

Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Welcome to Enbridge's Information Session on the Don River 30 Inch Natural Gas Pipeline Replacement Project

Thank you for coming. We invite you to view the display boards, speak to members of Enbridge Gas Distribution Inc. (Enbridge) and/or Stantec Consulting Ltd. (Stantec), and complete a questionnaire providing your feedback.

Please sign in at the front desk to have your attendance recorded as part of the environmental study and to receive future project updates.

Our Commitment

Enbridge is committed to involving community members in this proposed project. We are dedicated to providing you with up-to-date information in an open, honest and respectful manner and will carefully consider your input.

Enbridge provides safe and reliable delivery of natural gas to more than 2 million residential, commercial, and industrial customers across Ontario. We are committed to environmental stewardship and conducts all of its operations in an environmentally responsible manner.



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Purpose of the Information Session

The purpose of this Public Information Session is to:

- Consult with the public, Indigenous communities and regulatory authorities regarding the proposed Preliminary Preferred Route, alternative routes and potential impacts;
- Provide an opportunity for affected landowners and the public to discuss the proposed project with representatives of Enbridge and Stantec. Stantec is a third party environmental consulting company that has been engaged by Enbridge to undertake the environmental assessment; and
- Receive input from affected landowners and the general public regarding any issues to be addressed.



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Project Background

Enbridge is proposing to replace a segment of a natural gas pipeline that supplies the City of Toronto.

The Don River 30 Inch Natural Gas Pipeline Replacement Project (“the Project”) will include the replacement and abandonment of a segment of Nominal Pipe Size (NPS) 30 (inch) vital natural gas main.

Project Need

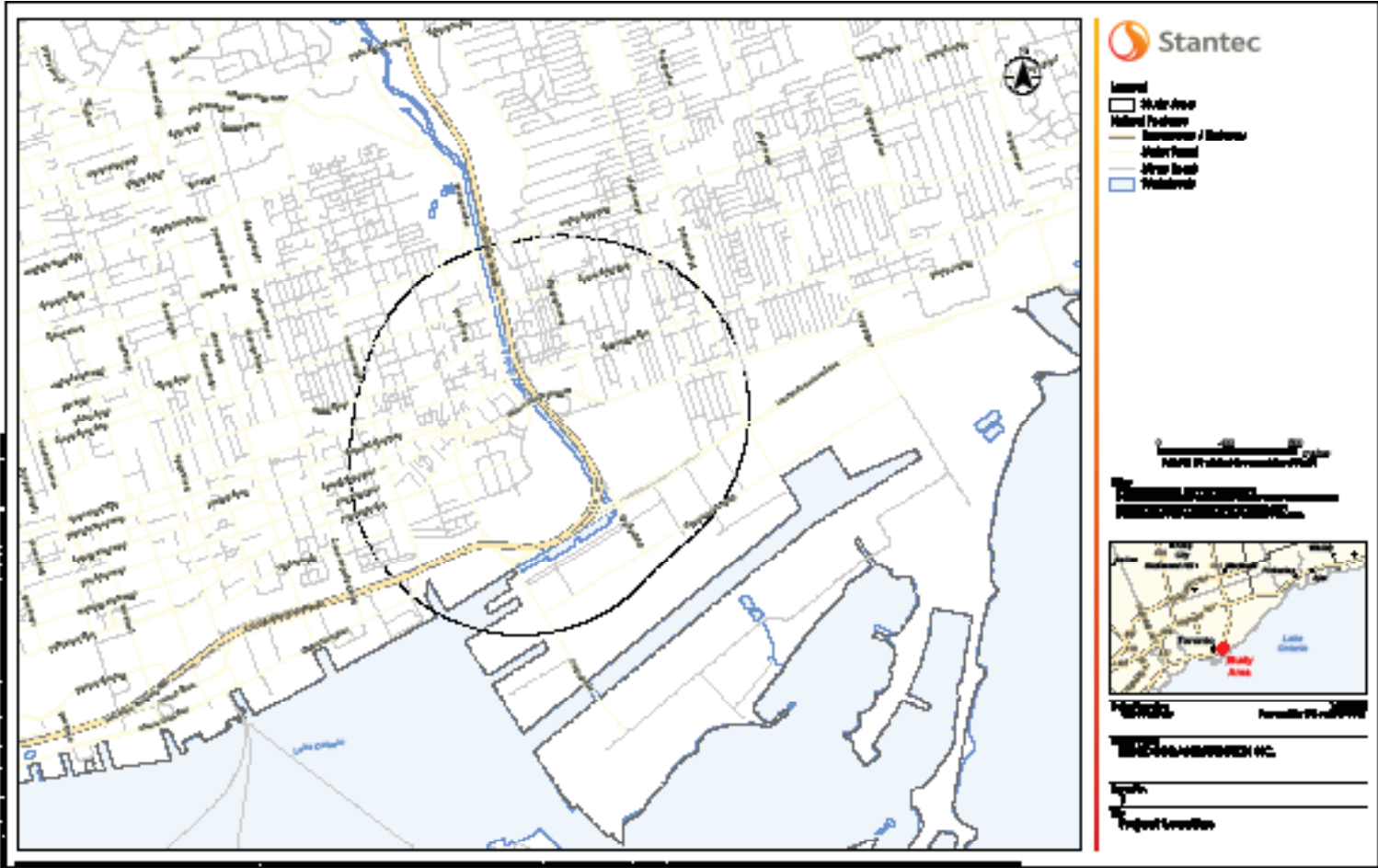
The segment of the pipeline that will be replaced is located on a bridge owned by Enbridge that spans the Don River. The bridge is subject to increased risk from significant weather events. Where possible, the proposed pipeline will be located within the right-of-way of previously disturbed municipal roads and entirely below ground eliminating the risk associated with the above ground crossing.



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Study Area for the Don River 30 Inch Replacement



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Environmental Study

The environmental study and subsequent Environmental Report for the proposed project will be completed in accordance with the OEB "Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)".

The study will:

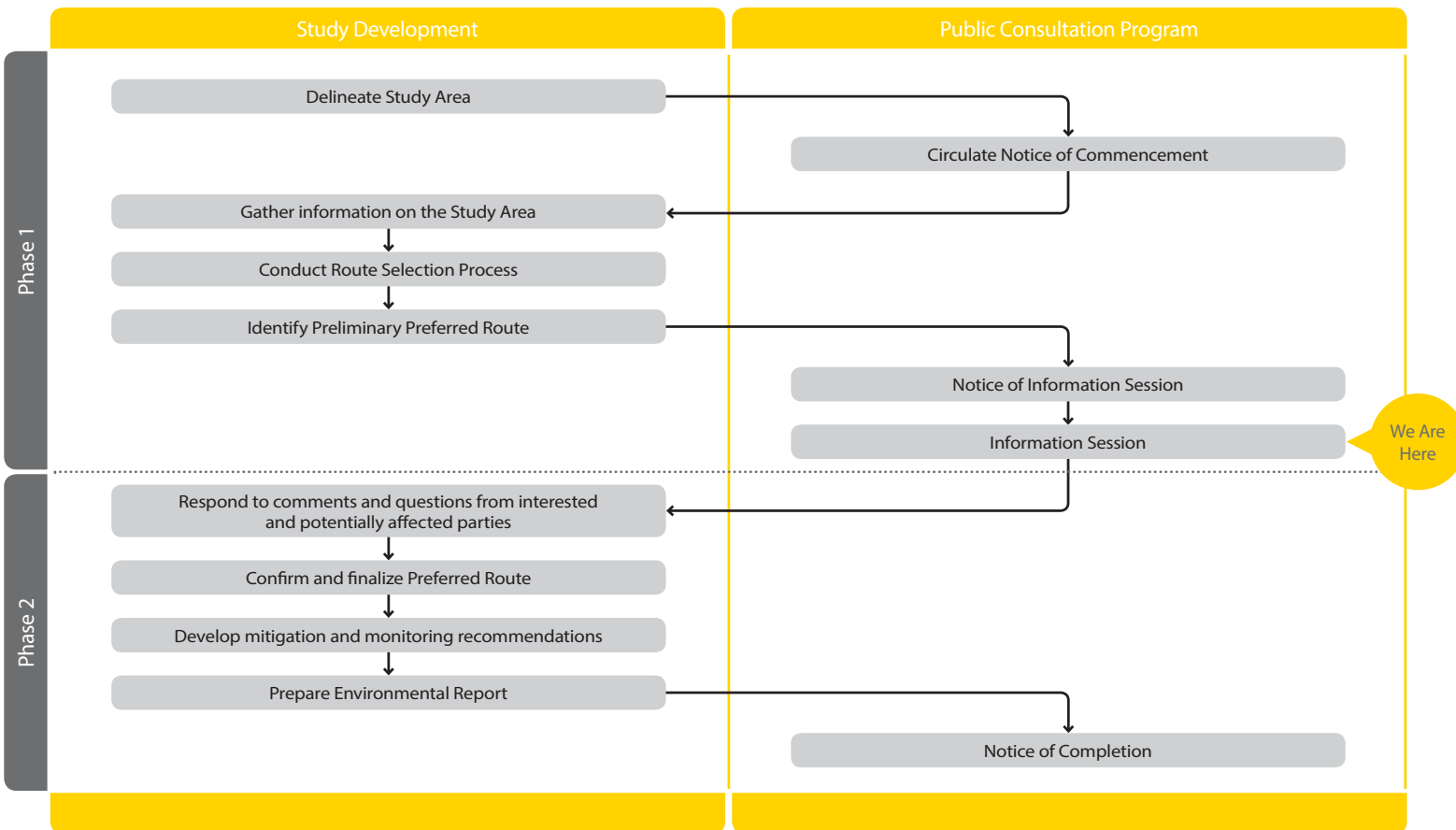
- Be undertaken during the earliest phase of the project;
- Identify potential impacts of the construction and operation of the proposed natural gas Don River Replacement pipeline on environmental, socio-economic and archaeological features;
- Identify an environmentally acceptable route for the Don River Replacement pipeline;
- Undertake consultation to understand the views of interested and potentially affected parties;
- Assess the potential cumulative effects of the project in conjunction with other projects that are planned for the area;
- Develop mitigation and protective measures to avoid or minimize impacts; and
- Develop appropriate inspection, monitoring and follow-up programs for the project, to ensure the success of mitigation and protective measures.



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Environmental Study Process



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Public Consultation

Public consultation is a key component of the Environmental Report.

The consultation program helps identify and address stakeholder concerns and issues, and provides the public with an opportunity to receive information about the project, and have meaningful participation into the project review and development process.

Public input from this information session will be used to help finalize the preferred pipeline route and mitigation plans to be implemented during construction.

Once the LTC (Leave-to-Construct) application is made to the OEB, any party with an interest in the Project, including members of the public, can participate in the process.



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



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 has included social and economic exclusion, and 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 pursue sustainable relationships with Indigenous communities 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, 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 in the context of existing Canadian law and the protection of indigenous peoples under the Canadian Constitution.
- 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 occupied 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 review this policy to ensure it remains relevant and meets changing expectations.



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Ontario Energy Board (OEB) and Approval Process

The OEB regulates the natural gas industry in Ontario in the public's interest. Under Section 90 of the Ontario Energy Board Act, the OEB's review and approval are required before the project can proceed.

Enbridge plans to complete the report for the environmental study in January of 2018 and pending a feasibility analysis, Enbridge may file a LTC application for the proposed replacement pipeline with the OEB in April, 2018. This application will include comprehensive information on the project, including: the need for the project, alternatives, project costs and economics, pipeline specifications, pipeline construction, environmental mitigation measures, land requirements, and public, regulator and Indigenous consultation.

The OEB will then hold a public hearing to review the project. Notification of the hearing includes notices in local newspapers and letters to directly affected landowners. The hearing provides an opportunity for the general public and landowners to ask and submit questions regarding the project. The OEB will then issue a written decision regarding the project.

If the OEB finds the project is in the public interest, it will approve construction of the pipelines. If the project is approved, the OEB normally attaches conditions to its approval with which Enbridge will comply during the construction and post construction restoration process.



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Preliminary Preferred Route Selection Process

The Preliminary Preferred Route for the proposed pipeline will be selected through a five-step process.

Step 1

Constraints and Opportunities
Inventory of environmental and socio-economic features.

Step 2

The generation of Route Options is influenced by the following:

- Avoidance to the extent feasible of sensitive socio-economic and environmental features such as communities, rivers, etc.
- Avoidance to the extent feasible of areas which may present construction difficulties or the potential for long-term maintenance/remedial work (i.e., new buildings, rail lines, etc.).
- Utilizing to the extent feasible existing linear infrastructure, such as road right-of-ways (ROWs) and property lines.
- The length of the pipeline and associated costs of construction and operation may influence route generation.
- Constraints in the study area (i.e., other utilities, bridges, sanitary sewers, new residential developments, etc.) may also influence route generation.
- Routes should follow a reasonably direct path between start and end points, if feasible.

Step 3

Route Evaluation

An evaluation of the Route Options will be conducted based on:

1. A quantitative comparative evaluation of impacts to environmental and socio-economic features.
2. A qualitative comparative evaluation based on stakeholder input and the experience of the Project Team in routing linear infrastructure.
3. A qualitative comparative assessment of construction constraints along each of the routes.

Once complete, a Preliminary Preferred Route will be identified.

Step 4

Input on the Preliminary Preferred Route

The Preliminary Preferred Route is subject to input through a variety of communication and consultation activities, such as an Information Session.

Step 5

Confirmation of the Preferred Route

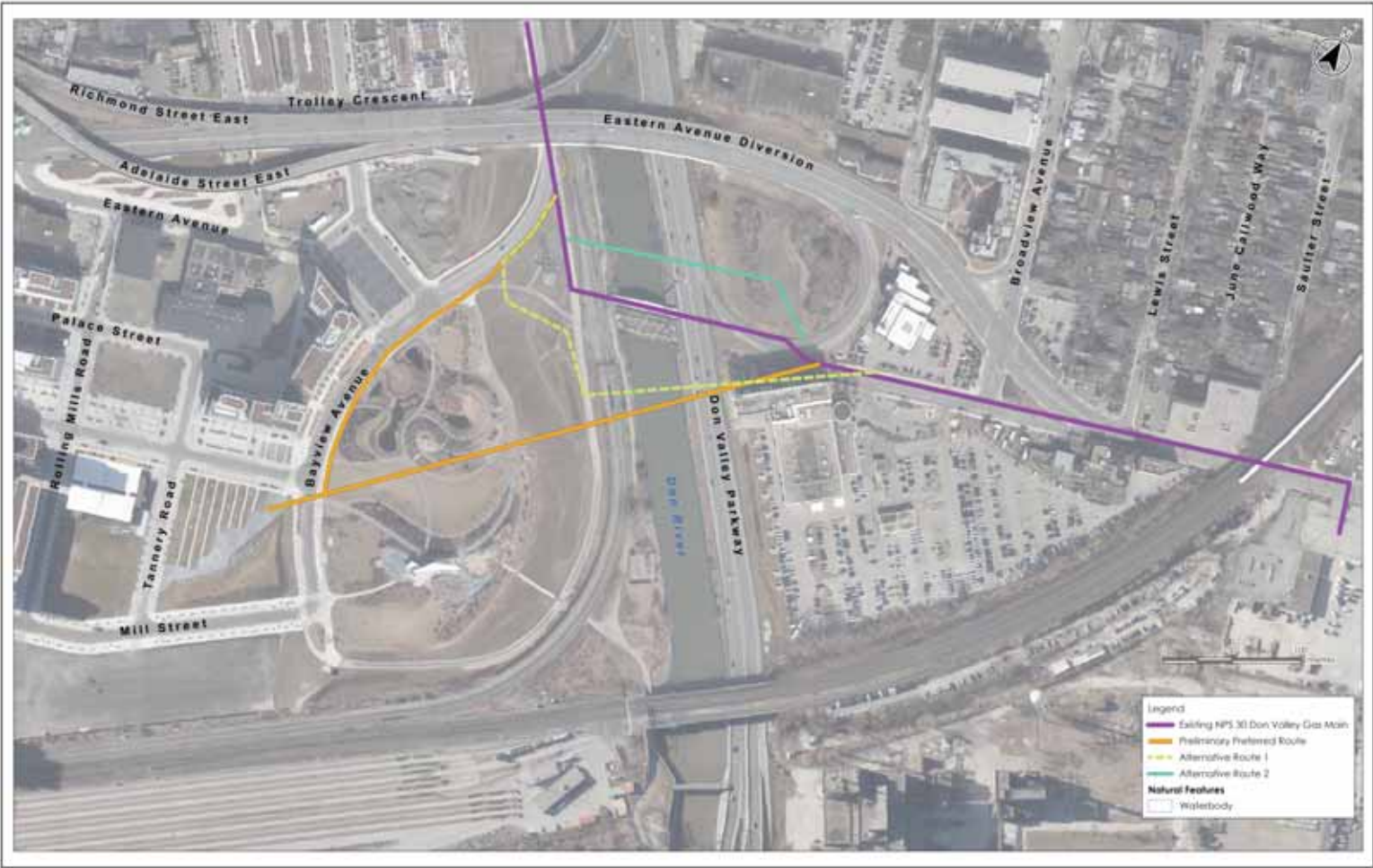
A Preferred Route will be confirmed. The Preferred Route may require minor changes as the project moves forward based on the results of pre-construction field investigations, landowner requests, and/or engineering considerations.



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Preliminary Preferred Route and Alternatives



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Existing Features

Information on existing features for the Study Area has been collected from a number of external sources including but not limited to agencies, aerial photography, official plan mapping, natural features mapping and site visits. This information has been used in the justification of the preliminary preferred route.

Additional data collection and agency consultation will continue after this Information Session to confirm the Preliminary Preferred Route.

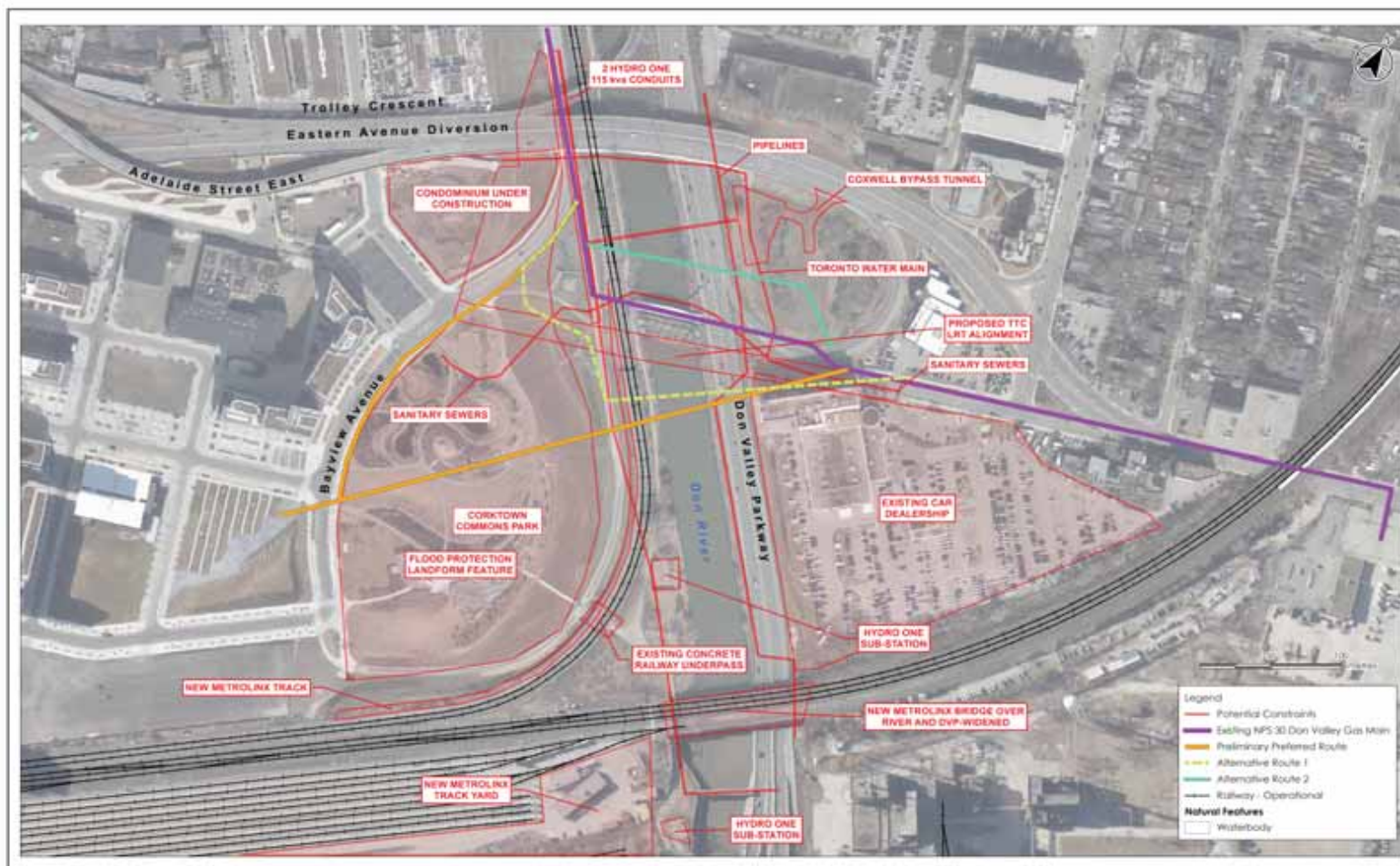
Environmental and socio-economic features within the Study Area, relevant to pipeline planning, construction and operation, have been outlined in the following map. The Preliminary Preferred Route avoids sensitive environmental and socio-economic features where feasible. Where features cannot be avoided, mitigation and protection measures will be employed during pipeline construction and operation.



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Natural Environment and Socio-Economic Environment



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Environment, Health & Safety Policy

Our Commitment

Enbridge is committed to protecting the health and safety of all individuals affected by our activities, including our employees, contractors and the public. We will provide a safe and healthy working environment, and will not compromise the health and safety of any individual. Our goal is to have no incidents and mitigate impacts on the environment by working with our stakeholders, peers and others to promote responsible environmental practices and continuous improvement.

We are committed to environmental protection and stewardship and we recognize that pollution prevention, biodiversity and resource conservation are key to a sustainable environment, and will effectively integrate these concepts into our business decision-making.

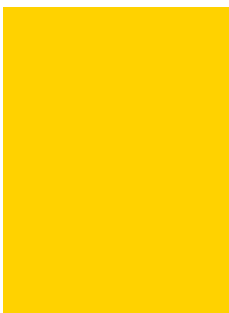
All employees are responsible and accountable for contributing to a safe working environment, for fostering safe working attitudes, and for operating in an environmentally responsible manner.



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Enbridge Gas Distribution provides safe, reliable delivery of natural gas.



Pipeline Design

The high-grade steel pipeline is designed to meet and/or exceed the regulations of the Canadian Standards Association (Z662 Oil and Gas Pipeline Systems) and the applicable regulations of the Technical Standards & Safety Association (TSSA).

Pipeline Safety and Integrity

We take many steps to ensure safe, reliable operation of our network of natural gas pipelines, such as:

- Design, construct, and test our pipelines to meet or exceed requirements set by industry standards and regulatory authorities;
- Continuously monitor the entire network; and
- Perform regular field surveys to detect leaks and confirm corrosion prevention methods are working as intended.



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Enbridge Gas Distribution provides safe, reliable delivery of natural gas.



Pipeline Construction



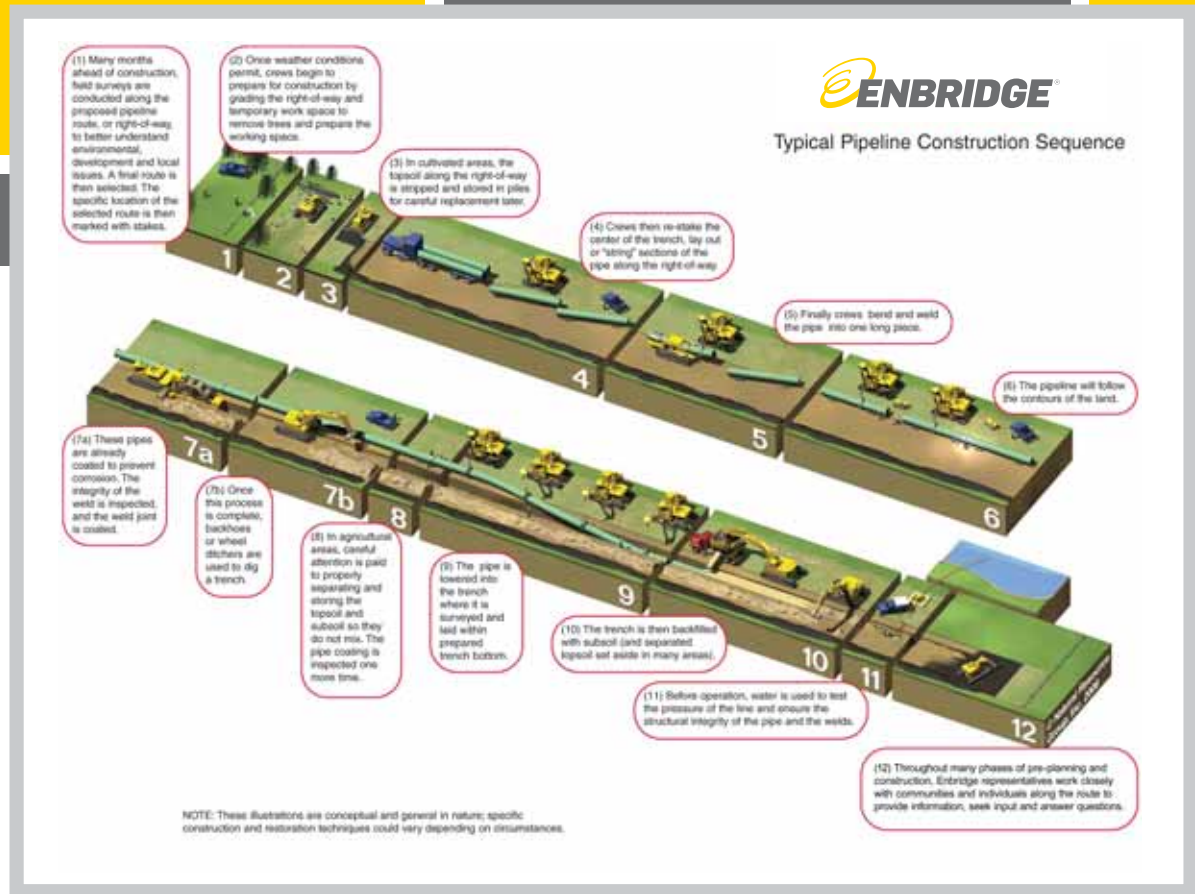
Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Pipeline Construction

Procedures

- Preparation of the right-of-way (ROW);
- Trenching, pipe delivery, welding together pipe sections, and lowering the pipeline into the trench; and
- Backfilling, pressure testing, clean-up, and long-term monitoring.



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Pipeline Construction

Trenching

- Trenches are dug by backhoes or other excavation machines.
- Trench depth is determined by Canadian Standards Association (Z662 Oil and Gas Pipeline Systems) and Enbridge standards.
- Pipelines are usually buried at a minimum depth of approximately 1.0 metre (3.3 feet) from the top of the pipe to the ground surface.
- The amount of open trench at any given time is kept to a minimum to ensure safety and minimize environmental impact.
- Where agriculturally productive lands are encountered, topsoil, and subsoil would be stripped and stockpiled separately to avoid topsoil and subsoil mixing.
- When rock excavation is required, mechanical equipment will be used. Blasting may be required but as a last resort.

Welding

Pipeline welds are examined by a third-party company using radiography (X-rays) before the line is lowered into the trench.

Trenchless Techniques

The Direct Pipe method or boring may be used to cross under major roads, the Don River, or other pipelines and environmentally sensitive features.

Backfilling

Excavated material is replaced and large stones are removed from the backfill material to prevent pipeline damage. The construction area is carefully cleaned up after the trench is backfilled. All construction materials are removed and cultivated and landscaped areas are restored.



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Pipeline Construction

We have a comprehensive mitigation program for the crossing of the Don River. The Don River crossing will be installed by the Direct Pipe method:

- Help minimize environmental disturbance;
- Help protect against potential downstream fish habitat disturbance;
- Help protect fish and other wildlife, and their related habitat from silt/sedimentation; and
- Help avoid interactions with utilities, rail lines, and other infrastructure that are located along or in close proximity to the Don River.



Reference: <https://www.herrenknecht.com/en/products/core-products/tunnelling/direct-pipe.html#>



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Enbridge Gas Distribution provides safe, reliable delivery of natural gas.

Pipeline Construction

Hydrostatic Testing

The new pipeline would be hydrostatically tested. Hydrostatic testing is when we seal the gas line and then it is filled with water and then pressured up to a pressure higher than actual operating pressures.

Hydrostatic testing checks for leaks and confirms pipeline strength. Water for the test may be obtained from the City of Toronto or the Don River, if it can support the withdrawal without environmental impact.

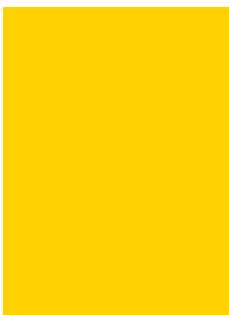
Afterward, the water is disposed of or released according to Ministry of the Environment and Climate Change permits and guidelines to ensure it does not cause erosion or sedimentation of watercourses.



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Enbridge Gas Distribution provides safe, reliable delivery of natural gas.



Environmental Considerations

Clean Up

All construction materials are removed and a final grading of the area is performed. Anything removed or disturbed by construction (such as fences or pavement) are repaired or replaced.

Any disturbed soils are restored and seeded with an appropriate seed mix. Erosion and sediment control measures are installed as required until the area is revegetated.

Ongoing Monitoring

Slope erosion and re-establishment of vegetation are carefully monitored following roadside construction. Enbridge will be fully responsible for the remedial work necessary to address such issues following pipeline construction.



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Next Steps

After this Information Session, we intend to pursue the following schedule of activities:

1. Analyze public, Indigenous and stakeholder input, respond to comments/questions received, and confirm the Preliminary Preferred Route (December 2017/January 2018)
2. Complete Environmental Report (January 2018)
3. OEB application and regulatory process (April 2018)
4. Subject to OEB approval:
 - a. Pre-Construction activities (2018)
 - Topographic Land Survey (2018)
 - Pipeline Design (2018)
 - Acquire Permits (2018/2019)
 - b. Construction (January 2019)*
 - c. Post Construction Activities (2019 - 2020)

* If the steps above progress quicker than expected, construction could start earlier.



Proposed Don River 30 Inch Natural Gas Pipeline Replacement



Thank you!

We sincerely hope this Information Session has provided you with an opportunity to:

- Discuss your areas of interest related to the proposed project with representatives from Enbridge and Stantec;
- Provide your input regarding the existing conditions (environmental and socio-economic features) identified within the study area; and
- Comment on the 'Preliminary Preferred Route' and site specific protection and mitigation measures.

Input from stakeholders and Indigenous communities will be used to confirm the existing environmental, socio-economic and archaeological conditions and the Preferred Pipeline Route.

If you wish to stay informed about the progress of the project and the preparation of the Environmental Report, and have not previously identified yourself to Enbridge or Stantec, please provide your name, postal address, email address, and any group affiliation to either:

Kelsey Mills

Environmental Advisor
Enbridge Gas Distribution Inc.
3rd Floor, 101 Honda Blvd
Markham, ON L6C 0M6
Ph: (905) 927-3145
Email: kelsey.mills@enbridge.com

Rooly Georgopoulos, B.Sc.

Senior Project Manager
Stantec Consulting Ltd.
300-675 Cochrane Drive West Tower
Markham, ON L3R 0B8
Ph: (905) 415-6367
Email: EA.donriver30@stantec.com

Please provide any comments, questions or concerns regarding this project by **January 9, 2018**.

Also, you can visit the project website at www.enbridgegas.com/donriver.



Thank you for your participation.

