitigated (Y/N/Not Applicable) |
|---|-------------------|---|--|--|
| Existing and Planned Land Use | N | § No effects anticipated. | | Not Applicable |
| Existing Linear Infrastructure Corridors and Other Infrastructure | Y | § Potential to disrupt existing utility infrastructure. | | Y |
| Population Demographics | N | § No effects anticipated. | | Not Applicable |
| Economic Activities, Employment and Labour Force | N | § No effects anticipated. | | Not Applicable |
| Tourism and Recreation | Y | § General construction activities. | § Temporary and transitory visual nuisance to nearby recreational activities. | Y |
| Indigenous Communities | Y | § General construction activities. | § Potential to affect traditional land and/or resources. | Y |
| Archaeological and Heritage Resources | Y | § General construction activities. | § Damage to, or the loss of, previously unidentified significant archaeological or other heritage sites. | Y |
| Community Services | Y | § General construction activities. | § Temporary impacts to traffic and access to the St. Laurent Complex Community Centre from St. Laurent Boulevard | Y |
| Potentially Contaminated Sites | Y | § General construction activities. | § Potential to encounter contaminated soils. | Y |
| Planning Policies | N | § No effects anticipated. | | Not Applicable |

| Feature | Interaction (Y/N) | Description of Potential Interaction(s) | Description of Potential Effects | Can it be Mitigated (Y/N/Not Applicable) |
|---|-------------------|---|---|--|
| Accidents and Malfunctions | Y | § Equipment failure and accidental spill of hazardous materials during construction, operation, or decommissioning. § Pipeline failure during operation resulting in an accidental release of gas. | § Leaks from equipment and machinery or other spills causing contamination of soils and/or water. § Pipeline failure resulting in adverse effects to surrounding area. | Y |
| Effects of the Environment on the Project | Y | § Various environmental conditions including climate change, extreme weather incidents and seismic activity. | § Delay in construction. § Damage to facilities. | Y |

2.1.2.1 CUMULATIVE EFFECTS ASSESSMENT

A cumulative effects assessment was completed for the potential effects identified in Table 3. The main difference between determining the significance of project-specific effects versus cumulative effects is the consideration and interaction of the effects of other projects with the potential effects of the proposed Project. For the purposes of the assessment, cumulative effects are defined as:

- § The combination and interaction of effects of the same project;
- § The combination and interaction of the effects of this project with other projects; and,
- § The combined effects over time in the same space.

Cumulative effects assessment recognizes that while a particular project may not have a significant impact on the natural or social environment on its own, multiple projects of a similar nature that occur in the same area and over a similar period of time may cause more significant impacts. An example of a social impact from a cumulative effects perspective is the construction of multiple utility facilities (i.e., telephone lines, natural gas pipelines, hydro transmission lines) and regular maintenance in the same road ROW within a short timeframe (i.e., within a year). While the potential noise, dust, traffic disruption and other construction impacts may be acceptable from a social standpoint for one project, cumulatively, they may be unacceptable and could potentially impact business operations and/or reduce the enjoyment of personal property if the effects are not managed appropriately. In an effort to reduce the potential for cumulative effects, Enbridge may coordinate their construction schedule with the local municipality.

The cumulative effects assessment is discussed further in Section 6.

2.2 STAKEHOLDER AND INDIGENOUS CONSULTATION

Stakeholder and Indigenous consultation and engagement are an important component of the Project. Early and frequent consultation with directly and indirectly affected property owners, government agencies, Indigenous communities and the public was an integral part of this study. The objectives of the consultation process were to:

- § Identify all potentially affected parties;
- § Provide information to the parties on relevant components of the Study;

- § Obtain input from these parties; and,
- § Integrate information received into the decision-making process.

A number of methods were completed to achieve these objectives, including:

- § Identification of key community members and interest groups during the Study Area definition phase including conservation authorities, school boards and schools, utility companies, government agencies, as well as directly and indirectly impacted landowners;
- § Preparation and completion of a comprehensive stakeholder consultation program;
- § Circulation of notices via Canada Post to over 6,400 residents, businesses and public buildings (i.e., schools and City of Ottawa services) within 500 m of the PR;
- § Advertisements in the local newspaper introducing the Study and providing notices of public meetings to discuss the Project and PR;
- § Development of a project website to provide project information;
- § Two public open house meetings to discuss the Project and review progress;
- § Receipt of and response to public input through letters, e-mails and phone calls;
- § Production and analysis of project questionnaires for the public meetings; and,
- § Circulation of information at key points in the process to all stakeholders including government agencies, Indigenous communities, residents and other interested parties.

The stakeholder consultation program also included early and frequent contact with regulatory agencies to provide or request information regarding the Project. Details of the stakeholder consultation program are provided in Section 4.

3.0 PHYSICAL, NATURAL AND SOCIO-ECONOMIC ENVIRONMENT SETTING

This section describes the existing physical, natural, and socio-economic environment setting for lands that are located within the Study Areas. Figure 3 identifies the natural and socio-economic features associated with the both Study Areas. It should be noted that, unless otherwise indicated, the term “Study Area” within this section refers to the Desktop Study Area, covering a radius of 250 from the PR.

3.1 PHYSICAL ENVIRONMENT

The physical environment section provides baseline information on the following features:

- § Physiography;
- § Topography;
- § Surficial Geology;
- § Groundwater;
- § Bedrock; and,
- § Seismicity.

More information is provided below on each component.

3.1.1 Physiography

The Study Area is located within the physiographic region of the Ottawa Valley Clay Plains (Chapman and Putnam, 1984). The physiographic region is characterized by post-Champlain Sea Deposits containing clayey abandoned river channel deposits with silt and silty clay as well as sand lenses underlain by unmodified marine clay (Chapman and Putnam, 1984). The Study Area lies over Upper Ordovician and Lower Ordovician bedrock consisting of shale, limestone, dolostone and siltstone (Ontario Geological Survey [OGS], 1991).

3.1.2 Topography

Topography is lower near the northwest portion of the Study Area, with the highest elevations noted near the southern extent of the Study Area near the intersection of Donald Street and St. Laurent Boulevard. As the Project footprint is located within a graded municipal road ROW along a busy section of St. Laurent Boulevard, no impacts to topography are anticipated.

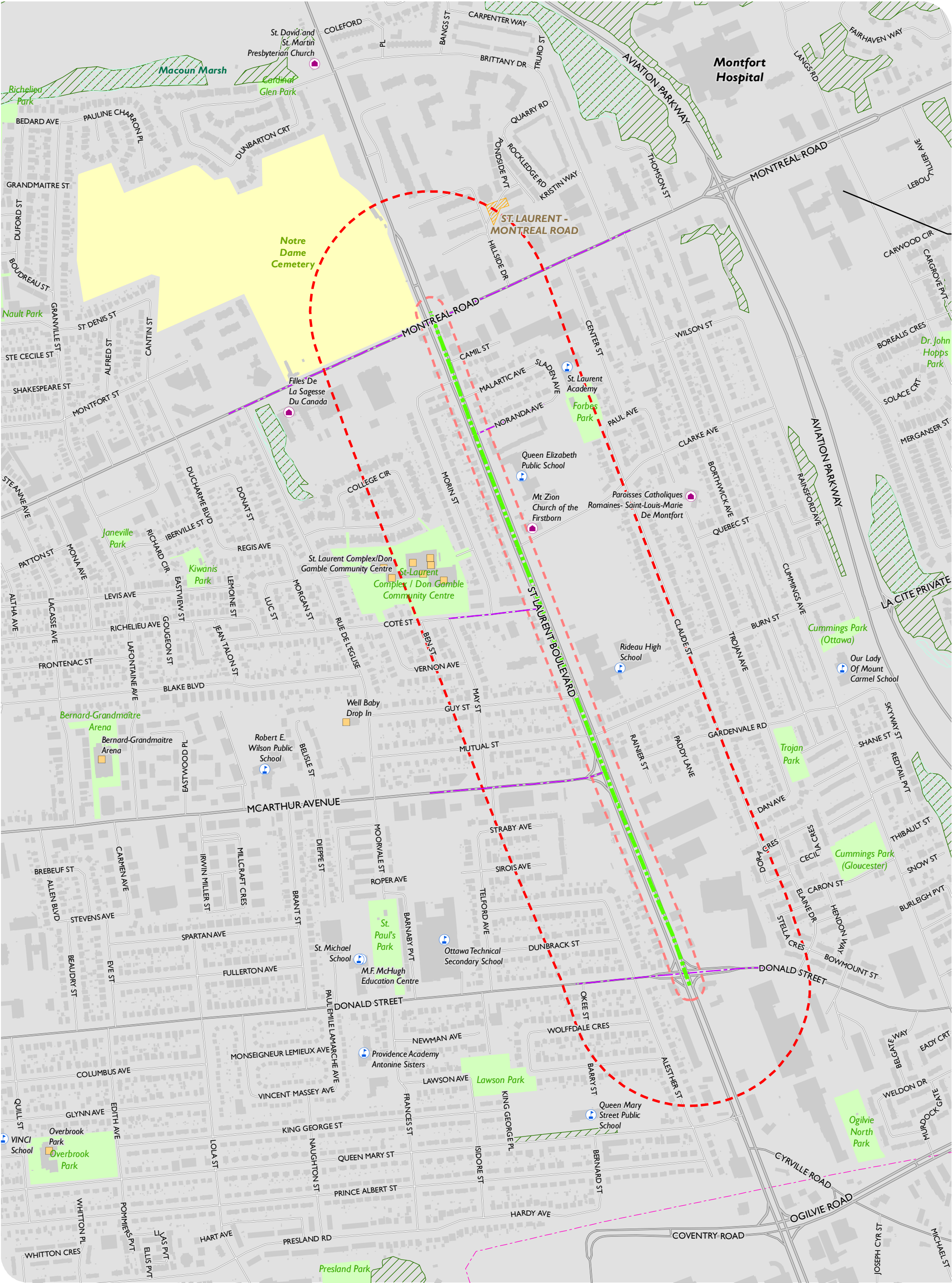
3.1.3 Surficial Geology

Surficial geologic mapping indicates that the PR lies within a mixed zone of Pleistocene-aged overburden deposits, composed of the following soil types:

- § Fine-textured glaciolacustrine deposits composed of silt and clay and stone-poor sandy silt to silty sand textured till, often described as massive and well laminated; and,
- § Older alluvial deposits composed of clay silt, sand, gravel that may contain organic remains.

In addition, a small pocket of Paleozoic bedrock occurs within the north extent of the Study Area.

Overburden thickness (i.e., the material above the bedrock) across the Study Area is consistently low and approximately less than 50 m thick (Ontario Geological Survey, 2007).



**ENBRIDGE GAS INC.
ST. LAURENT
PIPELINE PROJECT**

**PREFERRED ROUTE,
NATURAL ENVIRONMENT AND
SOCIO-ECONOMIC FEATURES
FIGURE 3**

- Field Work Study Area (30 m radius around Preferred Route)
- Study Area (250 m radius around Preferred Route)
- Place of Worship
- City Facility
- School
- Preferred Route
- Existing Enbridge Distribution Line
- Electrical Transmission Line

- Unevaluated Wetland
- ANSI, Earth Science
- Building Footprint
- Woodland
- Park
- Cemetery



MAP DRAWING INFORMATION:
DATA PROVIDED BY MNRF, CITY OF OTTAWA

MAP CREATED BY: GM
MAP CHECKED BY: WM
MAP PROJECTION: NAD 1983 UTM Zone 18N



PROJECT: 18xxxx STATUS: DRAFT DATE: 2019-04-08

3.1.4 Groundwater

The Study Area lies within the boundaries of the Rideau Source Protection Area, which is part of the larger Mississippi-Rideau Source Protection Area. Drinking water systems in this Source Protection Area include municipal and non-municipal systems of various sizes that draw raw water from both groundwater and surface water sources. The Mississippi-Rideau Source Protection Area comprises 12 municipal drinking water systems, and a number of private domestic wells throughout the area.

The clay, sand, silt and gravel deposits of glaciolacustrine origins are the main sources of groundwater within the catchment area.

Well information contained in the MECP Water Well Information System (WWIS) was reviewed in the vicinity of the PR to better understand local groundwater conditions.

There were a total of 38 well records located within 100 m of the PR. While a number of the records are described as water supply, it should be noted that the area is supplied by municipal water and any wells described as water supply exist as historic records from the 1940s and 50s and should not be considered potable water sources. The remaining more recent records are the result of test holes for soil sampling and monitoring well installments. Table 4 summarizes the reported well information for these wells. The wells identified within 100 m of the PR range in depth between 2.4 m below ground surface (mbgs) and 39.9 mbgs. Based on evaluation of the drilling contractors' notes contained in the well logs, groundwater was found at depths ranging from 1.5 mbgs and 39.9 mbgs in coarse-textured deposits surrounded by finer-textured deposit deposits. The variability in water levels observed between locations is likely a product of the wells being installed at different depths, and with different screen intervals, and potentially speaks to the presence of distinct aquifers within the different layers noted above. Bedrock was encountered in 14 of the well records located within 100 m of the PR.

Table 4: Water Well Record Locations within 100 m of the PPR

| Well ID | Ground Elevation (masl) | Static Level (mbgs) | Static Elevation (masl) | Well Depth (mbgs) | Depth to Bedrock (mbgs) | Water Found (mbgs) | Well Description |
|---------|-------------------------|---------------------|-------------------------|-------------------|-------------------------|--------------------|--------------------------|
| 7184917 | 68.3 | N/A | N/A | 7.2 | N/R | N/A | Monitoring and Test Hole |
| 1500383 | 69.6 | 1.2 | 67.4 | 23.8 | 2.7 | 23.7 | Water Supply |
| 1508453 | 72.4 | 3.7 | 68.7 | 30.5 | 3 | 24.3 | Water Supply |
| 7191557 | 70.0 | N/A | N/A | 4 | N/R | N/A | Test Hole |
| 7186448 | 69.9 | N/A | N/A | 3.1 | N/R | N/A | Observation Wells |
| 1500386 | 71.4 | 2.4 | 69 | 21.3 | 4.3 | 16.1 | Water Supply |
| 7263803 | 72.5 | N/A | N/A | 7 | N/R | N/A | Monitoring and Test Hole |
| 1500390 | 69.3 | 1.8 | 67.5 | 19.8 | 6.7 | 16.7 | Water Supply |
| 1500379 | 68.2 | 3 | 65.2 | 24.4 | 6.7 | 21.3 | Water Supply |
| 7191556 | 69.9 | N/A | N/A | 7.6 | N/R | N/A | Test Hole |
| 1500382 | 72.2 | 3 | 69.2 | 26.5 | 7.6 | 23.4 | Water Supply |
| 7052467 | 71.8 | N/A | N/A | 4.6 | N/R | N/A | Test Hole |

| | | | | | | | |
|---------|------|-----|------|------|-----|------|--------------------------|
| 7290015 | 69.2 | N/A | N/A | 7.6 | N/R | N/A | Observation Wells |
| 1500387 | 68.6 | 3 | 65.6 | 24.4 | 6.1 | 21.3 | Water Supply |
| 1501133 | 72.4 | N/A | N/A | 26.2 | 1.8 | 26.2 | Water Supply |
| 1500381 | 70.9 | 6.1 | 64.8 | 39.9 | 6.1 | 39.9 | Water Supply |
| 7185236 | 69.9 | N/A | N/A | 5.5 | N/R | N/A | Observation Wells |
| 1508880 | 68.2 | 6.4 | 61.8 | 24.4 | 6.7 | 20.7 | Water Supply |
| 7170701 | 72.1 | N/A | N/A | 3.1 | N/R | N/A | Monitoring and Test Hole |
| 7185237 | 69.9 | N/A | N/A | 2.4 | N/R | N/A | Test Hole |
| 7109370 | 67.4 | 5.8 | 61.6 | 0 | N/R | N/A | Test Hole |
| 7109370 | 67.4 | 5.9 | 61.5 | 0 | N/R | N/A | Test Hole |
| 7109370 | 67.4 | 5.9 | 61.5 | 0 | N/R | N/A | Test Hole |
| 7109370 | 67.4 | 6.6 | 60.8 | 0 | N/R | N/A | Test Hole |
| 7109370 | 67.4 | 5.7 | 61.7 | 0 | N/R | N/A | Test Hole |
| 7109370 | 67.4 | 6 | 61.4 | 0 | N/R | N/A | Test Hole |
| 7109370 | 67.4 | 5.9 | 61.5 | 0 | N/R | N/A | Test Hole |
| 7109370 | 67.4 | 5.7 | 61.7 | 0 | N/R | N/A | Test Hole |
| 1508452 | 72.3 | 3.7 | 68.6 | 30.5 | 4.9 | 24.3 | Water Supply |
| 7184919 | 68.5 | N/A | N/A | 7.3 | N/R | N/A | Monitoring and Test Hole |
| 7200484 | 69.8 | N/A | N/A | 4 | N/R | 1.5 | Observation Wells |
| 1508891 | 72.3 | 1.2 | 71.1 | 21 | 2.4 | 19.8 | Water Supply |
| 1500378 | 69.9 | 2.4 | 67.5 | 19.8 | 7.3 | 16.7 | Water Supply |
| 7170702 | 72.2 | N/A | N/A | 3.1 | N/R | N/A | Monitoring and Test Hole |
| 1501131 | 72.7 | 2.7 | 70 | 21.9 | 7 | 21.9 | Water Supply |
| 7264851 | 70.8 | N/A | N/A | 13.7 | N/R | N/A | Monitoring and Test Hole |
| 7184918 | 68.3 | N/A | N/A | 8.1 | N/R | N/A | Monitoring and Test Hole |
| 7101184 | 71.8 | N/A | N/A | 9.5 | N/R | 5 | Test Hole |

N/R indicates depth to bedrock not reported or bedrock surface not encountered.

N/A indicates information not available in well record.

The construction and operation of a natural gas pipeline is not identified as a drinking water threat under the *Ontario Clean Water Act*.

3.1.5 Bedrock

Underlying the overburden soils in the Study Area are a sequence of upper Ordovician-aged sedimentary rocks (Georgian Bay Formation, Blue Mountain Formation, Billings Formation, Collingwood Member and Eastview Member). These bedrock formations are characterized by shale, limestone, dolostone and

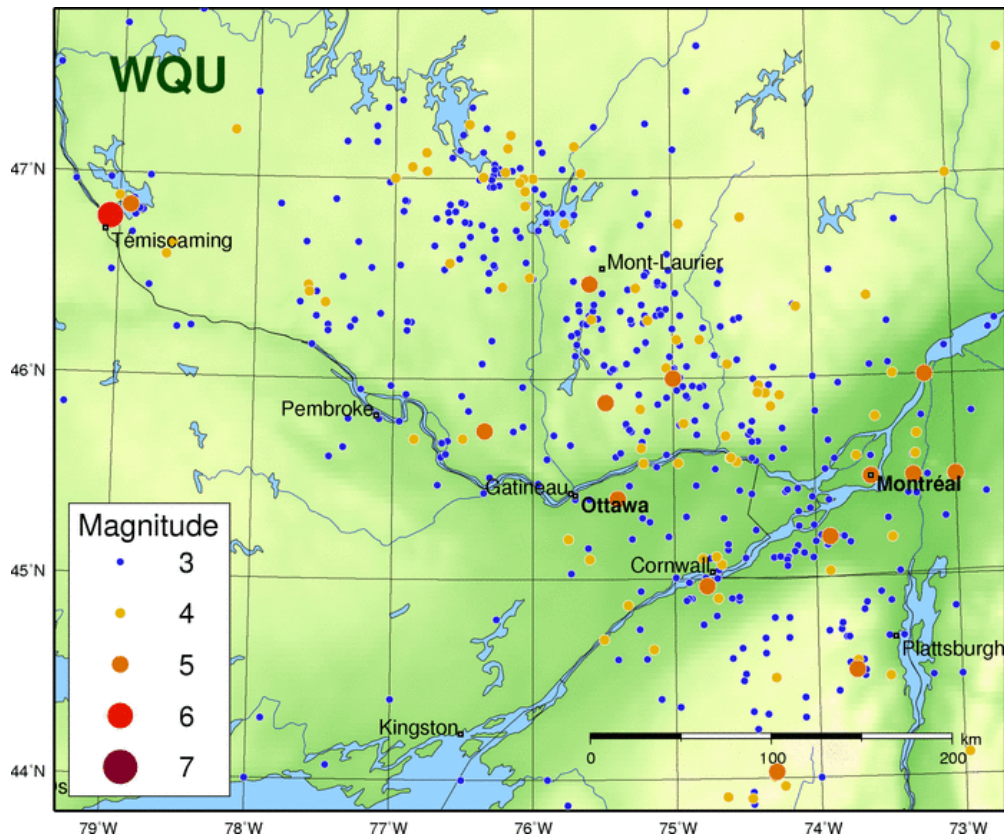
siltstone (OGS, 1991). Because the Project involves replacing an existing pipeline, bedrock is not expected to be encountered during pipeline construction.

3.1.6 Seismicity

Shifting of large sections of the earth's crust (tectonic plates) has the ability to cause severe earthquakes. Central and Eastern Canada is located in a stable continental region within the North American Plate and has a relatively low rate of earthquake activity (Natural Resources Canada [NRCan], 2016).

A review of seismic activity in the area was undertaken to determine the potential for impact to the Project once constructed. The review revealed that the Study Area is located within the Western Quebec Seismic Zone as depicted in Figure 4 below.

Figure 4: Location of Study Area in Western Quebec Seismic Zone



Source: NRCan, 2016

This region encompasses a vast territory that encloses the Ottawa Valley from Montreal to Temiskaming, as well as the Laurentians and Eastern Ontario. Seismic activity records since the beginning of the century indicate concentrations of earthquakes within two sub-zones: one along the Ottawa River and the second along a more active Montreal-Maniwaki axis (NRCan, 2016).

Three significant sized (magnitude 5 to 6) events have occurred in the 280 years of European settlement of this region, all of them outside of Ottawa - 1732, Montreal, Quebec; 1935, in the area of Temiskaming, Ontario; and 1944, between the Cornwall, Ontario and Massena, New York (NRCan, 2016).

3.2 NATURAL ENVIRONMENT

The following section provides baseline information for the following features:

- § Atmospheric Environment;
- § Surface Water and Aquatic Habitat;
- § Provincially Significant Wetlands (PSWs);
- § Areas of Natural and Scientific Interest and other Environmentally Sensitive Areas;
- § Terrestrial Habitat and Vegetation; and,
- § Wildlife and Wildlife Habitat;

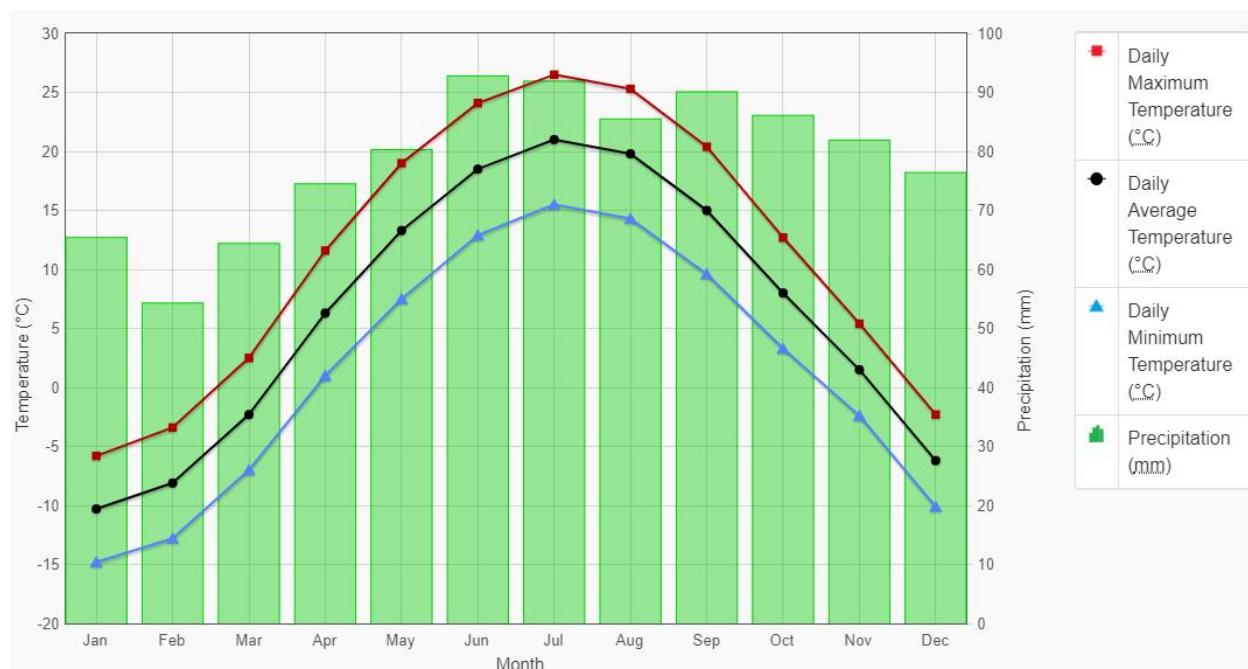
More information is provided on each component below.

3.2.1 Atmospheric Environment

3.2.1.1 CLIMATE

Climate averages are commonly used to describe the climatic conditions of a particular location in Canada. At the end of each decade, Environment Canada updates its climate averages for several locations across Canada and for as many climatic characteristics as possible. The climate averages and extremes are obtained from Canadian climate stations with at least 15 years of data between 1981 and 2010 (Environment Canada, 2017). Figure 5 provides data for the City of Ottawa area for temperature and precipitation on a monthly basis.

Figure 5: Temperature and Precipitation Graph for 1981 to 2010 Canadian Climate Normals for the City of Ottawa



Source: Environment Canada, 2018

3.2.1.2 AIR QUALITY

According to the MECP, overall air quality in Ontario has improved significantly over the 2007-2016 decade due to a substantial decrease in harmful pollutants such as nitrogen dioxide, sulphur dioxide and carbon monoxide that are emitted by vehicles and industry. There has also been a significant decrease in fine particulate matter which is emitted directly into the atmosphere as a by-product of fuel combustion or formed indirectly in the atmosphere through a series of complex chemical reactions. Fine particulate matter includes aerosols, smoke, fumes, dust, fly ash and pollen, and can have various negative health effects, especially on the respiratory system (MECP, 2018).

3.2.2 Surface Water and Aquatic Habitat

The Study Area is located within the Rideau River – Rideau Falls Catchment part of the Lower Rideau River Subwatershed which is managed by the Rideau Valley Conservation Authority (RVCA). RVCA manages the Rideau Watershed that is comprised of six sub-watersheds that in total span 4,234 km² from the Ottawa River in the north to Wolfe Lake and Upper Rideau Lake in the south, through the townships and communities of Manotick, North Gower, Smiths Falls, Merrickville, Perth and Westport.

The Rideau River – Rideau Falls Catchment is the final catchment through which the Rideau River flows. The City of Ottawa occupies the confluence of the Rideau River and the Ottawa River. Consequently, the catchment and the larger subwatershed of the Lower Rideau is the most densely-populated and urban of all the Rideau subwatersheds. Starting at Burritts Rapids (and the junction with the Middle Rideau subwatershed), the Lower Rideau flows through the farming communities in North Grenville and the former Osgoode and Rideau Townships, past the suburbs of Manotick, Barrhaven, and Riverside South before splitting from the Rideau Canal at Hogs Back. The river continues through the heart of the city and over the Rideau Falls to the Ottawa River (RVCA). The total length of the Rideau River within the Lower Rideau River Subwatershed measures approximately 70 km (RVCA). The dominant land use within the Rideau River – Rideau Falls Catchment is settlement, with low percentages of natural environment cover comprising of approximately 7% forest cover and less than 1% wetland cover.

Following the combination of a comprehensive desktop review and a field visit, it was determined that no surface water or aquatic habitat exists within the Study Area.

3.2.3 Provincially Significant Wetlands

A review of available mapping indicated that no PSWs exist within and/or adjacent to the Study Area.

3.2.4 Areas of Natural and Scientific Interest and Other Environmentally Significant Areas

A review of available mapping revealed the St. Laurent / Montreal Road Earth Science Area of Natural and Scientific Interest (ANSI) occurs within the northeast portion of the Study Area. This feature is currently developed with businesses and residential buildings.

3.2.5 Terrestrial Habitat and Vegetation

A field survey and concurrent high-level Ecological Land Classification (ELC) was conducted using the ELC System for Southern Ontario (Lee et al., 1998) in order to classify and map ecological communities within the Field Work Study Area, covering a radius of approximately 30 m around the PR. The ecological community boundaries were determined through the review of aerial photography and then further refined through an on-site survey.

ELC surveys conducted on February 5, 2019 identified one naturalized classification and four cultural classifications along the PR. The only naturalized classification was fencerow (TAGM5) occurring in between highly urbanized properties. The remaining classifications were indicative of the highly urbanized landscape and include: high density residential (CVR_2), business sector (CVC_1), education (CVC_4), green lands (cemetery) (CGL), No rare vegetation communities or plant species considered as endangered or threatened under the ESA, 2007 were observed.

In total, 27 plants were documented during the field survey. Of the 27 species, approximately 48% are listed as native species considered to be common (S4) to very common (S5) in the province of Ontario; 4% were considered imperiled (S2) and approximately 33% are listed as introduced species, therefore a status ranking is not applicable as the species is not a suitable target for conservation activities (SNA rank). The remaining 15% were not identified to species level and therefore, a status ranking was not applicable. The 4% of the species considered imperiled in the province of Ontario solely included streetscape Honey Locust (*Gleditsia triacanthos inermis*). Vegetation observed during the field survey is included in Table 5.

Table 5: Vegetation Observed During ELC Surveys in 2019

| Scientific Name | Common Name | SARA ¹ | ESA ² | SRank ³ | Invasive Ranking ⁴ |
|--------------------------------------|---|-------------------|------------------|--------------------|-------------------------------|
| <i>Abies balsamea</i> | Balsam Fir | --- | --- | S5 | --- |
| <i>Acer negundo</i> | Manitoba Maple | --- | --- | S5 | 4 |
| <i>Acer platanoides</i> | Norway Maple | --- | --- | SNA | 6 |
| <i>Acer rubrum</i> | Red Maple | --- | --- | S5 | --- |
| <i>Fagus grandifolia</i> | American Beech | --- | --- | S4 | --- |
| <i>Fraxinus americana</i> | White Ash | --- | --- | S4 | --- |
| <i>Gleditsia triacanthos inermis</i> | Honey-locust | --- | --- | SNA | --- |
| <i>Juniperus virginiana</i> | Eastern Red Cedar | --- | --- | S5 | --- |
| <i>Malus sp.</i> | Apple species | --- | --- | --- | --- |
| <i>Phalaris arundinacea</i> | Reed Canary Grass | --- | --- | S5 | 9 |
| <i>Picea abies</i> | Norway Spruce | --- | --- | SNA | --- |
| <i>Picea glauca</i> | White Spruce | --- | --- | S5 | --- |
| <i>Pinus resinosa</i> | Red Pine | --- | --- | S5 | --- |
| <i>Pinus sylvestris</i> | Scotch Pine | --- | --- | SNA | 2 |
| <i>Quercus robur</i> | English Oak | --- | --- | SNA | --- |
| <i>Quercus rubra</i> | Northern Red Oak | --- | --- | S5 | --- |
| <i>Rhamnus cathartica</i> | Common Buckthorn | --- | --- | SNA | 9 |
| <i>Rubus sp.</i> | Rubus species | --- | --- | --- | --- |
| <i>Solanum dulcamara</i> | Climbing Nightshade or Bittersweet Nightshade | --- | --- | SNA | 4 |
| <i>Solidago sp.</i> | Goldenrod species | --- | --- | --- | --- |
| <i>Syringa vulgaris</i> | Common Lilac | --- | --- | SNA | 4 |
| <i>Thuja occidentalis</i> | Eastern White Cedar | --- | --- | S5 | --- |

| Scientific Name | Common Name | SARA ¹ | ESA ² | SRank ³ | Invasive Ranking ⁴ |
|---|--------------------|-------------------|------------------|--------------------|-------------------------------|
| <i>Tilia americana</i> | American Basswood | --- | --- | S5 | --- |
| <i>Tilia cordata</i> | Little-leaf Linden | --- | --- | SNA | 6 |
| <i>Ulmus davidiana</i> var. <i>japonica</i> | Prospector Elm | --- | --- | --- | --- |
| <i>Vicia cracca</i> | Tufted Vetch | --- | --- | SNA | --- |
| <i>Vitis riparia</i> | Riverbank Grape | --- | --- | S5 | --- |

1 – Status identified by the Committee on the Status of Endangered Wildlife in Canada under the federal SARA, 2002; 2 – SAR in Ontario List under the provincial ESA, 2007; 3 – Ontario SRank; S5 = secure; S4 = apparently secure; S3 = vulnerable; S2 = imperiled; SX = Extirpated; SH = Possibly Extirpated; SNA = non-native or exotic species to Ontario; 4 – Invasive Ranking as determined by the Invasive Exotic Plant Species Rankings for Southern Ontario (Draft - Urban Forest Associates/MNRF, 2014).

3.2.6 Wildlife and Wildlife Habitat

Based on a review of aerial photos and background resources, a limited amount of wildlife species were identified as having the potential to occur within the Study Area due to the highly urban nature of the area.

Species identified during the background review that are listed as *Endangered* or *Threatened* on the Species at Risk in Ontario List (SARO list) are discussed further in Section 3.2.7.

3.2.6.1 INCIDENTAL WILDLIFE OBSERVATIONS

Wildlife observed within and adjacent to the PR during the survey included birds and small mammals commonly adapted to urban landscapes. Individual streetscape trees, manicured grass and fencerows provide limited and marginal habitat for wildlife. Incidental wildlife species observed within the Field Work Study Area during the field survey are listed in Table 6 below. All species observed are common in the City of Ottawa and have an S-Rank of S5 or are listed as introduced species with an S-Rank of SNA.

Table 6: Incidental Wildlife Observations

| Scientific Name | Common Name | SARA ¹ | ESA, 2007 ² | SRank ³ | Evidence |
|--------------------------------|------------------------|-------------------|------------------------|--------------------|--------------------|
| Birds | | | | | |
| <i>Columba livia</i> | Rock Pigeon | --- | --- | SNA | Visual observation |
| <i>Corvus brachyrhynchos</i> | American Crow | --- | --- | S5B | Visual observation |
| <i>Passer domesticus</i> | House Sparrow | --- | --- | SNA | Visual observation |
| <i>Poecile atricapillus</i> | Black-capped Chickadee | --- | --- | S5 | Visual observation |
| Mammals | | | | | |
| <i>Sciurus carolinensis</i> | Eastern Gray Squirrel | --- | --- | S5 | Visual observation |
| <i>Tamiasciurus hudsonicus</i> | Red Squirrel | --- | --- | S5 | Visual observation |

1 – Status identified by the Committee on the Status of Endangered Wildlife in Canada under the federal SARA, 2002; 2 – SAR in Ontario List under the provincial ESA, 2007; 3 – Ontario SRank; S5 = secure; S4 = apparently secure; S3 = vulnerable; S2 = imperiled; SX = Extirpated; SH = Possibly Extirpated; SNA = non-native or exotic species to Ontario.

3.2.6.2 SIGNIFICANT WILDLIFE HABITAT

Wildlife habitat is defined as areas where plants, animals and other organisms live and have access to resources needed to sustain their populations (e.g., food, water), including specific areas that are important for species to carry out their life cycle (e.g., migratory species) (MNRF, 2010). Habitat is

considered Significant where it is “ecologically important in terms of features, functions, representation or amount, and contributing to the quality and diversity of an identifiable geographic area of Natural Heritage System” (MNRF, 2010).

Based on results from the 2019 field survey, and in accordance with the Ecoregion 6E Criterion Schedule (MNRF 2015), no Significant Wildlife Habitat was found to occur within and adjacent to the Study Area due to limited natural habitat available within the highly urbanized landscape.

3.2.6.3 SPECIES OF CONSERVATION CONCERN

The Significant Wildlife Habitat Technical Guide (MNRF, 2000) defines Species of Conservation Concern as globally, nationally, provincially, regionally, or locally rare (S-Rank of S2 or S3) but does not include Species at Risk (listed as Endangered or Threatened under the *ESA*, 2007). Due to the highly urbanized nature of the PPR Study Area, a limited number of Species of Conservation Concern were identified as potentially occurring within and adjacent to the Study Area.

Table 7 below provides a list of Species of Conservation Concern that have the potential to occur within the vicinity of the Study Area. None of the species listed were observed during the 2019 field survey.

Table 7: Species of Conservation Concern Identified with Potential to Occur within the Vicinity of the Study Area.

| Common Name | Scientific Name | SARA ¹ | ESA, 2007 ² | SRank ³ | Source of Occurrence Record ⁴ | Potential Habitat in the Study Area (Y/N) and Habitat Description | Species Observed in PPR Study Area |
|------------------|-------------------------|-------------------|------------------------|--------------------|--|--|------------------------------------|
| <i>Birds</i> | | | | | | | |
| Common Nighthawk | <i>Chordeiles minor</i> | THR | SC | S4B | OBBA | Flat rooftops with gravel occur within the Field Work Study Area; however, it is not anticipated that buildings will be disturbed as a result of the Project. | No |
| Peregrine Falcon | <i>Falco peregrinus</i> | SC | SC | S3B | CBC, MNRF | Yes, tall buildings and urban environments occur within the Field Work Study Area; however, it is not anticipated that buildings will be disturbed as a result of the Project. | No |

1 – Status identified by the Committee on the Status of Endangered Wildlife in Canada under the federal SARA, 2002; 2 – SAR in Ontario List under the provincial *ESA*, 2007; 3 – Ontario SRank; S5 = secure; S4 = apparently secure; S3 = vulnerable; S2 = imperilled; SX = Extirpated; SH = Possibly Extirpated; SNA = non-native or exotic species to Ontario; 4 – MNRF = MNRF Species at Risk in Ontario List by area of the province and MNRF MNRF Regulated Habitat (O. Reg. 242/08); OBBA = Ontario Breeding Bird Atlas; CBC = Christmas Bird Count.

3.2.7 Species at Risk

The *ESA*, 2007 protects SAR and their habitat in Ontario. There are two applicable regulations under the *ESA*: Ontario Regulation 230/08 (SARO list) and Ontario Regulation 242/08 (General). These regulations serve to identify which species and habitat receive protection and provide direction on the current implementation of the *ESA*, 2007 by the MECP (*Please note that as of April 1, 2019, the MNRF is no longer responsible for administering the ESA, 2007*). Due to the highly urbanized nature of the Study Area, a limited number of SAR were identified with potential to occur within or adjacent to the Study Area.

Table 8 below provides a list of SAR that have the potential to occur within the vicinity of the Study Area. No SAR or SAR habitat was observed during the 2019 field survey.

Table 8: Species at Risk Listed as Endangered or Threatened with Potential to Occur within the Vicinity of the Study Area

| Common Name | Scientific Name | SARA ¹ | ESA, 2007 ² | SRank ³ | Source of Occurrence Record ⁴ | Potential Habitat in the Study Area (Y/N) and Habitat Description | Species Observed in Study Area |
|-----------------------------|-------------------------------|-------------------|------------------------|--------------------|--|---|--------------------------------|
| <i>Birds</i> | | | | | | | |
| Barn Swallow | <i>Hirundo rustica</i> | --- | THR | S4B | OBBA, MNRF | No, although man-made structures suitable for nesting were observed within the PPR Study Areas; however, it is not anticipated that man-made structures will be disturbed as a result of the Project. | No |
| Chimney Swift | <i>Chaetura pelagica</i> | THR | THR | S4B,S4N | OBBA | Yes, homes with chimneys were observed within the PPR Study Area; however, it is not anticipated that homes/chimneys will be disturbed as a result of the Project. | No |
| <i>Mammals</i> | | | | | | | |
| Little Brown Myotis | <i>Myotis lucifugus</i> | END | END | S4 | MWH | Yes, residential and commercial buildings may provide hibernacula and roosting habitat; however, it is not anticipated that buildings will be disturbed as a result of the Project. | No |
| Eastern Small-footed Myotis | <i>Myotis leibii</i> | --- | END | S2S3 | MWH | Yes, residential and commercial buildings may provide hibernacula and roosting habitat; however, it is not anticipated that buildings will be disturbed as a result of the Project. | No |
| Northern Myotis | <i>Myotis septentrionalis</i> | END | END | S3 | MWH | Yes, residential and commercial buildings may provide hibernacula and roosting habitat; however, it is not anticipated that buildings will be disturbed as a result of the Project. | No |
| Tri-colored Bat | <i>Pipistrellus subflavus</i> | END | END | S3? | MWH | Yes, residential and commercial buildings may provide hibernacula and roosting habitat; however, it is not anticipated that buildings will be disturbed as a result of the Project. | No |

| Common Name | Scientific Name | SARA ¹ | ESA, 2007 ² | SRank ³ | Source of Occurrence Record ⁴ | Potential Habitat in the Study Area (Y/N) and Habitat Description | Species Observed in Study Area |
|------------------------|------------------------|-------------------|------------------------|--------------------|--|--|--------------------------------|
| <i>Vascular Plants</i> | | | | | | | |
| Butternut | <i>Juglans cinerea</i> | END | END | S3? | TOC | No, trees within Field Work Study Area are predominately streetscape trees and true forest communities in the area do not exist. | No |

1 – Status identified by the Committee on the Status of Endangered Wildlife in Canada under the federal SARA, 2002; 2 – SAR in Ontario List under the provincial ESA, 2007; 3 – Ontario SRank; S5 = secure; S4 = apparently secure; S3 = vulnerable; S2 = imperilled; SX = Extirpated; SH = Possibly Extirpated; SNA = non-native or exotic species to Ontario; 4 – MNRF = MNRF Species at Risk in Ontario List by area of the province and MNRF Regulated Habitat (O. Reg. 242/08); OBBA = Ontario Breeding Bird Atlas, MWH = Digital Distribution Maps of the Mammals of the Western Hemisphere, version 3.0; TOC = Trees of Canada.

3.3 Socio-Economic Environment

The socio-economic assessment completed for the Project included the following features:

- § Existing and Planned Land Use;
- § Socio-economic Characteristics;
- § Existing Linear Infrastructure Corridors and Other Infrastructure;
- § Existing Residences;
- § Tourism and Recreation;
- § Indigenous Communities;
- § Archaeological and Cultural Heritage Resources;
- § Community Services;
- § Waste Disposal;
- § Potentially Contaminated Sites; and,
- § Planning Policies.

More information is provided on each feature in the following sections.

3.3.1 Existing and Planned Land Use

A land use desktop study was completed for the Project. The purpose of the land use study was to confirm land uses identified in secondary sources. The results of the land use study are divided into separate sections for the PPR.

The PPR is located in the City of Ottawa. With respect to existing land use designations, land uses in the Study Area are guided by the PPS (2014), and the City of Ottawa's Official Plan (2003), which is regulated by the City of Ottawa's Zoning By-law (2008).

The PPS (2014) provides the Government of Ontario's policy direction on land use planning to promote strong communities, a strong economy, and a clean and healthy environment (e.g., the efficient management of land and infrastructure, the protection of resources, and appropriate employment and residential development). The City of Ottawa's Official Plan (2003) and other planning documents are required to comply with the PPS to ensure consistency.

The City of Ottawa's Official Plan (2003) permits public utilities and public utility features, including natural gas lines, in any land use designation. The Study Area contains a number of different land use designations:

- § The General Urban Area covers the entire Study Area from north to south. The General Urban Area Designation permits “a full range and choice of housing types to meet the needs of all ages, incomes and life circumstances, in combination with conveniently located employment, retail, service, cultural, leisure, entertainment, and institutional uses” (City of Ottawa Official Plan, Section 3.6.1).
- § The Traditional Main Street designation covers all of St. Laurent Boulevard that is within the PPR. The Official Plan states that “they are set within a tightly-knit urban fabric, with buildings that are small-scale, with narrow frontages and set close to the street. The development pattern, mix of uses, contiguous storefronts and density create an interesting pedestrian environment and support the use of transit. Residential uses are often located on the upper floors. Traditional Mainstreets generally have on-street parking or the potential to provide it, and limited on-site parking.” The Traditional Main Street permits a number of uses “including retail and service commercial uses, offices, residential and institutional uses. Uses may be mixed in individual buildings or occur side by side in separate buildings. Where a Mainstreet abuts an Employment Area, the zoning by-law may prohibit noise-sensitive uses on the Mainstreet where appropriate” (City of Ottawa Official Plan, Section 3.6.3).
- § The Arterial Main Street designation applies to Montreal Road and McArthur Avenue and extends from St. Laurent Boulevard all the way west to North River Road. The Official Plan states that “they are lined by larger lots and buildings, varied setbacks, and lower street-level densities than Traditional Mainstreets. Arterial Mainstreets are more automobile-oriented, built with four or more lanes. They generally do not provide on-street parking. Parking lots are typically located between the buildings and the street, and the predominant land use is single-purpose commercial. Over time, it is anticipated that these streets will evolve into more transit-supportive, pedestrian-friendly Mainstreets that support the neighbouring community.” The Arterial Main Street permits a number of uses “including retail and service commercial uses, offices, residential and institutional uses. Uses may be mixed in individual buildings or occur side by side in separate buildings. Where a Mainstreet abuts an Employment Area, the zoning by-law may prohibit noise-sensitive uses on the Mainstreet where appropriate” (City of Ottawa Official Plan, Section 3.6.3).

The Study Area’s land uses are also regulated by the City of Ottawa’s Zoning By-law (2008), however, utilities such as a natural gas pipeline are not subject to the provisions of the Zoning By-law (City of Ottawa By-law 2008-250, Section 91). For reference, the various zoning designations in the Study Area are listed below.

- § Residential First Density Zone – R1
- § Residential Second Density Zone – R2
- § Residential Third Density Zone – R3
- § Residential Fourth Density Zone – R4
- § Residential Fifth Density Zone – R5
- § Minor Institutional Zone – I1
- § Parks and Open Space Zone – O1
- § Community Leisure Facility Zone – L1
- § Traditional Main Street Zone – TM
- § Arterial Main Street Zone – AM
- § Transit Oriented Development Zone - TD

3.3.2 Socio-economic Characteristics

The Project is located adjacent to residential neighbourhoods, commercial uses and institutional uses. The residential neighbourhoods of Cummings and Overbrook-McArthur were established in the post WWII era (City of Ottawa 2016). The Study Area runs along the dividing line of two neighbourhoods. On the Eastern side of St. Laurent Boulevard, the Study Area runs through Cummings from North to South. On the Western side, the Study Area begins in Vanier South and terminates in the Overbrook-McArthur neighbourhood in the South. The Cummings area, which extends eastwards outside of the Study Area, has a population of 9,270 people. The Vanier South area has a population of 7,510 and the Overbrook-McArthur area has a population of 11,590 (City of Ottawa 2016). The majority of the Study Area falls within the Rideau-Rockcliffe ward (Ward 13). A portion of the Study Area, the eastern side of St. Laurent Boulevard, near Donald Street, falls within the Beacon Hill-Cyrville ward (Ward 11).

Within the residential neighbourhoods (between Vanier Parkway and Aviation Parkway), there are a number of municipal parks. These are the Ken Steele Park, Lawson Park, Trojan Park, St. Paul's Park, Forbes Park, Helen Redpath Thomson Park, Janeville Park, Gil-O-Julien Park, Overbrook Park, Ogilvie North Park, St. Laurent Complex and Cummings Park. Of these, only Forbes Park and the St. Laurent Complex fall within the Study Area.

There is a place of worship, the Mt. Zion Church of the Firstborn, located at 715 St. Laurent Boulevard, directly adjacent to the proposed project.

Most residential buildings located in the PPR are low density and predominantly single family homes. There are some high density apartment buildings located within the Study Area although these are infrequent.

There are a number of commercial activities along the PPR. Examples of commercial activities include the commercial centres on the eastern side of St. Laurent Boulevard, near Donald Street and McArthur Avenue, which include a Staples retail store, a number of restaurants including Tim Hortons and Subway, car dealerships and grocery stores. There are further commercial uses located at the intersection of St. Laurent Boulevard and Montreal Road, which includes the Audi car dealership at Montreal Road and a small shopping plaza, which includes a Shoppers Drug Mart, restaurants including a McDonalds and Tim Hortons and a grocery store.

Examples of institutional activities include the City of Ottawa St. Laurent Complex community centre, the Queen Elizabeth Public School and the St. Laurent Medical Centre. The Rideau High School is currently unoccupied and not used as a school, yet the land remains zoned institutional. As of 2018, the land has an application for a Zoning By-law amendment to permit various uses in the existing former high school to support the establishment of a community hub. This would include providing space for public gatherings, resident services and programs, social supports, cultural services and other uses such as day care, medical facility and educational programs.

Based on a review of the City of Ottawa's geoOttawa mapping, there do not appear to be land uses such as hospitals, nursing homes or other such sensitive receptors within the Study Area. The Montfort Hospital is located outside of the Study Area to the North East.

3.3.3 Existing Linear Infrastructure Corridors and Other Infrastructure

Minor existing linear infrastructure corridors were identified within the PR during the land use desktop study. No major infrastructure was identified. Local utilities can be expected along the route. There are no major overhead electrical transmission lines, oil or gas pipelines, major highway crossings, or rail crossings identified along the PPR. Montreal Road and McArthur Avenue are both arterial roads. Montreal Road crosses the Study Area, while McArthur Avenue terminates at St. Laurent Boulevard.

3.3.3.1 TRANSPORTATION

The Study Area crosses a variety of roads. The City of Ottawa's Official Plan – Schedule E (2003) identifies the following roads within the Study Area as part of the "Urban Road Network":

- § St. Laurent Boulevard (Arterial);
- § Montreal Road (Arterial);
- § McArthur Avenue (Arterial);
- § Donald Street East (Major Collector); and
- § Donald Street West (Collector).

All other roads within the Study Area are local roads.

Montreal Road and St. Laurent Road are listed in the Ottawa Official Plan – Schedule C (2003) as on-road bicycle routes. Also, as of 2018, McArthur Avenue is a City of Ottawa cycling route and has separated bicycle lanes running from North River Road to St. Laurent Boulevard.

3.3.4 Existing Residences

Existing residences are present within the Study Area. These residences are considered to be potential noise receptors during construction.

Over 6,400 residences were identified in the Study Area; with a total of 140 residences serviced directly off of St. Laurent Boulevard. The remaining residences are located either along the side streets or fall within the Study Area, yet do not directly interact with St. Laurent Boulevard.

3.3.5 Tourism and Recreation

The PR contains no tourism uses yet does contain some recreational uses and open spaces. The St. Laurent Complex is a City of Ottawa owned community centre. The centre has a public skating rink, a public library, meeting rooms, a public pool and gymnasium. Next to the former Rideau High School is a sports field, which contains two full-sized soccer fields and a small running track.

There are also some additional open spaces just outside the Study Area, including St. Paul's Park, the fields of the Ottawa Technical Secondary School, and Cummings Park.

3.3.6 Indigenous Communities

There are no First Nations Reserve Lands located in the Study Area (Indigenous and Northern Affairs Canada, 2019 retrieved from: <http://cippn-fnpim.aadnc-aandc.gc.ca/index-eng.html>). However, the Algonquins of Ontario have a land claim over the entirety of eastern Ontario, including the Study Area, and have been identified by the Crown as having a potential interest in this Project.

In a letter from the MOENDM dated March 4, 2019, the MOENDM determined that the Project may have the potential to affect First Nation and Métis communities and indicated that the Algonquins of Ontario and Mohawks of Akwesasne should be consulted with. Refer to Section 4.2 for details on Indigenous engagement.

3.3.7 Archaeological and Cultural Heritage Resources

A Stage 1 Archeological Assessment was completed for the project between December of 2018 and March 2019 by Timmins Martelle Heritage Consultants Inc. that consisted of a review of current land use, historic and modern maps, registered archaeological sites and previous archaeological studies, past settlement history for the area and a consideration of topographic and physiographic features, soils and drainage. The background research indicated that the Study Area was in proximity to features indicating

archaeological potential, namely: 1) areas of 19th century settlement; 2) mapped 19th century thoroughfares (Montreal Road, MacArthur Avenue and St. Laurent Boulevard); and 3) The Notre-Dame Cemetery.

A review of historic topographic mapping and aerial photographs, along with modern day imagery and proponent mapping, shows that the land within the majority of the Study Area (19.13 ha) has been extensively disturbed by above and below ground utilities and previous construction activity. A section of the Study Area (0.40 ha) at the northwestern corner of the intersection of Montreal Road and St. Laurent Boulevard is occupied by the Notre Dame Cemetery. A series of small areas of manicured lawn (2.09 ha total) within the Study Area retain archaeological potential.

Based on the Stage 1 Archaeological Assessment, which was completed and submitted to the MTCS on March 22, 2019, the area of the St. Laurent Boulevard and other areas within the Study Area are considered extensively disturbed and have low archaeological potential. As a site inspection was not conducted as part of the Stage 1 Archaeological Assessment, these areas will be visually confirmed and documented during the Stage 2 Archaeological Assessment.

The areas of manicured lawn that front St. Laurent Boulevard, Morin Street, Malartic Avenue, Noranda Avenue, Côté Street, Guy Street, McArthur Avenue, Mutual Street and Donald Street are not obviously disturbed and retain archaeological potential, and therefore will require a Stage 2 Archaeological Assessment. In keeping with provincial standards, the areas that consist of unploughable land are recommended for assessment by a standard test pit survey at a 5 m transect interval.

The Notre Dame Cemetery boundaries are fenced and a row of monuments stands immediately west of this fence adjacent to the ROW. As this cemetery is in the area associated with a 19th-century church, there is potential to be unmarked burials in the area. As such, a cemetery boundary investigation may be required for the ROW in this area; however, the specifics of this strategy should be developed after the completion of the Stage 2 survey of the area, and upon completion of detailed design drawings. As the cemetery fencing immediately abuts the sidewalk and paved roadway, Stage 2 test pit survey and mechanical trenching is not feasible. If the pipeline is to be located along the cemetery boundary, additional consultation with the MTCS will be required to confirm additional measures required to proceed with construction, such as additional monitoring in the area.

If the Project footprint is changed to incorporate lands not covered within the Stage 1 Archaeological Assessment, then additional archaeological assessment may be required.

Refer to the Stage 1 report included in Appendix A1.

3.3.8 Community Services

The following section provides an overview of the general responsibilities for the City of Ottawa in relation to community services along the PR.

3.3.8.1 CITY OF OTTAWA

The City of Ottawa is a single tier municipality. As a single tier municipality, the City is responsible for municipal services which include social housing, land, ambulance and emergency/police planning, environmental services (solid waste management), a county road system, Ontario Works, children's services, homes for the aged, library co-operatives, museums, archives, County forest management, and tourism.

No community services were identified along the PR.

3.3.9 Waste Disposal Sites

A review of Ottawa's online information on waste management facilities and the Government of Ontario's list of small and large landfills revealed no known waste disposal sites located within the PPR Study Area.

3.3.10 Potentially Contaminated Sites

During construction of the proposed pipeline, there is a possibility that contaminated soils could be unexpectedly encountered. Potentially contaminated sites include existing and former gas stations, vehicle repair shops, waste disposal sites, railway ROWs, public works yards, transformer stations, utility pole storage yards and lumber yards. Contaminants that may be present in the Study Areas include hydrocarbons (gas, diesel fuel, oil), lead, trace heavy metals, phenols, polyaromatic hydrocarbons (PAH), polychlorinated biphenyl (PCBs) and fuel additives. No Hazard Lands or potentially contaminated sites were identified along the PPR.

3.3.11 Planning Policies

The following secondary data sources were reviewed to obtain information on planning policies that pertain to the Study Area. The provincial policies stipulate the type of land use and development projections proposed for large areas of the province. It is the responsibility of the lower-tier municipalities to implement such policies through their individual official plans and zoning by-laws.

As the Project will be located within an existing previously disturbed municipal road ROW, it would be considered a permitted infrastructure use. Plans and policies reviewed as part of the Project include:

3.3.11.1 PROVINCIAL SECONDARY SOURCES

§ Provincial Policy Statement, 2014

- The Project is considered "Infrastructure" under this Plan (Section 1.6) and should be provided in a coordinated, efficient and cost-effective manner and be available to meet current and projected needs. Existing infrastructure should be optimized before developing new infrastructure.

3.3.11.2 MUNICIPAL SECONDARY SOURCES

§ The City of Ottawa Official Plan, 2003

- The PR is located entirely within this Plan area.
- PR – Includes General Urban Area, Traditional Main Street and Arterial Main Street designations.

§ City of Ottawa Zoning By-Law 2008-250 2008

4.0 STAKEHOLDER CONSULTATION PROGRAM

A comprehensive stakeholder consultation program was undertaken for the Project. This section provides an overview of the program with stakeholders (public and agencies) and Indigenous engagement activities undertaken as part of the Study. Consultation-related materials are provided in Appendix C and D.

4.1 PUBLIC AND AGENCY CONSULTATION

Public and agency consultation was an important part of the Project and continued through all Project phases. From the outset and throughout the Study process, Enbridge stressed the importance of consulting with area residents, community organizations and government agencies. To meet the Study consultation requirements set by the OEB and set the stage for achieving Enbridge's consultation objectives, the stakeholder consultation plan called for a series of communication and consultation activities that would be closely linked to the technical work being conducted.

Communication activities included newspaper notices, letters of invitation/notification, open house meetings and the Enbridge Project-specific website. In addition, meetings by telephone and correspondence by electronic mail were undertaken by the Project team.

4.1.1 Objectives

The objectives of the public consultation program were to:

- § Seek and facilitate the involvement of those potentially affected;
- § Make all reasonable efforts to identify the interests and meet the process needs of participants;
- § Provide participants with the information they required to participate in a meaningful way;
- § Consider public issues/concerns during Project design and when making Project approval decisions;
- § Incorporate feedback and evolve as required in response to the input and needs (access, format, etc.) of participants; and,
- § Communicate to participants how their input affected outcomes (i.e., Project design and review/approval decisions).

4.1.2 Contact List

A contact list was developed that subdivided the groups into categories:

- § Federal Agencies and Members of Parliament;
- § Provincial Agencies and Members of Provincial Parliament;
- § Local and Municipal Agencies including Council;
- § Interest Groups (i.e., School Boards, Conservation Authorities);
- § Corporations (i.e., Hydro One, Infrastructure Ontario, Local Businesses); and,
- § Indigenous communities.

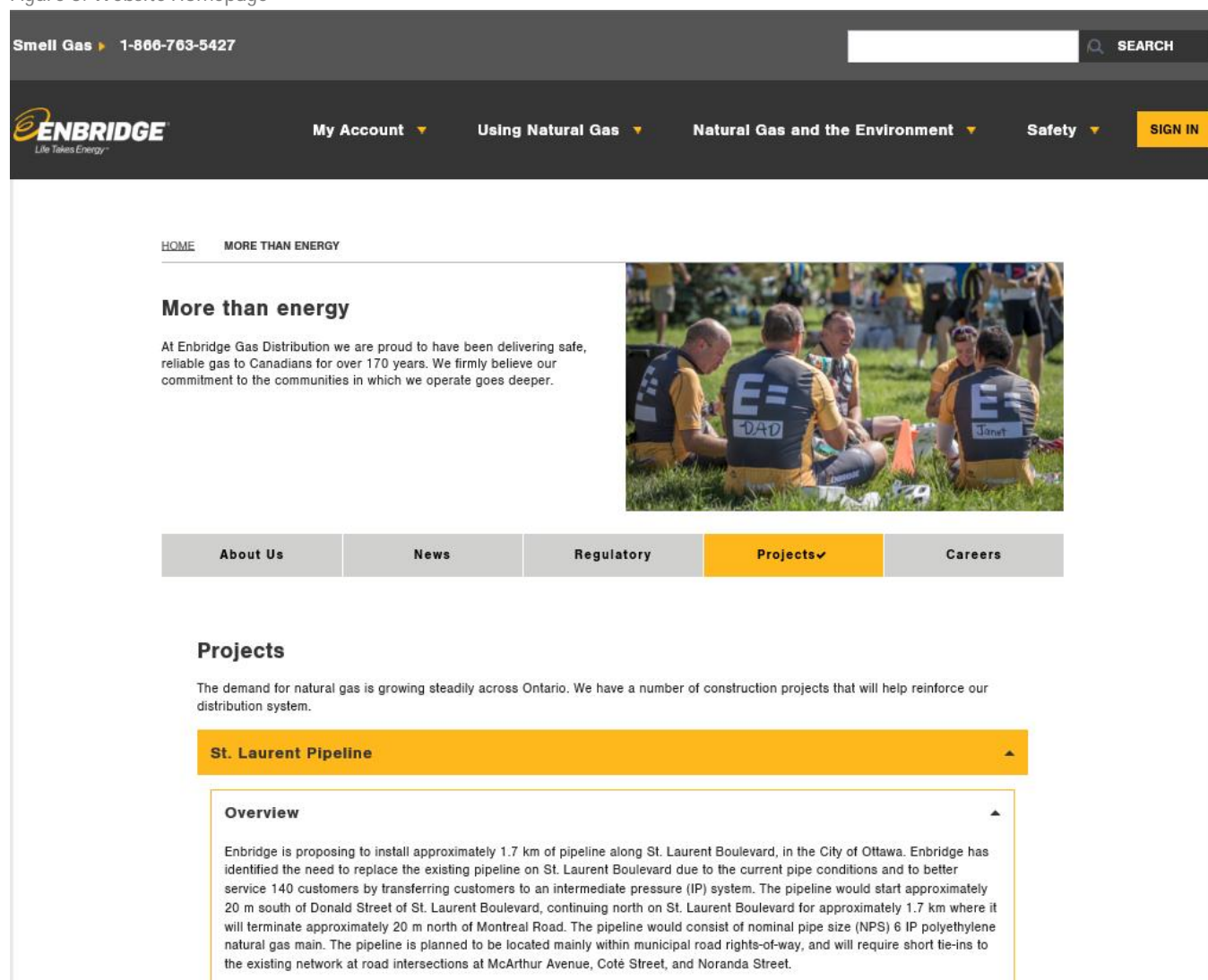
All of the stakeholder groups listed above have been included in the Stakeholder and Indigenous Contact List in Appendix C4.

4.1.3 Website

As a component of the public consultation program, Enbridge created a Project-specific website in order to make information accessible to as many groups as possible. In addition, by including all information in a downloadable format, it provided a cost-effective and expeditious method of communicating with the public and agencies. The final ER, also in a downloadable format, will be posted online. A screen capture of the Project website is included below as Figure 6. All material presented at public meetings, public notices, and reports are posted on the website at the following link:

<https://www.enbridgegas.com/About-Us#tab-content>.

Figure 6: Website Homepage



4.1.4 Public Notice

A Notice of Study Commencement and Open House ("Notice") was published in the local newspaper (Ottawa Citizen) in English on the following dates:

- § Wednesday, February 20, 2019;
- § Wednesday, February 27, 2019;
- § Monday, March 4, 2019;

- § Wednesday, March 20, 2019; and,
- § Wednesday, March 27, 2019.

A copy of the Notice has been included in Appendix C1. Copies of the newspaper tear sheets have been included in Appendix C2.

The Notice was also emailed to stakeholders and mailed to over 6,400 residences and businesses in the Study Area during the week of February 25, 2019 via Canada Post. Because the notice did not reach all intended recipients prior to the open house, an additional open house was scheduled. The second Notice was emailed to inform stakeholders of the second open house on March 18, 2019 and subsequently mailed again the week of March 18, 2019 via Canada Post. The second notice also included a toll free project phone number. A copy of the second Notice has been included in Appendix C1.

Public correspondence is logged in Appendix D1.

4.1.5 Contact Letters

Letters requesting environmental and socio-economic data and inviting agencies, interest groups, and local councillors to the open house were emailed on February 21, 2019. To expedite the process, agency letters were sent by electronic mail. Various agency consultations occurred throughout the Study following the circulation of contact letters. Few responses were received from agencies. Some had no interest in the project, and others referred the project team to online resources to screen projects for impacts. No specific comments were received that required follow up. Agency consultation has been included in Appendix D2. Consultation with Interest groups is logged in Appendix D3.

4.1.6 Public Open House

A public open house was held on Monday March 4, 2019 at the Richelieu Vanier Community Centre (300 Des, Péré-Blancs Avenue, Ottawa, Ontario). The purpose of the meeting was to provide an opportunity for the public to comment on the Study and planning process and the planned pipeline route. The meeting was planned to achieve the following objectives:

- § Introduce participants to the Project, the Study process and consultation plans; and,
- § Seek feedback from participants, on local environmental considerations, issues or concerns that should be addressed as part of the Study, and the PR.

A number of panels were prepared to present the Project and to provide an overview of the environmental assessment process, design and construction for this Project. Panels were presented in English, and a French translated copy was available as a handout at the sign-in desk. The panels discussed the following:

- § Purpose of the Open House (Introduction to Enbridge);
- § Enbridge's Indigenous Peoples Policy;
- § Project Introduction and Location;
- § Baseline Studies – Desktop and Field;
- § Pipeline Design and Safety;
- § Pipeline Construction;
- § Mitigation and Monitoring;
- § Regulatory Framework (OEB);
- § Continuous Stakeholder Engagement; and,
- § Environmental Assessment Process and Project Schedule.

A copy of the panels in English and French are located in Appendix C5.

Dillon and Enbridge staff were present at the meeting to answer questions and listen to comments from interested agencies and members of the community. The first open house meeting was attended by eight people. The majority of the open house attendees were local residents in the Project Study Area. Both English and French speaking staff were present at the open house.

Based on feedback received from members of the public following the first open house, the Project team learned that the admail Notices sent to the public through Canada Post did not reach all of the intended recipients in time to inform them of the event. In the interest of allowing for full and transparent consultation, EGI decided to host a second open house. The second open house was hosted on April 3, 2019 at the Paroisse Saint-Louis-Marie-de-Monfort Church (749 Trojan Avenue, Ottawa, Ontario). The second open house meeting was attended by 13 people. There were a mix of residents within the Study Area and others with interest in the project in attendance.

4.1.6.1 RESULTS FROM OPEN HOUSE

Participants were asked to complete a questionnaire once they had a chance to see the panels and speak to the Project team. Copies of the open house exit questionnaires have been included in Appendix C5 (in English and French). A total of four questionnaires were completed at the first open house, and 10 from the second open house. A total of six of the questionnaire respondents identified themselves as property owners and/or residents in the Study Area.

No major opposition was received with respect to the use of the PPR. Some concerns with the Project were received related to:

- § Timing of pipeline installation and the need to keep residents informed;
- § Access to local businesses;
- § Traffic and noise disruptions; and,
- § Dust emissions.

Similar concerns were raised during the second open house; primarily related to traffic disruption within the area during construction. One member of the public also raised concerns that there is an existing rodent problem in the area caused by a previous infrastructure project along St. Laurent Boulevard; and that construction of the pipeline may worsen the issue for residents, even temporarily.

Based on the total number of questionnaires received, 10 of the respondents were in favour of the Project, while four had no opinion (these respondents included City staff and members of the public not residing within the Study Area).

Consultation is documented in Appendix D5.

4.1.6.2 ROUTE REFINEMENTS RESULTING FROM PUBLIC INPUT AND PRELIMINARY PREFERRED ROUTE

No opposition to the PR was noted during the public open house; as such, no comments received materially affected the Project route.

4.2 INDIGENOUS ENGAGEMENT

On December 14, 2018, as per OEB Guidelines, an email was sent to the Ministry of Energy, Northern Development and Mines (MOENDM) notifying them of Enbridge's intention to apply for Leave to Construct and requesting the MOENDM's assessment of Duty to Consult requirements.

In a letter from the MOENDM dated March 4, 2019, the MOENDM determined that the Project may have the potential to affect First Nation and Métis communities and provided a list of the following communities that should be consulted:

- § Algonquins of Ontario
- § Mohawks of Akwesasne

On March 18, 2019, letters and Notice of Study Commencement and invitation to attend the upcoming open house was sent to the Algonquins of Ontario and the Mohawks of Akwesasne to introduce the Project and provide an opportunity to comment. The notification letter invited the indigenous groups to provide input and comments regarding the proposed Project, specifically regarding potential impacts that the Project may have on constitutionally protected Aboriginal or Treaty Rights and any measures for mitigating those impacts. Enbridge also requested the opportunity to meet with each community to discuss the Project.

Consultation with Indigenous communities is summarized in Appendix D4.

4.3 ONGOING ENGAGEMENT ACTIVITIES

Although the ER has been completed, Enbridge is committed to ongoing communication with agencies, stakeholders, Indigenous communities, and the public. Beyond the Study, Enbridge will continue with the planning, design and construction phases of the Project. This information will be made available to interested parties as necessary. In addition, Enbridge will continue to meet with agencies and stakeholders to determine technical details of the pipeline design, construction coordination, permitting requirements and policy amendments if required.

Enbridge will continue to actively engage all identified Indigenous groups in meaningful dialogue concerning the Project for the purposes of exchanging information regarding the Project, responding to inquiries, discussing issues and concerns regarding the Project; and will respond to communities in a timely manner.

A full consultation record with Indigenous Communities will be documented in the Indigenous Consultation Report to be submitted with the LTC Application under separate cover.

5.0 POTENTIAL ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES ALONG THE PREFERRED ROUTE

This section provides the assessment of the potential impacts associated with the Project on the physical, natural and socio-economic environment (Table 9). Recommended mitigation measures are also described in this section.

The majority of potential Project-related impacts were avoided by locating the pipeline within an existing, previously disturbed municipal road ROW.

Table 9: Potential Construction and Operation Effects, Mitigation Measures and Net Effects

| Component | Potential Construction and Operation Effects | Mitigation Measures | Potential Net Effects |
|---|---|--|---|
| Physical Environment | | | |
| Physiography, Topography, and Surficial Geology | <p><i>Construction</i> Soil removal, soil erosion.</p> <p><i>Operation</i> No effects are anticipated during operation of the pipeline.</p> | Existing topography along the PR will be returned to as close to pre-construction condition as possible following construction; the pipeline will be buried underground and back-filled to existing grade. | No significant net effect is anticipated following implementation of the recommended mitigation measures. |
| Groundwater | <p><i>Construction</i> It is understood that construction will involve the installation of a pipeline with typical depth (top of pipe) of approximately 1.2 m. The pipeline will be installed for the most part using open-cut trenching techniques. Should sections of the pipeline trench encounter the groundwater table, groundwater will likely exfiltrate into the trench and may require dewatering to facilitate construction. Tie-in pits (if required) can also reach depths greater than 5 m.</p> <p><i>Operation</i> No effects are anticipated during operation of the pipeline.</p> | <p>Should the groundwater table or other wet areas be encountered during construction, the following mitigation measures are recommended:</p> <p>§ Store all fuels, chemicals, and other lubricants away from drainage features and on relatively flat areas in contained storage areas. Re-fuelling activities should be undertaken a minimum of 100 m away from drainage features and other sensitive environmental features. Should a spill occur, the MECP Spills Action Centre (1-800-268-6060) should be contacted immediately and containment should occur as soon as practical; Enbridge's Environment Department should also be notified (1-855-336-2056);</p> <p>§ Register under the EASR where dewatering in excess of 50,000 L/day and up to 400,000 L/day is required. Excess water should be directed away from sensitive natural features.</p> <p>§ Obtain a PTTW from the MECP where dewatering in excess of 400,000 L/day is required. Excess water should be directed away from natural features;</p> <p>§ Groundwater should be redirected back to the ground surface when dewatering to maintain infiltration and should be discharged in a flat vegetated area and into a filter system (such as filter bags) a minimum of 30 m from the nearest watercourse, unless otherwise approved by the MECP.</p> <p>Additional mitigation measures specific to dewatering and discharge are as follows:</p> <p>Management of water from construction sites often requires more than one form of treatment. The primary method that should be used is to discharge through a silt bag or filter bag. The location of the silt/filter bag should be at least 30 m away from a watercourse, unless otherwise approved by the MECP, away from slopes, and on a vegetated surface to prevent additional silt loading as the water is discharged (as possible).</p> <p>Beyond this primary treatment, a series of treatments (called a "treatment train") may need to be employed if the quality of the water being discharged is still impaired relative to the receiving water. In general, groundwater that is being de-watered should be directed towards a vegetated flow path or depression. Other measures in the treatment train include:</p> <p>§ Pumping to upland vegetated areas;</p> <p>§ Small temporary holding ponds;</p> <p>§ Vegetated swales and check dams;</p> <p>§ Bio-log retention areas; and,</p> <p>§ Erosion control blankets.</p> <p>Additional measures are provided in Section 32.10: Spills Response and Reporting, and Section: 8.6.3.1 Dewatering of Enbridge's <i>Construction and Maintenance Manual, 2017</i>.</p> | No significant net effect is anticipated following implementation of the recommended mitigation measures. |
| Bedrock | <p><i>Construction</i> Because this a replacement of an existing pipeline, bedrock is unlikely to be encountered during construction.</p> <p><i>Operation</i> No effects are anticipated during operation of the pipeline.</p> | <p>§ Rock excavation is not anticipated; however, if required excavation should be completed in accordance with Section 8.8 Rock Excavation of Enbridge's <i>Construction and Maintenance Manual, 2017</i>.</p> | No significant net effect is anticipated following implementation of the recommended mitigation measures. |

| Component | Potential Construction and Operation Effects | Mitigation Measures | Potential Net Effects |
|--|--|---|---|
| Seismicity | <p><i>Construction</i> No effects are anticipated during construction of the pipeline.</p> <p><i>Operation</i> Impacts to the pipeline as a result of seismic activity are not anticipated at this time. The pipeline will be designed in accordance with low to moderate levels of seismicity and comply with the Canadian Geological Survey data and National Building Code minimum standards.</p> | § No mitigation is necessary. | No significant net effect is anticipated following implementation of the recommended mitigation measures. |
| Natural Environment | | | |
| Atmospheric Environment | <p><i>Construction</i> Air emissions associated with construction generally include carbon monoxide and carbon dioxide (including greenhouse gases) from construction equipment exhaust. Air emissions may also be produced through pipeline welding activities. Pipeline construction will likely result in the creation of dust that may be carried away from the site during dry conditions.</p> <p><i>Operation</i> No effects are anticipated during operation of the pipeline.</p> | <p>Good equipment maintenance practices will be encouraged during construction. Emissions produced through welding cannot be mitigated; however, these emissions will be short-term and localized. It is not anticipated that this will be a significant contributor to air pollution or greenhouse gas emissions.</p> <p>Construction dust should be mitigated by limiting the area of open trenches (where possible) and protecting spoil piles. Water and other environmentally friendly suppressants are recommended to control dust during dry and windy conditions. The amount of excavated soil remaining will be minimized and cleaned up immediately following construction. Dust control measures should be monitored regularly to increase efficiency. Additional mitigation measures include:</p> <p>§ Equip vehicles with emission controls, as applicable, and operate within regulatory requirements; § Limit long-term idling; § Use appropriate earth moving practices; and, § Limit construction activities during high wind events.</p> | Air emissions and dust impacts will be localized and temporary. The proposed work will not have any significant impact on the local climate. Assuming mitigation measures are implemented, no significant net effect is anticipated during the construction and/or operation of the pipeline. |
| Wetlands | <p><i>Construction and Operation</i> No effects are anticipated during operation of the pipeline.</p> | § No mitigation is necessary. | N/A |
| Areas of Natural and Scientific Interest | <p><i>Construction</i> The pipeline will be installed primarily within an existing road ROW. The St. Laurent / Montreal Road ANSI occurs well outside the proposed areas of construction and no effects are anticipated during construction of the pipeline</p> <p><i>Operation</i> No effects are anticipated during operation of the pipeline.</p> | § No mitigation is necessary. | No significant net effect is anticipated. |
| Surface Water, Fish and Aquatic Habitat | <p><i>Construction and Operation</i> No effects are anticipated during operation of the pipeline.</p> | § No mitigation is necessary. | N/A |
| Terrestrial Habitat and Vegetation | <p><i>Construction</i> The pipeline will be installed primarily within an existing road ROW. Any vegetation encountered will likely consist of common roadside vegetation of minor ecological value (vegetation capable of colonizing new roadside edges). However if construction activities (e.g., temporary laydown areas, equipment encroachment) extend into vegetated areas, activities could result in the alteration or removal of terrestrial habitat and could adversely impact trees and other vegetation by causing soil compaction, damaging roots and the structural integrity of vegetation. Construction activities could also result in invasive species and/or weed introduction and spread.</p> | <p>General mitigation measures recommended during construction include:</p> <p>§ Minimize the width of the construction area so that minimal vegetation is affected; § Limits of the workspace should be clearly marked to avoid encroachment into adjacent areas and to avoid unnecessary tree removals; § Where feasible, construction traffic should be limited to the existing road allowance to avoid potential compression to tree root zones; § Protect vegetation adjacent to the working area from construction traffic and/or materials storage; § If required, obtain permits from the municipalities for tree removal. Consultation with these agencies to ascertain appropriate measures for tree removals or injuries should be undertaken and may include compensation. An Arborist Assessment should be conducted to ascertain potential removal in the temporary working space and permanent easement and used to support permitting; § Native topsoil should be preserved through proper topsoil handling and storage;</p> | No significant net effect is anticipated following implementation of the recommended mitigation measures. |

| Component | Potential Construction and Operation Effects | Mitigation Measures | Potential Net Effects |
|--|--|---|---|
| Wildlife, Significant Wildlife Habitat and Species at Risk | <p><i>Operation</i> No effects are anticipated during operation of the pipeline.</p> | <p>§ Ontario native seed mixes that are free of weed species should be used for revegetation; § Ontario native seed mixes should be appropriate for the habitat type and existing land use; § Upon completion of construction, replace all vegetation removed or damaged with appropriate native species as required; § Undertake construction in a manner consistent with Section: 8.2 Clearing of Enbridge's <i>Construction and Maintenance Manual, 2017</i>; § Follow guidelines set out by the appropriate conservation authorities and local municipality; § Grade only where necessary; § All equipment will arrive to the site clean and free of soil and/or vegetation to prevent the introduction and spread of invasive species and weeds; § Monitor for invasive vegetation and weeds during construction and implement controls as necessary (e.g., mowing, spraying); and, § Implement tree protection zones once vegetation removal is complete. The tree drip line plus an additional 1 m demarcated by fencing should be established around remaining edge vegetation to avoid soil compaction.</p> | No significant net effect is anticipated following implementation of the recommended mitigation measures. |
| | <p><i>Construction</i> The following are potential effects during construction: § The removal of trees and shrubs can impact nesting birds if conducted during known breeding bird timing windows (generally between April 1 and August 31); § Noise from construction activities can cause some temporary disturbance to local wildlife; and, § Trenching activities have the potential to cause physical harm to wildlife that may fall in any open trenches, particularly if the trenches are left exposed overnight.</p> <p><i>Operation</i> No effects are anticipated during operation of the pipeline.</p> | <p>The following provides the recommended general mitigation measures with respect to wildlife and SAR:</p> <p>§ Undertake environmental awareness training for all workers onsite to highlight issues specific to the Project. Training should focus on protocols for injured wildlife and the identification of SAR that may be encountered; § Provide SAR identification sheets to workers that outline habitat, identifying characteristics and mitigation measures; § All wildlife encountered should be handled by a qualified professional using approved MNRF handling protocols and relocated away from the construction area to prevent incidental harm; § Nuisance and large wildlife encounters or incidents involving wildlife should be reported to the MNRF; § Food waste and debris should be removed from the site daily to an approved waste facility; § Conduct preconstruction planning that includes a review of the areas of potential habitat; § Narrow construction footprint if possible; § Suspend activity if active habitat is discovered that cannot be adequately setback from; and, § Document SAR encounters.</p> <p>Abide by regulatory timing windows (generally April 15 to August 31) and setback distances: § Conduct pre-construction nest sweeps if construction will occur in migratory bird restricted activity period (April 1 – August 31). Nest sweeps are valid for 7 days; and, § Protect active nests by flagging or fencing off an appropriate setback distance as determined by a qualified professionals. <ul style="list-style-type: none"> ○ Barn Swallow nest in man-made structures such as barns and culverts. If a Barn Swallow nest must be removed, it must be removed prior to May 1 or after August 31. A notice of activity form must be submitted to the MNRF and a mitigation and restoration record developed in accordance with Ontario Regulation 242/08. § Conduct pre-construction nest sweeps if construction will occur in restricted activity periods for SAR birds (May 1 – August 31). Nest sweeps for SAR birds are valid for 2 days. § Protect active nests by flagging or fencing off an appropriate setback distance (30 m). § Monitor active nests during the implementation of work to identify what level of disturbance the work is having on the nesting birds. Nests will be monitored to determine when a nest is no longer active and the protective buffer can be removed.</p> | |
| Soils | <p><i>Construction</i> § Grubbing, stripping, excavation. § Open trenching. § Loss of topsoil through wind erosion. § Loss of topsoil through surface water erosion. § Soil compaction and rutting.</p> <p>Impacts to soils will be minimized as the Project will be located within an existing, previously disturbed municipal road ROW.</p> | <p>Any topsoil that is excavated is a valuable resource that should be salvaged and replaced following the completion of pipeline construction. If the contractor cannot effectively salvage topsoil, an application of topsoil should be applied during re-seeding. The following mitigation measures are recommended to minimize impacts on soils including actively farmed areas, as well as those provided in the Section 8.3 Topsoil Handling of Enbridge's <i>Construction and Maintenance Manual, 2017</i>:</p> <p>§ Suspend or limit construction during wet soil conditions; § Restrict grading and stripping to temporary work areas; § Use lightweight and wide-tracked equipment to minimize soil compaction, where possible; § Segregate topsoil within the construction easement prior to trenching to avoid compaction and soil mixing; § Use plywood or tarpaulins to store topsoil and avoid topsoil loss;</p> | No significant net effect is anticipated following implementation of the recommended mitigation measures. |

| Component | Potential Construction and Operation Effects | Mitigation Measures | Potential Net Effects |
|---|--|--|--|
| | <p>Notwithstanding the above, there is potential for minor impacts to fringe areas, specifically the treed and manicured lawn median strips that occur intermittently along the centerline of St. Laurent Boulevard.</p> <p><i>Operation</i> No effects are anticipated during operation of the pipeline.</p> | <p>§ Implement a mitigation strategy to control accelerated erosion if necessary;</p> <p>§ Use topsoil in areas where the subsoil covers the trench and is relatively infertile;</p> <p>§ Verify that all construction equipment used is mechanically sound to avoid leakage of oil, gasoline, hydraulic fluids and grease;</p> <p>§ Maintain proper spill management equipment (i.e., spill kit) on-site at all times); and,</p> <p>§ Restore the areas to as close to pre-construction condition as possible.</p> | |
| Socio-Economic Environment | | | |
| Construction Activities – Noise | <p><i>Construction</i> Construction activities have the potential to disturb residents along the pipeline route, particularly in proximity to the intersections on St. Laurent Boulevard. Construction-related noise effects are expected to be minor, temporary and localized.</p> <p><i>Operation</i> The operation of the pipeline will not impact residents from a noise perspective.</p> | <p>§ Construction activities will be carried out in compliance with municipal noise by-laws with respect to noise and construction equipment usage. No construction activities will occur on Statutory Holidays, Sundays and at night as stipulated in respective noise by-laws without applicable noise by-law exemptions. General noise control measures will be implemented during construction (i.e., proper maintenance of equipment, muffling systems, minimum idling of equipment and vehicles).</p> | No significant net effect is anticipated following implementation of the recommended mitigation measures. |
| Construction Activities – Access Modifications and Restrictions | <p><i>Construction</i> Access to entrance ways (i.e., driveways) will be maintained as best as possible during the construction period.</p> <p><i>Operation</i> The pipeline, once constructed, will not restrict access as it will be installed underground.</p> | <p>§ Appropriate signage and flag personnel will be used should detours be necessary;</p> <p>§ Vehicle traffic should also be managed in accordance with Section 3.9: Traffic Control and Protection Plan, Section 18: Road and Railway Crossings, Section 31.4: Pipeline Depth of Cover Survey, Section 8.5: Trenching/ Excavating, Section 8.6: Trenching, Section 8.7: Paving Excavation and Repairs of Enbridge's <i>Construction and Maintenance Manual, 2017</i>; and,</p> <p>§ An appropriate Traffic Control Plan will be developed and implemented in accordance with Ontario Traffic Manual (OTM) Book 7 – Temporary Conditions.</p> | No significant net effect is anticipated following implementation of the recommended mitigation measures. |
| Construction Activities – Traffic Disruption | <p><i>Construction</i> The Project has the potential to affect vehicle traffic in the Study Area. There may be an increase in the amount of truck traffic during Project construction; however, truck traffic impacts will be localized and temporary. Road crossings may be completed using the open-cut method which would have impacts on road users. Trenchless installations may be pursued where open-cut is not possible. In addition, traffic reductions to one-lane or detours for roads that will be open-cut may be necessary during construction. Parking may be a concern to nearby commercial and industrial facilities.</p> <p><i>Operation</i> While in operation, the pipeline will not have any impacts, or act as a barrier to any vehicle traffic, as it will be buried underground.</p> | <p>§ Traffic access will be maintained where possible during construction. However, a lane closure and traffic detours may be required to allow construction equipment and materials passage, or where open-cut construction is planned. Good management and best practices will be implemented during construction to minimize traffic disruption. If required, temporary detour routes will be provided to reduce potential impacts to commuters;</p> <p>§ Enbridge is encouraged to consult with municipal staff to develop an appropriate traffic management plan to assist with maintaining traffic flow. Consultation with local transit providers and Emergency Medical Services (EMS) may also be required if temporary detours and/or bus stop relocations are deemed necessary;</p> <p>§ A common parking area may also be established for construction crews to reduce traffic and better manage parking congestion.</p> <p>§ Enbridge will respond to any construction complaints promptly (if any); and,</p> <p>§ Vehicle traffic should also be managed in accordance with Section 3.9: Traffic Control and Protection Plan, Section 18: Road and Railway Crossings, Section 31.4: Pipeline Depth of Cover Survey, Section 8.5: Trenching/ Excavating, Section 8.6: Trenching, Section 8.7: Paving Excavation and Repairs of Enbridge's <i>Construction and Maintenance Manual, 2017</i>.</p> <p>§ An appropriate Traffic Control Plan will be developed and implemented in accordance with OTM Book 7 – Temporary Conditions.</p> | Traffic impacts associated with construction activities will be minor, temporary and localized. Assuming all the proposed mitigation measures are implemented, no significant net effect is anticipated during the construction of the pipeline. |
| Construction Activities – Vibration | <p><i>Construction</i> Vibration may be produced by heavy equipment movement along the pipeline route, soil excavation, and trenchless (HDD) activities, however it is expected to be minimal and not exceed vibration caused by typical construction activities.</p> | <p>§ Enbridge will monitor areas considered to be susceptible to vibration damage and take appropriate steps, if required. Enbridge or its contractor will provide compensation for any property damage in relation to the Project should it occur.</p> | No significant net effect is anticipated following implementation of the recommended mitigation measures. |

| Component | Potential Construction and Operation Effects | Mitigation Measures | Potential Net Effects |
|---|--|---|---|
| | <p><i>Operation</i> No effects are anticipated during operation of the pipeline.</p> | | |
| Construction Activities – Construction Waste | <p><i>Construction</i> Waste produced during the construction period may include non-hazardous wastes (packaging, spent lubricating cartridges, coffee cups) and hazardous wastes (pneumatic oils from hydraulic systems, gasoline and other lubricants/oils).</p> <p><i>Operation</i> No effects are anticipated during operation of the pipeline.</p> | <p>§ Solid waste should be collected and disposed of appropriately in accordance with applicable regulations at a licensed waste facility;</p> <p>§ Hazardous wastes should be transported by MECP licensed waste haulers to a MECP registered disposal site. Good management practices are recommended to prevent spills and contamination during construction. Any temporary storage of wastes on-site should include the use of secured containers in designated sites away from sensitive areas; and,</p> <p>§ All construction waste should be disposed of in accordance with Section 4.1: Hazardous Waste Management and Disposal of Enbridge's <i>Construction and Maintenance Manual, 2017</i>.</p> | No significant net effect is anticipated following implementation of the recommended mitigation measures. |
| Construction Activities – Bentonite Slurry | <p><i>Construction</i> Bentonite slurry will be generated during construction if trenchless methods are used. There is potential for bentonite slurry to seep into porous formations subsurface, reduce groundwater quality, and leave the tunnel along a preferential flow pathway and inadvertently seep into a nearby watercourse, or interfere with nearby structures (i.e., roadways).</p> <p><i>Operation</i> No effects are anticipated during operation of the pipeline.</p> | <p>Bentonite slurry, when not managed appropriately, is considered an industrial waste and so requires specific handling. Bentonite slurry generation can be reduced by using a centrifuge to screen out unwanted solids and fines, allowing the bentonite to be reused on-site to a certain extent. Prior to disposal, bentonite slurry can be treated by solidification methods and removed from the site under the appropriate waste classification. Other mitigation measures include:</p> <p>§ the composition of the bentonite slurry should be determined based on the geotechnical conditions of the site;</p> <p>§ the application of bentonite slurry should be monitored frequently by the contractor; and,</p> <p>§ extra caution should be exercised near drainage features, natural features, and nearby structures that could be impacted.</p> <p>Additional measures are provided in Section 12: Trenchless Installations of Enbridge's <i>Construction and Maintenance Manual, 2017</i>.</p> | No significant net effect is anticipated following implementation of the recommended mitigation measures. |
| Construction Activities – Aesthetics | <p><i>Construction</i> Construction activities may be a visual nuisance to the local residents along the route; however, these nuisances will be short term during the construction period.</p> <p><i>Operation</i> During operations, the pipeline will be underground and will not be visible.</p> | <p>§ Mitigations measures are not necessary as the pipeline will not be visible once constructed.</p> | No significant net effect is anticipated following implementation of the recommended mitigation measures. |
| Existing and Planned Land Use | <p><i>Construction and Operation</i> No effects are anticipated during operation of the pipeline.</p> | <p>§ No mitigation is necessary.</p> | N/A |
| Existing Linear Infrastructure Corridors and Other Infrastructure | <p><i>Construction</i> There is minimal potential for the Project to interfere with existing infrastructure and associated corridors during construction.</p> <p><i>Operation</i> No effects are anticipated during operation of the pipeline.</p> | <p>§ Access to existing linear infrastructure corridors will be maintained throughout the construction period;</p> <p>§ Utilities should be identified early on in the planning process if locations are anticipated to be impacted by Project construction. Contact with Ontario One-Call should be made as well as follow-up with other operators in the area; and,</p> <p>§ Additional information is provided in Section 18: Road and Railway Crossings, Section 31.4: Pipeline Depth of Cover Survey, Section 8.5: Trenching/ Excavating, Section 8.6: Trenching, Section 8.7: Paving Excavation and Repairs of Enbridge's <i>Construction and Maintenance Manual, 2017</i>.</p> | No significant net effect is anticipated following implementation of the recommended mitigation measures. |
| Population Demographics | <p><i>Construction and Operation</i> No effects are anticipated during operation of the pipeline.</p> | <p>§ No mitigation is necessary.</p> | N/A |

| Component | Potential Construction and Operation Effects | Mitigation Measures | Potential Net Effects |
|---|--|---|---|
| Economic Activities, Employment and Labour Force | <i>Construction and Operation</i> No effects are anticipated during operation of the pipeline. | § No mitigation is necessary. | N/A |
| Tourism and Recreation | <i>Construction</i> The Project has the potential to restrict access to recreational facilities located along the route (St. Laurent Complex) during the construction period. <i>Operation</i> No effects are anticipated during operation of the pipeline. | § Access to recreational facilities will be maintained to the extent possible during construction. In the event that access modifications are required, discussions will be held with facility owners and appropriate signage will be installed. | No significant net effect is anticipated following implementation of the recommended mitigation measures. |
| Indigenous Communities | <i>Construction</i> Project construction could potentially result in the finding of indigenous artifacts. <i>Operation</i> No effects are anticipated during operation of the pipeline. | § In the unlikely event that archaeological resources are discovered during construction, a Heritage Resource Discovery Contingency plan will be implemented; and, § Work undertaken in, and around, areas with known archaeological potential will be completed in accordance with Section 8.15: Archaeological Areas of Enbridge's <i>Construction and Maintenance Manual, 2017</i> . | No significant net effect is anticipated following implementation of the recommended mitigation measures. |
| Archaeological and Heritage Resources | <i>Construction</i> The potential for as-yet undiscovered archaeological sites will be addressed by conducting a systematic Stage 2 archaeological survey of the proposed pipeline and related facilities that are of concern to the assessment. Should the Stage 2 survey result in the discovery of additional sites, the criteria for determining the requirements for further assessment will be applied to ascertain whether the discoveries warrant further and more intensive investigations. Those criteria are detailed in Section 2.2 of the <i>Standards and Guidelines</i> (MTCS 2011: 39-41). <i>Operation</i> No effects are anticipated during operation of the pipeline. | § In the unlikely event that archaeological resources are discovered during construction, a stop work procedure will be implemented and MTCS will be advised along with Indigenous communities; § Work undertaken in and around areas with known archaeological potential will be completed in accordance with Section 8.15: Archaeological Areas of Enbridge's <i>Construction and Maintenance Manual, 2017</i> ; § The results of the Stage 1 archaeological assessment indicate that there is potential for the discovery of pre-contact and contact period First Nations peoples and Euro-Canadian pioneers archaeological remains during construction. No significant net effect is anticipated providing the recommended mitigation measures are implemented, including the completion of a Stage 2 archaeological assessment; and, § If human remains are discovered during construction, a stop work procedure will be implemented and the appropriate agencies (e.g., police, coroner) will be contacted as well as Indigenous communities, if applicable. | No significant net effect is anticipated following implementation of the recommended mitigation measures. |
| Community Resources | <i>Construction</i> No effects are anticipated during construction of the pipeline. <i>Operation</i> No effects are anticipated during operation of the pipeline. | § Traffic studies will be developed and approved by the appropriate authority prior to construction to ensure that EMS, police and fire are aware of any road detours or lane closures. | No significant net effect is anticipated following implementation of the recommended mitigation measures. |
| Waste Disposal and Potentially Contaminated Sites | <i>Construction</i> There is limited potential to encounter contaminated sites during construction. <i>Operation</i> No effects are anticipated during operation of the pipeline. | The contractor should proceed with construction cautiously and be aware of the potential for contaminated soils. If contaminated soils are suspected, Section 8.13: Suspect Soil Excavation and Disposal Requirements of Enbridge's <i>Construction and Maintenance Manual, 2017</i> , should be followed as suspect soils must be safely handled and disposed of in a manner consistent with regulatory requirements. Generally, when an excavation results in the discovery of suspect soil, there must be safe handling and disposal of the soil in compliance with regulatory requirements. Additional subsurface investigations (confirmatory and waste classification samples) should also take place in areas suspected of having soil contamination. Enbridge's Suspect Soil Procedure provides direction for managing contaminated sites that are encountered during construction. Should suspect soils be encountered, third party consultants are on-call twenty-four hours, seven days a week to provide support. Suspect soils are typically identified based on the following: | No significant net effect is anticipated following implementation of the recommended mitigation measures. |

| Component | Potential Construction and Operation Effects | Mitigation Measures | Potential Net Effects |
|-----------|--|--|-----------------------|
| | | <div><div>§ An odour emanating from the excavation;</div><div>§ A significant change in colour, oil sheen, texture or stunted vegetation condition;</div><div>§ The presence of coloured, odorous or non-water like liquid seeping into the excavation; and,</div><div>§ The presence of solid wastes including drums, containers or tanks.</div></div> <div>If suspect soils are identified, implement the Suspect Soils Procedure (see Section 8.13 of Enbridge's <i>Construction and Maintenance Manual, 2017</i> for further details).</div> | |

6.0 CUMULATIVE EFFECTS

The cumulative effects assessment evaluates the significance of residual effects (after mitigation) of the Project along with the effects of other unrelated projects. The cumulative effects assessment recognizes that while individual actions may not have a significant impact on the biophysical or social environment, multiple actions of a similar nature that occur over an extended period of time may have a very significant impact. For the purposes of the assessment, cumulative effects are defined as:

- § The combination and interaction of effects of the same project;
- § The combination and interaction of the effects of this project with other projects; and,
- § The combined effects over time in the same space.

6.1 METHODOLOGY

The cumulative effects assessment was undertaken in accordance with OEB guidelines and included developing a Study Area for the cumulative effects assessment with appropriate boundaries that would allow for the identification and consideration of the following:

- § additive effects of pipeline construction occurring slowly over time (i.e., erosion of the easement due to inadequate grading);
- § interactive or magnifying effects from pipeline construction (i.e., soil fertility loss in the area and soil degradation due to compaction during construction);
- § additive effects of pipeline construction and other existing and future projects in the area (i.e., additive forest cover losses due to tree clearing for pipeline construction and subdivision development); and,
- § interaction of pipeline construction with other existing and future projects in the area (i.e., cold stream fish habitat degradation, as an interactive effect of increased erosion and sedimentation due to pipeline stream crossing and floodplain development).

6.2 STUDY AREA BOUNDARIES

Based on the above criteria and Dillon's professional experience, it was determined that the spatial boundaries (Study Area) for the cumulative effects assessment be established as a 250 m radius of the PR (i.e., 250 m on either side of the route).

Temporal boundaries identified for the assessment include recently constructed projects, projects currently under review, under construction or planned within three years before or three years following Project construction (i.e., reasonably foreseeable).

6.3 IDENTIFIED PROJECTS

A review of various online sources was conducted to identify projects in the cumulative effects assessment Study Area. Various small-scale construction and road improvement projects were identified on the City of Ottawa's website and through public notification in the vicinity of the Study Area, including:

- § Montreal Road Revitalization Project (status: planned construction start spring 2019);
- § Donald Street at St. Laurent Boulevard Intersection Improvements (status: underway);
- § St. Laurent Academy – school expansion;
- § Repaving along St. Laurent (status: planned construction 2020)

- § New senior residence on Centre Street, behind St. Laurent Academy (status: under construction); and,
- § McArthur Avenue Improvement Plan (status: Completed).

No major infrastructure projects (reasonably foreseeable) were noted within 1 km of the Preferred Route during the established temporal boundaries.

6.4 ANALYSIS OF CUMULATIVE EFFECTS

Cumulative effects to the physical and natural environment are anticipated to be minimal as the lands proposed for the pipeline have been previously disturbed and will be restored to their previous state following construction. Potential impacts will be minimized through the use of mitigation.

Based on the planned and existing developments, there is a possibility of socio-economic cumulative effects related to construction traffic, noise, and dust, although these are anticipated to be outside the 1 km buffer from the Project. The use of appropriate mitigation techniques and short timeframe for construction (6 months, weather permitting) will ensure that any cumulative impact is minimal and short-term in duration. In addition, the selection of the PR will result in minimal disturbance to the area, since the pipeline work will be limited to the ROW where there is an existing pipeline. Access to entrance ways will be maintained throughout construction. With the implementation of appropriate mitigation and protective measures, potential cumulative effects will be of low probability and magnitude, short duration, and reversible, and are therefore not anticipated to be significant.

6.5 ADDITIVE AND MAGNIFYING EFFECTS

A review was completed to determine potential additive effects of pipeline construction occurring slowly over time as well as potential magnifying effects from pipeline construction. Additive effects can be caused by the removal of vegetation, forest cover, and agricultural crops as well as soil fertility loss and soil erosion. The review also included examining the effects of incremental increase of easement widths when adding parallel pipelines.

Additive and magnifying effects are not anticipated since the pipeline will be placed within the existing road ROW (no increase in ROW width) in a heavily urbanized environment. Typical additive effects of erosion, soil fertility loss/soil degradation, and removal of vegetation cover are not applicable to the Project.

7.0 ACCIDENTS AND MALFUNCTIONS

This section provides an overview of potential environmental effects resulting from accidents and malfunctions of the Project.

7.1 ACCIDENTS/MALFUNCTIONS CONSIDERED

Accidents and malfunctions have the potential to occur during all phases of the Project and include the following:

- § equipment or machinery leaks or other spills; and,
- § pipeline failure during operation resulting in the release of natural gas.

Accidents and malfunctions can result from several events including equipment failure, human error, natural perils, or criminal activities. The assessment of accidents and malfunctions takes into account the type, scale and location of the Project, the characteristics of the product to be transported, sensitivities in the Study Area, and Enbridge internal preventative protocols for minimizing such events.

Enbridge also implements several strategies aimed at eliminating, or minimizing, accidents and malfunctions including:

- § patrolling the ROW regularly using aircraft, vehicles, and foot patrols; and,
- § maintaining the pipeline using special pipeline coatings, in-line inspections, integrity digs, leak surveys and using cathodic protection.

7.1.1 Equipment or Machinery Leaks or Other Spills

It is likely that hazardous material will be stored onsite during the construction period and could include fuel, lubricants, coolants, paints and solvents. If not stored properly, hazardous materials may come into contact with the natural and socio-economic environment.

7.1.2 Pipeline Releases During Operation Resulting in Release of Natural Gas

The failure of the pipeline during operation can result in the accidental release of natural gas into the environment. Enbridge monitors and controls its pipelines continuously using a comprehensive monitoring system. Enbridge's strives to have zero leaks and have established company-wide leak reduction targets.

Natural gas pipelines can be damaged by regular work activities conducted by contractors (i.e., road work, utility work, etc.). It is required that contractors obtain utility locates prior to any ground disturbance by contacting Ontario One Call in order to decrease the possibility of pipeline damages.

7.2 EFFECTS ASSESSMENT AND SIGNIFICANCE

The potential effects associated with equipment and machinery leaks or other spills and pipeline failure during operation are listed in Table 10.

Table 10: Potential Effects, Mitigation Measures and Net Effects Identified as a Result of Accidents and Malfunctions

| Potential Effect | Project Activity | Spatial Boundary | Mitigation Measures | Potential Net Effects |
|--|----------------------------|------------------|---|-----------------------|
| Leaks from equipment and machinery or other spills causing contamination of soils and/or water | Construction and Operation | Study Area | <p>Equipment and machinery should be kept in good working order and be maintained on a regular basis.</p> <p>Follow safe work procedures when working with, or storing, chemicals. Crews should be properly trained in the handling of wastes.</p> <p>Immediately contain and clean up spills in accordance with regulatory requirements and Enbridge procedures.</p> <p>Contractor(s) and construction crews should have appropriate spill containment and hazardous material and response training.</p> <p>Implement applicable sections of Enbridge's internal protocols for safety, pre-emergency preparedness, and emergency response actions.</p> <p>Depending on the type/extent and or nature of spill, the following should be contacted:</p> <ul style="list-style-type: none"> § MECP Spills Action Centre at 1-800-268-6060 (out of Province 1-416-325-3000); and, § MECP Pollution 24 hour public hotline at: 1-866-MOE-TIPS (1-866-663-8477) § Report emergencies by calling 911 (Emergency Services). | None |
| Pipeline releases resulting in adverse effects to the environment | Operation | Study Area | <p>Implement applicable sections of Enbridge's internal protocols for safety, pre-emergency preparedness, emergency response actions and emergency response.</p> | None |

Enbridge takes steps to ensure the safe and reliable operation of their natural gas pipelines, including continuously monitoring the entire network and performing regular field surveys to detect leaks and confirm corrosion prevention methods are working as intended. If a natural gas release is detected or reported, Enbridge promptly responds by dispatching a trained response team and isolates and repairs the leak or damage.

Additional mitigation measures are provided in Enbridge's *Construction and Maintenance Manual, 2017*.

Vandalism to the Project and response measures is also considered in Enbridge's internal protocols.

7.3 SUMMARY OF NET EFFECTS

The likelihood of any adverse effects caused by accidents and malfunctions occurring is considered to be very low. Providing mitigation measures outlined in this ER are implemented, net effects are not considered to be significant.

8.0 EFFECTS OF THE ENVIRONMENT ON THE PROJECT

This section identifies the potential effects of the environment on the Project. The identification of potential effects of the environment on the Project is used to develop appropriate mitigation measures, if required.

Enbridge is aware of the range of environmental conditions that can affect the Project. This knowledge has been incorporated into Project planning, design and proposed mitigation measures to avoid such effects as best as possible.

8.1 ENVIRONMENTAL CONDITIONS CONSIDERED

The following environmental conditions were identified as potentially affecting the Project in the Study Area:

- § Climate change;
- § Extreme precipitation, flooding and erosion; and,
- § Seismic activity.

8.1.1 Climate Change

An increased warming trend as a result of climate change has the potential to result in higher water levels and increased flow in watercourses to be crossed by the pipeline. However, increased warming can also lead to increased drought conditions and other unusual weather patterns such as lightning storms.

Long periods of drought conditions can also lead to loose soils and a subsequent increase in dust during windy periods. Unexpected changes in weather conditions can also lead to excessive runoff in the spring and excessive ice during the winter.

8.1.2 Extreme Precipitation, Flooding and Erosion

Extreme precipitation can lead to flood conditions resulting in accelerated erosion. Flooding can result in less ground cover over a pipeline and can reduce water quality in watercourses. Periods of extreme precipitation and flooding can also create poor ground conditions (i.e., wet soils) and thus delay construction of the Project.

8.1.3 Seismic Activity

Seismic activity has the potential to negatively affect the Project however is considered unlikely as the pipeline is located in the Western Quebec Seismic Zone which generally has low to moderate level of seismicity. The pipeline will also be constructed in accordance with applicable regulatory requirements.

8.2 EFFECTS ASSESSMENT AND SIGNIFICANCE

The assessment of effects of the environment on the Project includes all environmental conditions considered. Based on the above, there is potential for the environment (i.e., climate change, extreme precipitation, seismic activity) to adversely affect the Project as outlined in Table 11.

Table 11: Potential Effects, Mitigation Measures and Net Effects Identified as a Result of Effects of the Environment on the Project

| Potential Effect | Project Activity | Spatial Boundary | Mitigation Measures | Potential Net Effects |
|-----------------------|------------------------|------------------|--|-----------------------|
| Delay in construction | Construction Operation | Study Area | Enbridge and their contractor(s) will be flexible in their planning of construction and maintenance activities to allow for varied weather patterns. On-site personnel will continuously monitor weather during construction activities and plan/ adjust schedule as required. | None |
| Damage to facilities | Construction Operation | Study Area | Undertake regular patrols and maintenance as required on the pipeline during operation. | None |

8.3 SUMMARY OF NET EFFECTS

An effect caused by the environment could potentially result in a significant effect on the Project; however, this is considered to be unlikely. In the context of mitigation measures provided in this ER, as well as Enbridge contingency plans, no net effects are anticipated.

9.0 INSPECTION AND MONITORING RECOMMENDATIONS

It is Dillon's recommendation that Enbridge employ the services of an Environmental Inspector to be present during the construction of the pipeline. The Environmental Inspector will provide inspection of contractor environmental mitigation measures and respond to other environmental issues that may develop during pipeline construction. The Environmental Inspector should be familiar with pipeline construction techniques and OEB guidelines.

The primary objective of environmental inspection is to determine the effectiveness of mitigation measures (and modify as needed), inspect the construction site and to determine compliance with applicable environmental legislation, regulations, industry standards, and project permit conditions, including any notification requirements or conditions set by the OEB. Standard conditions of approval set by the OEB for Enbridge may include:

- § requirements to notify the OEB of any material changes in construction or restoration procedures;
- § to notify the OPCC Chair of commencement and completion of construction and facility testing;
- § to prepare and file post-construction interim and final monitoring reports; and,
- § to apply a stakeholder complaint tracking system.

The primary objective of environmental monitoring during construction is to monitor the natural and social environments to determine any adverse effects and to verify that the construction site is returned to pre-construction conditions as soon as possible. The purpose of post-construction monitoring is to ascertain the success of the restoration effort and mitigation measures. The knowledge gained from inspection and monitoring can be used in future projects to avoid or minimize similar problems that may arise. Monitoring reports also allow for the collection of quantitative data for the assessment of impacts, and to recommend mitigation measures for the future.

9.1 PRE-CONSTRUCTION

A number of activities should be undertaken prior to construction including:

- § Acquisition of permits and approvals listed in Section 1 of this report;
- § The development of a project-specific Environmental Protection Plan (EPP) and Environmental Alignment Sheets with detailed mitigation measures;
- § Environmental training for the contractor. This usually occurs with the construction manager and project foremen. The purpose of the training is to educate the construction crew on the key components of the EPP, including associated mitigation measures including SAR, and about working within residential areas. Other areas of concern along the ROW are also reviewed in the field at this time; and,
- § A pictorial record of conditions is compiled to compare restoration efforts with pre-construction conditions.

9.2 DURING CONSTRUCTION

9.2.1 Environmental Inspector

The Environmental Inspector's responsibilities will be to monitor the construction with respect to the mitigation and monitoring recommendations outlined in this report, and that construction activities are carried out in compliance with permit conditions. Additional inspections may be required after severe weather events.

9.2.2 Environmental Monitors

Environmental Monitors (typically Qualified Professionals) should be used as-needed during construction, e.g., fish salvages or handling wildlife.

9.2.3 Spills Contingency Plan

A contingency plan for accidental spills should be developed. At a minimum, there should be spill kits on site and a telephone number posted for the MECP Spills Action Centre (1-800-268-6060), which will be reported by Enbridge Environment, Health and Safety, in the event of a spill. The Environmental Inspector will be trained in Enbridge's spill response protocols and should impart this training at the pre-construction meeting.

9.3 POST-CONSTRUCTION

9.3.1 Monitoring Reports

In order to assess the effectiveness of restoration programs within the ROW used for pipeline construction and in keeping with the intent of OEB guidelines, environmental monitoring reports will be prepared including an Interim Monitoring Report and a Final Monitoring Report. As per OEB guidelines, the Interim Monitoring Report is normally required within six months after final tie-ins, while the Final Monitoring Report is to be prepared prior to November 1, after the first full growing season following construction.

9.3.1.1 INTERIM MONITORING REPORT

The following provides an outline of an Interim Monitoring Report based on OEB guidelines.

- § Describe the predicted impacts (including cumulative impacts) and mitigation measures;
- § Compare predicted impacts with those that actually occurred, explaining the reasons for any deviations;
- § Outline any changes in the proposed construction, monitoring or restoration procedures that took place during the Project, and the reason for the changes;
- § Discuss the effectiveness of the measures applied and indicate opportunities for improvement in future pipeline projects;
- § Provide a log of complaints during construction and the actions taken in response; and,
- § Detail any instances where provisions of a local by-law have not been complied with and the reasons for such non-compliance.

9.3.1.2 FINAL MONITORING REPORT

The following provides an outline of a Final Monitoring Report based on OEB guidelines.

- § Describe the condition of the rehabilitated ROW and actions taken subsequent to the interim report;
- § Compare predicted and actual impacts (including cumulative impacts), mitigation measures, and explain any deviations which occurred;
- § Report the results of any monitoring programs and analyses such as soil and water sampling, and make recommendations as appropriate;
- § Discuss the effectiveness of the mitigation measures as well as the monitoring programs and indicate opportunities for improvement in future pipeline projects;
- § Provide a breakdown of environmental costs incurred for the Project. In particular, items of cost associated with specific measures related to pre-construction, construction or restoration should be described;
- § Provide a log of complaints received during construction and the actions taken in response; and,
- § Include instances where the provision of any local by-law has not been complied with and the reasons for such non-compliance.

The Final Monitoring Report should also address any potential cumulative effects which may arise for pipelines such as reduced soil productivity, land use restrictions due to increased easement widths or additional above ground facilities and/or the repeated construction through sensitive areas.

10.0 SUMMARY AND CONCLUSIONS

The Study involved undertaking an inventory of physical, natural and socio-economic features within the Study Area. This information was used to produce maps identifying features that could be impacted by pipeline construction and/or operation. The PR is sited in an existing, previously disturbed municipal road ROW. This minimizes potential impacts to the surrounding communities and land uses. As existing customers must be serviced off of St. Laurent Boulevard, no alternative routes were identified.

Mitigation measures were recommended to minimize potential negative impacts to the environment. These recommendations, in combination with the Enbridge's *Construction and Maintenance Manual, 2017*, are anticipated to effectively protect environmental features along the PR. The mitigation recommendations contained in the ER, along with the Enbridge's construction policies, should be included in contract specifications. Use of a qualified Environmental Inspector and Environmental Monitors will help reduce disturbance to the local environment during pipeline construction activities.

Lastly, preparation of Interim and Final Post Construction monitoring reports and an environmental inspection program will assist with monitoring the area to determine any changes to the environment from baseline following the construction period.

Dillon does not anticipate any long term impacts from the construction and/or operation of the proposed pipeline provided the mitigation measures recommended in this report are followed.

11.0 REFERENCES AND WORKS CITED

- Barnett, P.J., Cowan, W.R. and Henry, A.P. 1991. Quaternary Geology of Ontario, Southern/Eastern sheet (Ontario Geological Survey).
- Chapman, L.S. and D.F. Putnam. 1984. The Physiography of Southern Ontario. Ontario Geological Survey, Special Volume 2, Ontario Ministry of Natural Resources. Toronto.
- City of Ottawa. 2003. Official Plan and Associated Schedules. Available at: <https://ottawa.ca/en/city-hall/planning-and-development/official-plan-and-master-plans/official-plan/volume-1-official-plan>.
- City of Ottawa. (2016). Neighbourhood Profiles. Retrieved from Ottawa Neighbourhood Study: <http://neighbourhoodstudy.ca>.
- Environment Canada. 2018. Canadian Climate Normals 1981-2010 Station Data, Temperature and Precipitation Graph for 1981 to 2010 Canadian Climate Normals Ottawa Macdonald international Airport. Accessed January 2019.
- Fisheries and Oceans Canada. 2017a. Ontario Restricted Activity Timing Windows for the Protection of Fish and Fish Habitat. Available at: <http://www.dfo-mpo.gc.ca/pnw-ppe/timing-periodes/on-eng.html>.
- Fisheries and Oceans Canada. 2017b. Aquatic Species at Risk Map. Her Majesty the Queen in Right of Canada 2018. Accessed January 2019. Available at: <http://www.dfo-mpo.gc.ca/species-especes/sara-lep/map-carte/index-eng.html>.
- Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and Its Application. Ontario Ministry of Natural Resources, Southcentral Science Section, Science Development and Transfer Branch. SCSS Field Guide FG-02.
- Ministry of the Environment, Conservation and Parks. 2018. Water Well Information System. Well Record Data.
- Ministry of Natural Resources and Forestry. 2018a. Land Information Ontario database.
- Ministry of the Environment and Climate Change. 2016. Air Quality in Ontario 2015 Report. <http://airqualityontario.com/downloads/AirQualityInOntarioReportAndAppendix2016.pdf>.
- Ministry of Natural Resources and Forestry. 2017. Natural Heritage Information Centre. Species of Conservation Concern, Plant Communities and Wildlife Concentration, Element Occurrence Database.
- Ministry of Natural Resources and Forestry. 2013. In-water Work Timing Window Guidelines. Queen's Printer for Ontario, 2013.
- Ministry of Natural Resources and Forestry. 2010. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005. Second Edition. Toronto: Queen's Printer for Ontario. 248 pp.

- Ministry of Natural Resources and Forestry. 2008. Species at Risk in Ontario.
<https://www.ontario.ca/environment-and-energy/species-risk-ontario-list>.
- Mississippi-Rideau. 2014. Mississippi-Rideau Source Protection Plan. Available at:
<https://www.mrsourcewater.ca/en/library/reports/17-mississippi-rideau-source-protection-plan>.
- Natural Resources Canada. 2016. Earthquake zones in Eastern Canada.
<http://www.seismescanada.rncan.gc.ca/zones/eastcan-en.php#WQSZ>.
- Ontario Breeding Bird Atlas. 2001. Ontario Breeding Bird Atlas – Guide for Participants.
- Ontario Nature. 2018. Ontario’s Reptile and Amphibian Atlas, Range Maps. Retrieved from:
<https://ontarionature.org/oraa/maps/>.
- Rideau Valley Conservation Authority. GeoPortal Online Mapping Tool. Retrieved from:
<https://gis.rvca.ca/html5/?viewer=rvcageoportal>.
- Rideau Valley Conservation Authority. 2016. Lower Rideau Subwatershed Report: A report on the environmental condition of the Lower Rideau River. Available at:
<https://watersheds.rvca.ca/subwatersheds/lower-rideau/subwatershed-report-lower-rideau>.
- Rideau Valley Conservation Authority. 2013. Rideau River – Rideau Falls Catchment Lower Rideau River Sub watershed Report 2012. . Available at: <https://watersheds.rvca.ca/subwatersheds/lower-rideau/catchment-reports-lower-rideau/164-lower-rideau/catchments/rideau-river-rideau-falls>.
- Statistics Canada. 2016a. Population and dwelling counts, for census metropolitan areas, 2016 and 2011 censuses. <http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/hlt-fst/pd-pl/Table.cfm?Lang=Eng&T=205&S=3&RPP=100>.
- Statistics Canada. 2016b. Population and dwelling counts, for Canada, provinces and territories, 2016 and 2011 censuses. <http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/hlt-fst/pd-pl/Table.cfm?Lang=Eng&T=101&S=50&O=A#map-popup>.

Appendix A1

Stage 1 Archaeological Assessment Report

**Stage 1 Archaeological Assessment
St. Laurent Pipeline Project
Enbridge Gas Inc.
Part of Lots 5, 6, 7, and 8, Junction Gore and
Part of Lot 26, Concession 1 on Ottawa River
Geographic Township of Gloucester
Carleton County
City of Ottawa, Ontario**

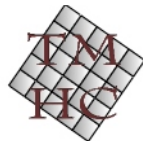
Submitted to

Dillon Consulting Limited
177 Colonnade Road South, Suite 101
Ottawa, Ontario, K2E 7J4

and

The Ontario Ministry of Tourism, Culture and Sport

Prepared by



**Timmins Martelle
Heritage Consultants Inc.**

**@ the Museum of Ontario Archaeology
1600 Attawandaron Road, London, ON N6G 3M6
Phone: (519) 641-7222 Fax: (519) 641-7220**

Archaeological License: Matthew Beaudoin, Ph.D., P324
Our File: 2018-218
PIF Number: P324-0375-2019

March 2019
Original report submitted to the Ministry of Tourism, Culture and Sport
22 March 2019

Executive Summary

Enbridge Gas Inc. (Enbridge) has identified the need to construct approximately 1.7 km of natural gas pipeline in the City of Ottawa, Ontario. The preferred route for the proposed natural gas pipeline originates approximately 20 m south of Donald Street of St. Laurent Boulevard, continuing north on St. Laurent Boulevard for approximately 1.7 km where it will terminate approximately 20 m north of Montreal Road. All proposed segments of pipe are to be installed within the existing municipal ROW. The Stage 1 Project area was determined to be a 50 m wide study area centred on St. Laurent Boulevard. The Project area lies within part of Lots 5, 6, 7, and 8 Junction Gore and Lot 26, Concession 1 on Ottawa River in the Geographic Township of Gloucester, City of Ottawa, County of Carleton, Ontario. Timmins Martelle Heritage Consultants Inc. (TMHC) was contracted to carry out a Stage 1 archaeological assessment for the Project area by Dillon Consulting Limited (Dillon) who are coordinating the project on behalf of Enbridge. The Stage 1 assessment was undertaken as part of the internal Enbridge environmental screening process. All work was done in accordance with the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011).

The Stage 1 background study included a review of current land use, historic and modern maps, registered archaeological sites and previous archaeological studies, past settlement history for the area and a consideration of topographic and physiographic features, soils and drainage. The background research indicated that the Project area was in proximity to features signalling archaeological potential, namely: 1) areas of 19th century settlement; 2) mapped 19th century thoroughfares (Montreal Road, MacArthur Avenue and St. Laurent Boulevard); and 3) The Notre-Dame Cemetery.

Nonetheless, a review of historic topographic mapping and aerial photographs, along with modern day imagery and proponent mapping, shows that the land within the majority of the Project area (19.13 ha) has been extensively disturbed by above and below ground utilities and previous construction activity. A section of the Project area (0.40 ha) at the northwestern corner of the intersection of Montreal Road and St. Laurent Boulevard is occupied by the Notre Dame Cemetery. A series of small areas of manicured lawn (2.09 ha total) within the Project area retain archaeological potential.

Based on the information compiled in the background study the following recommendation is made:

The area of the St. Laurent ROW and other areas within the 50 m wide project area containing existing structures, paved surfaces and roadways are considered extensively disturbed and no longer containing the potential for recovering archaeological resources. As a Stage 1 site inspection was not conducted as part of this assessment, these areas would require to be visually confirmed and documented during the Stage 2 assessment.

The areas of manicured lawn that front St. Laurent Boulevard, Morin Street, Malartic Avenue, Noranda Avenue, Cote Street, Guy Street, McArthur Avenue, Mutual



Street and Donald Street (Maps 9-12) are not obviously disturbed and retain archaeological potential and will require Stage 2 survey. In keeping with provincial standards, the areas within the Project area that consist of unploughable land are recommended for assessment by a standard test pit survey at a 5 m transect interval to achieve the provincial standard.

The Notre Dame Cemetery boundaries are fenced and a row of monuments stands immediately west of this fence adjacent to the ROW. As this cemetery is in the area associated with a 19th-century church, there is potential to be unmarked burials in the area. As such, a cemetery boundary investigation may be required for the ROW in this area; however, the specifics of this strategy should be developed after the completion of the Stage 2 survey of the area. As the cemetery fencing immediately abuts the sidewalk and paved roadway, Stage 2 test pit survey and mechanical trenching is not feasible. As such, construction monitoring would be required in this area.

If the Project area is changed to incorporate lands not covered within this assessment, then additional archaeological assessment may be required.

These recommendations are subject to the conditions laid out in Section 6.0 of this report and to the Ministry of Tourism, Culture and Sport's review and acceptance of this report into the provincial registry.



Table of Contents

| | |
|--|-----------|
| Executive Summary | ii |
| Table of Contents | iv |
| List of Tables | v |
| List of Maps | v |
| Project Personnel | vi |
| Acknowledgements | vi |
| | |
| 1.0 PROJECT CONTEXT | 1 |
| 1.1 Development Context..... | 1 |
| 1.1.1 Introduction..... | 1 |
| 1.1.2 Purpose and Legislative Context | 1 |
| 2.0 STAGE 1 BACKGROUND STUDY | 2 |
| 2.1 Research Methods and Sources..... | 2 |
| 2.2 Project Context: Archaeological Context..... | 5 |
| 2.2.1 Project Area: Overview and Physical Setting | 5 |
| 2.2.2 Summary of Registered or Known Archaeological Sites | 5 |
| 2.2.3 Summary of Past Archaeological Investigations Within 50 Metres | 5 |
| 2.3 Project Context: Historical Context | 6 |
| 2.3.1 First Peoples Settlement in Project Area..... | 6 |
| 2.3.2 18 th and 19 th Century and Municipal Settlement | 9 |
| | |
| 3.0 ANALYSIS AND CONCLUSIONS | 12 |
| 4.0 RECOMMENDATIONS..... | 13 |
| 5.0 SUMMARY | 14 |
| 6.0 ADVICE ON COMPLIANCE WITH LEGISLATION..... | 14 |
| 7.0 BIBLIOGRAPHY | 15 |
| 8.0 MAPS | 17 |



List of Tables

| | |
|---|---|
| Table 1: Chronology of First Peoples Settlement in Eastern Ontario..... | 6 |
|---|---|

List of Maps

| | |
|--|----|
| Map 1: Location of the Project Area in the City of Ottawa, ON | 18 |
| Map 2: Location of the Project Area in the City of Ottawa, ON | 19 |
| Map 3: Physiography Within the Vicinity of the Project Area..... | 20 |
| Map 4: Drainage Within the Vicinity of the Project Area | 21 |
| Map 5: Project Area Shown on the Walling 1863 Map of the Carleton County, ON | 22 |
| Map 6: Project Area Shown on the 1879 Map of the City of Ottawa, ON | 23 |
| Map 7: Project Area Shown on 1935 Aerial Photograph | 24 |
| Map 8: Project Area Shown on 1950 Aerial Photograph | 25 |
| Map 9: Stage 1 Areas of Archaeological Potential – Section 1 | 26 |
| Map 10: Stage 1 Areas of Archaeological Potential – Section 2..... | 27 |
| Map 11: Stage 1 Areas of Archaeological Potential – Section 3..... | 28 |
| Map 12: Stage 1 Areas of Archaeological Potential – Section 4..... | 29 |
| Map 13: Proponent Mapping | 30 |



Project Personnel

TMHC would like to thank the following staff members who contributed to this project:

| | |
|------------------------------|--|
| Project Coordinators: | Holly Martelle, Ph.D. (P064) Matthew Beaudoin, Ph.D. (P324) |
| Report Production: | Matthew Beaudoin, Ph.D. (P324) Liam Browne, M.A. (P1048) |
| GIS Technician: | David Gostick, B.A |

Acknowledgements

TMHC would like to acknowledge the assistance of the following individuals:

| | |
|-------------------------------|---|
| <i>Whitney Moore</i> | <i>Project Manager</i> Dillon Consulting Limited |
| <i>Giuseppe Muraca</i> | <i>Partner</i> Dillon Consulting Limited |
| <i>Ryan Fehr</i> | <i>Sr. Advisor Operations, Toronto</i> Enbridge Gas Distribution |



**Stage 1 Archaeological Assessment
St. Laurent Pipeline Project
Enbridge Gas Inc.
Part of Lots 5, 6, 7, and 8, Junction Gore and
Part of Lot 26, Concession 1 on Ottawa River
Geographic Township of Gloucester
Former Carleton County
City of Ottawa, Ontario**

1.0 PROJECT CONTEXT

1.1 Development Context

1.1.1 Introduction

Enbridge Gas Inc. (Enbridge) has identified the need to construct approximately 1.7 km of natural gas pipeline in the City of Ottawa, Ontario. The preferred route for the proposed natural gas pipeline originates approximately 20 m south of Donald Street of St. Laurent Boulevard, continuing north on St. Laurent Boulevard for approximately 1.7 km where it will terminate approximately 20 m north of Montreal Road. All proposed segments of pipe are to be installed within the existing municipal ROW. The Stage 1 Project area was determined to be a 50 m wide study area centred on St. Laurent Boulevard. The Project area lies within part of Lots 5, 6, 7, and 8 Junction Gore and Lot 26, Concession 1 on Ottawa River in the Geographic Township of Gloucester, City of Ottawa, County of Carleton, Ontario. Timmins Martelle Heritage Consultants Inc. (TMHC) was contracted to carry out a Stage 1 archaeological assessment for the Project area by Dillon Consulting Limited (Dillon) who are coordinating the project on behalf of Enbridge. The Stage 1 assessment was undertaken as part of the internal Enbridge environmental screening process. All work was done in accordance with the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011).

All archaeological assessment activities were performed under the professional archaeological license of Matthew Beaudoin, Ph.D. (P324) and in accordance with the 2011 *Standards and Guidelines for Consultant Archaeologists* (MTC 2011). Permission to commence the study was given by Whitney Moore, of Dillon.

1.1.2 Purpose and Legislative Context

The *Ontario Heritage Act* (1990) makes provisions for the protection and conservation of heritage resources in the province of Ontario. Our archaeological

assessment work is part of an environmental review which is intended to identify areas of environmental interest as specified in the *Provincial Policy Statement* (2014). Heritage concerns are recognized as a matter of provincial interest in Section 2.6.2 of the *Provincial Policy Statement* (PPS) which states:

development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved (OMMAH 2014:29).

In the PPS the term *conserved* means:

the identification, protection, management and use of *built heritage resources, cultural heritage landscapes and archaeological resources* in a manner that ensures their cultural heritage value or interest is retained under the *Ontario Heritage Act*. This may be achieved by the implementation of recommendations set out in a conservation plan, archaeological assessment and/or heritage impact assessment. Mitigative measures and/or alternative development approaches can be included in these plans and assessments (OMMAH 2014:40).

Sections 2 (d) and 3.5 of the *Planning Act* stipulate that municipalities shall have regard for their conservation of features of significant architectural, cultural, historical, archaeological or scientific interest. Therefore, the purpose of a Stage 1 background study is to determine if there is potential for cultural resources to be found on a property for which a change in land use is pending. If a property is found to have potential for cultural resources, a Stage 2 assessment is required, involving a search for archaeological resources.

2.0 STAGE 1 BACKGROUND STUDY

2.1 Research Methods and Sources

A Stage 1 background study was conducted to gather information about known and potential archaeological resources within the Project area. According to the Province of Ontario's 2011 *Standards and Guidelines for Consultant Archaeologists*, a Stage 1 background study must include a review of:

- an up-to-date listing of sites from the Ontario Archaeological Sites Database (OASD) of archaeological sites with 1 km of the Project area;
- reports of previous archaeological fieldwork within a radius of 50 metres;
- topographic maps at 1:10,000 (recent and historical) or the most detailed scale available;
- historic settlement maps (e.g., historical atlas, surveys);
- archaeological management plans or other archaeological potential mapping (when available); and



- commemorative plaques or monuments on or near the Project area.

For this project, the following activities were carried out to satisfy or exceed the above requirements:

- a database search of registered archaeological sites within 1 km of the Project area was carried out with the Ministry of Tourism, Culture and Sport's Past Portal system (completed January 23, 2019);
- a review of known prior archaeological reports for the Project area and adjacent lands (note the Ministry of Tourism, Culture and Sport currently does not keep a publicly accessible record of archaeological assessments carried out in the Province of Ontario, so a complete inventory of prior assessment work nearby is not available);
- Ontario Base Mapping (1:10,000) was reviewed through ArcGIS and mapping layers provided by geographynetwork.ca; detailed mapping provided by the client was also reviewed; and,
- historic maps and records related to post-1800 land settlement were studied.

Additional sources of information were also consulted, including modern aerial photographs, local history accounts, soils and physiography data provided by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), and both 1:50,000 (Natural Resources Canada) and finer scale topographic mapping.

There are no commemorative plaques or monuments within the vicinity of the Project area. The Project area falls within the Regional Municipality of Ottawa-Carleton's Archaeological Management Plan (ASI and Geomatics 1999); however, this plan does not identify the Project area as having archaeological potential.

When compiled, background information was used to create a summary of the characteristics of the Project area, to evaluate its archaeological potential. The Province of Ontario (MTC 2011 – Section 1.3.1) has defined the criteria that identify archaeological potential as:

- previously identified archaeological sites
- water sources
 - primary water sources (lakes, rivers, streams, creeks)
 - secondary water courses (intermittent streams and creeks, springs, marshes, swamps)
 - features indicating past water sources (e.g., glacial lake shorelines indicated by the presence of raised sand or gravel beach ridges, relic river or stream channels indicated by clear dip or swale in topography, shorelines of drained lakes or marshes, cobble beaches)
 - accessible or inaccessible shoreline (e.g., high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh)



- elevated topography (e.g., eskers, drumlins, large knolls, plateau)
- pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground
- distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases; there may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings
- resource areas, including:
 - food or medicinal plants (e.g., migratory routes, spawning areas, prairie);
 - scarce raw materials (e.g., quartz, copper, ochre or outcrops of chert);
 - early Euro-Canadian industry (e.g., fur trade, logging, prospecting, mining)
- areas of 19th century settlement. These include places of early military or pioneer settlement (e.g., pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches and early cemeteries. There may be commemorative markers of their history, such as local, provincial, or federal monuments or heritage parks.
- early historical transportation routes (e.g., trails, passes, roads, railways, portage routes)
- property listed on a municipal register or designated under the *Ontario Heritage Act* or that is a federal, provincial, or municipal historic landmark or site; and
- property that local histories or informants have identified with possible archaeological sites, historical events, activities or occupations.

In Southern Ontario (south of the Canadian Shield), any lands within 300 metres of any of the features listed above are considered to have potential for the discovery of archaeological resources.

Typically, a Stage 1 assessment will determine potential for precontact First Peoples' and historic era sites independently. This is due to the fact that lifeways varied considerably during these eras so that criteria used to evaluate potential for each type of site also varies.

It should be noted that some factors can also negate the potential for discovery of intact archaeological deposits. Subsection 1.3.2 of the 2011 *Standards and Guidelines for Consultant Archaeologists* indicates that archaeological potential can be removed in instances where land has been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. Major disturbances indicating removal of archaeological potential include, but are not limited to:

- quarrying;
- major landscaping involving grading below topsoil;
- building footprints; and,
- sewage and infrastructure development.



Some activities (agricultural cultivation, surface landscaping, installation of gravel trails, etc.) may result in minor alterations to the surface topsoil but do not necessarily affect or remove archaeological potential. It is not uncommon for archaeological sites, including structural foundations, subsurface features and burials, to be found intact beneath major surface features like roadways and parking lots. Archaeological potential is, therefore, not removed in cases where there is a chance of deeply buried deposits, as in a developed or urban context or floodplain where modern features or alluvial soils can effectively cap and preserve archaeological resources.

2.2 Project Context: Archaeological Context

2.2.1 Project Area: Overview and Physical Setting

The preferred route for the proposed natural gas pipeline originates approximately 20 m south of Donald Street of St. Laurent Boulevard, continuing north on St. Laurent Boulevard for approximately 1.7 km where it will terminate approximately 20 m north of Montreal Road (Maps 1 and 2). As the Project is in the planning stages, there are no detailed development plans at this time and no effort was made to depict the result of the Stage 1 work on proponent mapping. As such, the 50 m wide Project area was established to encompass any potential work areas along the corridor.

The Project area lies within the Ottawa Valley Clay Plains physiographic region, as defined by Chapman and Putnam (1942:205-209; Map 3). The Ottawa Valley Clay Plains are a vast clay plain that extends along the shore of the Ottawa River. The majority of the Project area is located within a clay plain region; however, the northern portion of the Project area is located within a sand plain. These clay plains were formed through sediment deposition associated with the retreating Laurentide ice sheet and the waters of the Champlain Sea. As the Project area occurs within the core of the City of Ottawa, the soils within the Project area are all classified as urban.

Lands in the vicinity of the Project area are drained by the Rideau and Ottawa Rivers. The area surrounding the project area is poorly drained and there are no significant water courses within 300 m (Map 4).

2.2.2 Summary of Registered or Known Archaeological Sites

According to the Ontario Archaeological Sites Database (OASD) maintained by the Ministry of Tourism, Culture and Sport, there are no registered archaeological sites within one kilometre of the Project area.

2.2.3 Summary of Past Archaeological Investigations Within 50 Metres

During our background review it was established that no archaeological projects had taken place within 50 metres of the Project area. As the Province does not currently maintain an accessible database of archaeological assessment areas *per se*, it is not known



whether this is a complete inventory of archaeological assessment activities undertaken within 50 metres of the Project area.

2.3 Project Context: Historical Context

2.3.1 First Peoples Settlement in Project Area

There is archaeological evidence of First Peoples settlement within the Ottawa Region since the time of glacial retreat some 12,000 years ago through to the modern era. Nonetheless, our knowledge of past native land use in the area is incomplete due primarily to a lack of archeological investigation of many areas prior to urban development. Nonetheless, using province-wide and region-specific data, a general model of First Peoples settlement in the area can be proposed. The following paragraphs provide a basic textual summary of the known general cultural trends and archaeological periods and a tabular summary appears in Table 1.

Table 1: Chronology of First Peoples Settlement in Eastern Ontario

| Period | | | Time Range (circa) | Diagnostic Features | Complexes |
|-------------|--------------|------------------|---------------------|---|--|
| Paleoindian | Early | | 9000 - 8400 B.C. | fluted projectile points | Gainey, Barnes, Crowfield |
| | Late | | 8400 - 8000 B.C. | non-fluted and lanceolate points | Holcombe, Hi-Lo, Lanceolate |
| Archaic | Early | | 8000 - 6000 B.C. | serrated, notched, bifurcate base points | Nettling, Bifurcate Base Horizon |
| | Middle | | 6000 - 2500 B.C. | stemmed, side & corner notched points | Brewerton, Otter Creek, Stanly/Neville |
| | Late | | 2000 - 1800 B.C. | narrow points | Lamoka |
| | | | 1800 - 1500 B.C. | broad points | Genesee, Adder Orchard, Perkiomen |
| | | | 1500 - 1100 B.C. | small points | Crawford Knoll |
| | Terminal | | 1100 - 950 B.C. | first true cemeteries | Hind |
| Woodland | Early | | 950 - 400 B.C. | expanding stemmed points, Vinette pottery | Meadowood |
| | Middle | | 400 B.C. - A.D. 500 | dentate, pseudo-scallop pottery | Point Peninsula |
| | Transitional | | A.D. 500 - 900 | first corn, cord-wrapped stick pottery | Princess Point//Sandbanks Tradition |
| | Late | Early Iroquoian | A.D. 900 - 1300 | first villages, corn horticulture, longhouses | Glen Meyer |
| | | Middle Iroquoian | A.D. 1300 - 1400 | large villages and houses | Uren, Middleport |
| | | Late Iroquoian | A.D. 1400 - 1650 | tribal emergence, territoriality | Huron/Wendat |
| Contact | | Aboriginal | A.D. 1700 - 1875 | treaties, mixture of Native & European items | Ojibwa, Mississauga, Mohawk |
| | | Euro-Canadian | A.D. 1796 - present | English goods, homesteads | European settlement, pioneer life |

Paleoindian Period

The first human populations to inhabit the region arrived between 12,000 and 10,000 years ago, coincident with the end of the last period of glaciation. Climate and environmental conditions were significantly different then they are today; local environs would not have been welcoming to anything but short-term settlement. Termed Paleoindians by archaeologists, Ontario's first peoples would have crossed the landscape in small groups (i.e., bands or family units) searching for food, particularly migratory game species. In this area, caribou may have provided the staple of Paleoindian diet, supplemented by wild plants, small game, birds and fish.

Given the low density of populations on the landscape at this time and their mobile nature, Paleoindian sites are small and ephemeral. They are sometimes identified by the presence of fluted projectile points manufactured on a highly distinctive whitish-grey chert



named "Fossil Hill" (after the formation) or "Collingwood." This material was acquired from sources near the edge of the escarpment on Blue Mountain. It was exploited by populations from as far south as the London area, who would have traveled to the source as part of their seasonal round.

Archaic Period

Settlement and subsistence patterns changed significantly during the Archaic Period as both the landscape and ecosystem adjusted to the retreat of the glaciers. Building on earlier patterns, early Archaic populations continued the mobile lifestyle of their predecessors. Through time and with the development of more resource rich local environments, these groups gradually reduced the size of the territories they exploited on a regular basis. A seasonal pattern of warm season riverine or lakeshore settlements and interior cold weather occupations has been documented in the archaeological record.

Since the large cold weather mammal species that formed the basis of the Paleoindian subsistence pattern became extinct or moved northward with the onset of warmer climate conditions, Archaic populations had a more varied diet, exploiting a range of plant, bird, mammal and fish species. Reliance on specific food resources like fish, deer and nuts becomes more pronounced through time and the presence of more hospitable environments and resource abundance led to the expansion of band and family sizes. In the archaeological record, this is evident in the presence of larger sites and aggregation camps, where several families or bands would come together in times of plenty. The change to more preferable environmental circumstances led to a rise in population density. As a result, Archaic sites are more plentiful than those from the earlier period. Artifacts typical of these occupations include a variety of stemmed and notched projectile points, chipped stone scrapers, ground stone tools (e.g., celts, adzes) and ornaments (e.g., bannerstones, gorgets), bifaces or tool blanks, animal bone (where and when preserved) and waste flakes, a by-product of the tool making process.

Early, Middle and Transitional Woodland Periods

Significant changes in cultural and environmental patterns are witnessed in the Woodland Period (circa 3,000 to historic times). By this time, the coniferous forests of earlier times were replaced by stands of mixed and deciduous species. Occupations became increasingly more substantial in this period, culminating in major semi-permanent villages by 1,000 years ago. Archaeologically, the most significant changes by Woodland times are the appearance of artifacts manufactured from modeled clay and the construction of house structures. The Woodland Period is often defined by the occurrence of pottery, storage facilities and residential areas similar to those that define the incipient agricultural or Neolithic period in Europe.

Early and Middle Woodland peoples are also known for a well-developed burial complex and ground stone tool industry. Unique Early Woodland ground stone items include pop-eyed birdstones and gorgets. In addition, there is evidence of the development



of widespread trading with groups throughout the northeast. The recovery of marine shells from the Lake Superior area indicates that exchanges of exotic materials and finished items from distant places were common place. The Middle Woodland period in the region is dominated by sites recognized as part of the Point Peninsula archaeological complex. Point Peninsula groups were influenced by Hopewell culture developments in the American Midwest, including mound burial and participation in widespread trade in exotic materials, many of which were used as burial offerings.

Late Woodland Period

In Eastern Ontario Late Woodland development saw continued use of the region by groups retaining a hunter and gatherer-based subsistence strategy. It would seem that portions of Eastern Ontario such as the Ottawa Valley featured an overlap of this subsistence practice with that of limited horticulture. Essentially, hunter/gatherers in the region are primarily regarded as Algonquian speaking populations continuing a way of life extending from the Archaic period. Historically some of these groups were known as the Matouweskarini, the Iroquet and the Kichesipirini. How these groups relate to ancestral populations such as those of the Point Peninsula complex remains a matter for debate. Understanding the prehistoric development of these groups has been hampered by a low intensity of archaeological activity. The following discussion will focus on developments in eastern Ontario that took place along the St. Lawrence River and the eastern shore of Lake Ontario.

The Late Woodland Period has been divided into three sub-periods consisting of Early, Middle and Late Iroquoian. Elements of all three are represented in Eastern Ontario although their relationship with one another is not as clearly defined as sequences emerging in southcentral and southwestern Ontario.

It is on Early Iroquois (EI) sites that the first definitive house structures have been identified in Eastern Ontario. It is believed that there were earlier house structures but to date none have been identified in the region. Houses were small elliptical structures, much like Middle Woodland houses recorded in southwestern and northern Ontario, only slightly larger, with hearths placed off the centre line. It is during this part of the sequence that evidence of villages occurs, first as loosely associated structures followed by structures with more systematic organization of space, such as the designation of midden or garbage areas. In eastern Ontario evidence for EI villages is lacking. Many of the sites, such as Lakeshore Lodge in Prince Edward County, or the Kingston Outer Station, are fishing stations, a continuation of the Late Middle Woodland and Transitional Period settlement pattern. While there is some evidence for use of cultivated plants, it has been suggested that EI groups in Eastern Ontario still relied primarily on a hunter-gatherer subsistence strategy. Sites in areas such as Charleston Lake (Jackson's Point Rock Shelter) near Gananoque do suggest some differences between Point Peninsula and Pickering hunting and gathering patterns, indicating the same places were being used but at different seasons.



The Middle Iroquoian period, which dates between ca. A.D. 1300 and 1400, saw continued change in settlement patterns and subsistence practices among Late Woodland populations. These differences are considered part of a continuum involving *in situ* development of local populations. Middle Iroquoian sites are rare in Eastern Ontario, but they have been identified in Prince Edward County and in the Kingston area. There is a Middle Iroquoian component at Kingston Outer Station, a fishing camp located along the Cataraqui River in Kingston. Middle Iroquoian ceramics have also been recovered from the Gananoque River Drainage System. These groups appear to have developed into the easternmost branches of the Huron-Wendat, discussed in greater detail below.

To the east, along the St. Lawrence Valley, were the St. Lawrence Iroquois. Village clusters have been identified at Prescott and further east towards Cornwall in Eastern Ontario, with a large number reported for Jefferson County in New York State and farther east in Quebec.

The material culture of the Huron-Wendat and the St. Lawrence Iroquois was similar in many ways. The St. Lawrence Iroquoian populations are distinguished from the Huron-Wendat by distinctive ceramic styles and the development of an extensive bone tool technology. The St. Lawrence Iroquoian lithic industry was very poorly developed, mainly because local stone sources were of low quality for tool manufacture. This may also have been a consequence of disruption of earlier trading networks that brought in better quality cherts. There is also some indication of conflict between these populations. In addition to village sites, fishing camps along tributaries of the St. Lawrence River have been found at Morrisburg and between Cardinal and Prescott. It has been suggested that these fishing camps serviced the inland sites by harvesting eel, an important element in the diet of St. Lawrence Iroquois populations.

There is considerable evidence to suggest that there was conflict between different populations or groups through this period. The appearance of St. Lawrence Iroquois ceramics on Huron-Wendat sites in Prince Edward County and in the Trent River System, as well as the recovery of Huron-Wendat ceramics on St. Lawrence Iroquoian sites has been explained in various ways, ranging from trade to warfare to wholesale migration and relocation of St. Lawrence Iroquois groups. We know that by the mid-1500s, after the visits by Jacques Cartier, the St. Lawrence Iroquoians had disappeared from the region. There is one site in the Trent Valley, within Huron-Wendat territory, that has yielded St. Lawrence Iroquoian pottery in association with European trade goods, suggesting that at least some of the St. Lawrence Iroquoians ultimately settled among the Huron-Wendat.

2.3.2 18th and 19th Century and Municipal Settlement

The Project area lies within part of Lots 5, 6, 7, and 8, Junction Gore and Lot 26, Concession 1 on the Ottawa River in the Geographic Township of Gloucester, City of Ottawa, County of Carleton, Ontario. A brief discussion of 18th and 19th century and municipal settlement in Gloucester is provided below, as a means of providing general context for understanding former land use.



Gloucester Township

Gloucester Township was established in 1792 as Township B. It was originally part of Russell County but joined Carleton County in 1838 and was incorporated as Gloucester Township in 1850 (Walker & Walker 1968). Gloucester Township is bounded by the Rideau River to the west, the Ottawa River to the north, on the south by Osgoode Township and the on the east by Russell County.

The first documented permanent settler in the township was Braddish Billings. Born in Massachusetts, he was raised in Brockville, Ontario, after the family settled there in 1792 (Belden & Co. 1879:xxxvi). As a young man, Braddish worked for Philemon Wright in the lumber industry before branching out on his own. He built a shanty on Lot 17 in the Junction Gore in 1812 and eventually claimed Lots 16 and 18 as well. The community of Billings Bridge was named for the bridge that linked Gloucester to Bytown. Billings initiated the construction of the bridge in c.1830, and it was funded by Braddish and nine other Gloucester residents (Walker & Walker 1968:168). Thomas Mackay, another prominent figure in Gloucester's history, also settled in Junction Gore. Junction Gore was nestled by both the Rideau and Ottawa Rivers, which made it a desirable location for settlement. A surge in settlement in the Rideau Front came after the completion of the Rideau Canal in 1832 when workers decided to settle instead of returning home to Ireland. The bank of the Rideau River was the preferred option, and settlement spread inland from there (Kemp 1991). The village of Hawthorne, centered at the intersection of Walkley and Russell Roads, was so named in 1873 with the establishment of a post office. Hawthorne was one of three communities on Russell Road that was founded in the early 1830s (Belden & Co. 1879:xxxvi) and a school was depicted there on the 1863 Walling map.¹

The 1863 Walling map of East Carleton County depicts a tenant house (T.H.) on the southwest corner of Montreal Road and St. Laurent Boulevard the Project Area (Map 5). Furthermore, St. Laurent Boulevard and Montreal Road are depicted open at that time.

By 1879 the Project area is within the growing City of Ottawa (Map 6). At that point the western portion of Lot 26, Concession 1 on the Ottawa River, which fronts St. Laurent Boulevard, has been subdivided into a series of small lots numbered 1 through 28. There are no names or structure associated with these lots on the map and it is not clear if these lots were occupied at that time. The lots within the Junction Gore have also witnessed a series of changes by this time. The 1879 map depicts the eastern half of Lot 8 as being associated with Samuel Sparks and there are no structures associated with this portion of the Lot. Donald Street is depicted on the map at that time, but it was not likely open based on the depiction. Lot 7 is associated with Mrs. D. McArthur and McArthur Avenue is depicted as open. There are a series of structures depicted within the lot; however, they are all over 300 m away from the Project area. Lot 6 has been subdivided into a series of smaller lots and the only name associated with them is Mrs. Codd. There are no structures depicted within the Project area. Lot 5 has also been subdivided and the portion of Lot 5 within the

¹ Sources conflict about the date of construction of the first school at Hawthorne.



Project area is associated with T. L. Montreal Road is still depicted as open and the area to the southwest of the intersection of Montreal Road and St. Laurent Boulevard is depicted as being heavily developed by that time. It should be noted that by this time the Notre Dame Roman Catholic Church and Cemetery are now depicted to the northwest of the intersection of Montreal Road and St. Laurent Boulevard.

A review of the 1935 aerial photography shows that the lands within the Project area are primarily agricultural in nature. St. Laurent Boulevard is fronted primarily by agricultural fields and farm houses. The area surrounding the Montreal Road and St. Laurent Boulevard intersection has witnessed the most significant amount of development. There are numerous structures within the project area and the areas surrounding these structures appear to be impacted by development. The Notre Dame Church and Cemetery are clearly operational by that time and there are monuments clearly visible immediately adjacent to the Project area.

A review of the 1950 aerial photography shows that the lands within the Project area are still primarily agricultural in nature; however, there are a growing number of structure and some early subdivisions in the area. The area at the intersection of Montreal Road and St. Laurent Boulevard appears to be more developed by this time and there are additional structures in the vicinity. The boundaries of the Notre Dame Church and Cemetery do not appear drastically changed between 1935 and 1950.

A review of the contemporary aerial photography shows that the Project area is within a heavily developed portion of the City of Ottawa. The lands immediately adjacent to the Project area are a mix of commercial and residential properties. There are some open grassed areas along the route (e.g., a park to the south of Clarke Avenue); however, these are the exceptions to the normal area. The intersection of Montreal Road and St. Laurent Boulevard is heavily developed with several large commercial buildings, paved parking areas, and buried utilities.

Notre Dame Roman Catholic Cemetery Land Use

The Notre Dame Cemetery is an active cemetery that is located to the northwest corner of St. Laurent Boulevard and Montreal Road. A fence stands west of the St. Laurent Boulevard sidewalk at the top of a slope which leads down to the cemetery grounds. Monuments are present almost immediately beside this slope.

The Notre Dame Cemetery is the oldest and largest Catholic cemetery in Ottawa. In 1848 Eugène Guigues, 1st Bishop of Ottawa, purchased 20 hectares of land from Mr. Bradley for the use as a Catholic cemetery. The need for burial space arose as a result of the closure of Ottawa's Lower Town cemeteries (Barracks Hill Cemetery, 1788-1844; and Sandy Hill Cemetery, 1844-1872). Georges Bouillon was tasked with planning the new cemetery and on May 1st, 1872, the grounds were consecrated and the cemetery was officially opened.



3.0 ANALYSIS AND CONCLUSIONS

As noted in Section 2.1, the Province of Ontario has identified numerous factors that signal the potential of a property to contain archaeological resources. The Stage 1 background study included a review of current land use, historic and modern maps, registered archaeological sites and previous archaeological studies, past settlement history for the area and a consideration of topographic and physiographic features, soils and drainage. According to the map-based review and background research, potential for the discovery of archaeological sites is indicated by the proximity (within 300 m) to:

- 1) areas of 19th century settlement;
- 2) mapped 19th century thoroughfares (Montreal Road, St. Laurent Boulevard and MacArthur Avenue); and
- 3) Notre Dame Cemetery.

Historical and modern aerial photography indicates that the majority of the St. Laurent Boulevard ROW has been extensively disturbed and does not retain archaeological potential. This portion of St. Laurent Boulevard and surrounding side streets is heavily urban with and contains numerous modern residential and commercial structures. Construction of these structures and the creation of the modern roadway would have extensively disturbed the majority of the Project area.

As the project area is comprised of a 50 m wide area centred on the St. Laurent Boulevard ROW the project area includes numerous areas of manicured lawn which are not obviously disturbed. These areas most typically consist of strips manicured lawn associated with residential or commercial buildings on St. Laurent Boulevard or the side streets on both sides of the roadway. Areas of not obviously disturbed manicured lawn front St. Laurent Boulevard, Morin Street, Malartic Avenue, Noranda Avenue, Cote Street, Guy Street, McArthur Avenue, Mutual Street and Donald Street (Maps 9-12). Most notable among these is the sports field between Queen Elizabeth Public School and Rideau High School on the east side of St. Laurent Boulevard. These areas of lawn retain archaeological potential and will require Stage 2 survey.

The 1863 Walling map of the City of Ottawa depicts a tenant house on the southwestern corner of St. Laurent Boulevard and Montreal Road (Map 5). The footprint of this building is now occupied by a modern car dealership and the areas immediately to the south and west are occupied by a paved parking lot associated with the dealership. The 1879 City of Ottawa map depicts the area to the on the west side of St. Laurent Boulevard south of Montreal Road as town plot making it unclear whether the tenant house still stood at this time (Map 6). The 1935 historical aerial photograph of the intersection shows that additional structures had been erected at that corner of the intersection in the intervening years (Map 7). This photograph depicts no structure standing at the immediate southwest corner of the intersection where the Walling map depicted the tenant house. None of the structures depicted at the southwestern corner of the intersection on the 1935 historical aerial photograph are still standing today. It is likely that the tenant house was demolished



at some point between 1863 and 1935. The fact the modern car dealership stands on the mapped footprint of the tenant house makes it unlikely that the 1863 tenant house foundations have survived. The southwest corner of St. Laurent Boulevard and Montreal Road can be considered extensively disturbed and no longer containing the potential for recovering archaeological resources.

Overall Project Area

The Stage 1 background study has confirmed that most of the Project area can be considered extensively disturbed (19.13 ha) and no longer contains the potential for recovering archaeological resources. A series of small areas of manicured lawn (2.09 ha in total) within the Project area retains archaeological potential and these areas of archaeological potential should be subject to Stage 2 archaeological assessment. In keeping with provincial standards, the portions of the Project area that consist of unploughable land are recommended for test pit assessment. A five metre transect interval is recommended to achieve the provincial standard.

As the available proponent mapping is at a large scale and is for planning purposes only at this point (Map 13) we have not attempted to present the Stage 1 recommendations on the proponent mapping.

4.0 RECOMMENDATIONS

Based on the information compiled in the background study the following recommendation is made:

The area of the St. Laurent ROW and other areas within the 50 m wide project area containing existing structures, paved surfaces and roadways are considered extensively disturbed and no longer containing the potential for recovering archaeological resources. As a Stage 1 site inspection was not conducted as part of this assessment, these areas would require to be visually confirmed and documented during the Stage 2 assessment.

The areas of manicured lawn that front St. Laurent Boulevard, Morin Street, Malartic Avenue, Noranda Avenue, Cote Street, Guy Street, McArthur Avenue, Mutual Street and Donald Street (Maps 9-12) are not obviously disturbed and retain archaeological potential and will require Stage 2 survey. In keeping with provincial standards, the areas within the Project area that consist of unploughable land are recommended for assessment by a standard test pit survey at a 5 m transect interval to achieve the provincial standard.

The Notre Dame Cemetery boundaries are fenced and a row of monuments stands immediately west of this fence adjacent to the ROW. As this cemetery is in the area associated with a 19th-century church, there is potential to be unmarked burials in the area. As such, a cemetery boundary investigation may be required for the ROW in this area; however, the specifics of this strategy should be developed after the completion of the Stage 2 survey of the area. As the cemetery fencing immediately abuts the sidewalk and



paved roadway, Stage 2 test pit survey and mechanical trenching is not feasible. As such, construction monitoring would be required in this area.

If the Project area is changed to incorporate lands not covered within this assessment, then additional archaeological assessment may be required.

These recommendations are subject to the conditions laid out in Section 6.0 of this report and to the Ministry of Tourism, Culture and Sport's review and acceptance of this report into the provincial registry.

5.0 SUMMARY

A Stage 1 background study was undertaken for a proposed pipeline corridor in Ottawa, Ontario. The background research indicated that the Project area was in proximity to features signalling archaeological potential, namely: 1) areas of 19th century settlement; 2) mapped 19th century thoroughfares (Montreal Road, MacArthur Avenue and St. Laurent Boulevard); 3) Notre Dame Cemetery. Therefore, based on the background review, some portions of the Project area have potential for either First Peoples or 18th or 19th century sites. The detailed review of the available historical mapping indicates that most of the Project area should be considered extensively disturbed (19.13 ha) and no longer contains the potential for recovering archaeological resources. A series of small areas of manicured lawn (2.09 ha total) within the Project area retains archaeological potential and these areas of archaeological potential should be subject to Stage 2 archaeological assessment. In keeping with provincial standards, the portions of the Project area that consist of unploughable land are recommended for test pit assessment. A five metre transect interval is recommended to achieve the provincial standard. In addition, pending the results of the Stage 2 test pit survey a cemetery boundary investigation may be required for the Notre Dame Cemetery at the intersection of St. Laurent Boulevard and Montreal Road.

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

This report is submitted to the Ministry of Tourism, Culture and Sport as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism, Culture and Sport, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on



the site, submitted a report to the minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

Should previously undocumented (i.e., unknown or deeply buried) archaeological resources be discovered, there may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the *Ontario Heritage Act*. Further, archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48 (1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed from them, except by a person holding an archaeological licence.

The *Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33* requires that any person discovering human remains must notify the police or coroner and the Registrar of Burial Sites, War Graves, Abandoned Cemeteries and Cemetery Closures, Ontario Ministry of Government and Consumer Services. Effective as of January 16, 2016, Nancy Watkins, Senior Policy Analyst, is the new Registrar. Her telephone number is 416 212-7499 and her e-mail address is Nancy.Watkins@ontario.ca.

7.0 BIBLIOGRAPHY

Archaeological Services Inc. and Geomatics International Inc. (ASI and Geomatics)
1999 *The Archaeological Resource Potential Study of the Regional Municipality of Ottawa-Carleton*. Report on file with the Regional Municipality of Ottawa-Carleton.

Belden, H. & Co.
1879 *Illustrated Historical Atlas of the County of Carleton*. Reprinted 1971. Port Elgin: Ross Cumming.

Chapman L.J. and D.F. Putnam
1984 *The Physiography of Southern Ontario*. Second Edition. University of Toronto Press, Toronto, Ontario.

Kemp, Lois (ed.)
1991 *Gloucester Roots*. Gloucester: Elokem Enterprises.

Ministry of Northern Development and Mines (MNDM)
2007 *Physiography of Southern Ontario*. Chapman, L.J. and D.F. Putnam, authors. GIS map data layer distributed by the Ontario Geological Survey as Miscellaneous Release – Data (MRD) 228. Queen's Printer for Ontario.



Ministry of Tourism and Culture (MTC; now Ministry of Tourism, Culture and Sport)
2011 *Standards and Guidelines for Consultant Archaeologists*. Toronto.

Natural Resources Canada (NRC)
2012 *Ottawa, Ontario*. 1:50,000 Scale Topographic Map. Tile 031/G05, Electronic Version.

Ontario Fundamental Dataset, Ministry of Natural Resources (2012) and CanVec Geospatial Database (2012)
2013 Base Mapping for the Province of Ontario.

Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA)
2006 GIS Layers for Soils in the Province of Ontario.

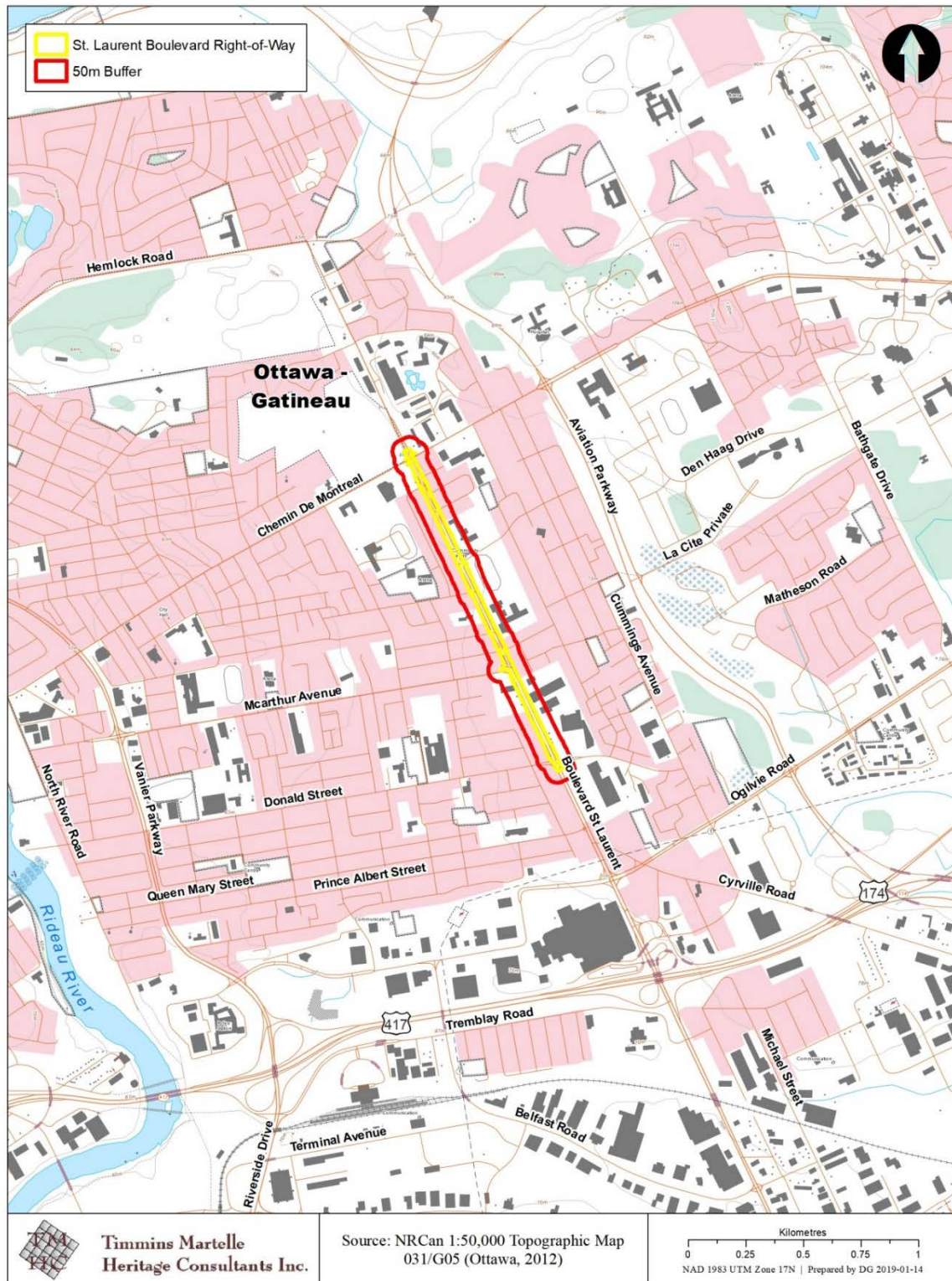
Walker, Harry and Olive Walker
1968 *Carleton Saga*. Ottawa: The Runge Press Limited.

Walling, H.F.
1863 *Map of the County of Carleton, Canada West from Surveys Under the Direction of H.F. Walling*. Published by D.P. Putnam, Prescott, C.W.



8.0 MAPS



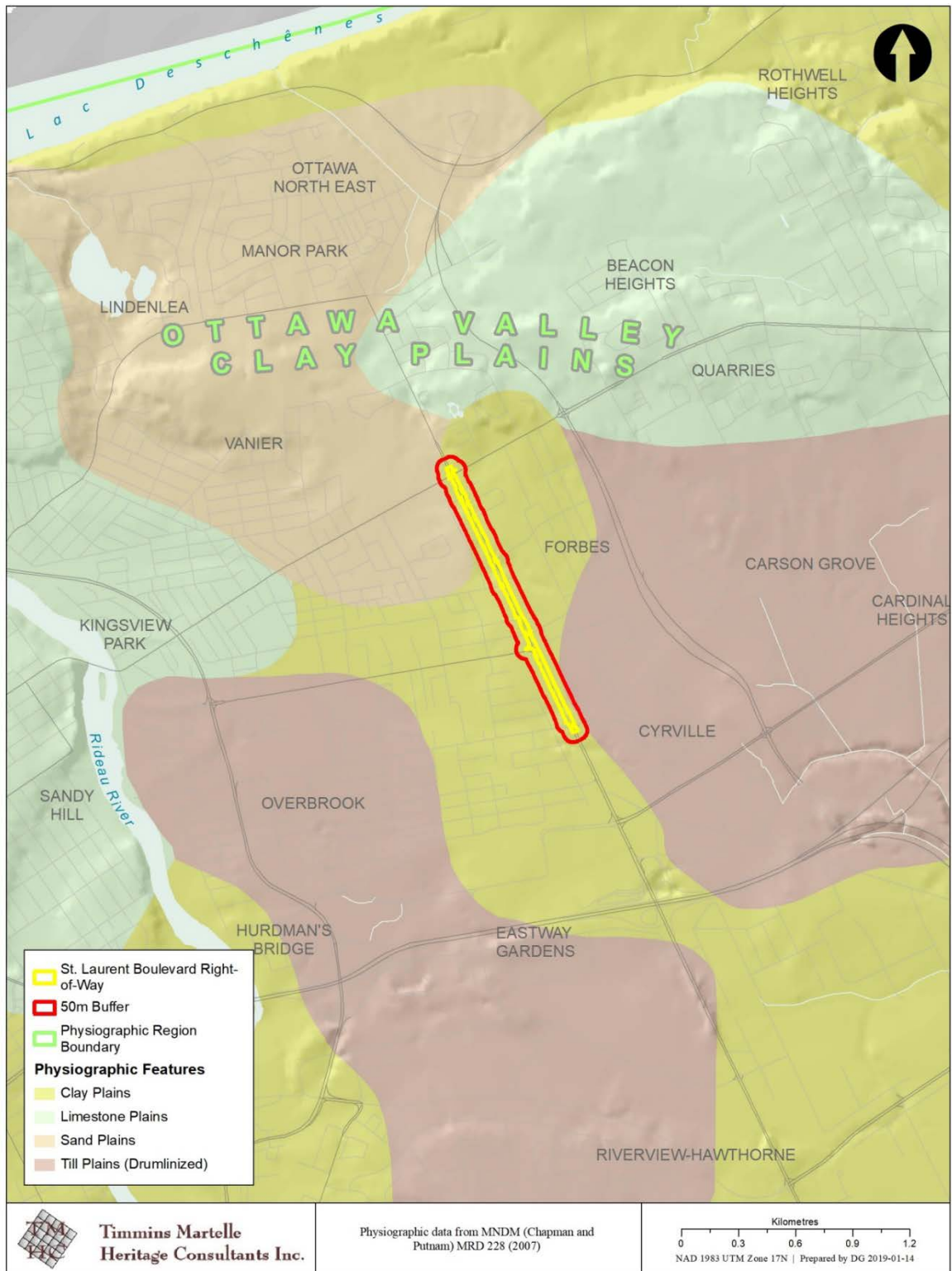


Map 1: Location of the Project Area in the City of Ottawa, ON



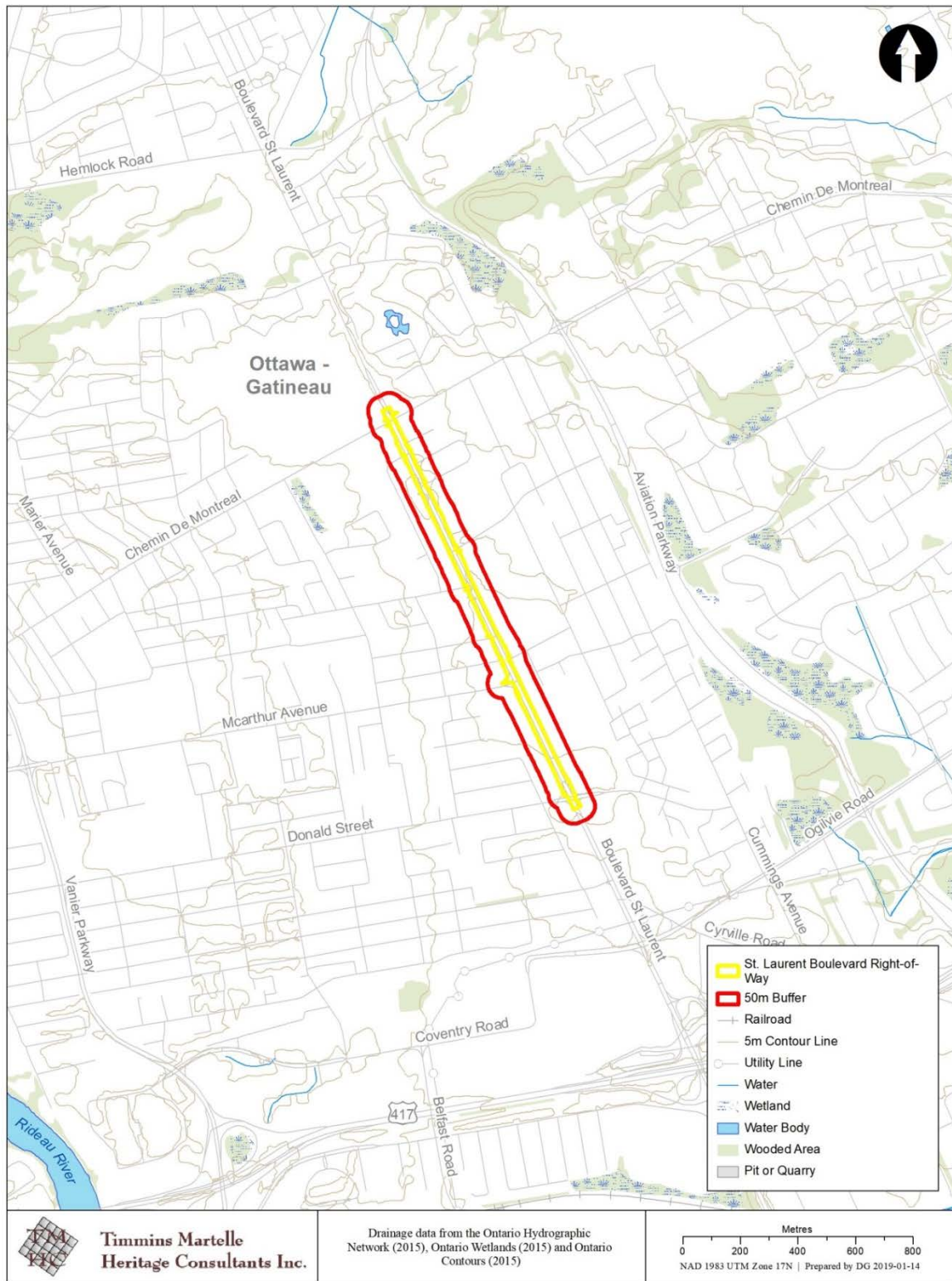
Map 2: Location of the Project Area in the City of Ottawa, ON





Map 3: Physiography Within the Vicinity of the Project Area

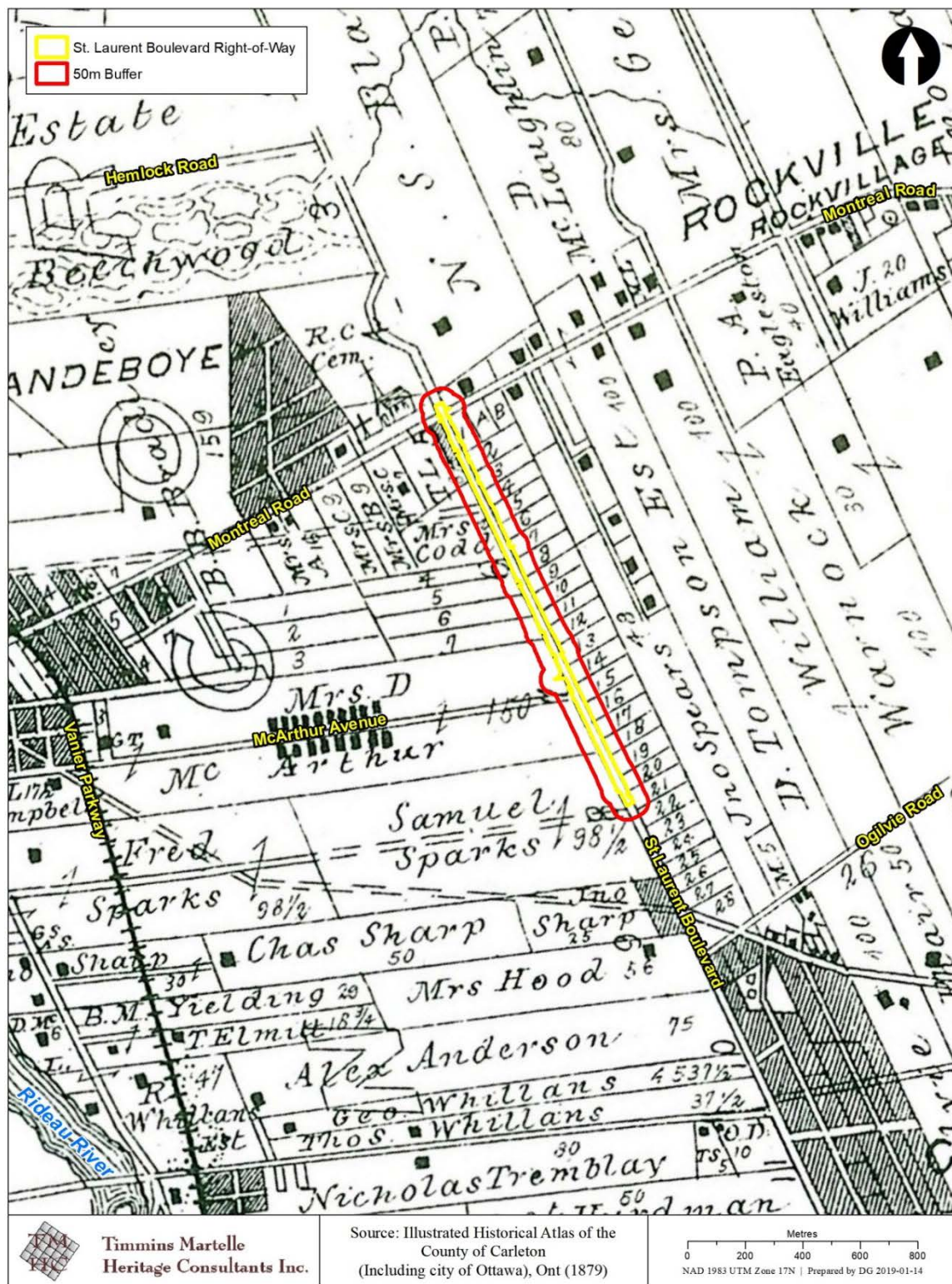




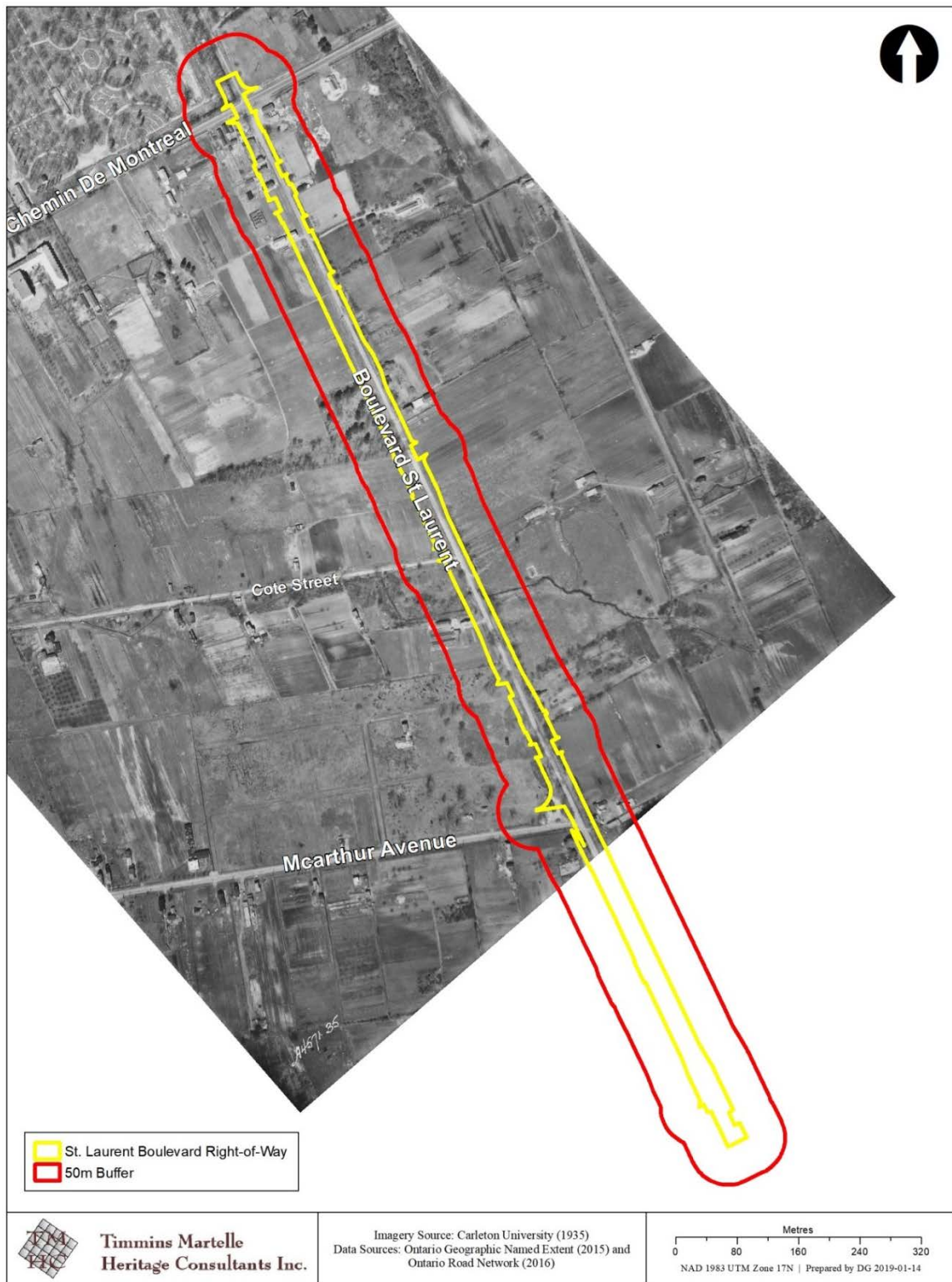
Map 4: Drainage Within the Vicinity of the Project Area



Map 5: Project Area Shown on the Walling 1863 Map of the Carleton County, ON



Map 6: Project Area Shown on the 1879 Map of the City of Ottawa, ON



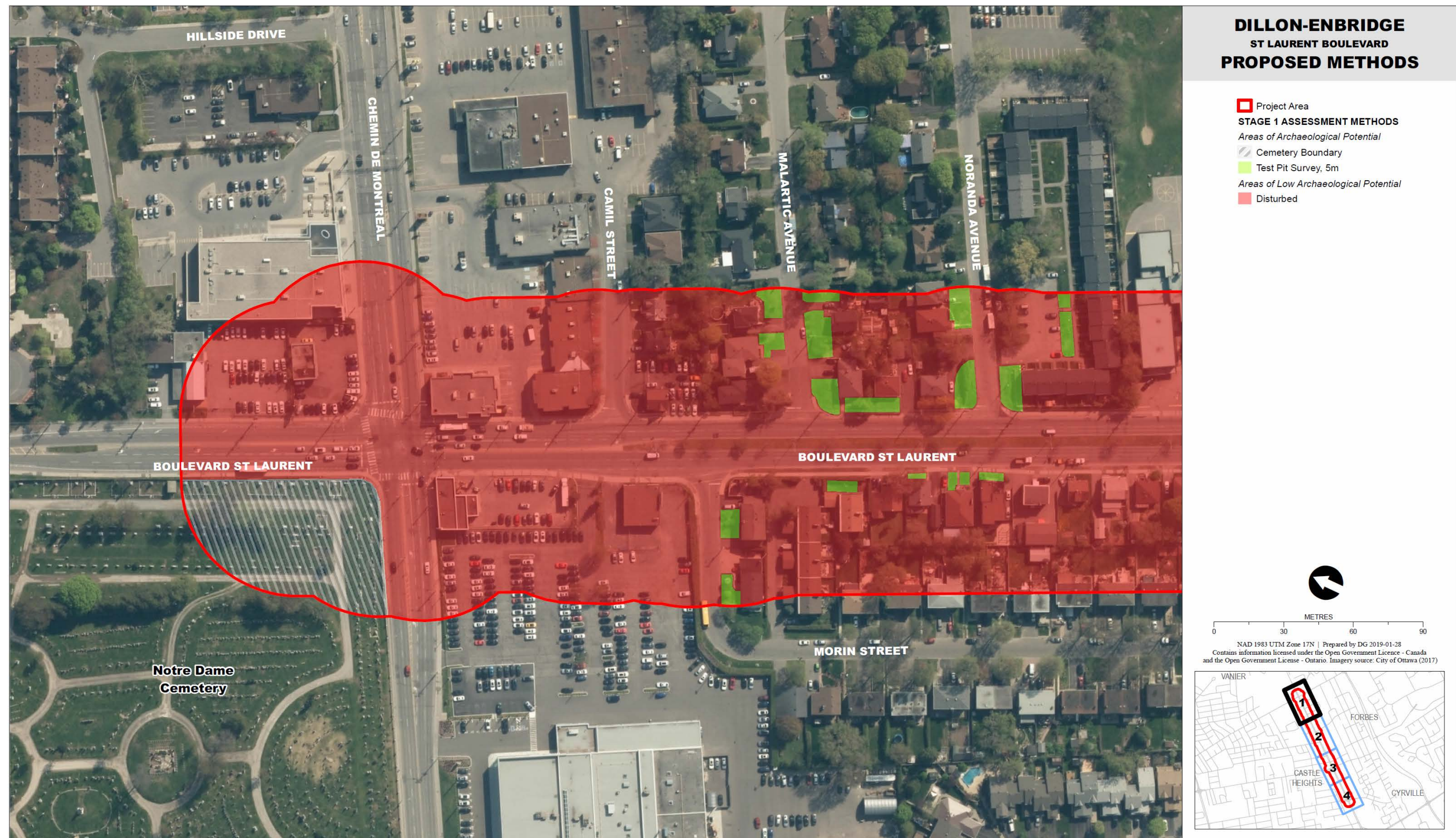
Map 7: Project Area Shown on 1935 Aerial Photograph





Map 8: Project Area Shown on 1950 Aerial Photograph





Map 9: Stage 1 Areas of Archaeological Potential – Section 1





Map 10: Stage 1 Areas of Archaeological Potential – Section 2





Map 12: Stage 1 Areas of Archaeological Potential – Section 4



Map 13: Proponent Mapping



Appendix A2

Cultural Heritage Checklist

Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes

A Checklist for the Non-Specialist

The **purpose of the checklist** is to determine:

- if a property(ies) or project area:
 - is a recognized heritage property
 - may be of cultural heritage value
- it includes all areas that may be impacted by project activities, including – but not limited to:
 - the main project area
 - temporary storage
 - staging and working areas
 - temporary roads and detours

Processes covered under this checklist, such as:

- *Planning Act*
- *Environmental Assessment Act*
- *Aggregates Resources Act*
- *Ontario Heritage Act* – Standards and Guidelines for Conservation of Provincial Heritage Properties

Cultural Heritage Evaluation Report (CHER)

If you are not sure how to answer one or more of the questions on the checklist, you may want to hire a qualified person(s) (see page 5 for definitions) to undertake a cultural heritage evaluation report (CHER).

The CHER will help you:

- identify, evaluate and protect cultural heritage resources on your property or project area
- reduce potential delays and risks to a project

Other checklists

Please use a separate checklist for your project, if:

- you are seeking a Renewable Energy Approval under Ontario Regulation 359/09 – [separate checklist](#)
- your Parent Class EA document has an approved screening criteria (as referenced in Question 1)

Please refer to the Instructions pages for more detailed information and when completing this form.

Project or Property Name
St. Laurent Pipeline Project

Project or Property Location (upper and lower or single tier municipality)
City of Ottawa

Proponent Name
Enbridge Gas Inc.

Proponent Contact Information
500 Consumers Road, North York, ON M2J 1P8, 1-8777-362-7434

Screening Questions

| | Yes | No |
|--|--------------------------|-------------------------------------|
| 1. Is there a pre-approved screening checklist, methodology or process in place? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

If Yes, please follow the pre-approved screening checklist, methodology or process.

If No, continue to Question 2.

Part A: Screening for known (or recognized) Cultural Heritage Value

| | Yes | No |
|--|--------------------------|-------------------------------------|
| 2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

If Yes, do **not** complete the rest of the checklist.

The proponent, property owner and/or approval authority will:

- summarize the previous evaluation and
- add this checklist to the project file, with the appropriate documents that demonstrate a cultural heritage evaluation was undertaken

The summary and appropriate documentation may be:

- submitted as part of a report requirement
- maintained by the property owner, proponent or approval authority

If No, continue to Question 3.

| | Yes | No |
|---|--------------------------|-------------------------------------|
| 3. Is the property (or project area): | | |
| a. identified, designated or otherwise protected under the <i>Ontario Heritage Act</i> as being of cultural heritage value? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. a National Historic Site (or part of)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. designated under the <i>Heritage Railway Stations Protection Act</i> ? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. designated under the <i>Heritage Lighthouse Protection Act</i> ? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f. located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

If Yes to any of the above questions, you need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report, if a Statement of Cultural Heritage Value has not previously been prepared or the statement needs to be updated

If a Statement of Cultural Heritage Value has been prepared previously and if alterations or development are proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No, continue to Question 4.

Part B: Screening for Potential Cultural Heritage Value

| | Yes | No |
|---|--------------------------|-------------------------------------|
| 4. Does the property (or project area) contain a parcel of land that: | | |
| a. is the subject of a municipal, provincial or federal commemorative or interpretive plaque? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. has or is adjacent to a known burial site and/or cemetery? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. is in a Canadian Heritage River watershed? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. contains buildings or structures that are 40 or more years old? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Part C: Other Considerations

| | Yes | No |
|--|--------------------------|-------------------------------------|
| 5. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area): | | |
| a. is considered a landmark in the local community or contains any structures or sites that are important in defining the character of the area? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. has a special association with a community, person or historical event? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. contains or is part of a cultural heritage landscape? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

If Yes to one or more of the above questions (Part B and C), there is potential for cultural heritage resources on the property or within the project area.

You need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report (CHER)

If the property is determined to be of cultural heritage value and alterations or development is proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No to all of the above questions, there is low potential for built heritage or cultural heritage landscape on the property.

The proponent, property owner and/or approval authority will:

- summarize the conclusion
- add this checklist with the appropriate documentation to the project file

The summary and appropriate documentation may be:

- submitted as part of a report requirement e.g. under the *Environmental Assessment Act*, *Planning Act* processes
- maintained by the property owner, proponent or approval authority

Instructions

Please have the following available, when requesting information related to the screening questions below:

- a clear map showing the location and boundary of the property or project area
 - large scale and small scale showing nearby township names for context purposes
- the municipal addresses of all properties within the project area
- the lot(s), concession(s), and parcel number(s) of all properties within a project area

For more information, see the Ministry of Tourism, Culture and Sport's [Ontario Heritage Toolkit](#) or [Standards and Guidelines for Conservation of Provincial Heritage Properties](#).

In this context, the following definitions apply:

- **qualified person(s)** means individuals – professional engineers, architects, archaeologists, etc. – having relevant, recent experience in the conservation of cultural heritage resources.
- **proponent** means a person, agency, group or organization that carries out or proposes to carry out an undertaking or is the owner or person having charge, management or control of an undertaking.

1. Is there a pre-approved screening checklist, methodology or process in place?

An existing checklist, methodology or process may already be in place for identifying potential cultural heritage resources, including:

- one endorsed by a municipality
- an environmental assessment process e.g. screening checklist for municipal bridges
- one that is approved by the Ministry of Tourism, Culture and Sport (MTCS) under the Ontario government's [Standards & Guidelines for Conservation of Provincial Heritage Properties](#) [s.B.2.]

Part A: Screening for known (or recognized) Cultural Heritage Value

2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value?

Respond 'yes' to this question, if all of the following are true:

A property can be considered not to be of cultural heritage value if:

- a Cultural Heritage Evaluation Report (CHER) - or equivalent - has been prepared for the property with the advice of a qualified person and it has been determined not to be of cultural heritage value and/or
- the municipal heritage committee has evaluated the property for its cultural heritage value or interest and determined that the property is not of cultural heritage value or interest

A property may need to be re-evaluated, if:

- there is evidence that its heritage attributes may have changed
- new information is available
- the existing Statement of Cultural Heritage Value does not provide the information necessary to manage the property
- the evaluation took place after 2005 and did not use the criteria in Regulations 9/06 and 10/06

Note: Ontario government ministries and public bodies [prescribed under Regulation 157/10] may continue to use their existing evaluation processes, until the evaluation process required under section B.2 of the Standards & Guidelines for Conservation of Provincial Heritage Properties has been developed and approved by MTCS.

To determine if your property or project area has been evaluated, contact:

- the approval authority
- the proponent
- the Ministry of Tourism, Culture and Sport

3a. Is the property (or project area) identified, designated or otherwise protected under the *Ontario Heritage Act* as being of cultural heritage value e.g.:

- i. designated under the *Ontario Heritage Act*
 - individual designation (Part IV)
 - part of a heritage conservation district (Part V)

Individual Designation – Part IV

A property that is designated:

- by a municipal by-law as being of cultural heritage value or interest [s.29 of the *Ontario Heritage Act*]
- by order of the Minister of Tourism, Culture and Sport as being of cultural heritage value or interest of provincial significance [s.34.5]. **Note:** To date, no properties have been designated by the Minister.

Heritage Conservation District – Part V

A property or project area that is located within an area designated by a municipal by-law as a heritage conservation district [s. 41 of the *Ontario Heritage Act*].

For more information on Parts IV and V, contact:

- municipal clerk
- [Ontario Heritage Trust](#)
- local land registry office (for a title search)

ii. subject of an agreement, covenant or easement entered into under Parts II or IV of the *Ontario Heritage Act*

An agreement, covenant or easement is usually between the owner of a property and a conservation body or level of government. It is usually registered on title.

The primary purpose of the agreement is to:

- preserve, conserve, and maintain a cultural heritage resource
- prevent its destruction, demolition or loss

For more information, contact:

- [Ontario Heritage Trust](#) - for an agreement, covenant or easement [clause 10 (1) (c) of the *Ontario Heritage Act*]
- municipal clerk – for a property that is the subject of an easement or a covenant [s.37 of the *Ontario Heritage Act*]
- local land registry office (for a title search)

iii. listed on a register of heritage properties maintained by the municipality

Municipal registers are the official lists - or record - of cultural heritage properties identified as being important to the community.

Registers include:

- all properties that are designated under the *Ontario Heritage Act* (Part IV or V)
- properties that have not been formally designated, but have been identified as having cultural heritage value or interest to the community

For more information, contact:

- municipal clerk
- municipal heritage planning staff
- municipal heritage committee

iv. subject to a notice of:

- intention to designate (under Part IV of the *Ontario Heritage Act*)
- a Heritage Conservation District study area bylaw (under Part V of the *Ontario Heritage Act*)

A property that is subject to a **notice of intention to designate** as a property of cultural heritage value or interest and the notice is in accordance with:

- section 29 of the *Ontario Heritage Act*
- section 34.6 of the *Ontario Heritage Act*. **Note:** To date, the only applicable property is Meldrum Bay Inn, Manitoulin Island. [s.34.6]

An area designated by a municipal by-law made under section 40.1 of the *Ontario Heritage Act* as a **heritage conservation district study area**.

For more information, contact:

- municipal clerk – for a property that is the subject of notice of intention [s. 29 and s. 40.1]
- [Ontario Heritage Trust](#)

- v. included in the Ministry of Tourism, Culture and Sport's list of provincial heritage properties

Provincial heritage properties are properties the Government of Ontario owns or controls that have cultural heritage value or interest.

The Ministry of Tourism, Culture and Sport (MTCS) maintains a list of all provincial heritage properties based on information provided by ministries and prescribed public bodies. As they are identified, MTCS adds properties to the list of provincial heritage properties.

For more information, contact the MTCS Registrar at registrar@ontario.ca.

3b. Is the property (or project area) a National Historic Site (or part of)?

National Historic Sites are properties or districts of national historic significance that are designated by the Federal Minister of the Environment, under the *Canada National Parks Act*, based on the advice of the Historic Sites and Monuments Board of Canada.

For more information, see the [National Historic Sites website](#).

3c. Is the property (or project area) designated under the *Heritage Railway Stations Protection Act*?

The *Heritage Railway Stations Protection Act* protects heritage railway stations that are owned by a railway company under federal jurisdiction. Designated railway stations that pass from federal ownership may continue to have cultural heritage value.

For more information, see the [Directory of Designated Heritage Railway Stations](#).

3d. Is the property (or project area) designated under the *Heritage Lighthouse Protection Act*?

The *Heritage Lighthouse Protection Act* helps preserve historically significant Canadian lighthouses. The Act sets up a public nomination process and includes heritage building conservation standards for lighthouses which are officially designated.

For more information, see the [Heritage Lighthouses of Canada](#) website.

3e. Is the property (or project area) identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office?

The role of the Federal Heritage Buildings Review Office (FHBRO) is to help the federal government protect the heritage buildings it owns. The policy applies to all federal government departments that administer real property, but not to federal Crown Corporations.

For more information, contact the [Federal Heritage Buildings Review Office](#).

See a [directory of all federal heritage designations](#).

3f. Is the property (or project area) located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?

A UNESCO World Heritage Site is a place listed by UNESCO as having outstanding universal value to humanity under the Convention Concerning the Protection of the World Cultural and Natural Heritage. In order to retain the status of a World Heritage Site, each site must maintain its character defining features.

Currently, the Rideau Canal is the only World Heritage Site in Ontario.

For more information, see Parks Canada – [World Heritage Site website](#).

Part B: Screening for potential Cultural Heritage Value

4a. Does the property (or project area) contain a parcel of land that has a municipal, provincial or federal commemorative or interpretive plaque?

Heritage resources are often recognized with formal plaques or markers.

Plaques are prepared by:

- municipalities
- provincial ministries or agencies
- federal ministries or agencies
- local non-government or non-profit organizations

For more information, contact:

- [municipal heritage committees](#) or local heritage organizations – for information on the location of plaques in their community
- Ontario Historical Society's [Heritage directory](#) – for a list of historical societies and heritage organizations
- Ontario Heritage Trust – for a [list of plaques](#) commemorating Ontario's history
- Historic Sites and Monuments Board of Canada – for a [list of plaques](#) commemorating Canada's history

4b. Does the property (or project area) contain a parcel of land that has or is adjacent to a known burial site and/or cemetery?

For more information on known cemeteries and/or burial sites, see:

- Cemeteries Regulations, Ontario Ministry of Consumer Services – for a [database of registered cemeteries](#)
- Ontario Genealogical Society (OGS) – to [locate records of Ontario cemeteries](#), both currently and no longer in existence; cairns, family plots and burial registers
- Canadian County Atlas Digital Project – to [locate early cemeteries](#)

In this context, adjacent means contiguous or as otherwise defined in a municipal official plan.

4c. Does the property (or project area) contain a parcel of land that is in a Canadian Heritage River watershed?

The Canadian Heritage River System is a national river conservation program that promotes, protects and enhances the best examples of Canada's river heritage.

Canadian Heritage Rivers must have, and maintain, outstanding natural, cultural and/or recreational values, and a high level of public support.

For more information, contact the [Canadian Heritage River System](#).

If you have questions regarding the boundaries of a watershed, please contact:

- your conservation authority
- municipal staff

4d. Does the property (or project area) contain a parcel of land that contains buildings or structures that are 40 or more years old?

A 40 year 'rule of thumb' is typically used to indicate the potential of a site to be of cultural heritage value. The approximate age of buildings and/or structures may be estimated based on:

- history of the development of the area
- fire insurance maps
- architectural style
- building methods

Property owners may have information on the age of any buildings or structures on their property. The municipality, local land registry office or library may also have background information on the property.

Note: 40+ year old buildings or structure do not necessarily hold cultural heritage value or interest; their age simply indicates a higher potential.

A building or structure can include:

- residential structure
- farm building or outbuilding
- industrial, commercial, or institutional building
- remnant or ruin
- engineering work such as a bridge, canal, dams, etc.

For more information on researching the age of buildings or properties, see the Ontario Heritage Tool Kit Guide [Heritage Property Evaluation](#).

Part C: Other Considerations

5a. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) is considered a landmark in the local community or contains any structures or sites that are important to defining the character of the area?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has potential landmarks or defining structures and sites, for instance:

- buildings or landscape features accessible to the public or readily noticeable and widely known
- complexes of buildings
- monuments
- ruins

5b. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) has a special association with a community, person or historical event?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has a special association with a community, person or event of historic interest, for instance:

- Aboriginal sacred site
- traditional-use area
- battlefield
- birthplace of an individual of importance to the community

5c. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) contains or is part of a cultural heritage landscape?

Landscapes (which may include a combination of archaeological resources, built heritage resources and landscape elements) may be of cultural heritage value or interest to a community.

For example, an Aboriginal trail, historic road or rail corridor may have been established as a key transportation or trade route and may have been important to the early settlement of an area. Parks, designed gardens or unique landforms such as waterfalls, rock faces, caverns, or mounds are areas that may have connections to a particular event, group or belief.

For more information on Questions 5.a., 5.b. and 5.c., contact:

- Elders in Aboriginal Communities or community researchers who may have information on potential cultural heritage resources. Please note that Aboriginal traditional knowledge may be considered sensitive.
- [municipal heritage committees](#) or local heritage organizations
- Ontario Historical Society's "[Heritage Directory](#)" - for a list of historical societies and heritage organizations in the province

An internet search may find helpful resources, including:

- historical maps
- historical walking tours
- municipal heritage management plans
- cultural heritage landscape studies
- municipal cultural plans

Information specific to trails may be obtained through [Ontario Trails](#).

Appendix B

Typical Pipeline Construction Sequence

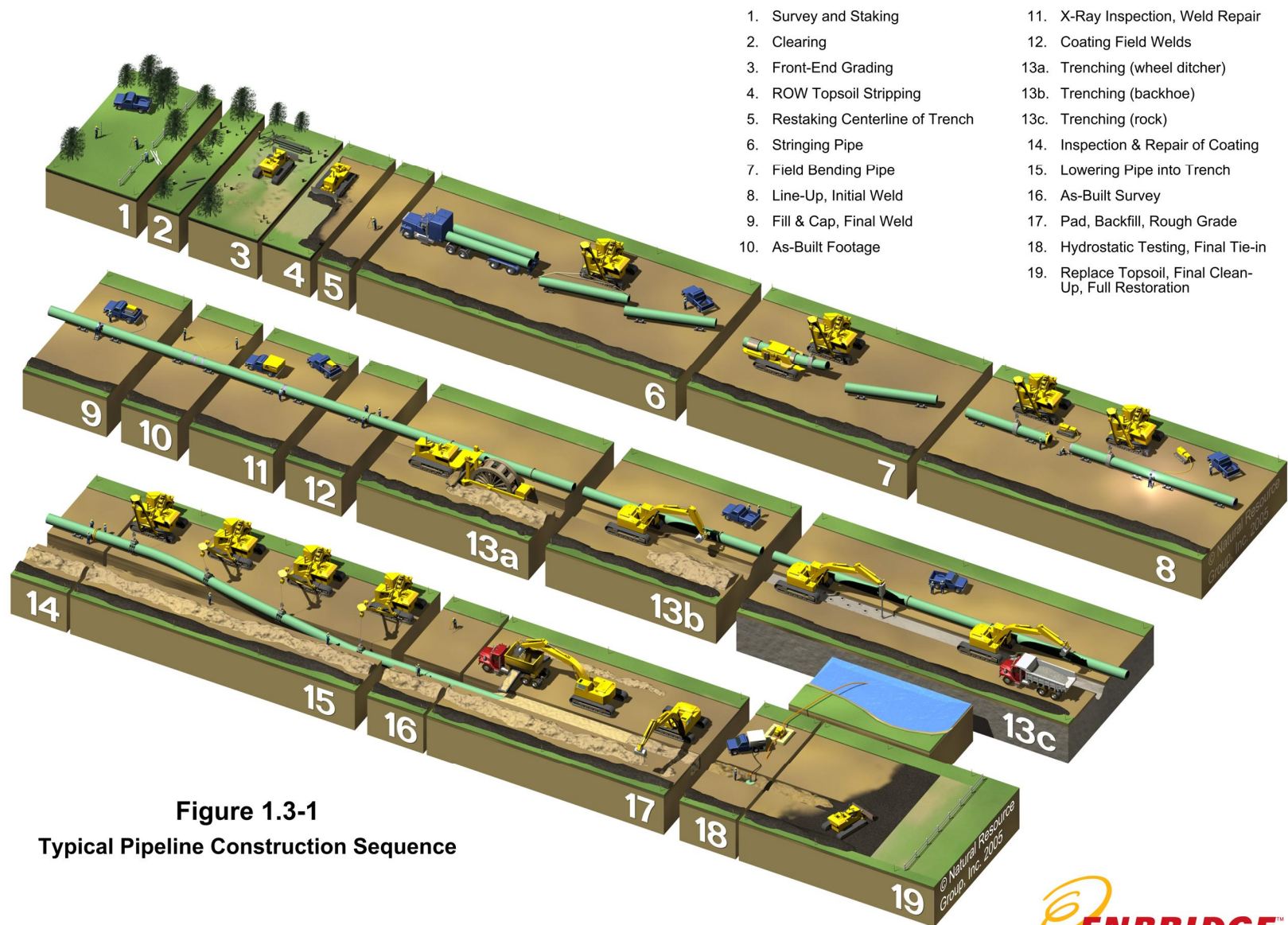


Figure 1.3-1
Typical Pipeline Construction Sequence

Used By Permission Natural Resource Group, Inc. © 2010



Appendix C1

Notice of Study Commencement and Open House

PROPOSED ST. LAURENT PIPELINE PROJECT

NOTICE OF STUDY COMMENCEMENT AND OPEN HOUSE

CITY OF OTTAWA, ONTARIO

ENBRIDGE GAS INC.

The Study

Enbridge Gas Inc. (Enbridge) has retained Dillon Consulting Limited (Dillon) to undertake an environmental and cumulative effects assessment and Environmental Report (ER) for the installation of approximately 1.7 kilometers (km) of pipeline along St. Laurent Boulevard, in the City of Ottawa. Enbridge has identified the need to replace the existing pipeline on St. Laurent Boulevard due to the current pipe conditions and to better service 140 customers by transferring customers to an intermediate pressure (IP) system. Once the study is complete, Enbridge may apply to the Ontario Energy Board (OEB) for approval to install the existing pipeline. If approved, construction may be scheduled for the summer of 2019.

The preferred route for the proposed natural gas pipeline originates approximately 20 m south of Donald Street of St. Laurent Boulevard, continuing north on St. Laurent Boulevard for approximately 1.7 km where it will terminate approximately 20 m north of Montreal Road. It should be noted that no alternatives could be considered as this pipeline will be servicing customers directly along the route.

The pipeline will consist of nominal pipe size ("NPS") 6 IP polyethylene natural gas main. The pipeline is planned to be located mainly within municipal road rights-of-way, and will require short tie-ins to the existing network at road intersections at McArthur Avenue, Coté Street, and Noranda Street. The preferred route is identified on the map.

The Process

The study is being conducted in accordance with the OEB's Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario. The study will review the need and justification for the pipeline, describe the natural and socio-economic environment, evaluate the project from a social and environmental perspective, outline safety measures, and describe appropriate measures for impact mitigation and monitoring.

Invitation to the Community

Stakeholder consultation is a key component of this study. Members of the general public, agencies, Indigenous communities and interest group representatives are invited to participate in the study. We will be hosting an Open House to provide you with an opportunity to review the project and provide input. Details on the Open House are as follows:

Location: Richelieu Vanier Community Centre
(300 Des, Pères-Blancs Ave, Ottawa)

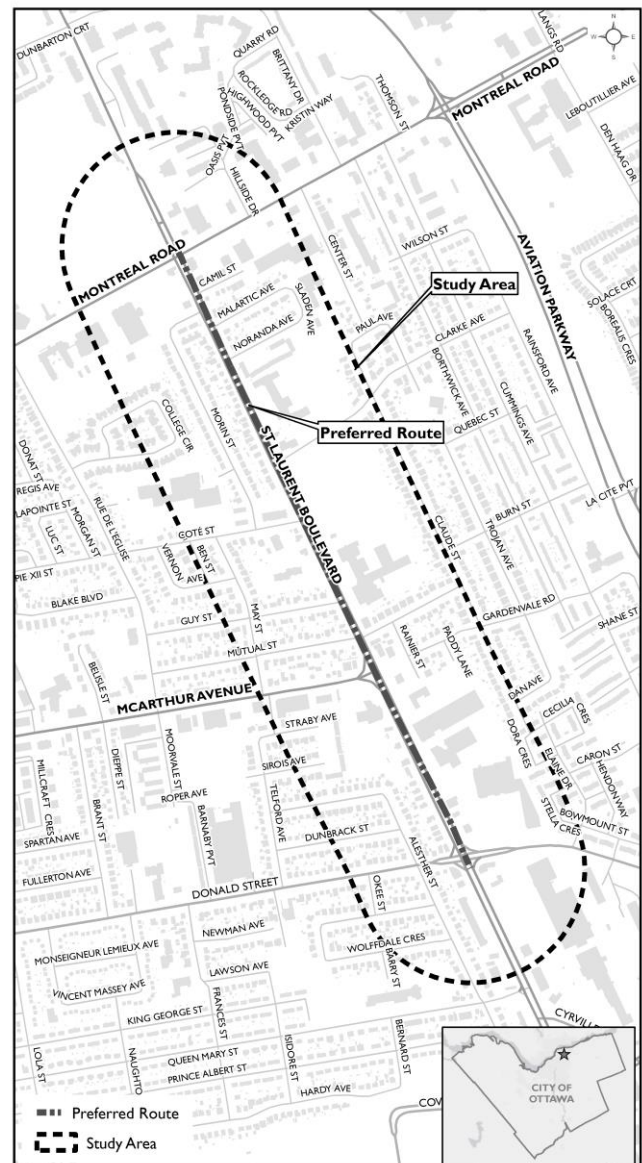
Date: March 4th, 2019 (Monday)

Time: 5 PM to 8 PM

Representatives from Enbridge and Dillon will be in attendance to discuss the project and answer questions. Your input will be used to confirm the preferred route and create mitigation plans to be implemented during construction. If you are interested in participating, or would like to provide comments, please come to the meeting or contact one of the individuals listed as soon as possible.

Tanya Turk
Environmental Advisor
Enbridge Gas Inc.
101 Honda Boulevard,
Markham ON L6C 0M6
Telephone: 416-495-3103
tanya.turk@enbridge.com

Whitney Moore
Environmental Assessment
Project Manager
Dillon Consulting Limited
177 Colonnade Road South,
Suite 101 Ottawa, ON K2E 7J4
Telephone: (613) 745-2213
StLaurentEA@dillon.ca



PROPOSED ST. LAURENT PIPELINE PROJECT

NOTICE OF STUDY COMMENCEMENT AND OPEN HOUSE

CITY OF OTTAWA, ONTARIO

ENBRIDGE GAS INC.

The Study

Enbridge Gas Inc. (Enbridge) has retained Dillon Consulting Limited (Dillon) to undertake an environmental and cumulative effects assessment and Environmental Report (ER) for the installation of approximately 1.7 kilometers (km) of pipeline along St. Laurent Boulevard, in the City of Ottawa. Enbridge has identified the need to replace the existing pipeline on St. Laurent Boulevard due to the current pipe conditions and to better service 140 customers by transferring customers to an intermediate pressure (IP) system. Once the study is complete, Enbridge may apply to the Ontario Energy Board (OEB) for approval to install the existing pipeline. If approved, construction may be scheduled for the summer of 2019.

The preferred route for the proposed natural gas pipeline originates approximately 20 m south of Donald Street of St. Laurent Boulevard, continuing north on St. Laurent Boulevard for approximately 1.7 km where it will terminate approximately 20 m north of Montreal Road. It should be noted that no alternatives could be considered as this pipeline will be servicing customers directly along the route.

The pipeline will consist of nominal pipe size ("NPS") 6 IP polyethylene natural gas main. The pipeline is planned to be located mainly within municipal road rights-of-way, and will require short tie-ins to the existing network at road intersections at McArthur Avenue, Coté Street, and Noranda Street. The preferred route is identified on the map.

The Process

The study is being conducted in accordance with the OEB's Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario. The study will review the need and justification for the pipeline, describe the natural and socio-economic environment, evaluate the project from a social and environmental perspective, outline safety measures, and describe appropriate measures for impact mitigation and monitoring.

Invitation to the Community

Stakeholder consultation is a key component of this study. Members of the general public, agencies, Indigenous communities and interest group representatives are invited to participate in the study. We will be hosting an Open House to provide you with an opportunity to review the project and provide input. Details on the Open House are as follows:

Location: Paroisse Saint-Louis-Marie-de-Monfort

(749 Trojan Avenue, Ottawa)

Date: April 3rd, 2019 (Wednesday)

Time: 5 PM to 8 PM

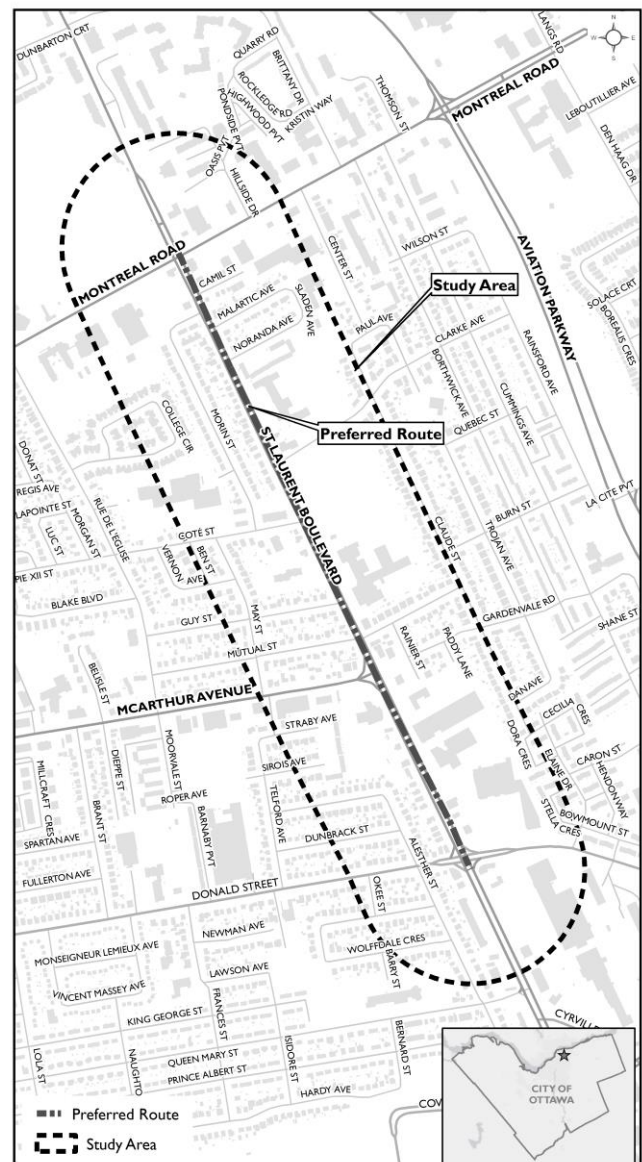
Project Phone Number : 1-855-801-2303

Project Website: <https://www.enbridgegas.com/en/About-Us>
(click on 'Projects')

Representatives from Enbridge and Dillon will be in attendance to discuss the project and answer questions. Your input will be used to confirm the preferred route and create mitigation plans to be implemented during construction. If you are interested in participating, or would like to provide comments, please come to the meeting or contact one of the individuals listed as soon as possible.

Tanya Turk
Environmental Advisor
Enbridge Gas Inc.
101 Honda Boulevard,
Markham ON L6C 0M6
Telephone: 416-495-3103
tanya.turk@enbridge.com

Whitney Moore
Environmental Assessment
Project Manager
Dillon Consulting Limited
177 Colonnade Road South,
Suite 101 Ottawa, ON K2E 7J4
Telephone: (613) 745-2213
StLaurentEA@dillon.ca



PROJET PROPOSÉ DE PIPELINE ST-LAURENT

AVIS DE DÉBUT D'ÉTUDE ET RÉUNION PORTES OUVERTES

VILLE D'OTTAWA, ONTARIO

ENBRIDGE GAS INC.

L'étude

Enbridge Gas Inc. (Enbridge) a retenu les services de Dillon Consulting Limited (Dillon) pour entreprendre une évaluation environnementale et des effets cumulatifs ainsi qu'un rapport environnemental pour l'installation d'environ 1,7 kilomètre (km) de pipeline le long du boulevard St-Laurent, à Ottawa. Enbridge a établi le besoin de remplacer le pipeline existant du boulevard St-Laurent en raison des conditions actuelles de la conduite. Ces travaux permettront de mieux servir les 140 clients en les transférant sur un système de pression intermédiaire (PI). Une fois l'étude terminée, Enbridge pourra déposer sa demande d'approbation auprès de la Commission de l'énergie de l'Ontario (CÉO) pour remplacer le pipeline existant. Si la demande est approuvée, la construction pourrait être prévue pour l'été 2019.

La route privilégiée pour le projet de pipeline de gaz naturel commence environ 20 mètres au sud de la rue Donald depuis le boulevard St-Laurent, vers le nord sur le boulevard St-Laurent pendant environ 1,7 kilomètre, où elle se terminera environ 20 mètres au nord du chemin de Montréal. Il doit être noté qu'aucune solution de rechange n'a pu être envisagée, car le pipeline desservira les clients se trouvant directement le long de la route.

Le pipeline sera une conduite de gaz naturel en polyéthylène de diamètre nominal de 6 PI. On prévoit que le pipeline soit installé principalement sur le droit de passage de la route municipale, et nécessitera des raccordements courts au réseau actuel aux intersections de l'avenue McArthur, de la rue Coté et de la rue Noranda. La route privilégiée est dessinée sur la carte.

Le processus

L'étude est menée conformément aux Lignes directrices de la CÉO en matière d'environnement pour ce qui est de l'emplacement, de la construction et de l'exploitation des pipelines et des installations d'hydrocarbures en Ontario. L'étude examinera la nécessité et la pertinence du pipeline, décrira l'environnement naturel et socio-économique, évaluera le projet d'un point de vue social et environnemental, décrira les mesures de sécurité et les mesures appropriées pour atténuer et surveiller les répercussions.

Invitation à la communauté

Une consultation avec les parties intéressées est un élément clé de l'étude. Les membres grand public, des communautés autochtones et les représentants des groupes d'intérêts sont invités à participer à l'étude. Nous organiserons une réunion portes ouvertes pour vous permettre d'examiner le projet et d'offrir vos commentaires. Renseignements de la réunion portes ouvertes :

Endroit : Centre communautaire Richelieu Vanier

(300, av. des Pères-Blancs, Ottawa)

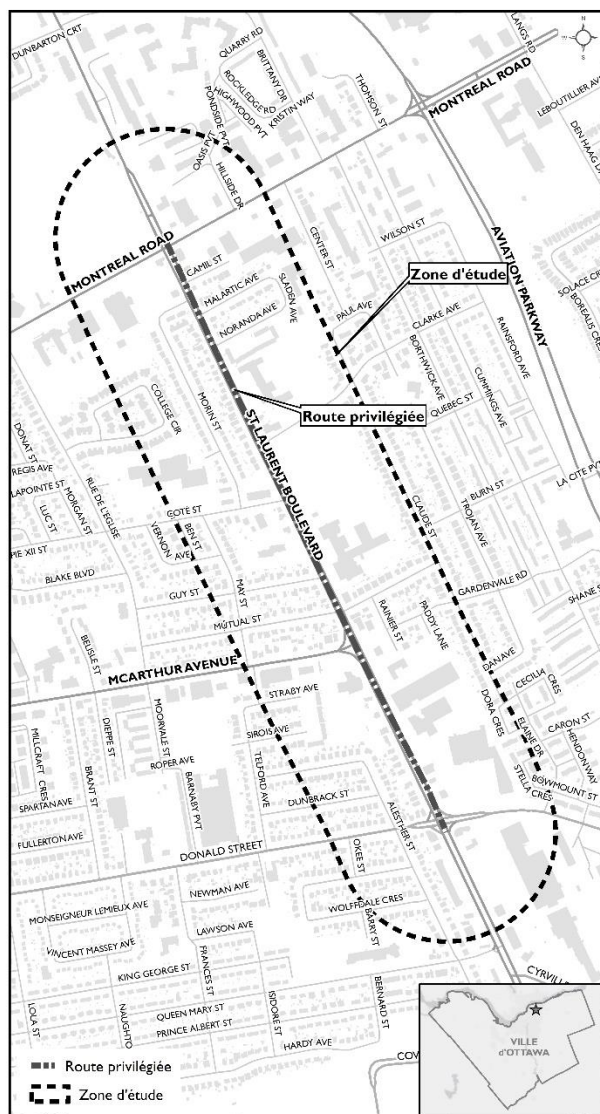
Date : 4 mars 2019 (lundi)

Heure : de 17 h à 20 h

Des représentants d'Enbridge et de Dillon seront présents pour discuter du projet et répondre aux questions. Vos commentaires seront utilisés pour confirmer la route privilégiée et créer des mesures d'atténuation qui seront mises en œuvre durant la construction. Si vous souhaitez participer, ou formuler des commentaires, veuillez vous présenter à la réunion ou communiquer avec une des personnes suivantes dès que possible :

Tanya Turk
Conseillère en
environnement
Enbridge Gas Inc.
101, boul. Honda, Markham
ON L6C 0M6
Tél. : 416 495-3103
tanya.turk@enbridge.com

Whitney Moore
Évaluation environnementale
Gestionnaire de projet
Dillon Consulting Limited
177, ch. Colonnade Sud,
Bureau 101 Ottawa, ON K2E 7J4
Tél. : 613 745-2213
StLaurentEA@dillon.ca



PROJET PROPOSÉ DE PIPELINE ST-LAURENT

AVIS DE DÉBUT D'ÉTUDE ET RÉUNION PORTES OUVERTES

VILLE D'OTTAWA, ONTARIO

ENBRIDGE GAS INC.

L'étude

Enbridge Gas Inc. (Enbridge) a retenu les services de Dillon Consulting Limited (Dillon) pour entreprendre une évaluation environnementale et des effets cumulatifs ainsi qu'un rapport environnemental pour l'installation d'environ 1,7 kilomètre (km) de pipeline le long du boulevard St-Laurent, à Ottawa. Enbridge a établi le besoin de remplacer le pipeline existant du boulevard St-Laurent en raison des conditions actuelles de la conduite. Ces travaux permettront de mieux servir les 140 clients en les transférant sur un système de pression intermédiaire (PI). Une fois l'étude terminée, Enbridge pourra déposer sa demande d'approbation auprès de la Commission de l'énergie de l'Ontario (CÉO) pour remplacer le pipeline existant. Si la demande est approuvée, la construction pourrait être prévue pour l'été 2019.

La route privilégiée pour le projet de pipeline de gaz naturel commence environ 20 mètres au sud de la rue Donald depuis le boulevard St-Laurent, vers le nord sur le boulevard St-Laurent pendant environ 1,7 kilomètre, où elle se terminera environ 20 mètres au nord du chemin de Montréal. Il doit être noté qu'aucune solution de rechange n'a pu être envisagée, car le pipeline desservira les clients se trouvant directement le long de la route.

Le pipeline sera une conduite de gaz naturel en polyéthylène de diamètre nominal de 6 PI. On prévoit que le pipeline soit installé principalement sur le droit de passage de la route municipale, et nécessitera des raccordements courts au réseau actuel aux intersections de l'avenue McArthur, de la rue Coté et de la rue Noranda. La route privilégiée est dessinée sur la carte.

Le processus

L'étude est menée conformément aux Lignes directrices de la CÉO en matière d'environnement pour ce qui est de l'emplacement, de la construction et de l'exploitation des pipelines et des installations d'hydrocarbures en Ontario. L'étude examinera la nécessité et la pertinence du pipeline, décrira l'environnement naturel et socio-économique, évaluera le projet d'un point de vue social et environnemental, décrira les mesures de sécurité et les mesures appropriées pour atténuer et surveiller les répercussions.

Invitation à la communauté

Une consultation avec les parties intéressées est un élément clé de l'étude. Les membres grand public, des communautés autochtones et les représentants des groupes d'intérêts sont invités à participer à l'étude. Nous organiserons une réunion portes ouvertes pour vous permettre d'examiner le projet et d'offrir vos commentaires. Renseignements de la réunion portes ouvertes :

Endroit : Paroisse Saint-Louis-Marie-de-Monfort
(749, rue Trojan, Ottawa)

Date : 3 avril 2019 (mercredi)

Heure : de 17 h à 20 h

Numéro de téléphone du projet: 1-855-801-2303

Site web pour le projet: <https://www.enbridgegas.com/en/About-Us>
(cliquez sur 'Projects')

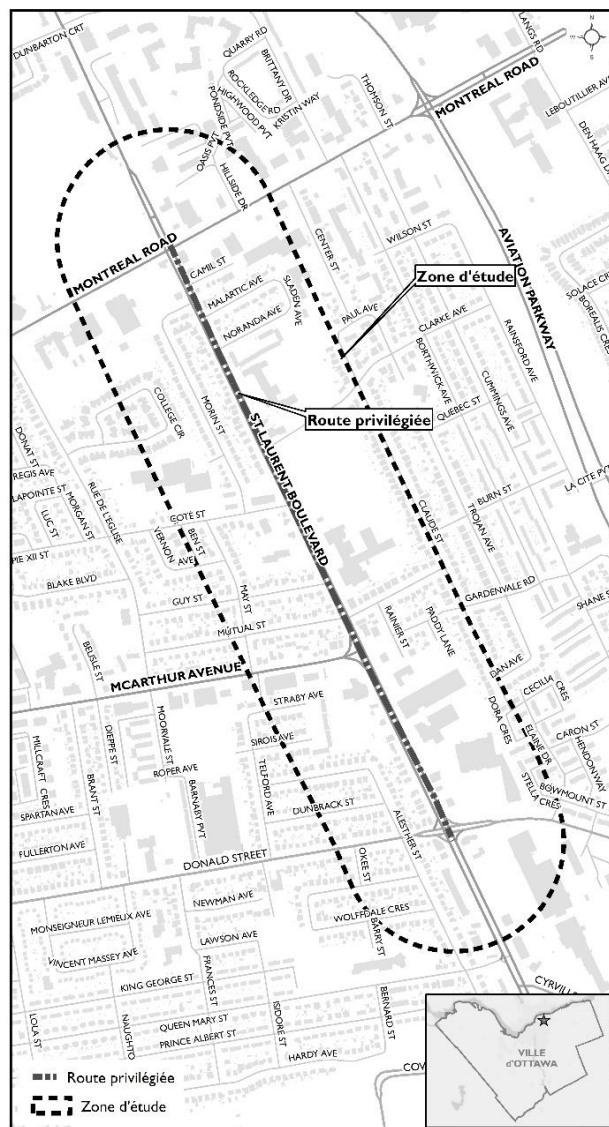
Des représentants d'Enbridge et de Dillon seront présents pour discuter du projet et répondre aux questions. Vos commentaires seront utilisés pour confirmer la route privilégiée et créer des mesures d'atténuation qui seront mises en œuvre durant la construction. Si vous souhaitez participer, ou formuler des commentaires, veuillez vous présenter à la réunion ou communiquer avec une des personnes suivantes dès que possible :

Tanya Turk
Conseillère en
environnement
Enbridge Gas Inc.

101, boul. Honda, Markham
ON L6C 0M6
Tél. : 416 495-3103
tanya.turk@enbridge.com

Whitney Moore
Évaluation environnementale
Gestionnaire de projet
Dillon Consulting Limited

177, ch. Colonnade Sud,
Bureau 101 Ottawa, ON K2E 7J4
Tél. : 613 745-2213
StLaurentEA@dillon.ca



Appendix C2

Newspaper Tear Sheet

OPP officer cleared in fatal shooting at detachment

Family of mentally ill man hopes inquest can help reveal how incident escalated

TODD HAMBLETON

The Ontario Special Investigations Unit has determined there are no reasonable grounds to lay criminal charges against an OPP officer who shot and killed Babak Saidi in the Morrisburg detachment on Dec. 23, 2017.

SIU director Tony Loparco's report, dated Jan. 11, was released Tuesday afternoon.

Saidi, 43, was shot dead after reporting for his required weekly check-in after a 2014 conviction for assault and battery.

Reached by phone late on Friday afternoon in Ottawa, Elly Saidi, Babak's older sister, told the Cornwall Standard-Freeholder she was "quite disappointed (with the report); it took the SIU 14 months to come to this decision, and in the end basing the decision on the testimony given to them by the officer seven months after the shooting, in July."

Asked what the family will do next, Elly Saidi said it's hoping that an inquest into the shooting will be held.

"I'm really hoping we can learn from this," she said. "We need the police to be better trained at de-escalating a situation. In a span of seven seconds, my brother was shot five times, three (of the shots) in the back."

Elly Saidi said she hopes an inquest would lead to police officers being better able to deal with people who have mental health issues.

In the report, Loparco goes through details of what led up to the barely two-minute altercation that resulted in Babak Saidi's death.

Saidi, whose family said he suffered from schizophrenia, was on a court-ordered condition at the time to sign in at the Morrisburg detachment every week. On Dec. 23, he was dropped off by his father and picked up the direct-line telephone at the detachment to contact the OPP communications centre and advise it he was present to sign in.

What had not publicly been released until Tuesday was that the Stormont, Dundas and Glengarry OPP officers had decided to arrest

Saidi at the station that Saturday due to a complaint filed on Dec. 20, in which a saleswoman alleged Saidi had threatened and drawn a knife on her and held it against her throat.

The report says when the two officers who responded to the Morrisburg detachment for his sign-in informed Saidi he was being charged, he turned to leave. The subject officer attempted to stop him and the two men fell through the outdoor doors.

The SIU report said that during the ensuing scuffle, according to forensic and video evidence, along with witness statements, Saidi bit the officer on his arm. The officer struck Saidi's head to get him to release, and Saidi struck the officer's head with an object believed to be his radio. The officer then shot his Taser at Saidi with no effect and Saidi was able to get the Taser and aim it at the officer.

The officer then drew his gun, which Saidi at one point grabbed, the report said, and the officer fired a number of shots at Saidi, which ultimately killed him.

Loparco found the officer had genuine reason to fear for his death or grievous injury and to use his firearm to prevent and had acted appropriately under



Babak Saidi, 43, was shot Dec. 23, 2017, by an OPP officer at the Morrisburg detachment where Saidi was reporting as part of a probation order.

the circumstances.

Babak's younger sister Hoda Pari Poush described her brother as a "very gentle soul with a very kind heart," who had his good days and bad days.

She said he had mental health problems and was known to police, but she questioned how the situation could have escalated so quickly on Dec. 23, 2017.

thambleton@postmedia.com

PROPOSED ST. LAURENT PIPELINE PROJECT NOTICE OF STUDY COMMENCEMENT AND OPEN HOUSE CITY OF OTTAWA, ONTARIO ENBRIDGE GAS INC.

The Study

Enbridge Gas Inc. (Enbridge) has retained Dillon Consulting Limited (Dillon) to undertake an environmental and cumulative effects assessment and Environmental Report (ER) for the installation of approximately 1.7 kilometers (km) of pipeline along St. Laurent Boulevard, in the City of Ottawa. Enbridge has identified the need to replace the existing pipeline on St. Laurent Boulevard due to the current pipe conditions and to better service 140 customers by transferring customers to an intermediate pressure (IP) system. Once the study is complete, Enbridge may apply to the Ontario Energy Board (OEB) for approval to install the existing pipeline. If approved, construction may be scheduled for the summer of 2019.

The preferred route for the proposed natural gas pipeline originates approximately 20 m south of Donald Street of St. Laurent Boulevard, continuing north on St. Laurent Boulevard for approximately 1.7 km where it will terminate approximately 20 m north of Montreal Road. It should be noted that no alternatives could be considered as this pipeline will be servicing customers directly along the route.

The pipeline will consist of nominal pipe size ("NPS") 6 IP polyethylene natural gas main. The pipeline is planned to be located mainly within municipal road rights-of-way, and will require short tie-ins to the existing network at road intersections at McArthur Avenue, Coté Street, and Noranda Street. The preferred route is identified on the map.

The Process

The study is being conducted in accordance with the OEB's Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario. The study will review the need and justification for the pipeline, describe the natural and socio-economic environment, evaluate the project from a social and environmental perspective, outline safety measures, and describe appropriate measures for impact mitigation and monitoring.

Invitation to the Community

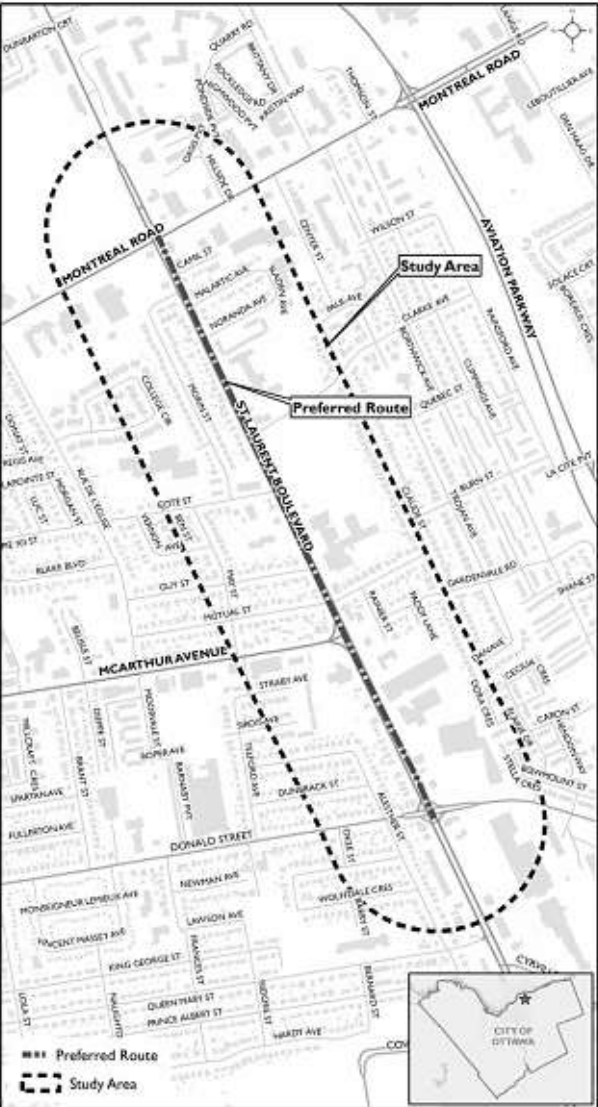
Stakeholder consultation is a key component of this study. Members of the general public, agencies, Indigenous communities and interest group representatives are invited to participate in the study. We will be hosting an Open House to provide you with an opportunity to review the project and provide input. Details on the Open House are as follows:

Location: Richelieu Vanier Community Centre
(300 Des, Pères-Blancs Ave, Ottawa)
Date: March 4th, 2019 (Monday)
Time: 5 PM to 8 PM

Representatives from Enbridge and Dillon will be in attendance to discuss the project and answer questions. Your input will be used to confirm the preferred route and create mitigation plans to be implemented during construction. If you are interested in participating, or would like to provide comments, please come to the meeting or contact one of the individuals listed as soon as possible.

Tanya Turk
Environmental Advisor
Enbridge Gas Inc.
101 Honda Boulevard,
Markham ON L6C 0M6
Telephone: 416-495-3103
tanya.turk@enbridge.com

Whitney Moore
Environmental Assessment
Project Manager
Dillon Consulting Limited
177 Colonnade Road South,
Suite 101 Ottawa, ON K2E 7J4
Telephone: (613) 745-2213
StLaurentEA@dillon.ca



CLARK DAVEY 1928-2019

‘The true journalist of journalists’

Longtime newspaper publisher was driving force behind Michener Awards

BRUCE DEACHMAN

He was a champion of the sort of investigative journalism that, in his words, has “the kind of impact that moves peoples’ hearts and their minds, that stirs their sense of justice, and changes the rules and the laws, to make our society a better place.”

Clark Davey, one of the great newspapermen and among the few who rose from a small-town reporter’s desk to managing editors’ offices and publishers’ boardrooms in the largest papers across the country, died Monday in Ottawa. He was 90.

“He was far-sighted and funny, and cared deeply about journalists and journalism,” says Lucinda Chodan, editor-in-chief of the Montreal Gazette, who arrived there as an arts reporter in 1984, a year into Davey’s tenure as publisher. “You can see that in the incredible role he played in founding the Michener Awards Foundation and fostering great journalism in Canada. “The fact that he was managing editor of the Globe and Mail and publisher in Ottawa, Montreal and Vancouver shows his versatility and his great track record. When he was at a news organization, things got better.”

Russ Mills, whose two tours of duty as publisher of the Ottawa Citizen sandwiched Davey’s, described Davey as “a legendary figure” in journalism, whose breadth of experience made his counsel regularly sought by other publishers and editors.

Davey followed the news closely, right up to the end. According to Mills, Davey attended weekly roundtable lunches at the Rideau Club, and at last week’s, for example, was active and up-to-date discussing the SNC-Lavalin file.

Davey was born in 1928 in Chatham, Ont. His career might have taken a completely different arc had his poor vision not kept him from attending Royal Roads Military College in B.C. He was heartbroken after failing his medical, but an English teacher told him people would pay him to write. So he enrolled in the first journalism degree course taught at University of Western Ontario, graduating in 1948 and joining the newsroom of the Chatham Daily News.

There, he worked under Richard (Dic) Doyle, but moved to Kirkland Lake when the Thomson newspaper chain made him editor-in-chief of the Northern Daily News. His time there was brief, however, as his girlfriend, Joyce Gordon, issued him an ultimatum: Northern Ontario or me. He chose her: they married in September 1952.

In the meantime, he joined the newsroom of the Globe and Mail, where his mentor Doyle had been working for a year. As a reporter with the Globe, Davey covered national and international affairs, including the Suez Canal crisis, the St. Lawrence Seaway project and the cancellation of the Avro Arrow program. During the 1957 federal election campaign, he recognized that Tory leader John Diefenbaker was gaining momentum and might actually win, and convinced his editors to allow him to stay with the Chief’s campaign for 40 days.

When Doyle became editor of the Globe in 1963, he chose Davey as his managing editor, and, according to Mills, the two raised the broadsheet’s reputation from that of a local paper to a national one. Davey was managing editor for 15 years before joining the Vancouver Sun in 1978. He was publisher there until 1983, when he took over at the Gazette. He was publisher of the Citizen from



Clark Davey displays a mock-up edition of the Montreal Gazette in 1988. The former newspaper publisher died Monday. *BILL GRIMSHAW FILES*

1989 to 1993. He was also president and chair of The Canadian Press, and co-founder and president of the Michener Awards Foundation that oversees the country’s most prestigious journalism prize.

“He was the true journalist of journalists,” says Kim Kierans, journalism professor at University of King’s College in Halifax and Michener Foundation board member. “He told me when I last saw him in November, ‘If we’re not providing the encouragement for journalism organizations and journalists within them to do the journalism that matters, then we’re in trouble as a democracy.’”

“He was also a lovely man, smart and sparkling... with incredible enthusiasm for the business and its future.”

According to Mills, Davey, who in 2002 led a protest on the steps of the Ottawa Citizen after Mills was fired for running an editorial critical of then-prime minister Jean Chrétien, was known as tough

and gruff, “but deep down he was a really kind and thoughtful person, and a very good friend who was always fair to people.”

Although he called the shots on the job, it was Joyce who ruled the home roost. According to son Ric, his father only stopped the presses twice — once while at the Globe, when Joyce called him to report that she and Ric thought they had just seen a UFO.

“That was the kind of pull she had over him,” says Ric.

Davey is survived by his wife, Joyce; brother Kenneth George; children Ric (Rita Celli), Kevin (Margaret) and Clark Jr. (Shelley Grist); and grandchildren Jason, Nicole, Michael, Kira, Stephen and Christian.

Friends are invited to a celebration of life at Tubman Funeral Home, Westboro Chapel, 403 Richmond Rd., on Friday, March 1, from 2-5 p.m. Shared memories and speeches at 4 p.m.

bdeachman@postmedia.com

Canadian Tire proposes store at Carlingwood

KELLY EGAN

Canadian Tire is planning a new store at the Carlingwood Shopping Centre, with an eye on closing its outlet just 2.5 kilometres east on Carling Avenue.

Carlingwood, which opened in 1956, has been looking for another retail anchor since the Sears outlet closed in January 2018, leaving roughly 180,000 square feet of empty space and 133 employees without work. A demolition permit for the Sears store was issued last fall. It had been a mainstay in the west-end for decades and the closure left the mall with only one anchor, a Loblaws.

Canadian Tire has submitted a site planning application to the City of Ottawa, which it hopes to have approved by April 2. No zoning changes are required. The plan calls for a two-storey build, roughly on the old Sears footprint, with a 30-bay automotive service centre facing Woodroffe Avenue. The vehicle entrances will be via the existing Carlings signalized stop and from Woodroffe, where only right-hand turns will be permitted.

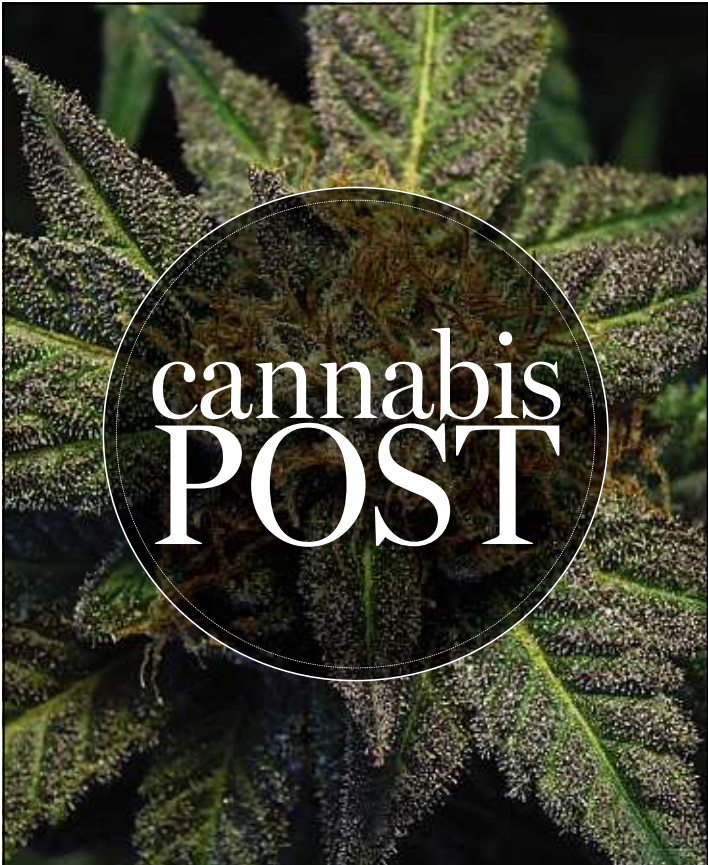
The store at Carling and Clyde opened in March 2008 with some unusual features. Originally, almost all the retail space was on the second floor, while the first floor allowed for a large covered parking lot. Some shoppers didn’t like the second-floor concept, and the car entrance from Clyde could be awkward.

Retail analyst Barry Nabatian, who has no inside knowledge about the proposal, said it looks like a good move for the shopping centre, Canadian Tire and the community.

Bay Ward Coun. Theresa Kavanagh scheduled a meeting on the plan on Tuesday, from 7 to 8:30 p.m., at the Ron Kolbus centre on Greenview Avenue.

kegan@postmedia.com

Twitter.com/kellyegancolumn



Cannabis Post NEWSLETTER

Get cannabis news, investment insights and more with the Cannabis Post. We'll cut through the noise to highlight what industry insiders will be talking about each week.

SIGN UP FOR YOUR FREE NEWSLETTER
CANNABISPOST.FINANCIALPOST.COM

PRESENTED BY
FINANCIAL POST / **GrowthOp**

PROPOSED ST. LAURENT PIPELINE PROJECT
NOTICE OF STUDY COMMENCEMENT AND OPEN HOUSE
CITY OF OTTAWA, ONTARIO
ENBRIDGE GAS INC.

The Study
Enbridge Gas Inc. (Enbridge) has retained Dillon Consulting Limited (Dillon) to undertake an environmental and cumulative effects assessment and Environmental Report (ER) for the installation of approximately 1.7 kilometers (km) of pipeline along St. Laurent Boulevard, in the City of Ottawa. Enbridge has identified the need to replace the existing pipeline on St. Laurent Boulevard due to the current pipe conditions and to better service 140 customers by transferring customers to an intermediate pressure (IP) system. Once the study is complete, Enbridge may apply to the Ontario Energy Board (OEB) for approval to install the existing pipeline. If approved, construction may be scheduled for the summer of 2019.

The preferred route for the proposed natural gas pipeline originates approximately 20 m south of Donald Street at St. Laurent Boulevard, continuing north on St. Laurent Boulevard for approximately 1.7 km where it will terminate approximately 20 m north of Montreal Road. It should be noted that no alternatives could be considered as this pipeline will be servicing customers directly along the route.

The pipeline will consist of nominal pipe size (NPS) 6 IP polyethylene natural gas main. The pipeline is planned to be located mainly within municipal road rights-of-way, and will require short tie-ins to the existing network at road intersections at McArthur Avenue, Côté Street, and Noranda Street. The preferred route is identified on the map.

The Process
The study is being conducted in accordance with the OEB's Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario. The study will review the need and justification for the pipeline, describe the natural and socio-economic environment, evaluate the project from a social and environmental perspective, outline safety measures, and describe appropriate measures for impact mitigation and monitoring.

Invitation to the Community
Stakeholder consultation is a key component of this study. Members of the general public, agencies, Indigenous communities and interest group representatives are invited to participate in the study. We will be hosting an Open House to provide you with an opportunity to review the project and provide input. Details on the Open House are as follows:

Location: Richelieu Vanier Community Centre
(300 Des, Pères-Blancs Ave, Ottawa)
Date: March 4th, 2019 (Monday)
Time: 5 PM to 8 PM

Representatives from Enbridge and Dillon will be in attendance to discuss the project and answer questions. Your input will be used to confirm the preferred route and create mitigation plans to be implemented during construction. If you are interested in participating, or would like to provide comments, please come to the meeting or contact one of the individuals listed as soon as possible.

| | |
|--|--|
| Tanya Turk Environmental Advisor Enbridge Gas Inc. 101 Honda Boulevard, Markham ON L3C 0M6 Telephone: 416-495-3103 tanya.turk@enbridge.com | Whitley Moore Environmental Assessment Project Manager Dillon Consulting Limited 177 Colonnade Road South, Suite 101 Ottawa, ON K2E 7J4 Telephone: (613) 745-2213 StLaurentEA@dillon.ca |
|--|--|

ENBRIDGE

PROPOSED ST. LAURENT PIPELINE PROJECT

NOTICE OF STUDY COMMENCEMENT AND OPEN HOUSE

CITY OF OTTAWA, ONTARIO

ENBRIDGE GAS INC.

The Study

Enbridge Gas Inc. (Enbridge) has retained Dillon Consulting Limited (Dillon) to undertake an environmental and cumulative effects assessment and Environmental Report (ER) for the installation of approximately 1.7 kilometers (km) of pipeline along St. Laurent Boulevard, in the City of Ottawa. Enbridge has identified the need to replace the existing pipeline on St. Laurent Boulevard due to the current pipe conditions and to better service 140 customers by transferring customers to an intermediate pressure (IP) system. Once the study is complete, Enbridge may apply to the Ontario Energy Board (OEB) for approval to install the existing pipeline. If approved, construction may be scheduled for the summer of 2019.

The preferred route for the proposed natural gas pipeline originates approximately 20 m south of Donald Street of St. Laurent Boulevard, continuing north on St. Laurent Boulevard for approximately 1.7 km where it will terminate approximately 20 m north of Montreal Road. It should be noted that no alternatives could be considered as this pipeline will be servicing customers directly along the route.

The pipeline will consist of nominal pipe size ("NPS") 6 IP polyethylene natural gas main. The pipeline is planned to be located mainly within municipal road rights-of-way, and will require short tie-ins to the existing network at road intersections at McArthur Avenue, Coté Street, and Noranda Street. The preferred route is identified on the map.

The Process

The study is being conducted in accordance with the OEB's Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario. The study will review the need and justification for the pipeline, describe the natural and socio-economic environment, evaluate the project from a social and environmental perspective, outline safety measures, and describe appropriate measures for impact mitigation and monitoring.

Invitation to the Community

Stakeholder consultation is a key component of this study. Members of the general public, agencies, Indigenous communities and interest group representatives are invited to participate in the study. We will be hosting an Open House to provide you with an opportunity to review the project and provide input. Details on the Open House are as follows:

Location: Richelieu Vanier Community Centre (300 Des, Pères-Blancs Ave, Ottawa)
Date: March 4th, 2019 (Monday)
Time: 5 PM to 8 PM

Representatives from Enbridge and Dillon will be in attendance to discuss the project and answer questions. Your input will be used to confirm the preferred route and create mitigation plans to be implemented during construction. If you are interested in participating, or would like to provide comments, please come to the meeting or contact one of the individuals listed as soon as possible.

Tanya Turk
Environmental Advisor
Enbridge Gas Inc.
101 Honda Boulevard,
Markham ON L6C 0M6
Telephone: 416-495-3103
tanya.turk@enbridge.com

Whitney Moore
Environmental Assessment Project Manager
Dillon Consulting Limited
177 Colonnade Road South,
Suite 101 Ottawa, ON K2E 7J4
Telephone: (613) 745-2213
StLaurentEA@dillon.ca



A man with short brown hair, wearing a white long-sleeved shirt, is sitting on a light-colored couch. He is smiling broadly while holding a silver mobile phone to his ear with his right hand. In his left hand, he holds a white credit card. A silver laptop is open on his lap, and he is looking at the screen. The background is a bright, out-of-focus indoor setting with a white shelf and a small potted plant.

WANTED

100 PEOPLE WITH HEARING LOSS

Qualified Participants Needed for Technology Field Test



NOW Enrolling



Actual Size

We're looking for people like you, who may be experiencing difficulty hearing in noisy environments to evaluate a remarkable new digital hearing aid[®] and a rehabilitative process that could be the solution to your difficulties. There's no cost or obligation to participate!

Call us toll-free today to see if you qualify for this Field Test. Potential candidates will be given a FREE hearing test to determine their candidacy.

Selected participants will be given a FREE in-office demonstration and the opportunity to evaluate the latest, most advanced hearing aid technology for 30 days. This latest digital technology solves the biggest challenge for hearing aid wearers – hearing well in noisy environments.

Nobody will notice it because of its minute size, fitting snugly and comfortably just behind the ear. Everything works automatically, so you can get back to enjoying your relationships, rather than thinking about your hearing.

**Apply
Today**

Candidates are being selected.

The selection process ends on
March 29th 2019.

**Call a local clinic below or book
your appointment online at:**

HearingLife.ca/Wanted

**Referred by Physicians more than
80,000 times!**

Brockville

68 William Street
Call Heather at
1-888-758-9027

Carleton Place

130 Lansdowne Avenue
Call Shelley at
1-888-714-6381

Cornwall

31 Ninth Street East Unit 108
Call Vanessa at
1-888-694-6990

Kemptville

2671 Concession Road
Call Morgan at
1-888-697-8977

Ottawa Bank

2430 Bank Street
Call Shanan at
1-888-679-9780

Ottawa Holland

118 Holland Avenue
Call toll-free at
1-888-687-2495

Ottawa Iris

2730 Iris Street
Call Krista at
1-888-687-5814

Ottawa Merivale

501-1580 Merivale Road
Call Katherine at
1-888-892-5162

Ottawa Montreal Rd

13A-585 Montreal Road
Call Shayna at
1-888-899-6513

Pembroke

157 Alfred Street
Call Daniella at
1-888-899-6712

Perth

104-40 Sunset Boulevard
Call Shelly at
1-888-864-9302

Smiths Falls

91 Cornelia Street West
Call Connie at
1-888-884-8452

HearingLife

Formerly **ListenUP!**
CANADA

TRUSTED PARTNER OF

NIHB, VAC and Worker's Compensation Provider

* Offer valid until March 29th, 2019 and is subject to change without notice. No-cost hearing tests are provided to adults ages 19 and older. A fee will apply for a copy of your audiogram. Child hearing tests are conducted at select locations for a fee, please contact us for more information. Candidates must be private sale or eligible for ADP. Some conditions may apply. Please see clinic for details. Offer not valid in Quebec. [1] <https://www.oticon.ca/solutions/open>

Promo Code
NSP-WNTD100-OTT



Police officers killed a dog outside this home on Athans Avenue on Monday night. *JEAN LEVAC*

Police officers shoot two dogs, rescue woman being mauled

MEGAN GILLIS

Two dogs were shot Monday night in the Hunt Club area after responding police officers were attacked by one of the animals before they could rescue a woman being mauled by a second dog.

The dog that left a 44-year-old woman with “severe” injuries including bites to her face, neck and arms was killed.

The woman was in serious but stable condition on arrival at the trauma centre, paramedics said.

Patrol officers responded to a report that someone was screaming at a home on Athans Avenue near Bank Street just before 11 p.m.

As officers arrived on the scene, they were “immediately attacked by a large aggressive dog,” police said. They shot the dog, which retreated into the home.

Officers then discovered a second

dog was mauling a person outside the home.

They shot and killed it “to prevent it from further injuring this person.” The officers were unhurt.

The injured dog was taken to a vet for treatment and it and two other dogs found at the scene are in “protective care,” said Roger Chapman, the city’s director of bylaw and regulatory services.

HALF A DOZEN GUNSHOTS

“At this time, there is no evidence to suggest any of the dogs were of a prohibited breed,” Chapman added.

Chapman said the department “takes incidents such as these very seriously and is investigating accordingly.”

Neighbour Jennifer Moodie said she heard at least half a dozen gunshots — a shock on the quiet street — and came out to see the surviving

dog, “barking and crying,” being led from the home.

The woman said the man who lives in the home was “distracted” when he returned from work and learned his partner was injured and his dog dead.

“They’re nice people — never, ever an issue,” Moodie said, adding that she’d never seen the dogs because they were kept in the couple’s fenced backyard.

It was the second time this month that police were forced to shoot a dog.

On March 1, a police officer shot and killed a dog that attacked her in Vanier.

The officer was taken to hospital with serious, but non-life-threatening bite wounds to her arms.

The attack occurred on Deschamps Avenue where officers were apparently assisting in an eviction.

Inquest to be held in shooting death of mentally ill man

Saidi grabbed officer’s gun during struggle outside Morrisburg police station in 2017

ANDREW DUFFY

A coroner’s inquest will be held into the death of Babak Saidi, a mentally ill Iroquois man who was shot five times outside a Morrisburg police station during a struggle with two OPP officers trying to arrest him.

Saidi’s sister, Elly Saidi, said she hopes the inquest will offer recommendations to help prevent similar tragedies in the future.

Earlier this year, the Special Investigations Unit concluded that criminal charges are not warranted in the case.

But Elly Saidi said questions remain about how her brother’s arrest could have gone so wrong, so fast on Dec. 23, 2017.

Babak Saidi, 43, was shot dead less than two minutes after he entered the Morrisburg OPP station as part of a court-ordered check-in procedure. He had made the same appearance dozens of times that same year.

“I’m relieved there will be an inquest,” Elly Saidi said Tuesday. “It will be good to know what happened for public safety and for public policy: What can be done differently so that something like this won’t happen again between police and someone with mental illness?”

Babak Saidi had been diagnosed with schizophrenia and was taking medication for the illness.

According to the SIU report released last month, two Morrisburg OPP officers tried to arrest Saidi on new charges after he entered the station on the morning of Dec. 23, 2017.

Saidi walked toward the exit and was pursued by the two officers,

who tried to restrain him.

Saidi resisted when the officers grabbed him from behind and they all spilled outside. According to the SIU report, a melee ensued during which both officers tried to fire Tasers at Saidi, but neither weapon delivered an electric shock since the darts did not penetrate his clothing.

When Saidi gained control of the male officer’s Taser, the officer pulled his handgun. The SIU concluded, based on eyewitness accounts and closed circuit videotape, that the officer shot Saidi



Babak Saidi

after he reached for the gun and grabbed the barrel with his left hand.

A forensic pathologist’s report found that three of the gunshots entered Saidi’s upper back. He was also hit in the shoulder and leg.

SIU director Tony Loparco said that the wounds, at first blush, may raise some questions about the incident. But Loparco concluded the officer had little choice but to fire at close range since his own life was at risk in the struggle.

A date for the inquest has yet to be set since the coroner’s office must launch its own investigation of the shooting.



Conseil des
écoles publiques
de l'Est de l'Ontario

PUBLIC CONSULTATION

**New School Attendance Boundary for
Ottawa Ouest French Public Elementary School**
**(Proposed Revision to School Attendance Boundaries for
Charlotte-Lemieux and Maurice-Lapointe French
Public Elementary Schools)**

PREAMBLE: The *Conseil des écoles publiques de l'Est de l'Ontario (CEPEO)* invites those attending or eligible for French public school in Nepean or Bells Corners or attending Charlotte-Lemieux and Maurice-Lapointe French public elementary schools to a consultation on proposed school attendance boundaries for the new Ottawa Ouest French Public Elementary School, located at 20 Harrison Street in Nepean, for the 2019-2020 school year. Two consultations will be held at the following dates and locations:

| Public Consultations | | |
|----------------------|---|---|
| Date | Wednesday, March 27th 2019 | Thursday, March 28th 2019 |
| Time | 7:00 PM | 7:00 PM |
| Location | École élémentaire publique Charlotte-Lemieux | École élémentaire et secondaire publique Maurice-Lapointe |
| Address | 2093 Bel-Air Drive Ottawa (Ontario) K2C 0X2 | 17 Bridgestone Drive Kanata (Ontario) K2M 0E9 |
| Room | Gymnasium | Gymnasium |

Agenda

1. Introduction, background and context
2. Presentation of 3 proposed scenarios for the creation of a new school attendance boundary for *Ottawa Ouest* French Public Elementary
3. Questions and comments

FOR MORE INFORMATION:

Please contact ottawa-ouest@cepeo.on.ca or visit ottawa-ouest.cepeo.on.ca

Lucille Collard
President

Édith Dumont
Director of Education
and Secretary-Treasurer

PROPOSED ST. LAURENT PIPELINE PROJECT NOTICE OF STUDY COMMENCEMENT AND OPEN HOUSE CITY OF OTTAWA, ONTARIO ENBRIDGE GAS INC.

The Study

Enbridge Gas Inc. (Enbridge) has retained Dillon Consulting Limited (Dillon) to undertake an environmental and cumulative effects assessment and Environmental Report (ER) for the installation of approximately 1.7 kilometers (km) of pipeline along St. Laurent Boulevard, in the City of Ottawa. Enbridge has identified the need to replace the existing pipeline on St. Laurent Boulevard due to the current pipe conditions and to better service 140 customers by transferring customers to an intermediate pressure (IP) system. Once the study is complete, Enbridge may apply to the Ontario Energy Board (OEB) for approval to install the existing pipeline. If approved, construction may be scheduled for the summer of 2019.

The preferred route for the proposed natural gas pipeline originates approximately 20 m south of Donald Street of St. Laurent Boulevard, continuing north on St. Laurent Boulevard for approximately 1.7 km where it will terminate approximately 20 m north of Montreal Road. It should be noted that no alternatives could be considered as this pipeline will be servicing customers directly along the route.

The pipeline will consist of nominal pipe size (“NPS”) 6 IP polyethylene natural gas main. The pipeline is planned to be located mainly within municipal road rights-of-way, and will require short tie-ins to the existing network at road intersections at McArthur Avenue, Coté Street, and Noranda Street. The preferred route is identified on the map.

The Process

The study is being conducted in accordance with the OEB’s Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario. The study will review the need and justification for the pipeline, describe the natural and socio-economic environment, evaluate the project from a social and environmental perspective, outline safety measures, and describe appropriate measures for impact mitigation and monitoring.

Invitation to the Community

Stakeholder consultation is a key component of this study. Members of the general public, agencies, Indigenous communities and interest group representatives are invited to participate in the study. We will be hosting an Open House to provide you with an opportunity to review the project and provide input. Details on the Open House are as follows:



Location: Paroisse Saint-Louis-Marie-de-Monfort
(749 Trojan Avenue, Ottawa)
Date: April 3rd, 2019 (Wednesday)
Time: 5 PM to 8 PM

Representatives from Enbridge and Dillon will be in attendance to discuss the project and answer questions. Your input will be used to confirm the preferred route and create mitigation plans to be implemented during construction. If you are interested in participating, or would like to provide comments, please come to the meeting or contact one of the individuals listed as soon as possible.

Tanya Turk
Environmental Advisor
Enbridge Gas Inc.
101 Honda Boulevard,
Markham ON L6C 0M6
Telephone: 416-495-3103
tanya.turk@enbridge.com

Whitney Moore
Environmental Assessment Project Manager
Dillon Consulting Limited
177 Colonnade Road South,
Suite 101 Ottawa, ON K2E 7J4
Telephone: (613) 745-2213
StLaurentEA@dillon.ca

Project Phone Number : 1-855-801-2303
Project Website:
<https://www.enbridgegas.com/en/About-Us>
(click on ‘Projects’)



AFFORDABLE METAL ROOFING



DOWN PAYMENT*
INTEREST*
PAYMENTS FOR 6 MONTHS*



SHOWROOM:
960 Ch. Burton Road
Vars, ON K0A 3H0
Mon-Fri 9AM-5PM

DONT OVERPAY FOR YOUR METAL ROOF
CALL US FIRST
1.844.778.9393

www.londonecometal.com

*Financing Available OAC. Promotion expiry date: Oct 31, 2019. Cannot be combined with any other offer. Limited time offering. Some restrictions may apply, contact us for details.

PROPOSED ST. LAURENT PIPELINE PROJECT
NOTICE OF STUDY COMMENCEMENT AND OPEN HOUSE
CITY OF OTTAWA, ONTARIO
ENBRIDGE GAS INC.

The Study

Enbridge Gas Inc. (Enbridge) has retained Dillon Consulting Limited (Dillon) to undertake an environmental and cumulative effects assessment and Environmental Report (ER) for the installation of approximately 1.7 kilometers (km) of pipeline along St. Laurent Boulevard, in the City of Ottawa. Enbridge has identified the need to replace the existing pipeline on St. Laurent Boulevard due to the current pipe conditions and to better service 140 customers by transferring customers to an intermediate pressure (IP) system. Once the study is complete, Enbridge may apply to the Ontario Energy Board (OEB) for approval to install the existing pipeline. If approved, construction may be scheduled for the summer of 2019.

The preferred route for the proposed natural gas pipeline originates approximately 20 m south of Donald Street of St. Laurent Boulevard, continuing north on St. Laurent Boulevard for approximately 1.7 km where it will terminate approximately 20 m north of Montreal Road. It should be noted that no alternatives could be considered as this pipeline will be servicing customers directly along the route.

The pipeline will consist of nominal pipe size ("NPS") 6 IP polyethylene natural gas main. The pipeline is planned to be located mainly within municipal road rights-of-way, and will require short tie-ins to the existing network at road intersections at McArthur Avenue, Coté Street, and Noranda Street. The preferred route is identified on the map.

The Process

The study is being conducted in accordance with the OEB's Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario. The study will review the need and justification for the pipeline, describe the natural and socio-economic environment, evaluate the project from a social and environmental perspective, outline safety measures, and describe appropriate measures for impact mitigation and monitoring.

Invitation to the Community

Stakeholder consultation is a key component of this study. Members of the general public, agencies, Indigenous communities and interest group representatives are invited to participate in the study. We will be hosting an Open House to provide you with an opportunity to review the project and provide input. Details on the Open House are as follows:

Location: Paroisse Saint-Louis-Marie-de-Monfort
(749 Trojan Avenue, Ottawa)
Date: April 3rd, 2019 (Wednesday)
Time: 5 PM to 8 PM

Representatives from Enbridge and Dillon will be in attendance to discuss the project and answer questions. Your input will be used to confirm the preferred route and create mitigation plans to be implemented during construction. If you are interested in participating, or would like to provide comments, please come to the meeting or contact one of the individuals listed as soon as possible.

Tanya Turk
Environmental Advisor
Enbridge Gas Inc.
101 Honda Boulevard,
Markham ON L6C 0M6
Telephone: 416-495-3103
tanya.turk@enbridge.com

Whitney Moore
Environmental Assessment Project Manager
Dillon Consulting Limited
177 Colonnade Road South,
Suite 101 Ottawa, ON K2E 7J4
Telephone: (613) 745-2213
StLaurentEA@dillon.ca

Project Phone Number : 1-855-801-2303
Project Website:
<https://www.enbridgegas.com/en/About-Us>
(click on 'Projects')



HOME REPAIRS

SPONSORED BY ENVIROPURE HOME SERVICES

How expert mould removal turned a grow-op back into a home

IRIS WINSTON
Postmedia Content Works

Ron Haveron and his wife were relaxing at home when a telephone call from the Ottawa police disrupted their quiet evening.

"We have a few rental units," Haveron said, "and we had been renting a house in Orleans to some people that we thought were very nice. We found out we were wrong about that when the police said that there had been a drug bust at the house and they wanted us to show up there right away."

When they arrived, they discovered that the basement was the site of a marijuana grow-op.

"We had to get all the remnants of the grow-op out at our cost," Haveron said, noting that the basement had been virtually destroyed during the drug bust. "We were told we had to find our own contractors and that we weren't allowed to do any of the work ourselves."

Finding the right company to do the job was the next hurdle. The first companies Haveron contacted left him feeling very uncomfortable.

"They treated us as though we were the criminals," he said. "And we had done nothing wrong. Then, we finally met Richard Stickle of Enviropure — we found the company online — and things really changed. He was very respectful and understanding. He and his crew did everything they could to help. They really went the extra mile."

Enviropure Home Services took over to ensure that

the house was restored to a healthy environment for future residents.

The hot and humid conditions required to grow marijuana can cause significant damage to a property — including warped wood, collapsed drywall and large amounts of mould. Exposure to mould can cause health issues like throat, eye and skin irritation, nasal congestion, coughing and wheezing, as well as exacerbating problems for people who are already subject to asthma and other respiratory issues.

"We've cleaned up everything from the smallest bits to grow-ops and places that are completely contaminated with mould," said Stickle, Enviropure's vice-president of operations. "We are not just a mould remediation company; we are certified for mould inspections. We are so detail-oriented and thorough in our mould remediation that, after we have completed the job and done post-air quality testing, we actually give a safe-dwelling certificate to let the client know that the building is completely safe to inhabit."

Mould remediation, he emphasized, is a process, not a product.

"Sprays that promise to remove mould instantly don't work," Stickle said. "Mould has to be removed or you do not solve the problem."

Bleach, he added, is as ineffective as the commercial sprays.

"The problem with using bleach is that it has to be the perfect mixture of nine parts water and one part bleach, and left for 10 minutes to

create a chemical reaction and get rid of mould," he explained. "But bleach evaporates faster than water. So people are putting water on the mould, which helps it to grow."

Sprays that promise to remove mould instantly don't work. Mould has to be removed or you do not solve the problem.

He pointed out that mould, which starts to grow whenever water remains on a surface for 72 hours or more, can cause various health issues.

"Anything under five microns that goes into your lungs never comes out," he said. "Mould spores are just two microns. Once there is enough mould in your lungs, it builds into all kinds of respiratory problems, like asthma and bronchitis or even fatal diseases in some cases."

The answer in mould remediation is high efficiency particulate air (HEPA) vacuuming, followed by source containment and the disposal of defective materials.

"You can't get mould out of certain materials, such as drywall," Stickle said. "You need specialized ways of getting rid of it. That's why it should be done by



Mould can not only create extensive damage to your home, it can cause serious health problems. GETTY IMAGES

certified experts."

All divisions of Enviropure are certified by the Institute of Inspection, Cleaning and Restoration Certification and

the American Bio-Recovery Association.

"I would recommend Enviropure to anybody," said Ron Haveron, who, a year follow-

ing the cleanup, is renting out the restored property again.

For more information, visit www.enviropurehome.com or call 613-513-7873.

Warning signs

Signs that a property may have been a grow-op:

1. Modified duct work;
2. Circular holes in floor joists or roof trusses from venting, or patched holes;
3. Chunks of brickwork on the exterior that have been replaced;
4. Brown stains in soffits, or brand-new soffits;
5. Stains on basement floors (caused by containers left for long periods) or stains in laundry tubs;
6. Modified wiring and electrical panel;
7. New plumbing for water supply and drains;
8. Foundations and concrete walls cored or breached to get wiring around the hydro meter;
9. Warped/rotted wooden structures due to excessive moisture.

Call an expert to conduct professional mould inspection and air quality testing.

Appendix C3

Stakeholder and Indigenous Letters

February 21, 2019

**RE: Enbridge Gas Inc.
St. Laurent Pipeline Project
City of Ottawa, Ontario
Notice of Project**

Dear Sir/Ms.,

Enbridge Gas Inc. (Enbridge) has retained Dillon Consulting Limited (Dillon) to undertake an environmental and cumulative effects assessment and Environmental Report (ER) for the installation of approximately 1.7 kilometers (km) of pipeline along St. Laurent Boulevard, in the City of Ottawa. The study is being conducted in accordance with the *Ontario Energy Board's (OEB) Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition, August 2016*. Once the study is complete, Enbridge may apply to the OEB for approval to install the pipeline. If approved, construction may be scheduled for the summer of 2019.

A Preliminary Preferred Route (PPR) for the proposed natural gas pipeline has been identified; originating approximately 20 m south of Donald Street on St. Laurent Boulevard, continuing north on St. Laurent Boulevard for approximately 1.7 km where it will terminate approximately 20 m north of Montreal Road. Please refer to the project location figure, attached. Enbridge has identified the need to replace the existing pipeline on St. Laurent Boulevard due to the current pipe conditions, and to better service 140 customers along the PPR by transferring customers to an intermediate pressure (IP) system.

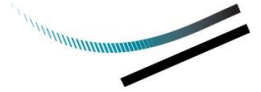
The pipeline will consist of nominal pipe size (NPS) 6-inch IP polyethylene natural gas main. The pipeline is planned to be located mainly within municipal road rights-of-way, and will require short tie-ins to the existing network at road intersections at McArthur Avenue, Coté Street, and Noranda Street. It should be noted that no alternatives could be considered as this pipeline will be servicing customers directly along the route.

This project is part of a larger replacement project which will be completed in phases over the next 4 years. The purpose of the larger project is to replace approximately 13 km of NPS 12-inch extra-high pressure (XHP) steel pipe based on current conditions with a new NPS 12-inch XHP pipe on an alternative route.

Stakeholder involvement will play a key role in the project. In order to undertake a successful consultation program, we have developed a mailing list of government agencies (federal, provincial and municipal), Indigenous and community groups, residents and members of the general public that have interest in the study. Enbridge



177 Colonnade Road
Suite 101
Ottawa, Ontario
Canada
K2E 7J4
Telephone
613.745.2213
Fax
613.745.3491



will also be hosting an Open House meeting as part of the study. Details of this Open House are provided in the enclosed Notice of Commencement.

As part of the initial phase of the study, we are collecting information on the natural environment, archaeological features and socio-economic features within the PPR route described above. Examples of data typically collected for these types of projects include information on terrestrial and aquatic vegetation and wildlife, archaeological and heritage resources, community parks and picnic areas, community facilities, nature trails, bus routes and other utilities such as water, sewage, industrial and commercial utilities. Planning policies and future plans for the study area are important pieces of information that will be considered when evaluating potential routes.

We are interested in hearing from you regarding issues/concerns that you (or your organization) may have regarding this Project. We are also requesting any information relating to the natural and/or human environments in the study area (along or adjacent to the routes) that may fall within your mandate.

Please send this information by email to StLaurentEA@dillon.ca by March 18, 2019. If you require any further information at this time, please do not hesitate to contact me. If requested, a GIS file can be provided to facilitate your review of the study area.

If there is a more appropriate contact at your organization who should receive this letter, please kindly forward the letter at your discretion and notify us as we will update our stakeholder consultation list.

Sincerely,

DILLON CONSULTING LIMITED

Whitney Moore, B.Sc.
Project Manager
Phone: 613-745-2213 Ext. 3040

Encls. Notice of Study Commencement and Open House
Preliminary Preferred Route Map

February 21, 2019

Sent via email only



Rideau Valley Conservation Authority
3889 Rideau Valley Drive
Manotick, ON K4M 1A5
Attn: Mr. Glen McDonald, Director, Science and Planning

**RE: Enbridge Gas Inc.
St. Laurent Pipeline Project
City of Ottawa, Ontario
Notice of Project**

177 Colonnade Road
Suite 101
Ottawa, Ontario
Canada
K2E 7J4
Telephone
613.745.2213
Fax
613.745.3491

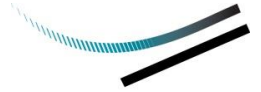
Dear Mr. McDonald,

Enbridge Gas Inc. (Enbridge) has retained Dillon Consulting Limited (Dillon) to undertake an environmental and cumulative effects assessment and Environmental Report (ER) for the installation of approximately 1.7 kilometers (km) of pipeline along St. Laurent Boulevard, in the City of Ottawa. The study is being conducted in accordance with the *Ontario Energy Board's (OEB) Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition*, August 2016. Once the study is complete, Enbridge may apply to the OEB for approval to install the pipeline. If approved, construction may be scheduled for the summer of 2019.

A Preliminary Preferred Route (PPR) for the proposed natural gas pipeline has been identified; originating approximately 20 m south of Donald Street on St. Laurent Boulevard, continuing north on St. Laurent Boulevard for approximately 1.7 km where it will terminate approximately 20 m north of Montreal Road. Please refer to the project location figure, attached. Enbridge has identified the need to replace the existing pipeline on St. Laurent Boulevard due to the current pipe conditions, and to better service 140 customers along the PPR by transferring customers to an intermediate pressure (IP) system.

The pipeline will consist of nominal pipe size (NPS) 6-inch IP polyethylene natural gas main. The pipeline is planned to be located mainly within municipal road rights-of-way, and will require short tie-ins to the existing network at road intersections at McArthur Avenue, Coté Street, and Noranda Street. It should be noted that no alternatives could be considered as this pipeline will be servicing customers directly along the route.

This project is part of a larger replacement project which will be completed in phases over the next 4 years. The purpose of the larger project is to replace approximately 13 km of NPS 12-inch extra-high pressure (XHP) steel pipe based on current conditions with a new NPS 12-inch XHP pipe on an alternative route.



Stakeholder involvement will play a key role in the project. In order to undertake a successful consultation program, we have developed a mailing list of government agencies (federal, provincial and municipal), Indigenous and community groups, residents and members of the general public that have interest in the study. Enbridge will also be hosting an Open House meeting as part of the study. Details of this Open House are provided in the enclosed Notice of Commencement.

As part of the initial phase of the study, we are collecting information on the natural environment, archaeological features and socio-economic features within the PPR route described above. Examples of data typically collected for these types of projects include information on terrestrial and aquatic vegetation and wildlife, archaeological and heritage resources, community parks and picnic areas, community facilities, nature trails, bus routes and other utilities such as water, sewage, industrial and commercial utilities. Planning policies and future plans for the study area are important pieces of information that will be considered when evaluating potential routes.

We are interested in hearing from you regarding issues/concerns that you (or your organization) may have regarding this Project. We are also requesting any information relating to the natural and/or human environments in the study area (along or adjacent to the alternative routes) that may fall within your mandate and in particular whether the following are within the study area:

- environmentally sensitive areas;
- floodplains; and,
- other specific natural features that would warrant protection.

Please send this information by email to StLaurentEA@dillon.ca by March 18, 2019. If you require any further information at this time, please do not hesitate to contact me. If requested, a GIS file can be provided to facilitate your review of the study area.

If there is a more appropriate contact at your organization who should receive this letter, please kindly forward the letter at your discretion and notify us as we will update our stakeholder consultation list.

Sincerely,

DILLON CONSULTING LIMITED

Whitney Moore, B.Sc.

Project Manager

Phone: 613-745-2213 Ext. 3040

Encls. Notice of Study Commencement and Open House
Preliminary Preferred Route Map

February 21, 2019

**RE: Enbridge Gas Inc.
St. Laurent Pipeline Project
City of Ottawa, Ontario
Notice of Project**

Dear Sir/Ms.,

Enbridge Gas Inc. (Enbridge) has retained Dillon Consulting Limited (Dillon) to undertake an environmental and cumulative effects assessment and Environmental Report (ER) for the installation of approximately 1.7 kilometers (km) of pipeline along St. Laurent Boulevard, in the City of Ottawa. The study is being conducted in accordance with the *Ontario Energy Board's (OEB) Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition, August 2016*. Once the study is complete, Enbridge may apply to the OEB for approval to install the pipeline. If approved, construction may be scheduled for the summer of 2019.

A Preliminary Preferred Route (PPR) for the proposed natural gas pipeline has been identified; originating approximately 20 m south of Donald Street on St. Laurent Boulevard, continuing north on St. Laurent Boulevard for approximately 1.7 km where it will terminate approximately 20 m north of Montreal Road. Please refer to the project location figure, attached. Enbridge has identified the need to replace the existing pipeline on St. Laurent Boulevard due to the current pipe conditions, and to better service 140 customers along the PPR by transferring customers to an intermediate pressure (IP) system.

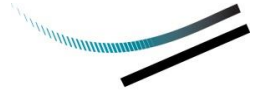
The pipeline will consist of nominal pipe size (NPS) 6-inch IP polyethylene natural gas main. The pipeline is planned to be located mainly within municipal road rights-of-way, and will require short tie-ins to the existing network at road intersections at McArthur Avenue, Coté Street, and Noranda Street. It should be noted that no alternatives could be considered as this pipeline will be servicing customers directly along the route.

This project is part of a larger replacement project which will be completed in phases over the next 4 years. The purpose of the larger project is to replace approximately 13 km of NPS 12-inch extra-high pressure (XHP) steel pipe based on current conditions with a new NPS 12-inch XHP pipe on an alternative route.

In order to undertake a successful consultation program, Indigenous engagement will play a key role in the project. Enbridge will be hosting one Open House meeting as part of the study. As noted in the attached Notices of Study Commencement, Enbridge is



177 Colonnade Road
Suite 101
Ottawa, Ontario
Canada
K2E 7J4
Telephone
613.745.2213
Fax
613.745.3491



hosting a Public Open House at Richelieu Vanier Community Centre (300 Des, Pères-Blancs Ave, Ottawa) on March 4, 2019, between 5 PM and 8 PM.

As part of the initial phase of the study, we are collecting information on the natural environment, archaeological features and socio-economic features within the PPR route described above. Examples of data typically collected for these types of projects include information on terrestrial and aquatic vegetation and wildlife, archaeological and heritage resources, community parks and picnic areas, community facilities, nature trails, bus routes and other utilities such as water, sewage, industrial and commercial utilities. Planning policies and future plans for the study area are important pieces of information that will be considered when evaluating potential routes.

Enbridge is committed to meaningful engagement with Indigenous groups and the satisfaction of the duty to consult. Enbridge looks forward to engaging with your Nation to ensure your community's interests are being represented. Your Nation is invited to provide comments regarding the proposed project. Specifically, Enbridge is seeking information about any potential impacts that the project may have on constitutionally protected Aboriginal or treaty rights and any measures for mitigating those adverse impacts.

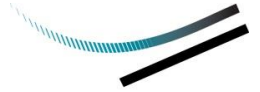
We invite your community to be involved in the engagement and consultation process. Kindly indicate whether your community is interested in participating in the engagement activities on or before **March 18, 2019**. If you are unable to respond by the above date and are intending to do so, please provide an alternative date for when the Project Team may expect a response.

Enbridge would also be interested in meeting with your Nation to share project related information should you wish. Alternatively, please advise if you do not wish to meet individually but would prefer to be kept informed of the project.

On behalf of the Project Team, thank you in advance for your consideration regarding the initial phases of the project. Please do not hesitate to contact me with any questions you may have.

Sincerely,

Sonia Fazari
Sr. Advisor, Community Engagement
Enbridge Gas Inc.
O: 416-753-6962



C: 416-525-2497

Sonia.fazari@enbridge.com

Encls. Preliminary Preferred Route Map
Notice of Study Commencement and Open House



February 21, 2019

Sent via email only



Ministry of Natural Resources and Forestry
Kemptville District Office
10 Campus Drive, Unit 1
Kemptville, ON K0G 1J0

Attn.: Ms. Mary Dillon, District Planner

**RE: Enbridge Gas Inc.
St. Laurent Pipeline Project
City of Ottawa, Ontario
Notice of Project**

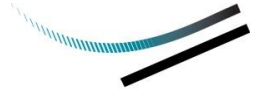
177 Colonnade Road
Suite 101
Ottawa, Ontario
Canada
K2E 7J4
Telephone
613.745.2213
Fax
613.745.3491

Dear Ms. Dillon,

Enbridge Gas Inc. (Enbridge) has retained Dillon Consulting Limited (Dillon) to undertake an environmental and cumulative effects assessment and Environmental Report (ER) for the installation of approximately 1.7 kilometers (km) of pipeline along St. Laurent Boulevard, in the City of Ottawa. The study is being conducted in accordance with the *Ontario Energy Board's (OEB) Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition*, August 2016. Once the study is complete, Enbridge may apply to the OEB for approval to install the pipeline. If approved, construction may be scheduled for the summer of 2019.

A Preliminary Preferred Route (PPR) for the proposed natural gas pipeline has been identified; originating approximately 20 m south of Donald Street on St. Laurent Boulevard, continuing north on St. Laurent Boulevard for approximately 1.7 km where it will terminate approximately 20 m north of Montreal Road. Please refer to the project location figure, attached. Enbridge has identified the need to replace the existing pipeline on St. Laurent Boulevard due to the current pipe conditions, and to better service 140 customers along the PPR by transferring customers to an intermediate pressure (IP) system.

The pipeline will consist of nominal pipe size (NPS) 6-inch IP polyethylene natural gas main. The pipeline is planned to be located mainly within municipal road rights-of-way, and will require short tie-ins to the existing network at road intersections at McArthur Avenue, Coté Street, and Noranda Street. It should be noted that no alternatives could be considered as this pipeline will be servicing customers directly along the route.



This project is part of a larger replacement project which will be completed in phases over the next 4 years. The purpose of the larger project is to replace approximately 13 km of NPS 12-inch extra-high pressure (XHP) steel pipe based on current conditions with a new NPS 12-inch XHP pipe on an alternative route.

Stakeholder involvement will play a key role in the project. In order to undertake a successful consultation program, we have developed a mailing list of government agencies (federal, provincial and municipal), Indigenous and community groups, residents and members of the general public that have interest in the study. Enbridge will also be hosting an Open House meeting as part of the study. Details of this Open House are provided in the enclosed Notice of Commencement.

As part of the initial phase of the study, we are collecting information on the natural environment, archaeological features and socio-economic features within the PPR route described above. Examples of data typically collected for these types of projects include information on terrestrial and aquatic vegetation and wildlife, archaeological and heritage resources, community parks and picnic areas, community facilities, nature trails, bus routes and other utilities such as water, sewage, industrial and commercial utilities. Planning policies and future plans for the study area are important pieces of information that will be considered when evaluating potential routes.

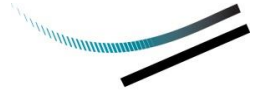
We are interested in hearing from you regarding issues/concerns that you (or your organization) may have regarding this project. We are also requesting any information relating to the natural and/or human environments in the study area that may fall within your mandate and in particular whether the following are within the study area:

- wetlands;
- woodlands;
- environmentally sensitive areas;
- rare, threatened or endangered species occurrences and/or habitat present;
- areas of natural and scientific interest;
- any other natural features that would warrant protection.

Please send this information by email to StLaurentEA@dillon.ca by March 18, 2019. If you require any further information at this time, please do not hesitate to contact me. If requested, a GIS file can be provided to facilitate your review of the study area.

If there is a more appropriate contact at your organization who should receive this letter, please kindly forward the letter at your discretion and notify us as we will update our stakeholder consultation list.

February 21, 2019



Sincerely,

DILLON CONSULTING LIMITED

Whitney Moore, B.Sc.

Project Manager

Phone: 613-745-2213 Ext. 3040

Encls. Notice of Study Commencement and Open House
Preliminary Preferred Route Map



February 21, 2019

**RE: Enbridge Gas Inc.
St. Laurent Pipeline Project
City of Ottawa, Ontario
Notice of Project**

Dear Sir/Ms.,

Enbridge Gas Inc. (Enbridge) has retained Dillon Consulting Limited (Dillon) to undertake an environmental and cumulative effects assessment and Environmental Report (ER) for the installation of approximately 1.7 kilometers (km) of pipeline along St. Laurent Boulevard, in the City of Ottawa. The study is being conducted in accordance with the *Ontario Energy Board's (OEB) Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition, August 2016*. Once the study is complete, Enbridge may apply to the OEB for approval to install the pipeline. If approved, construction may be scheduled for the summer of 2019.

A Preliminary Preferred Route (PPR) for the proposed natural gas pipeline has been identified; originating approximately 20 m south of Donald Street on St. Laurent Boulevard, continuing north on St. Laurent Boulevard for approximately 1.7 km where it will terminate approximately 20 m north of Montreal Road. Please refer to the project location figure, attached. Enbridge has identified the need to replace the existing pipeline on St. Laurent Boulevard due to the current pipe conditions, and to better service 140 customers along the PPR by transferring customers to an intermediate pressure (IP) system.

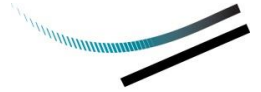
The pipeline will consist of nominal pipe size (NPS) 6-inch IP polyethylene natural gas main. The pipeline is planned to be located mainly within municipal road rights-of-way, and will require short tie-ins to the existing network at road intersections at McArthur Avenue, Coté Street, and Noranda Street. It should be noted that no alternatives could be considered as this pipeline will be servicing customers directly along the route.

This project is part of a larger replacement project which will be completed in phases over the next 4 years. The purpose of the larger project is to replace approximately 13 km of NPS 12-inch extra-high pressure (XHP) steel pipe based on current conditions with a new NPS 12-inch XHP pipe on an alternative route.

Stakeholder involvement will play a key role in the project. In order to undertake a successful consultation program, we have developed a mailing list of government agencies (federal, provincial and municipal), Indigenous and community groups, residents and members of the general public that have interest in the study. Enbridge



177 Colonnade Road
Suite 101
Ottawa, Ontario
Canada
K2E 7J4
Telephone
613.745.2213
Fax
613.745.3491



will also be hosting an Open House meeting as part of the study. Details of this Open House are provided in the enclosed Notice of Commencement.

As part of the initial phase of the study, we are collecting information on the natural environment, archaeological features and socio-economic features within the PPR route described above. Examples of data typically collected for these types of projects include information on terrestrial and aquatic vegetation and wildlife, archaeological and heritage resources, community parks and picnic areas, community facilities, nature trails, bus routes and other utilities such as water, sewage, industrial and commercial utilities. Planning policies and future plans for the study area are important pieces of information that will be considered when evaluating potential routes.

We are interested in hearing from you regarding issues/concerns that you (or your organization) may have regarding this project. We are also requesting any information relating to the natural and/or human environments in the study area that may fall within your mandate and in particular whether the following are within the study area:

- current Official Plan designations and zoning;
- presence of any environmentally sensitive areas/designations in the Official Plan for the study area;
- whether any part of the study area is designated as an area of groundwater recharge or discharge in the Official Plan; and,
- anything other planning information that may be relevant to the project.

Please send this information by email to StLaurentEA@dillon.ca by March 18, 2019. If you require any further information at this time, please do not hesitate to contact me. If requested, a GIS file can be provided to facilitate your review of the study area.

If there is a more appropriate contact at your organization who should receive this letter, please kindly forward the letter at your discretion and notify us as we will update our stakeholder consultation list.

Sincerely,

DILLON CONSULTING LIMITED

Whitney Moore, B.Sc.
Project Manager
Phone: 613-745-2213 Ext. 3040

Encls. Notice of Study Commencement and Open House
Preliminary Preferred Route Map

Appendix C4

Stakeholder and Indigenous Contact List

Stakeholder Contact List

| Surname | First Name | Organization | Department | Title | Address | Address 2 | Postal Code | Telephone | E-Mail |
|--|-------------|--|--|--|--|--------------------|-------------|------------------------|--|
| Federal/Provincial Elected Officials | | | | | | | | | |
| Fortier | Mona | Government of Canada | Ottawa - Vanier | Member of Parliament | 223 Montreal Road | Vanier, ON | K1L 6C7 | 613-998-1860 | Mona.Fortier@parl.gc.ca |
| Des Rosiers | Nathalie | Government of Ontario | Ottawa - Vanier | Member of Provincial Parliament | 237 Montreal Rd. | Vanier, ON | K1L 6C7 | 613-744-4484 | NDesRosiers.mpp.CO@liberal.ca.org |
| Federal Agencies | | | | | | | | | |
| Puvanathan | Anjala | Canadian Environmental Assessment Agency | Ontario Region | Director | 55 St. Clair Avenue East, Suite 907 | Toronto, ON | M4T 1M2 | 416-952-1575 | anjala.puvanathan@ceaa-acee.gc.ca |
| Macadam | Lori | Indigenous Services Canada (previously Indigenous and Northern Affairs Canada) | Major Infrastructure Project Delivery | Director | 10 Wellington Street | Gatineau, QC | K1A0H4 | 819-956-3545 | lorimacadam@canada.ca |
| Dobos | Rob | Environment and Climate Change Canada | Environmental Assessment Section, Environmental Protection Branch - Ontario Region | Manager | 867 Lakeshore Road, PO Box 5050 | Burlington, ON | L7R 4A6 | 905-336-4953 | rob.dobos@canada.ca |
| -- | -- | Fisheries & Oceans Canada | Fisheries Protection Program | -- | 867 Lakeshore Road | Burlington, ON | L7S 1A1 | 1-855-852-8320 | FisheriesProtection@dfo-mpo.gc.ca |
| Thevenot | Aurelia | Health Canada | Environmental Health Program, Regions and Programs Bureau | EA Coordinator | 180 Queen Street West | Toronto, ON | M5V 3L7 | 416-954-0027 | aurelia.thevenot@canada.ca |
| -- | -- | Transport Canada | -- | -- | 330 Sparks Street | Ottawa, ON | K1A 0N5 | 613-990-2309 | EnviroOn@tc.gc.ca |
| Provincial Agencies | | | | | | | | | |
| Fazio | Rossella | Hydro One Networks Inc. | Transmission Lines Sustainment | Manager | 483 Bay Street, North Tower 15th Flr | Toronto, ON | M5G 2P5 | 416-345-6411 | rossella.fazio@HydroOne.com |
| Manson-Smith | Rachel | Ministry of Indigenous Relations and Reconciliation | Indigenous Relations Branch, Ministry Partnerships Unit | Manager | 160 Bloor St E, 4th Flr | Toronto, ON | M7A 2E6 | 416-325-7032 | maa.aa.review@ontario.ca |
| Cooper | David | Ministry of Agriculture, Food and Rural Affairs | Food Safety and Environmental Policy Branch, Environmental and Land Use Policy | Manager | Ontario Government Bldg, 1 Stone Rd W, 3rd Flr | Guelph, ON | N1G 4Y2 | 519-826-3117 | david.cooper@ontario.ca |
| Doncaster | Michelle | Ministry of Agriculture, Food and Rural Affairs | Policy Division | Policy Advisor | Ontario Government Bldg, 3rd Flr, 1 Stone Rd | Guelph, ON | N1G 4Y2 | 519-826-4369 | michelle.doncaster@ontario.ca |
| Barboza | Karla | Ministry of Tourism, Culture and Sport | Programs and Services Branch, Heritage Program Unit | Team Lead - Heritage (Acting) | 401 Bay St, Suite 1700 | Toronto, ON | M7A 0A7 | 416-314-7120 | karla.barboza@ontario.ca |
| Keith | Darja | Ministry of Tourism, Culture and Sport | Sport, Recreation and Community Programs Division, Policy Unit | Manager, Policy Unit (Acting) | College Park, 777 Bay St, 18th Flr | Toronto, ON | M7A 1S5 | 416-212-9311 | darja.keith@ontario.ca |
| Thomas | Mathew | Ministry of Education | Capital Policy and Programs Branch, Policy Unit B | Manager | Mowat Block, 900 Bay St, 19th Flr | Toronto, ON | M7A 1L2 | 416-326-9920 | mathew.p.thomas@ontario.ca |
| Helfinger | Michael | Ministry of Economic Development and Growth | Policy Coordination and Business Climate Branch, Cabinet Office Liaison Unit | Senior Policy Advisor | Hearst Block, 900 Bay St, 6th Flr | Toronto, ON | M7A 2E1 | 416-325-6519 | michael.helfinger@ontario.ca |
| Yordi | Samir | Ministry of Energy | Strategic Policy and Research | Cabinet Liaison & Strategic Policy Coordinator | 77 Grenville St, 6th Flr | Toronto, ON | M7A 1B3 | 416-327-2726 | samir.yordi@ontario.ca |
| Mytsicki | Lisa | Infrastructure Ontario | Reality and Environmental Services | Environmental Specialist | 1 Dundas St. W., Suite 2000 | Toronto, ON | M5G 2L5 | 416-212-3768 | lisa.mytsicki@infrastructureontario.ca |
| Adderley | Barbara | Ministry of Municipal Affairs | Provincial Planning Policy Branch, Planning Innovation Section | Manager | College Park, 777 Bay St, 13th Flr | Toronto, ON | M5G 2E5 | 416-585-6285 | barbara.adderley@ontario.ca |
| Dillon | Mary | Ministry of Natural Resources and Forestry | Regional Operations Division, Southern Region, Kemptville District | District Planner | Unit 1, 10 Campus Drive | Kemptville, ON | K0G 1L0 | 613-258-8470 | mary.dillon@ontario.ca |
| Makula | Peter | Ministry of Transportation | Eastern Region, Engineering Office | Manager | 1355 John Counter Boulevard | Kingston, ON | K7L 5A3 | 613-545-4754 | peter.makula@ontario.ca |
| Wiesek | Marek | Ministry of Transportation | Highway Corridor Management Office | Permit Officer | 159 William Hearst Ave, 7th Floor | Downsview, ON | M3M 1J8 | 416-235-4570 | Marek.Wiesek@ontario.ca |
| Mahmood | Mansoor | Ministry of Environment, Conservation and Parks | Environmental Approvals Branch, Approval Services | Manager | 135 St. Clair Avenue West, 1st Floor | Toronto, ON | M4V 1P5 | 416-314-3636 | mansoor.mahmood@ontario.ca |
| Raeburn-Gibson | Richard | Ministry of Environment, Conservation and Parks | Eastern Region | Director | PO Box 22032 | Kingston, ON | K7M 8S5 | 613-548-6901 | richard.raeburngibson@ontario.ca |
| MacDonald | Tara | Ministry of Environment, Conservation and Parks | Ottawa District Office | Manager (Acting) | Unit 103, 2430 Don Reid Drive | Ottawa, ON | K1H 1E1 | 613-521-3450 ext 224 | tara.m.macdonald@ontario.ca |
| Malcolmson | Heather | Ministry of Environment, Conservation and Parks | Source Protection Programs Branch | Director (Acting) | 40 St. Clair Ave W, 14th Flr | Toronto, ON | M4V 1M2 | 416-212-6459 | heather.malcolmson@ontario.ca |
| O'Donnell | Cheryl | Ministry of Environment, Conservation and Parks | Air Policy and Climate Change Branch, Regional Air Issues | Manager (Acting) | 135 St Clair Ave W, 6th Flr | Toronto, ON | M4V 1P5 | 416-326-7999 | cheryl.o'donnell@ontario.ca |
| Municipality | | | | | | | | | |
| Watson | Jim | City of Ottawa | City Council | Mayor | 110 Laurier Avenue West | Ottawa, ON | K1P 1J1 | 613-580-2496 | Jim.Watson@ottawa.ca |
| Tierney | Tim | City of Ottawa | City Council, Ward 11 | Councillor | 110 Laurier Avenue West | Ottawa, ON | K1P 1J1 | 613-580-2481 | Tim.Tierney@ottawa.ca |
| Nussbaum | Tobi | City of Ottawa | City Council, Ward 13 | Councillor | 110 Laurier Avenue West | Ottawa, ON | K1P 1J1 | 613-580-2483 | Tobi.Nussbaum@ottawa.ca |
| Kanelakos | Steve | City of Ottawa | -- | City Manager | 110 Laurier Avenue West | Ottawa, ON | K1P 1J1 | 613-580-2424 ext 25657 | Steve.Kanelakos@ottawa.ca |
| Wills | Stephen | City of Ottawa | Planning, Infrastructure and Economic Development | General Manager | 110 Laurier Avenue West | Ottawa, ON | K1P 1J1 | 613-580-2424 ext 16150 | Stephen.wills@ottawa.ca |
| Manconi | John | City of Ottawa | Transportation Services | General Manager | 110 Laurier Avenue West | Ottawa, ON | K1P 1J1 | 613-580-2424 ext 52111 | john.manconi@ottawa.ca |
| Wylie | Kevin | City of Ottawa | Public Works and Environmental Services | General Manager | 110 Laurier Avenue West | Ottawa, ON | K1P 1J1 | 613-580-2424 ext 19013 | kevin.wylie@ottawa.ca |
| Di Monte | Anthony | City of Ottawa | Emergency and Protective Services | General Manager | 110 Laurier Avenue West | Ottawa, ON | K1P 1J1 | 613-580-2424 ext 22458 | anthony.dimonte@ottawa.ca |
| -- | -- | Ottawa Police Service | Central Community Police Centre, Vanier | -- | 252 McArthur Road | Vanier, ON | K1L 6P4 | 613-236-1222 ext. 5823 | |
| Conservation Authorities | | | | | | | | | |
| McDonald | Glen | Rideau Valley Conservation Authority | Science and Planning | Director, Science and Planning | 3889 Rideau Valley Drive | Manotick, ON | K4M 1A5 | 613-692-3571 ext 1133 | glen.mcdonald@rvea.ca |
| Interest Groups, Private Organizations | | | | | | | | | |
| -- | -- | Conseil des écoles publiques de l'Est de l'Ontario | Administration | -- | 2445 Boul. St-Laurent | Ottawa, ON | K1G 6C3 | 613-742-8960 | info@cepeo.on.ca |
| Andre | Denise | Ottawa Catholic School Board | Administration | Director of Education | 570 West Hunt Club Road | Nepean, ON | K2G 3R4 | 613-224-4455 ext 2272 | Director@ocsb.ca |
| Williams-Taylor | Camille | Ottawa-Carlton District School Board | Administration | Director of Education | 133 Greenbank Road | Ottawa, ON | K2H 6L3 | 613-721-1820 ext 8490 | director@ocdsb.ca |
| Lawson | Heather | Queen Elizabeth Public School | Administration | Principal | 689 St Laurent Boulevard | Ottawa, ON | K1K 3A6 | 613-746-3246 | queenelizabethps@ocdsb.ca |
| -- | -- | Rideau High School (Permanently Closed) | Administration | -- | 815 St Laurent Boulevard | Ottawa, ON | K1K 3A7 | -- | -- |
| -- | -- | Notre-Dame Cemetery | Cemetery | -- | 455 Montreal Road | Ottawa, ON | K1K 0V2 | 613-746-4175 | -- |
| Mingardi | Maurizio | Mount Zion Church of the Firstborn | Community Group | Pastor | 715 St Laurent Boulevard | Ottawa, ON | K1K 3A6 | 613-744-7578 | -- |
| -- | -- | St-Laurent Complex | Community Group | -- | 525 Cote Street | Ottawa, ON | K1K 0Z8 | 613-742-6767 | StlaurentComplex@ottawa.ca |
| Duke | Kirsten | Vanier Community Association | Community Group | -- | 300 Peres-Blancs Ave | Ottawa, ON | K1L 7L5 | -- | vca.acv@gmail.com |
| Akkaw | Hisham | Shoppers Drug Mart | Business | -- | 541 Montreal Road | Ottawa, ON | K1K 0V1 | 613-740-0616 | -- |
| -- | -- | Sean Denture & Implants Centre | Business | -- | 712 St Laurent Boulevard | Ottawa, ON | K1K 3A5 | 613-216-7107 | sean@sdic.ca |
| -- | -- | Intercontinental Music Ltd | Business | -- | 610 Donald Street | Ottawa, ON | K1K 1L4 | 613-748-9891 | intercontinentalmusic@rogers.com |
| Ontario Pipeline Coordinating Committee (OPCC) | | | | | | | | | |
| Crnojacki | Zora | Ontario Pipeline Coordinating Committee | Ontario Energy Board | OPCC Chair | P.O. Box 2319, 2300 Yonge St., 26th Floor | Toronto, ON | M4P 1E4 | 416-440-8104 | Zora.Crnojacki@oeb.ca |
| Hatcher | Laura | | Ministry of Tourism, Culture and Sport | Team Lead, Heritage | 401 Bay Street | Toronto, ON | M7A 0A7 | 416-314-3108 | Laura.e.hatcher@ontario.ca |
| Manouchehri | Kouroush | | Technical Standards and Safety Authority | Engineer | 345 Carlingview Drive | Toronto, ON | M9W 6M9 | 416-734-3539 | kmanouchehri@tsa.org |
| Elms | Michael | | Ministry of Municipal Affairs and Housing, Eastern Municipal Services Office | Manager, Community Planning/Development | Rockwood House, 8 Estate Lane | Kingston, ON | K7M 9A8 | 613-545-2132 | michael.elms@ontario.ca |
| Orwin | Ruth | | Ministry of Environment, Conservation and Parks (Eastern Region) | Supervisor, APEP | P.O. Box 820, 133 Dalton Avenue | Kingston, ON | K7L 4X6 | 613-549-4000 | ruth.orwin@ontario.ca |
| McCabe | Shannon | | Ministry of Energy, Northern Development and Mines | Senior Advisor, Indigenous Energy Unit | 6th Floor, 77 Grenville Street | Toronto, ON | M7A 2C1 | 416-212-6704 | Shannon.McCabe@ontario.ca |
| Vecchiola | Joseph | | Ministry of Economic Development, Job Creation and Trade | Policy Lead | College Park, 777 Bay Street, 4th Floor, Suite 425 | Toronto, ON | M5G 2E5 | 416-325-1561 | Joseph.Vecchiola@ontario.ca |
| Pim | Linda | | Ministry of Agriculture, Food, Rural Affairs | Policy Advisor | 3rd Floor SE, 1 Stone Road West | Guelph, ON | N1G 4Y2 | 519-826-3380 | Linda.Pim@ontario.ca |
| Difabio | Tony | | Ministry of Transportation (Highway Corridor Management) | Team Lead | Garden City Tower, 2nd Floor, 301 St. Paul Street | St. Catharines, ON | L2R 7R4 | 905-704-2656 | Tony.difabio@ontario.ca |
| Renwick | Sally | | Ministry of Natural Resources and Forestry | Team Lead, Environmental Planning Section | 200 Water Street | Peterborough, ON | K9J 8M5 | 705-755-5195 | sally.renwick@ontario.ca |
| Grace | Patrick | | Infrastructure Ontario (Lands Transactions, Hydro Corridor/Public Works) | Director | 1 Dundas Street West, Suite 2000 | Toronto, ON | M5G 2L5 | 416-327-2959 | Patrick.Grace@infrastructureontario.ca |
| Indigenous Communities | | | | | | | | | |
| Benedict | Grand Chief | Mohawk Council of Akwesasne | -- | Grand Chief | PO Box 90 | Akwesasne, QC | H0M 1A0 | -- | -- |
| Stavinga | Janet | Algonquins of Ontario | Consultation Office | Executive Director | 31 Riverside Drive, Suite 101 | Opemunk, ON | K8A 8R6 | -- | -- |

Appendix C5

Open House Panels and Exit Questionnaire



Proposed St. Laurent Pipeline Project



WELCOME TO OUR
PUBLIC OPEN HOUSE

Welcome

Who we are

Enbridge provides safe and reliable delivery of natural gas to more than 3.7 million residential, commercial, and industrial customers across Ontario, Quebec and New Brunswick. Enbridge is committed to environmental stewardship and conducts all of its operations in an environmentally responsible manner.

Why are we here?

- To provide information about the proposed St. Laurent Pipeline Project and present the route.
- To provide affected landowners and the public the opportunity to discuss the proposed Project with Enbridge and Dillon.
- To receive input from affected landowners and the general public regarding any issues to be addressed.
- To discuss construction and environmental mitigation.



Please sign in at the front desk and provide your input on the project by completing a questionnaire.

Commitment to Consultation

We are committed to a comprehensive consultation process and want to hear from you about this project.

Our consultation approach is:

Inclusive – reaching out to all who may be interested or affected and providing opportunities to become informed and get involved.

Transparent – providing access to information and clear explanation for decisions.

Accountable – explaining how your input will be used in the decision making process.



As an important part of the consultation process, we will work with all stakeholders to identify and resolve project issues.

Enbridge's Indigenous Peoples Policy

Enbridge recognizes the diversity of Indigenous Peoples who live where we work and operate. We understand that the history of Indigenous Peoples in both Canada and the United States has had destructive impacts on the social and economic wellbeing of Indigenous Peoples. Enbridge recognizes the importance of reconciliation between Indigenous communities and broader society. Positive relationships with Indigenous Peoples, based on mutual respect and focused on achieving common goals, will create constructive outcomes for Indigenous communities and for Enbridge.

Enbridge commits to pursuing sustainable relationships with Indigenous Nations and groups in proximity to where Enbridge conducts business. To achieve this, Enbridge will govern itself by the following principles:

- We recognize the legal and constitutional rights possessed by Indigenous Peoples in Canada and in the U.S., and the importance of the relationship between Indigenous Peoples and their traditional lands and resources. We commit to working with Indigenous communities in a manner that recognizes and respects those legal and constitutional rights and the traditional lands and resources to which they apply, and we commit to ensuring that our projects and operations are carried out in an environmentally responsible manner.
- We recognize the importance of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) within the context of existing Canadian and U.S. law and the commitments that governments in both countries have made to protecting the rights of Indigenous Peoples.
- We engage in forthright and sincere consultation with Indigenous Peoples about Enbridge's projects and operations through processes that seek to achieve early and meaningful engagement so their input can help define our projects that may occur on lands traditionally used by Indigenous Peoples.
- We commit to working with Indigenous Peoples to achieve benefits for them resulting from Enbridge's projects and operations, including opportunities in training and education, employment, procurement, business development, and community development.
- We foster understanding of the history and culture of Indigenous Peoples among Enbridge's employees and contractors, in order to create better relationships between Enbridge and Indigenous communities.

This commitment is a shared responsibility involving Enbridge and its affiliates, employees and contractors, and we will conduct business in a manner that reflects the above principles. Enbridge will provide ongoing leadership and resources to ensure the effective implementation of the above principles, including the development of implementation strategies and specific action plans.

Enbridge commits to periodically reviewing this policy to ensure it remains relevant and meets changing expectations.

Project Introduction

What is being proposed?

- A replacement of approximately 1.7 km of existing pipeline on St. Laurent Boulevard beginning 20 m south of Donald Street on St. Laurent Boulevard, continuing north on St. Laurent Boulevard and ending approximately 20 m north of Montreal Road.
- The pipeline will consist of 6-inch Intermediate Pressure (IP) polyethylene natural gas main.



Why do we need this project?

- The current pipeline is proposed for replacement due to its age and condition, and to better service 140 customers by transferring customers to an IP system.

Project Location

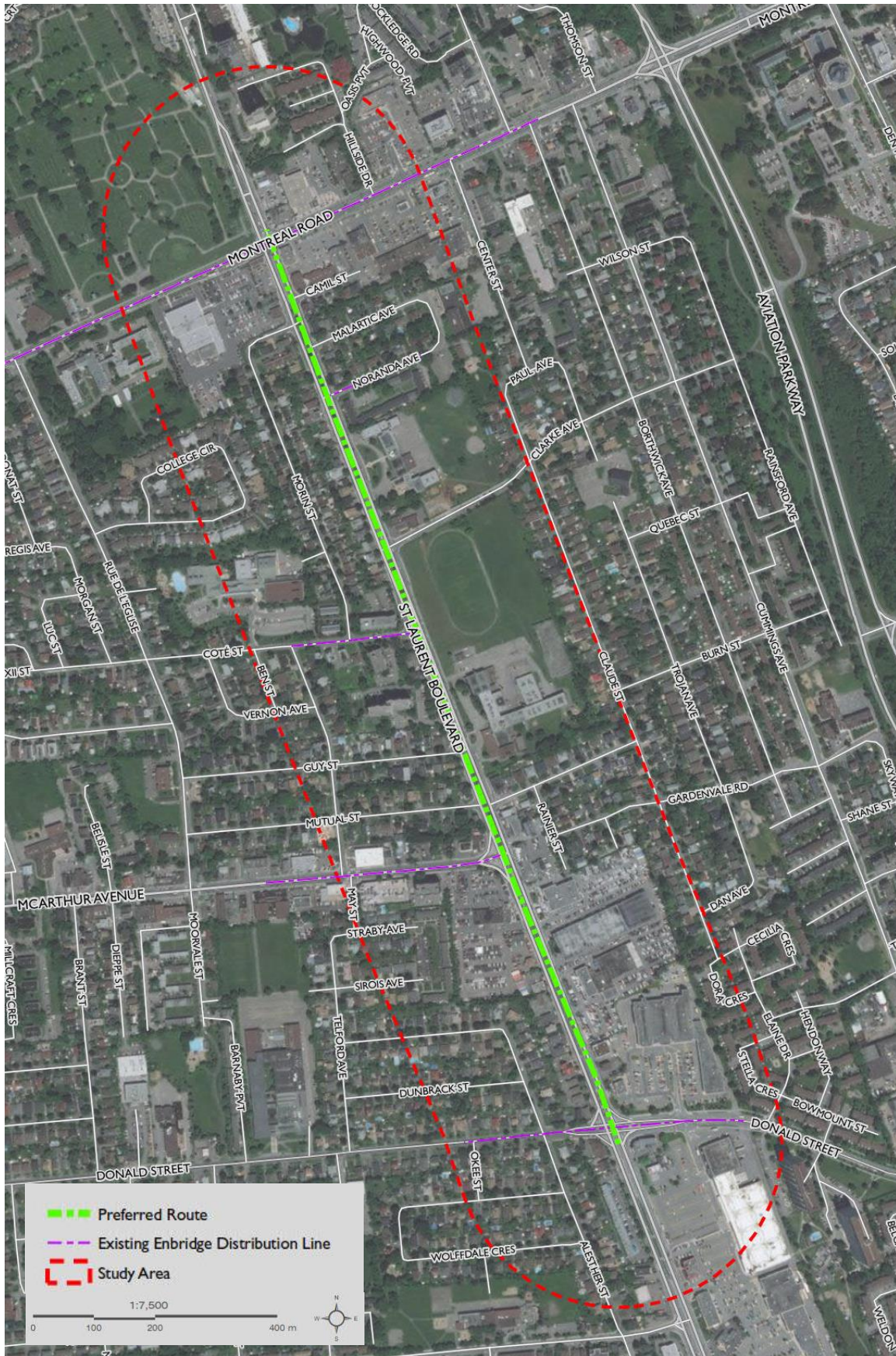
The proposed natural gas pipeline is approximately 1.7 km along St. Laurent Boulevard, beginning just south of Donald Street, and ending just north of Montreal Road.

It should be noted that no alternatives could be considered as this pipeline will be servicing customers directly along St. Laurent Boulevard.

The pipeline would be located mainly within municipal road rights-of-way, and will require short tie-ins to the existing network at road intersections at McArthur Avenue, Côté Street and Noranda Street.



Proposed St. Laurent Pipeline Route



Baseline Studies – Desktop and Field

Desktop and Field Studies Completed:

- Winter vegetation surveys
- Species at Risk (SAR) habitat search
- Incidental wildlife observations
- Archaeology and built heritage

Species at Risk:

- Several SAR have potential to be observed in the vicinity of the Study Area; however, since the proposed pipeline does not occur within any designated natural heritage features, the likelihood for SAR is low.
- No buildings or structures were identified within the construction area that provide suitable habitat for Barn Swallow (*Hirundo rustica*) and Chimney Swift (*Chaetura pelagica*).
- Standard wildlife mitigation strategies will be carried out throughout construction in an effort to avoid potential impacts to SAR and other urban terrestrial wildlife.



Pipeline Design, Construction and Safety

Pipeline Design

The proposed pipeline is designed to meet and/or exceed the regulations of the Canadian Standards Association (Z662 Oil and Gas Pipeline Systems) and the applicable regulations of the Technical Standards & Safety Association (TSSA).

Pipeline Construction

Our construction work is temporary and transitory – once the pipe is laid, we restore the area to as close to pre-construction condition as possible.

Pipeline Safety and Integrity

We take many steps to safely and reliably operate our network of natural gas pipelines, such as:

- Designing, constructing, and testing our pipelines to meet or exceed requirements set by industry standards and regulatory authorities.
- Ensuring that any work is respectful of community activities, regulations and bylaws.
- Continuously monitoring the entire network.
- Performing regular field surveys to detect leaks and confirm corrosion prevention methods are working as intended.



Pipeline Construction Sequence

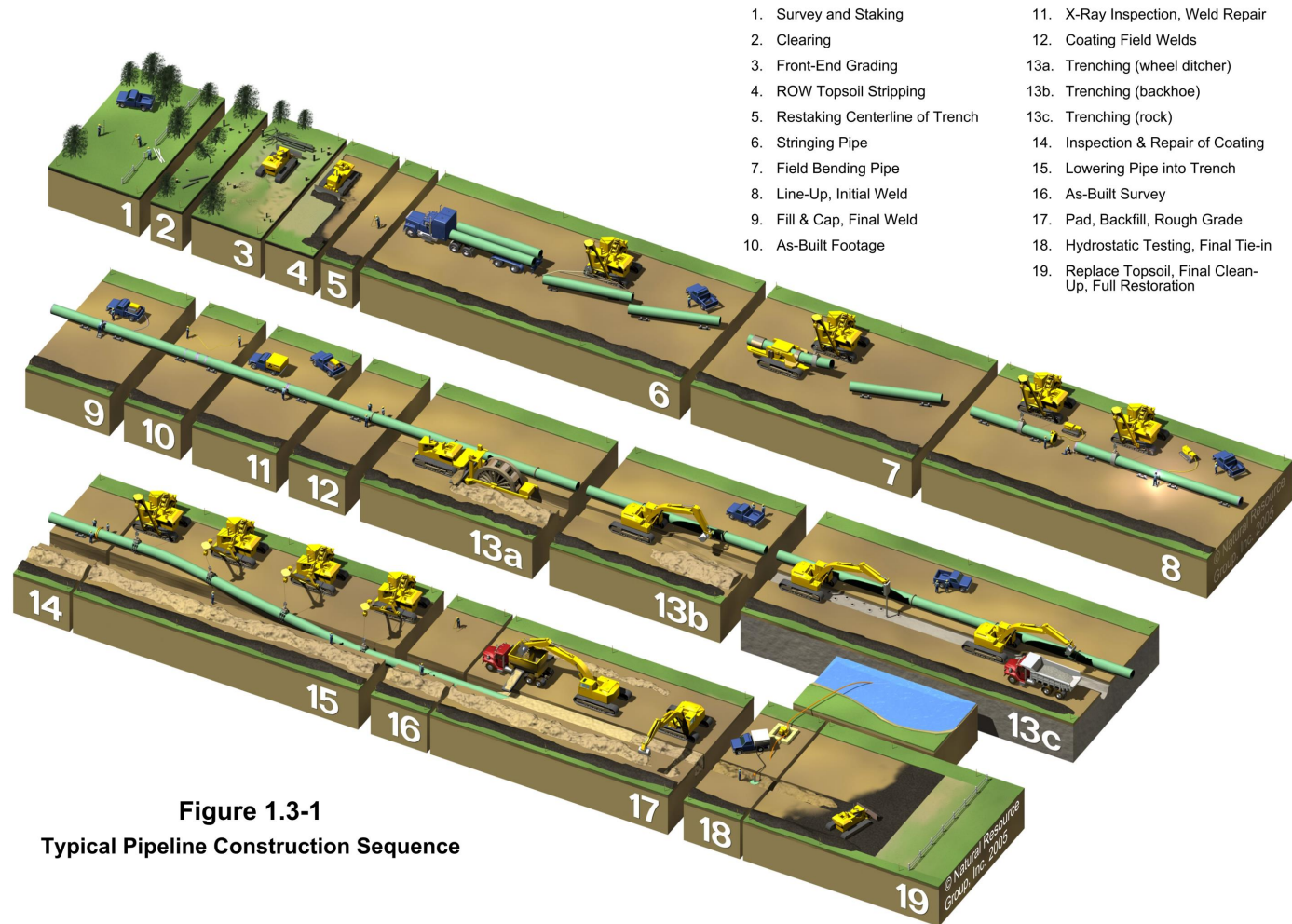


Figure 1.3-1
Typical Pipeline Construction Sequence

Used By Permission Natural Resource Group, Inc. © 2010

Mitigation and Monitoring

We are committed to working with the community on construction planning, mitigation, and post-construction monitoring. Enbridge will conduct post-construction monitoring so that impacted areas are restored as close to pre-construction conditions as possible.



Enbridge recognizes that the construction of the pipeline may result in short term potential impacts and commits to applying mitigation measures to prevent these impacts and work with the municipality and residents so that issues are resolved in a timely manner.

Regulatory Framework

For the project to proceed, approval by the Ontario Energy Board (OEB) is required. The OEB requires that Enbridge complete an environmental assessment and route selection study.

Note: Alternative routes are not possible for this project as this is a replacement of pipeline that must service customers along St. Laurent Boulevard.

Role of the Ontario Energy Board:

- Determines whether a proposed pipeline is in the public interest.
- Reviews the Environmental Report (including details of consultation) as part of the application, known as the Leave to Construct Application.
- Once the Leave to Construct Application is submitted to the OEB, any party with an interest in the project may apply to the OEB to become intervenors or interested parties.
- Provides a public forum during the review of the Leave to Construct Application for people to participate in the decision-making process.

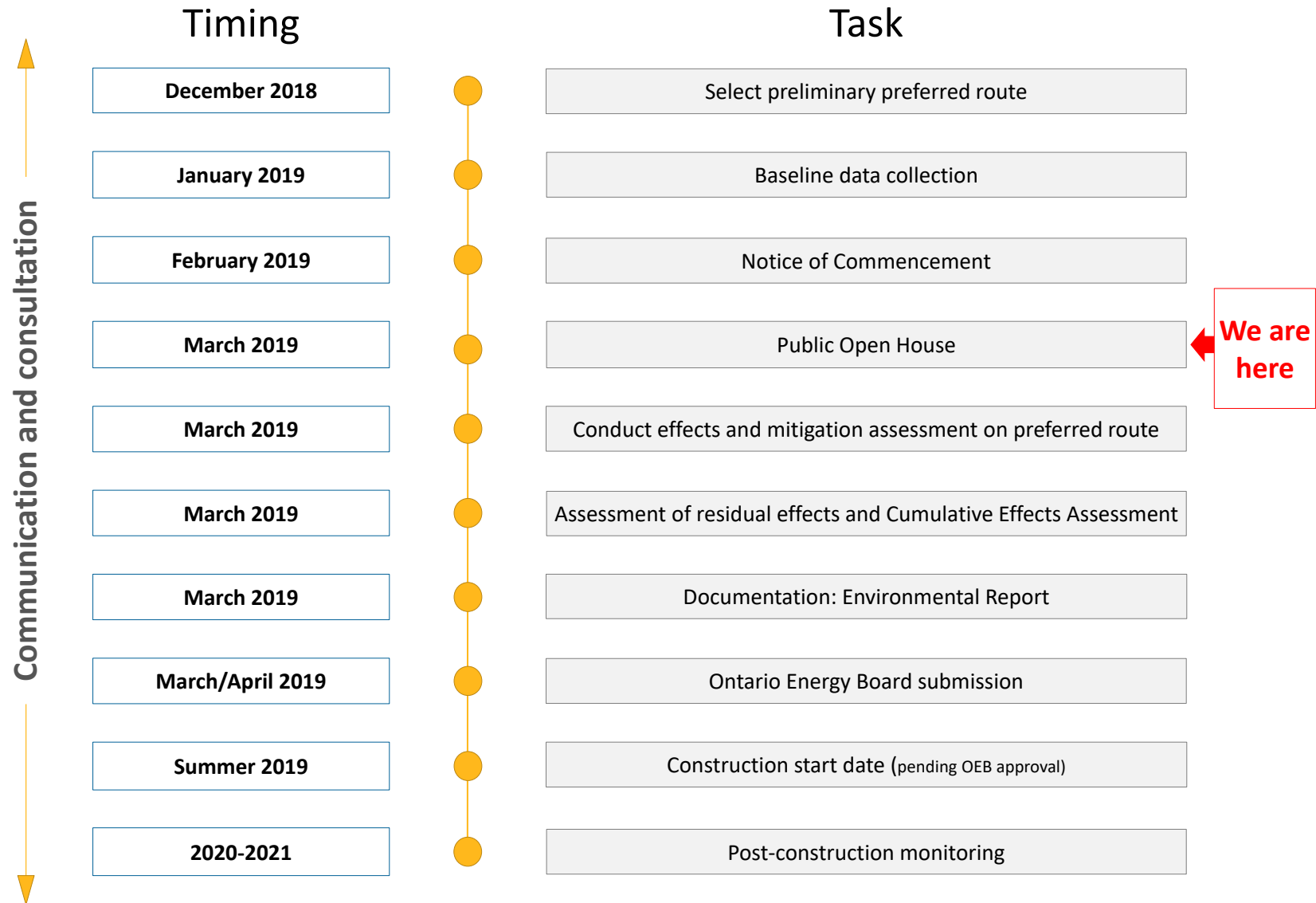
Continuous Stakeholder Engagement

Enbridge is committed to open dialogue throughout the environmental assessment and the Leave to Construct Application process. Stakeholders will have the opportunity to remain engaged in the process after the environmental assessment is completed, through:

- Participation in the OEB hearing as an intervenor or interested party (details can be found at www.ontarioenergyboard.ca)
- Contacting Enbridge or Dillon project team members
- Visiting our project page at www.enbridgegas.com/about-us and clicking on the **Projects** tab!



Environmental Assessment Process and Project Schedule



Staying Informed

Get project updates by providing us with your email or mailing address.

Please ensure you've signed in! **Complete the comment form** and drop it in the box at the door or give it to one of our Project Team Members.

For comments, questions or for more information, please contact:

| Tanya Turk | Whitney Moore |
|--|---|
| Environmental Advisor Enbridge Gas Inc. | Environmental Assessment Project Manager Dillon Consulting Limited |
| 416-495-3103 | 613-745-2213 |
| Tanya.Turk@enbridge.com | StLaurentEA@dillon.ca |
| 101 Honda Boulevard Markham, ON L6C 0M6 | 177 Colonnade Road South, Suite 101 Ottawa, ON K2E 7J4 |

Under the *Freedom of Information and Protection of Privacy Act*, **all comments and questions submitted regarding this project will be used for the purposes of creating an environmental assessment report** that will be a part of the public record and will be made available to individuals or organizations with an interest in this project. **Personal information such as name, address, and telephone number will not be included in the environmental assessment report** but will be released, if requested, to any person as part of the review of the environmental assessment report.

Projet de pipeline Saint-Laurent



**BIENVENUE À NOTRE
SÉANCE PUBLIQUE
PORTES OUVERTES**

Bienvenue

Qui nous sommes

Enbridge fournit une source sûre et fiable de gaz naturel à plus de 3,7 millions de clients résidentiels, commerciaux et industriels en Ontario, au Québec et au Nouveau-Brunswick. Enbridge s'est engagée à gérer l'environnement et mène toutes ses activités dans le respect de l'environnement.

Pourquoi sommes-nous ici?

- Fournir des renseignements sur le Projet de pipeline Saint-Laurent et présenter la route.
- Donner aux propriétaires fonciers concernés et au public la possibilité de discuter du projet avec Enbridge et Dillon.
- Recevoir les commentaires des propriétaires fonciers concernés et du grand public concernant les problèmes à résoudre.
- Discuter de la construction et de l'atténuation écologique.



Dites-nous ce que vous pensez

Veuillez vous inscrire à la réception et donner votre avis sur le projet en remplissant un questionnaire.

Engagement envers la consultation

Nous sommes engagés envers un processus de consultation exhaustif et souhaitons connaître votre avis sur ce projet.

Notre approche de consultation est :

Inclusive — contacter tous ceux qui peuvent être intéressés ou touchés et fournir des occasions de s'informer et de s'impliquer.

Transparente — fournir un accès à l'information et une explication claire des décisions.

Responsable — expliquer la façon dont votre contribution sera utilisée dans le processus de prise de décision.



En tant que partie importante du processus de consultation, nous travaillerons avec toutes les parties prenantes pour cerner et résoudre les problèmes liés au projet.

Politique d'Enbridge sur les peuples autochtones

Enbridge reconnaît la diversité des peuples autochtones qui habitent où nous travaillons et où nous opérons. Nous comprenons que l'histoire des peuples autochtones au Canada et aux États-Unis a eu des effets destructeurs sur le bien-être social et économique de ces peuples. Enbridge reconnaît l'importance de la réconciliation entre les communautés autochtones et la société en général. Des relations positives avec les peuples autochtones, fondées sur le respect mutuel et axées sur la réalisation d'objectifs communs, créeront des résultats constructifs pour les communautés autochtones et pour Enbridge.

Enbridge s'engage à entretenir des relations durables avec les nations autochtones et les groupes situés à proximité du lieu où Enbridge exerce ses activités. Pour y parvenir, Enbridge se gouvernera selon les principes suivants :

- Nous reconnaissons les droits légaux et constitutionnels des peuples autochtones au Canada et aux États-Unis, ainsi que l'importance des relations entre les peuples autochtones et leurs terres et ressources traditionnelles. Nous nous engageons à travailler avec les communautés autochtones d'une manière qui reconnaît et respecte ces droits légaux et constitutionnels, ainsi que les terres et les ressources traditionnelles auxquelles elles s'appliquent, et nous nous engageons à veiller à ce que nos projets et nos opérations soient menés dans le respect de l'environnement.
- Nous reconnaissons l'importance de la Déclaration des Nations unies sur les droits des peuples autochtones (DNUDPA) dans le contexte des lois canadiennes et américaines existantes et des engagements pris par les gouvernements des deux pays en matière de protection des droits des peuples autochtones.
- Nous menons des consultations franches et sincères avec les peuples autochtones au sujet des projets et des activités d'Enbridge par l'entremise de processus qui cherchent à obtenir un engagement rapide et significatif afin que leurs contributions puissent aider à définir nos projets susceptibles de se dérouler sur des terres traditionnellement utilisées par les peuples autochtones.
- Nous nous engageons à travailler avec les peuples autochtones pour obtenir pour eux des avantages résultant des projets et des activités d'Enbridge, notamment des occasions en matière de formation et d'éducation, d'emploi, de passation de marchés, de développement commercial et de développement communautaire.
- Nous favorisons la compréhension de l'histoire et de la culture des peuples autochtones parmi les employés et les entrepreneurs d'Enbridge, afin de créer de meilleures relations entre Enbridge et les communautés autochtones.

Cet engagement est une responsabilité partagée entre Enbridge et ses sociétés affiliées, ses employés et ses sous-traitants, et nous mènerons nos activités d'une manière qui soit conforme aux principes susmentionnés. Enbridge assurera un leadership et des ressources permanents pour garantir la mise en œuvre effective des principes susmentionnés, notamment l'élaboration de stratégies de mise en œuvre et de plans d'action spécifiques.

Enbridge s'engage à revoir périodiquement cette politique pour s'assurer qu'elle reste pertinente et qu'elle répond aux attentes en évolution.

Présentation du projet

Que propose-t-on?

- Un remplacement d'environ 1,7 km de pipeline existant sur le boulevard Saint-Laurent commençant à 20 m au sud de la rue Donald sur le boulevard Saint-Laurent, continuant vers le nord sur le boulevard Saint-Laurent et se terminant à environ 20 m au nord du chemin Montréal.
- Le pipeline consistera en une conduite de gaz naturel en polyéthylène de 6 pouces à pression intermédiaire (PI).



Pourquoi avons-nous besoin de ce projet?

- Le pipeline actuel doit être remplacé en raison de son âge et de son état, et pour offrir un meilleur service à 140 clients en les transférant vers un système PI.

Emplacement du projet

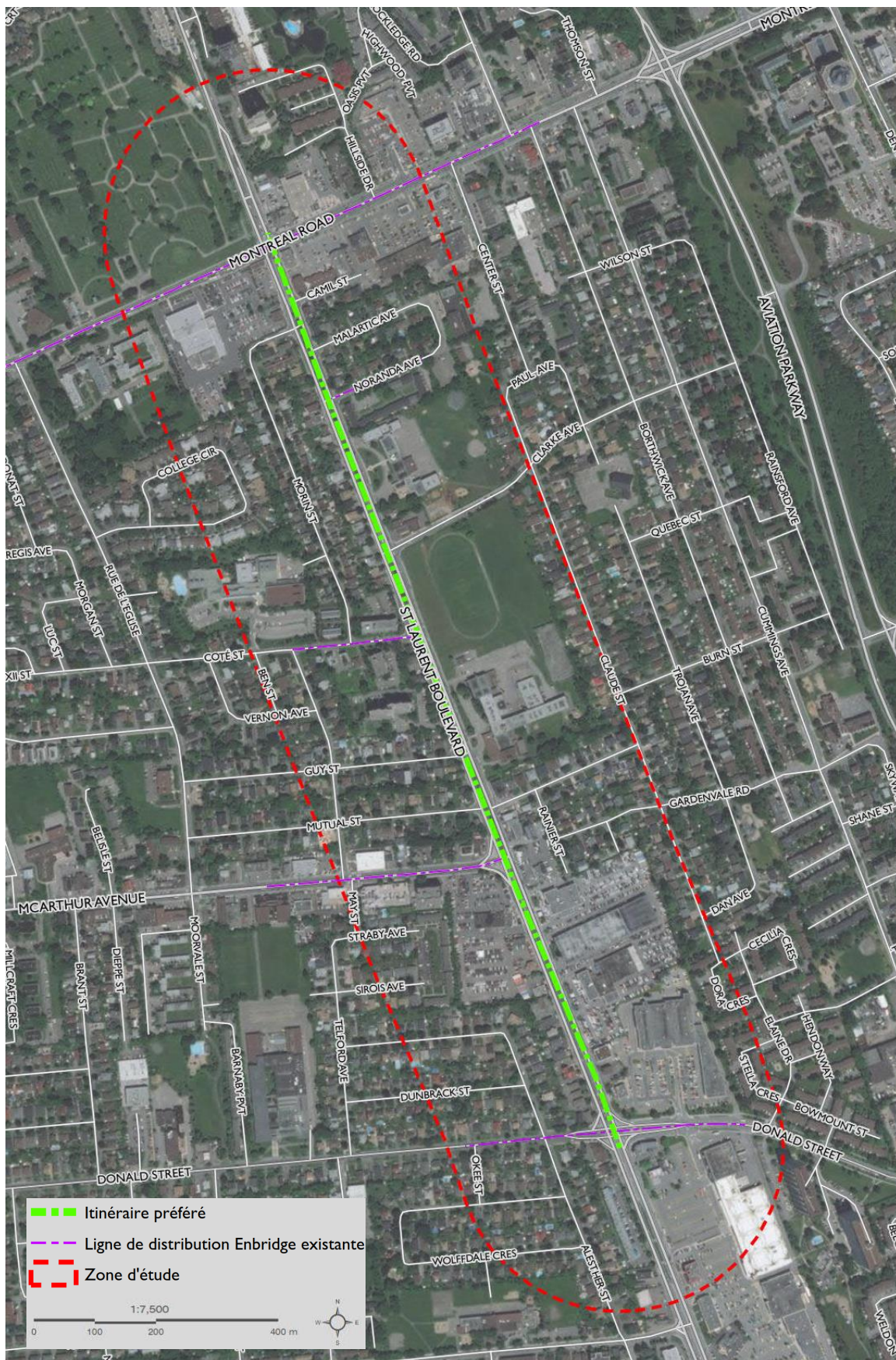
Le pipeline proposé s'étend sur environ 1,7 km le long du boulevard Saint-Laurent, en commençant juste au sud de la rue Donald et se terminant juste au nord du chemin Montréal.

Il est à noter qu'aucune autre solution ne pourrait être envisagée, car ce pipeline servira directement les clients le long du boulevard Saint-Laurent.

Le pipeline serait principalement situé dans le droit de passage de la route municipale et nécessitera de courts raccordements au réseau existant aux intersections de l'avenue McArthur, de la rue Coté et de la rue Noranda.



Tracé proposé du pipeline Saint-Laurent



Études de base — Bureau et chantier

Études de bureau et de chantier terminées

- Relevés de la végétation en hiver
- Recherche d'habitat d'espèces à risque (EÀR)
- Observations incidentes de la faune
- Archéologie et patrimoine bâti

Espèces à risque

- Plusieurs EÀR pourraient être observées à proximité de la zone d'étude; cependant, étant donné que le pipeline proposé ne se trouve dans aucun élément du patrimoine naturel désigné, la probabilité d'EÀR est faible.
- Aucun bâtiment ni aucune structure offrant un habitat propice à l'hirondelle rustique (*Hirundo rustica*) et au martinet ramoneur (*Chaetura pelagica*) n'ont été cernés dans la zone de construction.
- Des stratégies standards d'atténuation de la faune seront appliquées tout au long de la construction afin d'éviter tout impact potentiel sur les EÀR et d'autres espèces sauvages terrestres en milieu urbain.



Conception, construction et sécurité des pipelines

Conception du pipeline

Le pipeline proposé est conçu pour respecter et (ou) dépasser les réglementations de l'Association canadienne de normalisation (réseaux de canalisations de gaz et de pétrole Z662) et les réglementations applicables de la Technical Standards & Safety Association (TSSA).

Construction du pipeline

Nos travaux de construction sont temporaires et transitoires — une fois le tuyau posé, nous restaurons la zone aussi près que possible des conditions préalables à la construction.

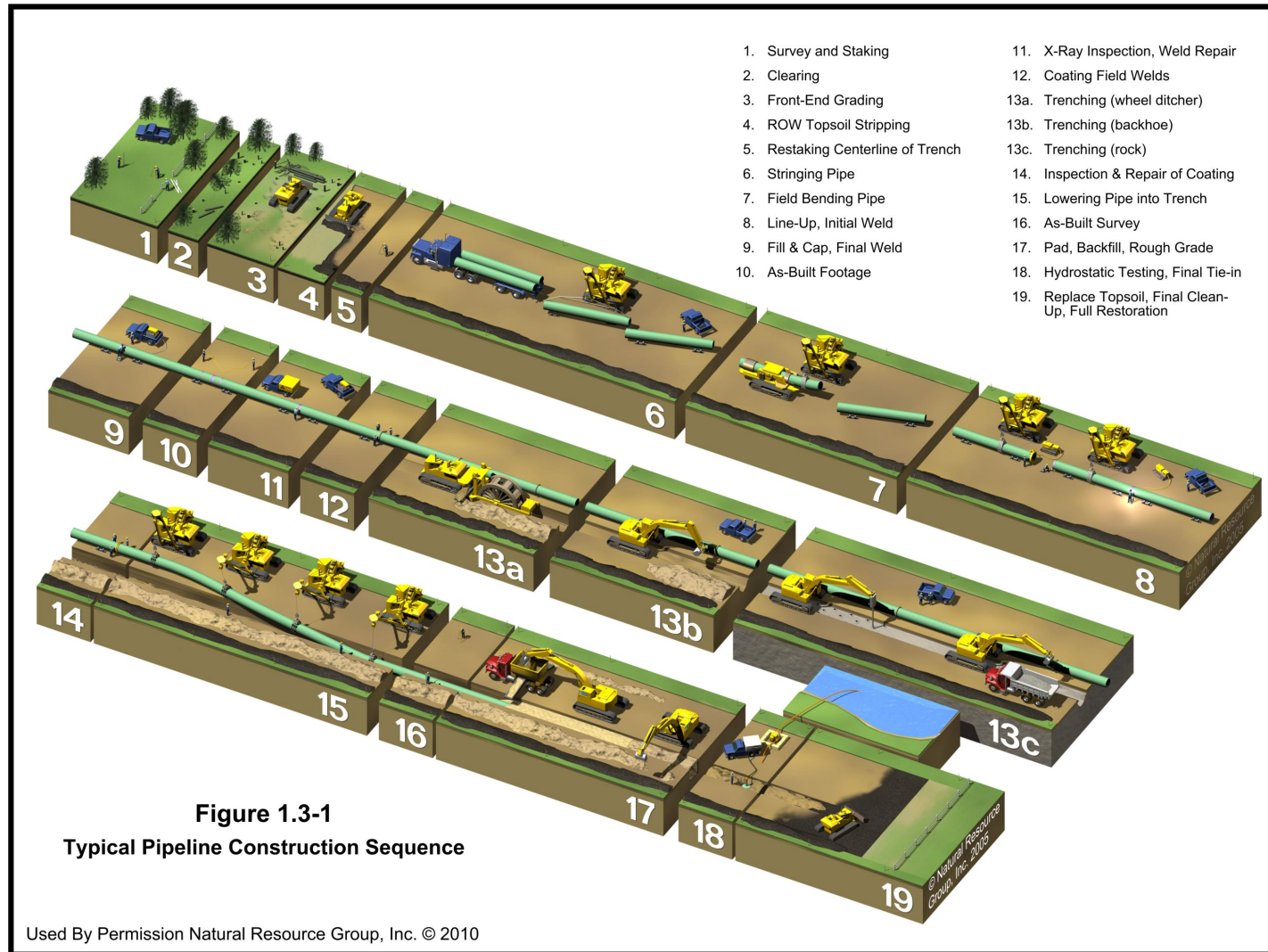
Sécurité et intégrité du pipeline

Nous prenons de nombreuses mesures pour exploiter notre réseau de pipelines de manière sûre et fiable, notamment:

- Concevoir, construire et tester nos pipelines pour satisfaire ou dépasser les exigences définies par les normes de l'industrie et les autorités de réglementation.
- S'assurer que tout travail est respectueux des activités communautaires, des lois et des règlements.
- Surveiller continuellement l'ensemble du réseau.
- Réaliser des enquêtes de terrain régulières pour détecter les fuites et confirmer que les méthodes de prévention de la corrosion fonctionnent comme prévu.



Séquence de construction du pipeline



Atténuation et surveillance

Nous sommes engagés à travailler avec la communauté sur la planification de la construction, les mesures d'atténuation et le suivi après la construction. Enbridge effectuera une surveillance après la construction afin de restaurer les zones touchées aussi près que possible des conditions préalables à la construction.



Enbridge reconnaît que la construction du pipeline peut avoir des répercussions potentielles à court terme et s'engage à appliquer des mesures d'atténuation afin de prévenir ces répercussions et à collaborer avec la municipalité et les résidents afin que les problèmes soient résolus rapidement.

Cadre réglementaire

Pour que le projet aille de l'avant, l'approbation de la Commission de l'énergie de l'Ontario (CÉO) est requise. La CÉO exige qu'Enbridge réalise une évaluation environnementale et une étude de sélection de la route.

Remarque : D'autres routes ne sont pas possibles pour ce projet, car il s'agit d'un remplacement du pipeline devant servir les clients le long du boulevard Saint-Laurent.

Rôle de la Commission de l'énergie de l'Ontario

- Détermine si un pipeline proposé est dans l'intérêt public.
- Examine le dossier environnemental (y compris les détails de la consultation) dans le cadre de la demande, connue sous le nom de demande d'autorisation de construire.
- Une fois que la demande d'autorisation de construire est soumise à la CÉO, toute partie ayant un intérêt dans le projet peut demander à la CÉO de devenir un intervenant ou une partie intéressée.
- Fournit un forum public lors de l'examen de la demande d'autorisation de construire pour que les gens participent au processus de prise de décision.

Engagement continu des intervenants

Enbridge s'est engagée à ouvrir le dialogue tout au long de l'évaluation environnementale et du processus de demande d'autorisation de construction. Les intervenants auront la possibilité de continuer à participer au processus une fois l'évaluation environnementale terminée, par les moyens suivants :

- Participer à l'audience de la CÉO en tant qu'intervenant ou partie intéressée (les détails se trouvent à l'adresse www.ontarioenergyboard.ca)
- Contacter les membres de l'équipe de projet d'Enbridge ou de Dillon
- Visiter notre page de projet sur www.enbridgegas.com/about-us et cliquer sur l'onglet Projets!



Processus d'évaluation environnementale et calendrier du projet



Restez informés

Obtenez des mises à jour du projet en nous fournissant votre adresse électronique ou postale.

Assurez-vous d'être inscrits! **Remplissez le formulaire de commentaires** et déposez-le dans la boîte à la porte ou remettez-le à l'un des membres de notre équipe de projet.

Pour formuler des commentaires, des questions ou pour obtenir plus de renseignements, veuillez contacter :

| Tanya Turk | Whitney Moore |
|---|--|
| Conseillère en environnement Enbridge Gas Inc. | Gestionnaire de projet, Évaluation environnementale Dillon Consulting Limited |
| 416 495 3103 | 613 745-2213 |
| Tanya.Turk@enbridge.com | StLaurentEA@dillon.ca |
| 101, boul. Honda Markham (Ontario) L6C 0M6 | 177, ch. Colonnade Sud, bureau 101 Ottawa (Ontario) K2E 7J4 |

En vertu de la Loi sur l'accès à l'information et la protection de la vie privée, **tous les commentaires et toutes les questions formulés au sujet de ce projet serviront à créer un rapport d'évaluation environnementale** qui fera partie du dossier public et sera mis à la disposition des particuliers ou des organisations qui ont intérêt à ce projet. **Les renseignements personnels comme le nom, l'adresse et le numéro de téléphone ne seront pas inclus dans le rapport d'évaluation environnementale**, mais seront communiqués, sur demande, à toute personne dans le cadre de l'examen du rapport d'évaluation environnementale.

PROPOSED ST. LAURENT PIPELINE PROJECT
OPEN HOUSE COMMENT FORM

| | |
|---------------------|--|
| Open House Date: | |
| Name: | |
| Group/Organization: | |
| Email Address: | |
| Mailing Address: | |
| Telephone: | |

1. How did you hear about the St. Laurent Replacement Pipeline Project?

- | | |
|---|---|
| <input type="checkbox"/> Newspaper | <input type="checkbox"/> Received information in the mail |
| <input type="checkbox"/> Local media | <input type="checkbox"/> Direct mail invitation |
| <input type="checkbox"/> From a friend or neighbour (word of mouth) | <input type="checkbox"/> Other (please specify) _____ |

2. Do you own property or live beside:

- ☐ Preliminary Preferred Route ☐ Alternative Route

3. Do you agree with the Preliminary Preferred Route? Why or why not?

4. Are there any potential effects to you, your property or business that would need to be addressed prior to construction/operation of the pipeline? (Please indicate which route you are commenting on)

5. Are there any significant features along the routes or in the study areas that we have not identified? If so please tell us the feature(s) and the location(s).

6. What is your view of the proposed project?

- ☐ I am supportive ☐ No opinion at this time ☐ I am not supportive

Please provide any key comments, issues or concerns (Please indicate which route you are commenting on)

7. What is your current heat source?

☐ Heating oil ☐ Electricity ☐ Propane ☐ Wood

☐ I'm already serviced by natural gas

8. If natural gas were available, would you be interested in converting to natural gas?

☐ Yes ☐ No

9. How many years after pipeline construction could you convert your heating system to natural gas?

☐ <1 year ☐ 2 years ☐ 3 years ☐ 4 years ☐ >5 years

10. Were your questions adequately addressed by a project representative?

☐ Yes ☐ No ☐ Partly

11. If not, please list your questions below and provide a description on how you think we can best address them.

12. Did you receive an adequate understanding of the Environmental Assessment and Ontario Energy Board processes?

☐ Yes ☐ No

13. If not, what additional information do you require?

14. Do you have any additional comments? (Please indicate which route you are commenting on)

Mail to: Whitney Moore, Environment Assessment Project Manager, Dillon Consulting Limited, 177 Colonnade Road South, Suite 101, Ottawa, ON, K2E 7J4 OR Email to: StLaurentEA@dillon.ca

Under the Freedom of Information and Protection of Privacy Act, all comments and questions submitted regarding this project will be used for the purposes of creating an environmental assessment report that will be a part of the public record and will be made available to individuals or organizations with an interest in this project. Personal information such as name, address, and telephone number will not be included in the environmental assessment report but will be released, if requested, to any person as part of the review of the environmental assessment report.

PROPOSITION DE PROJET GAZODUC SAINT-LAURENT
FORMULAIRE DE COMMENTAIRE DE PORTES OUVERTES – 4 Mars, 2019

| | |
|-----------------------|--|
| Nom | |
| Groupe / organisation | |
| Adresse électronique | |
| Adresse postale | |
| Téléphone | |

1. Comment avez-vous entendu parler du projet gazoduc Saint-Laurent?

- ☐ Journal
☐ Les médias locaux
☐ D'un ami ou d'un voisin (bouche à oreille)
☐ Informations reçues par courrier
☐ Autre (veuillez préciser) _____

2. Êtes-vous propriétaire ou habitez-vous près de la route préférée?

- ☐ Oui ☐ Non

3. Êtes-vous d'accord avec le projet? Pourquoi ou pourquoi pas?

4. Existe-t-il des effets potentiels sur vous, votre propriété ou votre entreprise, auxquels il faudrait remédier avant la construction / l'exploitation du gazoduc?

5. Existe-t-il des caractéristiques importantes le long du tracé ou dans la zone d'étude que nous n'avons pas identifiées? Si tel est le cas, indiquez-nous les fonctions et leur emplacement.

6. Quelle est votre vue du projet proposé?

☐ Je suis en faveur ☐ Aucun avis pour le moment ☐ Je ne suis pas en faveur

Veuillez fournir tout autre commentaire, problème ou préoccupation supplémentaire.

7. Quelle est votre source de chaleur actuelle?

☐ L'huile de chauffage ☐ Électricité ☐ Propane ☐ Bois
☐ Je suis déjà desservi au gaz naturel

8. Vos questions ont-elles été correctement traitées par un représentant du projet?

☐ Oui ☐ Non ☐ Partiellement

9. Si non, veuillez énumérer vos questions ci-dessous et décrire comment vous pensez que nous pouvons le mieux y répondre.

10. Avez-vous bien compris les processus d'évaluation environnementale et de la Commission de l'énergie de l'Ontario?

☐ Oui ☐ Non

11. Avez-vous des commentaires supplémentaires?

S'il vous plaît laissez ce questionnaire avec un membre du personnel lors de notre journée portes ouvertes. Vous pouvez également le faire parvenir à: Whitney Moore, gestionnaire de projet d'évaluation environnementale, Dillon Consulting Limited, 177, chemin Colonnade Sud, bureau 101, Ottawa (Ontario) K2E 7J4 ou par courriel à: StLaurentEA@dillon.ca

En vertu de la Loi sur l'accès à l'information et la protection de la vie privée, tous les commentaires et questions formulés au sujet de ce projet serviront à créer un rapport d'évaluation environnementale qui fera partie du dossier public et sera mis à la disposition des particuliers ou des organisations qui ont intérêt à ce projet. Les informations personnelles telles que le nom, l'adresse et le numéro de téléphone ne seront pas incluses dans le rapport d'évaluation environnementale, mais seront communiquées, sur demande, à toute personne dans le cadre de l'examen du rapport d'évaluation environnementale.

Appendix D1

Public Correspondence

| Public Correspondence | | | | | | |
|------------------------|------|--|------------------|---|--------------------|--------------------|
| Date of Contact (2019) | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding Issues |
| February 25 | N/A | Notice of Commencement and Open House (Notice) circulated via regular mail through Canada Post to residents within the Study Area. | N/A | N/A | N | |
| March 6 | | Dillon received a call from [REDACTED] stating that she had just received the NOTICE for the open house in the mail (late). She expressed that she was extremely dissatisfied with the consultation aspect of the project as well as the location of the open house as it was not located along the proposed route (St. Laurent). She requested a new open house be planned at a new location, and indicated she would be contacting the media if this was not resolved. | March 6 | Dillon explained that this was the first notification they had received of the late mail-out. Dillon apologized for the inconvenience and said they would look into the cause of the mail delivery delay immediately. | Y | |

| Public Correspondence | | | | | | |
|------------------------|------|---|------------------|--|--------------------|--------------------|
| Date of Contact (2019) | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding Issues |
| March 6 | | left a message for EGI indicating she had spoken with Dillon. She expressed that she was extremely disappointed with the consultation process, and reiterated she would be contacting the media if the issue is not resolved. She asked that EGI call her back. | March 6 | <p>EGI called back on March 6. The constituent was upset about receiving the Notice after the open house and further indicated that her neighbours along St. Laurent also received the Notice a day late post open house. She also questioned the location of the open house as it was located in Vanier and nowhere close to the location where the proposed project was taking place (approx. 2 km from St. Laurent). She suggested the St. Laurent Complex as a more appropriate venue. Similar to her telephone voice message, she indicated she would go to the media and that she was indigenous and an activist.</p> <p>She indicated that the perception was that EGI was attempting to “fly under the radar”. EGI reassured her that this was not the case. The conversation ended on a good note and she was provided contact information for future communications.</p> | Y | |

| Public Correspondence | | | | | | |
|------------------------|------|---------|------------------|---|--------------------|--------------------------|
| Date of Contact (2019) | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding Issues |
| | | | March 8 | EGI contacted [REDACTED] to inform her that they were planning to host another open house. The constituent was pleased to hear the news and stated that she looked forward to meeting with EGI to better understand the project. She also suggested EGI may want to consider the Rideau High Community Hub as a backup venue for the open house since it was located on St. Laurent. | Y | |
| | | | March 26 | Dillon contacted [REDACTED] to confirm if she received her Notice with the details of the new open house. She had not yet received the Notice but asked where the location was, as if it was not in a location within walking distance she would be asking EGI to cancel to open house. Dillon gave her the location and time and she was satisfied with the location. She stated that she would be attending as she had protest signs made for the event and would be gathering her neighbours to attend. Dillon asked that she call back when the Notice was received to confirm she receives it. | Y | Notice not yet received. |
| | | | March 26 | [REDACTED] left a message with Dillon confirming she had received the Notice in the mail that same day. | N/A | None. |

| Public Correspondence | | | | | | |
|------------------------|------------|---|------------------|---|--------------------|--------------------|
| Date of Contact (2019) | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding Issues |
| March 6 | [REDACTED] | Dillon received a call from [REDACTED] indicating that he had received his Notice March 5 one day after the open house. He suggested for future mailouts to print something about the project on the envelope so they are not overlooked. He also suggested a different venue as the first open house was not adjacent to the pipeline route. | March 6 | Dillon apologized for the error. We recorded his contact information and told him we would be in touch to let him know what the next steps would be. | Y | |
| | | | March 26 | Dillon called [REDACTED] to confirm he received the new Notice in the mail. He confirmed was pleased we called to follow-up. | N | |
| March 7 | [REDACTED] | Left a message with Dillon stating he had received his Notice after the open house date. | March 7 | Dillon returned the call and left a message. | N | |
| March 7 | [REDACTED] | Received a call from [REDACTED], who was concerned that the entire Study Area was being impacted (disturbed) as part of the project. | March 7 | Dillon explained to him that the Study Area was merely for desktop review purposes and the proposed project would be located along St. Laurent within the existing road ROW. | N | |
| March 7 | [REDACTED] | [REDACTED] left a message stating she had received the Notice March 6 and was upset with the consultation error. | March 7 | Dillon returned her call and explained there was a mail delivery error. We assured her that we were looking into another date and venue for a second open house and that she would be receiving a new Notice. | N | |
| March 7 | [REDACTED] | Dillon received a call from [REDACTED] inquiring about the Notice and what it was. | March 7 | Dillon explained that it was a Notice for a proposed pipeline project along St. Laurent Boulevard. | N/A | |
| March 7 | [REDACTED] | Left a message with EGI stating he had received the Notice on March 7 and was upset with the late Notice. | March 8 | EGI returned his call and indicated they were working on setting up another open house. | N/A | |

| Public Correspondence | | | | | | |
|------------------------|------------|--|------------------|---|--------------------|--------------------|
| Date of Contact (2019) | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding Issues |
| March 9 | ██████████ | ██████████ emailed EGI to notify them that he had received the open house letter invitation after it had already commenced and was extremely dissatisfied with the consultation process. | March 10 | EGI representative thanked him for reaching out, provided information about the project and the mailing issue, provided the project website, and added him to the contact list. | N/A | |
| March 9 | ██████████ | ██████████ emailed EGI to notify them that he had received the open house letter invitation after it had already commenced and was extremely upset with the process. | March 10 | EGI representative thanked him for reaching out, provided information about the project and the mailing issue, provided the project website, and added him to the contact list. | N/A | |
| | | | March 11 | ██████████ suggested the open house be closer to the citizens affected by the work and suggested the old Rideau High School property, or a room at the community centre on Coté Street. ██████████ thought the previous location was unsuitable due to distance for those walking. ██████████ also suggested retiring the newspaper ads for targeted internet ads in the affected postal zones. | N/A | |
| | | | March 12 | EGI representative thanked ██████████ for his suggestions and explained the current approach for acquiring a new open house venue. | N/A | |
| | | | March 12 | ██████████ confirmed a potential location for the open house. | N/A | |
| | | | March 12 | EGI representative confirmed that the Rideau High Community Hub would be unavailable for the open house. | N/A | |

| Public Correspondence | | | | | | |
|------------------------|--------|--|------------------|---|--------------------|--------------------|
| Date of Contact (2019) | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding Issues |
| | | | March 18 | ██████ replied to the email circulation of the new Notice and open house date stating he was planning to attend the open house. | N/A | |
| March 10 | ██████ | ██████ emailed EGI to notify them that she had received the open house letter invitation after it had already commenced. | March 11 | EGI representative thanked him for reaching out, provided information about the project and the mailing issue, provided the project website, and added him to the contact list. | N | |
| | | | March 12 | ██████ thanked EGI representative for speedy response and was pleased that another Open House is being considered. | N | |
| | | | March 25 | EGI representative queried ██████ about receiving the second letter for the Notice and Open House. | Y | |
| | | | March 25 | ██████ indicated she did not receive the Notice yet. | Y | |
| | | | March 25 | EGI representative shared that another resident had received their invitation, and queried if she had received hers yet. | Y | |
| | | | March 27 | ██████ confirmed that she received the Notice in the mail the previous day. | N | |

| Public Correspondence | | | | | | |
|------------------------|------|---|------------------|---|--------------------|--------------------|
| Date of Contact (2019) | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding Issues |
| March 28 | | Indicated that St. Laurent Academy was located in a cul-de-sac off of St. Laurent Boulevard within the Study Area. She inquired about access to the school during construction. | March 28 | EGI returned call letting her know that access to the school will be maintained during construction , and should the current design proceed, construction would occur on the west side of the street, opposite the academy. During the call also indicated that there was construction occurring for the new senior residence behind the academy. | N | |
| April 2 | | left a message indicating that she is a tenant in a townhome at St. Laurent Boulevard and Noranda Street and inquired about what type of disruption she could expect during construction. Would there be a disruption in service? She was interested to know what mitigation measures would be in place to keep access open for walkers, runners, bikers. | April 2 | EGI returned her call, leaving two voicemails, indicating that access would be maintained and requested her email address for future correspondence. EGI also informed that the info presented at the open house is available online and she could call back anytime to discuss further. | N | |

Appendix D2

Agency Correspondence

| Agency Correspondence - Federal | | | | | | |
|---------------------------------|---|--|------------------|---|--------------------|--------------------|
| Date of Contact (2019) | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding Issues |
| February 21 | N/A | Dillon circulated the agency stakeholder letter providing information about the project with the Notice and project location map attached to all federal contacts in the Stakeholder Contact List. | N/A | N/A | N | N |
| February 21 | N/A | Bounce-back received from EACoordination_ON@aandc-aandc.gc.ca ; | February 22 | Sent letter to Indigenous Services Canada via regular mail. | N | N |
| February 21 | Fisheries and Oceans Canada | Received confirmation of email receipt. | N/A | N/A | N | N |
| February 21 | Sarah Rimbach | Received confirmation of receipt of email from MPP Nathalie Des Rosiers office. | N/A | N/A | N | N |
| February 27 | Denise Fell Environment Canada | Inquired as to whether the project crossed federal lands. | February 27 | Responded confirming the project does not cross federal lands. Ms. Fell responded on Feb 28 confirming that ECCC does not have any questions about the project at this time. | N | N |
| February 27 | Transport Canada | Provided a response stating the Transport Canada does not require receipt of all individual or Class EA related notifications and requested that project proponents self-assess their projects using the criteria provided in their email. | N/A | N/A | N | N |
| March 20 | Jeremy Schultz Canadian Environmental Assessment Agency | Received a letter requesting we review the regulations to confirm applicability of the project and if the project is not on schedule 1 of the Regulations or is not subject to CEAA 2012, to be removed from the distribution list. | N/A | N/A | N | N |

| Agency Correspondence - Provincial | | | | | | |
|------------------------------------|---|---|------------------|--|--------------------|--------------------|
| Date of Contact (2019) | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding Issues |
| February 21 | N/A | Dillon circulated the agency stakeholder letter providing information about the project with the Notice and project location map attached to all provincial contacts in the Stakeholder Contact List. | N/A | N/A | N | N |
| February 21 | Infrastructure Ontario | Received bounce-back from Lisa Lyslick stating she would be away on mat leave until September 2019. Her email response notes to direct inquiries to Frank Dieterman. | N/A | Forwarded letter to Frank Dieterman. | N | N |
| February 22 | Alain Nadeau Ministry of Transportation | Received email stating that he would be the MTO representative for this project (instead of Marek Wiesek). | N/A | Added contact to stakeholder list. | N | N |
| February 22 | Zora Crnojacki Ontario Energy Board | Bounce-back received from Ms. Crnojacki's email address. | N/A | Re-sent the stakeholder letter and Notice to the OPCC chair. | Y | N |
| March 5 | Olivia Matthews Ministry of Transportation | Ms. Matthews thanked us for circulating the Notice to MTO and indicated they had no interest in the work and can be taken off the mailing list for future circulation. | N/A | N/A | N | N |
| March 7 | Mary Dillon Ministry of Natural Resources and Forestry | Provided an email with resources for proponents to check whether there may be any environmental impacts and to contact MNRF should we have any further questions related to MNRF interests. | N/A | N/A | N | N |
| March 12 | Liam Lonergan OEB Consumer Relations | Received an email stating that the letter had been sent to the wrong contact and should be Ms. Crnojacki. Her new email address was provided. | N/A | Added updated email to stakeholder list. | Y | N |
| March 18 | N/A | Dillon circulated the new Notice to all provincial agency contacts. | N/A | N/A | N | N |

| Agency Correspondence - Provincial | | | | | | |
|------------------------------------|--|--|------------------|---|--------------------|--------------------|
| Date of Contact (2019) | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding Issues |
| March 18 | Kimberly Livingstone Ministry of Tourism, Culture and Sport | Provided a letter detailing the process to check for cultural and archaeological resources. | N/A | N/A | N | N |
| March 20 | Jamie Batchelor Rideau Valley Conservation Authority | Received an email from RVCA stating that they had no comments related to the CA's mandate or interest. | March 20 | Thanked them for their response. | N | N |

| Agency Correspondence - Municipal | | | | | | |
|-----------------------------------|---------------------|--|------------------|---|--------------------|--------------------|
| Date of Contact (2019) | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding Issues |
| February 19 | Councillor Nussbaum | EGI provided an email with information about the project for the upcoming open house including the Notice. | N/A | N/A | N | N |
| February 19 | Councillor Tierney | EGI provided an email with information about the project for the upcoming open house including the Notice. | N/A | N/A | N | N |
| February 21 | N/A | Dillon circulated the agency stakeholder letter providing information about the project with the Notice and project location map attached to all municipal contacts in the Stakeholder Contact List. | N/A | N/A | N | N |
| February 21 | Laura Mueller | Provided confirmation of receipt of Notice via email. | N/A | N/A | N | N |

| Agency Correspondence - Municipal | | | | | | |
|-----------------------------------|---------------------|---|------------------|---|--------------------|--------------------|
| Date of Contact (2019) | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding Issues |
| February 28 | Councillor Nussbaum | EGI provided a reminder via email of the upcoming open house on March 4. | N/A | N/A | N | N |
| February 28 | Councillor Tierney | EGI provided a reminder via email of the upcoming open house on March 4. | N/A | N/A | N | N |
| March 4 | Councillor Nussbaum | EGI provided the open house panels and indicated they were acceptable to share with constituents. | N/A | N/A | N | N |
| March 4 | Councillor Tierney | EGI provided the open house panels and indicated they were acceptable to share with constituents. | N/A | N/A | N | N |
| March 4 | Laura Mueller | Ms. Mueller emailed the project team to provide notice that Councillor Nussbaum is no longer the representative for Rideau-Rockcliffe Ward as he had taken on a new position as CEO of the National Capital Commission. She indicated that City Council has appointed two sitting Councillors, Mathieu Fleury and Jean Cloutier. She directed any correspondence to the rideaurockcliffeward@ottawa.ca email address. | March 4 | EGI acknowledged the change and thanked Ms. Mueller for letting us know. | N | N |
| March 9 | Councillor Tierney | Email received from Councillor Tierney asking how the attendance of the open house was and if there were any issues following the news that the mailed Notices arrived late. | March 10 | EGI responded indicating we had a total of 8 attendees, and that, given the type of project this number was typical. EGI stated that a second open house was planned for early April given the Notice delivery issue and that they would reach out with details when confirmed. | Y | N |
| March 14 | Laura Mueller | EGI emailed Ms. Mueller as a follow up to let her know that a second open house was planned and provided the details. | N/A | N/A | N | N |

| Agency Correspondence - Municipal | | | | | | |
|-----------------------------------|--------------------|--|------------------|---|--------------------|--------------------|
| Date of Contact (2019) | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding Issues |
| March 14 | Councillor Tierney | EGI emailed Councillor Tierney as a follow-up to let her know that a second open house was planned and provided the details. | N/A | N/A | N | N |
| March 27 | Councillor Tierney | EGI emailed Councillor Tierney a friendly reminder of the open house on April 3. | N/A | N/A | N | N |
| March 27 | Laura Mueller | EGI emailed Ms. Mueller a friendly reminder of the open house on April 3. | March 28 | Elizabeth Whyte of the Ward Office responded stating that she would be attending the open house on behalf of the Ward Office. | N | N/A |
| | | | April 3 | Ms. Whyte confirmed that she would be attending around 6 pm as she could not make the entire meeting. | N | N |
| | | | April 3 | EGI responded to Ms. Whyte letting her know a representative would be there to answer her questions and introduce her to the team, if needed. | N | N |

Appendix D3

Interest Group Correspondence

| Interest Group Correspondence | | | | | | |
|-------------------------------|---|---|------------------|---|--------------------|--------------------|
| Date of Contact | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding Issues |
| February 21 | N/A | Dillon circulated the agency stakeholder letter providing information about the project with the Notice and project location map attached to all interest group contacts in the Stakeholder Contact List. | N/A | N/A | N | N |
| March 5 | Barry Boyd Ottawa-Carleton District School Board | Received an email from Mr. Boyd stating that the Ottawa- Carleton District School Board is currently reviewing the feasibility of connecting the property's storm drainage to the City of Ottawa's storm lines. He stated that the gas line replacement may have an impact on their project if they move forward and asked for someone to get back to him to discuss. | March 8 | EGI responded stating the expected project timeline, and stated that it would be easiest if they were to complete their work first, however if timing does not work out the contractor connecting the storm sewers should be able to complete the installation without issue, so long as concurrent timing is not an issue. | N | N |
| March 6 | Dave Mungall Pye & Richards Architects Inc. | Mr. Mungall stated that there will be a coordination impact with the crossover of the gas service and new storm sewer. Details would need to be worked out and the timetable is currently unknown. | March 8 | EGI forwarded the above response to Mr. Mungall. | N | N |

| Interest Group Correspondence | | | | | | |
|-------------------------------|--|--|------------------|--|--------------------|--------------------|
| Date of Contact | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding Issues |
| March 29 | Steven Boyle c/o Overbrook Community Association Planning and Development Committee | <p>Received an email from Mr. Boyle on behalf of the Overbrook Community Association's Planning and Development Committee with a question relating to where within the road of allowance of St. Laurent Boulevard the gas line is proposed to be located. He also indicated that the community association covers part of the Study Area on the west side of St. Laurent Boulevard only from Donald Street to McArthur Avenue, but they also tend to look out informally for the area north of that (as it is lacking a community association).</p> <p>The concerns expressed related to future plans for the roadway which includes the preparation of a Complete Street Plan, urban design principles, traffic analysis, public real improvements and Master Plan for St. Laurent Boulevard.</p> <p>Specially, they are concerned with impediments to planting of future street trees, and construction of bike lanes or bike tracks; and asked that the project team respond to his concern.</p> <p>They also cc'd Elizabeth Whyte at the Ward 13 councillor's office to make her aware of the concern.</p> | April 8 | <p>EGI responded to Mr. Boyle noting that, should this project proceed, the replacement pipeline would be built within the municipal road allowance. EGI let him know that the project planners have been in consultation with the City of Ottawa throughout preliminary pipeline design, as well as scheduling optimal construction timelines; and while the design has not been finalized, at this time we do not anticipate constructing within the boulevard. The EGI team is currently looking at constructing the replacement pipeline on the west side of St. Laurent, however, this is still in the design phase and not confirmed.</p> <p>EGI also referred Mr. Boyle to the Project website for further details.</p> | N | N |

Appendix D4

Engagement with Indigenous Communities

| Correspondence | | | | | | |
|------------------------|---|--|------------------|---|--------------------|--------------------|
| Date of Contact (2019) | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding issues |
| March 18 | Grand Chief Benedict, Mohawk Council of Akwesasne | EGI representative emailed to provide advance materials about the proposed St. Laurent Project. These materials included the Project Notification letter, Notice, map of the proposed location and a copy of the Duty to Consult Letter issued by the Ministry of Energy, Northern Development and Mines. EGI requested to advise if there was another contact to direct this information to and indicated to contact EGI should they have any questions regarding the proposed project. | N/A | N/A | N/A | N |
| March 18 | Algonquins of Ontario c/o Janet Stavinga | EGI representative emailed to provide advance materials about the proposed St. Laurent Project. These materials included the Project Notification letter, Notice, map of the proposed location and a copy of the Duty to Consult Letter issued by the Ministry of Energy, Northern Development and Mines. EGI requested to advise is there was another contact to direct this information to and asked indicated to contact EGI should they have any questions regarding the proposed project. | N/A | N/A | N/A | N |

Appendix D5

Open House Exit Questionnaire Correspondence

| Open House Exit Questionnaire Correspondence | | | | | | |
|--|------|---|------------------|--|--------------------|--------------------|
| Date of Contact (2019) | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding Issues |
| March 4 | | submitted an open house comment form and agrees with the project and thinks the project is very well planned. | N/A | N/A | N | N |
| March 4 | | submitted an open house comment form and agrees with the project. He would like to see the construction schedule posted online with updates and expressed that dust control is important. He also wrote that there should be more information explaining the Environmental Assessment and Ontario Energy Board Process. | N/A | N/A | N | N |
| March 4 | | submitted an open house comment form and agrees with the project but was concerned about access to businesses in the area during construction. Sheila talked to an EGI representative and communicated concerns about traffic management and access to businesses. | N/A | N/A | N | N |
| March 4 | | submitted an open house comment form and agrees with the project. He wrote that the timing of the project would be important and was curious if this project will be integrated with other planned street work in the area (i.e., new street design plan for St. Laurent Boulevard in 2019 - 2022). He wonders if other work in the area was considered for planning of this project. | N/A | N/A | N | N |
| March 4 | | expressed her concerns about traffic in the area and timing of the project (i.e., rush hour, traffic re-routing). | March 4 | Enbridge representative thanked her for her interest and indicated they will follow up with project timing once further information becomes available. | Y | N |

| Open House Exit Questionnaire Correspondence | | | | | | |
|--|------------|---|------------------|---|--------------------|--------------------|
| Date of Contact (2019) | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding Issues |
| | | ██████████ talked with another Enbridge representative about project scope, project timeline and discussed pre-construction notification on road signage. | March 4 | An EGI representative thanked her for her interest and shared the project website information, provided her with a hard copy of the French Language storyboards and addressed her concerns. | N | N |
| March 4 | ██████████ | ██████████ expressed his concerns about potential impacts to residents specifically regarding traffic and rush hour. ██████████ suggested that signage be included to specify that construction will not be during rush hour to avoid excessive commuters utilizing Cummings Avenue as a detour. | March 4 | Enbridge representative thanked him for his interest and indicated they will follow up with restricted construction hours once further information becomes available.. | Y | N |
| April 3 | Unknown | Supportive of project, questions adequately answered, received adequate understanding of the EA and OEB process. | N/A | N/A | N | N |
| April 3 | ██████████ | Agrees with project; acknowledged it is presumably necessary. ██████████ asked that EGI attempt to protect/ not remove the trees, especially those along the centre median as they were planted to give a greener boulevard feel to the roadway. She thanked the project team for scheduling a second open house after the Notices arrived late for the first one. She also indicated that the Monfort Parish was a better location within the community affected by the project. | April 3 | N/A | N | N |

| Open House Exit Questionnaire Correspondence | | | | | | |
|--|--|---|------------------|---|--------------------|--------------------|
| Date of Contact (2019) | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding Issues |
| April 3 | Barry Boyd Ottawa-Carleton District School Board | Mr. Boyd does not own property or live within the Study Area, however, expressed concerns that the construction may impact the planned stormwater upgrade project at 689 St. Laurent Boulevard. | N/A | An EGI representative spoke with Mr. Boyd and Mr. Boyd expressed that he is hoping to have the sewer line installed prior to EGI completing the pipeline installation and as a result would not impact his construction. Mr. Boyd was still not certain the sewer project will go forward so EGI indicated that even if the pipeline is installed prior to the sewer line it will not impact his construction as they install much deeper. EGI also mentioned that crossing utilities is a typical practice during construction and should have no issue. Mr. Boyd was okay with this response and asked if he could be kept in the loop as to timing or our project as we get closer to OTC. | N | N |
| April 3 | ██████████ | ██████████ indicated that he agrees with the project to maintain reliable service and had no other comments. | April 3 | ██████████ spoke with team members and had several questions about the type of pipe, installation, pressure etc. | N | N |
| April 3 | ██████████ | ██████████ is a representative from City Hall and had no opinion or comments. | N/A | N/A | N | N |
| April 3 | URS MAAG | Indicated he agrees with project, although there are concerns related to traffic disturbances. He indicated his concerns were adequately addressed and had no further comments. | N/A | N/A | N | N |
| April 3 | ██████████ | ██████████ indicated that she agrees with the project and her questions were adequately addressed by the project team. She had no specific comments. | N/A | N/A | N | N |

| Open House Exit Questionnaire Correspondence | | | | | | |
|--|------------|--|------------------|--|--------------------|--------------------------------------|
| Date of Contact (2019) | Name | Comment | Date of Response | Response and Issue Resolution (if applicable) | Follow-Up Required | Outstanding Issues |
| April 3 | Unknown | Representative from City Hall; had no opinion or comments. | N/A | N/A | N | N |
| April 3 | ██████████ | ██████████ indicated he agrees with the project and had no other specific comments. | N/A | N/A | N | N |
| April 3 | ██████████ | ██████████ indicated he agrees with the project, and indicated he was concerned with traffic. He indicated that his concerns were adequately addressed by the project team and had no other specific comments. | N/A | N/A | N | N |
| April 3 | ██████████ | ██████████ indicated that there has been a problem with rats in the local area after installation of telecom services. The City has been dealing with this issue (putting bait in sewers etc.). She was concerned that vibration may flush rats out into residential areas. She also recommended that wording used in the Notices be updated to indicate maintenance/ repair projects vs. new pipelines. She was pleased with the new location of the venue. | April 3 | Project team spoke to ██████████ about her concerns. EGI will need to follow up with the City about the “rat issue” to see what is being done and what (if any) additional mitigation could be considered. | N | Follow up with City about rat issue. |

Appendix E

Preferred Route Photo Inventory



| Photo Comments | Photo |
|--|--|
| <p>Photo #1 Feb 27, 2019</p> <p>Notes:</p> <p>Looking southeast on St. Laurent Street near Queen Elizabeth Public School</p> |  |
| <p>Photo #2 Feb 27, 2019</p> <p>Notes:</p> <p>Looking northwest towards the intersection of Montreal Road and St. Laurent Street</p> |  |

Photo #3
Feb 27, 2019

Notes:

Looking northeast on St.
Laurent Street towards
Donald Street.



Photo #4
Feb 27, 2019

Notes:

Looking northwest on St.
Laurent Street past Mutal
Street.

