



Enbridge Gas Inc.

**PROPOSED BOUNDARY ROAD
PIPELINE PROJECT
ENVIRONMENTAL REPORT**

February 2020

Prepared by:



Katrina Kroeze
Stakeholder Engagement Specialist
GHD Ltd.



Emily Gallant
Stakeholder Engagement Specialist
GHD Ltd.

Reviewed by:



Ian Dobrindt,
Senior Environmental Planner
GHD Ltd.

TABLE OF CONTENTS

List of Tables	ii
List of Figures	iii
Appendices	iii
1. Introduction	1
1.1 Project Description	1
1.2 Description of the Planning Process Followed	3
1.2.1 Overview of the Ontario Energy Board Approval Process	3
1.2.2 Description of the Major Steps in Selecting a Preferred Route	4
1.2.3 Preparation of the Project’s Environmental Report	5
1.2.4 Additional Regulatory Processes	5
2. Identification, Evaluation and Selection of the Preferred Route	6
2.1 Selection of the Proposed Pipeline Routes	6
2.2 Description of the Study Area	6
2.2.1 Natural Environment	6
2.2.2 Built Environment	7
2.2.3 Social & Economic Environment	8
2.2.4 Cultural Environment	9
2.3 Route Assessment	10
2.3.1 Development of the Evaluation Criteria	10
2.3.2 Application of the Net Effects Analysis	11
2.4 Comparative Evaluation	12
2.5 Selection of the Preferred Route	14
2.6 Engagement and Consultation on the Preliminary Preferred Route & Alternate Route	14
2.7 Confirmation of the Preferred Route	15
3. Impact Assessment of the Preferred Route	17
3.1 Detailed Description of the Project	17
3.2 Construction and Operation of the Project	17
3.3 Confirmation of Environmental Impacts and Impact Management Measures	19
4. Cumulative Effects Assessment of the Preferred Route	20
4.1 Approach	20
4.2 Study Area Delineation	21
4.3 Current and Planned Projects in the Study Area	22
4.4 Analysis of Cumulative Effects	22
4.5 Summary	25
5. Implementation of the Proposed Project	26
5.1 Commitments and Monitoring	26
5.1.1 Environmental Effects Monitoring	26

5.1.2	ER Commitments and Compliance Monitoring	29
5.2	Potential Approvals and Permits Required	30
5.3	Approvals Required	30
5.4	Implementation	31
6.	Overview of the Consultation Process	31
6.1	Consultation Program and Goals	31
6.2	Indigenous Communities and Stakeholders	32
6.3	Notifications	32
6.3.1	Website	32
6.3.2	Public Notice	33
6.3.3	Letters to Select Stakeholders	33
6.3.4	Individual Meetings	33
6.4	Public Open House	34
6.4.1	Consideration of Issues Raised	35
6.5	Review Agencies	36
6.6	Indigenous Communities	37
6.7	Public	38
6.8	Proposed On-going Consultation	39
7.	Summary	39
8.	References and Resources	40

LIST OF TABLES

Table 2.1	Evaluation Criteria & Indicators	10
Table 2.2	Comparative Evaluation Rankings of the Alternate Routes	14
Table 4.1	Current and Planned Projects	22
Table 4.2	Significance Assessment Framework	23
Table 5.1	Summary of Environmental Effects Monitoring	27
Table 5.2	Commitments and Compliance Monitoring	29
Table 5.3	Potential Approvals and Permits	30

LIST OF FIGURES

Figure 1.1 Study Area and Proposed Routes 2

Figure 2.1 Reasoned Argument Approach 12

Figure 2.2 Preferred Route 16

Figure 3.1 Typical Pipeline Construction Sequence 18

Figure 5.1 Project Timeline 31

Figure 6.1 Project Website 33

Figure 6.2 Open House Display Boards..... 34

APPENDICES

Appendix A Natural Environment Review

Appendix B Historical Records Review

Appendix C Stage 1 Archaeological Assessment

Appendix D Cultural Heritage Checklist

Appendix E Net Effects Analysis

Appendix F Project Stakeholder List

Appendix G Notices

Appendix H Letters

Appendix I Open House Comment Forms

Appendix J Open House Display Boards

Appendix K Stakeholders Correspondence

Appendix L Ministry of Energy, Northern Development and Mines Duty to Consult Letter

1. INTRODUCTION

This Environmental Report (ER) describes the planning process followed and its results for the Boundary Road Pipeline Project (“the Project”) being proposed by Enbridge Gas Inc. (Enbridge). The Project is for a new natural gas pipeline to service two customers on Boundary Road south of Highway 417, located on the municipal boundary between the City of Ottawa and Russell Township. Enbridge retained GHD Limited (GHD) to carry out the planning process in accordance with the Ontario Energy Board (OEB) Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario (7th Edition, 2016) (the Guidelines). In response, two proposed pipeline routes were identified, assessed and comparatively evaluated leading to the selection of a Preferred Route.

1.1 Project Description

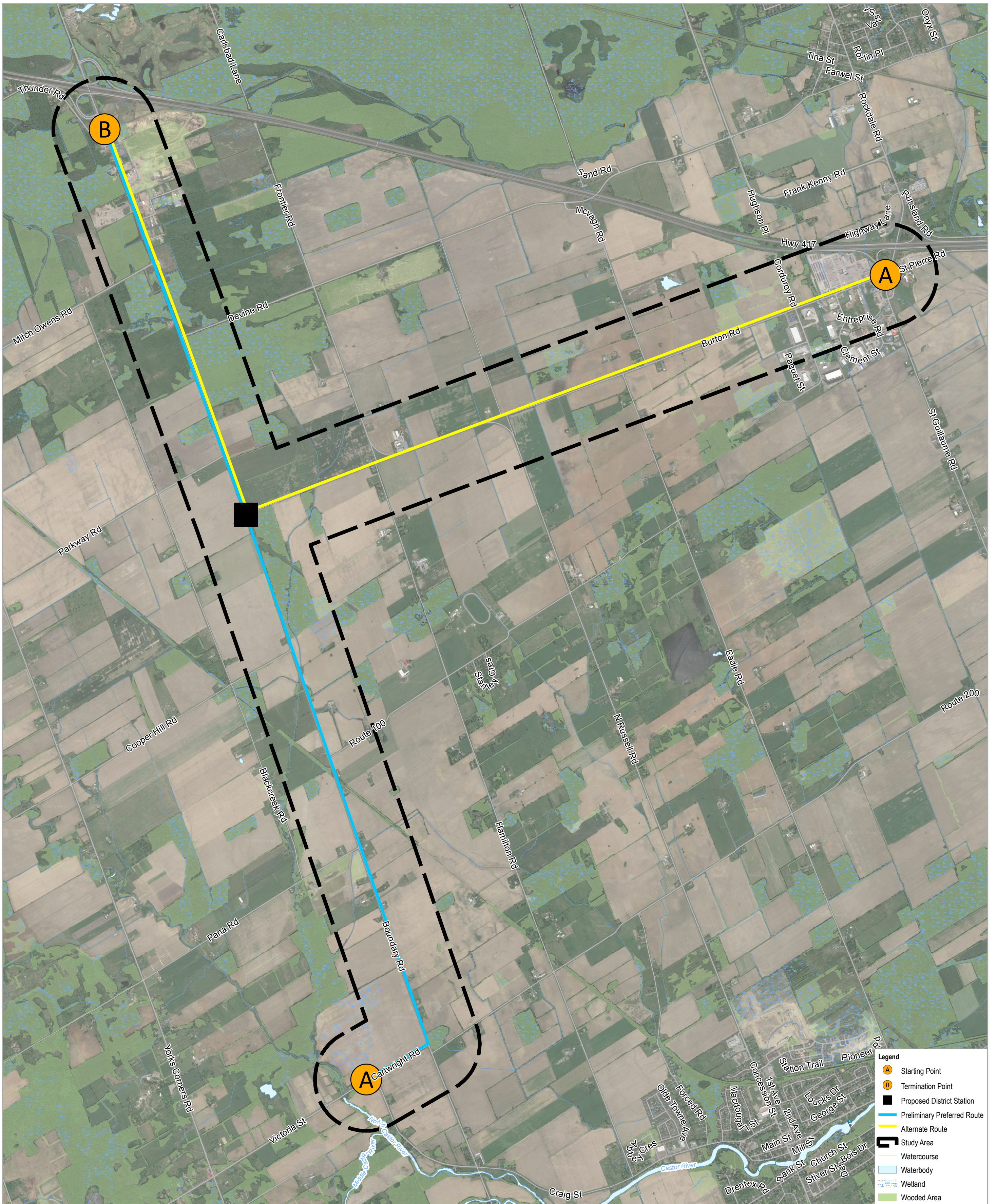
The Project includes two sections of pipeline and the installation of a new district station to support it. Following completion of the Environmental Report, Enbridge will file an application to the OEB for approval to construct. If approved, construction is anticipated to begin in spring 2021. The two proposed routes identified are described as follows and are shown in **Figure 1.1**:

Preliminary Preferred Route (PPR): consists of two sections having a total length of 10.1 km and a district station. Section 1 will begin at Victoria Street and Cartwright Road where it will tie in to Enbridge’s existing pipeline. The 4-inch steel pipe will extend east along Cartwright Road to the intersection of Boundary Road, where it will veer north and continue along Boundary Road for 6.2 km, concluding at the corner of Burton Road where a district station will be installed.

At the district station, Section 2 will begin and will consist of 3.9 km of 4-inch polyethylene pipe that continues north along Boundary Road to the new customers’ property just south of Highway 417.

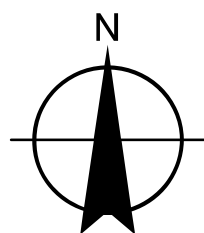
Alternate Route (AR): consists of two sections of pipeline having a total length of approximately 10.6 km and a district station. Section 1 will begin at Burton Road and St. Guillaume Road where it will tie in to Enbridge’s existing pipeline. The 4-inch steel pipe will extend west along Burton Road for 6.7 km to the intersection of Boundary Road, where a district station will be installed.

At the district station, Section 2 will begin and will consist of 3.9 km of 4-inch polyethylene pipe that continues north along Boundary Road to the new customers’ property just south of Highway 417.



- Legend**
- Starting Point
 - Termination Point
 - Proposed District Station
 - Preliminary Preferred Route
 - Alternate Route
 - Study Area
 - Watercourse
 - Waterbody
 - Wetland
 - Wooded Area

Paper Size ANSI C
 0 300 600 900 1,200
 1:25,000 Meters



Map Projection: Transverse Mercator
 Horizontal Datum: North American 1983
 Grid: NAD 1983 UTM Zone 18N

**ENBRIDGE GAS INC.
 PROPOSED BOUNDARY ROAD PIPELINE PROJECT**

Project No. 11157080
 Revision No. -
 Date Feb 19, 2020

STUDY AREA MAP

FIGURE 1.1

1.2 Description of the Planning Process Followed

1.2.1 Overview of the Ontario Energy Board Approval Process

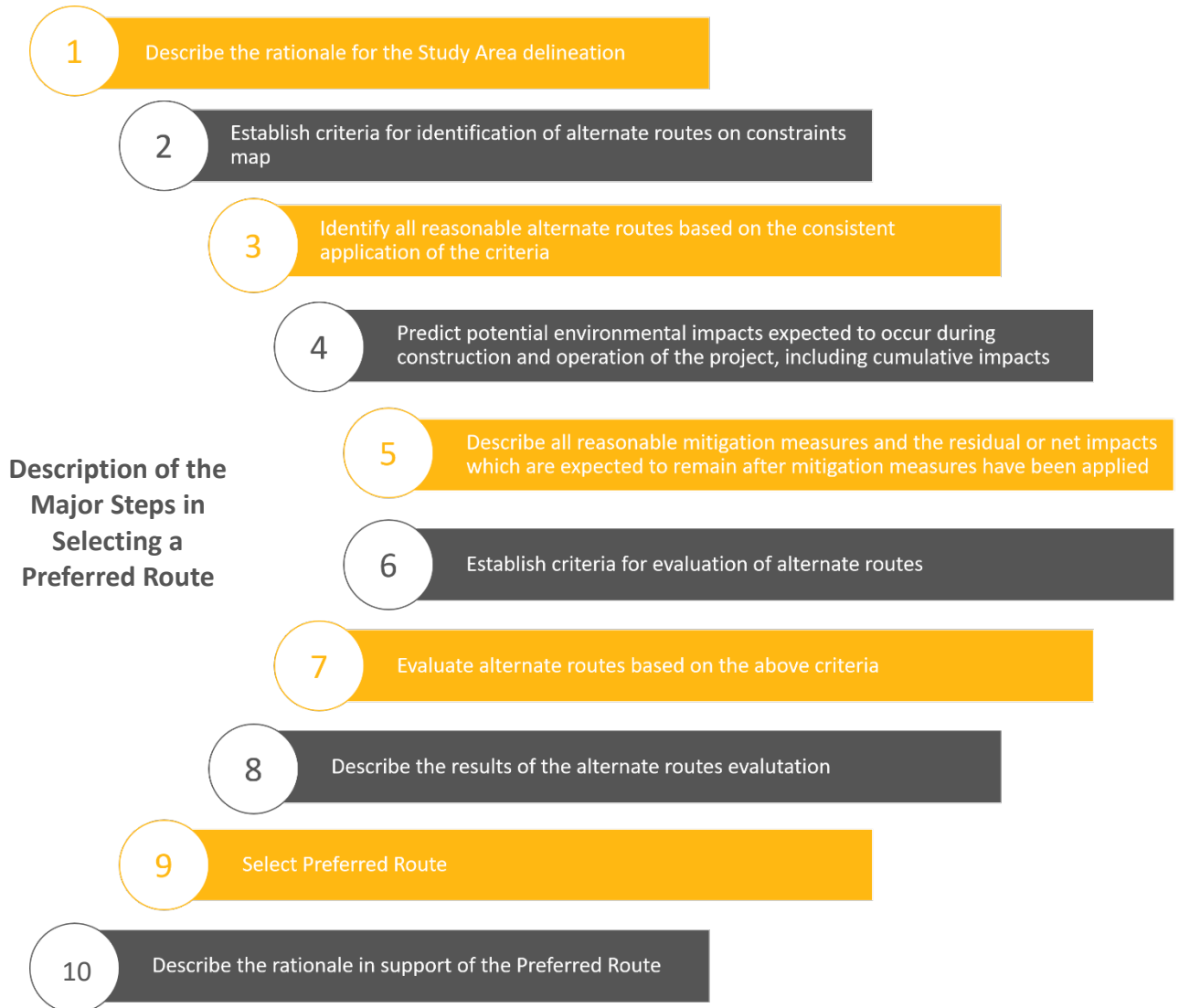
In Ontario, the development of certain natural gas projects requires the submission of a Leave to construct Application to the OEB for approval before they can be implemented. The OEB is an independent, quasi-judicial tribunal, regulated by the *Ontario Energy Board Act*, S.O.1998 c.15 Sch B, (*the Act*). Under *the Act*, the OEB holds numerous gas and electricity related regulatory responsibilities. With respect to natural gas, one of the OEB's responsibilities is to approve pipeline construction. In all its activities, the primary objective of the OEB is to ensure that public interest is served and protected. With this objective in mind, the Guidelines prescribe methods for environmental analysis and reporting related to gas facilities that require Leave to construct Applications.

In particular, an ER is required to be prepared and distributed to the Ontario Pipeline Coordinating Committee (OPCC) for review and comment. The OPCC is a coordinating committee of inter-ministerial representatives that review natural gas projects in Ontario that require approval from the OEB. The OPCC may also request that the ER be distributed to other key stakeholders including adjacent landowners.

The applicant is expected to file the ER and OPCC's accompanying review along with any other additional supporting documentation that may be relevant to OEB as evidence in support of the Leave to construct Application. With this information in hand, the OEB makes their decision to approve or deny the applicant's Leave to construct Application.

1.2.2 Description of the Major Steps in Selecting a Preferred Route

The ten major steps or planning principles outlined in the Guidelines for selecting a Preferred Route were followed for the Project. The ten principles are listed as follows:



1.2.3 Preparation of the Project's Environmental Report

This ER has been structured to satisfy the content requirements of the Guidelines because of its importance as one of the key documents submitted as evidence to the OEB in support of the Leave to construct Application. With this in mind, the following briefly summarizes the contents of each of the sections included in the ER to aid in its review:

1. **Introduction:** introduces the applicant and consultant, describes the Preferred Route, provides an overview of the OEB's approvals process and major steps in the planning process, and summarizes the ER's contents.
2. **Identification, Evaluation, and Selection of the Preferred Route:** describes the planning process followed for identifying, assessing, and comparatively evaluating proposed alternate routes leading to the selection of a Preferred Route for the new gas pipeline. This included delineating the Study Area and describing its environment.
3. **Impact Assessment of the Preferred Route:** describes the construction and operation of the new gas pipeline along the Preferred Route and confirms the associated potential environmental effects, impact management measures, and the resultant net effects.
4. **Cumulative Effects Assessment of the Preferred Route:** outlines the cumulative impacts from the Project in conjunction with other on-going and planned projects in the Study Area as per the Guidelines.
5. **Implementation of the Proposed Project:** describes the commitments and monitoring associated with the construction and operation of the new gas pipeline along the Preferred Route, lists the approvals and permits that may be potentially required subject to OEB approval, and briefly summarizes the proposed schedule for implementing the new gas pipeline.
6. **Overview of the Consultation Process Carried Out:** lists participants involved in the Project (review agencies, Indigenous Communities, special interest groups and the public), how they were consulted; an overview of the input/comments/feedback received and how this input was considered as part of the Project.
7. **Summary:** provides a synopsis of the Project.
8. **References and Resources:** outlines the reference and resource materials used to prepare the ER.

1.2.4 Additional Regulatory Processes

The proposed works associated with the Project are not included under the Regulations Designated Physical Activities SOR/2012-147 (the Project is not greater than 40 km in length or regulated by the National Energy Board). As such, the *Canadian Environmental Assessment Act* (CEAA), 2012 does not apply. Furthermore, the Project is not located within any federally designated wildlife areas or migratory bird sanctuaries.

A number of municipal and provincial approvals and/or permits could be required in order to implement the Project. **Section 5.2** provides further detail on these.

2. IDENTIFICATION, EVALUATION AND SELECTION OF THE PREFERRED ROUTE

The ten planning principles outlined in the Guidelines were followed to select a Preferred Route for the Project. As a result, the Preferred Route was arrived at through a traceable, replicable, and rational process based on technically sound and consistently applied procedures that is easily understandable to all involved (i.e., Enbridge, affected parties, OEB).

2.1 Selection of the Proposed Pipeline Routes

As mentioned in **Section 1.2**, two routes were identified in the preliminary stages of the study for the Project. Given the rural and industrial setting of the area, the two routes were analyzed based on their feasibility to construct in relation to existing environment and infrastructure in the area. With this in mind, the routes identified were determined to be 'reasonable' for consideration in the study. As described in **Section 1.1**, both routes are composed of two sections of pipeline and a district station. The district station and Section 2 are the same for both routes (**Figure 1.1**).

2.2 Description of the Study Area

The Study Area was defined as encompassing a 100 m limit from the PPR and AR in all directions (**Figure 1.1**). This limit was selected to account for the area where potential temporary construction related effects may be reasonably expected to occur along the proposed alternate routes based on Enbridge's specific pipeline construction experience and GHD's infrastructure construction experience.

The environment associated with the Study Area is described based on existing information sources and supplemented with data from field investigations, where necessary. The description addresses the definition of the environment as per the *Environmental Assessment Act* as follows:

- **Natural Environment:** land, water, plant and animal life.
- **Built Environment:** any building or structure or thing made by humans.
- **Social Environment:** social conditions that influence the life of humans or a community.
- **Economic Environment:** economic conditions that influence the life of humans or a community.
- **Cultural Environment:** cultural conditions that influence the life of humans or a community.

As per the Guidelines, the environmental features and constraints associated with the Study Area in relation to the two reasonable proposed routes are mapped to a scale of 1:25,000 (**Figure 1.1**).

2.2.1 Natural Environment

The Project would be constructed primarily within a rural environment consisting of vacant, residential, or agricultural lands with a small area of commercial and industrial lands at the northern end of the route where the two new customers are located. Interspersed amongst these existing land uses is a number of natural environmental features.

GHD completed a desktop screening of natural environment conditions along the PPR and AR of the Project, to identify the potential presence of sensitive environmental features, as well as detail

potential impacts and mitigation. For the purposes of this review, the Study Area has been defined a 50 meter (m) buffer from either side of the alignment.

Based on the results of the Natural Environment Review, GHD identified the following environmental considerations along the PPR and AR:

- Natural habitats are present within the Study Area and likely provide habitat for a variety of wildlife species, including breeding birds, amphibians and reptiles, mammals, and fish.
- A variety of Species at Risk (SAR) may be found in wooded habitats, open habitats, and aquatic habitat throughout the Study Area. Barn Swallow may nest on human made structures, and SAR bats may roost on human made structures.
- Potential intersection/crossing of Significant Ecological Areas (SEAs), unevaluated wetlands and woodlands, including associated portions of the City of Ottawa's Natural Heritage System.
- Aquatic features such as creeks, rivers, and wetlands are regulated by the South Nation Conservation Authority.

Due to the presence of these features, there is the potential for negative impacts to the natural environment as a result of the proposed works. Appropriate mitigation measures must be adhered to in order to avoid or reduce impacts to natural features.

The full Natural Environment Review is included in **Appendix A**.

2.2.2 Built Environment

2.2.2.1 Potential Contaminant Sources

There are a number of potential environmental concerns representing an increased risk to the soil and groundwater quality along the two routes based on a review of historical land uses within the Study Area including:

- **Fuel Service Stations** – There are multiple properties along the two routes that are currently and were potentially historically utilized as gasoline service stations. These properties include 5336 Boundary Road, 5495 Boundary Road, 992 Burton Road, and 104 St. Guillaume Road. These properties likely contain(ed) fuel storage tanks. No information was available regarding potential spills or leaks from the fuel storage tanks; however, the potential for any releases from the tanks is identified as a potential environmental concern.
- **Auto Salvage Yard** – The property located at 5575 Boundary Road was historically utilized as an auto salvage yard, and a shallow ditch containing water surrounds the majority of the property. The historical utilization of this property as an automotive salvage yard, and the potential for any releases to reach surface water is identified as a potential environmental concern.
- **Waste Management Facility** – The property located at 211 Corduroy Road is currently in operation as a waste management facility and was potentially historically utilized as a waste management facility since at least 2017. No information was available regarding the types of waste stored or handled on the property, and the potential for any releases from the wastes stored on the property is identified as a potential environmental concern along the Alternate Route.

In light of the preceding, it is possible that potentially impacted fill material will be encountered at one or more locations along the two routes. The full Historical Records Review is included in **Appendix B**.

2.2.2.2 Underground Infrastructure

There is a variety of underground infrastructure within the Study Area supporting the residential and industrial land uses including water, sewage, and fibre-optic cables.

2.2.2.3 Transportation

There is no public transportation service provided along either of the two Alternate routes¹.

2.2.3 Social & Economic Environment

The Study Area includes the City of Ottawa's Ward 19 (south of Highway 417), the City of Ottawa's Ward 20 (borders the south-west portion of the Preliminary Preferred Route), Russell Township (north-west portion of the Study Area along Boundary Road), and

2.2.3.1 City of Ottawa (Ward 19 & Ward 20)

The City of Ottawa's Ward 19 – Cumberland and Ward 20 – Osgoode have similar socio-economic profiles. Ward 19 has a population of 43,375 with significant growth of 29.8% between 2006 and 2011 and Ward 20 has a population of 24,445 with an increased growth of 7.7%. In both Wards, the largest population segment is represented by those between the ages of 40-49 years old, representing 20% of the population.

The median household income for Ward 19 is \$104,228 and for Ward 20 is \$108,568.

In Ward 19 the main residential dwelling types are single-detached (65.4%) and row homes (27.3%), while Ward 20 is primarily single-detached (93.2%). Over half of Ward 19 (61.9%) and Ward 20 (57.8%) have achieved a postsecondary certificate, diploma, or degree.

With regards to the leading industry sectors of employment, Ward 19 is represented by retail (25.5%), construction (11.5%), and educational services (10.9%) while Ward 20 is represented by construction (31%), arts, entertainment, and recreation (10.6%), and transportation and warehousing (8.8%).

2.2.3.2 Russell Township

Russell Township has a population of 16,520 people with a substantial population growth of 8.3% between 2011 and 2016. The Township is comprised of two urban villages, Russell and Embrun, with a total population of 11,382 in the urban villages while the remaining 5,138 live in the rural setting surrounding the two villages.

A large portion of the population (67.7%) are of working-age with an anticipated 3,100 people expected to retire in the coming years. The median household income is \$105,488 per year and the majority of residents (58.3%) speak both official languages.

¹ City of Ottawa OC Transpo and Russell Public Transportation, October 2019

The most common type of dwelling is the single detached home (82.6%) with approximately 85% owned. A large portion (78%) of the population in the Township have attained an education level above High School with a split between college, university degree, certificate or apprenticeships. In 2016, the leading industry sectors of employment included public administration (22%), health care and social assistance (10%), construction (10%), and retail (9%) with over half of the residents living in Russell (68%) commuting to the City of Ottawa to get to work.

In terms of business composition, the Township is primarily comprised of construction (235 businesses), real estate (186 businesses), professional, scientific and technical services (169 businesses), and agricultural, forestry, fishing and hunting (130 businesses). In addition, approximately two-thirds of businesses do not have any employees demonstrating the prevalence of small size companies, including the identified independent farms within the Study Area. Finally, the 417 Industrial Park, located at the beginning of Alternate Route at Burton Road and St. Guillaume Road, is a strategic economic priority for the Township to attract new businesses.

Lastly, along the two proposed alternate routes, there are no schools, libraries, places of worship, cemeteries, or community centres. There is also no new residential developments planned, approved, and/or underway within the Study Area.

2.2.3.3 Algonquins of Ontario

The Study Area is within the current Algonquins of Ontario (AOO) land claim for their unceded traditional territory. In 2016, an agreement in principle was ratified, including a transfer of \$300-million to the AOO and approximately 48,000 hectares to Algonquin ownership². Part of the AOO Final Agreement will include settlement lands to be transferred in fee simple to one or more of the Algonquin Institutions. At this time, there are two parcels of land adjacent to Boundary Road in the Study Area, slated to be transferred to the Algonquins of Ontario.

2.2.4 Cultural Environment

2.2.4.1 Archaeology

Although there are no previously registered archaeological sites located within one kilometre of the Study Area, parts of the Study Area, including the area where the district station will be located, exhibit archaeological potential and if impacted, will require Stage 2 assessment prior to any proposed construction activities based on a Stage 1 Archaeological Assessment carried out as part of the Project (**Appendix C**).

The Stage 1 Archaeological Assessment will be submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) in winter 2020.

2.2.4.2 Built Heritage

There are no properties within the Study Area that are Listed or Designated under the Ontario Heritage Act³ based on reviewing the City of Ottawa Heritage Register and the Russell Township website. In addition, there are no cemeteries located in the Study Area. Notwithstanding this, a Criteria for Evaluating Potential Built Heritage Resources and Cultural Heritage Landscapes from

² ASI Stage 1 Archaeological Assessment, December 2019

³ ASI Stage 1 Archaeological Assessment, December 2019

the MHTCSI was completed which confirms that there is low potential for built heritage or cultural heritage landscape in the Study Area (**Appendix D**).

2.3 Route Assessment

The PPR and AR were assessed prior to comparatively evaluating them in order to identify a recommended route (the Preferred Route). The assessment was based on a net effects analysis. A net effects analysis is composed of the following activities reflecting the process outlined in the Ministry of the Environment, Conservation, and Parks Codes of Practice – Preparing and Reviewing Environmental Assessments in Ontario (MECP, 2014) and the Guidelines:

1. Identify potential effects on the environment (both positive and negative).
2. Develop appropriate impact management measures.
3. Apply the impact management measures to the identified potential environmental effects to identify net effects on the environment (both positive and negative).

Both routes are composed of two separate sections of pipeline and a district station. The district station and Section 2 are the same for both routes; and therefore, the net effects for the district station and Section 2 of the pipeline will be the same for both routes options.

2.3.1 Development of the Evaluation Criteria

In order to identify the potential effects of the proposed alternate routes on the environment in a traceable, logical, understandable, and reproducible manner, evaluation criteria were first developed. With this in mind, the evaluation criteria were developed based on the Study Area’s environmental conditions, the alternate two routes being considered, and type and scale of potential environmental effects anticipated from both alternate routes and their relative significance.

The developed evaluation criteria were linked to each aspect of the environment as defined in the Guidelines because the description of the effects of each route on the environment is required by the EA process. As a result, four categories of criteria were developed (**Table 2.2**).

Table 2.1 Evaluation Criteria & Indicators

Category ⁴	Evaluation Criteria	Indicators
Natural Environment	<ul style="list-style-type: none"> ▪ Effect on surface water 	<ul style="list-style-type: none"> ▪ Temporary change in surface water quality
	<ul style="list-style-type: none"> ▪ Effect fisheries and aquatic habitat 	<ul style="list-style-type: none"> ▪ Temporary or permanent loss of aquatic features or categorical loss of functions by type – including Provincially Significant Wetland, Locally Significant Wetland, watercourses, and others ▪ Aquatic communities including aquatic Species at Risk (species of special concern, threatened, endangered) species of local concern potentially affected temporarily or permanently
	<ul style="list-style-type: none"> ▪ Effect on wildlife and terrestrial habitat 	<ul style="list-style-type: none"> ▪ Temporary or permanent loss of roadside vegetation including wooded areas, wetlands, and SEAs along the routes ▪ Terrestrial species, including Species at Risk, (species of special concern, threatened, endangered) species of local

⁴ Technical Feasibility and Economic Environment categories were determined to be not applicable to the Net Effects and Comparative Evaluation process because there would be either no potential effect or discernible differences between the alternatives

Category ⁴	Evaluation Criteria	Indicators
		concern, spread of invasive species, and area sensitive species potentially affected temporarily and/or permanently
Built Environment	<ul style="list-style-type: none"> Effect on existing residences, businesses, and/or agricultural uses (farms) 	<ul style="list-style-type: none"> Number of residences, businesses and/or agricultural uses temporarily disrupted
	<ul style="list-style-type: none"> Effect of impacted soil and/or groundwater on the proposed gas pipeline 	<ul style="list-style-type: none"> Presence of impacted soil and/or groundwater along route
	<ul style="list-style-type: none"> Effect on existing roadway infrastructure 	<ul style="list-style-type: none"> Number and type of roads affected and extent and duration of adverse effects
	<ul style="list-style-type: none"> Effect of vibration on existing buildings 	<ul style="list-style-type: none"> Number of existing buildings affected and extent and duration of adverse effects
Social Environment	<ul style="list-style-type: none"> Effect on traffic and road safety 	<ul style="list-style-type: none"> Temporary and/or permanent disruption to traffic operations
	<ul style="list-style-type: none"> Effect of noise on sensitive receptors 	<ul style="list-style-type: none"> Approximate number of sensitive receptors affected and extent and duration of adverse effects
	<ul style="list-style-type: none"> Effect of perceptible vibration levels on sensitive receptors 	<ul style="list-style-type: none"> Approximate number of sensitive receptors affected and extent and duration of adverse effects
	<ul style="list-style-type: none"> Effect of particulate on sensitive receptors 	<ul style="list-style-type: none"> Approximate number of sensitive receptors affected and extent and duration of adverse effects
Cultural Environment	<ul style="list-style-type: none"> Effect on archaeological potential 	<ul style="list-style-type: none"> Loss of potential archaeological resources with value or interest

2.3.2 Application of the Net Effects Analysis

With the evaluation criteria developed, the three activities associated with the net effects analysis were carried out for both routes.

Identify Potential Effects on the Environment

The potential effects on the environment (both positive and negative) were identified for the two pipeline routes by applying the developed evaluation criteria and indicators to each of them. The identified potential effects were then documented in the “Potential Effects” column of the net effects analysis tables for each route (**Appendix E**).

Develop and Apply Impact Management Measures

Impact management measures were developed, where possible and as required, and applied to prevent/minimize/off-set potential negative environmental effects for each pipeline route. More specifically, the intent of the impact management measures is as follows:

Avoidance: The first priority is to prevent the occurrence of negative effects (adverse environmental effects) associated with both alternate routes.

Mitigation: Where adverse environmental effects cannot be avoided, appropriate measures to remove or alleviate, to some degree, the negative effects associated with implementing each route were sought.

Compensation: In situations where appropriate mitigation measures were not available, or significant net adverse effects would remain following the application of mitigation, compensation measures may be required to counterbalance the negative effects through replacement in kind, substitution, reimbursement, or other agreed compensation.

The impact management measures were developed based on professional expertise of the Project Team reflecting on current procedures, historical performance, and existing environmental conditions. These measures were documented in the “Impact Management Measures” column of the net effects analysis tables for both alternate routes (**Appendix E**).

Determine Net Effects on the Environment

Once the appropriate impact management measures were developed and applied to the potential environmental effects of each alternate pipeline routes, the remaining net effect(s) were determined and documented in the “Net Effects” column of the net effects analysis tables for each route (**Appendix E**). In cases where the net effect could not be improved through the application of impact management measure(s), the potential net effect remained unchanged. Therefore, it will still be identified as the “net effect”.

As referenced, **Appendix E** provides the completed net effects analysis for the two proposed pipeline routes.

2.4 Comparative Evaluation

Next, the two pipeline routes were comparatively evaluated using the Reasoned Argument or “Trade-off” approach based on the results of the net effects analysis (**Figure 2.1**).

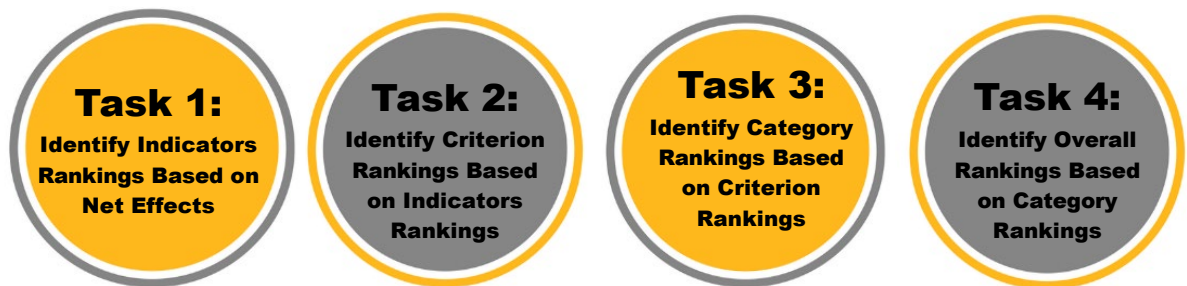


Figure 2.1 Reasoned Argument Approach

Task 1: Identify Indicator Rankings Based on Net Effects

First, the net effects identified for each pipeline route by indicator were compared to one another to identify an indicator ranking (i.e., First or Second). If the corresponding net effects of an indicator were the same for the two routes, then both were ranked equally and the word “tied” was added to the indicator ranking (i.e., First (Tied)).

Task 2: Identify Criterion Rankings Based on Indicator Rankings

In Task 2, the indicator rankings identified through the first task were considered collectively to assign a ranking by evaluation criterion. The following criterion rankings were utilized based on the indicator rankings associated with each route:

- **More Preferred** – assigned to the route having the most top placed indicator rankings (e.g., First rankings) amongst the two routes being considered.
- **Less Preferred** – assigned to the route having the fewest top placed indicator rankings amongst the two routes being considered.

When corresponding criterion rankings were the same for the two routes, then those routes were ranked equally and the word “tied” was added to the criterion ranking (i.e., More Preferred (Tied), Less Preferred (Tied)). A rationale for the rankings by criterion is provided within the Net Effects and Comparative Evaluation Table (**Appendix E**).

Task 3: Identify Category Rankings Based on Criterion Rankings

In Task 3, the criterion rankings identified through the preceding task were considered collectively to assign a ranking (i.e., Most Preferred or Less Preferred (includes Ties)) by individual category (i.e., Natural Environment, Built Environment, Social Environment, Cultural Environment, and Financial).

The assignment of a ranking was based on the number of evaluation criteria associated with a particular category. For example, in the situations where a category only has one evaluation criterion associated with it (i.e., Cultural), then the same ranking for that evaluation criterion was assigned to the category. In other words, the rankings for both the evaluation criterion and associated category was the same.

In the situations where a category has more than one evaluation criterion, then all of the evaluation criterion rankings were considered collectively to identify a ranking for the category. For example, in the case of the Built Environment Category, rankings assigned for all five Built Environment evaluation criteria were considered collectively in determining the rankings for the Built Environment Category. A rationale for the rankings by category is provided in the Net Effects and Comparative Evaluation Table (**Appendix E**).

Task 4: Identify Overall Proposed Routes Rankings Based on Category Rankings

Following the identification of category rankings, an overall ranking for each alternate route was determined. With this in mind, the following overall rankings were utilized based on the category rankings associated with each route:

- **Recommended** – assigned to the alternate route with the greatest number of top placed category rankings (e.g., greater number of “More Preferred” rankings) among the two routes considered, thus providing the highest number of advantages and the least number of disadvantages overall.
- **Not Recommended** – assigned to the alternate route having fewer number of top placed category rankings among the two routes considered, thus providing a higher number of disadvantages and lower number of advantages overall.

The results of applying the preceding comparative evaluation approach are documented in **Appendix E**.

2.5 Selection of the Preferred Route

The PPR was recommended as the Preferred Route based on the comparative evaluation process carried out. Overall, it had the greatest number of top placed category rankings (e.g., greater number of “More Preferred” rankings) compared to the AR (**Table 2.2**). As a result, it provided the highest number of advantages and the least number of disadvantages overall.

In particular, the PPR is more advantageous to the AR from a Built Environment perspective because there are fewer disruptions to existing residences and businesses as well as has fewer historical areas of potential contaminant concerns.

Table 2.2 Comparative Evaluation Rankings of the Alternate Routes

Category	Evaluation Criteria	Preliminary Preferred Route	Alternate Route
Natural Environment	Effect on surface water	More Preferred	Less Preferred
	Effect on fisheries and aquatic habitat		
	Effect on wildlife and terrestrial habitat		
Built Environment	Effect on existing residences, businesses, and/or community, institutional, and recreational facilities	More Preferred	Less Preferred
	Effect of impacted soil and/or groundwater on the proposed gas pipeline		
	Effect on existing roadway infrastructure		
	Effect of vibration on existing buildings		
Social Environment	Effect on traffic and road safety	Less Preferred	More Preferred
	Effect of noise on sensitive receptors		
	Effect of perceptible vibration levels on sensitive receptors		
	Effect of particulate on sensitive receptors		
Cultural Environment	Effect on areas of archaeological resources	More Preferred (Tied)	More Preferred (Tied)
Overall Ranking		More Preferred	Less Preferred

2.6 Engagement and Consultation on the Preliminary Preferred Route & Alternate Route

The PPR and AR were presented to Indigenous communities, the public and other stakeholders through engagement and consultation activities to obtain their feedback. Specifically, review agencies, Indigenous Communities, the public, and other interested stakeholders were informed of both the PPR and AR through public notices, letters, individual meetings, and a Public Open House.

With regards to the Public Open House, both proposed routes were presented on display boards and large printed maps, both static and aerial, with sticky notes available to facilitate discussions around both routes. The maps provided attendees the opportunity to examine the routes closely

and identify landmarks for the two proposed routes. In general, support for the selection of the PPR was well-received from those who were consulted.

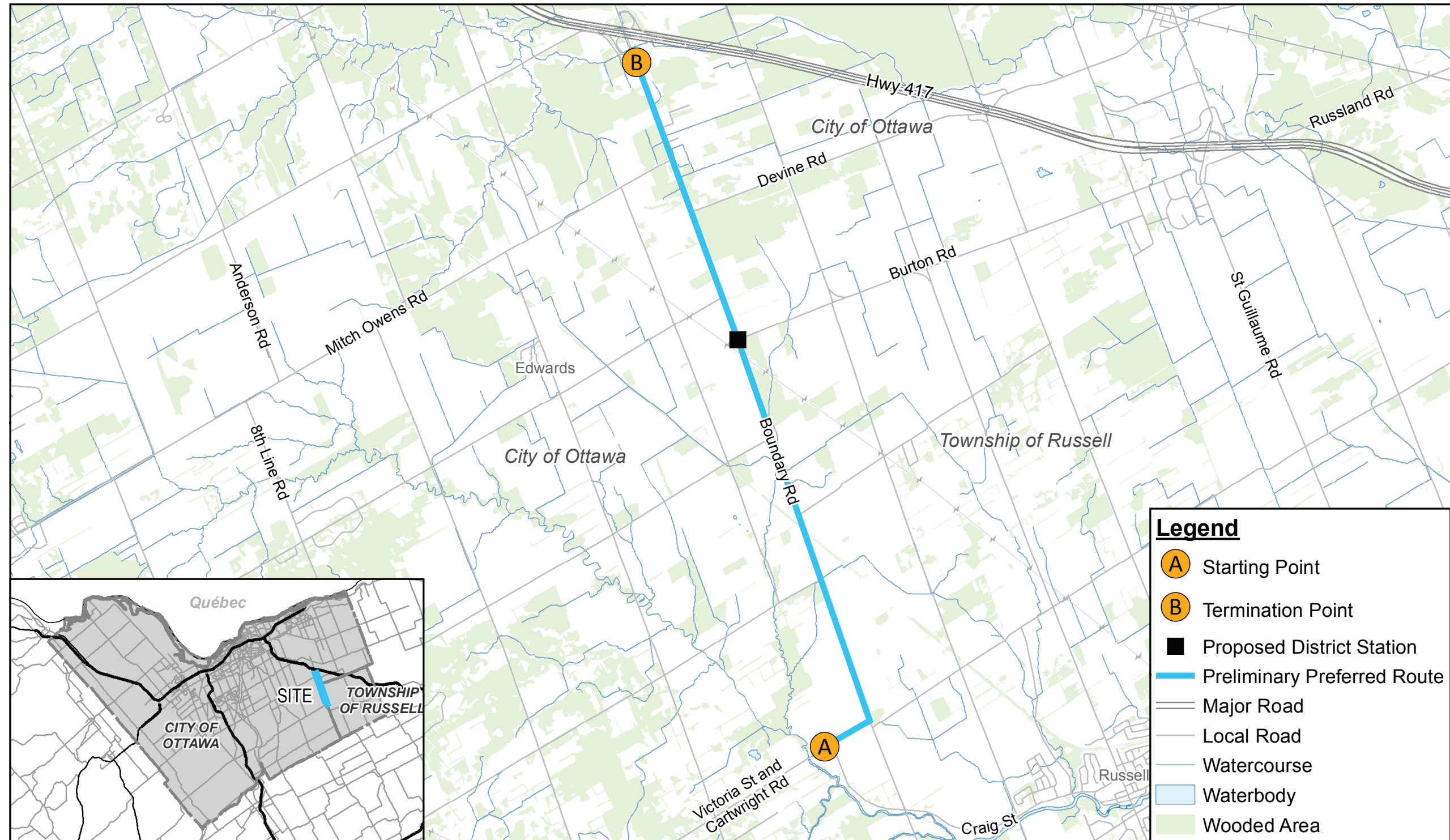
Attendees indicated that Boundary Road was a long and strait road that could handle construction impacts and was less populated. No major concerns were raised, however a resident did seek more information on construction sequencing since Boundary Road is a main connector between the surrounding rural communities. Once sequencing was explained, this mitigated any further concern.

Another discussion with a 2-3 residents who lived along the AR indicated that the elevation of the AR route was more varied, and the PPR would likely be the more appropriate choice.

Section 6.0 fully describes the engagement and consultation process carried out as part of the Project including all comments received and how they were specifically considered in the confirmation of the Preferred Route.

2.7 Confirmation of the Preferred Route

As a result of the comparative evaluation completed for the two proposed routes and the responses from the various engagement activities undertaken with the public, government agencies, and Indigenous communities, the PPR was confirmed as the pipeline route for the Project (**Figure 2.2**).



Source: ESRI World Light Gray Canvas Basemap, Accessed 2019; Source: MNRF NRVIS, 2018. Produced by GHD under licence from Ontario Ministry of Natural Resources and Forestry, © Queen's Printer 2020.



ENBRIDGE GAS INC.
 PROPOSED BOUNDARY ROAD PIPELINE PROJECT
 PREFERRED ROUTE

11157080
 Jan 15, 2020

FIGURE 2.2

3. IMPACT ASSESSMENT OF THE PREFERRED ROUTE

Following confirmation of the Preferred Route, an impact assessment associated with the construction and operation of the Project was carried out so that the following could be accomplished as per the Guidelines:

- Potential environmental effects can be identified with more certainty.
- More site-specific impact assessment measures can be developed.
- Net environmental effects can be identified with more certainty.
- Appropriate monitoring requirements can be clearly defined.
- Specific approval/permitting requirements for the Project can be identified.

3.1 Detailed Description of the Project

The Project consists of two sections having a total length of 10.1 km and a district station (**Figure 1.1**). Section 1 will begin at Victoria Street and Cartwright Road where it will tie in to Enbridge's existing pipeline. The 4-inch steel pipe will extend eastwards along Cartwright Road to the intersection of Boundary Road, where it will veer north and continue along Boundary Road for 6.2 km, concluding at the corner of Burton Road where a district station will be installed.

At the district station, Section 2 will begin and will consist of 3.9 km of 4-inch polyethylene pipe that will continue north along Boundary Road to the new customers' property just south of Highway 417. The new pipeline will deliver essential natural gas to two new customers, as well as future development in the area.

3.2 Construction and Operation of the Project

Construction of the Project is presently anticipated to begin in spring 2021 pending required approvals and is assumed to take approximately four to six months to complete. The pipeline construction process includes a number of steps (**Figure 3.1**) for typical construction sequence. The construction process will consider potential environmental impacts and will be completed in accordance with the latest Enbridge Construction and Maintenance Manual.

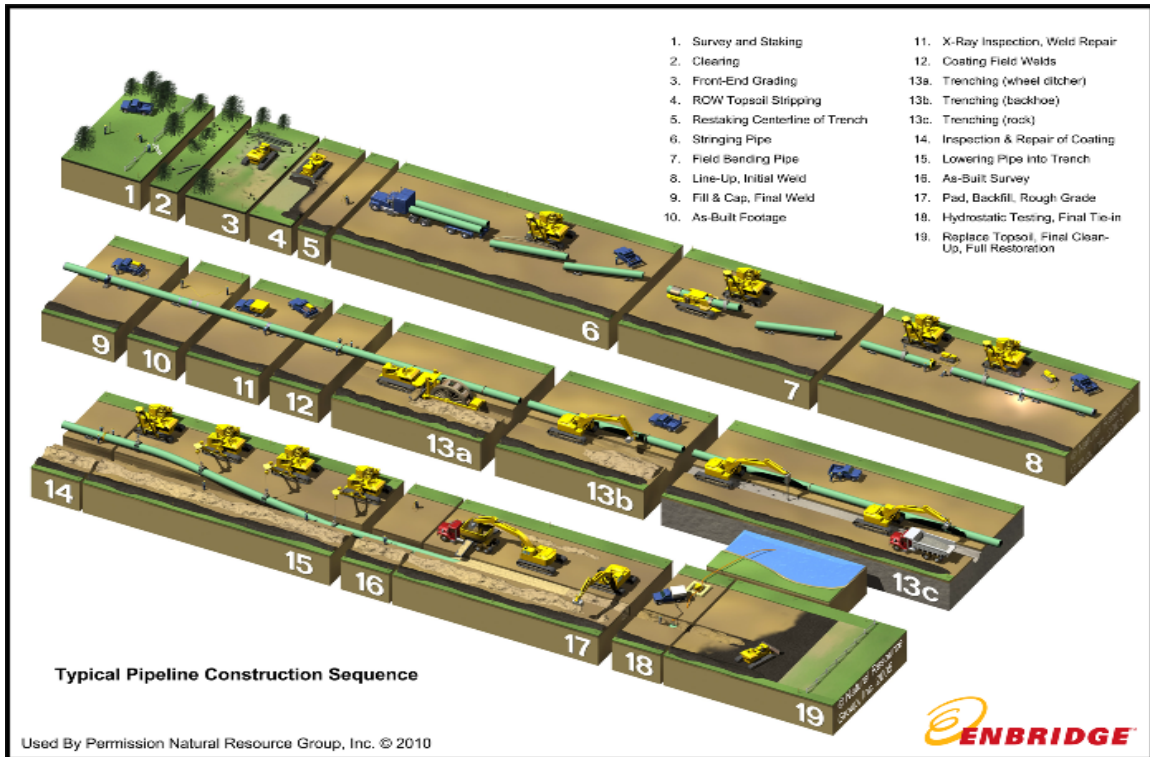


Figure 3.1 Typical Pipeline Construction Sequence

- **Site Preparation:** Before the work starts, a walk-through/survey of the construction area is completed by the crew including outlining the boundaries for construction, installing exclusionary fences and signage as required, identifying key elements such as where the utilities are located and clearing of any vegetation or debris.
- **Pipe Delivery:** Pipes are delivered in sections and site construction crews are responsible for stringing sections together along the trench-line.
- **Joining Pipes:** Steel pipes are assembled by welding and polyethylene pipes are assembled by fusion. The joints are tested to ensure reliability.
- **Test Holes:** Test holes are used during pre-construction to identify existing utilities along the road right-of-way.
- **Trenching:** Construction equipment is used to dig trenches along pipeline route in preparation for pipe installation. Safety barriers are installed around open trench and landowners affected are properly notified in advance. During construction, the amount of open trench is kept to a minimum to ensure safety.
- **Trenchless:** The horizontal directional drilling or boring may be used to cross under watercourses or other pipelines and environmentally sensitive features.
- **Pipe Lowering:** The crew must exercise care and ensure no obstruction when lowering pipe into trench. All water must be removed from the trench before lowering-in the pipe. Cranes/backhoes are used to lower the pipe into the trench.
- **Backfilling:** The process of backfilling must be undertaken in a manner that ensures erosion and/or water ponding will not occur along the trench. Backfill must always be compacted to eliminate the potential for erosion but is a special concern near watercourses. Backfilling a

trench is completed as quickly as possible and restoration is initiated as soon as backfill and compaction have been completed.

- **Testing:** the new pipeline will be pressure tested. This involves first sealing the line then filling it with water, nitrogen or air at a pressure higher than actual operating pressures. Pressure testing checks for leaks and confirms pipeline strength.
- **Clean up:** The construction area is cleaned once the pipeline is completely installed and backfill is complete. The construction crew is responsible for returning the site back to its original state. All surplus excavated material, grading backfill, other construction material and any debris must be removed and properly disposed of.

Safety to the public and of the construction crew on site is a top priority for Enbridge. To ensure the safe construction and operation of the Project, Enbridge is committed to including safety in the processes and in worker training. Routine maintenance across the pipeline system will be performed.

Once the construction of the new gas pipeline is complete, Enbridge will be responsible for routine inspections and maintenance of the pipeline as required. Enbridge will ensure compliance with all applicable municipal and provincial legislation and regulations during operation based on their extensive company experience and in accordance with the effective Enbridge Construction and Maintenance Manual.

3.3 Confirmation of Environmental Impacts and Impact Management Measures

The identified net effects and impact management measures associated with the Preferred Route were confirmed based on the proposed construction methodology and operation of the new gas pipeline and taking into account stakeholder comments received (see **Appendix E - Net Effects Analysis Table**).

4. CUMULATIVE EFFECTS ASSESSMENT OF THE PREFERRED ROUTE

The assessment of Cumulative Effects is considered to be a “Best Practice” and is viewed as an integral part of the environmental assessment within the OEB Guidelines for pipeline construction. Cumulative environmental effects are defined as effects that are likely to result from the project in combination with other projects or activities that have been or will be carried out.

Building upon the cumulative effects assessment (CEA) expectations within the Guidelines, the OEB has specified that only those effects that are additive or that interact with other existing or planned projects are to be considered under cumulative effects. This assessment has been prepared with consideration of this direction from the OEB.

4.1 Approach

This assessment describes the potential cumulative effects resulting from the interaction of residual effects of construction and operation with the effects of other unrelated projects. The other projects assessed are those that are either existing or approved and that have a high likelihood of proceeding.

Cumulative effects provides an analysis on environmental effects from existing and future activities that interact and combine with one another over a temporal and spatial basis. Change can occur in an additive (i.e., cumulative) or interactive (i.e., synergistic) manner.

The CEA methodology is designed to evaluate and manage the additive and interactive effects from:

- Existing infrastructure, facilities, and activities (current).
- Proposed projects (proposed).
- Future planned projects (future).

Information was collected on current and future planned projects in the Study Area through a review of the City of Ottawa, Russell Township, and the United Counties of Prescott & Russell Planning & Economic Development Departments, official plans, development applications interactive mapping, as well as through Indigenous, agency and stakeholder consultation.

The results of the cumulative effects assessment is documented in **Table 4.1** and includes the summary of causes of cumulative effects, a cumulative effects description, recommended mitigation measures, all residual effects and approaches to deal with residual effects.

4.2 Study Area Delineation

The first step in assessing cumulative effects is to define appropriate Study Area boundaries. As per the Guidelines on the expected approach to cumulative effects assessment, the Study Areas should include both spatial and temporal boundaries and ensure that the additive and interactive (or magnifying effects) can be analyzed.

Spatial

The spatial study boundaries discussed in this ER were contained within the Study Area. These boundaries are considered to be appropriate when considering the surrounding land uses and the limited length of the proposed pipeline. The cumulative effects assessment used the same boundaries to identify potential effects from the Project.

The Study Area for the cumulative effects is beyond any zone of influence for construction related effects in relation to the Project itself (e.g., dust and noise), which will mitigate or minimize the identified effects at the edges of the Study Area. The Study Area is also considered conservative in terms of managing both effects and risks in that it takes into account all of those features and areas that could be affected by the construction.

Temporal

The temporal boundaries for the cumulative effects assessment reflect the nature and timing of Project activities, and the availability of information for proposed and planned future projects. The Project schedule identifies the following key milestone activities:

- Construction – Spring 2021 (duration anticipated is 4-6 months).
- Operation and Maintenance – Fall 2021 onwards.

Based on the preceding milestone activities, two timing periods were selected for evaluation: spring 2021 to represent construction and fall 2021 for operation and maintenance, which would be consistent year over year. Forecasting beyond 2023 increases the uncertainty in predicting whether projects will proceed (based on the review of future planned projects in the Study Area identified in **Section 4.3**) and the effects associated with these projects.

4.3 Current and Planned Projects in the Study Area

Table 4.1 Current and Planned Projects

Existing and Future Projects	Description of Activities
City of Ottawa	<ul style="list-style-type: none"> ▪ Planned culvert renewal projects within 1-3 years: <ul style="list-style-type: none"> ○ Cooper Hill Road & Blackcreek Road (east of Boundary Road) ○ Boundary Road (due south of Burton Road) ▪ Planned road resurfacing project within 2-5 years: <ul style="list-style-type: none"> ○ Boundary Road
Russell Township	<ul style="list-style-type: none"> ▪ N/A
Algonquins of Ontario	<ul style="list-style-type: none"> ▪ Planned transfer of two parcels of land in fee simple to the Algonquins of Ontario, as a part of the comprehensive land claim final agreement.
Capital Region Resource Recovery Centre	<ul style="list-style-type: none"> ▪ The Environmental Compliance Approval (ECA) was signed by the Ministry of the Environment, Conservation, and Parks (MECP) in December 2019; however a detailed construction schedule has not been made available.
Proposed Warehouse	<ul style="list-style-type: none"> ▪ 53,712 square ft. warehouse south of Highway 417 on Boundary Road in close proximity to the Capital Region Resource Recovery Centre ▪ 52 parking spaces

4.4 Analysis of Cumulative Effects

Sections 2.1 to 2.5 and Appendix E – Net Effects Analysis of the ER consider the potential effects of the Project on specific features and conditions, and propose mitigation and protective measures to eliminate or reduce the potential effects. The cumulative effects assessment evaluates the significance of residual effects (after mitigation) of the Project, along with the effects of other existing and future planned projects.

The following criteria were defined in relation to assessing the significance of the residual adverse effects from the ER:

- **Magnitude:** The size or degree of the effects compared against baseline conditions or reference levels, and other applicable measurement parameters (i.e., standards, guidelines, objectives).
- **Extent:** The geographic area over or throughout which the effects are likely to be measurable.
- **Duration:** The time period over which the effects are likely to last.
- **Frequency:** The rate of recurrence of the effects (or conditions causing the effect).
- **Permanence:** The degree to which the effects can or will be reversed (typically measured by the time it will take to restore the environmental attribute or feature).

Table 4.2 provides the framework that was used to assess the degree of residual adverse effects. This framework includes the assessment criteria and definitions for three degrees of residual effects - low, medium and high. The determination of the degree of residual effects is framed to generally reflect provincial regulatory and industry standards and guidelines to the extent possible.

Table 4.2 Significance Assessment Framework

Significance Assessment Criteria	Significance Level		
	Low	Medium	High
Magnitude of Effect	Project-specific and/or cumulative effects may be noticeable and/or measurable, but are not likely to exceed a reference criterion or guideline value.	Project-specific and/or cumulative effects are likely to be noticeable and measurable, representing a small change relative to existing condition. Adverse effects may exceed a reference criterion or guideline value on occasion and/or at an individual location.	Project-specific and/or cumulative effects are likely to be noticeable and measurable, representing large measurable changes relative to existing conditions. Adverse effects caused by the Project are likely to result in the exceedance of a reference criterion or guideline on an ongoing basis across the Study Area.
Extent of Effect	Project-specific and/or cumulative effects are likely to be measurable within an area immediately surrounding the Enbridge work.	Project-specific and/or cumulative effects are likely to be noticeable and/or measurable within the wider Study Area	Project specific and/or cumulative effects are likely to be noticeable or measurable within the Study Area. Adverse effects will be experienced beyond the Study Area.
Duration/Timing (of effect)	Project-specific and/or cumulative effects result from short-term events, are considered to be short-term disturbances or losses limited to within the construction timelines	Project-specific and/or cumulative effects are ongoing effects related to the construction and operation/maintenance phases.	Project-specific and/or cumulative effects are ongoing effects that are likely to persist beyond the construction and/or operation/ maintenance phases and their effects are not readily reversible despite the implementation of mitigation measures.
Frequency (or probability)	Project-specific effects occur infrequently or are effectively one-time events during the project phase in which they occur.	Project-specific effects occur at regular but infrequent intervals during the project phase in which they occur.	Project-specific effects occur at regular and frequent intervals, or are ongoing conditions during the project phase in which they occur.
Permanence (of effect)	Measurable or noticeable project-specific and/or cumulative effects are not likely to persist over the planning horizon. Project-specific mitigation and/or compensation measures and potentially those of other projects and activities will ensure that long term cumulative effects attributable to the Project are not measurable.	Measurable or noticeable project-specific and/or cumulative effects are likely to persist for some time over the planning horizon. Adverse regional trends and cumulative effects attributable to the Project are potentially reversible.	Project-specific and/or cumulative effects are not readily reversible despite the implementation of mitigation and/or compensation measures. Adverse regional trends and cumulative effects attributable to the Project are likely to persist.

Based on the application of this framework, an effect could be categorized as negligible, minor, moderate or significant, according to the following definitions:

- a) **Negligible Effect (Not Significant)** are those environmental effects which, after taking into consideration applicable mitigation measures have been assessed to have a “low” level of significance for the majority of the significance criteria described above; or having a “low” or “medium” level of significance for the majority of the criteria with “low” permanence.
- b) **Minor Adverse Effects (Not Significant)** are those environmental effects which, after taking into consideration mitigation measures, have been assessed to have a “low” or “medium” level of significance for the majority of the criteria described above.
- c) **Moderate Adverse Effects (Not Significant)** are those environmental effects which, after taking into consideration mitigation measures, have been assessed to have a “medium” level of significance for the majority of the criteria described above or having a “low” or “medium” level of significance for the majority of the criteria with “high” permanence.
- d) **Significant Adverse Effects** are those environmental effects which, after taking into consideration mitigation measures, have a magnitude that has a “high” magnitude, “high” extent and “high” duration.

From a temporal perspective, the current and ongoing projects listed in **Section 4.3** largely have a high probability of proceeding just after or concurrent with Project construction (spring 2021 for a 4-6 month duration).

From a temporal and spatial/physical overlap, consultation will continue with City of Ottawa, the Algonquins of Ontario, and Russell Township staff and other utilities that intersect with the proposed pipeline to identify other additional unrelated projects that may occur concurrently with the proposed pipeline operation.

Based on the type of activities and the overlap, implementation of the proposed mitigation measures ensures that adverse cumulative effects will be of low probability and magnitude, short duration, and reversible.

There is the potential that cumulative effects may occur for residual impacts as outlined in the ER related to accidental spills, erosion and sediment control, and residents.

Enbridge will continue engagement and consultation with Indigenous communities, municipal staff, development groups and other utilities as appropriate, to determine the nature of activities that may lead to cumulative effects and coordinate plans to reduce resultant effects. Provided that operational and maintenance activities implement similar mitigation and protective measures as those recommended for pipeline construction, including for accidental spills, erosion and sediment control, noise, dust, air quality, and site access, adverse cumulative effects will be of low probability and magnitude, short duration, and reversible.

Therefore, adverse residual cumulative effects, if present, are not anticipated to be significant.

4.5 Summary

Based on the implementation of mitigation measures proposed for the Enbridge Boundary Road Pipeline Project, the determination of significance of effects and the context of this Project in conjunction with other existing and planned future projects in the area, the Project is not likely to cause significant adverse cumulative environmental effects.

5. IMPLEMENTATION OF THE PROPOSED PROJECT

Subject to OEB granting Leave to construct, Enbridge is planning to implement the proposed Project through the following major steps:

- Detailed Design and Permits.
- Tendering and Construction.
- Operation.

5.1 Commitments and Monitoring

In conjunction with carrying out the preceding steps, Enbridge is also proposing to implement the commitments made during the Project (i.e., mitigation/compensation measures, monitoring, permits and approvals, future consultation, etc.) as well as any conditions of approval imposed by the OEB. With this in mind, a monitoring framework was developed for the proposed Project that addresses both environmental effects monitoring and compliance monitoring.

The purpose of environmental effects monitoring is to monitor the net effects associated with the construction and operation of the Project, and as necessary, implement further mitigation measures, monitoring and contingency plans, where possible, so that:

- Predicted net negative effects are not more than anticipated.
- Unanticipated negative effects are addressed.
- Predicted benefits are realized.

The purpose of compliance monitoring is to ensure that the Project has been constructed, implemented, and/or operated in accordance with the commitments made by Enbridge during the Project as well as any conditions of approval imposed by the OEB. Based on public input received, Enbridge commits to notifying residents along the PPR ahead of construction.

5.1.1 Environmental Effects Monitoring

Table 5.1 outlines the environmental effects monitoring associated with the new natural gas pipeline along the Preferred Route based on the mitigation and compensation measures described in **Section 3.0**. In particular, **Table 5.1** lists the environmental effects monitoring by net effect within each Environment Category (i.e., Natural Environment, Built Environment, Social Environment, etc.) and includes the anticipated timing of the monitoring (i.e., pre-construction, construction, post-construction).

Table 5.1 Summary of Environmental Effects Monitoring

Category	Net Effect	Environmental Effect Monitoring	Timing of Monitoring
Natural Environment	<ul style="list-style-type: none"> The temporary decrease in surface water quality of nearby water features due to increased sediment in surface water runoff and unintentional release of deleterious substances during construction of the proposed natural gas pipeline. 	<ul style="list-style-type: none"> Daily construction phase monitoring during construction near sensitive features to ensure adequacy and efficacy of Erosion and Sediment Control measures. Construction phase surface water monitoring program will be developed during detailed design, with the purpose of ensuring mitigation measures are effective and adequate. 	During construction, post-construction
	<ul style="list-style-type: none"> The temporary loss of aquatic features (wetlands, watercourses, etc.) would be minimized by implementing impact management measures and will be fully restored once the works are completed. 	<ul style="list-style-type: none"> Daily construction phase monitoring during construction near sensitive features to ensure adequacy and efficacy of Erosion and Sediment Control measures. Construction phase surface water monitoring program will be developed during detailed design, with the purpose of ensuring mitigation measures are effective and adequate. 	During construction, post-construction
	<ul style="list-style-type: none"> The temporary loss of aquatic communities (species at risk) would be minimized by implementing impact management measures and will be fully restored once the works are completed. 	<ul style="list-style-type: none"> Daily construction phase monitoring during construction near sensitive features to ensure adequacy and efficacy of Erosion and Sediment Control measures. Construction phase surface water monitoring program will be developed during detailed design, with the purpose of ensuring mitigation measures are effective and adequate. 	During construction, post-construction
	<ul style="list-style-type: none"> The temporary disturbance/loss of roadside vegetation, including increased susceptibility to invasive species, in the work site area during construction will be minimized by implementing the impact management measures. 	<ul style="list-style-type: none"> Undertake monitoring and maintenance of tree protection fencing during construction, throughout duration of works. 	Pre-construction, during construction, post-construction
	<ul style="list-style-type: none"> Temporary disruption to driveways/entrances along construction would be minimized by providing temporary access to affected residents/businesses and notify residents/businesses in advance of construction. 	<ul style="list-style-type: none"> No specific monitoring program is proposed. 	N/A
	<ul style="list-style-type: none"> Temporary potential adverse impacts to soil and/or groundwater would be minimized through the application of impact management measures. All temporarily affected roads would be restored to pre-construction conditions. Temporary increase in vibration levels will be minimized through implementation of impact management measures. 	<ul style="list-style-type: none"> Undertake handling and disposal of contaminated soil if encountered as outlined in Enbridge's Suspect Soil Program and in accordance with regulations. Undertake visual pavement settlement monitoring during construction of the new gas pipeline under the travelled portion of the affected roads. Undertake reactive vibration monitoring if warranted 	During construction, post-construction Pre-construction, during construction, post-construction Construction

Category	Net Effect	Environmental Effect Monitoring	Timing of Monitoring
Social Environment	<ul style="list-style-type: none"> ▪ The temporary disruption of traffic operations along the Preferred Route during construction would be minimized by implementing a Traffic Management Plan ensuring the safety of all road users as well as the workers. ▪ Short-term construction related noise, dust, and vibration effects would be minimized by the development and implementation of best management practices during construction and adherence to applicable municipal by-laws, but residual effects on residents in close proximity would potentially remain. ▪ No potential archaeological resources would be lost as a Stage 2 Archaeological Assessment will be carried out prior to constructing the new alignment. ▪ Based on the results of the Cultural Heritage Checklist (Appendix D), the Study Area has a low potential for cultural heritage resources value or interest. 	<ul style="list-style-type: none"> ▪ Undertake monitoring as outlined in the Traffic Management Plan. ▪ Undertake reactive noise, dust, and vibration monitoring in response to complaints if warranted. ▪ No proposed monitoring at this time. 	<p>Construction</p> <p>Construction</p> <p>Pre-construction</p>

5.1.2 ER Commitments and Compliance Monitoring

Enbridge has made a number of commitments, including the mitigation and compensation measures and monitoring requirements listed in **Table 5.1** based on planning process followed and consultation carried out as part of the Project. **Table 5.2** summarizes the commitments providing the following information:

- Brief commitment description.
- Commitment timing (i.e., when the commitment will be implemented).

The commitments have been grouped into one of the following three categories:

- **General** (not specific to a particular environmental category or directly the result of consultation carried out during the Project).
- **Environment** (i.e., Natural Environment, Built Environment, Social Environment, etc.).
- **Consultation** (in response to a particular issue raised by a consulted party).

Table 5.2 Commitments and Compliance Monitoring

Category	ID	Commitment Description	Commitment Timing
General	1.	The required permits and approvals will be obtained for the proposed Project following OEB granting Leave to construct.	Pre-construction and Construction
	2.	The mitigation/compensation measures and monitoring requirements associated with the Project will be implemented unless they are determined to be no longer applicable or required.	Pre-construction and Construction
Environment (Natural, Built, and Social)	3.	Enbridge will monitor surface water quality during the construction of the natural gas pipeline to ensure no unintentional sediment release into the stormwater sewers.	Construction and post-construction
	4.	In the event of machinery or equipment leak or spill during construction, Enbridge will ensure that construction equipment is kept in good working order and maintained regularly, provide safety training to crew and contractors, follow regulatory and Enbridge procedures for containing and cleaning up leaks and spills, and contact the regulator depending on the nature of the spill.	Post-construction operations
	5.	Enbridge will inspect pipelines regularly and implement preventative maintenance as required. In the event of a natural gas pipeline leak, Enbridge will follow safety and emergency response measures.	Post-construction operations
	6.	A Traffic Management Plan will be prepared for the temporary disruption of traffic during construction. The construction area or zone will move along the Preferred Route so that construction activities will be contained in a localized area as construction takes place.	Pre-construction, Construction
Consultation	7.	The project-specific email (boundaryroadEA@ghd.com) will be maintained until construction is complete, as a central location for agencies and the public to submit questions and comments. Consultation after this time will be maintained internally by Enbridge personnel.	Pre-construction, Construction, Post-construction
	8.	Enbridge will follow their internal standards Complaints Protocol to address concerns/comments received prior to and during construction of the pipeline.	Pre-construction, construction
	9.	Enbridge will notify all residents along the Preferred Route ahead of construction.	Pre-construction
	10.	Enbridge will continue to engage and consult with Indigenous communities as identified by their interest in the project.	Pre-construction, construction, and Post-construction

5.2 Potential Approvals and Permits Required

In addition to requiring OEB approval, there are potentially a number of municipal and provincial approvals anticipated in order to implement the proposed Project. **Table 5.3** lists the potentially required approvals and permits required by Enbridge in order to construct and operate the new natural gas pipeline.

5.3 Approvals Required

The following table is a list of potential approvals and permits that are anticipated to be required prior to construction. Requirements will be confirmed as the Project progresses.

Table 5.3 Potential Approvals and Permits

Approval Authority	Potential Approvals and Permits Required	Timing
Ontario One Call	Ontario One Call Notification: Enbridge to provide Ontario One call with the location of infrastructure and Ontario One Call will transmit notification to service members in the defined area.	Pre-construction, During construction
City of Ottawa	Road Cut Permit: Under the Road Activity By-law, anyone needing to excavate the right-of-way must obtain a road cut permit. The by-law also requires that before any work within the right-of-way occurs, surrounding residents and businesses are notified.	Pre-construction
City of Ottawa	Temporary Construction-Related Encroachment Permit: are issued to clients undertaking a private property project requiring the use of City road allowance in order to store materials and/or stage part of their work.	Pre-construction
Russell Township	Work Approval Permit: required for any road cut work along the pipeline route.	Pre-construction
Ministry of Heritage, Sport, Tourism and Culture Industries	Acceptance Letter for Archaeological and Cultural Heritage Assessment.	Pre-construction
South Nation Conservation Authority	Permit for any interferences with watercourses or development within or adjacent to a 100-year floodplain protected under Section 28 of the <i>Conservation Authorities Act</i> .	Pre-construction
Ministry of the Environment, Conservation and Parks (MECP)	Consultation would be required with the MECP to determine if a permit is required under the <i>Endangered Species Act</i> if the works impact Species at Risk or Species at Risk habitat.	Pre-construction
MECP	If dewatering >50,000 L/d and <400,000 L/d, water taking activities must be registered on the Environmental Activity and Sector Registry (EASR). If dewatering >400,000 L/d, a Permit to Take Water (PTTW) will be required.	Pre-construction
Department of Fisheries and Oceans Canada (DFO)	A fish habitat impact screening may be needed to determine if DFO review/authorization will be required. The proposed method for watercourse crossings (i.e. horizontal directional drilling) will likely not require authorization provided measures to avoid causing serious harm to fish or fish habitat are followed during construction.	Pre-construction During construction
Environment and Climate Change Canada (ECCC)	Clearing of vegetation will be undertaken in accordance with the <i>Migratory Birds Convention Act, 1994</i> . Nest sweeps will be required at a maximum of 7 days prior to vegetation removal during the bird nesting season (i.e. April 1 to August 31).	During construction

5.4 Implementation

Enbridge is proposing to have the new gas pipeline constructed and fully operational by the end of 2021. In order to achieve this, Enbridge is planning on submitting a Leave to construct Application to the OEB in July 2020 to finalize the formal review and approvals process. Assuming OEB approval is obtained by fall 2020, Enbridge is proposing to begin construction of the new gas pipeline in April 2021 subject to receiving any required Project-specific approvals and permits. Construction is assumed to take approximately four to six months to complete.

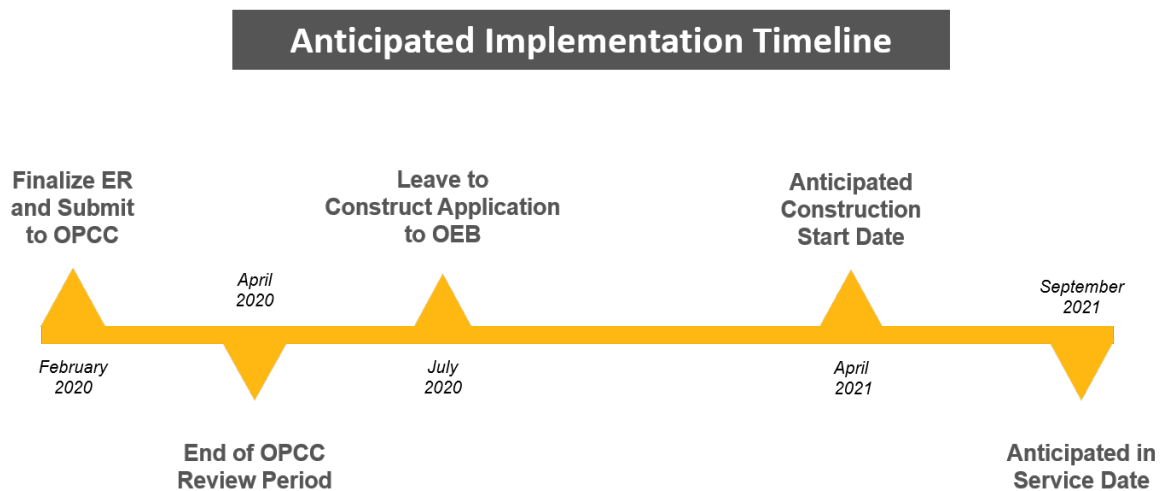


Figure 5.1 Project Timeline

The anticipated implementation timeline is based on known information at this time and is subject to change.

6. OVERVIEW OF THE CONSULTATION PROCESS

A comprehensive consultation program was undertaken for the Project. This section provides an overview of the program, lists specific relevant stakeholders, details the activities undertaken as part of the Study as well as input received from stakeholders.

6.1 Consultation Program and Goals

To meet the consultation requirements set by the OEB and set the stage for achieving Enbridge's consultation objectives, the Project included a series of communication and consultation activities that were conducted to inform affected communities and stakeholders and elicit feedback on the Project. Communication activities included newspaper notices, letters of invitation/notification, a Public Open House and project-details were posted on the Enbridge website. In addition, meetings with local Councillors were undertaken by the Project Team. The objectives of the public consultation program were to:

- Identify, Indigenous communities, stakeholders, and special interest groups and facilitate their engagement in providing feedback and identifying potential impacts.
- Make all reasonable efforts to identify the interests and meet the needs of participants.

- Provide participants with the information they require to participate in a meaningful way.
- Consider public issues/concerns during Project design and when making Project decisions.
- Incorporate feedback and evolve as required in response to the input and needs (access, format, etc.) of participants.
- Communicate to participants how their input affected outcomes (i.e., Project design and review/approval decisions).

6.2 Indigenous Communities and Stakeholders

Indigenous communities, public and agency consultation was an important part of the Project and will continue through all Project phases. During the Study process, Enbridge stressed the importance of consulting with area residents, local businesses and government agencies.

A list of regulatory agencies and interest groups active in the area was compiled through research and existing published information including government listings, previous studies completed in the area and a desktop search. The contact list was developed that subdivided the groups into categories:

- Indigenous Communities.
- Provincial Agencies and Members of Provincial Parliament.
- Local and Municipal Agencies including applicable City Councillors.
- Ontario Pipeline Coordination Committee.
- Special Interest Groups.
- Corporations (i.e., Hydro One, Hydro Ottawa, Infrastructure Ontario, Local Businesses).
- Adjacent Property Owners.

A complete list of stakeholders can be found in **Appendix F**.

6.3 Notifications

6.3.1 Website

To support the consultation program, Enbridge created a Project-section on their corporate website to ensure information is available to as many stakeholders as possible in an accessible format. This website page was developed not only to ensure information is easily accessible, but that the opportunity to provide input expands beyond the in-person Public Open House. The following resources are available online:

- Project Overview
- Study Area Map
- Tasks and Project Timelines
- Overview of Consultation Efforts
- Public Open House Details and Display Boards
- Overview of the Environmental Report
- Contact Information

Display boards used at the Public Open House were posted to the website on the day of the event to ensure that all stakeholders were provided access to the public-facing, plain language information used at the in-person event. The final Environmental Report will also be posted online in a downloadable format following submission. Consultation materials are available online at <https://www.enbridgegas.com/About-Us>.

A project-specific email was established (boundaryroadEA@ghd.com) as a central location for agencies and members of the public to submit questions and comments. This email was monitored and tracked by GHD.

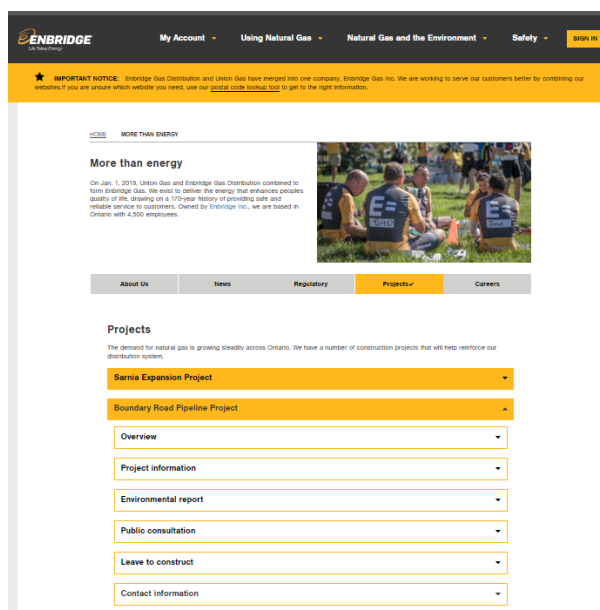


Figure 6.1 Project Website

6.3.2 Public Notice

A combined Notice of Study Commencement and Public Open House (Notice) was published in The Ottawa Sun newspaper on November 12 and 20, 2019 and a French notice was included in Le Droit newspaper on November 13 and 20, 2019, providing a Study Overview and information about the Project and Public Open House.

In addition, the Notice was distributed to 7,300 residents and businesses in and around the Study Area during the week of November 11, 2019 via Canada Post neighbourhood mail.

A copy of the Public Notice and newspaper ad can be found in **Appendix G**.

6.3.3 Letters to Select Stakeholders

Letters inviting agencies, interest groups, and local Councillors to the Open House were mailed out on November 8, 2019 prior to the Public Open House on November 27, 2019. In addition to hard-copy letters, Agency contacts also received notices via electronic mail. Individual letters to agencies, developers and special interest groups can be found in **Appendix H**.

6.3.4 Individual Meetings

City of Ottawa

Enbridge participated in several individual consultations with local area Councillors for City of Ottawa from Wards 19 and 20. Enbridge arranged and attended in-person meetings with representatives from Councillor’s offices to provide an overview of the Project, and present all public facing materials in order to elicit feedback. No concerns were expressed regarding the Boundary Road Project, however, both Councillors indicated that their constituents were interested in having natural gas service in the area. Enbridge has committed to working closely with the Councillor’s offices to assess the feasibility of bringing natural gas to their community.

Township of Prescott-Russell

The Township has a long history of expressed interest in bringing natural gas to their communities. Enbridge met with the Mayor, Councillors and other municipal staff to discuss the Boundary Road Project and provide clarity on the scope of this Project, indicating that the proposed pipes would be exclusively servicing the two customers and that servicing the rural communities falls outside of the scope of this project. Enbridge has committed to working closely with the Township to assess the feasibility of bringing natural gas to the community.

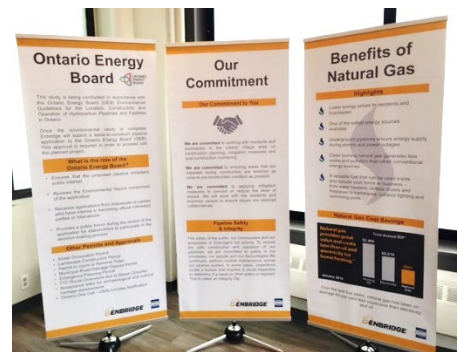
Carlsbad Springs Community Association

Following an expression of interest in bringing natural gas to the community of Carlsbad Springs, Enbridge emailed the Chair of the Association regarding the proposed Project and to clarify scope. Enbridge clarified that the proposed pipeline would be exclusively servicing the two customers and that servicing Carlsbad Springs would fall outside of the scope of the Project. Enbridge communicated to the Association that it has committed to working closely with local Councillors to assess the feasibility of bringing natural gas to the community. A meeting was subsequently held with the Association to provide them with a high level overview of the feasibility Study Area.

6.4 Public Open House

A Public Open House was held on November 27, 2019 at the Russell Sports & Youth Centre (988 Concession Street, Russell). The purpose of the event was to offer an opportunity for stakeholders and the public to comment on the Project, Study process, the Preliminary Preferred Route (PPR), the Alternate Route (AR), and the anticipated mitigation measures. Participants were asked to highlight any local considerations, issues or concerns that should be addressed as part of the Study.

The Public Open House was attended by 80+ people, 66 of whom officially signed in. Attendees included a combination of residents, business owners, developers, and representatives from local Councillor's offices. The Project Team was present to answer questions and engage in a dialogue with interested members of the community to address their concerns and elicit feedback. Team members that were also fluent in French were also available to attendees that were French-speaking.



Participants were encouraged to submit formal comment forms following their attendance at the Public Open House. Twenty-nine (29) comment forms were submitted and members of the Project Team documented several verbal concerns for those that did not wish to submit a formal comment form. Comment forms and staff documentation forms received during the Public Open House can be found in **Appendix I**.

Figure 6.2 Open House Display Boards

The Public Open House was drop-in format, where individuals could stop by at their convenience, read the relevant Project information and speak directly with Project Team members to gain clarity on the process and have technical experts address any questions and concerns. Informational display boards were created to present the information to attendees in a plain language, easy-to-understand format and illustrated the Project process. English boards were placed around

the room in a circle format, and a French translated copy was made available as a handout to those who preferred to read it in French.

The boards detailed:

- Welcome, Purpose, and Objectives
- Project Introduction
- Study Area, Preliminary Preferred and Alternate Routes
- Project Timeline
- Enbridge's Indigenous Peoples Policy
- Ontario Energy Board
- Route Selection Process
- Typical Pipeline Construction & Design
- Enbridge Commitment and Pipeline Safety and Integration
- Mitigation Measures

A copy of the display boards can be found in **Appendix J**.

6.4.1 Consideration of Issues Raised

Access to Natural Gas

The vast majority of individuals who were present at the Public Open House attended in order to express interest to have natural gas service brought to the surrounding area residences. Attendees primarily hailed from Carlsbad Springs, a community just north of the Study Area. The Carlsbad Springs Community Association, representing an area outside of the Project Study Area, publicized the event through their regular newsletter and Facebook page, encouraging residents of Carlsbad Springs to attend. Other residents along the PPR and AR also attended to express interest in being tied into the pipes along Boundary Road.

Prior to the Public Open House, Enbridge was in communication with representatives from the Carlsbad Springs Community Association, and as such anticipated that the event was likely going to bring out members of the public who were interested in receiving access to natural gas and that concerns and comments would fall outside of the scope of this project. Considering this, Enbridge provided information to attendees on how to submit formal requests for natural gas hookup through the Enbridge website.

The majority of attendees indicated their support for the Project. Through conversations at the event, Project Team representatives explained that the current Project is being looked at to service two specific customers and not the surrounding rural community, but that Enbridge would explore the possibility of conducting a feasibility study for Carlsbad Springs as requested. Enbridge has continued consultation with the Carlsbad Springs Community Association and local Councillors to explore this possibility.

Traffic

Discussions took place concerning the impact to traffic along the Preferred Route, with residents raising the concern that Boundary Road is a main arterial road that connects the Township of Russell to the 417 Highway, and therefore has a substantial amount of traffic. Project Team members explained the pipeline construction sequencing and what mitigation measures will be put in place to ensure minimal impacts. In collaboration with the City of Ottawa and the Township of Russell, Enbridge will develop a Traffic Management Plan.

Ecological Impact

Some residents indicated an interest in learning more about how the environment would be considered during construction, specifically indicating that the area is home to a large amount of creeks, water crossings and local species. Enbridge indicated that these items would be examined as part of the Environmental Report and that mitigation measures would be put in place to minimize any impacts to the natural environment.

6.5 Review Agencies

City of Ottawa

A representative from the City of Ottawa's Right of Way Approvals department requested information on the Project. Enbridge will obtain all required permits and approvals prior to beginning construction.

Ministry of Natural Resources and Forestry (MNRF)

The MNRF responded to the Notice of Commencement and Public Open House by providing Enbridge with some general guidance on what should be included as part of the natural heritage assessment should the proposed project activities require fisheries considerations. MNRF highlighted the importance of assessing *Petroleum Wells & Oil, Gas and Salt Resource Act*, *Public Lands Act*, and the *Lakes and Rivers Improvement Act*. The *Acts* were examined as requested and considered as part of the impact assessment with appropriate impact management measures included to minimize potential effects as outlined in the *Acts*.

Ministry of Environment, Conservation and Parks (MECP)

MECP responded to the Notice of Commencement and Public Open House indicating that from an initial scan, the following species at risk occurrences in the area of the proposed gas pipeline:

- Bald Eagle
- Bank Swallow
- Barn Swallow
- Blanding's Turtle
- Bobolink
- Butternut
- Canada Warbler
- Eastern Meadowlark
- Eastern Wood Pewee
- SAR Bats
- Snapping Turtle
- Wood Thrush

These species were examined as part of the Natural Environment Review conducted by GHD. Results can be found in **Appendix A**.

South Nation Conservation Authority (SNC)

SNC responded to the Notice of Commencement and Public Open House indicating that SNC implements Ontario Regulation 170/06, developed under Section 28 of the Conservation Authorities Act. A desktop review of SNC's mapping found that there are features protected by SNC under O. Reg 170/06 located within the project area, concluding that a permit from SNC will be required for any interference with a watercourse or development within or adjacent to a 100-year floodplain. SNC requested that they be included in any correspondence concerning the review of the detailed design.

Infrastructure Ontario (IO)

A representative from IO indicated that property owned by the Minister of Government and Consumer Services (identifiable by Teranet PINS 043240159 and 043240162) are adjacent to/within the Study Area. However, it is the proponent's responsibility to verify if provincial government property is within the Study Area.

The property identifiable by Teranet PIN 043240159 was confirmed as a government property within the Preferred Route, but not required for the project. No further actions are required by Enbridge.

Record of Agency correspondence can be found in **Appendix K**.

6.6 Indigenous Communities

As part of the requirements for Indigenous engagement and consultation on the Project, a formal request was submitted to the Ministry of Energy, Northern Development and Mines (MENDM) for confirmation on the requirements for Duty to Consult for the Project. An official response from the Ministry was received indicating that the following Indigenous communities be engaged and consulted with as part of the Project (**Appendix L**):

- Algonquins of Ontario (AOO)
- Mohawk Council of Akwesasne (MCA)

As such, notifications were sent to both Indigenous communities with follow up emails and phone calls by Enbridge.

Algonquins of Ontario

The AOO were notified about the proposed project through email and follow-up phone conversations. Correspondence with the AOO included an invitation to meet in person to discuss the project. The AOO did not respond to the Project Initiation Letter with initial questions or concerns, and did not request a project briefing.

Enbridge provided an update on the project timelines and a copy of the draft Stage 1 Archaeological Assessment for AOO review, and spoke with AOO representatives about the project on December 20, 2019. No questions or concerns with the Project were raised, at this time.

Enbridge provided the draft Environmental Report on January 16, 2020, for AOO review and feedback.

Enbridge representative followed-up on requests for AOO feedback and concerns on January 20, 2020 and January 31, 2020, and sought AOO comments on the draft Stage 1 Archaeological Assessment. On February 4, 2020 the AOO flagged that there are two Land Selects, along Boundary road, that are proposed lands to be transferred in fee simple to one or more of the Algonquin Institutions pursuant to their final settlement agreement. This transfer could have public utility implications and there could be a future desire to connect these lands to the line.

As of February 6, 2020, the AOO was engaged in their review of the draft Environmental Report, and said they would provide Enbridge with a formal response within the 42 day OPCC review period. Once this response is received, Enbridge will work to integrate the feedback provided and make any changes necessary.

Enbridge has committed to ongoing engagement and consultation as well as to respond to the AOOs review of the draft Environmental Report. Enbridge will work with the collective to integrate changes, and where possible, mitigations on the project. This commitment is a part of the ongoing consultation process and the duty to protect Aboriginal and Treaty Rights.

Mohawk Council of Akwesasne

In 2019, Enbridge notified the Mohawk Council of Akwesasne of the proposed Boundary Road Project (“Project”). A notification package and the Duty to Consult letter from the Ministry of Energy, Northern Development and Mines was provided to the community. The Project notification package outlined the scope of the Project, included a map and the location of the proposed route, the rationale for the Project and details regarding the planned Project Open House. Enbridge informed the MCA that they retained Dillon to complete an environmental screening report to assess physical, natural and socio-economical features potentially impacted by construction activities on the Project. Although, Enbridge requested a meeting with the MCA, the community did not express an interest in meeting.

Enbridge provided the MCA with a draft copy of the Stage 1 Archaeological Report and extended an opportunity to provide reasonable capacity funding to help facilitate the participation of MCA monitors on all future archaeological assessments specific to the proposed project.

To date, the MCA has not expressed any project specific concerns. However, Enbridge will continue to actively engage with the MCA in meaningful dialogue for the purpose of exchanging information regarding the Project, responding to inquiries, hearing and responding to any interests or concerns that may arise, as well as participating on ongoing dialogue about the Project. Record of Indigenous communities’ correspondence can be found in **Appendix K**. A comprehensive Indigenous Consultation Summary Report will be submitted as part of the LTC Application and will provide additional details on engagement activities for this project.

6.7 Public

Public comments related to the Project focused primarily on the expressed interest of having natural gas service in/to/for the surrounding rural area, which falls outside of the Project Study Area and the scope of this Project. One individual indicated that the Project should not be allowed to be constructed as proposed, and that Enbridge should halt progress until servicing the nearby communities can be included.

In response to comments received that fall outside of the scope of this project, Enbridge communicated that the proposed project has been sized for two commercial/industrial customers, but that members of the public are encouraged to formally express interest by completing an application with Enbridge Customer Connections.

Several members who reside along the Preferred Route and Alternate Route indicated interest in being notified of construction impacts. Enbridge will notify all residents along the Preferred Route ahead of construction.

Record of Public correspondence can be found in **Appendix K**.

6.8 Proposed On-going Consultation

Project updates will be posted to the Enbridge website up to LTC approval. Interested parties can also follow the LTC application status on the OEB website.

Enbridge has committed to ongoing engagement and consultation with Indigenous communities to address any questions and concerns related to the proposed project.

7. SUMMARY

The Environmental Report involved the description of the Study Area and assessment of proposed routes to identify the route that minimized environmental impacts while meeting technical feasibility. A catalogue of the predicted natural, built, social, economic and cultural features and their impacts was compiled, mitigation measures were described and the net effects were identified. This information was used to examine possible environmental features that could be impacted by pipeline construction and operation, and to what extent.

After careful analysis of environmental features, rationale of route options and an impact assessment of each route, the Preferred Route was selected.

The Preferred Route follows the previously disturbed right-of-way, with the exception of the installation of the District Station and maximizes the direct routing of the new gas pipeline. It avoids major infrastructure and utility conflicts, avoids direct impacts to local businesses and minimizes capital costs.

Several mitigation measures will be implemented to minimize impacts to the residents and businesses along the Preferred Route. Enbridge's Construction and Maintenance Manual will be consulted in order to protect environmental features along the route during and post-construction. GHD does not anticipate any permanent or adverse environmental impacts from the construction and operation of the new pipeline based on the assessment of environmental impacts in this report.

8. REFERENCES AND RESOURCES

- Capital Region Resource Recovery Centre (2019): <http://www.crrrc.ca/>.
- City of Ottawa Construction and Infrastructure Projects (2019): <https://ottawa.ca/en/planning-development-and-construction/construction-and-infrastructure-projects#planned-construction-projects>.
- City of Ottawa Development Application Search Tool (2019): <https://ottawa.ca/en/planning-development-and-construction/whats-happening-your-neighbourhood/development-application-search-tool>.
- City of Ottawa Heritage Conservation (2018): <https://ottawa.ca/en/planning-development-and-construction/heritage-conservation/individual-designation#> .
- City of Ottawa Natural Heritage System (2013):
https://documents.ottawa.ca/sites/documents/files/schedule_L3_west_en_0.pdf
- City of Ottawa Official Plan (2013): <https://ottawa.ca/en/planning-development-and-construction/official-plan-and-master-plans/official-plan>.
- City of Ottawa Permits, Licences and Applications, By-laws (2019):
<https://ottawa.ca/en/business/business-assistance-and-growth/permits-licences-and-applications-laws-and-garbage>.
- City of Ottawa Ward Profiles (2011): <https://ottawa.ca/en/city-hall/get-know-your-city/statistics-and-economic-profile/statistics/2011-census>.
- Provincial Policy Statement (2014):
<http://www.mah.gov.on.ca/Page215.aspx>.
- Russell Township Building & Planning (2019):
http://www.russell.ca/businesses/services_for_business/building_and_planning.
- Russell Township Economic Development Strategic Plan (December 2017):
http://www.russell.ca/UserFiles/Servers/Server_3708999/File/Town%20Hall/Strategic,%20Business%20and%20Master%20Plans/FINAL%20Russell%20Township%20-%20Economic%20Development%20Strategic%20Plan%20-%202017-12-1....pdf.
- Russell Township Heritage Conservation District Study (February 2018):
http://www.russell.ca/UserFiles/Servers/Server_3708999/File/Town%20Hall/Projects/190214%20PIC%203%20final%20to%20be%20presented.pdf.
- Statistics Canada, Township of Russell Census Profile (2016): <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=3502048&Geo2=CD&Code2=3502&Data=Count&SearchText=Russell&SearchType=Begins&SearchPR=01&B1=All&TABID=1>
- United Counties of Prescott & Russell (2019): http://en.prescott-russell.on.ca/business/economic_development/projects.

APPENDIX A

Natural Environment Review



Memorandum

January 11, 2020

To: Emily Gallant, GHD Ref. No.: 11157080

From: Lisa Horn; Laura Lawlor Tel: 519 340 3769

cc: Ian Dobrindt

Subject: Natural Environment Review, Boundary Road Pipeline Project, Enbridge Gas Inc.

1. Natural Environment Review

GHD completed a desktop screening of natural environment conditions along the Preliminary Preferred Route and Alternate Route of the Boundary Road Pipeline Project located on the municipal boundary between the City of Ottawa and Russell Township to identify the potential presence of sensitive environmental features, as well as detail potential impacts and mitigation. For the purposes of this review, the Study Area has been defined a 50 meter (m) buffer from either side of the alignment.

The Project involves the construction of a new pipeline within the road right-of-way to support the addition of two new customers, with the Preliminary Preferred Route and Alternate Route illustrated on **Figure 1**. GHD understands that much of the pipeline will be installed via open cut methods, but that horizontal directional drilling or boring will be used to cross under major roads, watercourses, other pipelines and environmentally sensitive features.

2. Methodology

2.1 Secondary Sources

Available secondary source information was obtained and reviewed to compile known natural heritage information for the Study Area. The sources reviewed are outlined in **Table 2.1**.

Table 2.1 Secondary Source Information Reviewed

Source	Information Reviewed
Ministry of Natural Resources and Forestry (MNRF)	<ul style="list-style-type: none">Natural Heritage Features data layers from Land Information Ontario and the NHIC database
Ministry of Environment, Conservation and Parks (MECP)	<ul style="list-style-type: none">Species at Risk (SAR) records
Fisheries and Oceans Canada	<ul style="list-style-type: none">Aquatic Species at Risk Maps (2019)
Ontario Reptile and Amphibian Atlas	<ul style="list-style-type: none">Species records for the Study Area
Ontario Butterfly Atlas	<ul style="list-style-type: none">Species records for the Study Area



Table 2.1 Secondary Source Information Reviewed

Source	Information Reviewed
eBird	<ul style="list-style-type: none">• Avian species records in the Study Area and vicinity
City of Ottawa Official Plan	<ul style="list-style-type: none">• Applicable Schedules
Township of Russell Official Plan	<ul style="list-style-type: none">• Applicable Schedules
WSP, Highway 417 Industrial Park Schedule 'B' Class EA, March 2019	<ul style="list-style-type: none">• Appendix A: Natural Environment Assessment Report

2.2 Agency Consultation

The Ministry of Environment, Conservation, and Parks (MECP) was contacted on November 3, 2019 to request available natural heritage information, Species at Risk (SAR) records, and relevant wildlife records. A response has not yet been received. However, other correspondence with MECP identified a list of potential SAR, which are considered in Section 3.3.

3. Results

3.1 Natural Heritage Features

Land use within the Study Area consists of a mix of developed areas at the starting and termination points, rural residential property, agricultural field, deciduous forest, wetland, and coniferous plantation.

Natural heritage features on and in the immediate vicinity of the Study Area are shown on **Figure 1**. Significant ecological areas (SEAs), unevaluated wetlands, woodland, and watercourses are present along the alignment within the Study Area. Watercourses intersecting the potential alignment are identified as having warmwater and coolwater thermal regimes (**Figure 2**). No Areas of Natural or Scientific Interest (ANSI), Provincially Significant Wetlands (PSW), or Deer Wintering Areas are identified within or immediately adjacent to the Study Area.

Review of the City of Ottawa Official Plan identified the presence of components of the Natural Heritage System (Schedule L1 East) throughout the Study Area, associated with woodlands, wetlands, and SEAs along the routes. Specifically, the City of Ottawa Natural Heritage System components are associated with the large wetlands on the east side of Boundary Road, south of Devine Road, as well as on the west side of Boundary Road, north of Mitch Owens Road. The latter is also associated with an SEA. Review of the Township of Russell Official Plan Schedules did not identify mapped natural heritage features within associated portions of the Study Areas.

3.2 Wildlife and Wildlife Habitat

The natural habitats (e.g. deciduous forest, wetlands) and anthropogenic habitats (e.g. agricultural fields, conifer plantations) present within the Study Area likely provide suitable habitat for a variety of wildlife species, including breeding birds, reptiles and amphibians, and mammals. The aquatic features (i.e.



watercourses) likely provide suitable habitat for a variety of coolwater and warmwater fish species. Detailed field surveys for fish, wildlife, or wildlife habitat were not completed as part of this work.

3.3 Species at Risk

Review of the Fisheries and Oceans Canada (DFO) aquatic SAR mapping did not identify the presence of any aquatic SAR within the Study Area. A variety of terrestrial SAR were identified through review of secondary source information, including:

- Barn swallow (*Hirundo rustica*)
- Bobolink (*Dolichonyx oryzivorus*)
- Eastern meadowlark (*Sturnella magna*)
- Eastern wood-pewee (*Contopus virens*)
- Wood thrush (*Hylocichla mustelina*)
- Snapping turtle (*Chelydra serpentina*)
- Blanding's turtle (*Emydoidea blandingii*)
- Monarch (*Danaus plexippus*)

Bobolink and Eastern Meadowlark may be present in agricultural areas where suitable grassy habitat (e.g. hay field) is present. Breeding success of these species in these fields will be dependent on the harvest schedule of the individual farms. Eastern Wood-pewee and Wood Thrush may be present in the woodlands throughout the Study Area. Barn Swallow may nest inside large culverts or in human made structures throughout the Study Area. Snapping Turtle and Blanding's Turtle may be found in wetland or other aquatic habitat throughout the Study Area, and may nest within the gravel road shoulder. Monarch may be found in any open areas throughout the Study Area where flowering plants and milkweed are present.

Correspondence with MECP identified the potential for the following additional species:

- Bald eagle (*Haliaeetus leucocephalus*)
- Butternut (*Juglans cinerea*)
- Bank swallow (*Riparia riparia*)
- Canada warbler (*Cardellina canadensis*)
- SAR Bats

Canada Warbler and Bald Eagle may be present in the woodlands throughout the Study Area. Bank Swallow may occur along the streams throughout the Study Area. Butternut may be found in or at the edges of deciduous forest. SAR bats may use a variety of habitats, including the wooded areas, for foraging and roosting, as well as potentially using man-made structures for roosting.



4. Potential Impacts

GHD understands that construction of the pipeline would result in surficial impacts confined to the road right-of-way. Given the variety of natural features in very close proximity to the alignment and the potential for SAR, the construction may result in negative impacts to natural features and wildlife in the absence of suitable avoidance and mitigation measures. Potential impacts may include:

- Temporary or permanent loss of trees, shrubs, and groundcover, including rare plant species if present.
- Loss or disruption of protected and/or regulated natural heritage features such as wetlands, woodlands, and SEAs.
- Temporary or permanent loss of breeding/foraging habitat for birds, urban adapted species, and SAR.
- Disruption and/or loss of nests of breeding birds, and noise and sensory disturbance to birds and other wildlife.
- Temporary increased road mortality threat to amphibians and mammals due to increased traffic during construction.
- Decline in surface water quality due to sedimentation and/or contamination, and associated impacts on aquatic species.
- Modifications of surface water and groundwater through potential changes to run-off and infiltration.

5. Mitigation

Potential impacts to natural features and wildlife may be avoided or reduced by implementing appropriate mitigation measures. GHD recommends that the impact assessment and determination of mitigation measures should be refined during the detailed design stage. This should include consultation with appropriate agencies (e.g., MECP, South Nation Conservation authority). GHD understands that Enbridge will handle any permitting requirements related to features regulated by the South Nation Conservation Authority internally. Works must proceed in accordance with applicable permits, policies and legislation.

Mitigation measures anticipated to be required based on the known natural environment features and species include (but are not limited to) the following:

- Trenchless technology should be used under all wetlands, watercourses, woodlands, and any other sensitive features such as important wildlife habitat.
- In addition to reducing impacts to natural features through construction methods, appropriate permits and authorizations must be obtained as necessary where works will proceed in close proximity to natural features (e.g. South Nation Conservation Authority permit).
- An inspection of culverts with a 0.9 m or greater diameter should be completed in advance of construction works to determine the presence of Barn Swallow nests. If nests are found, a Notice of Activity protocol under the Endangered Species Act must be followed.



- A detailed Erosion & Sediment Control (ESC) Plan should be developed. To prevent sedimentation of off Site retained vegetation, sediment fencing or sediment soxx should be installed prior to works to delineate the work zone and prevent direct damage to adjacent retained vegetation (i.e., mechanical damage, root damage, soil compaction). This fencing will remain until construction is complete and surfaces are stabilized.
- An on-site Environmental Inspector to monitor/advisor during construction activities in and in proximity to identified sensitive natural features.
- A Frac-out and Spill Emergency Response Plan will be developed and a spill kit will be present during construction around watercourses.
- Appropriate timing windows must be respected. Vegetation clearing should not occur within the breeding bird season to avoid incidental take of migratory birds, their nests and eggs under the Migratory Birds Convention Act (MBCA). Vegetation clearing is recommended to occur in the late fall/winter (October to March).
- Development of a Stormwater Management Plan to detail best practices for managing stormwater during construction and operation, including treatment of any water that may be discharged from work areas to the receiving environment.
- Any temporarily stockpiled soil, debris or other excess materials, and any construction-related materials, should be properly contained (e.g., inside silt fencing). All construction materials, excess materials, and debris will be removed and appropriately disposed of following construction.
- All avoidance and mitigation measures and conditions outlined in any obtained permits from relevant agencies must be adhered to.

6. Summary of Findings

Based on the results of the Natural Environment Review, GHD identified the following environmental considerations along the Preliminary Preferred and Alternate Route:

- Natural habitats are present within the Study Area and likely provide habitat for a variety of wildlife species, including breeding birds, amphibians and reptiles, mammals, and fish.
- A variety of SAR may be found in wooded habitats, open habitats, and aquatic habitat throughout the Study Area.
- Potential intersection/crossing of SEAs, unevaluated wetlands and woodlands, including associated portions of the City of Ottawa's Natural Heritage System.
- Aquatic features such as creeks, rivers, and wetlands are regulated by the South Nation Conservation Authority.

Due to the presence of these features, there is the potential for negative impacts to the natural environment as a result of the proposed works. Appropriate mitigation measures must be adhered to in order to avoid or



reduce impacts to natural features. A detailed impact assessment and development of route-specific mitigation measures should take place during detailed design.

7. References

City of Ottawa, 2003. City of Ottawa Official Plan. Available online: <https://ottawa.ca/en/planning-development-and-construction/official-plan-and-master-plans/official-plan/volume-1-official-plan#section-6-schedules>

eBird, 2019. eBird: An online database of bird distribution and abundance [web application]. eBird, Ithaca, New York. Website accessed October 2019: <http://www.ebird.org>.

Fisheries and Oceans Canada (DFO), 2019. Distribution of Fish Species at Risk: South Nation Conservation Authority.

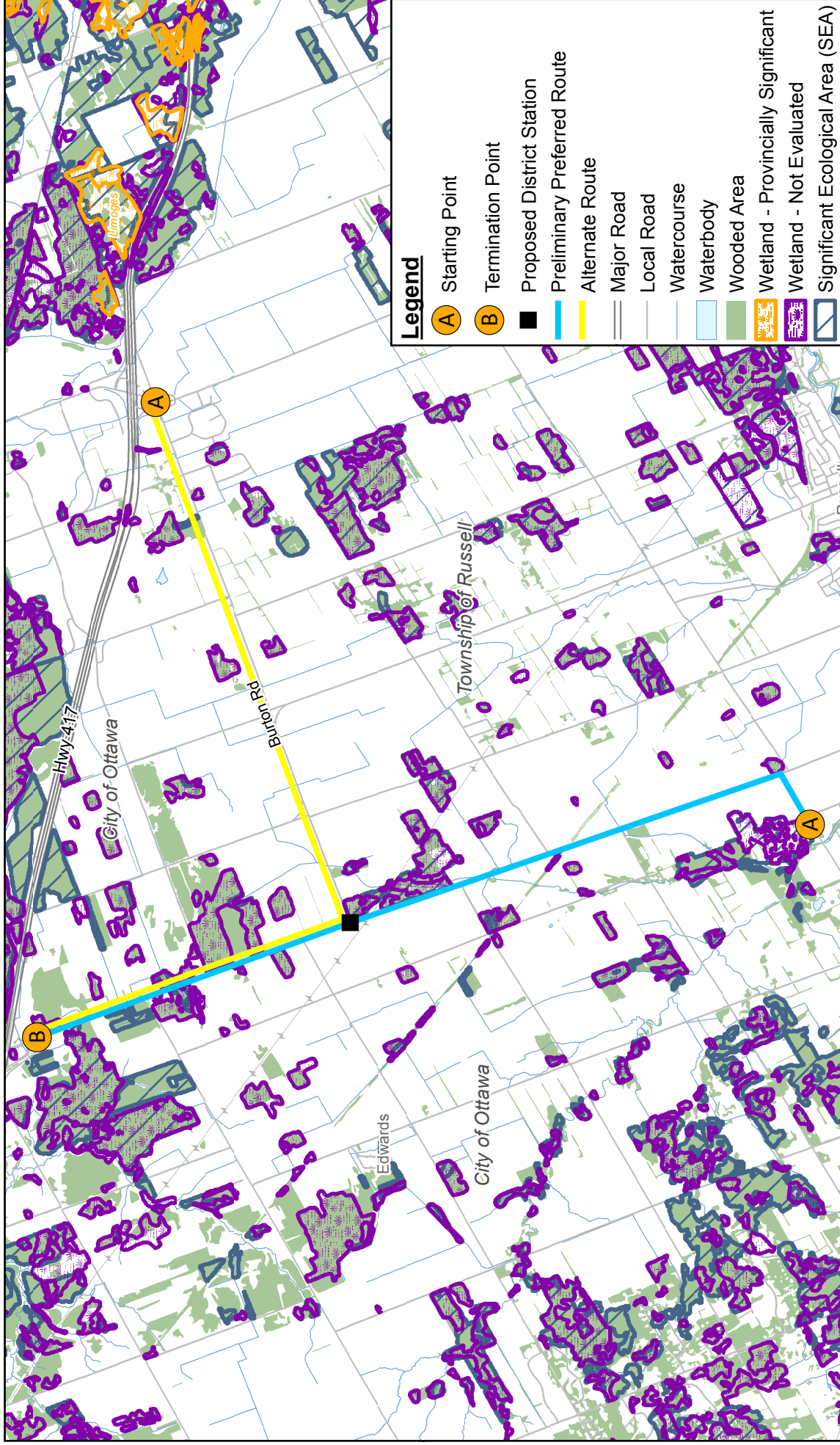
Ontario Ministry of Natural Resources and Forestry, 2019. Natural Heritage Areas Mapping. Land Information Ontario. Queen's Printer for Ontario.
http://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US.

Ontario Nature, 2019. Ontario Reptile and Amphibian Atlas. Website accessed October 2019: <https://www.ontarionature.org/oraa/maps/?species=bltu&lat=44.198&long=-80.411&zoom=6>

Toronto Entomologists' Association, 2019. Ontario Butterfly Atlas Online: Observations. Website accessed October 2019: http://www.ontarioinsects.org/atlas_online.htm.

Township of Russell, 2018. Official Plan. March 2018. Available online: http://www.russell.ca/UserFiles/Servers/Server_3708999/File/Businesses/Services%20for%20Business/Official%20Plan/Official%20Plan%20March%202018.pdf

WSP, 2019. Highway 417 Industrial Park Schedule 'B' Class Environmental Assessment: Project File Report.



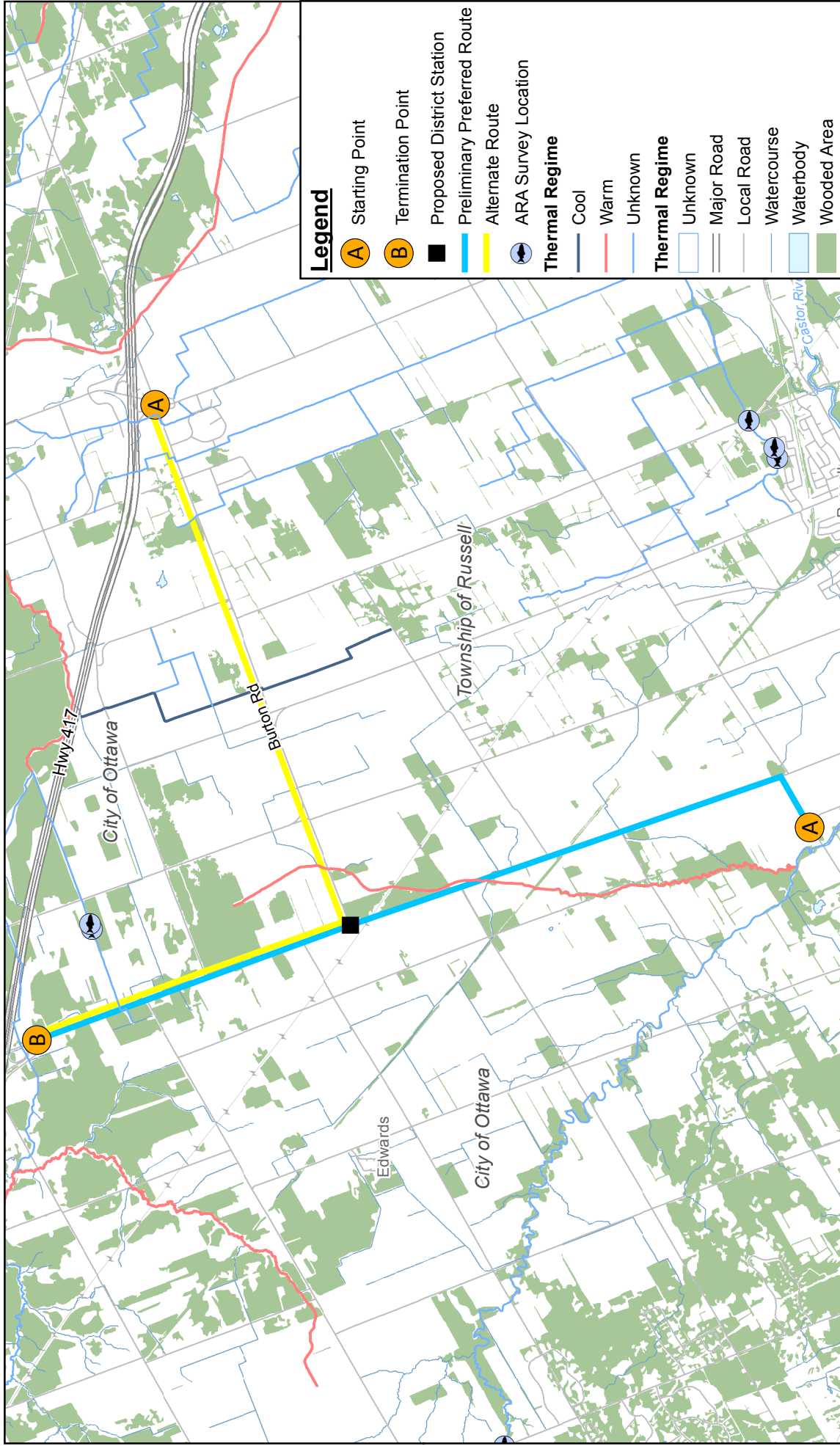
Source: ESRI World Light Gray Canvas Basemap, Accessed 2019; Source: MNRF NRVIS, 2018. Produced by GHD under licence from Ontario Ministry of Natural Resources and Forestry. © Queen's Printer 2019.



ENBRIDGE
ENBRIDGE GAS INC.
NATURAL ENVIRONMENT REVIEW
BOUNDARY ROAD PIPELINE PROJECT

11157080
Nov 6, 2019

FIGURE 1



Source: ESRI World Light Gray Canvas Basemap, Accessed 2019; Source: MNRF NRVIS, 2018. Produced by GHD under licence from Ontario Ministry of Natural Resources and Forestry, © Queen's Printer 2020.



ENBRIDGE
 ENBRIDGE GAS INC.
 NATURAL ENVIRONMENT REVIEW
 BOUNDARY ROAD PIPELINE PROJECT - THERMAL REGIME

11157080
 Jan 10, 2020

FIGURE 2

APPENDIX B

Historical Records Review



Memorandum

November 8, 2019

To: Emily Gallant,
Project Manager, GHD

Ref. No.: 11157080

From: Trevor Anthony, M.Sc., P.Eng.
GHD

Tel: 416-866-2368

Subject: Enbridge Boundary Road Pipeline Project – Historical Review

1. Historical Records Review

GHD completed a review of historical land use along the Preferred Route Alignment and the Alternative Route Alignment through a desktop review of publically available documents. The purpose of the review was to identify current or historic land uses that have the potential to impact soil or groundwater quality along either the Preferred Route Alignment or the Alternative Route Alignment. For the purposes of this review, the “Site” has been defined as including both the Preferred Route Alignment and the Alternative Route Alignment, and the Study Area has been defined as all properties located within 250 metres of the Site.

Documents reviewed include publically available fire insurance plans and aerial photographs, the Inventory of Coal Gasification Plant Waste Site in Ontario¹, the Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario², the 1991 Waste Disposal Site Inventory³, and on-line Records of Site Condition (RSC). A description of the information sources and their applicability to the Historical Records Review is provided below.

1.1 Fire Insurance Plans

Fire Insurance Plans (FIPs) assist in the identification of historical land use and commonly indicate the existence and location of aboveground and underground storage tanks, structures, improvements, and facility operations. GHD completed a search for any publically available FIPs that include the Study Area, and for all other available fire insurance information for the Site (i.e. inspection reports and Site plans). GHD did not identify any fire insurance information to be available for the Site or Study Area.

¹ Inventory of Coal Gasification Plant Waste Site in Ontario, Volumes I and II, prepared for the Ontario Ministry of the Environment, prepared by Intera Technologies Ltd., April 1987

² Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario, Volumes I and II, prepared for the Ontario Ministry of the Environment, prepared by Intera Technologies Ltd., November 1988

³ Waste Disposal Site Inventory, prepared by the Waste Management Branch of the Ontario Ministry of the Environment, June 1991



1.2 Aerial Photographs

GHD reviewed publically available aerial photographs⁴ for the Site. Aerial photographs generally document the development of the Site and properties in the vicinity of the Site. Aerial photographs of the Site and Study Area were reviewed by GHD from the City of Ottawa and/or Google Earth for the years 1976, 1991, 1999, 2005, 2011, 2017, and 2019. Based on the history of the Site and the quantity and quality of the aerial imagery available for review, the selected time period between aerial photographs of approximately 5 to 15 years was determined to be suitable for the purposes of this historical records review.

1976 Aerial Photograph (Scale Variable): Review of the 1976 aerial photograph indicates that the Site was mostly vacant or agricultural cropland, with a few residential dwellings located along the Preferred Route Alignment and the Alternative Route Alignment. At the northern portion of the Preferred and Alternative Route Alignments, a parcel of land located at 5575 Boundary Road (directly adjacent to intersection of Boundary Road and Mitch Owens Road) appeared to be utilized as a potential automotive salvage yard. A ditch or creek containing water was observed crossing the northern portion of the potential salvage yard. Vehicles or material appeared to be randomly placed across the property, including adjacent to the creek/ditch.

1991 Aerial Photograph (Scale Variable): Review of the 1991 aerial photograph indicates that the majority of the Site and Study Area was still vacant or agricultural cropland, with sporadic residential dwellings. Significant changes in land use along the northern portion of the Preferred and Alternative Route Alignments included: the development of potential gasoline service stations at 5336 Boundary Road (approximately 1200 metres north of Mitch Owens Road) and at 5495 Boundary Road (approximately 600 metres north of Mitch Owens Road). Additionally, the development of a potential pit/quarry operation at 5425 and 5455 Boundary Road (approximately 650 metres north of intersection Mitch Owens Road) was also identified. Significant changes in land use along the Alternative Route Alignment included: the development of commercial properties along the eastern portion of Burton Road, and on Clement Street, Enterprise Street, and St. Guillaume Road. Specific commercial developments of potential concern included potential gasoline service stations located at 992 Burton Road and 104 St. Guillaume Road (both located on the west side of St. Guillaume Road, south of the intersection of Burton Road, St. Guillaume Road, and St. Pierre Road). The salvage yard previously identified at 5575 Boundary Road appeared to have been re-aligned since 1976, with vehicles organized into rows, and the ditch/creek re-aligned to align with the outer limits of the salvage yard.

1999 Aerial Photograph (Scale Variable): Review of the 1999 aerial photograph indicates that the majority of the Site and Study Area was still vacant or agricultural cropland, with sporadic residential dwellings. Significant changes in land use along the northern portion of the Preferred and Alternative Route Alignments included: the development of a pit/quarry operation at 5500 and 5510 Boundary Road (approximately 530 metres north of Mitch Owens Road). Significant changes in land use along the Alternative Route Alignment included: the development of commercial properties along the eastern portion of Burton Road, and on

⁴ Various aerial photographs of Ottawa, retrieved from: <http://maps.ottawa.ca/geoottawa/>, retrieved on November 1, 2019



Clement Street, Enterprise Street, and St. Guillaume Road. No specific commercial developments of potential concern were identified in the 2005 aerial photograph.

2005 Aerial Photograph (Scale Variable): Review of the 2005 aerial photograph indicates that the majority of the Site and Study Area was still vacant or agricultural cropland, with sporadic residential dwellings. There were no significant changes in land use identified along the northern portion of the Preferred and Alternative Route Alignments. Significant changes in land use along the Alternative Route Alignment included: the development of additional commercial properties along the eastern portion of Burton Road, and along Clement Street, Enterprise Street, and St. Guillaume Road. No specific commercial developments of potential concern were identified in the 2005 aerial photograph.

2011 Aerial Photograph (Scale Variable): Review of the 2011 aerial photograph indicates that the majority of the Site and Study Area was still vacant or agricultural cropland, with sporadic residential dwellings. Significant changes in land use along the northern portion of the Preferred and Alternative Route Alignments included: expansion of the previously identified potential pit/quarry operations at 5425 and 5455 Boundary Road further to the north and east. Additionally, the auto salvage yard previously identified at 5575 Boundary Road no longer appeared to be utilized. Significant changes in land use along the Alternative Route Alignment included: the development of additional commercial properties along the eastern portion of Burton Road, and on Clement Street, Enterprise Street, and St. Guillaume Road. No specific commercial developments of concern were identified in the 2005 aerial photograph.

2017 Aerial Photograph (Scale Variable): Review of the 2017 aerial photograph indicates that the majority of the Site and Study Area was still vacant or agricultural cropland, with sporadic residential dwellings. No significant changes in land use along the northern portion of the Preferred or Alternative Route Alignments were identified in the 2017 aerial photograph. Significant changes in land use along the Alternative Route Alignment included: the development of additional roads, (Corduoy Road, Service Street, and Paquet Street), on the eastern portion of Burton Road. Additional commercial properties were developed in the area, with specific commercial developments of concern identified to include a potential waste management facility located at 211 Corduroy Road (located directly southeast of the intersection of Burton Road and Corduroy Road).

2019 Aerial Photograph (Scale Variable): Review of the 2019 aerial photograph indicates that the majority of the Site and Study Area was still vacant or agricultural cropland, with sporadic residential dwellings. There were no significant changes in land use at the Site or within the Study Area.

Based on a review of the aerial photographs, the following properties were identified as having the potential to impact the soil and groundwater quality along the Preferred Route Alignment and the Alternative Route Alignment:

- 5336 Boundary Road – Currently in operation as a ‘Petro Canada’ gasoline service station, and potentially historically utilized as a gasoline service station since at least 1991. The property likely contains fuel storage tanks. No information was available regarding potential spills or leaks from the fuel



storage tanks, and the potential for any releases from the tanks was identified as a potential environmental concern.

- 5495 Boundary Road – Previously in operation as ‘Luso Gas’, this property was potentially historically utilized as a gasoline service station since at least 1991. The property likely contains fuel storage tanks. No information was available regarding potential spills or leaks from the fuel storage tanks, and the potential for any releases from the tanks was identified as a potential environmental concern.
- 5575 Boundary Road – Historically utilized as a potential auto salvage yard between at least 1976 and 2011. Review of current aerial images indicates a shallow ditch containing water surrounds the majority of the site, and potentially crossed the property in the past. The historical utilization of this property as an automotive salvage yard, and the potential for any releases to reach surface water was identified as a potential environmental concern.
- 211 Corduroy Road – Currently in operation as ‘GFL Environmental’, this property is currently and was potentially historically utilized as a waste management facility since at least 2017. No information was available regarding the types of waste stored or handled on the property, and the potential for any releases from the wastes stored on the property was identified as a potential environmental concern.
- 992 Burton Road – Currently in operation as a ‘Ultramar’ gasoline service station, this property is currently and was potentially historically utilized as a fuel service station since at least 1991. No information was available regarding potential spills or leaks from the fuel storage tanks, and the potential for any releases from the tanks was identified as a potential environmental concern.
- 104 St. Guillaume Road – Currently in operation as a ‘MacEwen’ gasoline service station, this property is currently and was potentially historically utilized as a fuel service station since at least 1991. No information was available regarding potential spills or leaks from the fuel storage tanks, and the potential for any releases from the tanks was identified as a potential environmental concern.

1.3 Historical Database Review

GHD reviewed select publically available databases to identify potential contamination sources or known areas of contamination in the area of the Site. The results of GHD’s review is outlined in the following sections.

1.3.1 Inventory of Coal Gasification Plant Waste Sites in Ontario

GHD reviewed the 1987 Inventory of Coal Gasification Plant Waste Sites in Ontario completed by Interra Technologies Ltd. (Interra) to identify any potential manufactured gas plants located at the Site or within the Study Area. No manufactured gas plants were identified to be located at the Site or within the Study Area.

1.3.2 Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario

GHD reviewed the 1988 Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario completed by Interra Technologies Ltd. (Interra). No industrial Sites were identified to be located along the Preliminary Preferred Route or within the Study Area.



1.3.3 Ontario Ministry of the Environment, Conservation and Parks (MECP) Well Records

GHD completed a search of the MECP Water Well Information System database to identify any wells within the Study Area. Hundreds of wells were identified within the Study Area, with approximately 50 records identified along the Preferred and Alternative Route Alignments. The records found along the Preferred and Alternative Route Alignments generally pertained to domestic water supply wells and monitoring wells. Well depths ranged from between and 5.20 metres below ground surface (mBGS) and 103.60 mBGS. The stratigraphy of the wells generally consisted of silt/clay/gravel overlying shale and limestone bedrock, which was encountered at depths ranging between approximately 5.20 mBGS and 19.20 mBGS.

No other pertinent information related to the Site or Study Area was obtained through GHD's review of the MECP Well Records.

1.4 Waste Disposal Site Inventory

GHD reviewed the 1991 Waste Disposal Site Inventory produced by the Waste Management Branch of the Ontario Ministry of the Environment (MOE, now known as the MECP). Based on GHD's reviews of the Waste Disposal Site Inventory, no active or historical waste disposal sites were identified to be located within Preferred or Alternate Route Alignments or the within the Study Area.

1.5 Records of Site Condition

GHD completed a search of the Ontario MECP database of Records of Site Condition (RSC) for properties located within the Study Area. The RSC document search was completed to understand previously documented soil and groundwater conditions at properties located near or along the Preliminary Preferred Route within the Study Area. The RSC document search did not identify any properties at the Site or within the Study Area where RSCs have been filed.

2. Summary of Findings

Based on the results of the Historical Records Review, and based on previous experience completing Phase One Environmental Site Assessments, GHD identified the following potential environmental concerns which represent an increased risk to the soil and groundwater quality along the Preferred Route Alignment and the Alternative Route Alignment:

- **Fuel Service Stations** – Based on GHD's review of the aerial photographs, multiple properties along the Preferred Route Alignment and Alternative Route Alignment are currently and were potentially historically utilized as gasoline service stations. These properties include 5336 Boundary Road, 5495 Boundary Road, 992 Burton Road, and 104 St. Guillaume Road. These properties likely contain(ed) fuel storage tanks. No information was available regarding potential spills or leaks from the fuel storage tanks, and the potential for any releases from the tanks was identified as a potential environmental concern along the Preferred and Alternative Route Alignments.



- **Auto Salvage Yard** – Based on GHD's review of the aerial photographs, the property located at 5575 Boundary Road was historically utilized as an auto salvage yard, and a shallow ditch containing water surrounded the majority of the Site. The historical utilization of this property as an automotive salvage yard, and the potential for any releases to reach surface water was identified as a potential environmental concern along the Preferred and Alternative Route Alignments.
- **Waste Management Facility** – Based on GHD's review of the aerial photographs, the property located at 211 Corduroy Road is currently in operation as a waste management facility and was potentially historically utilized as a waste management facility since at least 2017. No information was available regarding the types of waste stored or handled on the property, and the potential for any releases from the wastes stored on the property was identified as a potential environmental concern along the Alternative Route Alignment.

As part of the historical document review, GHD did not identify any other specific potential contaminant sources that would warrant special consideration during the design of the proposed pipe alignment. It is possible that potentially impacted fill material will be encountered at one or more locations along the Preferred and Alternative Route Alignments. The Constructor should develop a soil management plan, including a strategy to sample, characterize, and segregate soil, to ensure that any excess soil is managed in accordance with Provincial Regulations and best management practices.

APPENDIX C

Stage 1 Archaeological Assessment

**STAGE 1 ARCHAEOLOGICAL ASSESSMENT
BOUNDARY ROAD PIPELINE
(FORMER TOWNSHIPS OF RUSSELL AND CUMBERLAND, COUNTY OF RUSSELL,
AND FORMER TOWNSHIPS GLOUCESTER AND OSGOODE, COUNTY OF CARLETON)
TOWNSHIP OF RUSSELL
CITY OF OTTAWA AND UNITED COUNTIES OF PRESCOTT AND RUSSELL, ONTARIO**

ORIGINAL REPORT

Prepared for:

GHD
184 Front Street East, Suite 302
Toronto, ON M5A 4N3

Archaeological Licence #P380 (Cooper)
Ministry of Heritage, Sport, Tourism and Culture Industries PIF# P380-0061-2019
ASI File: 18EA-052

6 February 2020



**Stage 1 Archaeological Assessment
Boundary Road Pipeline
(Former Townships of Russell and Cumberland, County of Russell, and
Former Townships Gloucester and Osgoode, County of Carleton)
Township of Russell
City of Ottawa and United Counties of Prescott and Russell, Ontario**

EXECUTIVE SUMMARY

ASI was contracted by GHD to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the proposed Boundary Road Pipeline Project in the City of Ottawa and United Counties of Prescott and Russell. The Project includes two sections of pipeline and the installation of a new district station to support it. This pipeline will deliver essential natural gas to two new customers in the area. Following completion of the Environmental Report, Enbridge will file an application to the OEB for approval to construct. If approved, construction is anticipated to begin in spring 2021.

At the outset, two potential routes were identified, a Preliminary Preferred Route (along Boundary Road) and Alternate Route (along Burton Road). The Stage 1 archaeological assessment was completed along both potential routes with a Study Area including a buffer of 50 metres from the road centerlines along both the Preliminary Preferred and Alternate Routes.

The Stage 1 background study determined that no previously registered archaeological sites are located within one kilometre of the Study Area. The property inspection determined that parts of the Preferred and Alternative Routes exhibit archaeological potential.

In light of these results, the following recommendations are made:

1. Parts of the Study Area exhibit archaeological potential. If impacted, these areas will require Stage 2 archaeological assessment, prior to any proposed construction activities;
2. The remainder of the Study Area does not retain archaeological potential on account of low and wet conditions, deep and extensive land disturbance, or having been previously assessed. These lands do not require further archaeological assessment; and,
3. Should the proposed work extend beyond the current Study Area, further Stage 1 archaeological assessment should be conducted to determine the archaeological potential of the surrounding lands.



PROJECT PERSONNEL

<i>Senior Project Manager:</i>	Lisa Merritt, MSc. (P094) <i>Partner / Director</i> <i>Environmental Assessment Division</i>
<i>Project Coordinator:</i>	Katrina Thach, Hon. BA (R1225) <i>Archaeologist / Project Coordinator</i> <i>Environmental Assessment Division</i>
<i>Project Director (Licensee):</i>	Martin Cooper, MA (P380) <i>Senior Associate</i>
<i>Project Manager:</i>	Eliza Brandy, MA (R1109) <i>Associate Archaeologist / Project Manager</i> <i>Environmental Assessment Division</i>
<i>Field Director:</i>	Martin Cooper
<i>Report Preparation:</i>	Eliza Brandy Danielle Bella, BA (Hon) <i>Archaeologist / Analyst</i> <i>Laboratory and Fieldwork Services, Operations Division</i> Hannah Brouwers BA (Hon) <i>Archaeologist / Administrative Assistant</i> <i>Laboratory and Fieldwork Services, Operations Division</i>
<i>Graphics:</i>	Jonas Fernandez, MSc (R281) <i>Lead Archaeologist / Manager - Fleet & Geomatics Specialist - Operations Division</i>
<i>Report Reviewer:</i>	Lisa Merritt



TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
PROJECT PERSONNEL	ii
TABLE OF CONTENTS	iii
1.0 PROJECT CONTEXT	1
1.1 Development Context	1
1.2 Historical Context	2
1.2.1 <i>Indigenous Land Use and Settlement</i>	2
1.2.2 <i>Euro-Canadian Land Use: Township Survey and Settlement</i>	6
1.2.3 <i>Historical Map Review</i>	9
1.2.4 <i>Twentieth-Century Mapping Review</i>	12
1.3 Archaeological Context	12
1.3.1 <i>Current Land Use and Field Conditions</i>	14
1.3.2 <i>Geography</i>	14
1.3.3 <i>Previous Archaeological Research</i>	16
2.0 FIELD METHODS: PROPERTY INSPECTION	17
3.0 ANALYSIS AND CONCLUSIONS	17
3.1 Analysis of Archaeological Potential	17
3.2 Analysis of Property Inspection Results	18
3.3 Conclusions	18
4.0 RECOMMENDATIONS	19
5.0 ADVICE ON COMPLIANCE WITH LEGISLATION	20
6.0 REFERENCES CITED	21
7.0 MAPS	27
8.0 IMAGES	44

LIST OF TABLES

Table 1: Nineteenth-century property owner(s) and historical features(s) within or adjacent to the Study Area 10

LIST OF FIGURES

Figure 1: Boundary Road Pipeline Study Area	28
Figure 2: Study Area (Approximate Location) Overlaid on the 1862 Map of the Counties of Stormont, Dundas, Glengarry, Prescott & Russell and the 1863 Map of the County of Carleton	29
Figure 3: Study Area (Approximate Location) Overlaid on the 1879 Illustrated Historical Atlas of the County of Carleton and the 1881 Illustrated Historical Atlas of Prescott and Russell Counties	29
Figure 4: Study Area (Approximate Location) Overlaid on the 1908 National Topographic System Russell Sheet	30
Figure 5: Study Area (Approximate Location) Overlaid on the 1954 Aerial Photography	30
Figure 6: Study Area (Approximate Location) 1983 National Topographic System Russell Sheet	31
Figure 7: Study Area - Surficial Geology	31
Figure 8: Study Area - Soil Drainage	32
Figure 9: Study Area - Results of the Stage 1 (Key Map)	33
Figure 10: Study Area - Results of the Stage 1 (Sheet 1)	34
Figure 11: Study Area - Results of the Stage 1 (Sheet 2)	35
Figure 12: Study Area - Results of the Stage 1 (Sheet 3)	36
Figure 13: Study Area - Results of the Stage 1 (Sheet 4)	37
Figure 14: Study Area - Results of the Stage 1 (Sheet 5)	38



Figure 15: Study Area - Results of the Stage 1 (Sheet 6)..... 39
 Figure 16: Study Area - Results of the Stage 1 (Sheet 7)..... 40
 Figure 17: Study Area - Results of the Stage 1 (Sheet 8) 41
 Figure 18: Study Area - Results of the Stage 1 (Sheet 9) 42
 Figure 19: Study Area - Results of the Stage 1 (Sheet 10)..... 43

LIST OF PLATES

Plate 1: [E] Boundary Road and Ninth Line Road intersection; Area is disturbed, no potential 44
 Plate 2: [NW] Boundary Road; Area is disturbed, no potential 44
 Plate 3: [SE] Boundary Road; Area is disturbed, no potential 44
 Plate 4: [SE] Boundary Road; Area is disturbed, no potential 44
 Plate 5: [SE] Boundary Road; Area is disturbed, no potential 44
 Plate 6: [SE] Boundary Road; Area beyond disturbed ROW and ditch requires Stage 2 44
 Plate 7: [E] Channelized canal; Area is disturbed, no potential..... 45
 Plate 8: [SE] Boundary Road; Area beyond disturbed ROW and ditch requires Stage 2 45
 Plate 9: [SE] Boundary Road; Area is disturbed, no potential 45
 Plate 10: [SE] Boundary Road; Area is disturbed, no potential..... 45
 Plate 11: [SE] Boundary Road; Area beyond disturbed ROW and ditch requires Stage 2 45
 Plate 12: [SE] Boundary Road; Area beyond disturbed ROW and ditch requires Stage 2 45
 Plate 13: [SE] Boundary Road; Area beyond disturbed ROW and ditch requires Stage 2 45
 Plate 14: [SE] Boundary Road; Area beyond disturbed ROW and ditch requires Stage 2 45
 Plate 15: [SE] Boundary Road at Burton Road allowance; Area beyond disturbed ROW and ditch requires Stage 2 46
 Plate 16: [NE] Burton Road allowance; Area beyond disturbed ROW requires Stage 2 46
 Plate 17: [NE] Burton Road allowance; Area requires Stage 2 46
 Plate 18: [E] Boundary Road towards hydro corridor; Area beyond disturbed ROW and ditch requires Stage 2 46
 Plate 19: [E] Minor tributary; Area beyond disturbed ROW is low and wet, no potential 46
 Plate 20: [SE] Boundary Road; Area beyond disturbed ROW and ditch requires Stage 2 46
 Plate 21: [SE] Boundary Road; Area beyond disturbed ROW and channelized creek requires Stage 2..... 47
 Plate 22: [E] Boundary Road culvert; Area beyond disturbed ROW and channelized creek requires Stage 2 47
 Plate 23: [NW] Boundary Road; Area beyond disturbed ROW requires Stage 2 47
 Plate 24: [NW] Boundary Road; Area beyond disturbed ROW requires Stage 2 47
 Plate 25: [SE] Boundary Road; Area beyond disturbed ROW and ditch requires Stage 2 47
 Plate 26: [SE] Boundary Road; Area beyond disturbed ROW and ditch requires Stage 2 47
 Plate 27: [SW] Cartwright Road; Area beyond disturbed ROW and ditch requires Stage 2 47
 Plate 28: [SW] Cartwright Road; Area beyond disturbed ROW and ditch requires Stage 2..... 47
 Plate 29: [E] Burton Road allowance; Area beyond road requires Stage 2..... 48
 Plate 30: [S] Channelized creek; Area beyond disturbed ROW and creek requires Stage 2..... 48
 Plate 31: [NW] Burton Road; Area beyond road requires Stage 2 48
 Plate 32: [E] Burton Road; Area beyond graded slope and ditch requires Stage 2 48
 Plate 33: [E] Burton Road; Area beyond disturbed ROW and ditch requires Stage 2 48
 Plate 34: [E] Burton Road; Area is disturbed; no potential..... 48
 Plate 35: [NW] Channelized creek; Area beyond disturbed ROW and creek channel requires Stage 2..... 48
 Plate 36: [SW] Burton Road; Area beyond disturbed ROW requires Stage 2 48
 Plate 37: [SW] Burton Road; Area beyond disturbed ROW requires Stage 2 49
 Plate 38: [NE] Burton Road; Area beyond Previously assessed ROW requires Stage 2 49
 Plate 39: [NE] Burton Road; Area beyond disturbed ROW requires Stage 2 49
 Plate 40: [NE] Burton Road; Area is disturbed, no potential 49



1.0 PROJECT CONTEXT

Archaeological Services Inc. (ASI) was contracted by GHD to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the proposed Boundary Road Pipeline Project in the City of Ottawa and United Counties of Prescott and Russell (Figure 1). The Project includes two sections of pipeline and the installation of a new district station to support it. This pipeline will deliver essential natural gas to two new customers in the area. Following completion of the Environmental Report, Enbridge will file an application to the OEB for approval to construct. If approved, construction is anticipated to begin in spring 2021.

At the outset, two potential routes were identified, a Preliminary Preferred Route (along Boundary Road) and Alternate Route (along Burton Road). The Stage 1 archaeological assessment was completed along both potential routes with a Study Area including a buffer of 50 metres from the road centerlines along both the Preliminary Preferred and Alternate Routes.

With the Preliminary Preferred Route being confirmed as the Preferred Route, the full description of the route is as followed: consists of two sections having a total length of 10.1 kilometres and a district station. Section 1 will begin at Victoria Street and Cartwright Road where it will tie in to Enbridge's existing pipeline. The 4-inch steel pipe will extend east along Cartwright Road to the intersection of Boundary Road, where it will veer north and continue along Boundary Road for 6.2 kilometres, concluding at the corner of Burton Road where a district station will be installed. At the district station, Section 2 will begin and will consist of 3.9 kilometres of 4-inch polyethylene pipe that continues north along Boundary Road to the new customers' property just south of Highway 417.

The Preferred Route predominantly follows the previously disturbed road right-of-way (ROW), with the exception of the installation of the District Station. At the time of writing, preferred designs were not available.

All activities carried out during this assessment were completed in accordance with the *Ontario Heritage Act* (2017, as amended in 2018) and the 2011 *Standards and Guidelines for Consultant Archaeologists* (S & G), administered by the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI 2011), formerly the Ministry of Tourism, Culture and Sport

1.1 Development Context

All work has been undertaken as required by the *Environmental Assessment Act*, RSO (Ministry of the Environment 1990 as amended 2010) and regulations made under the Act, and are therefore subject to all associated legislation. This project is being conducted in accordance with the Municipal Engineers' Association document *Municipal Class Environmental Assessment* (2000 as amended in 2007, 2011 and 2015).

The *Archaeological Resource Potential Mapping Study of the Regional Municipality of Ottawa-Carleton* (ASI and Geomatics International Inc. 1999) was also consulted.

Authorization to carry out the activities necessary for the completion of the Stage 1 archaeological assessment was granted by GHD on October 21, 2019.



1.2 Historical Context

The purpose of this section, according to the S & G, Section 7.5.7, Standard 1, is to describe the past and present land use and the settlement history and any other relevant historical information pertaining to the Study Area. A summary is first presented of the current understanding of the Indigenous land use of the Study Area. This is then followed by a review of the historical Euro-Canadian settlement history.

1.2.1 Indigenous Land Use and Settlement

Eastern Ontario has been occupied by human populations since the retreat of the Laurentide glacier, approximately 13,500 before present (BP) (Ferris 2013:13). Populations at this time would have been highly mobile, inhabiting a boreal-parkland similar to the modern sub-arctic. By approximately 10,000 BP, the environment had progressively warmed (Edwards and Fritz 1988), and populations now occupied less extensive territories (Ellis and Deller 1990:62–63).

By 10,000 BP, the ice margin had retreated northward from Georgian Bay and the pro-glacial Lake Algonquin was drained through the North Bay outlet (Karrow and Warner 1990:Fig 2.9). From approximately 10,000-5,500 BP, the Great Lakes basins experienced low-water levels and so it is therefore likely that many sites that would have been located on those former shorelines and are now submerged. From approximately 10,000 to 8,000 BP, eastern Ontario was occupied by populations whose subsistence was likely focused within the boreal forest environment (Wright 2001:101, 105, 106). Groups may have had seasonal prolonged residency at fords to take advantage of migrating animal herds, made vulnerable by the crossing, but otherwise likely subsisted at large in the forest environment (Wright 2001:112–113).

By approximately 8,000 BP, subsistence is believed to have shifted to an increased reliance on aquatic resources, likely anadromous fish (Wright 2001:125). It is likely that contact existed between populations in northcentral Ontario and those in southern Ontario (Wright 2001:123). Such communication networks would certainly have extended into eastern Ontario.

Lithic sites that likely date to the Late Palaeoindian or Early Archaic period have been reported for the Ottawa Valley area (eg. Swayze 2005; Swayze and McGhee 2011).

By approximately 6,000 BP, evidence exists for the highly specialized production of ground-stone and native copper artifacts. This is coupled with evidence for population growth and extensive exchange networks (Ellis et al. 1990:88, 90). Material culture is indicative of influences from populations in the St. Lawrence basin of southeastern Ontario and southern Quebec, however a number of sites in the Trent Valley may indicate a more westward extension of this influence and indicate a connection between the populations in the Ottawa Valley and those in the St. Lawrence basin (Ellis et al. 1990:90; Ramsden 1997). Trapping and fishing appear to have been a main-stay of subsistence. The combined habitation-burial sites are suggestive of decreased mobility (Ellis et al. 1990:91). This use of the Ottawa River Valley as a special place for burial should be seen as deliberate and reflective of the cosmology of these people (Parker Pearson 1999:141).

Between approximately 4,800 through 4,000 BP, populations in eastern Ontario had greater variability in their diet and began inhabiting larger sites with overall greater cultural complexity (Ellis et al. 1990:120). Evidence exists for infrastructure such as fish weirs as well as established cemeteries (Ellis et al. 1990, 2009). At this time period, the Great Lakes watershed was experiencing the Nipissing high-water phase.



Around 5,000 BP, isostatic rebound of the continent caused the Lake Huron basin to flood in-land as far as Lake Nipissing (though the exact strandline is debated). This isostatic rebound also affected the watershed boundaries causing the upper Great Lakes to drain through the modern St. Clair River drainage rather than its previous drainage down the Ottawa River (Jackson et al. 2000). This drastic change to the waterways of Ontario certainly had profound implications for the human geography of the entire Great Lakes basin.

Between 3,000-2,500 BP, populations continued to practice residential mobility and to harvest seasonally available resources, including spawning fish. Evidence still exists for extensive and complex exchange networks (Spence et al. 1990: 136, 138). Evidence for contacts with populations in New York State and New England has been found at the Morrison's Island-2 site on the Ottawa River Valley. The Morrison's Island-2 site demonstrates the continuation of this mortuary landscape as well as provides evidence for elaborate burial customs (Spence et al. 1990: 140). The presence of red ochre at this site is specifically implicit of ceremonialism.

The Woodland period begins around 2500 BP and exchange and interaction networks broaden at this time (Spence et al. 1990:136, 138) and by approximately 2,000 BP, evidence exists for macro-band camps, focusing on the seasonal harvesting of resources (Spence et al. 1990:155, 164). By 1500 BP there is macro botanical evidence for maize in southern Ontario, and it is thought that maize only supplemented people's diet. There is earlier phytolithic evidence for maize in central New York State by 2300 BP - it is likely that once similar analyses are conducted on Ontario ceramic vessels of the same period, the same evidence will be found (Birch and Williamson 2013:13–15). Bands likely retreated to interior camps during the winter. It is generally understood that these populations were Algonquian-speakers during these millennia of settlement and land use.

In southern Ontario, from the beginning of the Late Woodland period at approximately 1,000 BP, lifeways became more similar to that described in early historical documents. Between approximately 1000-1300 Common Era (CE), the communal site is replaced by the village focused on horticulture. Seasonal disintegration of the community for the exploitation of a wider territory and more varied resource base was still practised (Williamson 1990:317). By 1300-1450 CE, this episodic community disintegration was no longer practised and populations now communally occupied sites throughout the year (Dodd et al. 1990:343). From 1450-1649 CE this process continued with the coalescence of these small villages into larger communities (Birch and Williamson 2013). Through this process, the socio-political organization of the First Nations, as described historically by the French and English explorers who first visited southern Ontario, was developed. By 1600 CE, the communities within Simcoe County had formed the Confederation of Nations encountered by the first European explorers and missionaries. In the 1640s, the traditional enmity between the Haudenosaunee¹ and the Huron-Wendat (and their Algonkian allies such as the Nippissing and Odawa) led to the dispersal of the Huron-Wendat.

Algonquian-speaking groups were historically documented wintering with the Huron-Wendat, some who abandoned their country on the shores of the St. Lawrence because of attacks from the Haudenosaunee (Thwaites 1896-1901, 27:37). Other Algonquian groups were recorded along the northern and eastern shores and islands of Lake Huron and Georgian Bay - the "Ouasouarini" [Chippewa], the "Outchougai" [Outchougai], the "Atchiligouan" [Achiligouan] near the mouth of the French River and north of Manitoulin Island the "Amikouai, or the nation of the Beaver" [Amikwa; Algonquian] and the

¹ The Haudenosaunee are also known as the New York Iroquois or Five Nations Iroquois and after 1722 Six Nations Iroquois. They were a confederation of five distinct but related Iroquoian-speaking groups – the Seneca, Onondaga, Cayuga, Oneida, and Mohawk. Each lived in individual territories in what is now known as the Finger Lakes district of Upper New York. In 1722 the Tuscarora joined the confederacy.



“Oumisagai” [Mississauga; Chippewa] (Thwaites 1896-1901, 18:229, 231). At the end of the summer 1670, Father Louys André began his mission work among the Mississagué, who were located on the banks of a river that empties into Lake Huron approximately 30 leagues from the Sault (Thwaites 1896-1901, 55:133-155).

Historically, the main Algonquin bands included the Kichesipirini or "Big River people", with their main village on Morrison Island; the Waweskarini (literally wawashkesh irini or "deer people"), or the "Petite Nation des Algonquins", who lived along the rivers immediately west of Montreal; the Matouweskarini ("Madawaska people"), who lived in the Madawaska River region west of Ottawa; the Kinouchebiriiniouek (Kinozhe sipi iriniwag or "Pike river people"), who lived in the Bonnechere River watershed near Renfrew; and the Onontcharonon, or people of Iroquet, who lived south and east of Ottawa (Morrison 2005:14–15).

The earliest recorded form of the name 'Algonquin' is the name 'Algoumequin' which dates to 1603. The name 'Algonquain' appears in 1632 (Day and Trigger 1978:797). The name 'Algonquins' is used by the modern name Algonquins of Ontario and it is this name that will be used in this report. The Algonquins were primarily hunter-fishers. While this was of the utmost economic importance, protocol was strictly guided by Algonquin cosmology and understanding of the spiritualism in the natural world. Some Algonquins also practiced limited horticulture on lots cleared by slash-and-burn (Whiteduck 2002). Control of the waterways was also an important facet of the Algonquin economy, as sovereignty and tolls were exacted for right-of-passage. Such tolls may be seen as comparable to modern day visas and/or tariffs and were important elements of the Algonquins' place and position in the geo-political world of the seventeenth century (Whiteduck 2002). The Algonquin were referred to by the seventeenth century French as "la petite Nation." This refers to a tradition that the Algonquins had previously (prior to the sixteenth century) constituted a much larger group which had been fragmented in a battle near Trois Rivières (Day and Trigger 1978:794).

In 1646, war broke out between the Haudenosaunee and the Algonquins (Day and Trigger 1978:794). During this period Algonquins, Nipissings, and Hurons found refuge in various locations including French settlements at Trois-Rivières, Quebec City, Sillery, and Montreal; others went to the Lake St. John region to the east. Other Nipissings and Algonquins, remained in their traditional territories, avoiding the unsafe lower Ottawa valley in summer (Morrison 2005; Joan Holmes & Associates 1993). Algonquins did not completely abandon the Ottawa valley, but withdrew to its interior locations between 1650 and 1675. Algonquins used the Ottawa River for trade purposes from about 1654. During the last quarter of the 17th century, Algonquins were reported at numerous locations within the French sphere of influence.

Shortly after dispersal of the Wendat, Ojibwa began to expand into southern Ontario and Michigan from along the east shore of Georgian Bay, west along the north shore of Lake Huron, and along the northeast shore of Lake Superior and onto the Upper Peninsula of Michigan (Rogers 1978:760–762). This history was constructed by Rogers using both Anishinaabek oral tradition and the European documentary record, and notes that it included Chippewa, Ojibwa, Mississauga, and Saulteaux or "Southeastern Ojibwa" groups. Ojibwa, likely Odawa, were first encountered by Samuel de Champlain in 1615 along the eastern shores of Georgian Bay. Etienne Brule later encountered other groups and by 1641, Jesuits had journeyed to Sault Sainte Marie (Thwaites 1896:11:279) and opened the Mission of Saint Peter in 1648 for the occupants of Manitoulin Island and the northeast shore of Lake Huron. The Jesuits reported that these Algonquian peoples lived "solely by hunting and fishing and roam as far as the "Northern sea" to trade for "Furs and Beavers, which are found there in abundance" (Thwaites 1896-1901, 33:67), and "all of these Tribes are nomads, and have no fixed residence, except at certain seasons of the year, when fish are plentiful, and this compels them to remain on the spot" (Thwaites 1896-1901, 33:153). Algonquian-



speaking groups were historically documented wintering with the Huron-Wendat, some who abandoned their country on the shores of the St. Lawrence because of attacks from the Haudenosaunee (Thwaites 1896-1901, 27:37).

Other Algonquian groups were recorded along the northern and eastern shores and islands of Lake Huron and Georgian Bay - the “Ouasouarini” [Chippewa], the “Outchougai” [Outchougai], the “Atchiligouan” [Achiligouan] near the mouth of the French River and north of Manitoulin Island the “Amikouai, or the nation of the Beaver” [Amikwa; Algonquian] and the “Oumisagai” [Missisauga; Chippewa] (Thwaites 1896-1901, 18:229, 231). At the end of the summer 1670, Father Louys André began his mission work among the Mississagué, who were located on the banks of a river that empties into Lake Huron approximately 30 leagues from the Sault (Thwaites 1896-1901, 55:133-155).

After the Huron had been dispersed, the Haudenosaunee began to exert pressure on Ojibwa within their homeland to the north. While their numbers had been reduced through warfare, starvation, and European diseases, the coalescence of various Anishinaabek groups led to enhanced social and political strength (Thwaites 1896-1901, 52:133) and Sault Sainte Marie was a focal point for people who inhabited adjacent areas both to the east and to the northwest as well as for the Saulteaux, who considered it their home (Thwaites 1896-1901, 54:129-131). The Haudenosaunee established a series of settlements at strategic locations along the trade routes inland from the north shore of Lake Ontario. From east to west, these villages consisted of Ganneious, on Napanee Bay, an arm of the Bay of Quinte; Quinte, near the isthmus of the Quinte Peninsula; Ganaraske, at the mouth of the Ganaraska River; Quintio, at the mouth of the Trent River on the north shore of Rice Lake; Ganatsekwyagon (or Ganestiquiagon), near the mouth of the Rouge River; Teyaiagon, near the mouth of the Humber River; and Quinaouatoua, on the portage between the western end of Lake Ontario and the Grand River (Konrad 1981:135). Their locations near the mouths of the Humber and Rouge Rivers, two branches of the Toronto Carrying Place, strategically linked these settlements with the upper Great Lakes through Lake Simcoe. The inhabitants of these villages were agriculturalists, growing maize, pumpkins and squash, but their central roles were that of portage starting points and trading centres for Iroquois travel to the upper Great Lakes for the annual beaver hunt (Konrad 1974; Williamson et al. 2008:50–52). Ganatsekwyagon, Teyaiagon, and Quinaouatoua were primarily Seneca; Ganaraske, Quinte and Quintio were likely Cayuga, and Ganneious was Oneida, but judging from accounts of Teyaiagon, all of the villages might have contained peoples from a number of the Iroquois constituencies (ASI 2013).

Peace was achieved between the Haudenosaunee and the Anishinaabek Nations in August of 1701 when representatives of more than twenty Anishinaabek Nations assembled in Montreal to participate in peace negotiations (Johnston 2004:10). During these negotiations captives were exchanged and the Iroquois and Anishinaabek agreed to live together in peace. Peace between these nations was confirmed again at council held at Lake Superior when the Iroquois delivered a wampum belt to the Anishinaabek Nations.

From the beginning of the eighteenth century to the assertion of British sovereignty in 1763, there is no interruption to Anishinaabek control and use of southern Ontario. While hunting in the territory was shared, and subject to the permission of the various nations for access to their lands, its occupation was by Anishinaabek until the assertion of British sovereignty, the British thereafter negotiating treaties with them. Eventually, with British sovereignty, tribal designations changed (Smith 1975:221–222; Surtees 1985:20–21). According to Rogers (1978), by the twentieth century, the Department of Indian Affairs had divided the “Anishinaubag” into three different tribes, despite the fact that by the early eighteenth century, this large Algonquian-speaking group, who shared the same cultural background, “stretched over a thousand miles from the St. Lawrence River to the Lake of the Woods.”



In 1763, following the fall of Quebec, New France was transferred to British control at the Treaty of Paris. The British government began to pursue major land purchases throughout Ontario in the early nineteenth century, and entered into negotiations with various Nations for additional tracts of land as the need arose to facilitate European settlement.

The eighteenth century saw the ethnogenesis in Ontario of the Métis, when Métis people began to identify as a separate group, rather than as extensions of their typically maternal First Nations and paternal European ancestry (Métis National Council n.d.). Métis populations were predominantly located north and west of Lake Superior, however, communities were located throughout Ontario (MNC n.d.; Stone and Chaput 1978:607,608). During the early nineteenth century, many Métis families moved towards locales around southern Lake Huron and Georgian Bay, including Kincardine, Owen Sound, Penetanguishene, and Parry Sound (MNC n.d.). Recent decisions by the Supreme Court of Canada (Supreme Court of Canada 2003; Supreme Court of Canada 2016) have reaffirmed that Métis people have full rights as one of the Indigenous people of Canada under subsection 91(24) of the Constitution Act, 1867.

This area is within the current Algonquins of Ontario (AOO) land claim for their unceded traditional territory. In 2016, an agreement in principle was ratified, including a transfer of \$300-million to the AOO and approximately 48,000 hectares to Algonquin ownership. The Algonquin claim is one of the largest in Canadian history (Algonquins of Ontario 2013a; Algonquins of Ontario 2013b; Indigenous and Northern Affairs Canada 2016).

1.2.2 Euro-Canadian Land Use: Township Survey and Settlement

Historically, the Study Area is located in the Townships of Russell and Cumberland in the County of Russell, and the Townships of Gloucester and Osgoode in the County of Carleton, in the following lots and concessions:

The Township of Russell, County of Russell

- Concession I, Lots 16-24
- Concession II, Lots 23-24
- Concession III, Lot 23
- Concession IV, Lots 22-23
- Concession V, Lot 22
- Concession VI, Lot 22

The Township of Cumberland, County of Russell

- Concession VII, Lot 28
- Concession VIII, Lot 28
- Concession IX, Lot 28
- Concession X, Lot 28
- Concession XI, Lot 21-28

The Township of Gloucester, County of Carleton

- Concession IX on Ottawa River, Lot 1
- Concession X on Ottawa River, Lot 1

The Township of Osgoode, County of Carleton



- Concession X, Lots 20-21
- Concession XI, Lots 1-21

The S & G stipulates that areas of early Euro-Canadian settlement (pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches, and early cemeteries are considered to have archaeological potential. Early historical transportation routes (trails, passes, roads, railways, portage routes), properties listed on a municipal register or designated under the *Ontario Heritage Act* or a federal, provincial, or municipal historic landmark or site are also considered to have archaeological potential.

For the Euro-Canadian period, the majority of early nineteenth century farmsteads (i.e., those that are arguably the most potentially significant resources and whose locations are rarely recorded on nineteenth century maps) are likely to be located in proximity to water. The development of the network of concession roads and railroads through the course of the nineteenth century frequently influenced the siting of farmsteads and businesses. Accordingly, undisturbed lands within 100 m of an early settlement road are also considered to have potential for the presence of Euro-Canadian archaeological sites.

The first Europeans to arrive in the area were transient merchants and traders from France and England, who followed Indigenous pathways and set up trading posts at strategic locations along the well-traveled river routes. All of these occupations occurred at sites that afforded both natural landfalls and convenient access, by means of the various waterways and overland trails, into the hinterlands. Early transportation routes followed existing Indigenous trails, both along the lakeshore and adjacent to various creeks and rivers (ASI 2006).

Cumberland Township

In 1791, the first survey was conducted of 47,000 acres of land that became part of Cumberland Township (Cumberland Historical Society 2005). Cumberland Township was named in 1798 in honour of The Duke of Cumberland, King George III's son. Early settlers were English, United Empire Loyalists, Irish, Scottish and French Canadian. It is the most easterly township in the Regional Municipality of Ottawa-Carleton, previously part of the United Counties of Prescott and Russell (Mika and Mika 1977:512).

The Village of Cumberland is a small settlement on the south shore of the Ottawa River established in 1801. Some of the first settlers in the township were the Dunnings, who acquired 3000 acres and later built a general store and the first schoolhouse; Foubert, who bought a parcel of the Dunning property and opened a trading post; and Beckwith, who built a mill east of the settlement on a small stream (Mika and Mika 1977:512). Cumberland became the focus of industry for the township in the early nineteenth century, due to its access to various transportation routes. The village became popular as an early fur trading post through the nineteenth century because of its location at the confluence of the Lievre and Ottawa Rivers (Cumberland Historical Society 2005). The first post office opened in 1839 (Rayburn 1997:92). The presence of a small ship-building industry and a wharf enabled mail carriers to transport communications during the summer, then the Montreal Road was constructed in the 1820's connecting Bytown (Ottawa), Cumberland, Clarence Point, Plantagenet Mills, L'Orignal and Hawkesbury, opening up trade routes that didn't depend on river navigation. Commercial navigation on the Ottawa River was seasonal and mills at Cumberland Village eventually shut down. By 1907 the Old Montreal Road was paved from Ottawa to Cumberland (Cumberland Historical Society 2005).



The Montreal and Ottawa Railway Company (later the Canadian Pacific Railway) built a station at Leonard in 1897 and at Navan in 1898. The construction of the railroad permitted telegraph lines into the centre of the township. More inland concessions were granted away from the river front concessions and more settlers came to other parts of Cumberland Township (Cumberland Historical Society 2005). Improved transportation routes enabled freight and passengers to arrive at new Cumberland Township settlements and river transportation declined (Mika and Mika 1977:512).

In 1969, the Township of Cumberland was detached from Russell County and added to the Municipality of Ottawa-Carleton. In April 1999, the Township of Cumberland became the City of Cumberland. On January 1st, 2001, the Municipality of Cumberland merged with ten other municipalities to become the new City of Ottawa and the wards of Cumberland and Orleans were established to become a thriving mix of residential and commercial development (Cumberland Historical Society 2005).

Township of Gloucester

In 1792 the Township of Gloucester was first surveyed in the former Dundas County of the Eastern District, and known as Township B, until 1793 when it was named after William Frederick, the second Duke of Gloucester and Edinburgh (Clark 2017). In 1820 the township survey was completed – the 200 acre lots were surveyed back from the rivers, and where the lots surveyed from the Ottawa River met those surveyed from the Rideau River is the Junction Gore. The first church, a Methodist church, opened in 1834 at Long Island Village. Braddish Billings, of the United States, was the first permanent settler in the township. He constructed a sawmill in 1823 and was appointed Clerk and Ambassador. The Billings Estate, now a National Historic Site at 2100 Cabot Street, is the oldest wood framed house in Ottawa built in 1827 and was home to the family for four generations (Brown 2013). Other early include the McKay, Johnston, and St. Louis families. The Township of Gloucester was incorporated as a city in 1981 and amalgamated into the City of Ottawa in 2001.

The first racetrack in Gloucester, the Dominion Trotting Park, was built along the Montreal Road west of what is now Shefford Road. The trotting park consisted of a race track on the south side of the road, and a structure on the north side (Belden 1879). Three hotels were located in this area along the Montreal Road. The Victoria Sulphur Springs Hotel, owned by H. F. Brading and E. W. Hillman, was popular in the 1880s and 90s because it operated in conjunction with the trotting park, but also because, for a small fee, it offered access to natural sulphur springs near Green's Creek (Gloucester Historical Society 2007:5).

Township of Osgoode

In 1798, Osgoode Township was established and named after then Chief Justice of Upper Canada, William Osgoode. The area was once rich in timber which floated down the Castor River and the Petite Nation to the Ottawa River and Quebec. The working lumbermen were the first to express interest in settling the roadless wilderness area. The township received official settlers in the winter of 1826-27, Archibald McDonell of Cornwall being one of the earliest. McDonell was an officer of the Glengarry Militia prior to the War of 1812 and promoted during to Deputy Assistant Adjutant-General commanding forces along the St. Lawrence frontier. For his services, McDonell was given a grant of 800 acres in Osgoode Township. His wife Catherine, daughter of a Loyalist, was entitled to 200 acres in her own name. They held the largest tract of land of any family in the township. In 1833, McDonell became chairman of the first Board of Magistrates presiding over the first Court of Requests in the township. He opened the first store in Osgoode, and on the left bank of the Castor he erected the first sawmill. William York was the neighbour of McDonell in Cornwall. The two parties set out for Osgoode, unbeknownst to either, following different routes and arriving the same day. These two families were the only settlers in



the township until the winter of 1827-28. Col. John By and his Royal Engineers had started to build the Rideau Canal by the time. Bytown, now Ottawa, was the Northern terminus of the canal and was starting to take shape. Osgoode's pioneers cut a road to connect with a trail in Gloucester Township to Bytown, making it possible to get supplies from Bytown instead of the St. Lawrence as done previously. After the completion of the Rideau Canal in 1832, the number of settlers increased rapidly as many former canal workers stayed in the area.

Peter McLaren built the grist mill at Castor River, around which grew the Village of Kenmore in the eastern portion of the township. Kenmore was the location of the first burying ground, at a Roman Catholic house of worship. The second church was built by Methodists near the village of Metcalfe. James Grant was the township's first teacher at a schoolhouse east of Metcalfe. Metcalfe a centre for local trade and the seat of the Division Court by the 1880s. The old district system of government was abandoned in 1849, and the Ontario Municipal Act took effect in Osgoode the following year. Members of the first township council were Reeve Arthur Allen, Deputy Reeve John Lee, Councillors John McDiarmid, Peter McNab and Thomas Kennedy. Thomas Baily was appointed clerk and Donald McIntosh was appointed treasurer (Mika and Mika 1983:127–129).

Township of Russell

The soil of Russell Township is well suited to agriculture, which is the primary activity of area. Russell is drained by the Castor River, which traverses across the township from west to east and empties into the Nation River in the Township of Cambridge. Villages within the boundaries of Russell are Brisson, Cambridge, Embrun, Felton, Forget, Marvelville, Panna, Russell and Saint-Onge. John Purvis from Scotland settled on Lot A, Concession 1 in 1829, and was followed in 1832 by John Stewart. John Loucks established a mill in 1836, and lumberman began to clear forests along the banks of the Castor River in the area of Duncanville by 1841. By 1851, five mills operated within the township. Early industries in the township included lumber mills at Embrun, flour mills at Russell, and the North Russell Shale Brick Company. James Breckenridge opened a school in 1840, and another school was opened by James Keays in 1842. Mr. Keays was reeve of township some years later. By 1850, there were still only 64 inhabitants in the township (Mika and Mika 1983:320).

1.2.3 Historical Map Review

The 1862 *Map of the Counties of Stormont, Dundas, Glengarry, Prescott & Russell* (Walling and Gray 1862), 1863 *Map of the County of Carleton* (Prescott 1863), the 1879 *Illustrated Historical Atlas of the County of Carleton* (Belden 1879), and the 1881 *Illustrated Historical Atlas of Prescott and Russell Counties* were examined to determine the presence of historic features within the Study Area during the nineteenth century (Table 1; Figures 2-3).

It should be noted, however, that not all features of interest were mapped systematically in the Ontario series of historical atlases, given that they were financed by subscription, and subscribers were given preference with regard to the level of detail provided on the maps. Moreover, not every feature of interest would have been within the scope of the atlases.

In addition, the use of historical map sources to reconstruct/predict the location of former features within the modern landscape generally proceeds by using common reference points between the various sources. These sources are then geo-referenced in order to provide the most accurate determination of the location of any property on historic mapping sources. The results of such exercises are often imprecise or even



contradictory, as there are numerous potential sources of error inherent in such a process, including the vagaries of map production (both past and present), the need to resolve differences of scale and resolution, and distortions introduced by reproduction of the sources. To a large degree, the significance of such margins of error is dependent on the size of the feature one is attempting to plot, the constancy of reference points, the distances between them, and the consistency with which both they and the target feature are depicted on the period mapping.

Table 1: Nineteenth-century property owner(s) and historical features(s) within or adjacent to the Study Area

Con #	Lot #	<i>County Atlases (1862 and 1863)</i>		<i>Illustrated Historic Atlases (1879 and 1881)</i>	
		Property Owner(s)	Historical Feature(s)	Property Owner(s)	Historical Feature(s)
<i>Township of Russell</i>					
I	16	T Argue A Harlen	Structure	None	None
I	17	J Loney A Powell	Structure	None	None
I	18	T. Whittey	Structure	None	None
I	19	D&J. McDonald	Structure	None	None
I	20	Jas Keavs J Butler		None	None
I	21	None	None	None	None
I	22	None	None	None	None
I	23	None	None	None	None
I	24	None	None	None	None
II	23	None	None	Rich Wilson	None
II	24	None	None	Rich Wilson	None
III	23	Armstrong W. Henderson None	Structure Structure Post office	None	None
III	24	J Keavs		None	None
IV	22	Sparks LE Wood	Structure Structure	None	None
IV	23	None	None	None	None
V	22	W.M. Patterson		None	None
VI	22	None		None	None
<i>Township of Cumberland</i>					
VII	28	G. James	Structure	None	None
VIII	28	Wm Rowlan Thos McVagh T. Buckingham J. Buckingham	House None House School, house	None	Post Office
IX	28	J Bagg J McVagh Wm McVagh	House House House	None	Veighton Store, post office



Con #	Lot #	<i>County Atlases (1862 and 1863)</i>		<i>Illustrated Historic Atlases (1879 and 1881)</i>	
		Property Owner(s)	Historical Feature(s)	Property Owner(s)	Historical Feature(s)
		P. McVagh	House		
X	28	None	None	None	None
XI	21	None	None	None	None
XI	22	None	None	None	None
XI	23	None	None	None	None
XI	24	None	None	None	None
XI	25	None	None	None	None
XI	26	None	None	None	None
XI	27	None	None	None	None
XI	28	None	None	None	None
<i>Township of Gloucester</i>					
IX	1	None	None	Thos Starmer	None
X	1	None	None	None	None
<i>Township of Osgoode</i>					
X	20	Wm F Kearns	Structure, tributary	M Scharf	Structure, River of Castor
X	21	T Liscomb	Tannery, structures (3), school, tributary	Jas Kerr	River of Castor
XI	1	None	None	P Green	None
XI	2	None	None	T Mc Kay	None
XI	3	None	None	CanadaCo	None
XI	4	None	None	Thos Mc Kay	None
XI	5	None	None	Thos Mc Kay	None
XI	6	None	None	Thos Mc Kay	None
XI	7	None	None	Crown	None
XI	8	None	None	Thos Wilson	None
XI	9	None	None	Jno Smith	None
XI	10	None	None	Jno Smith	None
XI	11	None	None	Jno Smith	Black Creek
XI	12	None	None	Alex Lindsey	Black Creek
XI	13	None	None	Alex Lindsey	Black Creek
XI	14	None	None	Wm Griffith	Black Creek
XI	15	None	None	Wm Griffith	Black Creek
XI	16	A Baker	None	Hugh Paden	None
XI	17	None	None	Jno Smith	None
XI	18	None	None	Jno Cochran Jr	None
XI	19	Wm F. Kearns	None	Wm Henderson	None
XI	20	Wm F. Kearns	None	Wm Henderson	None
XI	21	R Hepinstall N Carter	Structure Structure	Noble Cartwright	Structure



The 1862 Map of the Counties of Stormont, Dundas, Glengarry, Prescott & Russell indicates that the boundary between Cumberland and Russell townships is a disputed line. An unlabelled road leads north through Lot 28, Concession 8 in Cumberland towards Bear Brook post office. Houses and a school cluster near the road. From the township boundary line, a road leads south between Lot 23, Concessions 3-4 in Russell, towards Duncanville. A post office is located within the Study Area at the northeast corner of Lot 23, Concession 3. The 1863 Map of the County of Carleton shows the North Branch of the Castor River in its historic alignment, running south and west of the Study Area, including the west half of Lots 20-21, Concession 10. Structures are shown grouped around the river. Lots 16 and 19-21, Concession 11 are shown as being owned, with no structures within the Study Area.

The 1879 Illustrated Historical Atlas of the County of Carleton shows growth in population, and the Black Creek is shown running through the Study Area. The 1881 Illustrated Historical Atlas of Prescott and Russell Counties indicates the Post office has moved north of the boundary to Carleton and is adjacent to Veighton Store.

1.2.4 Twentieth-Century Mapping Review

The 1908 National Topographic System Russell Sheet (Department of Militia and Defence 1908), 1954 Aerial Photography (Hunting Survey Corporation Limited 1954), and the 1983 National Topographic System Russell Sheet (Energy, Mines and Resources Canada 1983) were examined to determine the extent and nature of development and land uses within the Study Area (Figures 4-6).

The 1908 topographic map shows Black Creek running through the Study Area at Boundary Road and Burton Road, a bridge at each location. Two bridges are north of the bridge crossing Black Creek on Boundary Road, and three to the south. The Ottawa and New York Railway is shown crossing through the Study Area at Pana from southeast to northwest. There are fourteen wooden houses illustrated along the Study Area. Cartwright Street is depicted as an unmetalled road, leading onto Boundary Road where it continues north. Past Burton Road, Boundary Road ends. Burton Road is also depicted as an unmetalled road, with a portion absent between Lot 24, Concession 2 and Lot 23, Concession 4.

The 1954 photograph shows the Study Area is largely agricultural, and the roadways follow their previous alignments. Boundary Road and Burton Road have been extended where road was previously missing. The former Ottawa and New York Railway is now the New York Central Railway. Black Creek continues to be seen running from the Castor River through the Study Area.

The 1983 topographic map illustrates the Study area is south of Highway 417, and houses cluster at the north end of the Study Area. A junk yard is within the study area opposite Mitch Owens Road. A power transmission line is indicated parallel the railway, and Black Creek crosses through the railway before crossing the Study Area and then the power transmission line. A structure is north of the railway at Boundary Road, and three structures are shown at Boundary Road and Cartwright Street. Ch. St. Guillaume passes through Highway 417 to meet the east end of the Study Area at the dip in Burton Road. Two structures can be seen west of the intersection, and two more along Burton.

1.3 Archaeological Context



This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the Study Area, its environmental characteristics (including drainage, soils or surficial geology and topography, etc.), and current land use and field conditions. Three sources of information were consulted to provide information about previous archaeological research: the site record forms for registered sites available online from the MHSTCI through “Ontario’s Past Portal”; published and unpublished documentary sources; and the files of ASI.



1.3.1 Current Land Use and Field Conditions

A review of available Google satellite imagery shows topsoil grading activity in the northeast corner of Boundary Road and Ninth Line Road by 2003. By 2004, a house was constructed at 6645 Boundary Road. A self storage unit appears at 932 Burton road between 2003 and 2005. Between 2005 and 2008, the construction of a building and parking lot at 5329 Boundary Road for Alpine Auto Parts, a new parking lot south of the property, the house at 6673 Boundary Road, and the Slavko Concrete Finishing building at 888 Burton Road occurred. Detached garages were added in 2008 to the property at 1105 Burton Road, and in 2012 at 6673 Boundary Road. Earth moving activities can be seen in the parking lot of Pomerleau Excavation at 5425 Boundary Road. Grading activities and construction of a large building can be seen at the southwest corner of Burton Road and Corduroy Road between 2009 and 2013, and at the southeast corner a building and parking lot were constructed by 2014. A parking lot was constructed west of the building at 108 Enterprise Street by 2014.

A Stage 1 property inspection was conducted on November 6, 2019 that noted the Study Area is located starting at Victoria Street east along Cartwright Street, where it veers north and along Boundary Road. At the intersection of Boundary Road and Burton Road, the Study Area branches east along Burton Road to Rockdale Road, and continues north along Boundary Road to south of the Trans Canada Highway. The Study Area consists of rural residential and commercial properties, and rural agricultural lands with graded slope and ditches adjacent the road right-of-way (ROW).

1.3.2 Geography

In addition to the known archaeological sites, the state of the natural environment is a helpful indicator of archaeological potential. Accordingly, a description of the physiography and soils are briefly discussed for the Study Area.

The S & G stipulates that primary water sources (lakes, rivers, streams, creeks, etc.), secondary water sources (intermittent streams and creeks, springs, marshes, swamps, etc.), ancient water sources (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 the topography, shorelines of drained lakes or marshes, cobble beaches, etc.), as well as accessible or inaccessible shorelines (high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh, etc.) are characteristics that indicate archaeological potential.

Water has been identified as the major determinant of site selection and the presence of potable water is the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in Ontario since 5,000 BP (Karrow and Warner 1990:Figure 2.16), proximity to water can be regarded as a useful index for the evaluation of archaeological site potential. Indeed, distance from water has been one of the most commonly used variables for predictive modeling of site location.

The AOO state that archaeological sites within the Algonquin Traditional Territory typically have a minimal archaeological footprint (Morrison 2005). Since eastern Ontario was characterized by glacial lakes and/or inland seas, paleo-shorelines and associated archaeological sites are often located further inland from modern shorelines. The Study Area is located between two relict beaches, approximately 700 metres to the north and south.



Algonquin cosmology understood that the natural world was filled with spirits or Manitous. Such Manitous were found in the rivers, and maintaining their benevolence was of regular importance while travelling through the country. Manitous could be identified at places with ‘power’ and may especially be found at places such as waterfalls, caves or canyons which are prone to reverberation, echo, or other noise (Whiteduck 2002).

Other geographic characteristics that can indicate archaeological potential include: elevated topography (eskers, drumlins, large knolls, and plateaux), 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 (migratory routes, spawning areas) are also considered characteristics that indicate archaeological potential (S & G, Section 1.3.1).

The Study Area is located on the former seabed of the Champlain Sea. The Champlain Sea was a large inland arm of the Atlantic Ocean stretching inland as far as modern day Kingston and Pembroke. The Champlain Sea formed at approximately 13,000 BP when an ice barrier at modern day Quebec City melted and the inland glacial Lake Candona was flooded by the Goldthwait Sea. The Champlain Sea persisted until approximately 10,600 BP when, due to isostatic rebound of the continent, it receded to the modern Lake Champlain and the extinct Lampsilis Lake (Pintal 2012:221; Robinson 2012:197). The geography of the Champlain Sea strand is difficult to determine precisely. The sea levels in Quebec have been reconstructed at approximately 175 m above sea level (Karrow 2006), however, in parts of New York State and Vermont State, the Champlain Sea strands have been documented at elevations of approximately 91 m above sea level (Chapman 1937; Rayburn 2004) and 107 m above sea level (Springston and DeSimone 2007).

The Study Area is located within the sand plains and undrumlined till plains of the Russell and Prescott Sand Plains of southern Ontario (Chapman and Putnam 1984). The Russell and Prescott Sand Plains consist of a 65-mile continuous belt of large sand plains from Ottawa to Hawkesbury. The area is separated by clays of the lower Ottawa Valley. The complex was at first a continuous delta built by the Ottawa river, excepting the higher sands, and later cut by the Ottawa River when it rose above sea level. The texture of sand varies, transitioning from coarse to the north and becoming fine sand and silt south of Castor River. The sands are underlain by stratified red and grey clay, both low in lime suggesting that they originate from the granite rocks of the Canadian Shield. The majority of the plain lies within the drainage basin of the South Nation River, with smaller areas draining into the Rideau and Ottawa Rivers. Drainage is good from the bordering escarpments but becomes progressively poor towards the interiors. The dry sand plains have mature Podzol soils with thin ash-grey horizons and Humic Podzols occur where the water table is high. Iron and humus hardpans sometimes develop in the Humic Podzols where the sand is coarse. These soils are low in fertility due to deficiency in lime, nitrogen, potash, phosphorous and manganese. The finer sandy loams are largely poorly drained, but present excellent prospects for improvement. When drainage is established, a fertility program involving legumes and fertilizers can be used for these soils to become productive. These fine sand areas have become prosperous in dairy farming areas while coarse sands are withdrawn from agricultural use (Chapman and Putnam 1984:208–210).

Figure 7 depicts surficial geology for the Study Area. The surficial geology mapping demonstrates that the Study Area is underlain by coarse-textured glaciomarine deposits of sand, gravel, minor silt and clay, Deltaic and Littoral deposits, fine-textured glaciomarine deposits of silt and clay, minor sand and gravel which is massive to well laminated, and organic deposits of peat, muck and marl (Ontario Geological Survey 2010). Soils in the Study Area consist of Vars gravelly sand with good drainage, Castor silt loam



with moderate drainage, Bearbrook fine sandy loam, Bearbrook clay-sand spot phase, Bearbrook clay, and Bainsville silt loam with poor drainage, and Castor fine sandy loam and Rubicon fine sand with imperfect drainage (Figure 8).

The Study Area is under the South Nation Conservation Authority, jurisdiction of which encompasses 4,384 square kilometres of Eastern Ontario. The headwaters are north of Brockville, and the South Nation River flows northeast 175 kilometres, emptying into the Ottawa River near Plantagenet.

The Study area is crossed by the Castor River and Black Creek. The Castor River Subwatershed has a drainage area of 739 square kilometres within the larger South Nation River Watershed. The South Nation River Watershed maintains and protects 4,2000 square kilometres of eastern Ontario, comprised of parts of the City of Ottawa, Russell, North Dundas and Nation. The majority of lands adjacent the North Castor River are forested at 64%, with 18% being active agricultural fields, 9% meadow, and 2% pasture, recreational, residential, or scrubland. Other land classifications were 1%. The entire North Castor River Subwatershed is comprised of only 8.07% forest cover, while agricultural use is 61.51% (South Nation Conservation 2014; CityStreamWatch 2015; Conservation Ontario 2018).

Black Creek is one of the five major tributaries of the Greens Creek in the east end of the City of Ottawa. It is approximately four kilometres long, with headwaters beginning in the Mer Bleue Wetland and emptying into Greens Creek south of Innes Road. Black Creek is considered to be 82% undeveloped and 14% agriculture (CityStreamWatch 2018).

1.3.3 Previous Archaeological Research

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (OASD) maintained by the MHSTCI. This database contains archaeological sites registered within the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude and longitude. A Borden block is approximately 13 km east to west, and approximately 18.5 km north to south. Each Borden block is referenced by a four-letter designator, and sites within a block are numbered sequentially as they are found. The Study Area under review is located in Borden blocks *BiFu* and *BhFu*.

According to the OASD, no previously registered archaeological sites are located within two kilometres of the Study Area (MHSTCI 2019).

According to the background research, two previous reports detail fieldwork within 50 m of the Study Area.

Golder Associates Ltd. (2014) conducted a Stage 1 as part of the Boundary Road Site between Boundary Road and Frontier Road between Devine Road and Highway 417, including parts of the current Study Area. Background research determined the project area to not have archaeological potential, and no further work was recommended. The report states that the assessment results were based on the *Archaeological Resource Potential Mapping Study of the Regional Municipality of Ottawa-Carleton* (ASI and Geomatics International Inc. 1999). ASI notes that this potential mapping study was created prior to the current S & Gs, and that no property inspection was conducted during Golder's assessment. These areas have been re-assessed under the current Stage 1 analysis.



WSP Canada (2018) conducted a Stage 1 AA as part of the Vars Industrial Park project in the City of Ottawa and United Counties of Prescott-Russell, including parts of the current Study Area between Eadie Road and Rockdale Road. The property inspection in 2017 determined that parts of the current Study Area have archaeological potential and require a Stage 2 Archaeological Assessment.

2.0 FIELD METHODS: PROPERTY INSPECTION

A Stage 1 property inspection must adhere to the S & G, Section 1.2, Standards 1-6, which are discussed below. The entire property and its periphery must be inspected. The inspection may be either systematic or random. Coverage must be sufficient to identify the presence or absence of any features of archaeological potential. The inspection must be conducted when weather conditions permit good visibility of land features. Natural landforms and watercourses are to be confirmed if previously identified. Additional features such as elevated topography, relic water channels, glacial shorelines, well-drained soils within heavy soils and slightly elevated areas within low and wet areas should be identified and documented, if present. Features affecting assessment strategies should be identified and documented such as woodlots, bogs or other permanently wet areas, areas of steeper grade than indicated on topographic mapping, areas of overgrown vegetation, areas of heavy soil, and recent land disturbance such as grading, fill deposits and vegetation clearing. The inspection should also identify and document structures and built features that will affect assessment strategies, such as heritage structures or landscapes, cairns, monuments or plaques, and cemeteries.

The Stage 1 archaeological assessment property inspection was conducted under the field direction of Martin Cooper (P380) of ASI, on November 6, 2019, in order to gain first-hand knowledge of the geography, topography, and current conditions and to evaluate and map archaeological potential of the Study Area. It was a visual inspection only and did not include excavation or collection of archaeological resources. Fieldwork was only conducted when weather conditions were deemed suitable and seasonally appropriate, per S & G Section 1.2., Standard 2. Previously identified features of archaeological potential were examined; additional features of archaeological potential not visible on mapping were identified and documented as well as any features that will affect assessment strategies. Field observations are compiled onto the existing conditions of the Study Area in Section 7.0 (Figures 10-19) and associated photographic plates are presented in Section 8.0 (Plates 1-40).

3.0 ANALYSIS AND CONCLUSIONS

The historical and archaeological contexts have been analyzed to help determine the archaeological potential of the Study Area. These data are presented below in Section 3.1. Results of the analysis of the Study Area property inspection are presented in Section 3.2.

3.1 Analysis of Archaeological Potential

The S & G, Section 1.3.1, lists criteria that are indicative of archaeological potential. The Study Area meets the following criteria indicative of archaeological potential:

- Water sources: primary, secondary, or past water source (Castor River, Black Creek);
- Early historic transportation routes (Boundary Road); and
- Well-drained soils (Vars gravelly sand)



According to the S & G, Section 1.4 Standard 1e, no areas within a property containing locations listed or designated by a municipality can be recommended for exemption from further assessment unless the area can be documented as disturbed. The Municipal Heritage Register was consulted and no properties within the Study Area are Listed or Designated under the Ontario Heritage Act.

These criteria are indicative of potential for the identification of Indigenous and Euro-Canadian archaeological resources, depending on soil conditions and the degree to which soils have been subject to deep disturbance.

3.2 Analysis of Property Inspection Results

The property inspection determined that parts of the Preferred and Alternative Routes exhibit archaeological potential. If impacted, these areas will require Stage 2 archaeological assessment prior to any proposed construction activities.

According to the S & G Section 2.1.1, pedestrian survey is required in actively or recently cultivated fields (eg. Plates 12-18, 24, 29-31, 33, 36-39; Figures 10-19: areas highlighted in orange). According to the S & G Section 2.1.2, test pit survey is required on terrain where ploughing is not viable, such as wooded areas, properties where existing landscaping or infrastructure would be damaged, overgrown farmland with heavy brush or rocky pasture, and narrow linear corridors up to 10 metres wide (eg. Plates 6, 8-9, 11, 16, 21; Figures 10-19: areas highlighted in green).

Part of the Study Area was previously assessed (WSP 2018) and does not require further work (Figures 17-19: areas highlighted in red).

The property inspection determined that the remainder of the Study Area has been subjected to deep soil disturbance events associated with the construction of the existing road right-of-way (ROW), which includes the road bed and ditches, as well as adjacent residential/commercial/industrial development, and channelized creeks. According to the S & G Section 1.3.2 these areas do not retain archaeological potential and do not require further survey (Plates 1-40; Figures 10-19: areas highlighted in yellow). The Preferred Route predominantly follows the previously disturbed road right-of-way (ROW), with the exception of the installation of the District Station. At the time of writing, preferred designs were not available.

3.3 Conclusions

The Stage 1 background study determined that no previously registered archaeological sites are located within one kilometre of the Study Area. The property inspection determined that parts of the Preferred and Alternative Routes exhibit archaeological potential.



4.0 RECOMMENDATIONS

In light of these results, the following recommendations are made:

1. Parts of the Study Area exhibit archaeological potential. If impacted, these areas will require Stage 2 archaeological assessment, prior to any proposed construction activities;
2. The remainder of the Study Area does not retain archaeological potential on account of low and wet conditions, deep and extensive land disturbance, or having been previously assessed. These lands do not require further archaeological assessment; and,
3. Should the proposed work extend beyond the current Study Area, further Stage 1 archaeological assessment should be conducted to determine the archaeological potential of the surrounding lands.

NOTWITHSTANDING the results and recommendations presented in this study, ASI notes that no archaeological assessment, no matter how thorough or carefully completed, can necessarily predict, account for, or identify every form of isolated or deeply buried archaeological deposit. In the event that archaeological remains are found during subsequent construction activities, the consultant archaeologist, approval authority, and the Cultural Programs Unit of the MHSTCI should be immediately notified.



5.0 ADVICE ON COMPLIANCE WITH LEGISLATION

ASI also advises compliance with the following legislation:

- This report is submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, RSO 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 field work and report recommendations ensure the conservation, preservation and protection 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 Heritage, Sport, Tourism and Culture Industries, 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 field work 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 archaeological resources be discovered, they 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 sec. 48 (1) of the *Ontario Heritage Act*.
- The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.



6.0 REFERENCES CITED

Algonquins of Ontario

2013a Overview of Treaty Negotiations. <http://www.tanakiwin.com/our-treaty-negotiations/overview-of-treaty-negotiations/>.

2013b Agreement-in-Principle. <https://www.tanakiwin.com/our-treaty-negotiations/agreement-in-principle/>.

ASI

2006 *Historical Overview and Assessment of Archaeological Potential Don River Watershed, City Of Toronto.*

2013 *Archaeological Potential Model for Durham Region.*

ASI and Geomatics International Inc.

1999 *The Archaeological Resource Potential Mapping Study of the Regional Municipality of Ottawa-Carleton: Planning Report.*

Belden, H.

1879 *Illustrated Historical Atlas of the County of Carleton.* H. Belden & Co., Toronto.

Birch, J., and R.F. Williamson

2013 *The Mantle Site: An Archaeological History of an Ancestral Wendat Community.* Rowman & Littlefield Publishers, Inc., Latham.

Brown, A.

2013 The Billings House. http://www.ontarioplaques.com/Plaques/Plaque_Ottawa36.html.

Chapman, D.H.

1937 Late-Glacial and Postglacial History of the Champlain Valley. *American Journal of Sciences* series 5(34):89–124.

Chapman, L.J., and F. Putnam

1984 *The Physiography of Southern Ontario.* Vol. 2. Ontario Geologic Survey, Special Volume. Ontario Ministry of Natural Resources, Toronto.

CityStreamWatch

2015 *North Castor River 2015 Stream Watch Report.*

2018 *Black Creek 2018 Catchment Report.*

Clark, G.

2017 The Gloucester Historical Society - A Historical Timeline for the Township of Gloucester. <http://www.gloucesterhistory.com/history.html>.



Conservation Ontario

2018 *State of the Nation Watershed Report Card 2018.*

Cumberland Historical Society

2005 History of Cumberland Township. <http://www.cths.ca/english/7/7-1.html>.

Day, G.M., and B.G. Trigger

1978 Algonquin. In *Handbook of North American Indians: The Northeast*, 15:. Smithsonian Institution, Washington.

Department of Militia and Defence

1908 Russell Sheet. National Topographic System.

Dodd, C.F., D.R. Poulton, P.A. Lennox, D.G. Smith, and G.A. Warrick

1990 The Middle Ontario Iroquoian Stage. In *The Archaeology of Southern Ontario to A.D. 1650*, C. J. Ellis and N. Ferris, eds, pp. 321–360. Occasional Publication of the London Chapter OAS Number 5. Ontario Archaeological Society Inc., London.

Energy, Mines and Resources Canada

1983 Russell Sheet. National Topographic System.

Gloucester Historical Society

2007 Historic Gloucester 8(1).

Golder Associates Ltd.

2014 *Stage 1 Archaeological Assessment Capital Region Resource Recovery Centre Boundary Road Site Part Lots 22-25, Concession 11 Cumberland Township City of Ottawa, Ontario.*

Hunting Survey Corporation Limited

1954 Digital Aerial Photographs. <https://mdl.library.utoronto.ca/collections/air-photos/1954-air-photos-southern-ontario/index>.

Indigenous and Northern Affairs Canada

2016 *Algonquins of Ontario Achieve New Milestone toward Modern Treaty with Ontario and Canada. Agreement-in-Principle Sets Path for Final Stage of Land Claim Negotiations.*

Joan Holmes & Associates

1993 *Aboriginal Use and Occupation of the Ottawa River Watershed.* Algonquins of Golden Lake Claim. Volumes 1, 2, 7 and 8. Ontario Native Affairs Secretariat, Ottawa.

Johnston, D.

2004 *Connecting People to Place: Great Lakes Aboriginal in Cultural Context.* Unpublished paper prepared for the Ipperwash Commission of Inquiry.
<http://www.attorneygeneral.jus.gov.on.ca/inquiries/ipperwash/transcripts.pdf>.

Karrow, P.F.

2006 The Champlain Sea: Here Yesterday, Gone Tomorrow. A Canadian Newsletter for the Earth Sciences. Volume 4 Number 1, Spring 2006.



http://whaton.uwaterloo.ca/s06_champlain.html.

Karrow, P.F., and B.G. Warner

1990 The Geological and Biological Environment for Human Occupation in Southern Ontario. In *The Archaeology of Ontario to A.D. 1650*, pp. 5–36. Occasional Publications 5. London Chapter, Ontario Archaeological Society, London.

Konrad, V.A.

1974 Iroquois Villages on the North Shore of Lake Ontario, 1665-1687. presented at the Fall Meeting of the Ontario Historical Geographers, November 9, Carleton University, Ottawa, Ontario.

1981 An Iroquois Frontier: The North Shore of Lake Ontario during the Late Seventeenth Century. *Journal of Historical Geography* 7(2):129–144.

Métis National Council

n.d. The Métis Nation. <<http://www.metisnation.ca/index.php/who-are-the-metis>>.

n.d. Métis Historic Timeline. <http://www.metisnation.org/culture-heritage/m%C3%A9tis-timeline/>.

Mika, N., and H. Mika

1977 *Places In Ontario: Their Name Origins and History, Part I, A-E*. Vol. I. Encyclopedia of Ontario. Mika Publishing Company, Belleville.

1983 *Places In Ontario: Their Name Origins and History, Part III, N-Z*. Mika Publishing Company, Belleville.

Ministry of Heritage, Sport, Tourism and Culture Industries

2017 Ontario Heritage Act, R.S.O. 1990, c. O.18 [as Amended in 2017]. Province of Ontario.

2019 Ontario's Past Portal. *PastPortal*. <https://www.pastport.mtc.gov.on.ca>.

Ministry of the Environment

1990 Environmental Assessment Act, R.S.O. Province of Ontario.

Ministry of Tourism and Culture

2011 *Standards and Guidelines for Consultant Archaeologists*. Cultural Programs Branch, Ontario Ministry of Tourism and Culture, Toronto.

Morrison, J.

2005 Algonquin History in the Ottawa River Watershed. In *A Background Study for Nomination of the Ottawa River Under the Canadian Heritage Rivers System*, L. Hopkins, ed, pp. 17–32. Quebec-Labrador Foundation, Ipswich, MA.



Municipal Engineers Association

2000 *Municipal Class Environmental Assessment, Last Amended 2015.*

Ontario Geological Survey

2010 Surficial Geology of Southern Ontario. Miscellaneous Release — Data 128 – Revised.
http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=pub&id=MRD128-REV.

Pintal, J.-Y.

2012 Late Pleistocene to Early Holocene Adaptation: The Case of the Strait of Quebec. In *Late Pleistocene Archaeology & Ecology in the Far Northeast*, C. Chapdelaine, ed, pp. 218–236. Peopling of the Americas Publications. Texas A & M University Press, College Station, Texas.

Prescott, C.W.

1863 Map of the County of Carleton Canada West, from Surveys under the Direction of H.F. Walling. D.P. Putnam.

Rayburn, A.

1997 *Place Names of Ontario*. University of Toronto Press, Toronto.

Rayburn, J.A.

2004 Deglaciation of the Champlain Valley New York and Vermont and Its Possible Effects on North Atlantic Climate Change. Ph.D. Dissertation, Geology Department, State University of New York, Binghamton.

Robinson, F.W., IV

2012 Between Mountains and the Sea: An Exploration of the Champlain Sea and Paleoindian Land Use in the Champlain Basin. In *Late Pleistocene Archaeology & Ecology in the Far Northeast*, C. Chapdelaine, ed, pp. 191–217. Peopling of the Americas Publications. Texas A & M University Press, College Station, Texas.

Rogers, E.S.

1978 Southeastern Ojibwa. In *Handbook of North American Indians: The Northeast*, 15: Smithsonian Institution, Washington.

Smith, D.B.

1975 Who Are the Mississauga? *Ontario History* 67(4):311–222.

South Nation Conservation

2014 *Castor River Subwatershed Report Card*.

Spence, M.W., R.H. Pihl, and C. Murphy

1990 Cultural Complexes of the Early and Middle Woodland Periods. In *The Archaeology of Southern Ontario to A.D. 1650*, C. J. Ellis and N. Ferris, eds. Occasional Publication of the London Chapter OAS Number 5. Ontario Archaeological Society Inc., London.

Springston, G., and D. DeSimone

2007 Surficial Geologic Map of the Town of Williston, Vermont. Vermont Geologic Survey.,



Waterbury.

Stone, L.M., and D. Chaput

1978 History of the Upper Great Lakes. In *Handbook of North American Indians*, Bruce G. Trigger, ed, pp. 602–609. Smithsonian Institution, Washington.

Supreme Court of Canada

2003 *R. v. Powley*. September 19. <https://scc-csc.lexum.com/scc-csc/scc-csc/en/item/2076/index.do>.

2016 *Daniels v. Canada (Indian Affairs and Northern Development)*. April 14. <https://scc-csc.lexum.com/scc-csc/scc-csc/en/item/15858/index.do>.

Surtees, R.

1985 *A Cartographic Analysis of Indian Settlements and Reserves in Southern Ontario and Southern Quebec, 1763-1867*. Research Branch, Indian and Northern Affairs Canada, Ottawa.

Swayze, K.

2005 *Stage 1 & 2 Archaeological Assessment of the Broughton Lands, Part of Lot 5, Concession 1, March Township, City of Ottawa*.

Swayze, K., and R. McGhee

2011 The Heritage Hills Site and Early Postglacial Occupation of the Ottawa Valley. *Archaeology of Eastern North America* 39:131–152.

Thwaites, R.G.

1896 *The Jesuit Relations and Allied Documents: Travel and Explorations of the Jesuit Missionaries in New France, 1610-1791; the Original French, Latin, and Italian Texts, with English Translations and Notes*. 73 vols. Burrows Brothers, Cleveland.

Walling, H.F., and O.W. Gray

1862 Map of the Counties of Stormont, Dundas, Glengarry, Prescott & Russell, Canada West : From Actual Surveys under the Direction of H.F. Walling. C.W. Prescott, D. P. Putnam.

Whiteduck, K.J.

2002 *Algonquin Traditional Culture: The Algonquins of the Kitchissippi Valley; Traditional Culture at the Early Contact Period*. The Algonquins of Pikwàkanagàn, Golden Lake.

Williamson, R.F.

1990 The Early Iroquoian Period of Southern Ontario. In *The Archaeology of Southern Ontario to A.D. 1650*, C. J. Ellis and N. Ferris, eds, pp. 291–320. Occasional Publication of the London Chapter OAS Number 5. Ontario Archaeological Society Inc., London.

Williamson, R.F., D.A. Robertson, M.S. Cooper, R.I. MacDonald, S.J. Austin, and R.H. Pihl

2008 Life and Death at the Quarry: The Early Woodland Archaeology of the Peace Bridge Site. *Ontario Archaeology* 85–88:39–68.



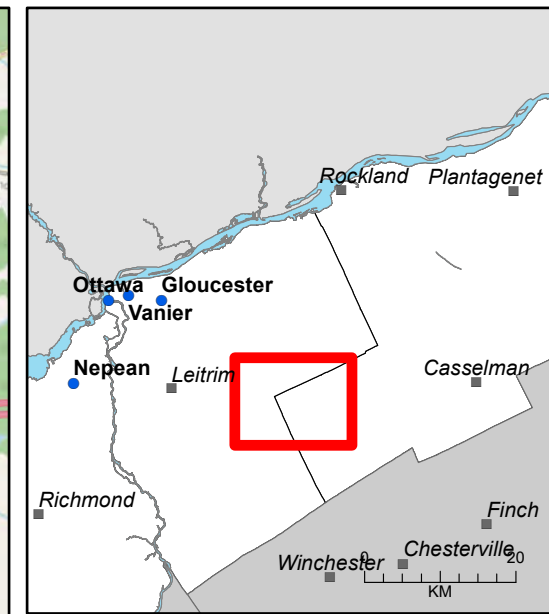
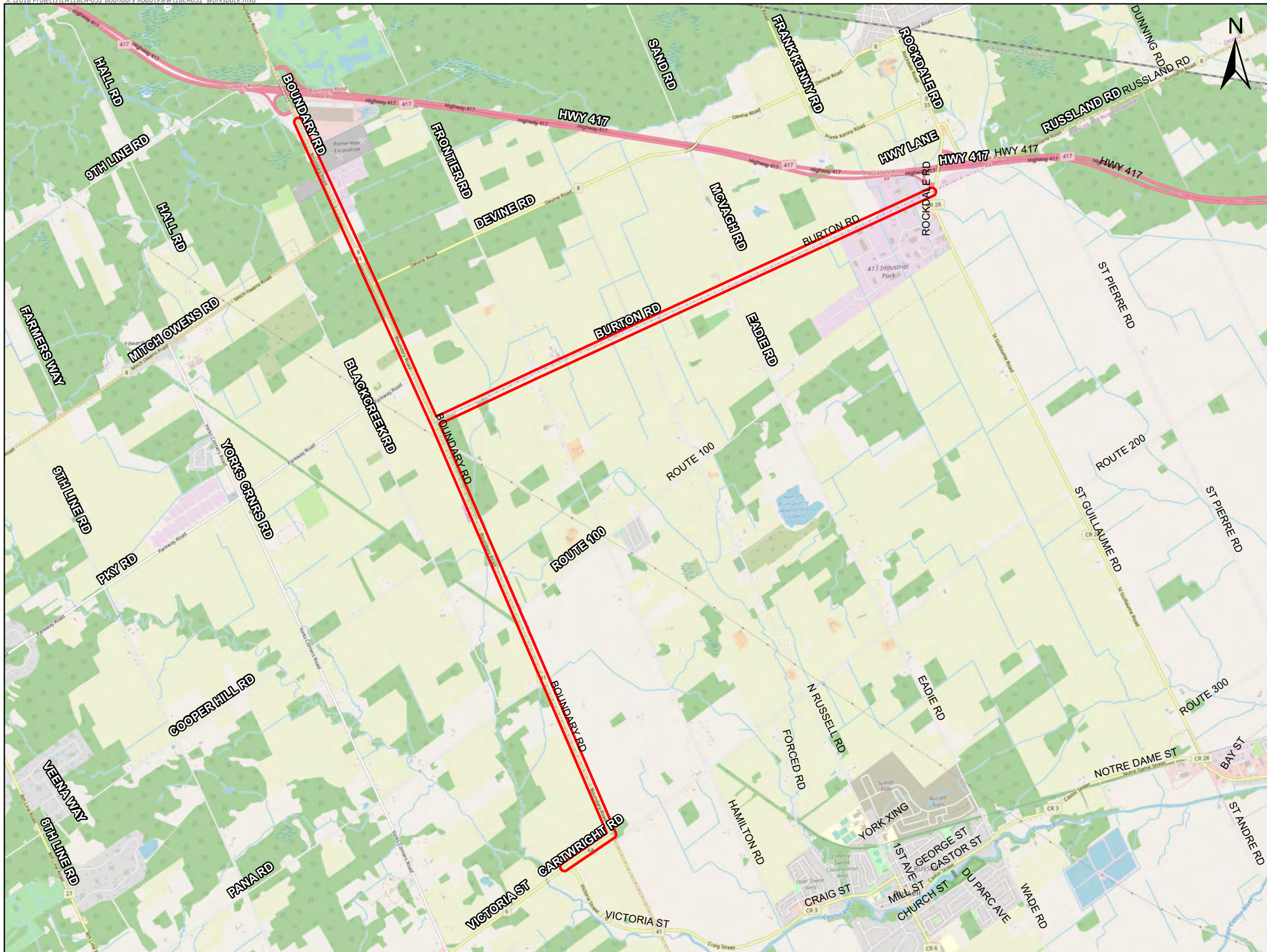
WSP Canada

2018 *Stage One Archaeological Assessment Vars Industrial Park Township of Russell and the City of Ottawa Lots 21-23, Concession 4, and Lots 10-22, Concession 5, and Lots 21 & 22, Concession 6, Township of Russell, and Lots 27 & 28, Concession 6 & 7, Township of Cumberland United Counties of Prescott-Russell, Historic Counties of Russell and Cumberland, Province of Ontario.*



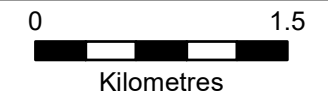
7.0 MAPS





 STUDY AREA

Sources: Ortho: ESRI
 Projection: NAD 1983 UTM Zone 17N
 Scale: 1:45,000
 Page Size: 11 x 17



ASI PROJECT NO.: 18EA-052
 DATE: 11/1/2019
 DRAWN BY: JF
 FILE: 18EA052_workspace



Providing Archaeological & Cultural Heritage Services
 528 Bathurst Street Toronto, ONTARIO M5S 2P9
 T 416-966-1069 F 416-966-9723 asiheritage.ca

Figure 1: Location of Study Area



Figure 2: Study Area (Approximate Location) Overlaid on the 1862 Map of the Counties of Stormont, Dundas, Glengarry, Prescott & Russell and the 1863 Map of the County of Carleton



Figure 3: Study Area (Approximate Location) Overlaid on the 1879 Illustrated Historical Atlas of the County of Carleton and the 1881 Illustrated Historical Atlas of Prescott and Russell Counties

	STUDY AREA	Sources: 1862 Map of the Counties of Stormont, Dundas, Glengarry, Prescott & Russell 1863 Map of the County of Carleton 1879 Illustrated Historical Atlas of the County of Carleton 1881 Illustrated Historical Atlas of Prescott and Russell Counties Projection: NAD 1983 UTM Zone 17N Scale: 1:101,294 Page Size: 8.5 x 11	 ASI PROJECT NO.: 18EA-052 DATE: 11/21/2019 DRAWN BY: JF FILE: 18EA052_hist_2panel
--	------------	--	--

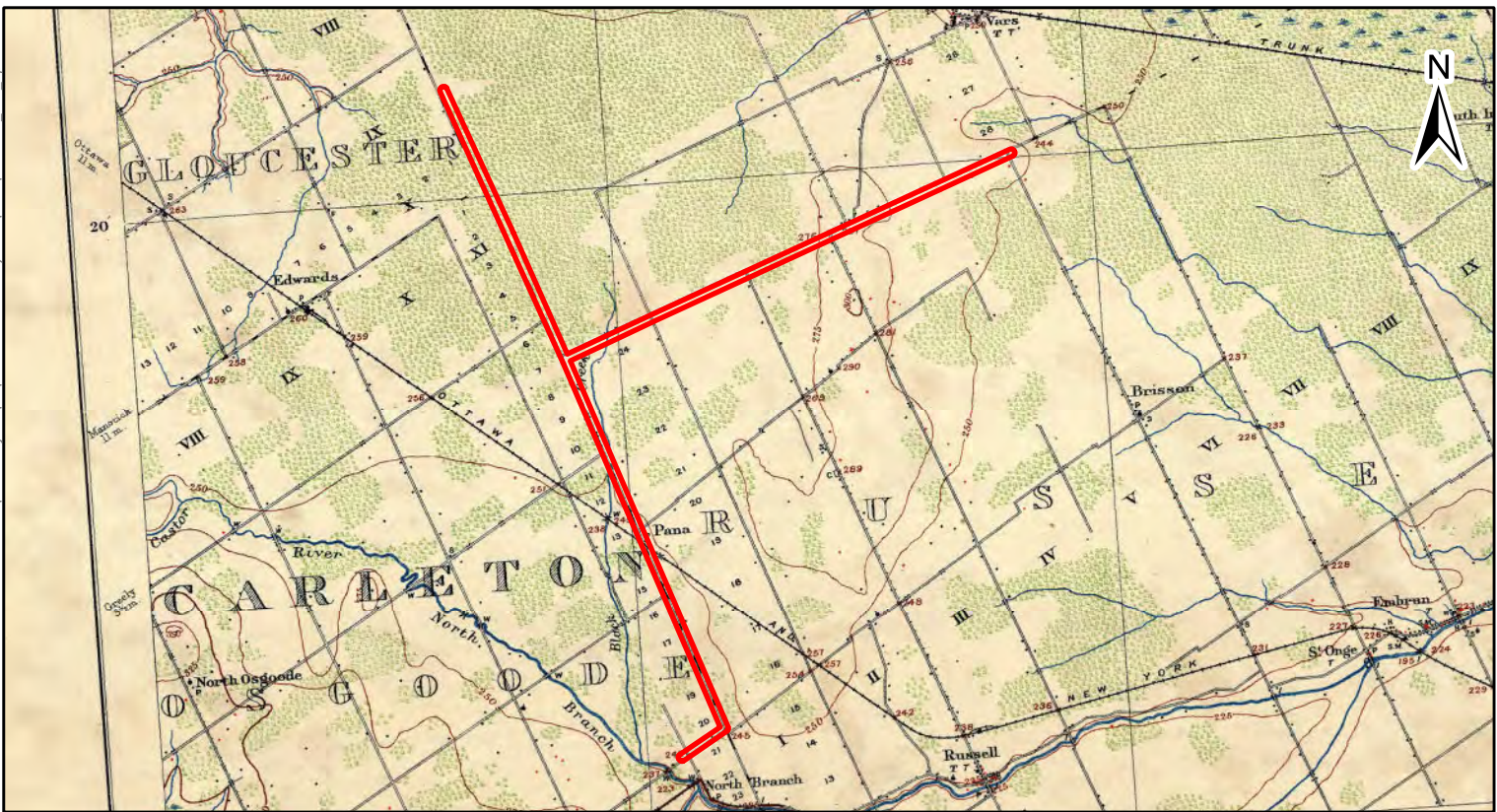
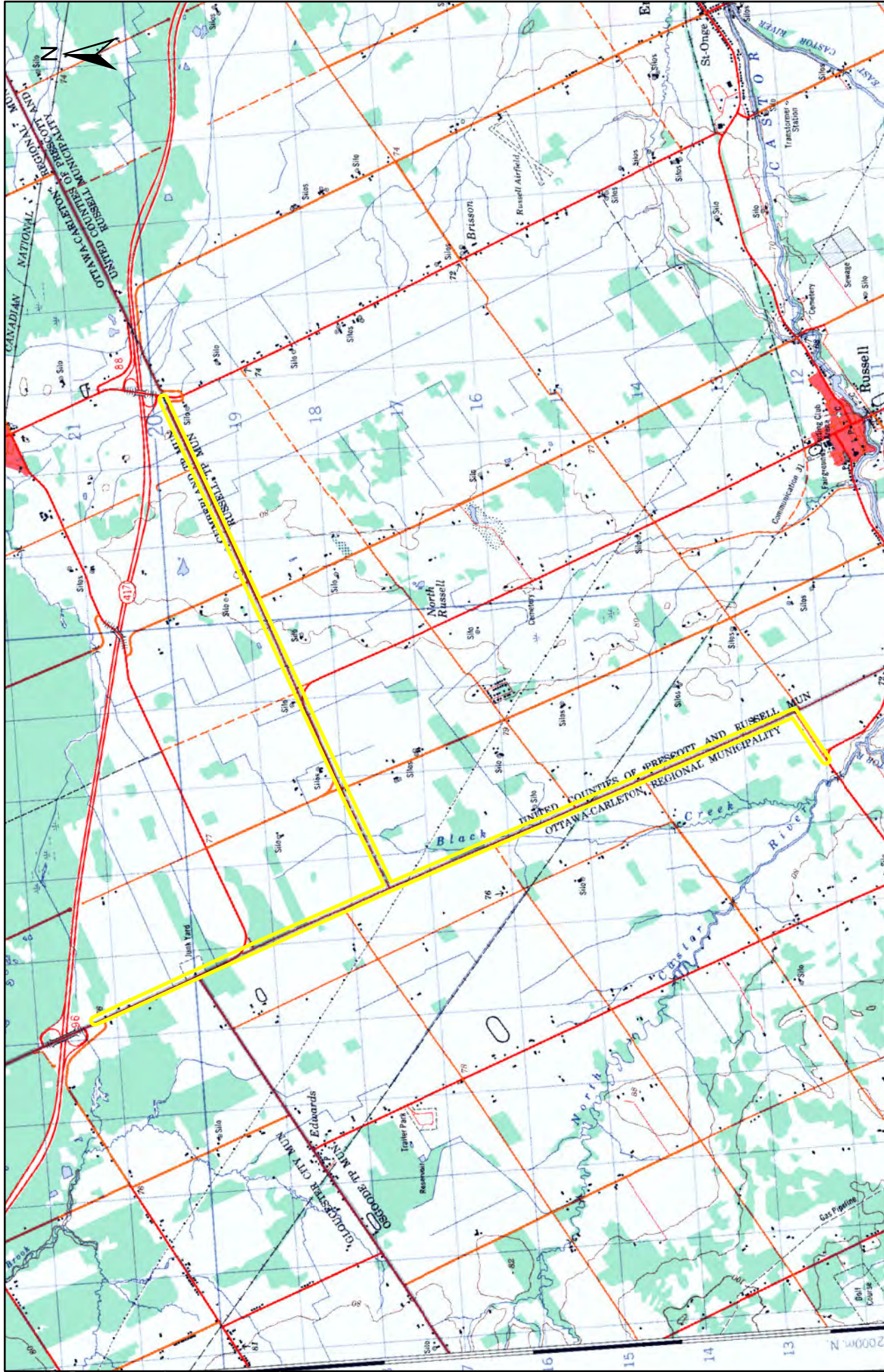


Figure 4: Study Area (Approximate Location) Overlaid on the 1908 National Topographic System Russell Sheet



Figure 5: Study Area (Approximate Location) Overlaid on the 1954 Aerial Photography

	<p>STUDY AREA</p>	<p>Sources: 1908 National Topographic System Russell Sheet 1954 Aerial Photography</p> <p>Projection: NAD 1983 UTM Zone 17N Scale: 1:101,294 Page Size: 8.5 x 11</p>	<p>0 2.5 Kilometres</p> <p>ASI PROJECT NO.: 18EA-052 DATE: 11/21/2019</p> <p>DRAWN BY: JF FILE: 18EA052_hist_2panel</p>
--	--------------------------	--	---




	<p>STUDY AREA</p> 	<p>Sources: 1983 National Topographic System Russell Sheet</p> <p>Projection: NAD 1983 UTM Zone 17N</p> <p>Scale: 1:64,145</p> <p>Page Size: 8.5 x 11</p>	<p>0  2.5</p> <p>Kilometres</p>	<p>AS PROJECT NO.: 18EA-052 DATE: 11/22/2019</p> <p>DRAWN BY: JF FILE: 18EA052_hist_1panel</p>
---	--	---	---	--

Figure 6: Study Area (Approximate Location) 1983 National Topographic System Russell Sheet



Figure 7: Study Area - Surficial Geology

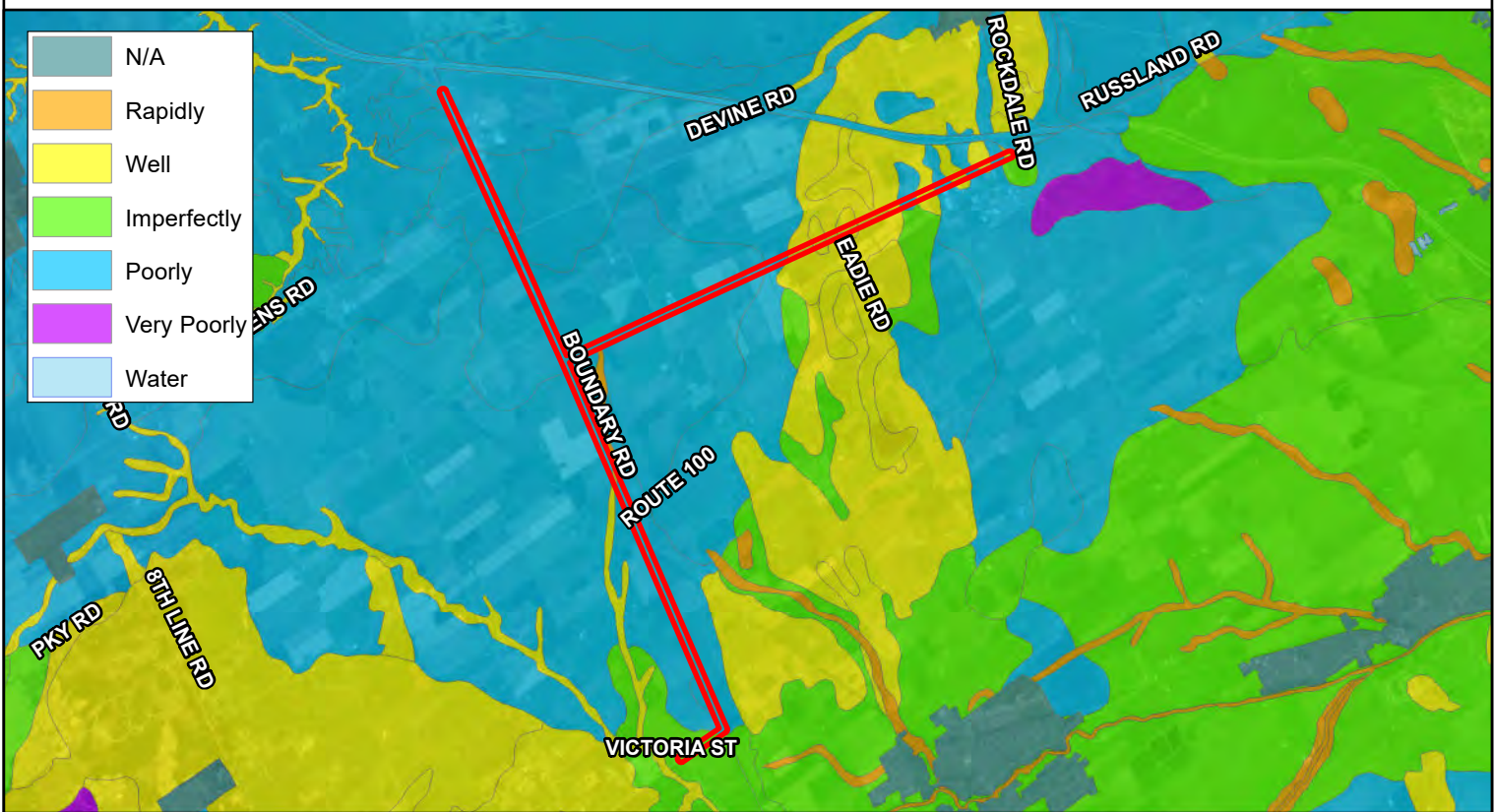



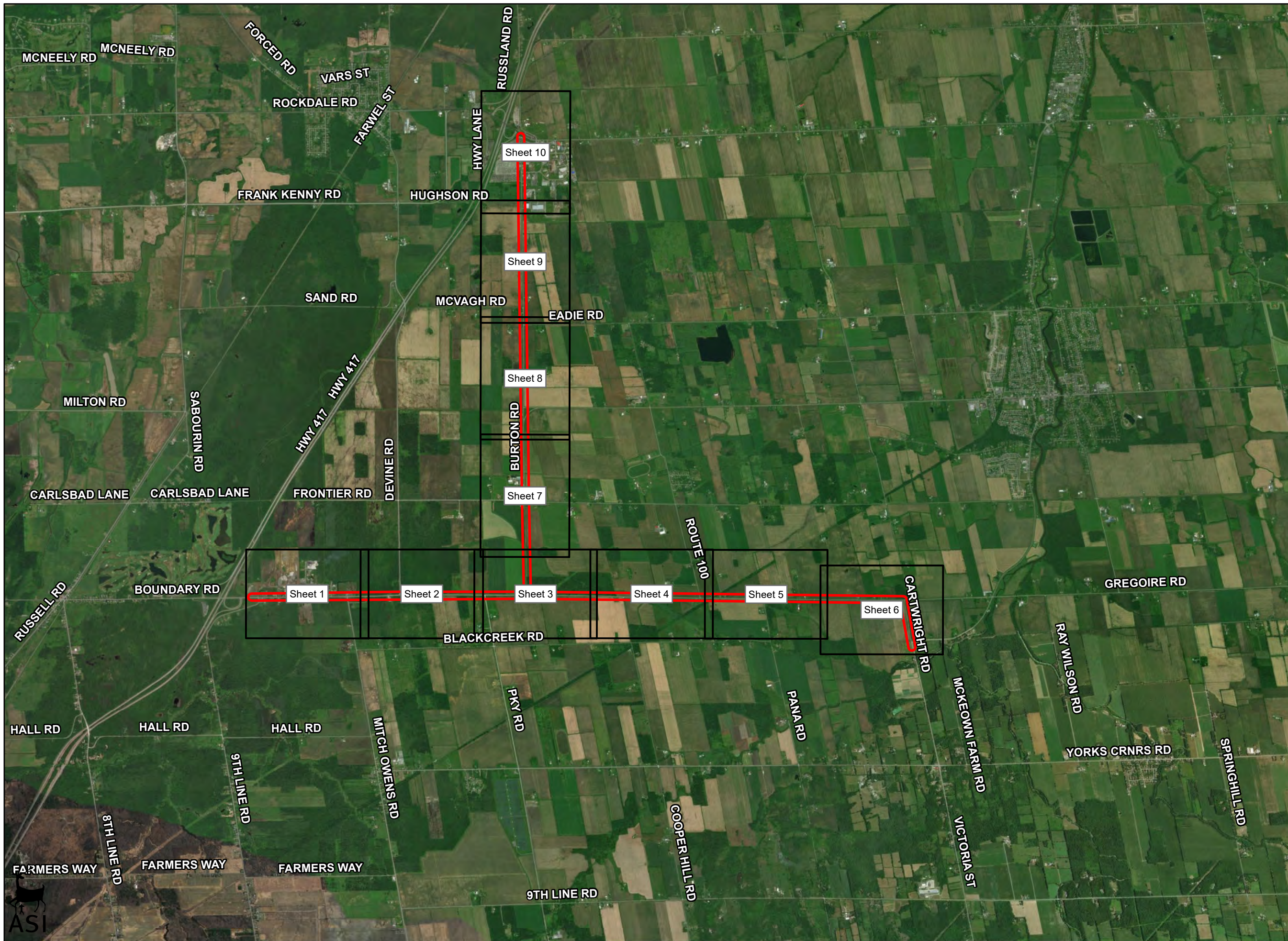


Figure 8: Study Area - Soil Drainage

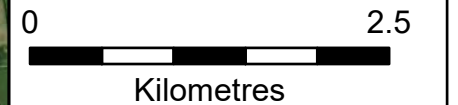
	 STUDY AREA	Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community	0  2.5 Kilometres
		Projection: NAD 1983 UTM Zone 17N Scale: 1:101,294 Page Size: 8.5 x 11	ASI PROJECT NO.: 18EA-052 DATE: 11/21/2019



- STUDY AREA
- MAPSHEET

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community





Projection: NAD 1983 UTM Zone 17N
 Scale: 1:52,631
 Page Size: 11 x 17



ASI PROJECT NO.: 18EA-052 DRAWN BY:
 DATE: 11/28/2019 FILE: 18EA052_fieldmap

Figure 9: Study Area - Results of the Stage 1 (Key Map)

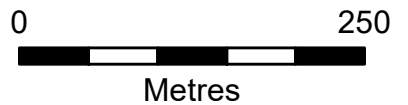


-  STUDY AREA
-  NO POTENTIAL - DISTURBED
-  POTENTIAL - TEST PIT SURVEY
-  PHOTO LOCATION AND DIRECTION



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

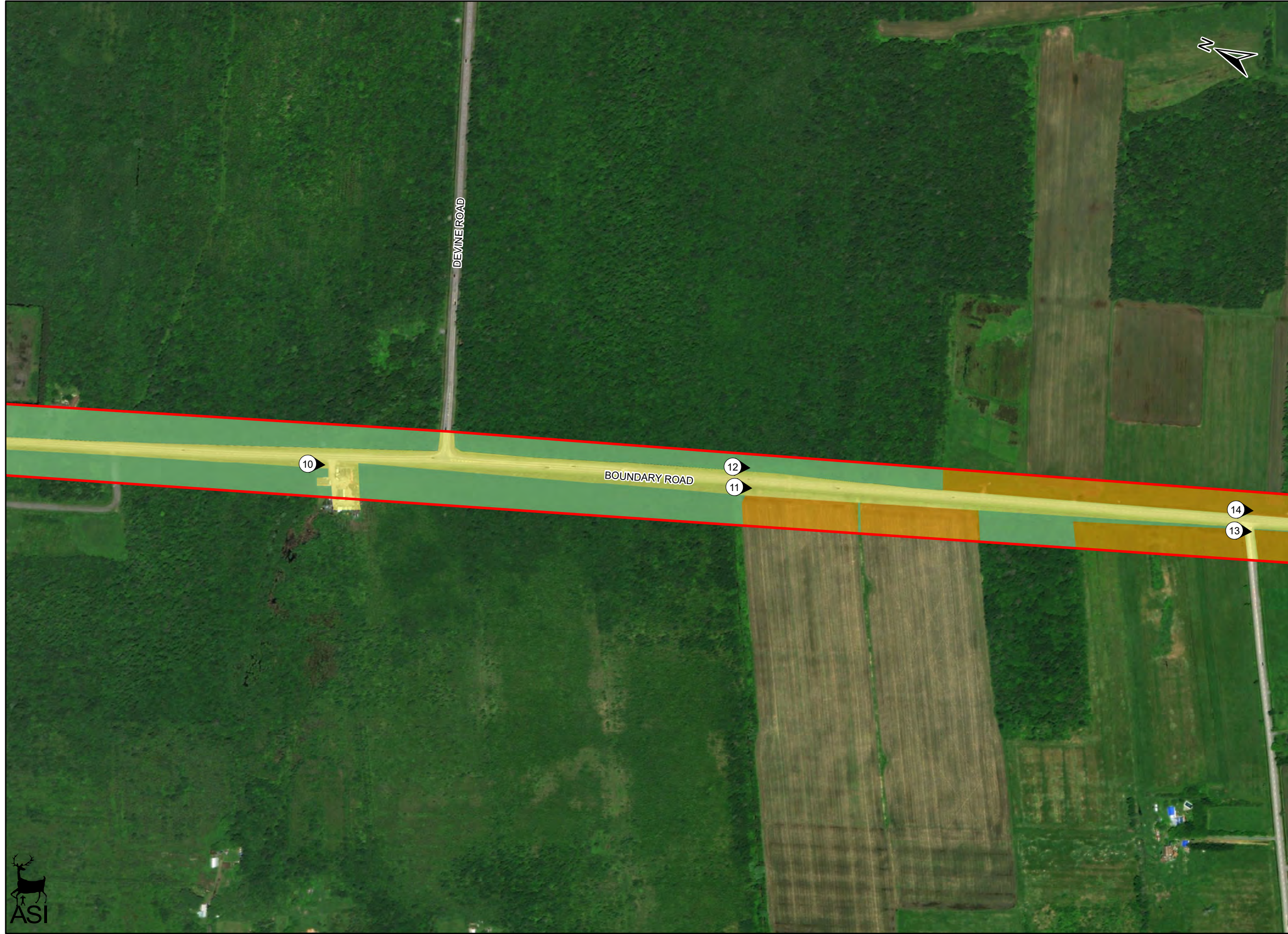
Projection: NAD 1983 UTM Zone 18N
 Scale: 1:5,480
 Page Size: 11 x 17



ASI PROJECT NO.: 18EA-052 DRAWN BY: JF/ESB
 DATE: 2020-02-06 FILE: 18EA052_fieldmap



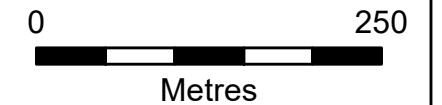
Figure 10: Study Area - Results of the Stage 1 (Sheet 1)



- STUDY AREA
- NO POTENTIAL - DISTURBED
- POTENTIAL - PEDESTRIAN SURVEY
- POTENTIAL - TEST PIT SURVEY
- PHOTO LOCATION AND DIRECTION

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Projection: NAD 1983 UTM Zone 18N
Scale: 1:5,480
Page Size: 11 x 17



ASI PROJECT NO.: 18EA-052 DRAWN BY: JF/ESB
DATE: 2020-02-06 FILE: 18EA052_fieldmap



Figure 11: Study Area - Results of the Stage 1 (Sheet 2)

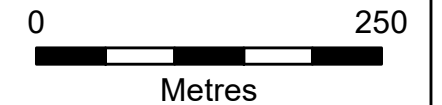


- STUDY AREA
- NO POTENTIAL - DISTURBED
- POTENTIAL - PEDESTRIAN SURVEY
- POTENTIAL - TEST PIT SURVEY
- PHOTO LOCATION AND DIRECTION



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Projection: NAD 1983 UTM Zone 18N
 Scale: 1:5,480
 Page Size: 11 x 17



ASI PROJECT NO.: 18EA-052 DRAWN BY: JF/ESB
 DATE: 2020-02-06 FILE: 18EA052_fieldmap



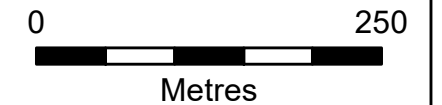
Figure 12: Study Area - Results of the Stage 1 (Sheet 3)



- STUDY AREA
- NO POTENTIAL - DISTURBED
- POTENTIAL - PEDESTRIAN SURVEY
- POTENTIAL - TEST PIT SURVEY
- NO POTENTIAL - LOW/WET
- PHOTO LOCATION AND DIRECTION

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Projection: NAD 1983 UTM Zone 18N
 Scale: 1:5,480
 Page Size: 11 x 17



ASI PROJECT NO.: 18EA-052 DRAWN BY: JF/ESB
 DATE: 2020-02-06 FILE: 18EA052_fieldmap



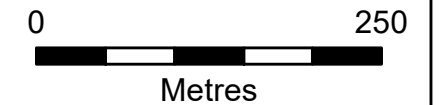
Figure 13: Study Area - Results of the Stage 1 (Sheet 4)



- STUDY AREA
- NO POTENTIAL - DISTURBED
- POTENTIAL - PEDESTRIAN SURVEY
- POTENTIAL - TEST PIT SURVEY
- PHOTO LOCATION AND DIRECTION

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Projection: NAD 1983 UTM Zone 18N
 Scale: 1:5,480
 Page Size: 11 x 17



ASI PROJECT NO.: 18EA-052 DRAWN BY: JF/ESB
 DATE: 2020-02-06 FILE: 18EA052_fieldmap



Figure 14: Study Area - Results of the Stage 1 (Sheet 5)



- STUDY AREA
- NO POTENTIAL - DISTURBED
- POTENTIAL - PEDESTRIAN SURVEY
- POTENTIAL - TEST PIT SURVEY
- PHOTO LOCATION AND DIRECTION

BOUNDARY ROAD

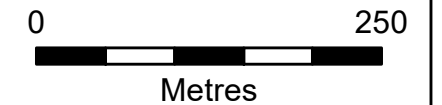
27 28

CARTWRIGHT ROAD

VICTORIA STREET

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Projection: NAD 1983 UTM Zone 18N
Scale: 1:5,480
Page Size: 11 x 17



ASI PROJECT NO.: 18EA-052 DRAWN BY: JF/ESB
DATE: 2020-02-06 FILE: 18EA052_fieldmap



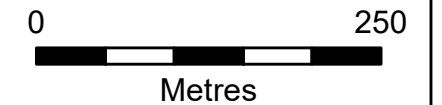
Figure 15: Study Area - Results of the Stage 1 (Sheet 6)



- STUDY AREA
- NO POTENTIAL - DISTURBED
- POTENTIAL - PEDESTRIAN SURVEY
- POTENTIAL - TEST PIT SURVEY
- NO POTENTIAL - LOW/WET
- PHOTO LOCATION AND DIRECTION

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Projection: NAD 1983 UTM Zone 18N
 Scale: 1:5,490
 Page Size: 11 x 17



ASI PROJECT NO.: 18EA-052 DRAWN BY: JF/ESB
 DATE: 2020-02-06 FILE: 18EA052_fieldmap



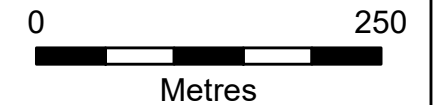
Figure 16: Study Area - Results of the Stage 1 (Sheet 7)



- STUDY AREA
- NO POTENTIAL - DISTURBED
- POTENTIAL - PEDESTRIAN SURVEY
- POTENTIAL - TEST PIT SURVEY
- NO POTENTIAL - LOW/WET
- PHOTO LOCATION AND DIRECTION

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

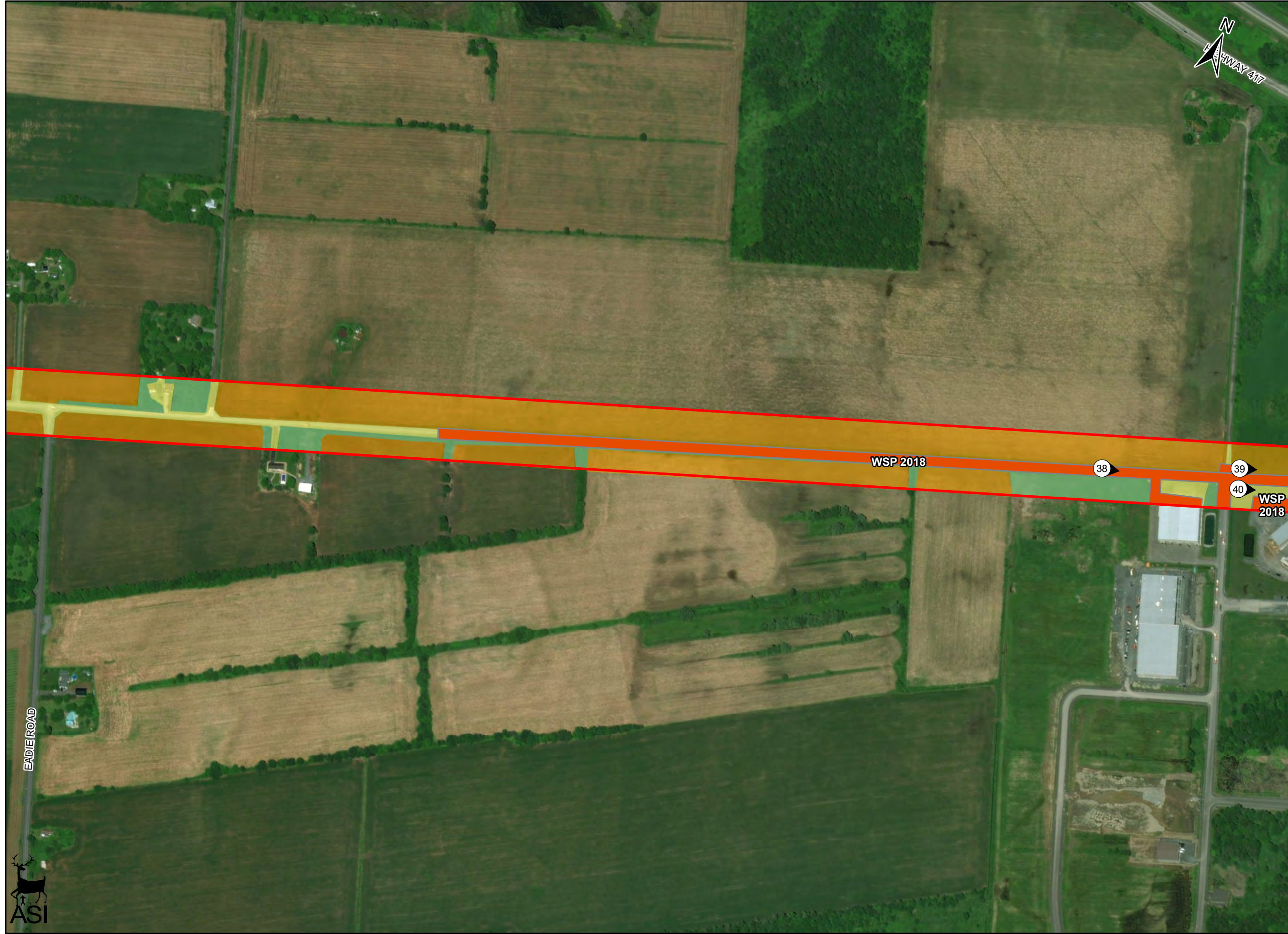
Projection: NAD 1983 UTM Zone 18N
 Scale: 1:5,490
 Page Size: 11 x 17



ASI PROJECT NO.: 18EA-052 DRAWN BY: JF/ESB
 DATE: 2020-02-06 FILE: 18EA052_fieldmap



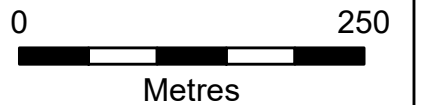
Figure 17: Study Area - Results of the Stage 1 (Sheet 8)



- STUDY AREA
- NO POTENTIAL - DISTURBED
- POTENTIAL - PEDESTRIAN SURVEY
- POTENTIAL - TEST PIT SURVEY
- PREVIOUSLY ASSESSED - NO FURTHER WORK
- PHOTO LOCATION AND DIRECTION

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

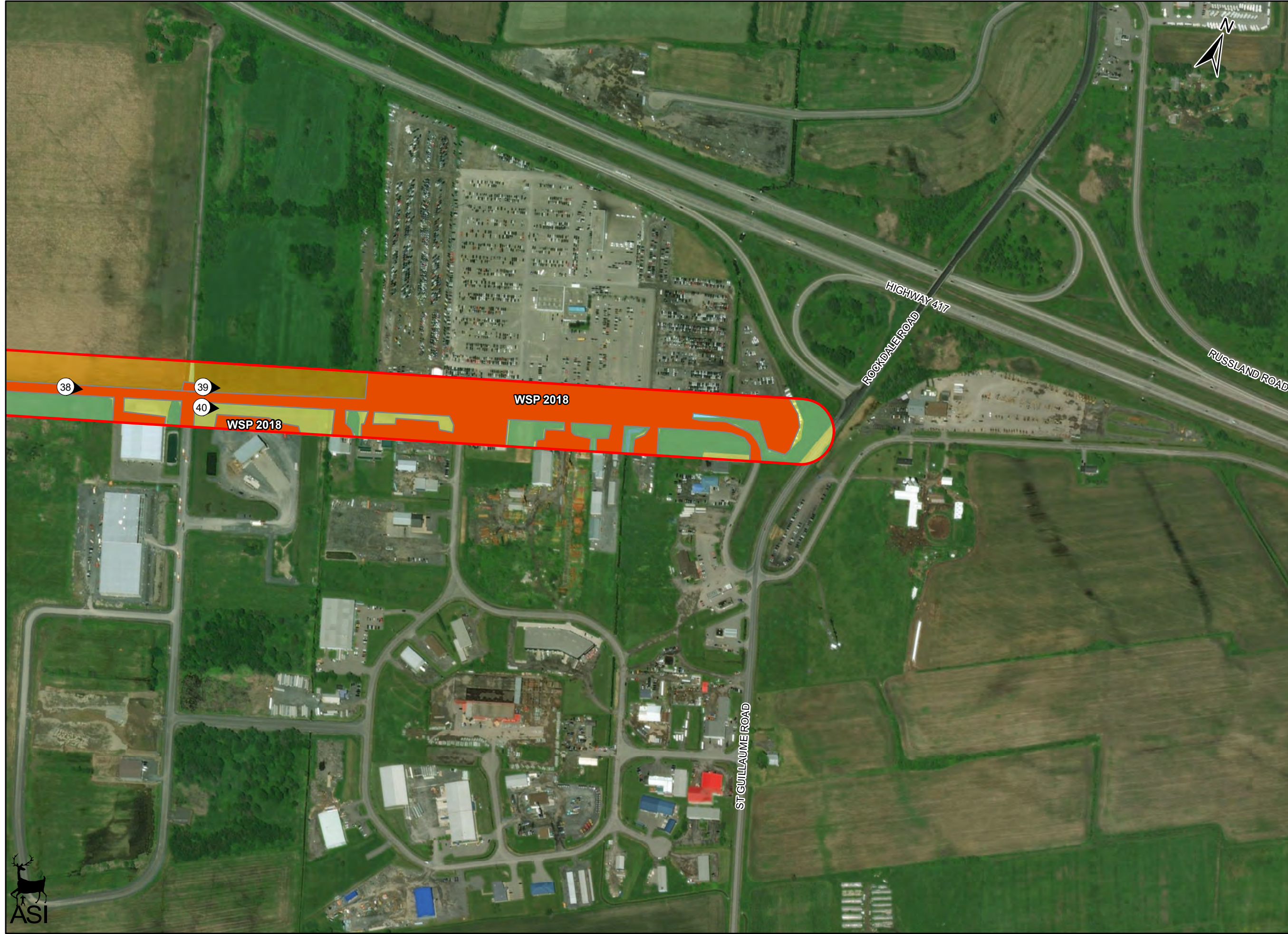
Projection: NAD 1983 UTM Zone 18N
 Scale: 1:5,490
 Page Size: 11 x 17



ASI PROJECT NO.: 18EA-052 DRAWN BY: JF/ESB
 DATE: 2020-02-06 FILE: 18EA052_fieldmap



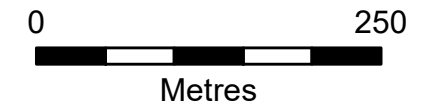
Figure 18: Study Area - Results of the Stage 1 (Sheet 9)



- STUDY AREA
- NO POTENTIAL - DISTURBED
- POTENTIAL - PEDESTRIAN SURVEY
- POTENTIAL - TEST PIT SURVEY
- NO POTENTIAL - LOW/WET
- PREVIOUSLY ASSESSED - NO FURTHER WORK
- PHOTO LOCATION AND DIRECTION

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Projection: NAD 1983 UTM Zone 18N
 Scale: 1:5,490
 Page Size: 11 x 17



ASI PROJECT NO.: 18EA-052 DRAWN BY: JF/ESB
 DATE: 2020-02-06 FILE: 18EA052_fieldmap



Figure 19: Study Area - Results of the Stage 1 (Sheet 10)

8.0 IMAGES



Plate 1: [E] Boundary Road and Ninth Line Road intersection; Area is disturbed, no potential



Plate 2: [NW] Boundary Road; Area is disturbed, no potential



Plate 3: [SE] Boundary Road; Area is disturbed, no potential



Plate 4: [SE] Boundary Road; Area is disturbed, no potential



Plate 5: [SE] Boundary Road; Area is disturbed, no potential



Plate 6: [SE] Boundary Road; Area beyond disturbed ROW and ditch requires Stage 2



Plate 7: [E] Channelized canal; Area is disturbed, no potential



Plate 8: [SE] Boundary Road; Area beyond disturbed ROW and ditch requires Stage 2



Plate 9: [SE] Boundary Road; Area is disturbed, no potential



Plate 10: [SE] Boundary Road; Area is disturbed, no potential



Plate 11: [SE] Boundary Road; Area beyond disturbed ROW and ditch requires Stage 2



Plate 12: [SE] Boundary Road; Area beyond disturbed ROW and ditch requires Stage 2



Plate 13: [SE] Boundary Road; Area beyond disturbed ROW and ditch requires Stage 2



Plate 14: [SE] Boundary Road; Area beyond disturbed ROW and ditch requires Stage 2



Plate 15: [SE] Boundary Road at Burton Road allowance; Area beyond disturbed ROW and ditch requires Stage 2



Plate 16: [NE] Burton Road allowance; Area beyond disturbed ROW requires Stage 2

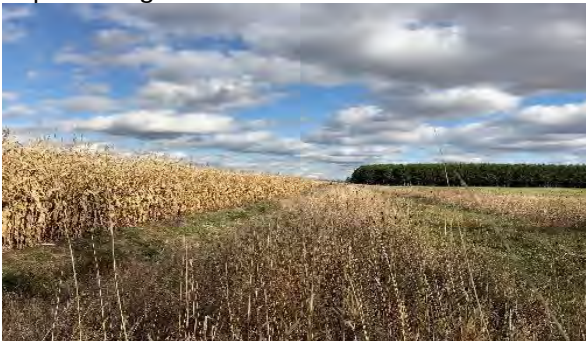


Plate 17: [NE] Burton Road allowance; Area requires Stage 2



Plate 18: [E] Boundary Road towards hydro corridor; Area beyond disturbed ROW and ditch requires Stage 2



Plate 19: [E] Minor tributary; Area beyond disturbed ROW is low and wet, no potential



Plate 20: [SE] Boundary Road; Area beyond disturbed ROW and ditch requires Stage 2



Plate 21: [SE] Boundary Road; Area beyond disturbed ROW and channelized creek requires Stage 2



Plate 22: [E] Boundary Road culvert; Area beyond disturbed ROW and channelized creek requires Stage 2



Plate 23: [NW] Boundary Road; Area beyond disturbed ROW requires Stage 2



Plate 24: [NW] Boundary Road; Area beyond disturbed ROW requires Stage 2



Plate 25: [SE] Boundary Road; Area beyond disturbed ROW and ditch requires Stage 2



Plate 26: [SE] Boundary Road; Area beyond disturbed ROW and ditch requires Stage 2



Plate 27: [SW] Cartwright Road; Area beyond disturbed ROW and ditch requires Stage 2



Plate 28: [SW] Cartwright Road; Area beyond disturbed ROW and ditch requires Stage 2



Plate 29: [E] Burton Road allowance; Area beyond road requires Stage 2



Plate 30: [S] Channelized creek; Area beyond disturbed ROW and creek requires Stage 2



Plate 31: [NW] Burton Road; Area beyond road requires Stage 2



Plate 32: [E] Burton Road; Area beyond graded slope and ditch requires Stage 2



Plate 33: [E] Burton Road; Area beyond disturbed ROW and ditch requires Stage 2



Plate 34: [E] Burton Road; Area is disturbed; no potential



Plate 35: [NW] Channelized creek; Area beyond disturbed ROW and creek channel requires Stage 2



Plate 36: [SW] Burton Road; Area beyond disturbed ROW requires Stage 2



Plate 37: [SW] Burton Road; Area beyond disturbed ROW requires Stage 2



Plate 38: [NE] Burton Road; Area beyond Previously assessed ROW requires Stage 2



Plate 39: [NE] Burton Road; Area beyond disturbed ROW requires Stage 2



Plate 40: [NE] Burton Road; Area is disturbed, no potential

APPENDIX D

Cultural Heritage Checklist

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
Enbridge Boundary Road Pipeline Project

Project or Property Location (upper and lower or single tier municipality)
City of Ottawa and the Township of Russell, Ontario

Proponent Name
Enbridge Gas Inc.

Proponent Contact Information
Tanya Turk, Environmental Advisor, 1-416-495-3103 tanya.turk@enbridge.com

Screening Questions

1. Is there a pre-approved screening checklist, methodology or process in place? Yes No

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

2. Has the property (or project area) been evaluated before and found **not** to be of cultural heritage value? Yes No

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.

3. Is the property (or project area): Yes No

- a. identified, designated or otherwise protected under the *Ontario Heritage Act* as being of cultural heritage value? Yes No
- b. a National Historic Site (or part of)? Yes No
- c. designated under the *Heritage Railway Stations Protection Act*? Yes No
- d. designated under the *Heritage Lighthouse Protection Act*? Yes No
- e. identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)? Yes No
- f. located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site? Yes No

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 E

Net Effects Analysis

Category/ Criterion	Indicator	Preliminary Preferred Route: consists of two sections having a total length of 10.1 km and a district station. Section 1 will begin at Victoria Street and Cartwright Road where it will tie in to Enbridge's existing pipeline. The 4-inch steel pipe will extend east along Cartwright Road to the intersection of Boundary Road, where it will veer north and continue along Boundary Road for 6.2 km, concluding at the corner of Burton Road where a district station will be installed. At the district station, Section 2 will begin and will consist of 3.9 km of 4-inch polyethylene pipe that continues north along Boundary Road to the new customers' property just south of Highway 417.		Alternate Route: consists of two sections of pipeline having a total length of approximately 10.6 km and a district station. Section 1 will begin at Burton Road and St. Guillaume Road where it will tie in to Enbridge's existing pipeline. The 4-inch steel pipe will extend west along Burton Road for 6.7 km to the intersection of Boundary Road, where a district station will be installed. At the district station, Section 2 will begin and will consist of 3.9 km of 4-inch polyethylene pipe that continues north along Boundary Road to the new customers' property just south of Highway 417.		Data Source
Natural Environment						
Effect on surface water	Temporary change in surface water quality	Potential Effects	A temporary decrease in surface water quality along both alternative routes due to increased sediment in surface water runoff and unintentional release of deleterious substances during construction of the new natural gas pipeline.		Appendix A - Natural Environment Review (GHD, January 2020)	
		Impact Management Measures	<ul style="list-style-type: none"> - Locate all work site areas a minimum of 30 m from any surface water feature (watercourse, waterbody or wetland), where possible. - Schedule works during low-flow/dry conditions - Design an erosion and sediment control (ESC) plan. Install ESC measures prior to construction; inspect and maintain them appropriately throughout construction. - Properly contain any temporarily stockpiled soil, debris or other excess materials (e.g. inside silt fencing) in areas separated at least 30 m from any surface water feature. - Control dust using water and not chemical suppressants in all dust sensitive areas (e.g., nearby watercourses, wetlands etc.). 			
		Net Effects	The temporary decrease in surface water quality of nearby water features due to increased sediment in surface water runoff and unintentional release of deleterious substances during construction of the proposed natural gas pipeline would be minimized by implementing the impact management measures along the Preliminary Preferred Route.	The temporary decrease in surface water quality of nearby water features due to increased sediment in surface water runoff and unintentional release of deleterious substances during construction of the proposed natural gas pipeline would be minimized by implementing the impact management measures along the Alternate Route.		
		Indicator Ranking	First (Tied)			
Criterion Ranking	Both proposed Routes are Tied as More Preferred because the temporary decrease in surface water quality would be minimized similarly by implementing the impact management measures.					
Effect on fisheries and aquatic habitat	Temporary or permanent loss of aquatic features or categorical loss of functions by type – including Provincially Significant Wetland, Locally Significant Wetland, watercourses, and others	Potential Effects	A temporary disruption to 4 watercourses and 4 unevaluated wetlands areas along Preliminary Preferred Route during construction activities.	A temporary disruption to 7 watercourses, 3 unevaluated wetlands, and a Significant Ecological Area (SEA) along Alternate Route during construction activities.	Appendix A - Natural Environment Review (GHD, January 2020)	
		Impact Management Measures	<ul style="list-style-type: none"> - Implement the impact management measures associated with addressing the changes in surface water quality and quantity (see Criterion: Effect on surface water). - Employ trenchless technology under all wetlands, watercourses, and any other sensitive features habitat. - Obtain appropriate permits and authorizations as necessary where works will proceed in close proximity to natural features (e.g. South Nation Conservation Authority Permit, DFO permit). - Design an ESC plan. Install ESC measures prior to construction; inspect and maintain them appropriately throughout construction. - Employ a qualified Environmental Inspector to monitor/advise during construction activities in proximity to identified sensitive natural features. - Prepare a Frac-out and Spill Emergency Response Plan and keep a spill kit present during construction around watercourses. - Develop a Stormwater Management Plan to detail best practices for managing stormwater during construction and operation, including treatment of any water that may be discharged from work areas to the receiving environment. - Implement avoidance and mitigation measures and conditions outlined in any permits obtained. 			
		Net Effects	The temporary disruption to fewer aquatic features along the Preliminary Preferred Route during construction of the new natural gas pipeline would be minimized by implementing the impact management measures.	The temporary disruption to a greater number of aquatic features along the Alternate Route during construction of the new natural gas pipeline would be minimized by implementing the impact management measures.		
		Indicator Ranking	First	Second		
		Potential Effects	A temporary disruption to warmwater aquatic species and unevaluated wetlands due to a decrease in surface water quality during construction of the pipeline, but no permanent disturbances.	A temporary disruption to warmwater and coldwater aquatic species and unevaluated wetlands due to a decrease in surface water quality during construction of the pipeline, but no permanent disturbances.		
		Impact Management Measures	<ul style="list-style-type: none"> - Implement the impact management measures associated with addressing the changes in surface water quality and quantity (see Criterion: Effect on surface water). - Employ trenchless technology under all wetlands, watercourses, and any other sensitive features. - Limit disturbance to creek, riparian, and wetland habitat to the extent possible by keeping work site areas in previously developed or upland areas. - Design an ESC plan. Install ESC measures prior to construction; inspect and maintain them appropriately throughout construction. - Employ a qualified Environmental Inspector to monitor/advise during construction activities in proximity to identified sensitive natural features. - Undertake construction outside of the relevant fish timing window (i.e. conduct work between July 16 to March 14 because spring spawning species are present) for the watercourse crossing. - Implement avoidance and mitigation measures and conditions outlined in any permits obtained. 			
		Net Effects	The temporary disruption along the Preliminary Preferred Route during construction of the new natural gas pipeline would be minimized by implementing the impact management measures.	The temporary disruption along the Alternate Route during construction of the new natural gas pipeline would be minimized by implementing the impact management measures.		
Indicator Ranking	First (Tied)					
Criterion Ranking	More Preferred because there are fewer fisheries and aquatic habitat features that could be potentially temporarily adversely affected and would be minimized similarly by implementing the impact management measures.		Less Preferred because there are more fisheries and aquatic habitat features that could be potentially temporarily adversely affected and would be minimized similarly by implementing the impact management measures.			

Category/ Criterion	Indicator	Preliminary Preferred Route: consists of two sections having a total length of 10.1 km and a district station. Section 1 will begin at Victoria Street and Cartwright Road where it will tie in to Enbridge's existing pipeline. The 4-inch steel pipe will extend east along Cartwright Road to the intersection of Boundary Road, where it will veer north and continue along Boundary Road for 6.2 km, concluding at the corner of Burton Road where a district station will be installed. At the district station, Section 2 will begin and will consist of 3.9 km of 4-inch polyethylene pipe that continues north along Boundary Road to the new customers' property just south of Highway 417.	Alternate Route: consists of two sections of pipeline having a total length of approximately 10.6 km and a district station. Section 1 will begin at Burton Road and St. Guillaume Road where it will tie in to Enbridge's existing pipeline. The 4-inch steel pipe will extend west along Burton Road for 6.7 km to the intersection of Boundary Road, where a district station will be installed. At the district station, Section 2 will begin and will consist of 3.9 km of 4-inch polyethylene pipe that continues north along Boundary Road to the new customers' property just south of Highway 417.	Data Source	
Effect on wildlife and terrestrial habitat	Temporary or permanent loss of roadside vegetation including wooded areas, wetlands, and Significant Ecological Areas (SEA) along the routes	Potential Effects	Temporary disturbance/loss of roadside vegetation, including increased susceptibility to invasive species, in the work site area during open cut construction of the pipeline in the road ROW, but no permanent disturbances.	Temporary disturbance/loss of roadside vegetation, including increased susceptibility to invasive species, in the work site area during open cut construction of the pipeline in the road ROW, but no permanent disturbances.	Appendix A - Natural Environment Review (GHD, January 2020)
			<ul style="list-style-type: none"> - Limit removal of vegetation - Locate work site areas away from identified natural features - Design ESC Plan. Sediment fencing should be installed prior to works to delineate the work zone and prevent direct damage to adjacent retained vegetation. - Employ a qualified Environmental Inspector to monitor/advise during construction activities in proximity to identified sensitive natural features. 		
			<ul style="list-style-type: none"> - Respect appropriate timing windows. Vegetation clearing should not occur within the breeding bird season to avoid incidental take of migratory birds, their nests and eggs. Vegetation clearing recommended to occur late fall/winter (October - March) - Implement avoidance and mitigation measures and conditions outlined in any permits obtained. 		
		Net Effects	- The temporary disturbance/loss of roadside vegetation, including increased susceptibility to invasive species, in the work site area during construction of the pipeline along the Preliminary Preferred Route would be minimized by implementing the impact management measures.	- The temporary disturbance/loss of roadside vegetation, including increased susceptibility to invasive species, in the work site area during construction of the pipeline along the Alternate Route would be minimized by implementing the impact management measures.	
	Indicator Ranking		First (Tied)		
	Terrestrial species, including Species at Risk, (species of special concern, threatened, endangered) species of local concern, spread of invasive species, and area sensitive species potentially affected temporarily and/or permanently	Potential Effects	Temporary disturbance to terrestrial species, including any potential Species at Risk, during construction of the Preliminary Preferred Route, but no permanent disturbance.	Temporary disturbance to terrestrial species, including any potential Species at Risk, during construction of the Alternate Route, but no permanent disturbance.	
		Impact Management Measures	<ul style="list-style-type: none"> - Delineate and maintain setbacks from natural areas. - Locate work areas away from naturalized areas wherever possible - Follow industry standard invasive species guidelines including the requirement for machinery to be free of any vegetation/seed matter. 		
			<ul style="list-style-type: none"> - Design an ESC Plan. Sediment fencing should be installed prior to works to delineate the work zone and prevent direct damage to adjacent retained vegetation. - Use methods such as timing/noise restrictions to protect nesting birds, wildlife, and amphibians. Avoid vegetation clearing and grubbing during the breeding bird season. If this is not possible, a nesting survey of any vegetation to be cleared must be completed by a qualified biologist in advance of clearing activities. - Employ a qualified Environmental Inspector to monitor/advise during construction activities in proximity to identified sensitive natural features. 		
		Net Effects	- In the event that a SAR, or suspected SAR, is found within the construction area, all work that could potentially harm the animal will be ceased and the Site Manager will be contacted for direction. Coordinate with Project Biologist and Ministry of Natural Resources and Forestry (MNRF) as required. - The temporary disturbance/terrestrial species, including potential Species at Risk, during construction along the Preliminary Preferred Route would be minimized by implementing the impact management measures.	- The temporary disturbance/terrestrial species, including potential Species at Risk, during construction along the Alternate Route would be minimized by implementing the impact management measures.	
	Indicator Ranking		First (Tied)		
Criterion Ranking		Both proposed Routes are Tied as More Preferred because the temporary disruption to wildlife and terrestrial habitat would be minimized similarly by implementing the impact management measures.			
Natural Environment Category Ranking		More Preferred because the temporary decrease in surface water quality for the Preliminary Preferred Route would be minimized by implementing impact management measures, there are fewer potential adverse effects to fisheries and aquatic habitat with no permanent effects and only roadside vegetation would be temporarily disturbed/lost during the construction of the new pipeline with either route.	Less Preferred because the temporary decrease in surface water quality for the Alternate Route would be minimized by implementing impact management measures, there are a greater number of potential adverse effects to fisheries and aquatic habitat with no permanent effects and only roadside vegetation would be temporarily disturbed/lost during the construction of the new pipeline with either route.		

Category/ Criterion	Indicator		Preliminary Preferred Route: consists of two sections having a total length of 10.1 km and a district station. Section 1 will begin at Victoria Street and Cartwright Road where it will tie in to Enbridge's existing pipeline. The 4-inch steel pipe will extend east along Cartwright Road to the intersection of Boundary Road, where it will veer north and continue along Boundary Road for 6.2 km, concluding at the corner of Burton Road where a district station will be installed. At the district station, Section 2 will begin and will consist of 3.9 km of 4-inch polyethylene pipe that continues north along Boundary Road to the new customers' property just south of Highway 417.	Alternate Route: consists of two sections of pipeline having a total length of approximately 10.6 km and a district station. Section 1 will begin at Burton Road and St. Guillaume Road where it will tie in to Enbridge's existing pipeline. The 4-inch steel pipe will extend west along Burton Road for 6.7 km to the intersection of Boundary Road, where a district station will be installed. At the district station, Section 2 will begin and will consist of 3.9 km of 4-inch polyethylene pipe that continues north along Boundary Road to the new customers' property just south of Highway 417.	Data Source
Built Environment					
Effect on existing residences, businesses, and/or agricultural uses (farms)	Effect on entranceways to existing residences, businesses and/or agricultural uses (farms)	Potential Effects	A temporary disruption to 57 entranceways to residences, agricultural access, and other laneways (construction zone would be continually moving), but no permanent disruption to residences, farms, and other businesses .	A temporary disruption to over 61 entrance ways to residences, agricultural access, and other laneways as well as an industrial complex with multiple tenants (construction zone would be continually moving), but no permanent disruption to residences, farms, and other businesses.	Study Area Walk and Desktop Review (GHD, November 2019)
		Impact Management Measures	- Provide temporary driveway/entranceway accesses to the affected residents, farms and businesses and notify the residents/farm/business owners in advance of construction of the temporary Alternative arrangements.		
		Net Effects	The temporary disruption to driveways/entranceways along both proposed Routes would be minimized by implementing the impact management measures.		
	Indicator Ranking	First	Second		
	Criterion Ranking	More Preferred because there are fewer residences, businesses and farms associated with constructing the Preliminary Preferred Route.	Less Preferred because there are more residences, businesses and farms associated with constructing the Alternate Route.		
Effect of impacted soil and/or groundwater on the proposed gas pipeline	Presence of impacted soil and/or groundwater along route	Potential Effects	Potential for impacted soil/groundwater affecting construction of the new natural gas pipeline along the Preliminary Preferred Route as a result of historical and current fuel service stations (2) likely containing storage tanks in the study area and a historical auto salvage yard with a shallow ditch containing water located in the study area.	Potential for impacted soil/groundwater affecting construction of the new natural gas pipeline along the Alternate Route as a result of historical and current fuel service stations (4) likely containing storage tanks in the study area, a historical auto salvage yard with a shallow ditch containing water located in the study area, and a historical waste management facility with potential environmental concerns.	Appendix B - Historical Records Review (GHD, November 2019)
		Impact Management Measures	If impacted soil/groundwater is confirmed as affecting the construction of the new natural gas pipeline, then carry out the following impact management measures: - Minimize the amount of temporary dewatering required during construction Use good management practices for construction in areas of environmental impairment, including: - Development and implementation a Suspect Soils Management Plan. - Use of appropriate personal protective equipment. - Engage a Qualified Person (as defined under Ontario Reg. 511/09) to direct appropriate management of potentially contaminated soil and/or water. - Adhere to Enbridge's Suspect Soils Management Plan, where suspect soils/groundwater would be analyzed if encountered and handled in accordance with regulations.		
		Net Effects	The potential adverse impacts would be minimized through the application of impact management measures.		
	Indicator Ranking	First	Second		
	Criterion Ranking	More Preferred because the Preliminary Preferred has one less identified potential contaminant sources along the pipeline route.	Less Preferred because the Alternate Route has one additional identified potential contaminant sources along the pipeline route.		
Effect on existing roadway infrastructure	Number and type of roads affected and extent and duration of adverse effects	Potential Effects	A temporary disruption to the eight (8) intersections (all side roads have stop controls) along the Preliminary Preferred Route during construction of the new natural gas pipeline.	A temporary disruption to thirteen (13) intersections (all side roads have stop controls) along the Alternate Route during construction of the new natural gas pipeline.	Study Area Walk and Desktop Review (GHD, November 2019)
		Impact Management Measures	- Secure proper sight visibility triangles install/maintain pavement markings and local road stop controls. - Restore the affected portions of the roads to pre-construction conditions as per City of Ottawa and Russell Township standards.		
		Net Effects	All temporarily affected roads would be restored to pre-construction conditions.		
	Indicator Ranking	First	Second		
	Criterion Ranking	More Preferred because the Preliminary Preferred Route would disrupt fewer intersections along the pipeline route.	Less Preferred because the Alternate Route would disrupt a greater number of intersections along the pipeline route.		
Effect of vibration on existing buildings	Number of existing buildings affected and extent and duration of adverse effects	Potential Effects	A temporary increase in vibration levels to 58 buildings along the Preliminary Preferred Route during construction of the natural gas pipeline (construction zone would be continually moving), but no permanent increase in vibration levels.	A temporary increase in vibration levels to over 70 buildings along the Alternate Route during construction of the new natural gas pipeline(construction zone would be continually moving), but no permanent increase in vibration levels.	Study Area Walk and Desktop Review (GHD, November 2019)
		Impact Management Measures	Implement Best Management Practices for vibration reduction to minimize temporary construction-related nuisance effects, including: - Relocate heavy equipment travel routes away from sensitive buildings. - Limit heavy construction to daytime hours. - If deemed appropriate at the time of construction, development and implement a Vibration Management Program.		
		Net Effects	The temporary increase in vibration levels along the Preliminary Preferred Route during construction of the new natural gas pipeline would be minimized by implementing the impact management measures.	The temporary increase in vibration levels along the Alternate Route during construction of the new natural gas pipeline would be minimized by implementing the impact management measures.	
	Indicator Ranking	First	Second		
	Criterion Ranking	More Preferred because there are fewer buildings (58 total) along Preliminary Preferred Route which could be exposed to vibration during construction.	Less Preferred because there are more buildings (over 70 total) including the a industrial park and parking lots which could be exposed to vibration during construction.		
Built Environment Category Ranking			More Preferred because there are fewer identified potential areas of contaminant concern (3), fewer road intersections (8), and fewer residences (5 less) that could be exposed to noise and vibration along Preliminary Preferred Route.	Less Preferred because there are more identified potential areas of contaminant concern (4), more (13) road intersections, and more residences (approx. 5) and businesses (417 Industrial Park) that could be exposed to noise and vibration along Preliminary Preferred Route.	

Category/ Criterion	Indicator		Preliminary Preferred Route: consists of two sections having a total length of 10.1 km and a district station. Section 1 will begin at Victoria Street and Cartwright Road where it will tie in to Enbridge's existing pipeline. The 4-inch steel pipe will extend east along Cartwright Road to the intersection of Boundary Road, where it will veer north and continue along Boundary Road for 6.2 km, concluding at the corner of Burton Road where a district station will be installed. At the district station, Section 2 will begin and will consist of 3.9 km of 4-inch polyethylene pipe that continues north along Boundary Road to the new customers' property just south of Highway 417.	Alternate Route: consists of two sections of pipeline having a total length of approximately 10.6 km and a district station. Section 1 will begin at Burton Road and St. Guillaume Road where it will tie in to Enbridge's existing pipeline. The 4-inch steel pipe will extend west along Burton Road for 6.7 km to the intersection of Boundary Road, where a district station will be installed. At the district station, Section 2 will begin and will consist of 3.9 km of 4-inch polyethylene pipe that continues north along Boundary Road to the new customers' property just south of Highway 417.	Data Source
Social Environment					
Effect on traffic & road safety	Temporary and/or permanent disruption to traffic operations	Potential Effects	A temporary disruption to traffic operations (e.g., loss of 1 traffic lane) along approximately 14 km along Preliminary Preferred Route for approximately 4 - 6 months during construction of the new natural gas pipeline (construction zone would be continually moving), but no permanent disruption to traffic operations.	A temporary disruption to traffic operations (e.g., loss of 1 traffic lane) along approximately 14.5 km along Alternate Route for approximately 4 months during construction of the new natural gas pipeline (construction zone would be continually moving), but no permanent disruption to traffic operations.	Study Area Walk and Desktop Review (GHD, November 2019)
		Impact Management Measures	- Prepare a traffic management plan (e.g., describe proposed works and lane/road closures, detail traffic management measures, outline provisions for emergency vehicles, cyclists, pedestrians, etc.) and implement during construction of the new natural gas pipeline.		
		Net Effects	The temporary disruption of traffic operations along both Alternative Routes for approximately 4 months during construction of the proposed natural gas pipeline would be minimized by implementing a Traffic Management Plan ensuring the safety of all road users as well as the workers at site and the smooth operation of the road network as well as the work site.		
	Indicator Ranking	First (Tied)			
Criterion Ranking	More Preferred (Tied) because there is approximately the same level of temporary disruption on traffic along both alternative routes. Temporary traffic disruption will be isolated to the construction zone and will move along the route and will be minimized by implementing a Traffic Management Plan.				
Effect of noise on sensitive receptors	Approximate number of sensitive receptors affected and extent and duration of adverse effects	Potential Effects	A temporary increase in noise levels to approximately 25 residences along Preliminary Preferred Route for approximately 4 months during construction of the new natural gas pipeline (construction zone would be continually moving), but no permanent increase in noise levels.	A temporary increase in noise levels to approximately 13 residences along Alternate Route for approximately 4 months during construction of the proposed natural gas pipeline (construction zone would be continually moving), but no permanent increase in noise levels.	Study Area Walk and Desktop Review (GHD, November 2019)
		Impact Management Measures	- Adhere to the City of Ottawa's Noise (By-law No.2017-255) and Noise By-law from Russell Township. - Implement Best Management Practices for noise reduction to minimize temporary construction-related nuisance effects (i.e., operators limit impact noise from tailgate, use of construction equipment).		
		Net Effects	The temporary increase in noise levels along Preliminary Preferred Route for approximately 4 months during construction of the new natural gas pipeline would be minimized by implementing the impact management measures.	The temporary increase in noise levels along Alternate Route for approximately 4 months during construction of the new natural gas pipeline would be minimized by implementing the impact management measures.	
	Indicator Ranking	Second	First		
Criterion Ranking	More Preferred (Tied) because approximately the same number of sensitive receptors along both routes would experience temporary noise disruption during the construction of the new natural gas pipeline.				
Effect of perceptible vibration levels on sensitive receptors	Approximate number of sensitive receptors affected and extent and duration of adverse effects	Potential Effects	A temporary increase in perceptible levels of vibration to approximately 25 residences Preliminary Preferred Route for approximately 4 months during construction of the new natural gas pipeline (construction zone would be continually moving), but no permanent increase in perceptible levels of vibration.	A temporary increase in perceptible levels of vibration to approximately 13 residences along Alternate Route for approximately 4 months during construction of the new natural gas pipeline (construction zone would be continually moving), but no permanent increase in perceptible levels of vibration.	Study Area Walk and Desktop Review (GHD, November 2019)
		Impact Management Measures	- Implement Best Management Practices for vibration reduction to minimize temporary construction-related nuisance effects during daytime, including: - Relocate heavy equipment travel routes away from sensitive buildings. - Limit heavy construction to daytime hours.		
		Net Effects	The temporary increase in perceptible levels of vibration along the Alternative Routes for approximately 4 months during construction of the proposed natural gas pipeline would be minimized by implementing the impact management measures.		
	Indicator Ranking	Second	First		
Criterion Ranking	More Preferred (Tied) because approximately the same number of sensitive receptors along both alternative routes could be exposed to perceptible levels of vibration during construction of the proposed natural gas pipeline.				
Effect of particulate on sensitive receptors	Approximate number of sensitive receptors impacted and extent and duration of effects	Potential Effects	A temporary increase in particulate (e.g., dust) to approximately 25 residences along Preliminary Preferred Route for approximately 4 months during construction of the new natural gas pipeline (construction zone would be continually moving), but no permanent increase in particulate levels.	A temporary increase in particulate (e.g., dust) to approximately 13 residences along Alternate Route for approximately 4 months during construction of the new natural gas pipeline (construction zone would be continually moving), but no permanent increase in particulate levels.	Study Area Walk and Desktop Review (GHD, November 2019)
		Impact Management Measures	- Implement Best Management Practices for particulate reduction to minimize temporary construction-related nuisance effects during daytime (e.g., spraying of water, calcium chloride).		
		Net Effects	The temporary increase in dust to approximately 25 residences along Preliminary Preferred Route for approximately 4 months during construction of the new natural gas pipeline would be minimized by implementing the impact management measures.	The temporary increase in dust to approximately 13 residences Alternate Route for approximately 4 months during construction of the new natural gas pipeline would be minimized by implementing the impact management measures.	
	Indicator Ranking	Second	First		
Criterion Ranking	Less Preferred because there are more residences (sensitive receptors) along Preliminary Preferred Route amount that could be exposed to dust during construction.		More Preferred because there are fewer residences (sensitive receptors) along Alternate Route amount that could be exposed to dust during construction.		
Social Environment Category Ranking		Less Preferred because there are more residences along both routes that would be exposed to short-term nuisances related to the construction of the pipeline route.		More Preferred because there are fewer residences along both routes that would be exposed to short-term nuisances related to the construction of the pipeline route.	

Category/ Criterion	Indicator	Preliminary Preferred Route: consists of two sections having a total length of 10.1 km and a district station. Section 1 will begin at Victoria Street and Cartwright Road where it will tie in to Enbridge's existing pipeline. The 4-inch steel pipe will extend east along Cartwright Road to the intersection of Boundary Road, where it will veer north and continue along Boundary Road for 6.2 km, concluding at the corner of Burton Road where a district station will be installed. At the district station, Section 2 will begin and will consist of 3.9 km of 4-inch polyethylene pipe that continues north along Boundary Road to the new customers' property just south of Highway 417.	Alternate Route: consists of two sections of pipeline having a total length of approximately 10.6 km and a district station. Section 1 will begin at Burton Road and St. Guillaume Road where it will tie in to Enbridge's existing pipeline. The 4-inch steel pipe will extend west along Burton Road for 6.7 km to the intersection of Boundary Road, where a district station will be installed. At the district station, Section 2 will begin and will consist of 3.9 km of 4- inch polyethylene pipe that continues north along Boundary Road to the new customers' property just south of Highway 417.	Data Source	
Cultural Environment					
Effects on archaeological resources	Loss of potential archaeological resources with value or interest	Potential Effects	Loss of potential archaeological resources with value or interest.	Loss of potential archaeological resources with value or interest.	Appendix B - Historical Records Review (GHD, November 2019) and Appendix C - ASI Stage 1 Archaeological Assessment (November 2019)
		Impact Management Measures	Undertake the following prior to any construction related disturbance associated with construction of the new natural gas pipeline: - A Stage 2 Archaeological Assessment to confirm the presence of any archaeological resources with cultural heritage value or interest within the environmental lands (at the location of the District Station). - If remains are found, the consultant archaeologist, approval authority, and the Cultural Programs Unit of the MHSTCI will be notified immediately and construction activities would stop until further notice. - If warranted, undertake a Stage 3 Archaeological Assessment for any archaeological resources discovered during the Stage 2 Archaeological Assessment. - If required, then undertake a Stage 4 Archaeological Assessment (i.e., avoidance or salvage excavation) following the Stage 3 Archaeological Assessment.		
		Net Effects	No potential archaeological resources with cultural heritage value or interest would be lost due to a Stage 2 Archaeological Assessment being carried out prior to constructing the new natural gas pipeline.		
		Indicator Ranking	First (Tied)		
		Criterion Ranking	More Preferred (Tied) because approximately the same amount of archaeological potential along both Alternative Routes that would require a stage 2 (pedestrian survey or test pit survey) prior to construction.		
Cultural Environment Category Ranking		More Preferred (Tied) because the same amount of archaeological potential exists along both Alternative Routes that would require a Stage 2 Archaeological Assessment and no potential resources of archaeological value or interest would be lost due to a Stage 2 Archaeological Assessment being carried out prior to constructing the pipeline.			
OVERALL RECOMMENDATION AND RATIONALE		<p>The Preliminary Preferred Route is the Preferred Route for the proposed Boundary Road Natural Gas Pipeline because it is ranked higher in more categories than Alternate Route. For instance, the Preliminary Preferred Route is ranked "More Preferred" than the Alternate Route in the Natural Environment and Built Environment Categories. In contrast, Alternate Route is only ranked higher than Preliminary Preferred Route in one category (Social Environment). Both alternative routes are considered tied in the Cultural Environment Category.</p> <p>With regards to the Natural Environment Category, Preliminary Preferred Route is "More Preferred" because it has 3 fewer aquatic features along the route. In addition, the 3 watercourse crossings are all classified as warmwater (less sensitive) whereas Alternate Route has 7 watercourse crossings (both warmwater and coldwater classifications).</p> <p>For the Built Environment Category, Preliminary Preferred Route is again "More Preferred" than Alternate Route because there is less potential for uncovering impacted soil/groundwater during construction of the new natural gas pipeline. In addition, there are fewer buildings along the Preliminary Preferred Route compared to the Alternate Route, which could be temporarily affected by construction of the new natural gas pipeline. Similarly, fewer road intersections would be temporarily affected during the construction of the new natural gas pipeline with Preliminary Preferred Route compared to the Alternate Route.</p> <p>Although there are more sensitive receptors along the Preliminary Preferred Route, which could potentially be adversely affected by construction activities (i.e., noise, vibration, dust) compared to the Alternate Route, the potential effects would be temporary in nature and be largely mitigated by the application of standard best management construction practices.</p>			

APPENDIX F

Project Stakeholder List

Appendix E - Boundary Road Pipeline Project Stakeholder List

Title	Salutation	First Name	Last Name	Telephone	Email	Address	City	Prov	Postal
AGENCIES									
CITY OF OTTAWA									
Councillor, Ward 20 (Osgoode)	Mr.	George	Darouze	613-580-2490	george.darouze@ottawa.ca	8243 Victoria Street	Metcalfe	ON	K0A 2P0
Ward 20 Councillors Assistant	Ms.	Jessica	Fait	613-580-2424	jessica.fait@ottawa.ca	8243 Victoria Street	Metcalfe	ON	K0A 2P0
Councillor, Ward 19 (Cumberland)	Mr.	Stephen	Blais	613-580-2489	stephen.blais@ottawa.ca	2263 Portobello Blvd	Orleans	ON	K4A 0X3
Ward 19 Councillors Assistant	Ms.	Stephanie	Brown	613-580-2424 x26869	stephanie.brown@ottawa.ca	2263 Portobello Blvd	Orleans	ON	K4A 0X3
MPP, Nepean-Carleton	Ms.	Goldie	Ghamari	613-838-4425	goldie.ghamari@pc.ola.org	Unit 30, 6179 Perth St.	Richmond	ON	K0A 2Z0
City Clerk	Mr.	Rick	O'Connor	613-580-2424 x21215	rick.oconner@ottawa.ca	110 Laurier Avenue West	Ottawa	ON	K1P 1J1
Planner, Planning and Infrastructure	Mr.	Bruce	Finlay	613-580-2424 x21850	bruce.finlay@ottawa.ca	110 Laurier Avenue West	Ottawa	ON	K1P 1J1
Senior Heritage Planner	Ms.	Sally	Coutts	613-580-2424 x13474	heritage@ottawa.ca	110 Laurier Avenue West	Ottawa	ON	K1P 1J1
Manager, Traffic Operations	Mr.	Chris	Brinkmann	613-580-2424 x23187	chris.brinkmann@ottawa.ca	110 Laurier Avenue West	Ottawa	ON	K1P 1J1
TOWNSHIP OF RUSSELL									
Warden, United Counties of Prescott-Russell	Mr.	Robert	Kirby	613-675-4661	administration@prescott-russell.on.ca	59 Court Street, P.O. Box 304	L'Original	ON	K0B 1K0
Councillor	Mr.	Andre	Brisson	613-914-7066	andrebrisson@russell.ca	717 Notre-Dame St	Embrun	ON	K0A 1W1
Councillor	Mr.	Jamie	Laurin	613-601-3581	jlaurin@russell.ca	717 Notre-Dame St	Embrun	ON	K0A 1W1
Councillor	Ms.	Cindy	Saucier	613-857-2715	cindysaucier@russell.ca	717 Notre-Dame St	Embrun	ON	K0A 1W1
Councillor	Mr.	Mike	Tarnowski	613-668-1866	miketarnowski@russell.ca	717 Notre-Dame St	Embrun	ON	K0A 1W1
MPP, Glengarry-Prescott-Russell	Ms.	Amanda	Simard	613-632-2706	asimard-co@ola.org	290A McGill St	Hawkesbury	ON	K2J 6B6
Manager of Infrastructure Services	Mr.	Jonathan	Bourgon	613-443-1747 ext 212	JonathanBourgon@Russell.ca	717 Notre-Dame Street	Embrun	ON	K0A 1W1
Director of Planning, Building and Economic Development	Ms.	Dominique	Tremblay	613-443-1747 ext. 2317	dominiquetremblay@Russell.ca	717 Notre-Dame Street	Embrun	ON	K0A 1W1
Municipal Clerk	Ms.	Joanne	Camiré Laflamme	613-443-1747 ext. 2310	clerk.grefe@russell.ca	717 Notre-Dame Street	Embrun	ON	K0A 1W1
SOUTH NATION CONSERVATION AUTHORITY									
Team Lead, Planning	Ms.	Alison	McDonald	613-984-2948	amcdonald@nation.on.ca	P.O. Box 29 38 Victoria St.	Finch	ON	K0C 1K0
MINISTRY OF ENVIRONMENT, CONSERVATION AND PARKS									
Manager, Ottawa District	Ms.	Tracy	Hart	613-521-3450	tracy.hart@ontario.ca	2430 Don Reid Dr, Unit 103	Ottawa	ON	K1H 1E1
Eastern Region	Eastern Region General Notification				eanotification.eregion@ontario.ca				
MINISTRY OF NATURAL RESOURCES AND FORESTRY									
District Manager	Mr.	Dan	Thompson	613-258-8201	dan.l.thompson@ontario.ca	Unit 1, 10 Campus Dr PO Box 2002	Kemptville	ON	K0G 1J0
MINISTRY OF TRANSPORTATION - EASTERN REGION									
Regional Director	Mr.	Jeff	Hudebine	613-545-4600	jeff.hudebine@ontario.ca	355 John Counter Blvd, PO Box 4000	Kingston	ON	K7L 5A3
MINISTRY OF HERITAGE, SPORT, TOURISM AND CULTURE INDUSTRIES									
Regional Advisor, Ottawa Region	Ms.	Carmen	Goold	613-323-3118	carmen.goold@ontario.ca	4th Flr, 347 Preston St	Ottawa	ON	K1S 3J4
Regional Manager, East Region	Ms.	Valerie	Andrews	613-720-7271	valerie.andrews@ontario.ca	4th Flr, 347 Preston St	Ottawa	ON	K1S 3J4

ONTARIO PIPELINE COORINDATING COMMITTEE									
Ontario Energy Board	Ms.	Zora	Crnojacki	416-440-8104	Zora.Crnojacki@oeb.gov.on.ca	P.O. Box 2319, 2300 Yonge Street, 26th Floor	Toronto	ON	M4P 1E4
Ministry of Agriculture, Food and Rural Affairs	Mr.	Arthur	Churchyard	226-962-2838	arthur.churchyard@ontario.ca	3rd Floor S, 1 Stone Road	Guelph	ON	N1G 4Y2
Ministry of Heritage, Sport, Tourism, and Culture Industries	Ms.	Laura	Hatcher	416-314-3108	Laura.e.hatcher@ontario.ca	401 Bay Street	Toronto	ON	M7A 0A7
Ministry of Transportation	Mr.	Tony	Difabio	(905) 704-2656	Tony.difabio@ontario.ca	301 St. Paul Street, 2 nd floor	St. Catharines	ON	L2R 7R4
Technical Standards and Safety Authority	Mr.	Kourosh	Manouchehri	(416) 734-3539	kmanouchehri@tssa.org	345 Carlingview Drive	Toronto	ON	M9W 6N9
Ministry of Natural Resources and Forestry	Ms.	Sally	Renwick	705-755-5195	sally.renwick@ontario.ca	300 Water Street	Peterborough	ON	K9J 8M5
Ministry of Municipal Affairs and Housing	Mr.	Ross	Lashbrook	437-225-6006	ross.lashbrook@ontario.ca	14th Flr, 135 St Clair Ave W	Toronto	ON	M4V 1P5
Ministry of Municipal Affairs and Housing, Eastern Municipal Services Office	Mr.	Michael	Elms	613-545-2132	michael.elms@ontario.ca	Eastern Municipal Services Office Rockwood House, 8 Estate Lane	Kingston	ON	K7M 9A8
Ministry of Energy, Northern Development and Mines	Ms.	Shannon	McCabe	416-212-6704	shannonmccabe@ontario.ca	6 th Floor, 77 Grenville Street	Toronto	ON	M7A 2C1
Ministry of Environment, Conservation and Parks (MECP) (Eastern Regional Contact)	Ms.	Ruth	Orwin	613-548-6931	ruth.orwin@ontario.ca	1259 Gardiners Rd	Kingston	ON	K7P 3J6
Infrastructure Ontario	Mr.	Patrick	Grace	647-264-3690	Patrick.Grace@infrastructure.ca	1 Dundas Street West, Suite 2000	Toronto	ON	M5G 1Z3
Ministry of Economic Development, Job Creation and Trade	Mr.	Joseph	Vecchiolla	416-325-1561	Joseph.Vecchiolla@ontario.ca	777 Bay Street, 4th Floor, Suite 425	Toronto	ON	M5G 2E5
UTILITIES AND SPECIAL INTEREST GROUPS									
OPP, Russell County Detachment	Ms.	Chantal	Lanteigne	613 443-4499	chantal.lanteigne@opp.ca	411 New York Central Ave	Embrun	ON	K0A 1W1
OPP, Ottawa Detachment	Mr.	Bob	Wheeler	613 270-9171	bob.wheeler@opp.ca	P.O. Box 13490, 1921 Provincial Police Lane	Ottawa	ON	K2K 1X6
Russel Fire Department	Chief	Bruce	Armstrong	613-445-3326	brucearmstrong@russel.ca	1195 South Russell Road	Russell	ON	K4R 1E5
Ottawa Fire Station 73 Department	Ms.	Virgina	Clark	613-835-1682	n/a	6090 Rockdale Road	Vars	ON	K0A 3H0
Prescott and Russell Emergency Services	Ms.	Justine	Lamarche	613-673-5139 ext 223	Jlamarche@prescott-russell.on.ca	PO Box 150	Plantagenet	ON	K0B 1L0
Russell Agricultural Society	Ms.	Theresa	Wever	613 445-1742	twever@rogers.com	1076 Concession Street P.O. Box 730	Russell	ON	K4R 1E8
Citizens' Environmental Stewardship Association	Mr.	Charles	Armstrong	n/a	info@dumpthedumpnow.ca	P.O. Box 225	Russell	ON	K4R 1C9
Hydro One Networks Inc.(Ontario One Call)	Mr.	Dean	Egan						
Bell Canada (Ottawa Region)	Mr.	Greg	Parsons	n/a	greg.parsons1@bell.ca	39 Apple Street	Brockville	ON	K6V 4X7
Rogers	Ms.	Janice	Webster	613-759-8685	janice.webster@rci.rogers.com	475 Richmond Road	Ottawa	ON	K2A 3W9
Ottawa Student Transportation Authority (East Zone)	n/a	n/a	n/a	613-224-8800 ext 2380	centre.east@ottawaschoolbus.ca	1645 Woodroffe Ave, Room 102	Nepean	ON	K2G 1W2
Student Transportation of Eastern Ontario	n/a	n/a	n/a	613-925-0022	transportation@steo.ca	104 Commerce Drive	Prescott	ON	K0E 1T0
INDIGENOUS COMMUNITIES									
Algonquins of Ontario (AOO)	Ms.	Janet	Stavinga	613-735-3759	algonquins@tanakiwin.com	31 Riverside Dr., Suite 101	Pembroke	ON	K8A 8R6
Mohawk Council of Akwesasne	Grand Chief	Vanessa	Adams	613-575-2250	info@akwesasne.ca	PO BOX 90	Akwesasne	QC	H0M 1A0

APPENDIX G

Notices

PROPOSED BOUNDARY ROAD PIPELINE PROJECT

NOTICE OF STUDY COMMENCEMENT AND PUBLIC OPEN HOUSE

OTTAWA/RUSSELL, ON

ENBRIDGE GAS INC.

Study Overview

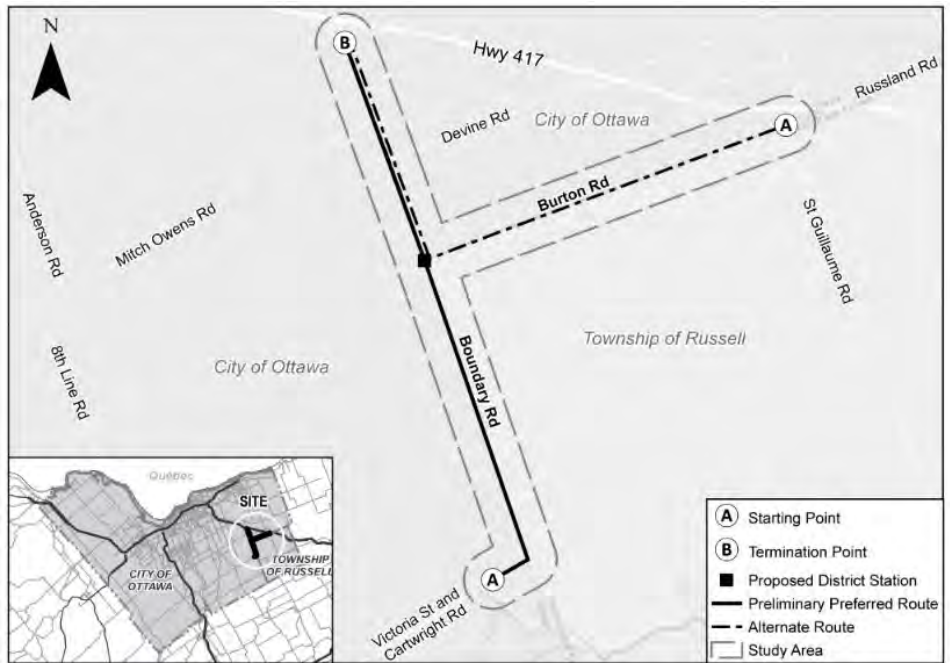
Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study to assess the potential impacts from construction and operation of the Boundary Road Pipeline Project (the Project), a proposed natural gas pipeline that would border the City of Ottawa and Township of Russell, along Boundary Road south of Highway 417. The project includes two sections of pipeline; 6.2 km of 4-inch steel pipe and 3.9 km of 4-inch polyethylene pipe respectively, and the installation of a new district station to support it. This pipeline will deliver essential natural gas to new customers in the area. The Environmental Report should be completed in winter 2020, after which Enbridge will file an application to the Ontario Energy Board (OEB) for approval to construct. If approved, construction is anticipated to begin in spring 2021.

Preliminary Preferred Route (PPR)

The PPR consists of two sections of pipeline having a total length of approximately 10.1 km and a district station. Section 1 will begin at Victoria Street and Cartwright Road where it will tie in to Enbridge's existing pipeline. The 4-inch steel pipe will travel east along Cartwright Road to the intersection of Boundary Road, where it will veer north and continue along Boundary Road for 6.2 km, concluding at the corner of Burton Road where a district station will be installed. At the district station, Section 2 will begin and will consist of 3.9 km of 4-inch polyethylene pipe that continues north along Boundary Road to the new customers' property just south of Highway 417.

Alternate Route (AR)

The AR consists of two sections of pipeline having a total length of approximately 10.6 km and a district station. Section 1 will begin at Burton Road and St. Guillaume Road where it will tie in to Enbridge's existing pipeline. The 4-inch steel pipe will travel west along Burton Road for 6.7 km to the intersection of Boundary Road, where a district station will be installed. At the district station, Section 2 will begin and will consist of 3.9 km of 4-inch polyethylene pipe that continues north along Boundary Road to the new customers' property just south of Highway 417.



Study 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* (2016). As part of the study process, potential impacts will be assessed and where necessary, mitigation measures will be applied to avoid and/or minimize the identified impacts.

Public Open House

Consultation is an important component of the study. As such, the public, regulatory agencies, Indigenous communities and other interested stakeholders are invited to attend a Public Open House being held to review the project information and provide comments. The Open House will be conducted as drop in style, and representatives from Enbridge and GHD will be available to discuss the proposed Project.

Please contact either one of the following representatives if you have any questions on the study.

Emily Gallant
Stakeholder Engagement
Specialist, GHD
Telephone: (416) 866-2368
BoundaryRoadEA@ghd.com

Tanya Turk
Advisor, Environment
Enbridge Gas Inc.
Telephone: (416) 495-3103
tanya.turk@enbridge.com

PUBLIC OPEN HOUSE

Russel Sports & Youth Centre
988 Concession Street, Russell
Wednesday, November 27, 2019
5:00 p.m. – 8:00 p.m.

Project information is available online at
www.enbridgegas.com/About-Us

Questions and comments may be submitted to BoundaryRoadEA@ghd.com by January 6, 2020 to be incorporated into the Environmental Report.



PROJET PIPELINIER DE LA ROUTE BOUNDARY

AVIS DE LANCEMENT DE L'ÉTUDE ET SÉANCE D'INFORMATION PUBLIQUE

OTTAWA/RUSSELL, ON

ENBRIDGE GAS INC.

Aperçu de l'étude

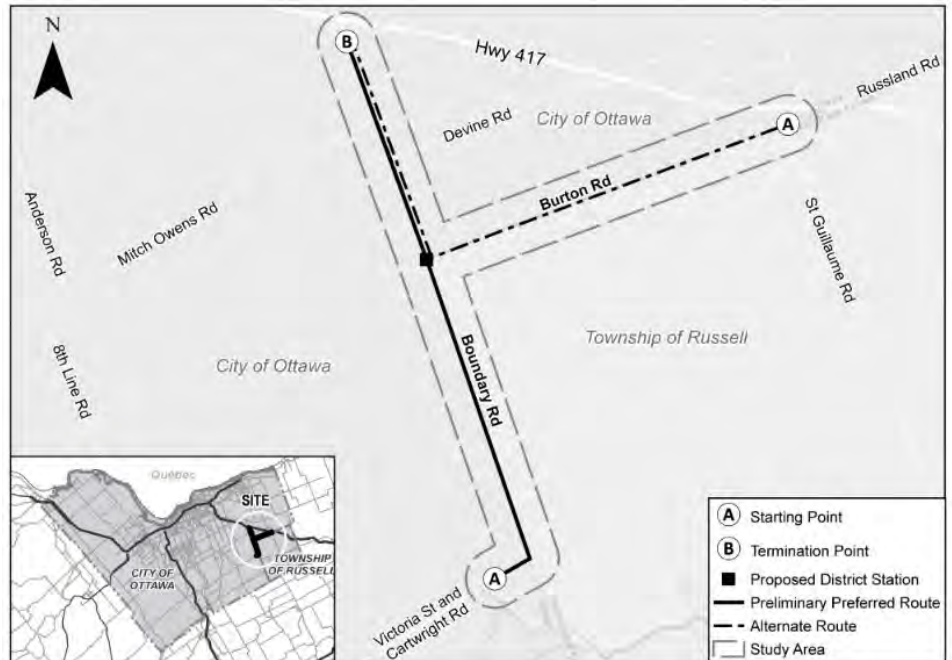
Enbridge Gas Inc. (Enbridge) a retenu les services de GHD Inc. (GHD) pour effectuer une étude environnementale afin d'évaluer les répercussions potentielles de la construction et de l'exploitation du projet pipeline de la route Boundary (le projet) : un projet de pipeline de gaz naturel à la frontière de la ville d'Ottawa et du canton de Russell, le long de la route Boundary, au sud de l'autoroute 417. Le projet comprend deux tronçons de pipeline : un tronçon de 6,2 km de tube en acier de 4 pouces et un autre de 3,9 km de conduite en polyéthylène de 4 pouces respectivement, ainsi que l'installation d'une nouvelle station de district pour sa mise en œuvre. Ce gazoduc acheminera le gaz naturel essentiel visant à desservir des nouveaux clients de la région. Le rapport environnemental devrait être achevé au cours de l'hiver 2020, après quoi Enbridge déposera une demande d'autorisation de construction auprès de la Commission de l'énergie de l'Ontario (CEO). Si la demande est approuvée, la construction devrait commencer au printemps 2021.

Tracé préliminaire privilégié (TPP)

Le TPP est constitué de deux tronçons de pipeline d'une longueur totale d'environ 10,1 km et d'une station de district. Le premier tronçon démarrera à hauteur de la rue Victoria et de la route Cartwright, où il sera relié au pipeline existant d'Enbridge. Le tube en acier de 4 pouces se dirigera vers l'est, le long de la route Cartwright jusqu'à l'intersection de la route Boundary, où il se dirigera vers le nord et continuera le long de la route Boundary sur une distance de 6,2 km pour se terminer au coin de la route Burton où une station de district sera installée. Le deuxième tronçon commencera au niveau de la station de district et la conduite en polyéthylène de 4 pouces s'étendant sur 3,9 km continuera vers le nord, le long de la route Boundary jusqu'à la propriété des nouveaux clients, située au sud de l'autoroute 417.

Tracé alternatif (TA)

Le TA est constitué de deux tronçons de pipeline d'une longueur totale d'environ 10,6 km et d'une station de district. Le premier tronçon démarrera à hauteur de la route Burton et de la route St. Guillaume, où il sera relié au pipeline existant d'Enbridge. Le tube en acier de 4 pouces se dirigera vers l'ouest, le long de la route Burton, sur une distance de 6,7 km jusqu'à l'intersection de la route Boundary, où une station de district sera installée. Le deuxième tronçon commencera au niveau de la station de district et la conduite en polyéthylène de 4 pouces s'étendant sur 3,9 km continuera vers le nord, le long de la route Boundary jusqu'à la propriété des nouveaux clients, située au sud de l'autoroute 417.



Processus de l'étude

L'étude est menée conformément aux *Lignes directrices environnementales de la CEO, relatives à l'emplacement, à la construction et à l'exploitation de pipelines et d'installations d'hydrocarbures en Ontario* (2016). Dans le cadre du processus d'étude, les répercussions potentielles seront évaluées et, si nécessaire, des mesures d'atténuation seront prises pour éviter et/ou réduire au minimum les répercussions identifiées.

Séance d'information publique

La consultation est un élément important de l'étude. À ce titre, le public, les organismes de réglementation, les communautés autochtones et les autres parties prenantes intéressées sont invités à participer à une séance d'information publique organisée pour examiner les données relatives au projet et formuler des commentaires. Les visiteurs à la séance d'information seront accueillis à leur arrivée par des représentants d'Enbridge et de GHD qui seront disponibles pour discuter du projet proposé.

Veillez communiquer avec l'un des représentants suivants si vous avez des questions au sujet de l'étude.

Emily Gallant

Spécialiste de l'engagement
des intervenants, GHD
Téléphone : (416) 866-2368
BoundaryRoadEA@ghd.com

Tanya Turk

Conseillère en environnement
Enbridge Gas Inc.
Téléphone : (416) 495-3103
tanya.turk@enbridge.com

SÉANCE D'INFORMATION PUBLIQUE

Russel Sports & Youth Centre
988 Concession Street, Russell
Le mercredi 27 novembre 2019
de 17 h à 20 h

**Les renseignements concernant le projet
sont disponibles en ligne :**

www.enbridgegas.com/About-US

Les questions et commentaires peuvent être adressés à BoundaryRoadEA@ghd.com avant le 6 janvier 2020 pour être intégrés au rapport environnemental.



APPENDIX H

Letters



November 8, 2019

██████████
██████████████████
██████████

Attn: ██████████

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear ██████████,

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

████████████████████
████████████████████
████████████████████

Attn: ██████████

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear ██████████,

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[REDACTED]
[REDACTED]
[REDACTED]

Attn: [REDACTED]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [REDACTED],

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[REDACTED]
[REDACTED]
[REDACTED]

Attn: [REDACTED]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [REDACTED]

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[REDACTED]
[REDACTED]
[REDACTED]

Attn: [REDACTED]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [REDACTED],

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[REDACTED]
[REDACTED]
[REDACTED]

Attn: [REDACTED]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [REDACTED],

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[REDACTED]
[REDACTED]
[REDACTED]

Attn: [REDACTED]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [REDACTED],

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:

Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[REDACTED]
[REDACTED]
[REDACTED]

Attn: [REDACTED]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [REDACTED],

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[REDACTED]
[REDACTED]
[REDACTED]

Attn: [REDACTED]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [REDACTED],

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

████████████████████
████████████████████
████████████████████

Attn: ██████████

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear ██████████,

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:

Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[REDACTED]
[REDACTED]
[REDACTED]

Attn: [REDACTED]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [REDACTED],

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:

Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[REDACTED]
[REDACTED]
[REDACTED]

Attn: [REDACTED]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [REDACTED],

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[REDACTED]
[REDACTED]
[REDACTED]

Attn: [REDACTED]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [REDACTED],

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[REDACTED]
[REDACTED]
[REDACTED]

Attn: [REDACTED]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [REDACTED],

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[Redacted]
[Redacted]
[Redacted]

Attn: [Redacted]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [Redacted],

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[REDACTED]
[REDACTED]
[REDACTED]

Attn: [REDACTED]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [REDACTED],

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

██████████
████████████████████
██████████

Attn: ██████████

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear ██████████,

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[REDACTED]
[REDACTED]
[REDACTED]

Attn: [REDACTED]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [REDACTED],

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:

Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[REDACTED]
[REDACTED]
[REDACTED]

Attn: [REDACTED]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [REDACTED],

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[REDACTED]
[REDACTED]
[REDACTED]

Attn: [REDACTED]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [REDACTED],

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

██████████
██████████
██████████

Attn: ██████████

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear ██████████,

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[REDACTED]
[REDACTED]
[REDACTED]

Attn: [REDACTED]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [REDACTED],

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[Redacted]
[Redacted]
[Redacted]

Attn: [Redacted]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [Redacted]

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[Redacted]
[Redacted]
[Redacted]

Attn: [Redacted]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [Redacted],

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[REDACTED]
[REDACTED]
[REDACTED]

Attn: [REDACTED]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [REDACTED],

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[REDACTED]
[REDACTED]
[REDACTED]

Attn: [REDACTED]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear [REDACTED],

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

██████████
██████████████████
████████████████████

Attn: ██████████

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

Dear ██████████,

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[Redacted]
[Redacted]
[Redacted]

Attn: [Redacted]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

To whom it may concern,

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.



November 8, 2019

[Redacted]
[Redacted]
[Redacted]

Attn: [Redacted]

**Re: Notice of Study Commencement and Public Open House
Proposed Boundary Road Pipeline Project | Ottawa/Russell, Ontario**

To whom it may concern,

Enbridge Gas Inc. (Enbridge) has retained GHD Inc. (GHD) to conduct an environmental study on the construction and operation of the Boundary Road Pipeline Project, a natural gas pipeline proposed along the boundary between the City of Ottawa and Township of Russell. The Preliminary Preferred Route, which spans approximately 10.1 km, will deliver essential natural gas to new customers in the area. Once the Environmental Report is complete, Enbridge will apply to the Ontario Energy Board (OEB) for approval to construct. This 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* (2016).

Please find attached the Notice of Study Commencement and Public Open House for further description of the Boundary Road Pipeline Project (the "Project") being proposed, including a description of the Preliminary Preferred Route (PPR) and Alternate Route (AR). Both the PPR and the AR require short tie-ins to the existing network at road intersections and the pipeline is planned to be located mainly within the municipal road rights-of-way. A map of the two routes is attached.

As part of the initial phase of the study, we are requesting any information your agency may have on the environment associated with the two routes as part of evaluating them and identifying potential impacts (e.g. aquatic and terrestrial species and features, development plans, community facilities, municipal infrastructure, utilities, archaeological and heritage resources, etc.). We request that you provide any information relating to the cultural heritage, natural and/or socio-economic environments in the study area (along or adjacent to the routes) that may fall within your mandate, that may affect routing, construction or operation of the proposed pipeline.

As stated in the attached Notice, a Public Open House is scheduled for November 27, 2019 to discuss the Project with agencies, Indigenous communities and the public. Representatives from Enbridge and GHD



will be available to discuss the proposed project including the proposed routes, design and the anticipated Project schedule.

We are requesting this information by **November 28, 2019**. The information can be sent to BoundaryRoadEA@ghd.com.

Please feel free to contact me if you have any questions or would like to discuss the study further.

Kind Regards,

A handwritten signature in black ink that reads 'Emily Gallant'.

Emily Gallant
Stakeholder Engagement Specialist, GHD
(416)-866-2368
emily.gallant@ghd.com

Attachments:
Notice of Commencement and Open House
Proposed Pipeline Route Map

c. Tanya Turk, Advisor Environment, Enbridge Gas Inc.

APPENDIX I

Open House Comment Forms



Boundary Road Pipeline Project

OPEN HOUSE COMMENT FORM

November 27, 2019

Name: _____
 Address: _____
 Email: _____ Phone: _____
 Group/Organization: _____

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: CARLSBAD ASS'N

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion
- _____

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

None

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

No

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 - Strongly Agree)

a) I feel more informed about the Project and the Ontario Energy Board's approval process.



Please explain: I was reasonable informed before, I am familiar with environmental assessments

b) The information presented was clear and relevant to me.



Please explain: Clear materials presented

c) Representatives from Enbridge and GHD were approachable and able to answer my questions.



Please explain: All friendly/informative

6. Do you have any additional comments?

As a homeowner I would like the project expanded to serve the Carlisbad area. Ideally I would like to become a customer for natural gas

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before

January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.



Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM

November 27, 2019

Name:	[Redacted]
Address:	[Redacted]
Email:	[Redacted]
Phone:	[Redacted]
Group/Organization:	[Redacted]

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: Facebook

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

N/A

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 – Strongly Agree)

a) *I feel more informed about the Project and the Ontario Energy Board's approval process.*



Please explain: _____

b) *The information presented was clear and relevant to me.*



Please explain: _____

c) *Representatives from Enbridge and GHD were approachable and able to answer my questions.*



Please explain: _____

6. Do you have any additional comments?

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before

January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.



Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM
 November 27, 2019

Name:	[Redacted]
Address:	[Redacted]
Email:	[Redacted]
Phone:	[Redacted]
Group/Organization:	_____

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

BUT want gas for our homes too!

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

Taggart-Miller must have a need for their dump.

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 – Strongly Agree)

a) I feel more informed about the Project and the Ontario Energy Board's approval process.



Please explain: _____

b) The information presented was clear and relevant to me.



Please explain: _____

c) Representatives from Enbridge and GHD were approachable and able to answer my questions.



Please explain: _____

6. Do you have any additional comments?

Home heating is important!

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.



Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM

November 27, 2019

Name:	[Redacted]
Address:	[Redacted]
Email:	[Redacted]
Phone:	[Redacted]
Group/Organization:	<input checked="" type="checkbox"/> Private

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

There is no consideration on "this" project for the households that are in or near the path of where this line is being implemented.

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

The construction / pipeline is not running down our street, so no impact there, other than potential traffic / trucks using Piperilla Rd as a route

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

Naturally the local residence, who have been asking / anticipating Natural Gas in our community for years. Now that these two large corporations have moved into the area & promises of contributing to improve community services (especially the Tugart Miller) we hope they keep their promise!

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 - Strongly Agree)

a) I feel more informed about the Project and the Ontario Energy Board's approval process.



Please explain: Informed but disappointed that we anticipated this being more of a community service not for specific users!

b) The information presented was clear and relevant to me.



Please explain: Wasn't relevant to me as of this particular project. More interested on future project to deliver gas

c) Representatives from Enbridge and GHD were approachable and able to answer my to home energy questions.



Please explain: _____

6. Do you have any additional comments?

I know this is the 1st Public meeting & wished the expectations were better communicated in advance. Lie... this is really just for Amagard Taggart Miller.

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before

January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.

Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM

November 27, 2019

Name: _____
Address: _____
Email: _____ Phone: _____
Group/Organization: taxe payeur

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

Je ne suis pas d'accord avec le projet car
je crois que l'étude ne pas pris en considération
le potentiel d'expansion future. Pour les membres
de la communauté affectés avec les deux industries
en question.

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

Avant l'installation d'une ligne de 4" est-elle
suffisante pour accommoder l'expansion future?
Aussi bien faire le travail d'une ligne de 6" ou 8"
des le début.

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

La ligne est-elle suffisante pour une expansion
du réseau future?

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 - Strongly Agree)

a) I feel more informed about the Project and the Ontario Energy Board's approval process.



Please explain: Je comprend mieux le processus

b) The information presented was clear and relevant to me.



Please explain: Bien.

c) Representatives from Enbridge and GHD were approachable and able to answer my questions.



Please explain: le personnel était bien informé.

6. Do you have any additional comments?

J'ai une très grande consommation personnel de propane. Donc, ce serait très utile d'avoir accès au gaz naturel. Pour aider à contraindre les effets négatifs du projet de dépôt.

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before

January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.

Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM

November 27, 2019

Name:	[REDACTED]
Address:	[REDACTED]
Email:	[REDACTED]
Phone:	[REDACTED]
Group/Organization:	[REDACTED]

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

WOULD LIKE TO COME DOWN ROUTE 200

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

ADD ROUTE 200

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

GO DOWN ROUTE 200

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 – Strongly Agree)

a) *I feel more informed about the Project and the Ontario Energy Board's approval process.*



Please explain: _____

b) *The information presented was clear and relevant to me.*



Please explain: _____

c) *Representatives from Enbridge and GHD were approachable and able to answer my questions.*



Please explain: _____

6. Do you have any additional comments?

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before
January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.

Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM

November 27, 2019

Name: [Redacted]
Address: [Redacted]
Email: [Redacted] Phone: [Redacted]
Group/Organization: Private Homeowner

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

Since I would like to new gas main to come down address Rd. to Pipperville Rd. to the adult Living Centre at Anderson Park

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 – Strongly Agree)

a) *I feel more informed about the Project and the Ontario Energy Board's approval process.*



Please explain: _____

b) *The information presented was clear and relevant to me.*



Please explain: _____

c) *Representatives from Enbridge and GHD were approachable and able to answer my questions.*



Please explain: _____

6. Do you have any additional comments?

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before **January 6, 2020** for inclusion in the Environmental Report.

Thank you for your participation.

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.



Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM
 November 27, 2019

Name:	[Redacted]
Address:	[Redacted]
Email:	[Redacted]
Phone:	[Redacted]
Group/Organization:	

1. How did you hear about this event?

- Received information by mail
 E-mail
 Newspaper Ad
 Friend of neighbour
 Other: Carlsbad Springs Community Assoc

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive
 I am not supportive
 No opinion

I am supportive however the project needs to be expanded to include the community of Carlsbad Springs residents within a reasonable timeframe. It could be a shared cost with Ontario/Federal programs

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

We are excluded from the pipeline area

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

Same

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 – Strongly Agree)

a) I feel more informed about the Project and the Ontario Energy Board's approval process.



Please explain: _____

b) The information presented was clear and relevant to me.



Please explain: _____

c) Representatives from Enbridge and GHD were approachable and able to answer my questions.



Please explain: _____

6. Do you have any additional comments?

We need equitable services in Carleton Place

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before

January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.



Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM
 November 27, 2019

Name:	[Redacted]
Address:	[Redacted]
Email:	[Redacted]
Phone:	[Redacted]
Group/Organization:	Country Grill (chip stand)

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 - Strongly Agree)

a) I feel more informed about the Project and the Ontario Energy Board's approval process.



Please explain: _____

b) The information presented was clear and relevant to me.



Please explain: _____

c) Representatives from Enbridge and GHD were approachable and able to answer my questions.



Please explain: _____

6. Do you have any additional comments?

Hope to have the cyan version of the construction on Boundary Rd.

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.



Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM

November 27, 2019

Name:	[Redacted]
Address:	[Redacted]
Email:	[Redacted]
Phone:	[Redacted]
Group/Organization:	

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

I would like the gas line extended to Carlsbad Springs, all the way down Boundary Rd to Russell/Piperville.

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

Extend gas line to Boundary Rd all the way to Carlsbad Springs.

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 - Strongly Agree)

a) I feel more informed about the Project and the Ontario Energy Board's approval process.



Please explain: _____

b) The information presented was clear and relevant to me.



Please explain: _____

c) Representatives from Enbridge and GHD were approachable and able to answer my questions.



Please explain: _____

6. Do you have any additional comments?

They are a lot of houses/residents on Boundary Rd in Carlsbad Springs after the 417 highway. More than 450 houses provided a survey to Enbridge that we would connect to Enbridge

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before

January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.



Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM
 November 27, 2019

Name:	_____
Address:	_____
Email:	_____
Phone:	_____
Group/Organization:	_____

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

I would like consideration be made to offer Natural gas all the way down Boundary RD as well to Russell RD

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 – Strongly Agree)

a) *I feel more informed about the Project and the Ontario Energy Board's approval process.*



Please explain: _____

b) *The information presented was clear and relevant to me.*



Please explain: _____

c) *Representatives from Enbridge and GHD were approachable and able to answer my questions.*



Please explain: _____

6. Do you have any additional comments?

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before

January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.



Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM
November 27, 2019

Name:	_____	_____
Address:	_____	_____
Email:	_____	Phone: _____
Group/Organization:	_____	

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion
- _____

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

- Please indicate applicable route:* Preliminary Preferred Route Alternate Route
- _____

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

- Please indicate applicable route:* Preliminary Preferred Route Alternate Route
- _____

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 – Strongly Agree)

a) I feel more informed about the Project and the Ontario Energy Board's approval process.



Please explain: _____

b) The information presented was clear and relevant to me.



Please explain: _____

c) Representatives from Enbridge and GHD were approachable and able to answer my questions.



Please explain: _____

6. Do you have any additional comments?

Would greatly benefit from NAT GAS

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before
January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.



Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM
 November 27, 2019

Name: _____
Address: _____
Email: _____ Phone: _____
Group/Organization: _____

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

- Please indicate applicable route: Preliminary Preferred Route Alternate Route

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

- Please indicate applicable route: Preliminary Preferred Route Alternate Route

*wetlands, ecological impact, tree loss
 trees replaced*

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 - Strongly Agree)

a) I feel more informed about the Project and the Ontario Energy Board's approval process.



Please explain: _____

b) The information presented was clear and relevant to me.



Please explain: _____

c) Representatives from Enbridge and GHD were approachable and able to answer my questions.



Please explain: _____

6. Do you have any additional comments?

TRAFFIC STUDY? going to affect commuters

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before
January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.

Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM

November 27, 2019

Name: [redacted]
Address: [redacted]
Email: [redacted] Phone: [redacted]
Group/Organization: CARLSBAD SPRINGS COMMUNITY ASSOC

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

I would like the potential environmental effect of re-digging between the station and customer for future expansion to be

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

current location of dirted station is next to marshland and requires re-digging in case of future expansion

considered in the environmental survey

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 – Strongly Agree)

a) *I feel more informed about the Project and the Ontario Energy Board's approval process.*



Please explain: _____

b) *The information presented was clear and relevant to me.*



Please explain: _____

c) *Representatives from Enbridge and GHD were approachable and able to answer my questions.*



Please explain: _____

6. Do you have any additional comments?

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before
January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.

Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM

November 27, 2019

Name:	[Redacted]		
Address:	[Redacted]		
Email:	[Redacted]	Phone:	[Redacted]
Group/Organization:	_____		

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion
- _____

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

Please give consideration to branch supply up Route 100 to supply North Russell development & farms.

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 – Strongly Agree)

a) *I feel more informed about the Project and the Ontario Energy Board's approval process.*



Please explain: _____

b) *The information presented was clear and relevant to me.*



Please explain: _____

c) *Representatives from Enbridge and GHD were approachable and able to answer my questions.*



Please explain: _____

6. Do you have any additional comments?

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before
January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.



Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM

November 27, 2019

Name:	[REDACTED]
Address:	[REDACTED]
Email:	[REDACTED]
Group/Organization:	CCSC

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

NO problems

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

gas to carlsbad SPRING and SURROUNDING

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 - Strongly Agree)

a) I feel more informed about the Project and the Ontario Energy Board's approval process.



Please explain: _____

b) The information presented was clear and relevant to me.



Please explain: _____

c) Representatives from Enbridge and GHD were approachable and able to answer my questions.



Please explain: _____

6. Do you have any additional comments?

please bring NG to community

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before

January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.

Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM

November 27, 2019

Name:	[REDACTED]		
Address:	[REDACTED]		
Email:	[REDACTED]	Phone:	[REDACTED]
Group/Organization:	Home owner / Business owner.		

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

Just concerned that taggart groups only represents their own interest and dont consider or consult with the community

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

access to a gas service with the pipeline construction and not afterwards as the cost would make it unaccessible to Homeowners.

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

Options to serve more people of the community has not been considered its only the main partners that are ~~being~~ accessing the line.

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 - Strongly Agree)

a) I feel more informed about the Project and the Ontario Energy Board's approval process.



Please explain: Nothing community based or advantage to others

b) The information presented was clear and relevant to me.



Please explain: Somewhat, lots of questions still unanswered.

c) Representatives from Enbridge and GHD were approachable and able to answer my questions.



Please explain: Excellent and

6. Do you have any additional comments?

I just hope the community gets a chance to be engaged and get a chance to make a difference in as many peoples lives as possible.

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.



Boundary Road Pipeline Project

OPEN HOUSE COMMENT FORM

November 27, 2019

Name: _____
 Address: _____
 Email: _____ Phone: _____
 Group/Organization: _____

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: UNFORTUNATELY RECEIVED IT LESS THAN

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

HOWEVER I WOULD LIKE ENBRIDGE TO TAKE A MORE
HOLISTIC VIEW & CONSIDER INCLUDING/EXTENDING TO
THE RESIDENTS OF CALSBAD.

SOYS FROM
EVENT.

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

UNFORTUNATELY WE WEREN'T CONSIDERED (RESIDENTS)
WHICH IS REALLY UNFORTUNATE & LIKELY A MISSED
OPPORTUNITY FOR US

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 – Strongly Agree)

a) *I feel more informed about the Project and the Ontario Energy Board's approval process.*



Please explain: _____

b) *The information presented was clear and relevant to me.*



Please explain: _____

c) *Representatives from Enbridge and GHD were approachable and able to answer my questions.*



Please explain: _____

6. Do you have any additional comments?

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before **January 6, 2020** for inclusion in the Environmental Report.

Thank you for your participation.

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.



Boundary Road Pipeline Project

OPEN HOUSE COMMENT FORM

November 27, 2019

Name: [Redacted]
 Address: [Redacted]
 Email: [Redacted] Phone: [Redacted]
 Group/Organization: Carlsbad Springs Community Association / Resident

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
- Friend of neighbour Other: Carlsbad Community Association Facebook page.

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

But I would like the proposed project to be built in order to allow for expansion to Carlsbad.

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

I would LOVE to be connected to natural gas!!! :)

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 - Strongly Agree)

a) I feel more informed about the Project and the Ontario Energy Board's approval process.



Please explain: _____

b) The information presented was clear and relevant to me.



Please explain: _____

c) Representatives from Enbridge and GHD were approachable and able to answer my questions.



Please explain: _____

6. Do you have any additional comments?

The project needs to be built in order to allow for expansion in order to provide gas to the residents of Carlisbad Springs & Edwards.

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before

January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.



Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM

November 27, 2019

Name:	[Redacted]
Address:	[Redacted]
Email:	[Redacted]
Phone:	[Redacted]
Group/Organization:	_____

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

Carlsbad springs resident - we would like to have gas in carlsbad

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

Carlsbad Springs included

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 – Strongly Agree)

a) I feel more informed about the Project and the Ontario Energy Board's approval process.



Please explain: _____

b) The information presented was clear and relevant to me.



Please explain: _____

c) Representatives from Enbridge and GHD were approachable and able to answer my questions.



Please explain: _____

6. Do you have any additional comments?

Please consider including Carlsbad Springs

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before **January 6, 2020** for inclusion in the Environmental Report.

Thank you for your participation.

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.

Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM
November 27, 2019

Name: _____	_____
Address: _____	_____
Email: _____	Phone: _____
Group/Organization: _____	_____

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

Financial impact to resident - cost to hook up to house, etc

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 – Strongly Agree)

a) *I feel more informed about the Project and the Ontario Energy Board's approval process.*



Please explain: _____

b) *The information presented was clear and relevant to me.*



Please explain: _____

c) *Representatives from Enbridge and GHD were approachable and able to answer my questions.*



Please explain: _____

6. Do you have any additional comments?

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before **January 6, 2020** for inclusion in the Environmental Report.

Thank you for your participation.

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.



Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM

November 27, 2019

Name:	[Redacted]
Address:	[Redacted]
Email:	[Redacted]
Phone:	[Redacted]
Group/Organization:	<u>YSB Hoist</u>

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

this option would be a big plus for us it would help us expand and create even more job opportunity for people

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 - Strongly Agree)

a) I feel more informed about the Project and the Ontario Energy Board's approval process.



Please explain: COST SAVING FOR US GIVING A CHANCE TO EXPAND

b) The information presented was clear and relevant to me.



Please explain: STAFF WAS EASY TO TALK TO AND EXPLAIN EVERYTHING

c) Representatives from Enbridge and GHD were approachable and able to answer my questions.



Please explain: _____

6. Do you have any additional comments?

I think this is a very good plan and
it would help many companies to expand
and hire more staff creating job for
communities

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before
January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.

Boundary Road Pipeline Project

OPEN HOUSE COMMENT FORM

November 27, 2019

Name: _____
Address: _____
Email: _____ Phone: _____
Group/Organization: _____

1. How did you hear about this event?

- Received information by mail
- E-mail
- Newspaper Ad
- Friend of neighbour
- Other: Neighbour

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive
 - I am not supportive
 - No opinion
- Why Arizona?
Target Miller

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

- Please indicate applicable route: Preliminary Preferred Route Alternate Route
- @ Down Piperville Rd

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

- Please indicate applicable route: Preliminary Preferred Route Alternate Route
- Piperville Rd

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 – Strongly Agree)

a) *I feel more informed about the Project and the Ontario Energy Board's approval process.*



Please explain: _____

b) *The information presented was clear and relevant to me.*



Please explain: _____

c) *Representatives from Enbridge and GHD were approachable and able to answer my questions.*



Please explain: _____

6. Do you have any additional comments?

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before **January 6, 2020** for inclusion in the Environmental Report.

Thank you for your participation.

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.



Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM
 November 27, 2019

Name: _____
 Address: _____
 Email: _____
 Group/Organization: YSB Carpentry Inc.

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion
- _____

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

Save on heating

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 – Strongly Agree)

a) *I feel more informed about the Project and the Ontario Energy Board's approval process.*



Please explain: _____

b) *The information presented was clear and relevant to me.*



Please explain: _____

c) *Representatives from Enbridge and GHD were approachable and able to answer my questions.*



Please explain: _____

6. Do you have any additional comments?

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before **January 6, 2020** for inclusion in the Environmental Report.

Thank you for your participation.

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.

Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM
November 27, 2019

Name: [REDACTED]
Address: [REDACTED]
Email: _____ Phone: [REDACTED]
Group/Organization: _____

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

*Intérêt de recevoir le service de gaz,
sur notre rue.*

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

Both route, off Amazon.

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 – Strongly Agree)

a) I feel more informed about the Project and the Ontario Energy Board's approval process.



Please explain: _____

b) The information presented was clear and relevant to me.



Please explain: _____

c) Representatives from Enbridge and GHD were approachable and able to answer my questions.



Please explain: _____

6. Do you have any additional comments?

Je désire recevoir tous informations en français et autres formulaires à remplir pour les ~~so~~ rapports environnemental à l'adresse ci-~~ment~~ mentionner. merci,

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.



Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM
 November 27, 2019

Name:	[Redacted]
Address:	[Redacted]
Email:	[Redacted]
Phone:	[Redacted]
Group/Organization:	_____

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: _____

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

It's fantastic!

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 – Strongly Agree)

a) I feel more informed about the Project and the Ontario Energy Board's approval process.



Please explain: _____

b) The information presented was clear and relevant to me.



Please explain: _____

c) Representatives from Enbridge and GHD were approachable and able to answer my questions.



Please explain: _____

6. Do you have any additional comments?

I would like my area to be serviced,
we are heading our home with wood +
oil currently, we want natural gas!

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before

January 6, 2020 for inclusion in the Environmental Report.

Thank you for your participation.

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.

Boundary Road Pipeline Project
OPEN HOUSE COMMENT FORM
November 27, 2019

Name:	[REDACTED]		
Address:	[REDACTED]		
Email:	[REDACTED]	Phone:	[REDACTED]
Group/Organization:	ALLIANCE DES BURUNDAIS DU CANADA		

1. How did you hear about this event?

- Received information by mail E-mail Newspaper Ad
 Friend of neighbour Other: CARLEBAD SPRINGS NEWSLETTER

2. What is your view of the proposed project? Please explain any issues or concerns.

- I am supportive I am not supportive No opinion

3. Please indicate any potential effects to you, your property or business that you would like addressed prior to construction/operation.

Please indicate applicable route: Preliminary Preferred Route Alternate Route
No effects as I do not live in Russell or the affected area and learned that there will be no effect.

4. Are there any significant features along the routes or surrounding area that you believe should be considered that were not identified at the Open House? If so, please explain.

Please indicate applicable route: Preliminary Preferred Route Alternate Route
N/A

5. On a scale of 1 to 5, please rate the statements below.

(0 - Strongly Disagree; 5 - Strongly Agree)

a) I feel more informed about the Project and the Ontario Energy Board's approval process.



Please explain: SKANDER SOUSSI m'a bien expliqué / he ^{very} well explained me everything

b) The information presented was clear and relevant to me.



Please explain: Yes. Soussi explained everything very well.

c) Representatives from Enbridge and GHD were approachable and able to answer my questions.



Please explain: Skander Soussi took a lot of time to answer all of my questions.

6. Do you have any additional comments?

I would like to encourage you to hire members of VISIBLE minorities such as BLACK citizens, especially engineers as they face a real hard time finding job opportunities on the field. I always see white people on the street working on the projects. Thanks.

Comments may also be submitted via email to BoundaryRoadEA@ghd.com before **January 6, 2020** for inclusion in the Environmental Report.

Thank you for your participation.

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.



Boundary Road Pipeline Project Open House

STAFF DOCUMENTATION

November 27, 2019

Team Member Name: _____
Attendee Name: _____
Attendee Email: _____ Attendee Phone: _____
Group/Organization: _____
Follow Up Needed? (Please circle): Yes / No
Follow-up Details: _____

COMMENTS

- Many industrial customers on Burton at Guillaume
- Few along Victoria route
- Large high pressure water main on south side of Burton
- History of Russel – from swamp area – Wendell Stanley (Indian trading post, artifacts found on farm near Burton and Edie)
- Archaeology – SW corner of Burton and Edie. Found clay pipes used in Indian Tradition post on the corner of Burton
- Discussed 50 well heads and potential contamination
- Disruption to his property is a concern, class action with other property owners, people are sick.
- Attendee complained that the customer has not been transparent and the installation of the proposed pipeline will not benefit future customers as the cost of running the Boundary Road pipeline will come with significant costs
- Water pipeline on the south side of Burton Road along the AR
- Cars located next to the auto salvage yard – most of the contamination will be on the far side of the site, away from the ROW
- Important to pay attention to the lay of the land along the AR, rise in elevation, bedrock closer to the surface.

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.

- The PPR is easy, you won't encounter power lines anywhere
- Township of Russell has a plan for a water/sewer pipeline closer to Russell
- Edie road to Point A should be avoided because of elevation
- Uneven foundations because of soft soil, light weight fill
- Does the customer have any say in which route is selected? The Russell korry lake is owned by them

APPENDIX J

Open House Display Boards



Boundary Road Pipeline Project

Public Open House

November 27, 2019



Please sign-in at the
registration table upon arrival



Feel free to approach any team
member to discuss the project



Share your thoughts with us by
completing a questionnaire



WELCOME!

Thank you for attending the
Open House for the
Boundary Road Pipeline Project



Today we will:

**Explain the why, how, and when
of the proposed Project**

**Explain the *Ontario Energy
Board* Process**

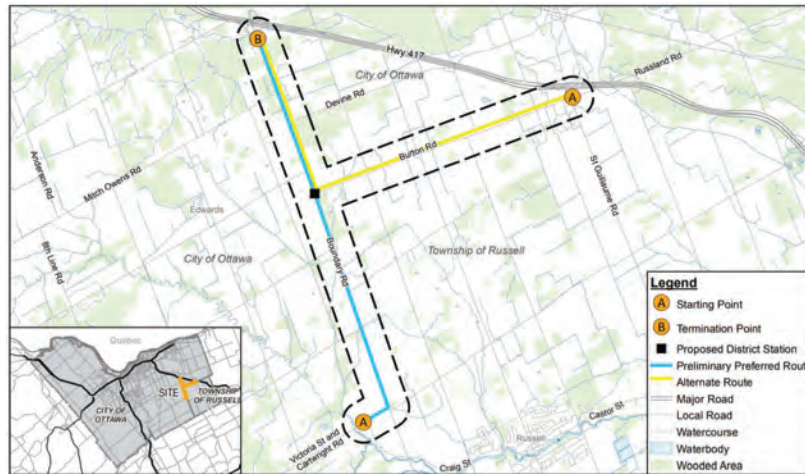
**Present the Preliminary Preferred
and Alternate Routes**

**Explain planned
mitigation measures**

**Understand your perspective and
collect public comments**



Study Area Map



Preliminary Preferred Route

The Preliminary Preferred Route (PPR) consists of two sections of pipeline having a total length of approximately 10.1 km and a district station.

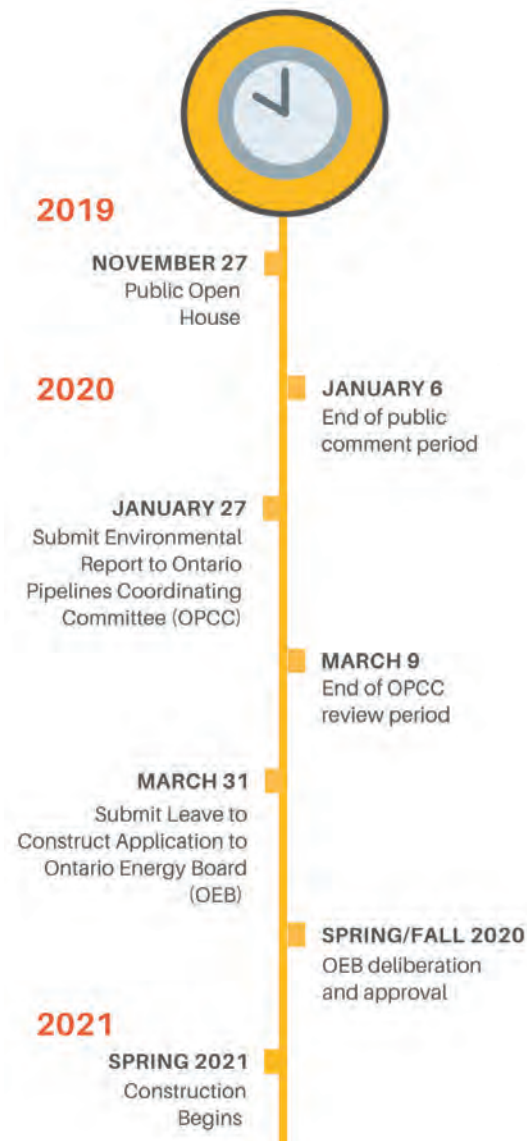
- **Section 1** will begin at Victoria Street and Cartwright Road where it will tie in to Enbridge's existing pipeline.
- The 4-inch steel pipe will travel east along Cartwright Road to the intersection of Boundary Road, where it will veer north and continue along Boundary Road for 6.2 km. It will conclude at the corner of Burton Road where a district station will be installed.
- At the district station, **Section 2** will begin and will consist of 3.9 km of 4-inch polyethylene pipe that continues north along Boundary Road to the new customers' properties just south of Highway 417.

Alternate Route

The Alternate Route (AR) consists of two sections of pipeline having a total length of approximately 10.6 km and a district station.

- **Section 1** will originate at Burton Road and St. Guillaume Road where it will tie in to Enbridge's existing pipeline.
- The 4-inch steel pipe will travel west along Burton Road for 6.7 km to the intersection of Boundary Road, where a district station will be installed.
- At the district station, **Section 2** will begin and will consist of 3.9 km of 4-inch polyethylene pipe that continues north along Boundary Road to the new customers' properties just south of Highway 417.

Project Timeline



The public comment period ends on **January 6, 2020**, however, comments can be submitted throughout the course of the project.

The length and results of the OEB Review Period may vary. Any delays may influence the proposed timeline for construction.

Construction is expected to take approximately 4-6 months. Post construction monitoring will be conducted in accordance with OEB conditions.

Route Selection Process

What types of things are considered in the selection of the preferred route?

PLANNING DOCUMENTS

Official Plans, environmental management plans, secondary plans and development applications

EXPERIENCE

Previous experience in pipeline development including technical and financial impacts

UTILITIES & INFRASTRUCTURE

Existing and proposed plans for services

ENVIRONMENTAL DATA

Archaeology, soil/groundwater conditions, existing land uses and built heritage

FIELD SURVEYS

Driving and walking the surrounding area to collect data

SOCIO-ECONOMIC DATA

Population and demographic data

PUBLIC INPUT

Collected from today's Open House and comments submitted during the review period

Safety, reliability of supply, cost, impacts to environmental and socio-economic features, where potential customers are located, and discussions with stakeholders are all criteria examined during route selection.

Ontario Energy Board



This study is being conducted in accordance with the *Ontario Energy Board (OEB) Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario*.

Once the environmental study is complete, Enbridge will submit a leave-to-construct pipeline application to the Ontario Energy Board (OEB). This approval is required in order to proceed with the planned project.

What is the role of the Ontario Energy Board?

- Ensures that the proposed pipeline considers public interest
- Reviews the Leave to Construct application, including the Environmental Report, Construction and Contract Specifications and Economic Feasibility
- Receives applications from individuals or parties who have interest in becoming official interested parties or intervenors
- Provides a public forum during the review of the application for stakeholders to participate in the decision-making process

Other Permits and Approvals

- Road cut permit (City of Ottawa)
- Temporary construction-related encroachment permit (City of Ottawa)
- Application for Work Approval (Township of Russell)
- Archaeological and cultural heritage assessments acceptance letter
- Ontario One Call – Utility Locates Notification



Our Commitment

Our Commitment to You



We are committed to working with residents and businesses in the area on construction planning, mitigation measures and post-construction monitoring.

We are committed to ensuring areas that are impacted during construction are restored as close to pre-construction condition as possible.

We are committed to applying mitigation measures to prevent or reduce the level of impact. We will work with the residents and business owners to ensure issues are resolved collaboratively.

Pipeline Safety & Integrity

The safety of the public, our communities and our employees is Enbridge's top priority.

To ensure the safe construction and operation of our pipelines, we are committed to safety in our processes, our people and our technologies.

We continually perform routine maintenance across our pipeline system. In some cases, inspections locate a feature that requires a visual inspection to determine if a repair or other action is required.



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:

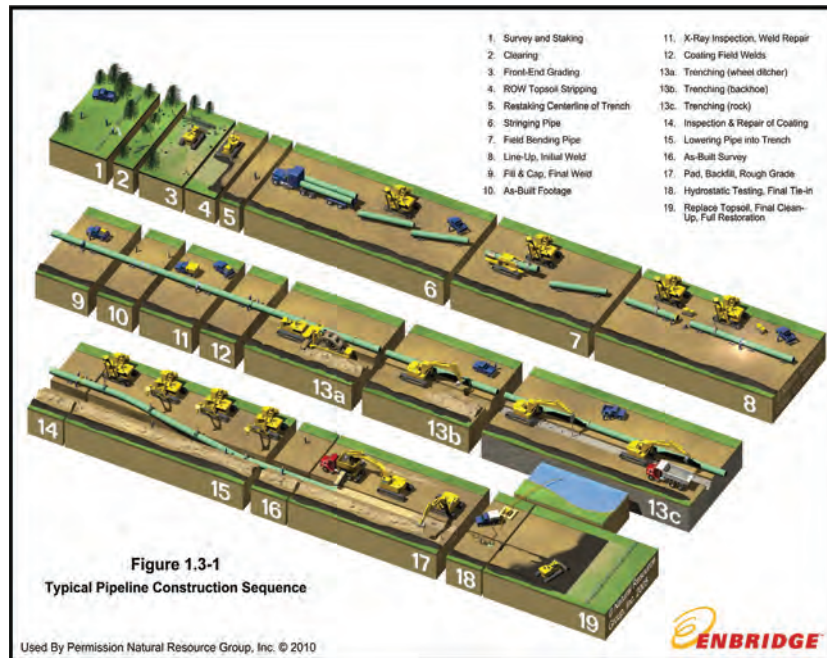
- We recognize the legal and constitutional rights possessed by Indigenous Peoples in Canada and in the U.S., and the importance of the relationship between Indigenous Peoples and their traditional lands and resources. We commit to working with Indigenous communities in a manner that recognizes and respects 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.

Pipeline Construction & Design

Typical Pipeline Construction Sequence



High-grade steel or plastic 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).

District Station

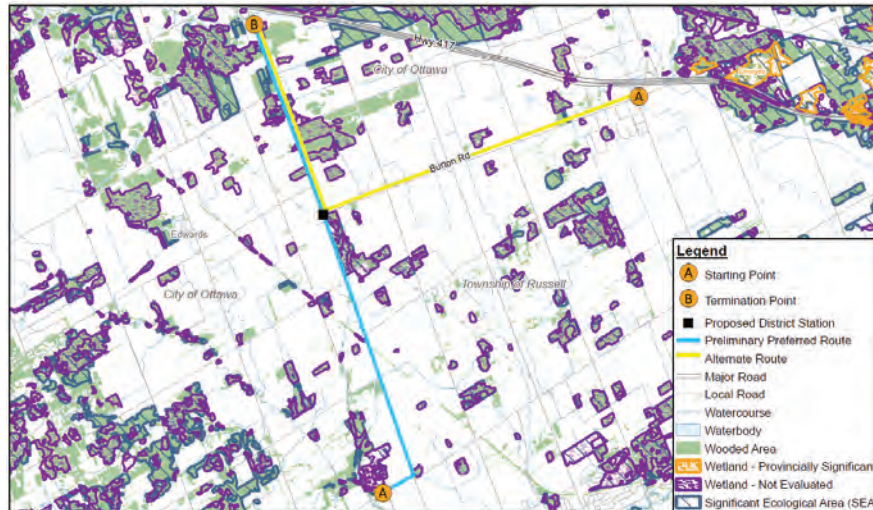


District stations are pressure regulating stations that reduce natural gas pressure and feed lower pressure networks. The district station for this project is located at the intersection of Boundary Road and Burton Road.

Area of Interest

Enbridge understands that the following aspects need to be considered during construction:

Wetlands and Ecological Areas



Fuel Service Stations

Historical Fuel Stations

5495 Boundary Road
992 Burton Road
104 St. Guillaume Road

Current Fuel Stations

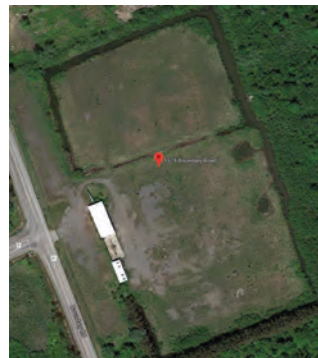
5336 Boundary Road

Enbridge understands there is some risk that contaminated soils may be encountered near the historic and current fuel stations.

Auto Salvage Yard

5575 Boundary Road was historically used as an auto salvage yard, and has a shallow ditch containing water surrounded the majority of the Site.

Enbridge is aware that there may be some potential for historical releases of fuel to have possibly reached surface water.



Mitigation Measures

Street Aesthetics

Construction along the proposed route will take place within existing road allowances.

Following excavation, the construction area will be cleaned up. All construction materials and excess soil will be removed, and final grading will be put in place. Anything disturbed by the construction (such as fences and pavement) will be replaced. Lastly, ground cover will be replaced by sodding or seeding where necessary.

Temporary Soil Management

Excavated soil will be stored along the route until the trench is ready to be backfilled. It is possible that contaminated soil could be encountered during construction. If this is the case, Enbridge will develop a Soil Management Plan to ensure soil is managed in accordance with Provincial Regulations.

Temporary Traffic Disruption

Enbridge will develop a Traffic Management Plan in collaboration with the City of Ottawa and Township of Russell.

It is anticipated that lane reductions will occur to accommodate the construction zone during trenching. Enbridge will ensure that proper traffic control is employed in these areas to safely maintain traffic flow.

One lane will be maintained at all times. Enbridge will work to create alternative accesses to these areas for pedestrians, cyclists and vehicles. Consultation with affected stakeholders will be included in this process.

Mitigation Measures

Temporary Dust Generation

Due to the minimal trench width, it is not anticipated that there will be excavated soil piled at any one time, reducing the potential to create dust from blowing winds. If dust does appear, it is typically managed by spraying the excavated soil with water, or covering the exposed soil with tarps.

Enbridge personnel will be on-site to ensure that the work area is kept clean to minimize dust that may be kicked up from construction.

Temporary Modifications to Property

Enbridge will make a photographic record of the right of way and adjacent properties before construction begins. During construction, a Pipeline Inspector will be on site to monitor construction activities. Enbridge will also conduct post-construction monitoring to ensure that the area has been returned to its pre-construction state.

Temporary Construction Noise

Work will be completed according to the City of Ottawa Bylaw (By-Law No. 2017-255).

This By-Law permits operation of construction equipment:

- Monday to Saturday between 7 a.m. and 10 p.m.
- Sunday and statutory holidays between 9 a.m. and 10 p.m.

Night work is not anticipated.



Thank you
for your
participation

Submit Your Comments

We encourage you to fill out a questionnaire before leaving today.

Comments and questions are also accepted by email.

To ensure your feedback is considered as part of the Environmental Report, please submit all comments before:

January 6, 2020

to BoundaryRoadEA@ghd.com



Contact
Us

Emily Gallant, GHD

Stakeholder Engagement Specialist

(416) 866-2368

emily.gallant@ghd.com

Tanya Turk, Enbridge

Advisor, Environment

(416) 495-3103

tanya.turk@enbridge.com

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 pipelinier de la route Boundary

Séance d'information publique

Le 27 novembre 2019



**Veillez vous présenter à la table
d'inscription à votre arrivée**



**N'hésitez pas à vous adresser à
un membre de l'équipe pour
discuter du projet**



**Donnez-nous votre avis en
répondant au questionnaire**



BIENVENUE!

Merci d'être venu aux portes ouvertes
du **projet pipelinier de la route
Boundary**

À vous la parole !

Thèmes du jour :

**Expliquer les tenants du projet
(pourquoi, comment et quand)**

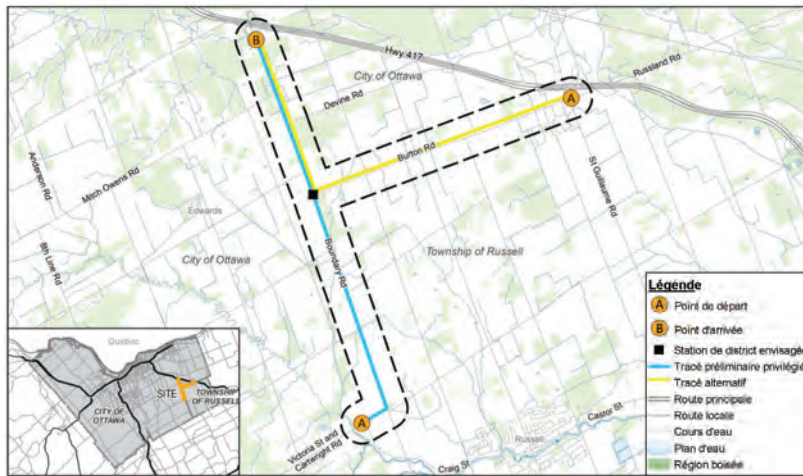
**Expliquer le processus de la
Commission de l'énergie de l'Ontario**

**Présenter les tracés privilégiés et
alternatifs**

**Expliquer les mesures
d'atténuation prévues**

**Comprendre votre point de vue et
recueillir les commentaires du public**

Carte de la zone d'étude



Tracé préliminaire privilégié

Le tracé préliminaire privilégié (TPP) est constitué de deux tronçons de pipeline d'une longueur totale d'environ 10,1 km et d'une station de district.

- Le **premier tronçon** démarrera à hauteur de la rue Victoria et de la route Cartwright, où il sera relié au pipeline existant d'Enbridge.
- Le tube en acier de 4 pouces se dirigera vers l'est, le long de la route Cartwright jusqu'à l'intersection de la route Boundary, où il se dirigera vers le nord et continuera le long de la route Boundary sur une distance de 6,2 km. Il se terminera au coin de la route Burton où une station de district sera installée.
- Le **deuxième tronçon** commencera au niveau de la station de district et la conduite en polyéthylène de 4 pouces s'étendant sur 3,9 km continuera vers le nord, le long de la route Boundary jusqu'aux propriétés des nouveaux clients, situées au sud de l'autoroute 417.

Tracé alternatif

Le tracé alternatif (TA) est constitué de deux tronçons de pipeline d'une longueur totale d'environ 10,6 km et d'une station de district.

- Le **premier tronçon** démarrera à hauteur de la route Burton et de la route St. Guillaume, où il sera relié au pipeline existant d'Enbridge.
- Le tube en acier de 4 pouces se dirigera vers l'ouest, le long de la route Burton, sur une distance de 6,7 km jusqu'à l'intersection de la route Boundary, où une station de district sera installée.
- Le **deuxième tronçon** commencera au niveau de la station de district et la conduite en polyéthylène de 4 pouces s'étendant sur 3,9 km continuera vers le nord, le long de la route Boundary jusqu'aux propriétés des nouveaux clients, situées au sud de l'autoroute 417.

Calendrier du projet



La consultation publique se termine **le 6 janvier 2020**; toutefois, les commentaires seront recueillis pendant toute la durée du projet.

La durée et les résultats de la période d'évaluation de la CEO peuvent varier. Tout retard peut affecter le calendrier proposé pour la construction.

La construction devrait durer environ 4 à 6 mois. Le suivi post-construction sera effectuée conformément aux conditions de la CEO.

Processus de sélection du tracé

Quels types d'éléments sont pris en compte dans le choix du tracé privilégié?

DOCUMENTS DE PLANIFICATION

Plans officiels, plans de gestion de l'environnement, plans secondaires et demandes de développement

EXPÉRIENCE

Expérience antérieure dans le développement pipelinier, y compris les répercussions techniques et financières

SERVICES PUBLICS ET INFRASTRUCTURES

Plans de services existants et proposés

DONNÉES ENVIRONNEMENTALES

Archéologie, état des sols et des eaux souterraines, utilisations existantes des terres et patrimoine bâti

ENQUÊTES SUR LE TERRAIN

Visites des environs en véhicule et à pied pour recueillir des données

DONNÉES SOCIO-ÉCONOMIQUES

Population et données démographiques

AVIS DU PUBLIC

Observations recueillies à la séance publique d'aujourd'hui et commentaires soumis pendant la période d'évaluation

La sécurité, la fiabilité de l'approvisionnement, les coûts, les répercussions sur l'environnement et les caractéristiques socio-économiques, l'emplacement des abonnés potentiels et les discussions avec les parties prenantes constituent l'ensemble des critères examinés pour le choix du tracé.



Commission de l'énergie de l'Ontario



Cette étude est menée conformément aux Lignes directrices environnementales de la Commission de l'énergie de l'Ontario (CEO), relatives à l'emplacement, à la construction et à l'exploitation de pipelines et d'installations d'hydrocarbures en Ontario (2016).

Une fois l'étude environnementale terminée, Enbridge soumettra une demande d'autorisation de construire un pipeline à la Commission de l'énergie de l'Ontario (CEO). Cette approbation est nécessaire pour la suite du projet.

Quel est le rôle de la Commission de l'énergie de l'Ontario?

- Assurer que le projet pipelinier tient compte de l'intérêt du public
- Examiner la demande d'autorisation de construire, y compris le rapport environnemental, les spécifications contractuelles et de construction et la faisabilité économique
- Recevoir les demandes des particuliers ou des organismes qui souhaitent devenir officiellement des parties intéressées ou des intervenants
- Organiser un forum public pendant la période d'évaluation pour que les parties intéressées participent au processus décisionnel.

Autres permis et approbations

- Permis de terrassement (ville d'Ottawa)
- Permis temporaire d'empiètement lié à la construction (ville d'Ottawa)
- Demande d'approbation des travaux (canton de Russell)
- Lettre d'acceptation concernant les évaluations du patrimoine archéologique et culturel
- Ontario One Call - Notification de localisation des services publics



Notre engagement

Notre engagement envers vous



Nous nous engageons à collaborer avec les résidents et les entreprises de la région en ce qui concerne la planification des travaux de construction, les mesures d'atténuation et le suivi post-construction.

Nous nous engageons à veiller à ce que les zones affectées pendant la construction soient restaurées dans les meilleures conditions possibles.

Nous nous engageons à appliquer des mesures d'atténuation pour éviter ou réduire les répercussions. Nous travaillerons avec les résidents et les propriétaires d'entreprise pour nous assurer que les problèmes sont résolus conjointement.

Sécurité et intégrité des pipelines

La sécurité du public, de nos collectivités et de nos employés est la priorité absolue d'Enbridge.

Afin que la construction et l'exploitation de nos pipelines se fassent en toute sécurité, nous nous engageons à assurer la sécurité de nos processus, de nos employés et des technologies utilisées.

Nous effectuons continuellement un entretien de routine dans l'ensemble de notre réseau pipelinier. Dans certains cas, les inspections localisent un dispositif qui nécessite une inspection visuelle pour déterminer si une réparation ou d'autres mesures sont nécessaires.



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 sera gouvernée 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 oeuvre effective des principes susmentionnés, notamment l'élaboration de stratégies de mise en oeuvre 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.

Construction et conception de pipelines

Séquence typique de construction de pipelines



Les pipelines en acier ou en plastique de haute qualité sont conçus pour respecter et/ou dépasser les règlements de l'Association canadienne de normalisation (Z662 Réseaux d'oléoducs et de gazoducs) et les règlements en vigueur de la Technical Standards and Safety Association (TSSA).

Station de district

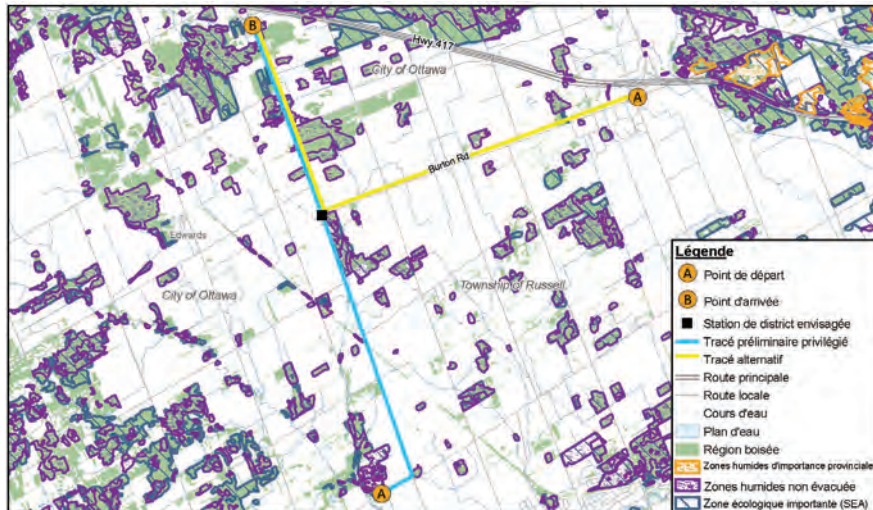


Les stations de district sont des stations de régulation de pression qui réduisent la pression du gaz naturel et alimentent les réseaux à basse pression. La station de district de ce projet est située à l'intersection de la route Boundary et de la route Burton.

Zone d'intérêt

Enbridge understands that the following aspects need to be considered during construction:

Terres humides et zones écologiques



Stations-service de carburant

Anciennes stations-service

5495 Boundary Road 992
Burton Road
104 St. Guillaume Road

Stations-service actuelles

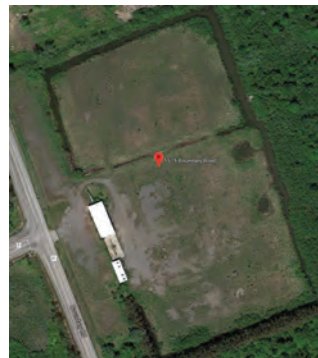
5336 Boundary Road

Enbridge est conscient du risque que des sols contaminés puissent se rencontrer à proximité des anciennes et des nouvelles stations-service.

Chantier de récupération du matériel automobile

Le 5575 Boundary a toujours été utilisé comme un chantier de récupération du matériel automobile où il y a un fossé peu profond contenant de l'eau.

Enbridge est conscient du risque d'anciens rejets de carburant qui pourraient éventuellement revenir à la surface.



Mesures d'atténuation

Esthétique des rues

La construction le long du tracé proposé se fera dans le cadre des réserves routières existantes.

Après l'excavation, la zone de construction sera nettoyée. Tous les matériaux de construction et l'excédent de terre seront enlevés et le terrassement final sera effectué. Tout ce qui est perturbé par la construction (comme les clôtures et le bitume) sera remplacé. Enfin, le couvert végétal sera remplacé par le biais d'ensemencement ou d'engazonnement au besoin.

Gestion temporaire des sols

Le sol excavé sera entreposé le long de la route jusqu'à ce que la tranchée soit prête à être remblayée. La présence de sols contaminés au cours des travaux de construction est envisageable. Dans ce cas, Enbridge élaborera un plan de gestion des sols pour s'assurer que le sol est géré conformément à la réglementation provinciale.

Perturbation temporaire de la circulation

Enbridge élaborera un plan de gestion de la circulation en collaboration avec la ville d'Ottawa et le canton de Russell.

On s'attend à des réductions temporaires des voies de circulation afin de s'adapter à la zone de construction pendant l'excavation de tranchées. Enbridge assurera la mise en place de mesures de contrôle du trafic dans ces secteurs pour assurer la sécurité des automobilistes.

Une voie de circulation sera maintenue en tout temps. Enbridge s'efforcera de créer d'autres accès à ces zones pour les piétons, les cyclistes et les véhicules. Des consultations avec les parties intéressées qui sont touchées seront comprises dans le processus.

Mesures d'atténuation

Formation de poussière temporaire

Compte tenu de la largeur minimale des tranchées, on ne s'attend pas à ce qu'il y ait du sol excavé empilé à aucun moment, ce qui réduit la possibilité de création de poussière en raison du vent. Si de la poussière apparaît, elle pourra être gérée en pulvérisant le sol excavé avec de l'eau, ou en recouvrant le sol exposé avec des bâches.

Le personnel d'Enbridge sera sur place pour s'assurer que la zone de construction reste propre afin de minimiser la poussière engendrée au cours des travaux.

Modifications temporaires au niveau des propriétés

Enbridge fera un enregistrement photographique de l'emprise et des propriétés adjacentes avant le début des travaux de construction. Pendant les travaux, un contrôleur de pipelines sera sur place pour surveiller les activités de construction. Enbridge assurera également le suivi post-construction pour s'assurer que la zone soit remise dans le même état qu'auparavant.

Bruit temporaire lié à la construction

Les travaux seront effectués conformément au règlement municipal d'Ottawa (règlement n° 2017-255).

Ce règlement permet l'exploitation d'équipements de construction :

- Du lundi au samedi, de 7 h à 22 h.
- Le dimanche et les jours fériés, de 9 h à 22 h.

Le travail de nuit n'est pas prévu.



Merci de
votre
participation

Soumettez vos commentaires

Nous vous incitons à répondre au questionnaire avant de partir.

Les questions et les commentaires peuvent également être envoyés par courriel.

Afin que vos commentaires soient pris en considération dans le rapport environnemental, veuillez soumettre tous vos commentaires avant :

le 6 janvier 2020

à BoundaryRoadEA@ghd.com



Nous
contacter

Emily Gallant, GHD

Spécialiste en matière d'engagement
des intervenants
(416) 866-2368
emily.gallant@ghd.com

Tanya Turk, Enbridge

Conseillère en environnement
(416) 495-3103
tanya.turk@enbridge.com

En vertu de la Loi sur l'accès à l'information et la protection de la vie privée, les questions et les commentaires concernant ce projet seront utilisés pour créer un rapport d'évaluation environnementale qui fera partie des archives publiques et qui sera mis à la disposition des personnes et des organisations qui ont un intérêt pour ce projet. Les renseignements personnels tels que 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.



APPENDIX K

Stakeholder Correspondence

BOUNDARY ROAD STAKEHOLDER AND INDIGENOUS CORRESPONDENCE

Date	Name and Organization	Format	Comment Received	Date of Response	Response and Issue Resolution (if applicable)
Agencies					
11/13/2019	Kourosh Manouchehri, TSSA	Email	Request that the Application for Review of Pipeline Project form be submitted to TSSA.	11/18/2019	Response was provided indicating that Enbridge will submit the Application for Review of Pipeline Project form.
11/14/2019	Stephen Kapusta, MTO	Email	<p>The Ministry confirmed receipt of the EA study information identifying that some of the areas identified are in the Ministry's permit control area (northern most part of Boundary Road and eastern most part on Burton Road) and therefore permits may be required for the work that is proposed to be undertaken, providing some relevant examples. The Ministry suggested that early consultation is recommended regarding any proposed works for either option.</p> <p>The Ministry asked that Enbridge consult with them regarding any further future expansion of gas service that will cross Highway 417 relative to the planning work being undertaken here for this expansion. The Ministry requires that no utility cross Highway 417 within the interchange area. Therefore, any crossing location should be to the west or east of any interchange infrastructure including the eastern and western extent of any existing or planned ramp locations. Depths for crossing freeways should also be considered as well as staging for any construction that would meet Ministry requirements for crossing depth. Therefore, any planning work for this proposed expansion should also consider future Highway 417 crossing locations and whether Enbridge can meet the Ministry's requirements for those future crossing locations.</p>	11/18/2019	Response was provided in that Enbridge will communicate with the Ministry as the project progresses to keep them informed and consult with them when necessary.
11/14/2019	Stephen Blais, City of Ottawa Councillor	Email	Stephen Blais indicated that he would not be able to attend the Public Open House, but that a representative from his office however would be present. He also sought follow up from the Enbridge team regarding the progress/process of evaluating the opportunities to expand gas to the residential areas.	11/18/2019	Follow up provided through the representative. Enbridge engaged further with Councillor Blais on the possibility of bringing natural gas service to the area through follow up meetings.
		Email	Request from Councillor Blais' office for a French version of the Notice of Commencement and Open House.	11/21/2019	The French version of the Boundary Road Notice of Commencement and Open House was provided.
11/27/2019	Celeste Soares, Office of Councillor Blais	Email	Request at Open House for copies of the display panels from the event	11/28/2019	A copy of the display panels was provided.
		Email		12/9/2019	As a follow up to previous emails, the following information was provided: Location and access links for the Enbridge website, which includes information on the Boundary Road Project Information on how residents can formally express an interest in being connected to natural gas, with Customer Connections team website and phone number provided.
11/28/2019	Infrastructure Ontario, Jordan Abraham	Email	<p>Infrastructure Ontario (IO) confirmed receipt of the Notice of Commencement for the Boundary Road Pipeline Project, indicating that their initial scan indicated that property owned by the Minister of Government and Consumer Services appeared to be adjacent to or within the Study Area. IO indicated that it was the proponent's responsibility to verify if provincial government property is within the Study Area. A list of title documents that would possibly identify owners of provincial government property was also provided.</p> <p>IO requested that if government property is identified within the Study Area but not required for the project, please continue to consult us them directly, however, if government property is required for the project, the proponent should contact us so that we can advise about requirements for obtaining government property.</p>	1/13/2020	Enbridge indicated that the properties along the PPR were examined that construction will have no impact on any government land since it will be limited to the road Right of Way.
12/17/2019	Mary Dillon, MNRF	Email	<p>MNRF confirmed receipt of the Notice of Study Commencement and Public Open House. The email included a guide to help Enbridge access natural heritage data from online sources and in-water timing guidelines should the proposed project activities require fisheries considerations. MNRF indicated that it is the proponent's responsibility to complete a preliminary screening for each project, obtain available information from multiple sources, conduct any necessary field studies, and to consider any potential environmental impacts that may result from an activity. MNRF indicated that if there are any questions or concerns regarding the Ministry's interests following completion of the preliminary screening, they would be available to provide technical information and advice. MNRF also indicated that Species at Risk data is no longer provided by the MNRF, and that all Endangered Species Act or Species at Risk enquiries should be directed to the Ministry of Environment, Climate Change and Parks at SAROntario@ontario.ca.</p> <p>MNRF also provided additional information on the Petroleum Wells & Oil, Gas and Salt Resource Act and Public Lands Act & Lakes and Rivers Improvement Act to assist in determining whether other legislation is applicable.</p> <p>MNRF indicated that they would like to remain engaged in this project and review the project report that is produced.</p>	12/17/2019	Response was provided indicating relevant information had been passed along and would be examined as part of the Environmental Report, and that the Draft ER was scheduled to be available for review at the end of January.
12/18/2019	Jon Orpana, MECP	Email	<p>MECP responded indicating that the Ministry has assumed responsibility for the administration of the Species at Risk file. Comments and questions from staff were provided, which included a list of the SAR occurrences in the area:</p> <ol style="list-style-type: none"> 1. Has the proponent screened the proposed area for species at risk (SAR)? 2. Have they completed any surveys to date in the area to confirm presence or absence of SAR? 3. Have they proposed any mitigation or avoidance for SAR that might be in the area of the proposed project? 4. Is there a timeline for this project? 5. How will the pipeline be installed and will it be in the road right of way? 	1/13/2020	<p>Response was provided indicating that ecologists would review the list SAR identified as part of the Environmental Report. Answers to specific questions were provided:</p> <p>Enbridge indicated that a preliminary SAR screening has been completed as part of a desktop Natural Environment Review, that no ecological field surveys have been completed by GHD as part of this work. Enbridge assured that mitigation and avoidance measures to protect wildlife including SAR are discussed in the Natural Environment Review. Enbridge also indicated that a Leave to Construct Application to the Ontario Energy Board will be submitted, and that if approved, construction would begin in Spring 2020. Enbridge provided details on sequencing, indicating it would fall within the road right of way within one metre depth.</p>

BOUNDARY ROAD STAKEHOLDER AND INDIGENOUS CORRESPONDENCE

Date	Name and Organization	Format	Comment Received	Date of Response	Response and Issue Resolution (if applicable)
1/13/2020		Email	MECP indicated that the forward this to their SAR Biologist.		N/A
12/3/2019	Marina Down, City of Ottawa	Email	In response to the Notice of Commencement and Public Open House, the Approvals Officer for utility installations at the City of Ottawa responded requesting information on the proposed pipeline as it falls within City of Ottawa ROW and specifically asked for engineered drawing that would be presented at the Public Open House.	12/5/2019	Response was provided and included the Display Boards that were presented at the Public Open House indicating that no detailed engineered drawings were presented, however information on the pipeline locations, typical pipeline construction sequence for Enbridge projects, as well as some details on mitigation measures as it relates to traffic. Enbridge communicated that as a stakeholder, they would continue to be engaged as the project progresses. Timelines for construction were provided.
12/5/2019	Jonathan Bourgon, Municipality of Russell	Email	The Township of Russell responded to the Notice of Commencement and Public Open House indicating that there was a presence of a water feeder main along Burton Road from Boundary to Eadie Rd and on Boundary Rd from Burton Rd. to Parkway Rd.	12/9/2019	Response was provided indicating that this would be included in the assessment.
11/13/2019	MECP	Email	MECP responded to the Notice of Commencement and Public Open House indicating that the email had been delivered to the Regional email account and that a Regional EA Coordinator will contact you if additional information is needed.	N/A	N/A
11/27/2019	South Nation Conservation Authority	Email	The South Nation Conservation (SNC) responded to the Notice of Commencement and Public Open House indicating that it is their understanding that the PPR will involve the construction of a natural gas pipeline along Boundary Road, starting on Cartwright Road and ending just south of Highway 417. SNC implements Ontario Regulation 170/06, developed under Section 28 of the Conservation Authorities Act. A desktop review of SNC's mapping finds that there are features protected by SNC under O. Reg 170/06 located within the project area. A permit from SNC will be required for any interference with a watercourse or development within or adjacent to a 100-year floodplain. SNC requested that they be included in the review of the detailed design.	N/A	Permit not required.
02/19/2020	Ministry of Heritage, Sport, Tourism and Culture Industries	Phone Call	Phone call resulted in making contact with Team Lead, Karla Barboza, who will who will review the request.	02/10/2020	Enbridge followed up by email and phone with MHSTCI as no response had been received from the Notice of Commencement and Public Open House that was sent on November 13, 2019. The email was sent to three individuals, one of which is on maternity leave.
02/10/2020	Ministry of Heritage, Sport, Tourism and Culture Industries	Phone	MHSTCI indicated that the Environmental Report should articulate what the existing conditions and potential impacts are to built heritage and cultural heritage landscapes within the Study Area. In addition a screening checklist and any other supporting documentation should be included.	02/18/2020	Enbridge spoke by phone with MHSTCI to confirm that there would be the inclusion of the built and cultural heritage details in the environmental report.
Utilities					
11/14/2019	Mark Beaudette, Hydro One	Email	Hydro One responded to the Notice of Commencement and Public Open House indicating that the initiation falls under 2 separate Hydro One Distribution service areas, being Winchester Area and Orleans Area. Hydro One Orleans expressed concerns with the Alternate Route (AR) along the Burton Rd section of this proposal. Should the AR be selected, he asked to be notified.	11/18/2019	Response was provided indicating that if the AR were selected, Enbridge would ensure that Hydro One gas mains would not be impacted.
11/15/2019	Janice Webster, Rogers	Email	Rogers responded to the Notice of Commencement and Public Open House indicating troubles with email delivery.	11/15/2019	Response was provided indicating that the Rogers system rejected the email. Email was resent.
11/15/2019		Email	Once properly received, Rogers indicated that there are cables along Burton Road and is aerial on Boundary Road and St Guillaume and at St Pierre and St Guillaume, but they should not interfere with your work.	11/15/2019	Response was provided indicating that the information would be passed on to the Enbridge team.
Special Interest Groups					
11/14/2019	Denis Labreche, Carlsbad Springs Community Association	Email	The Carlsbad Springs Community Association responded to the Notice of Commencement and Public Open House indicating an interest in the project. The Association represents over 1000+ homeowners in our rural community of 2000 residents, including sections of Edwards, Piperville and Carlsbad Springs and were interested in finding out if Enbridge gas service eventually become available to homeowners in Carlsbad Springs, Piperville and Edwards. The email also indicated that numerous homeowners in November 2018 were surveyed and 500+ names were obtained from residents indicating that over 99% of them would become clients of Enbridge gas when it becomes available for their home and small business. The email indicated that the President of the Association would attend the public meeting to discuss further how we can bring natural gas to their community. He also indicated that a community meeting / consultation was being organized with community and that he recommend that it be addressed and discussed with our homeowners	11/18/2019	Response was provided indicating that there are no plans to extend our Natural Gas pipelines beyond what is being proposed for this project.
11/18/2019	Denis Labreche, Carlsbad Springs	Email	The Carlsbad Springs Community Association asked what they could do to convince / demonstrate to Enbridge Gas that the residents of Carlsbad Springs and Edwards are VERY interested in their service.	11/18/2019	Response was provided indicating that this issue would be brought forward to Enbridge operations and that the possibility of a feasibility study would be discussed to determine what the estimated costs would be as a starting point.

BOUNDARY ROAD STAKEHOLDER AND INDIGENOUS CORRESPONDENCE

Date	Name and Organization	Format	Comment Received	Date of Response	Response and Issue Resolution (if applicable)
11/18/2019	Community Association	Email	The Carlsbad Springs Community Association asked that if each it would be helpful if homeowner contributed \$1000 each to the community association in order to provide this funding to Enbridge Gas to help finance the installation of the distribution lines in the area.	N/A	Enbridge met with Dennis at the Public Open House to discuss his concerns in more detail.
11/27/2019		Email	<p>The Carlsbad Springs Community Association sent a follow up email following the Public Open House meeting requesting further information on how residents could sign up or have add their names but did not see the Boundary Rd pipeline expansion project on the list, requesting further information on the web links and Customer Connections phone number.</p> <p>He indicated that the Association is not interested in waiting 15 years for a future Environment study or consultation on an expansion to our community, and that the goal is to be part of the Environmental study from the start and as a business plan this should make sense. He asked that we the community of Carlsbad Springs, Edwards and Ramsayville (representing approximately 1000 homes) be added to the Environmental study process.</p> <p>He indicated that he would like to discuss how to include their community in the process at the next Community Liaison meeting with the owners of the site in December.</p> <p>He also provided the following feedback and asked that it be shared with the rep responsible for the study.</p> <ul style="list-style-type: none"> ▪ Location for consultation was hard to find ▪ Residents want to clearly indicate that there are interested and would like to make sure the environmental study and the process includes the whole community, not just two clients on Boundary Rd. ▪ The proposed 4-inch pipe should be larger to offer the possibility of future expansion to our community. ▪ The proposed project is not currently configured for possible expansion to Carlsbad Springs, Edwards and Carlsbad Springs. ▪ The proposed location for the District Station is half-way up Boundary, and only a low-pressure pipe 4 inch is going between it and the Amazon warehouse. This should be future proof with a higher capacity and a larger pipeline that could offer an expansion to the residential community, not only to 2 clients. ▪ The environmental assessment is currently not considering the potential environmental impact of re-digging that would be required for any future expansion from the proposed location of the district station, nor the undesirable proposed location of the District Station next to a wetland area. 	12/16/2019	A response was provided indicating that as a follow up to Enbridge's discussion with Councillor Blais and Stephanie Brown, Enbridge is currently undertaking a high-level study to determine the estimated costs associated to bring natural gas to the Carlsbad Springs area and that information would be shared in 2020. As these comments fall outside of the Boundary Road Pipeline project, these conversations and exploring the possibility of a feasibility study would be discussed with the Township of Russell.
12/2/2019	Adrian Becea	Email	Board director with the Carlsbad Springs Community Association sent an email indicating support to the concerns outlined by Denis.	1/13/2020	Response was providing indicating that their expression of support would be included in the record of consultation as part of the Environmental Report.
Indigenous Communities					
		Email	No response.	11/7/2019	The project initiation letter and supporting documents for the proposed Boundary Road Pipeline Project were provided, inviting the AOO to provide feedback or shared knowledge by no later than December 6, 2019.
		Email	No response.	12/6/2019	Follow up email was sent to AOO inviting initial feedback, questions, or concerns the Algonquins of Ontario (AOO) may have on or with the Project. A project brief and next steps were also provided.
		Email	No response.	12/16/2019	Follow up email was sent to AOO with an update on next steps and timing linked to the Boundary Road project, indicating that a Stage 1 Archaeological Assessment would be prepared for review and input by January 10, 2020. It was indicated that in the event of a move to a Stage 2 Archaeological Assessment, this work would occur in the spring period once the ground has thawed. In this case, we would welcome the AOO's participation in monitoring this fieldwork.
		Email	No response	12/20/2019	The Stage 1 Archaeological Assessment prepared was provided for review and input.
1/8/2020	Algonquins of Ontario (AOO)	Email	AOO responded to the Notice of Commencement and Public Open House and follow up emails indicating receipt of the Stage 1 Archaeological Assessment for the Boundary Road Gas Pipeline, requesting that the response deadline be adjusted to January 20, 2020.	1/9/2020	Response was provided accepting the new response deadline of January 20, 2020 was acceptable. It was also noted that any capacity costs incurred as a result of reviewing this assessment would be covered by Enbridge.
		Email		1/31/2020	Enbridge contacted AOO asking for comments by Friday, February 14, 2020. Enbridge also reiterated that capacity funds were available to support AOO's timely review.
		Email		2/6/2020	Enbridge contacted AOO indicating an alteration to Section 6.6 of the Environmental Report, asking them to confirm if the information provided was accurate and to advise if there were any additional environmental or rights impact related concerns. A follow up call was also made.
2/6/2020		Email	AOO responded indicating that they will focus their resources on the more comprehensive review of the Draft ER provided to AOO on January 16h, 2020, indicating review of the Draft ER will be considered at our Planning and Environment Working Group on Monday, February 10, 2020. Any recommendations arising from these deliberations would then need to be reviewed and approved by the Algonquin Negotiation Representatives during the week of February 17, 2020. AOO indicated that they anticipate	2/7/2020	Enbridge responded with details on how the role of the OPCC as the coordinator of the review of natural gas projects in Ontario that require OEB approval by reviewing environmental assessments, considering reports prepared by the energy companies and raising any concerns with applicants before they submit their applications to the Ontario Energy Board. A detailed document on OPCC membership and review process was provided. Enbridge also addressed the timelines for review, indicating

BOUNDARY ROAD STAKEHOLDER AND INDIGENOUS CORRESPONDENCE

Date	Name and Organization	Format	Comment Received	Date of Response	Response and Issue Resolution (if applicable)
			being able to advise Enbridge of the outcome of these deliberations during the week of February 24, 2020. AOO indicated that they may be able to expedite this schedule prior to February 14, 2020. AOO also requested clarity on the date associated with the 42-day review period following the release of the Final ER, and requested information related to the Ontario Pipeline Coordination Committee and its relationship to the OEB, indicating that the OPCC is a new entity for the AOO. AOO anticipates they will be able to advise the Enbridge of the outcome of these deliberations during the week of March 23, 2020, indicating that an extension may be needed.		that the 42 days would conclude on March 26, 2020 should Enbridge maintain the submission date of February 14, 2020. Enbridge indicated that they will work with the AOO, upon receipt of your formal response on March 23, 2020 or before, to integrate changes, and where possible, mitigations on the project, highlighting that this commitment is a part of the ongoing consultation process, and the duty to protect and uphold Aboriginal and Treaty Rights.
2/12/2020		Email	AOO responded indicating that due to capacity and competing matters, they do not expect to be able to compile the information head of the February 14 th , 2020 submission date. AOO suggested that Enbridge provide the ER on Friday, February 14, 2020, then AOO will review the ER and provide comments as part of the 42 day comment period.	2/13/2020	Enbridge responded thanking AOO for the update, confirming that it is Enbridge's intention to submit the ER on February 14 th , 2020. Enbridge indicated that a copy of the ER, as submitted, will be provided to AOO for review and comment.
2/13/2020		Email	AOO responded thanking Enbridge for this commitment.		
	Mohawk Council of Akwesasne (MCA)	Email		11/18/2019	On November 18, 2019, an Enbridge representative sent a notification package and the Duty to Consult letter from the Ministry of Energy, Northern Development and Mines to the Mohawk Council of Akwesasne regarding the Boundary Road Project ("Project"). The Project notification package outlined the scope of the Project, included a map and the location of the proposed route, the rationale for the Project and details regarding the planned Project Open House. As outlined in the electronic letter, the Enbridge representative further informed the MCA representative that Enbridge retained Dillon to complete an environmental screening report to assess physical, natural and socio-economical features potentially impacted by construction activities on the Project. Enbridge requested a meeting with the MCA to provide the community with an overview of the project and answer any questions they may have.
11/18/2019		Email	Mohawk of Akwesasne Grand Chief confirmed receipt of the email and thanked Enbridge for the information.		
01/10/2020		In Person	An Enbridge representative met with the Grand Chief regarding another project. During discussions the Enbridge representative inquired how the MCA would like to be consulted on the St. Laurent Project and if there were any specific areas of interest that he would like to engage in and or involved throughout the project phase. The Grand Chief confirmed that it would be appreciated if Enbridge could provide the community with an opportunity to participate in any archaeological surveys. The Enbridge representative committed to keeping him informed of any upcoming archaeological surveys. The Grand Chief did not express any project specific concerns.		
02/14/2020		Email	An Enbridge representative emailed the MCA representative a copy of the stage 1 archaeological report for their information. The Enbridge representative provided the MCA representative a quick reminder of the rationale for project explaining that there are two private customers who are funding the installation of a natural gas pipeline to feed the industrial area near the 417 (where the Amazon warehouse is located). Enbridge explained that both owners (McTaggart and Broccolini) have requested this natural gas pipeline to service the warehouse area and as part of the environmental assessment, a stage one archaeological desktop study was conducted. The Enbridge representative extended the opportunity to have an MCA representative participate in the Stage 2 survey assessments sometime in the spring once the snow has thawed and conditions are suitable to maintain the integrity of the archaeological work. The Enbridge representative offered capacity funding to help support the participation of a representative from the community to engage in the archaeological field studies. The Enbridge representative requested the MCA's input on how best to move forward and help support the MCA in this endeavor.	02/18/2020	The Grand Chief responded back thanking Enbridge for the draft report and confirmed that the MCA could recommend a few monitors from the community to participate in the archaeological surveys.
Public					
11/15/2019	██████████	Email	A resident responded to the Notice of Commencement and Public Open House indicating that the AR travels along Burton Road going past the side of our farm. The resident requested that they be notified by email as the project develops further if they would be impacted by construction.	11/18/2019	Response was provided indicating that the Project Team would be notified that regarding their proximity to the AR and that project information could be found on the Enbridge website, encouraging them to check back regularly.
11/15/2019	██████████	Email	A resident responded to the Notice of Commencement and Public Open House indicating interest in the natural gas expansion study for the Carlsbad Springs area. Other questions included: <ul style="list-style-type: none"> ■ Is there a mailing list I can be add to so that I may be kept up to date on this study? ■ What existing gas line will this project connect to? ■ Enbridge recently expanded their system and added a new gas line along Rideau Road to Ramsayville Road, are you aware of this new line? 	11/25/2019	Response was provided indicating that should this project be approved by the Ontario Energy Board, there are two potential tie-in points that the project could connect to; Burton Road / St. Guillaume Road, and Cartwright Street / Victoria Street. The selection of the tie-in point is dependent on the route evaluation process, which is conducted as part of the environmental study currently being completed. Factors typically considered were communicated, including constructability, cost, stakeholder input, environmental constraints, utilities and infrastructure, and socio-economic constraints. Enbridge indicated that they aware of the other projects in the gas system (including along Rideau Road), however there are intricacies in the system that will limit how and where the gas system connects.

BOUNDARY ROAD STAKEHOLDER AND INDIGENOUS CORRESPONDENCE

Date	Name and Organization	Format	Comment Received	Date of Response	Response and Issue Resolution (if applicable)
11/23/2019	██████████	Email	<p>A resident responded to the Notice of Commencement and Public Open House requesting consideration of expanding important infrastructure to a semi-rural community in southeastern Ottawa.</p> <p>Communicating a previous request for Natural Gas, the resident expressed that Enbridge Gas responded negatively to their inquiry and that they were disappointed that Enbridge Gas was apparently disinterested in serving people who actually live in the community, but are eager to support that one business. The resident expressed that when key infrastructure is built with an entire community in mind, the environmental and economic benefits may then also be shared by the entire community – both people and business.</p>	11/26/2019	<p>Response was provided indicating that the Boundary Road Pipeline Project is a project to bring natural gas to industrial/commercial customers, that the proposed project has been sized for two industrial/commercial customers, and that they are responsible for the cost of the construction of this project.</p> <p>Enbridge communicated that they takes all expressions of interest in having natural gas seriously and that they are currently considering completing a feasibility study to determine what the estimated cost to bring natural gas to the community would be. Enbridge communicated that the best course of action to take would be to formally express interest through Customer Connections.</p>
11/28/2019	██████████	Email	<p>A resident responded to the Notice of Commencement and Public Open House expressing their opinion that a natural gas pipe should not be allowed to be constructed as proposed, from the perspectives of the environment, infrastructure development, or economic development since it does not includes natural gas access for the community.</p> <p>The resident asked if there were any other steps to ensure that this correspondence are included in your assessment report to the OEB.</p>	11/28/2019	<p>Response was provided confirming that the stakeholder feedback and correspondence will be included in the Consultation chapter of the Environmental Report (ER) that is submitted to the Ontario Pipelines Coordinating Committee (OPCC) at the end of January.</p>
11/21/2019	██████████	Email	<p>A resident responded to the Notice of Commencement and Public Open House expressing interest bringing natural gas to their residential home.</p>	11/25/2019	<p>Response was provided indicating that the Boundary Road Pipeline Project is a project to bring natural gas to industrial/commercial customers, that the proposed project has been sized for two industrial/commercial customers, and that they are responsible for the cost of the construction of this project.</p> <p>Enbridge communicated that they takes all expressions of interest in having natural gas seriously and that they are currently considering completing a feasibility study to determine what the estimated cost to bring natural gas to the community would be. Enbridge communicated that the best course of action to take would be to formally express interest through Customer Connections.</p>
11/18/2019	██████████	Email	<p>A resident submitted an email asking if they should advertise the Notice of Commencement and Public Open House to advise that Enbridge is not currently looking at extending service to Carlsbad Springs and that interested parties should attend the Public Open House to discuss the desire to bring natural gas to the community.</p>	11/25/2019	<p>Response was provided indicating that the Boundary Road Pipeline Project is a project to bring natural gas to industrial/commercial customers, that the proposed project has been sized for two industrial/commercial customers, and that they are responsible for the cost of the construction of this project.</p> <p>Enbridge communicated that they takes all expressions of interest in having natural gas seriously and that they are currently considering completing a feasibility study to determine what the estimated cost to bring natural gas to the community would be. Enbridge communicated that the best course of action to take would be to formally express interest through Customer Connections.</p> <p>Enbridge indicated that the purpose of the Public Open House is to discuss the proposed project, to review the proposed routes, timeline, and regulatory approvals for the project and its specific scope. It was communicated that connecting new customers to natural gas is handled through our Customer Connections department, who will not be attending this project-specific public open houses, however they are invited to attend.</p>
11/27/2019	██████████	Email	<p>Request at Open House for copies of the display panels from the event</p>	11/28/2019	<p>Open House display panels provided.</p>

BOUNDARY ROAD STAKEHOLDER AND INDIGENOUS CORRESPONDENCE

Date	Name and Organization	Format	Comment Received	Date of Response	Response and Issue Resolution (if applicable)
11/25/2019	██████████	Email	A resident submitted an email indicating that the Notice of Commencement and Public Open House was received on 22 November 2019 and that this timing was too short notice for residents to make themselves available for an open house and prepare substantial comments. The resident indicated that the notice gave no indication how long construction will take and what disruption will be caused on Boundary Road. 3, and that existing residents other than the 'new customer' abutting Highway 417 will benefit from this proposed pipeline.	11/29/2019	<p>Response was provided with guidance on where information from the Public Open House could be found and that comments can be submitted through the Project email. Specific concerns raised in the email were addressed as follows:</p> <p>Notice Delivery All notices were sent via Canada Post on November 8, 2019, so we could not foresee any delays beyond the standard Canada Post timeline. The notice was also published in the Ottawa Sun and Le Droit newspapers on November 13th and November 20th. Both in-person and online comments received are all treated equally and all comments received before January 6, 2019 will be documented in the Record of Consultation as part of the Environmental Report.</p> <p>Construction Concerns Enbridge has retained GHD Inc. to conduct an environmental study to assess potential impacts from construction and operation of the Project. The Report will outline potential disruptions and will provide details on the mitigation measures that will be required in order to minimize the impact on residents such as yourself. The Study will provide Enbridge with guidance on how to reduce impacts on street aesthetics, soil management, temporary traffic disruption, dust generation, temporary modifications to property and construction noise and any natural environment concerns that arise during the Study.</p> <p>Traffic A traffic management plan will be developed in collaboration with the City of Ottawa and the Township of Russell. Minor lane reductions will likely occur to accommodate the construction zone during trenching, however, as part of the mitigation measures; Enbridge does their best to limit disruption to a small area in the road right of way. Trenching is done in a series of stages and one lane will remain open. You can find more details on the construction process in the Open House materials attached. Construction is anticipated to take 4-6 months.</p> <p>It was communication that the project is being driven by the two customer requests for natural gas service and that they are bearing the cost for this and the pipes have been sized to service them specifically. Enbridge communicated that ensure these concerns would be included the Record of Consultation.</p>
11/19/2019	██████████	Email	A resident responded to the Notice of Commencement and Public Open House expressing interest bringing natural gas to their residential home in the area of Carlsbad Springs, expressing frustration.	11/25/2019	<p>Response was provided indicating that the Boundary Road Pipeline Project is a project to bring natural gas to industrial/commercial customers, that the proposed project has been sized for two industrial/commercial customers, and that they are responsible for the cost of the construction of this project.</p> <p>Enbridge communicated that they takes all expressions of interest in having natural gas seriously and that they are currently considering completing a feasibility study to determine what the estimated cost to bring natural gas to the community would be. Enbridge communicated that the best course of action to take would be to formally express interest through Customer Connections.</p>
11/27/2019	██████████	Email	A representative from Louis W Bray Construction responded to the Notice of Commencement and Public Open House, indicating interest the potential of being considered to bid on this work.	12/4/2019	Response was provided indicating that although construction plans are not yet finalized, the scope and location of this work falls within an existing partnership agreement with Aecon and that Enbridge does not foresee bidding this particular project at this time.
11/20/2019	██████████	Phone Call	Resident indicated he received/saw the Notice in the mail as well as the map. He lives just north of Hwy 417, and was wondering if he could hook up to the pipe. Indicated he had signed a petition a year ago to say he was interested in receiving natural gas.	11/20/2019	Clarified that the project is to bring gas to two large commercial/industrial customers at this time, and to bring gas to other surrounding neighborhoods / communities would be a completely separate project. He was encouraged to come to the open house next week to get more information, and told that the materials would also be on our website. He indicated he would come to our open house.
11/20/2019	██████████	Phone Call	Received a call from John Dionne from Ottawa ██████████ resident at Anderson Road and Piperville. Indicated he signed a form a year ago to get gas and thought he was going to get it, since 90% of people in the area want gas. Also inquired if the customer was Amazon.	11/20/2019	Clarified that Enbridge typically does not release the names of our customers unless we have permission to do so. Also indicated that at this time, the project is strictly to service 2 large industrial / commercial customers. To express his interest in receiving natural gas, I directed him to our customer connections phone number and website.
11/20/2019	████	Phone Call	Received a call from a resident at Mitch Owens and Anderson Road, who indicated he received the Notice in the mail. He asked if he was going to be getting gas now that this project is happening. He asked why we do not go down Mitch Owens.	11/20/2019	I indicated that at this time, the project is to service only 2 large industrial / commercial customers. To express his interest in receiving natural gas, I directed him to our customer connections phone number and website, or to go online and submit an application through customer care. I indicated that the 2 routes we present in the flyer were the best options, and that he may be interested in speaking with our project specialists at the open house to get further details on the project planning phase.

APPENDIX L

Ministry of Energy, Northern

Development and Mines

Duty to Consult Letter

Ministry of Energy, Northern
Development and Mines

77 Grenville Street
6th Floor
Toronto ON M7A 2C1

Tel: (416) 314-2599

Ministère de l'Énergie, du
Développement du Nord et des
Mines

77 rue Grenville
6^e étage
Toronto ON M7A 2C1

Tél: (416) 314-2599



Indigenous Energy Policy

VIA EMAIL

September 10, 2018

Joel Denomy
Technical Manager, Regulatory Applications
500 Consumers Road
North York, Ontario M2J 1P8

Re: Boundary Road Pipeline Project

Dear Joel Denomy:

Thank you for your email dated April 12, 2018 notifying the Ministry of Energy, Northern Development and Mines of Enbridge Gas Distribution's (Enbridge) intention to apply for Leave to Construct for the Boundary Road Pipeline project and requesting clarification on duty to consult requirements.

I understand that Enbridge is planning to construct a pipeline in order to provide gas distribution service to a new customer in Navan, Ontario. The project consists of approximately 10.1 km of natural gas pipeline, which includes 6.2 km of nominal pipe size ("NPS") 4 inch extra high pressure ("XHP") steel pipe and 3.9 km of NPS 4 inch intermediate pressure ("IP") polyethylene pipe. There are two proposed options under review as part of the leave to construct process for this project:

Option 1

The NPS 4 XHP steel pipeline originates at Cartwright Road where it will connect to Enbridge's existing NPS 6 XHP steel pipeline on Victoria Street. The pipeline travels east along Cartwright Road to Boundary Road and then runs north along Boundary Road. A district station will be installed near the intersection of Boundary Road and Burton Road. From there, the NPS 4 IP polyethylene pipeline will continue north along Boundary Road to the customer's property just south of Highway 417.

Option 2

The alternative route originates at Burton Road where the NPS 4 XHP steel pipeline will connect to Enbridge's existing NPS 4 XHP steel pipeline on St. Guillaume Road.

The pipeline travels west along Burton Road to Boundary Road. A district station will be installed where the NPS 4 XHP pipeline intersects with Boundary Road. From there, the NPS 4 IP polyethylene pipeline will continue north along Boundary Road to the customer's property just south of Highway 417.

The Ministry has reviewed the information provided relative to its current understanding of the interests of First Nation and Métis communities in the area and has determined that it may have the potential to affect First Nation and Métis communities who hold or claim Aboriginal or treaty rights protected under Section 35 of Canada's *Constitution Act*, 1982.

As you are aware, the Government of Ontario (the "Crown") has a constitutional duty to consult and accommodate First Nation and Métis communities when Crown project approvals may lead to an appreciable adverse impact on established or asserted Aboriginal or treaty rights. While the legal duty to consult falls on the Crown, the Crown may delegate the day-to-day, procedural aspects of consultation to project proponents. The Ministry of the Energy, Northern Development and Mines is delegating the procedural aspects of consultation to Enbridge through this letter.

Based on the Crown's preliminary assessment of First Nation and Métis community rights and project impacts, the following Aboriginal communities should be consulted on the basis that they have or may have constitutionally protected Aboriginal or treaty rights that may be adversely affected by the Project:

Community	Mailing Address
Algonquins of Ontario	Algonquins of Ontario Consultation Office 31 Riverside Drive, Suite 101 Pembroke, ON K8A 8R6
Mohawks of Akwesasne	PO BOX 90, AKWESASNE, QC H0M 1A0

This rights-based consultation list is based on information that is subject to change. First Nation and Métis communities may make new rights assertions at any time, and other developments (e.g. the discovery of Aboriginal archaeological sites) can occur that may require additional First Nation and/or Métis communities to be notified and/or consulted. If you become aware of potential rights impacts on communities that are not listed above at any stage of the consultation and approval process, kindly bring this to the attention of the Ministry with any supporting information regarding the claim. The Ministry will then assess whether it is necessary to include the community on the rights-based consultation list above.

It is the Ministry's expectation that Enbridge will communicate directly with the communities listed above, and that Enbridge will:

- Notify the communities that Enbridge has been delegated the procedural aspects of consultation by the Ministry of Energy, Northern Development and Mines on behalf of Ontario.
- Notify the communities that they may contact the Crown directly should they have any questions or concerns.

- Provide the communities with the following contact information should they wish to communicate directly with the Ministry:
 Shereen Smithanik
 Senior Policy Advisor
 Indigenous Energy Policy
 Ministry of Energy, Northern Development and Mines
 416- 326-0513
 shereen.smithanik@ontario.ca
- Please copy the Ministry contact when communicating the above information.

The Ministry relies on consultation conducted by proponents when it assesses the Crown's obligations and directs proponents during the regulatory process. Enbridge's responsibilities for procedural aspects of consultation include:

- Providing the First Nation and Métis communities with timely notice of the project for the purposes of considering possible impacts on their Aboriginal and/or treaty rights;
- In that notice, clearly stating that Enbridge has been delegated the procedural aspects of consultation by the Ministry of Energy, Northern Development and Mines on behalf of Ontario for the project.
- Providing First Nation and Métis communities with information about the project including anticipated impacts, and information on project timelines;
- Following up with First Nation and Métis communities to ensure they have received project information and that they are aware of the opportunity to express comments and concerns about the project;
- Explaining the regulatory and approval processes that apply to the project;
- Gathering information about how the project may adversely impact the relevant Aboriginal and/or treaty rights (for example, hunting, fishing) or sites of cultural significance (for example, burial grounds, archaeological sites);
- Considering the comments and concerns raised by First Nation and Métis communities and providing responses;
- Where appropriate, discussing accommodation, including mitigation or other measures to address potential adverse impacts on Aboriginal and/or treaty rights;
- Where appropriate, developing and discussing with the Crown appropriate accommodation measures;
- Taking reasonable steps to foster positive relationships with the First Nation and Métis communities;

- Bearing the reasonable costs associated with these procedural aspects of consultation; and
- Maintaining records of activities in relation to carrying out the delegated procedural aspects of consultation and providing information to the Ministry.

If you have any questions about this letter or require any additional information please contact Shereen Smithanik at 416-326-0513 or shereen.smithanik@ontario.ca.

Sincerely,



Morgan Owen
A/Manager
Indigenous Energy Policy

C: Ontario Pipeline Coordinating Committee (OPCC)

DRAFT