Appendix B Consultation

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B.1 Letter of Delegation

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Ministry of Energy and Mines

Energy Networks and Indigenous Policy Branch

Indigenous Energy Policy

77 Grenville Street, 6th Floor
Toronto, ON M7A 1B3
Tel: (416) 562-9492

Ministère de l'Énergie et des Mines

Direction Générale des Réseaux Énergétiques et des Politiques Autochtones

Politique Énergétique Autochtones

77 Rue Grenville, 6e Étage
Toronto, ON M7A 1B3
Tel: (416) 562-9492

Ontario

August 19, 2026

VIA EMAIL

Olatunbosun Ishola
Advisor, Regulatory Applications – Leave to Construct
Enbridge Gas Inc.
olatunbosun.ishola@enbridge.com

Re: Dawn Parkway System Renewal - Kirkwall Hamilton

Dear Olatunbosun Ishola,

Thank you for your email dated June 24, 2026 notifying the Ministry of Energy and Mines (MEM) of Enbridge Gas Inc. (Enbridge)'s intention to apply to the Ontario Energy Board (OEB) for Leave to Construct for the Dawn Parkway System Renewal project. The Dawn Parkway System Renewal project consists of two pipeline segments within Enbridge's Dawn Parkway Transmission System: Dawn to Enniskillen, located in Lambton County, and Kirkwall to Hamilton, located in the City of Hamilton. This letter is in relation to the Kirkwall to Hamilton segment (the Project).

MEM understands that Enbridge is proposing to install approximately 10.2 km of new NPS 48 natural gas transmission pipeline between the Kirkwall Valve Site and the Hamilton Gate Station in the City of Hamilton. The new pipeline will be constructed within a new easement generally parallel to the existing Dawn Parkway pipeline, which will remain in service. Station modifications and ancillary facilities will also be required to connect the new pipeline to the existing system. Construction is anticipated to begin in early 2028, with a proposed in-service date of Q4 2028.

On behalf of the Government of Ontario (the Crown), MEM has reviewed the information provided by Enbridge with respect to the Project and assessed it against the Crown's current understanding of the interests and rights of Aboriginal communities who hold or claim Aboriginal, or treaty rights protected under Section 35 of Canada's Constitution Act 1982 (s. 35 rights) in the area. In doing so, MEM has determined that the Project may have the potential to affect such Indigenous communities.

Duty to Consult with Indigenous Communities

The Crown has a constitutional Duty to Consult and, where appropriate, accommodate Indigenous communities when it has knowledge of established or credibly asserted Aboriginal or treaty rights protected under section 35 of Canada's *Constitution Act 1982* (s. 35 rights), and it contemplates conduct that might adversely affect those rights. These consultations are in addition to consultation imposed by statute, though these processes can be integrated.

Although the legal Duty to Consult remains with the Crown, the Crown may delegate the procedural aspects of consultation to project proponents. The procedural aspects of the Duty to Consult refer to those portions of the consultation process, including sharing information, holding meetings, and receiving comments from Indigenous communities. Project proponents are typically best positioned to address the specific planning, technical, and environmental aspects of projects, and, where appropriate, to consider possible ways to address or mitigate concerns raised by Indigenous communities about the project's potential impacts. The Crown remains responsible for the substantive aspects of the consultation, including providing oversight of the consultation process and ensuring the adequacy of consultation with the communities to whom the Duty to Consult is owed.

Delegation of Procedural Aspects of the Crown's Duty to Consult

Based on MEM's review of the information provided by Enbridge concerning the Project, including the nature and location of the Project, anticipated environmental effects, and the Crown's current understanding of established or credibly asserted s. 35 rights in the Project area, MEM has determined that the Crown does have a Duty to Consult with Indigenous communities in respect of the Project. Therefore, on behalf of the Crown, MEM is delegating to Enbridge, through this letter, the procedural aspects of consultation in respect of the Project.

Please see the appendix for detailed information on the respective roles and responsibilities of the provincial Crown and Enbridge. You should seek guidance from MEM at any time if you are unclear about your roles and responsibilities.

Potentially Impacted Indigenous Communities

Based on the Crown's assessment of established and credibly asserted s. 35 rights and potential Project impacts, Enbridge should consult with the following Indigenous communities:

Community	**Contact Information** *(Note: contact information is believed to be accurate, however, personnel may have changed)*
Mississaugas of the Credit First Nation	2789 Mississauga Rd R.R. #6 Hagersville, ON N0A 1H0 T: (905) 768-1133 ClaireS@mncfn.ca Megan.Devries@mncfn.ca

Six Nations of the Grand River	1695 Chiefwood Rd, PO Box 5000 Ohsweken, ON N0A 1M0 T: (519) 445-2201 sngr.chief@sixnations.ca lrcs@sixnations.ca dawnrussell@sixnations.ca
Haudenosaunee Confederacy Chiefs Council (HCCC)	16 Sunrise Court, Suite 600 PO Box 714 Ohsweken, ON N0A 1M0 T: (519) 445-4222 info@hdi.land

This rights-based consultation list is subject to change as new information becomes available, or the scope of the Project evolves. For example, First Nation and/or Métis communities may make new rights assertions at any time, and project-related developments may require additional Indigenous communities to be notified and/or consulted. A community may also indicate that they are not interested in being consulted regarding the Project. If any of the above should occur, Enbridge must notify MEM immediately so that updates to the consultation list can be considered.

We recommend that you contact the Crown if you are unsure about how to address a concern raised by an Indigenous community, particularly if the concern relates to a potential adverse impact on established or credibly asserted s. 35 rights. Consultation is ongoing throughout the project's duration, encompassing project development and design, consultation, approvals, construction, operation, and decommissioning.

If you become aware of potential impacts to s.35 rights of Indigenous communities that are not listed above at any stage of the project, please bring this to the attention of MEM with any supporting information regarding the claim at your earliest convenience.

Depth of Consultation

Based on currently available information about the Project's anticipated impacts, MEM's preliminary assessment has determined that consultation is owed at the low level of the consultation spectrum, at minimum, for the communities noted above.

As such, MEM requires Enbridge to, at a minimum, notify the communities of the project; share information about the project and provide an opportunity for the communities to comment. Any issues raised by the communities should be discussed and considered in light of the potential impact on rights, with mitigation or other forms of accommodation identified where appropriate. Enbridge's initial notice to the communities regarding the Project could include a request to confirm whether the community believes the Project will impact their rights and, accordingly, whether they are interested in being consulted. Should no response be received, Enbridge should continue to provide high-level notifications in accordance with project stage milestones.

Should information become available throughout the consultation process to suggest that project impacts will be significant enough to warrant a deeper level of consultation, Enbridge must inform MEM so that updated guidance can be provided. If no response is received, the proponent should continue to provide high-level notifications at key project stage milestones.

Indigenous Consultation Record

Before, or at the time of, filing applications with the OEB for the Project, please send an Indigenous Consultation Record (ICR) as described in the appendix to the MEM contact identified in this delegation letter. The ICR will provide MEM with an opportunity to review the consultations undertaken to date, to understand any rights-based concerns raised, to assess the adequacy of the rights-based consultation conducted by Enbridge, and, where appropriate, to provide further direction to Enbridge on any additional consultations that should be undertaken. An ICR should be maintained and updated throughout the life of the Project, and ICR updates should be provided to MEM from time to time if any new s.35 rights-based issues or concerns are identified before key Project milestones. Should you have any questions about the appropriate time to provide MEM with an ICR or an ICR update, please contact MEM.

Acknowledgement

Through receipt of this letter, Enbridge acknowledges this Crown delegation, and the procedural consultation responsibilities enumerated in the appendix. Enbridge also acknowledges that it will endeavour to support the Crown's ongoing oversight of the consultation process by continuing to share with MEM any Project-related issues and concerns identified by Indigenous communities throughout the life of the Project. If you have any questions about these requirements, please contact Allison Palmer, Senior Policy Advisor, Indigenous Energy Policy at Allison.Palmer@ontario.ca.

I trust that this information provides clarity and direction regarding the respective roles of the Crown and Enbridge.

Sincerely,

Shannon McCabe

Shannon McCabe
Manager, Strategic Indigenous Initiatives
Ministry of Energy and Mines

c: Samir Adkar, Director, Energy Networks and Indigenous Policy, Ministry of Energy and Mines

Ontario Pipeline Coordinating Committee (OPCC)

APPENDIX: ROLES AND RESPONSIBILITIES OF THE PROPONENT AND THE CROWN RELATED TO THE DUTY TO CONSULT WITH INDIGENOUS COMMUNITIES

Duty to Consult Roles and Responsibilities Delegated to Enbridge (the Proponent)

Please refer to the letter above for specific guidance on the project. On behalf of the Crown, please be advised that your responsibilities as Project Proponent for this Project include:

- providing notice(s) of accurate, complete, and plain language information about the Project to Indigenous communities identified in the letter above, with sufficient detail and at a stage(s) in the process that allows the communities to prepare their views on the Project and, if appropriate, for changes to be made to the Project. Project information may include:
    - a detailed description of the nature and scope of the Project, textual or otherwise, and translations into Indigenous languages where appropriate;
    - a description of the Project location;
    - maps or other visuals showing the Project location and any other affected area(s);
    - information about the Project lands (e.g. whether the Project is on privately owned or Crown-controlled lands);
    - information about the potential negative effects of the Project on the environment, including their severity, geographic scope, and likely duration. This can include, but is not limited to, effects on ecologically sensitive areas, water bodies, wetlands, forests; species at risk and/or the habitat of species at risk;
    - identification of any measures to avoid, minimize or mitigate potential adverse impacts;
    - a description of Project milestones and projected timing for the same;
    - details about other provincial or federal approvals that may be required for the Project to proceed; and
    - any additional information that might be helpful to the community;
- a written request to Indigenous communities to provide in writing or through a face-to-face meeting:
    - any information available to them that should be considered when preparing the Project documentation;
    - any potential adverse Project impacts on their established or credibly asserted s. 35 rights;
    - any suggested measures for avoiding, minimizing or mitigating potential adverse impacts; and
    - information, for the community's approval, about how information provided by the Indigenous community as part of the consultation process will be collected, stored, used, and shared;
    - any additional information that might be helpful to the community;
    - identifying a requested timeline for response(s) from the Indigenous community;
- an indication of the Proponent's availability to discuss the process and provide further information about the Project;

- the Proponent's contact information; and
- any additional information that might be helpful to the community;
- following up, as necessary, with Indigenous communities to ensure they received Project notices and information and are aware of the opportunity to comment, raise questions or concerns and identify potential adverse impacts on their established or credibly asserted rights;
    - If a community is unresponsive to efforts to notify and consult, the Proponent should nonetheless make attempts to update the community on the progress of the Project, the environmental assessment (if applicable) and any other regulatory approvals.
- bearing the reasonable costs associated with the procedural aspects of consultation (e.g., paying for meeting costs, making technical support available) and providing reasonable capacity funding to Indigenous communities to assist in their participation in the consultation process;
- gathering information about how the Project may adversely affect Aboriginal or treaty rights, including gathering information about land use and traditional knowledge;
- consider and respond to comments and concerns raised by Indigenous communities and answer questions about the Project and its potential impacts on established or credibly asserted s. 35 rights;
- as appropriate, discussing and implementing changes to the Project in response to concerns raised by Indigenous communities. This could include modifying the Project to avoid or minimize an impact on established or credibly asserted s. 35 right (e.g., altering the season when construction will occur to avoid interference with mating or migratory patterns of wildlife); and
- informing Indigenous communities about how their concerns were taken into consideration and whether the Project proposal was altered in response. It is considered best practice to provide the Indigenous community with a copy of the consultation record as part of this step for verification purposes.

If you are unclear about the nature of a concern raised by an Indigenous community, you should seek clarification and further details from the community, provide opportunities to listen to community concerns and discuss options, and clarify any issues that fall outside the scope of the consultation process. These steps should be taken to ensure that the consultation process is meaningful and that concerns are heard and, where possible, addressed.

You can also seek guidance from the Crown at any time. It is recommended that you contact the Crown if you are unsure about how to deal with a concern raised by an Indigenous community, particularly if the concern relates to a potential adverse impact on established or asserted Aboriginal or treaty rights.

The consultation process must maintain sufficient flexibility to respond to new information. We request that you make every reasonable effort to establish positive relationships with all Indigenous communities that may be affected by the Project. If you are unclear about the nature of a concern raised by an Indigenous community, you should seek clarification and further details from the community, provide opportunities to listen to community concerns and

discuss options, and clarify any issues that fall outside the scope of the consultation process. These steps should be taken to ensure that the consultation process is meaningful and that concerns are heard and, where possible, addressed. If a community is unresponsive to efforts to notify and consult, you should nonetheless make an effort to update the community on the project's progress, the environmental assessment (if applicable), and other relevant regulatory approvals.

If the Proponent retains sub-contractors to support the procedural aspects of consultation undertaken by the Proponent, Indigenous communities should be made aware of the sub-contractors role, and the Proponent should inform the Crown if any issues concerning established or asserted s. 35 rights arise.

Consultation should occur throughout the project's duration, including project development and design, approvals, construction, operation, and decommissioning. The Proponent should consider how it will support the Crown's ongoing oversight of the consultation process throughout the life of the Project. You should make every reasonable effort to establish positive relationships with all Indigenous communities that may be affected by the Project. You may wish to consider translating communications with communities into Indigenous languages or other languages, where appropriate.

If you reach a business arrangement with an Indigenous community that may affect or relate to the Crown's duty to consult, we ask that the Crown be advised of those aspects of such an arrangement that may relate to or affect the Crown's consultation obligations and that the community itself be apprised of the Proponent's intent to so-apprise the Crown. Whether or not any such business arrangements may be reached with any community, the Crown expects the Proponent to fulfill all its delegated procedural consultation responsibilities to the satisfaction of the Crown.

The Crown reserves the right to participate in the consultation process as it sees fit, including, but not limited to, providing further instructions to proponents on delegated procedural aspects of consultation or directly undertaking additional consultation with Indigenous communities. The Crown reserves the right to add communities throughout the consultation process.

Duty to Consult Roles and responsibilities assumed directly by the Crown

The role of the Crown in fulfilling any duty to consult and accommodate in relation to this Project includes:

- identifying the Proponent and updating, as appropriate, the Indigenous communities to consult for the fulfillment of the Crown duty;
- notifying Indigenous communities that they have been identified for consultation and that the procedural aspects of consultation have been delegated to the Proponent;
- carrying out, from time to time, any necessary assessment of the extent of consultation or, where appropriate, accommodation required for the project to proceed;
- supervising the aspects of the consultation process delegated to the Proponent;

- determining in the course of Project approvals whether the consultation of Indigenous communities was sufficient; and
- determining in the course of Project approvals whether accommodation of Indigenous communities, if required, was appropriate and sufficient.

If the Crown considers that there are outstanding issues related to consultation, the Crown may undertake additional consultation with Indigenous communities.

Indigenous Consultation Record

It is important to ensure that all consultation activities undertaken with Indigenous communities are fully documented. This includes all attempts by the Proponent, or any subcontractors or consultants retained by the Proponent to support the procedural aspects of consultation undertaken by the Proponent, such as notifying or consulting the community, all interactions with and feedback from the community, and all efforts to respond to community concerns. Crown regulators require a comprehensive consultation record to assess whether Aboriginal consultation and any necessary accommodations are sufficient for the Project to receive Ontario government approvals. The consultation record should include, but not be limited to, the following:

- a list of the identified Indigenous communities that were contacted;
- details of all attempts to notify or contact the community regarding the Project, all interactions with and feedback from the community, and all efforts to respond to community concerns, including:
    - copies of correspondence (e.g., letters and electronic communications) sent and received;
    - any evidence that communications were distributed to and received by the Indigenous communities (e.g., courier slips);
- where a community has been non-responsive to multiple efforts to contact the community, a record of such multiple attempts and the responses or lack thereof.
- a written summary of consultations with Indigenous communities and appended documentation such as copies of notices, any meeting summaries or notes including where the meeting took place and who attended, and any other correspondence (e.g., letters and electronic communications sent and received, dates and records of all phone calls);
- Sub-contractors, if any, that are retained by the Proponent to support the procedural aspects of consultation undertaken by the Proponent, information about their role and how Indigenous communities were made aware of the sub-contractor's role as well as any issues that may have arisen concerning established or asserted s. 35 rights.
- responses and information provided by Indigenous communities during the consultation process. This includes information on Aboriginal or treaty rights, traditional lands, claims, or cultural heritage features and information on potential adverse impacts on such Aboriginal or treaty rights and measures for avoiding, minimizing, or mitigating potential adverse impacts to those rights and

- a summary of the rights/concerns and potential adverse impacts on s. 35 rights or on sites of cultural significance (such as burial grounds and archaeological sites) identified by Indigenous communities, how comments or concerns were considered or addressed, and any changes to the Project as a result of the consultation, such as:
    - changing the Project scope or design;
    - changing the timing of proposed activities;
    - minimizing or altering the site footprint or location of the proposed activity;
    - avoiding impacts to the s. 35-related interest;
    - environmental monitoring; and
    - other mitigation strategies.
- Throughout the life of the Project, Indigenous Consultation Records should be updated with any significant interactions regarding s. 35 rights-based issues, and these significant updates should be shared with MEM.

As part of its oversight role, the Crown may, at any time during the consultation and approvals stage of the Project and beyond, request records from the Proponent relating to consultations with Indigenous communities. Any records provided to the Crown will be subject to the *Freedom of Information and Protection of Privacy Act; however, they* may be exempted from disclosure under section 15.1 (Relations with Aboriginal communities) of the Act. Additionally, please note that the information provided to the Crown may also be subject to disclosure where required under any other applicable laws or as part of other dispute resolution proceedings.

The nature of the contents of the consultation record should be shared with the Indigenous communities consulted, and their permission to share this information with the Crown should be obtained. It is considered best practice to share an Indigenous community's consultation record with the community prior to finalizing it, ensuring it is a robust and accurate record of consultation.

B.2 Contact List

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Appendix B.2 Project Contact List

Agencies and Elected Officials

Elected Officials

First Name	Surname	Organization	Position	Address	City/Town	Province	Postal Code	Telephone	E-Mail
Donna	Skelly	Government of Ontario	Member of Provincial Parliament Flambrough-Glanbrook	#104 – 2000 Garth Street	Hamilton	ON	L9B 0C1	905-679-3770	donna.skelly@pc.ola.org
Dan	Muys	Government of Canada	Member of Parliament - Flamborough - Glanbrook - Brant North	3194 Hwy #56, Unit 2 P.O. Box 405	Binbrook	ON	L0R 1C0	905-692-2917	dan.muys@parl.gc.ca
Andrea	Horwath	City of Hamilton	Mayor	71 Main Street West. 2nd floor	Hamilton	ON	L8P 4Y5	905-546-4200	mayor@hamilton.ca
Mike	Spadafora	City of Hamilton	Councillor-Ward 13	71 Main Street West. 2nd floor	Hamilton	ON	L8P 4Y5	905-546-2712	mike.spadafora@hamilton.ca
Ted	McMeekin	City of Hamilton	Councillor-Ward 15	71 Main Street West. 2nd floor	Hamilton	ON	L8P 4Y5	905-546-2713	ted.mcmeekin@hamilton.ca

Federal Agencies

First Name	Surname	Organization	Department	Position	Address	City/Town	Province	Postal Code	Telephone	E-Mail
Rob	Clavering	Environment and Climate Change Canada	Environmental Assessment Section, Environmental Protection Branch - Ontario Region Environment and Climate Change Canada	Manager	4905 Dufferin Street	Downsview	ON	M3H 5T4	416-458-9670	robert.clavering@ec.gc.ca
To Whom it May Concern		Fisheries and Oceans Canada	Fish and Fish Habitat Protection Program			Burlington	ON	L7S 1A1	1-855-852-8320	FisheriesProtection@dfo-mpo.gc.ca
To Whom it May Concern		Transport Canada								EnviroOnt@tc.gc.ca

Provincial Agencies

First Name	Surname	Organization	Department	Position	Address	City/Town	Province	Postal Code	Telephone	E-Mail
To Whom it May Concern		Ministry of Environment, Conservation and Parks	Species at Risk Branch		40 St. Clair Ave. W., 14th Floor	Toronto	ON	M4V 1M2		SAROntario@ontario.ca
Zachary	Potts	Ministry of Environment, Conservation and Parks	Environmental Assessment Branch - Indigenous Consultation	Advisor					705-346-0978	zachary.potts@ontario.ca
Aaron	Todd	Ministry of Environment, Conservation and Parks	West Central Region	Director	733 Exeter Rd	London	ON	N6E 1L3	647-633-3351	Aaron.Todd@ontario.ca
Laura	Collings	Ministry of Environment, Conservation and Parks	Source Protection Screening - Conservation and Source Protection Branch	Program Analyst					249-733-1157	SourceProtectionScreening@ontario.ca
To Whom it May Concern		Ministry of Natural Resources	Southern Region	Resources Land Use Planning and Strategic Issues Section	Peterborough	ON	K9J 8MS	Peterborough		SR.Planning@ontario.ca

Conservation Authority

First Name	Surname	Organization	Department	Position	Address	City/Town	Province	Postal Code	Telephone	E-Mail
Angela	Wang	Grand River Conservation Authority	Planning and Regulations	Resource Planner	400 Clyde Road. PO BOX 729	Cambridge	ON	N1R 5W6	519-621-2761 ext. 2292	awang@grandriver.ca
Mike	Stone	Hamilton Conservation Authority	Planning, Stewardship and Ecological Services	Senior Manager	838 Mineral Springs Road	Ancaster	ON	L9G4X1	905-525-2181 ext. 133	mike.stone@conservationhamilton.ca; jtweedle@conservationhamilton.ca
Adam	Heizer	Conservation Halton	Planning and Regulations	Regulations Officer	2596 Britannia Road	Burlington	ON	L7P0G3	905-336-1158 ext. 2254	aheizer@hrca.on.ca; agallaugher@hrca.on.ca

Ontario Pipeline Coordinating Committee

First Name	Surname	Department	Position	Address	City/Town	Province	Postal Code	Telephone	E-Mail	CC List
Zora	Crnojacki	Ontario Energy Board	Sr. Advisor, Natural Gas Applications	2300 Younge Street, PO Box 2319	Toronto	ON	M4P 1E4	416-440-8104	OPCC.Chair@oeb.ca	
Randy	Doradat	Ontario Energy Board	Advisor, Natural Gas Applications	2300 Younge Street, PO Box 2319	Toronto	ON	M4P 1E4	437-880-8925	OPCC.Chair@oeb.ca	
Ken	Mott	Ministry of Agriculture, Food & Agribusiness	Rural Planner	1 Stone Road West, 3rd Floor SE	Guelph	ON	N1G 4Y2	613-290-9112	omafra.eanotices@ontario.ca	
Jackson	Kaufman	Ministry of Citizenship and Multiculturalism	Heritage Planner	400 University Avenue, 5th floor	Toronto	ON	M7A 2R9	613-242-3743	jackson.kaufman@ontario.ca	heritage@ontario.ca james.hamilton@ontario.ca; anastasia.abrazhevich@ontario.ca
Marc	Boucher	Ministry of Energy	Senior Policy Advisor, Indigenous Energy Policy Unit	77 Grenville Street, 6th floor	Toronto	ON	M7A 1B3	416-419-3899	Marc.Boucher@Ontario.ca	shannon.mccabe@ontario.ca
Jake	Noordhof	Ministry of Environment, Conservation and Parks, Environmental Services Environmental Assessment Branch	Manager	135 St. Clair Avenue West, 1st floor	Toronto	ON	M4V 1P5	647-961-4850	jake.noordhof@ontario.ca	sourceprotectionscreening@ontario.ca eanotification.swregion@ontario.ca
Nick	Cole	Infrastructure Ontario	Environmental Manager	2001 - 1 Dundas Street West	Toronto	ON	M5G 2L6	647-264-4499	nick.cole@infrastructureontario.ca	
Carly	Basu	Ministry of Municipal Affairs and Housing Office, Central Municipal Services Office	Manager	777 Bay St, 16th Floor	Toronto	ON	M7A 2J3		Carly.Basu@ontario.ca	
To Whom It May Concern		Ministry of Natural Resources and Forestry,		300 Water Street, 3rd floor south	Peterborough	ON	K9J 3C7		Environmental.Planning.Team@ontario.ca	

First Name	Surname	Department	Position	Address	City/Town	Province	Postal Code	Telephone	E-Mail	CC List
		Environmental Planning Team								
Andre	Nurgel	Technical Standards and Safety Authority, Fuels Safety Program	Engineering Manager	345 Carlingview Drive	Toronto	ON	M9W 6N9	416-734-3521	anurgel@tssa.org	ryu@tssa.org
Daniel	Prelipcean	Ministry of Transportation, Corridor Management Office	Senior Project Manager	301 St. Paul Street	St. Catharines	ON	L2R 7R4	289-407-4238	daniel.prelipcean@ontario.ca	Alicia.Edwards@ontario.ca

Municipal

First Name	Surname	Title	Agency	Department	Address	City/Town	Province	Postal Code	Telephone	E-Mail
Anita	Fabac	Director, Planning & Chief Planner	City of Hamilton	Development Planning	71 Main Street West, 2nd Floor	Hamilton	ON	L8P 4Y5	905-546-2424 Ext. 1258	Anita.Fabac@hamilton.ca
To Whom It May Concern		Clerk	City of Hamilton	Office of the City Clerk	71 Main Street West, 1st Floor	Hamilton	ON	L8P 4Y5	905-546-4408	clerk@hamilton.ca
Marnie	Cluckie	City Manager	City of Hamilton	City Manager's Office	71 Main Street West, 2nd Floor	Hamilton	ON	L8P 4Y5	905-546-2424 ext 5778	marnie.cluckie@hamilton.ca
Charlie	Lauricella	Acting Manager	City of Hamilton	Public Works	71 Main Street West, 2nd Floor	Hamilton	ON	L8P 4Y5	905-546-2424 ext 2440	Charlie.Lauricella@hamilton.ca CC: Rich.Shebib@hamilton.ca ; Jason.Peele@hamilton.ca

Indigenous Communities

First Name	Surname	Organization	Position	Phone Number	Address	City	Province	Postal Code	E-Mail
Claire	Sault	Mississaugas of the Credit First Nation	Chief	905-768-1133	2789 Mississauga Rd R.R. #6	Hagersville	ON	N0A 1H0	claires@mncfn.ca CC: Abby.LaForme@mncfn.ca; Craig.King@mncfn.ca; Mark.LaForme@mncfn.ca
Sherri-Lyn	Hill	Six Nations of the Grand River	Chief	519-445-2201	1695 Chiefwood Rd. PO Box 5000	Ohsweken	ON	N0A1M0	LRCS@sixnations.ca
Raechelle	Williams	Haudenosaunee Confederacy Chiefs Council	HDI Environmental Supervisor	519-445-4222	16 Sunrise Court, Suite 600. PO Box 714	Ohsweken	ON	N0A1M0	raechellewilliams@hdi.land CC: info@hdi.land; aaron@detlorlaw.com

Stakeholders

First Name	Surname	Organization	Position	Phone Number	Address	City	Province	Postal Code	E-Mail
Robyn	Rumney	Conservation Ontario	905-895-0716	905-895-0716	120 Bayview Parkway	Newmarket	ON	L3Y 3W3	rrumney@conservationontario.ca
To Whom It May Concern		Gulliver's Lake RV Resort and Campground		905-659-7300	792 Safari Road	Millgrove	ON	L0R 1V0	
To Whom It May Concern		Hydro One Networks Inc.					ON		
Tiffany	Fung	Hydro One Networks Inc.	Real Estate Land Management	(416) 436-9669					Tiffany.Fung@HydroOne.com; Meghan.DiCosimo@hydroone.com
Paul	Nairn	Ontario Federation of Agriculture	Manager - Western Region	519-272-5533	200 Hanlon Creek Boulevard	Guelph	ON	N1C 0A1	paul.nairn@ofa.on.ca
Kate	Belbeck	Ontario Federation of Agriculture	Zone 5- Halton, Hamilton-Wentworth, Niagara	289-687-7477	200 Hanlon Creek Boulevard	Guelph	ON	N1C 0A1	kate.belbeck@ofa.on.ca
Glen	Prevost	Ontario Woodlot Association	Executive Director	613-713-1525	10 Campus Dr. Unit 4	Kemptville	ON	K0G 1J0	glen.prevost@ontariowoodlot.com

First Name	Surname	Organization	Position	Phone Number	Address	City	Province	Postal Code	E-Mail
Jeff	Clark	Pineland Greens Golf Club	Superintendent & General Manager	905-659-1271	722 Safari Road	Millgrove	ON	L0R 1V0	jclark@pinelandgreens.com
Ed	Fothergill	Ponderosa Nature Resort	Fothergill Planning & Development Inc.	905-577-1077			ON		ed@fothergillplanning.ca CC: pnr@ponderosaresort.ca
[redacted]	[redacted]	Resident		[redacted]	[redacted]	[redacted]	ON	[redacted]	[redacted]

B.3 Notice of Upcoming Environmental Study

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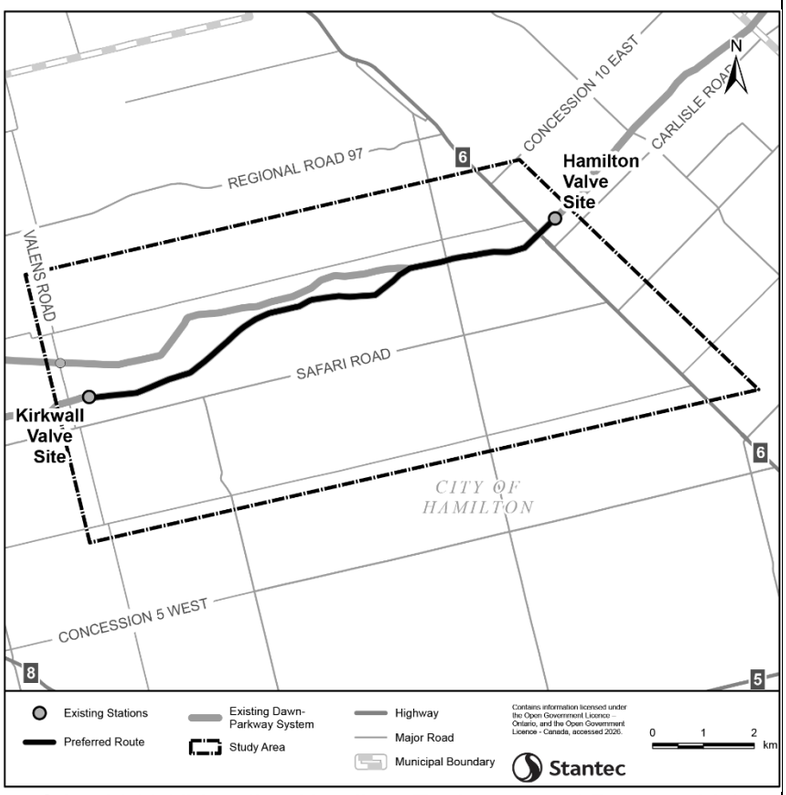
Enbridge Gas Inc.
Notice of Upcoming Environmental Study
Dawn Parkway System Renewal Project: Kirkwall to Hamilton

This notice is to inform you of an upcoming Enbridge Gas Inc. (Enbridge Gas) Environmental Study taking place in southwestern Ontario for a potential project that is in early development called the "Dawn Parkway System Renewal Project." The Dawn Parkway Transmission System was built in the 1950s and is the backbone of the natural gas system supporting energy security and economic competitiveness in Ontario and across Canada. It is part of a broader integrated supply network that serves homes and businesses across 500 municipalities in Ontario, Quebec, the Maritimes, and the Northeastern United States.

Through its integrity management program, Enbridge Gas identified several proactive measures to maintain capacity, safety, and reliability, ranging from targeted segment replacements to broader line upgrades. For this Environmental Study, Enbridge Gas is considering improvements to install new 48-inch diameter natural gas pipeline between its existing Kirkwall Valve Site, located northeast of the intersection of Safari Road and Valens Road and the existing Hamilton Valve Site, located east of Highway 6 and north of Carlisle Road. The proposed pipeline location was determined through a route selection process conducted in 2019 and is generally parallel to the three existing Enbridge Gas pipelines, measuring approximately 10.2 km in length. New permanent easements and temporary working space during construction will be required. The study area, existing infrastructure, and Preferred Route are shown in the figure.



Enbridge Gas has retained a third-party environmental consultant, Stantec Consulting Ltd. (Stantec), to reaffirm the findings of the 2019 Kirkwall to Hamilton Environmental Report which will be added as an addendum and will fulfill the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Projects and Facilities in Ontario, 8th Edition (2023).*

It is anticipated that the Addendum to the Environmental Report will be completed in Q1 2027, after which Enbridge Gas plans to file a Leave to Construct application for the Project with the OEB. The OEB's review and approval is required before the proposed Project can proceed. If approved, construction is anticipated to begin in the spring of 2028.

Enbridge Gas is committed to undertaking consultation and engagement with stakeholders, Indigenous communities, and the public as an integral component of the Environmental Study. Additional details about the Environmental Study and how to become involved during the consultation and engagement process will be provided in future correspondence.

Should you have any questions, comments, or input regarding the Environmental Study, please contact Stantec using the information below. All correspondence will be evaluated and may be considered during the Environmental Study.

Michael Candido
Environmental Scientist
Stantec Consulting Ltd.
Telephone: (519) 585-3439
Email: Kirkwall-HamiltonES@stantec.com

Stantec

ENBRIDGE
Life Takes Energy®

Enbridge
10175 101 St NW
Edmonton, Alberta T5J 0H3
Canada

July 6, 2026

Dear Neighbour,

Re: Enbridge Gas Inc. (Enbridge Gas) – Dawn-Parkway System Renewal

Enbridge Gas is writing to inform you of an upcoming environmental study taking place as part of a potential project called the “Dawn-Parkway System Renewal”. Enbridge Gas is considering improvements to install a new NPS 48 inch diameter natural gas pipeline, between its existing Kirkwall valve site, located northeast of the intersection of Safari Road and Valens Road and the existing Hamilton valve site, located east of Highway 6 and north of Carlisle Road. The proposed pipeline location was determined through a route selection process conducted in 2019, and is generally parallel to the three existing Enbridge Gas pipelines, measuring 10 kilometers in length.

The Dawn Parkway Transmission System is a critical component of Enbridge Gas’s existing natural gas transmission network and one of the most important natural gas transportation routes in Ontario. Its continued operation helps ensure a steady and reliable supply of natural gas for homes, businesses, and industry. The system connects the Dawn Operations Centre in St. Clair Township, the Parkway Compressor Station in the City of Mississauga, and the Kirkwall Valve Site in the City of Hamilton, and forms part of the broader transmission network serving Ontario.

This potential project is in the early stages of development, and the exact routing and footprint will be determined as the detailed design and environmental studies progress. For more information, please refer to the ‘Notice of Upcoming Environmental Study’ enclosed with this letter.

We are committed to engaging openly and respectfully with landowners and stakeholders within the communities we operate. Where potential land access or routing of the pipeline is proposed, we will be reaching out to you in the near future. A land representative will be contacting you on our behalf to introduce themselves, provide information and answer any questions you may have regarding land access if required for upcoming survey work and environmental studies prior to their commencement. Their contact details are also provided in this letter for your reference.

We will be hosting upcoming Information Sessions and will provide you with more information regarding the commencement of environmental studies very shortly.

Should you have any questions regarding this letter or at any time, please contact:

Chad Brown - Field Land Agent, AiM Land Services

Phone Number: 519-281-1098

Email: chad.brown@aimlandandenviro.ca

Sincerely,



Erin Whillans

Sr Advisor, Lands and Right of Way

July 6, 2026

«FIRST_NAME» «SURNAME», «POSITION»
«ORGANIZATION»
«DEPARTMENT»
«ADDRESS»
«CITYTOWN» «PROVINCE» «POSTAL_CODE»
«EMAIL»

Dear «FIRST_NAME» «SURNAME»,

Reference: Enbridge Gas – Dawn Parkway System Renewal Project: Kirkwall to Hamilton: Notice of Upcoming Environmental Study

Enbridge Gas Inc. (Enbridge Gas) will be completing an Environmental Study taking place in southwestern Ontario for a potential project that is in early development called the "Dawn Parkway System Renewal Project." For this Environmental Study, Enbridge Gas is considering improvements to install new 48- inch diameter natural gas pipeline between its existing Kirkwall Valve Site, located northeast of the intersection of Safari Road and Valens Road and the existing Hamilton Valve Site, located east of Highway 6 and north of Carlisle Road. The Preferred Route was determined through a route selection process conducted in 2019 and is generally parallel to the three existing Enbridge Gas pipelines, measuring 10.2 km in length.

Enbridge Gas has retained a third-party environmental consultant, Stantec Consulting Ltd. (Stantec), to complete an Environmental Study for the Project, which will fulfill the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Projects and Facilities in Ontario, 8th Edition (2023).*

Enbridge Gas is committed to undertaking consultation and engagement with stakeholders, Indigenous communities, and the public as an integral component of the Environmental Study. Additional details about the Environmental Study and how to become involved during the consultation and engagement process will be provided in future correspondence.

Should you have any questions, comments, or input regarding the Environmental Study, please contact Stantec using the information provided in the attached Notice.

Regards,

Michael Candido, B.Sc. (Env.), CAN-CISEC
Stantec Consulting Ltd.
Environmental Scientist
Assessment and Permitting
Phone: (519) 585-3439

Attachment: Notice of Upcoming Environmental Study

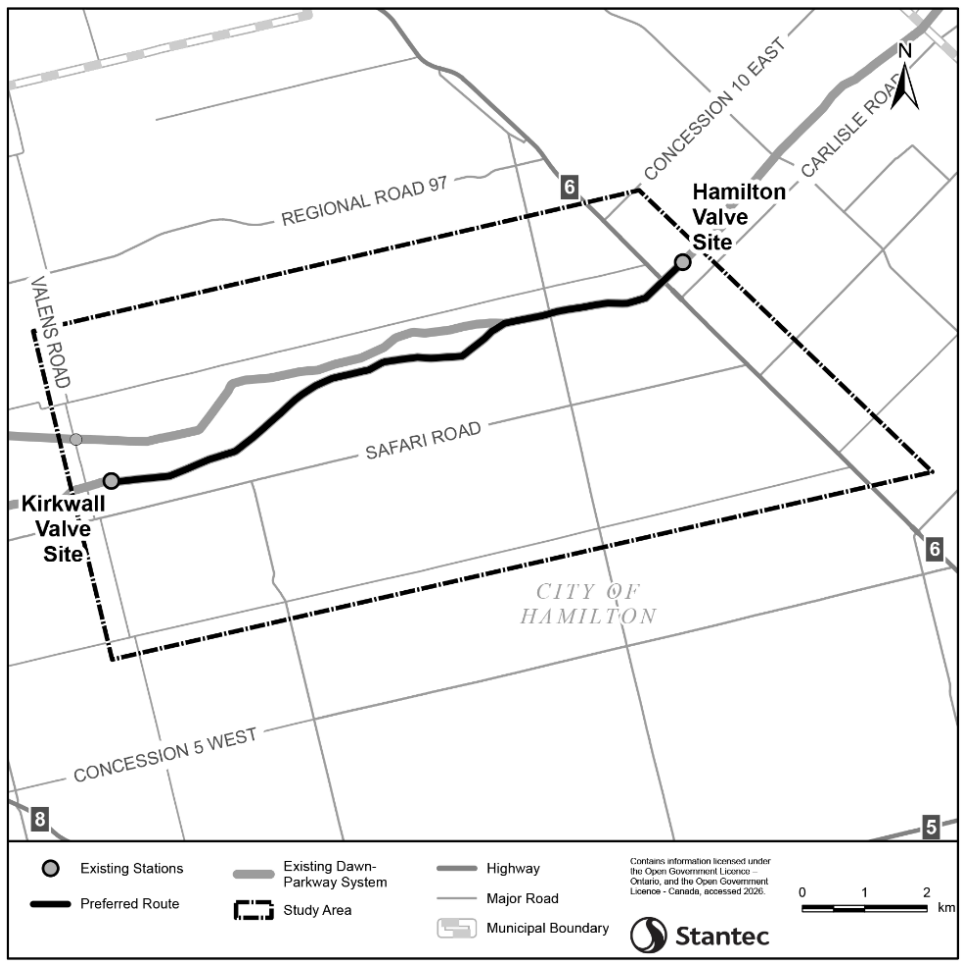
B.4 Notice of Environmental Study Commencement

DRAFT

Enbridge Gas Inc.
Notice of Environmental Study Commencement and Information Session
Dawn Parkway System Renewal Project: Kirkwall to Hamilton

Enbridge Gas Inc. (Enbridge Gas) will be conducting an Environmental Study for the Dawn Parkway System Renewal Project. Through its integrity management program, Enbridge Gas identified several proactive measures to maintain capacity, safety, and reliability along the Dawn Parkway Transmission System, ranging from targeted segment replacements to broader line upgrades.

For the Environmental Study, Enbridge Gas is considering installing a new 48- inch diameter natural gas pipeline between its existing Kirkwall Valve Site, located northeast of the intersection of Safari Road and Valens Road and the existing Hamilton Valve Site, located east of Highway 6 and north of Carlisle Road. The proposed pipeline location was determined through a route selection process conducted in 2019 and is generally parallel to the three existing Enbridge Gas pipelines, measuring approximately 10.2 km in length. New permanent easements and temporary working space during construction will be required.



Consultation and engagement with Indigenous communities, landowners, government agencies, the local municipality, and other interested persons is an integral component of the Project's planning process. As such, an Information Session will be held:

In-Person Information Session:
Millgrove Community Centre
August 25, 2026, 5:00 PM to 8:00 PM
855 Millgrove Side Road
Millgrove, ON L0R 1V0

Virtual Information Session (Online):
August 17 to August 31, 2026
https://www.solutions.com/Kirkwall-HamiltonES

A copy of the consultation materials from the In-Person Information Session will be available for viewing on the Enbridge Gas project webpage provided below. A questionnaire will also be available as part of the Information Session, and you will have the opportunity to provide comments or ask questions about the proposed Project. Input received may be used to develop site-specific environmental protection and mitigation measures for the Project. Input and comments about the Project are requested by September 15, 2026.

Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to reaffirm the findings of the 2019 Kirkwall to Hamilton Environmental Report and prepare an Addendum that will fulfill the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Projects and Facilities in Ontario, 8th Edition (2023).* It is anticipated that the Addendum to the Environmental Report will be completed in Q1 2027, after which Enbridge Gas plans to file a Leave to Construct application for the Project with the OEB. The OEB's approval would be required before construction of the proposed Project can proceed. If approved, construction is anticipated to begin in the spring of 2028.

For any questions, comments, or input regarding the Environmental Study, please contact:

Michael Candido
Environmental Scientist
Stantec Consulting Ltd.
Telephone: (519) 585-3439
Email: Kirkwall-HamiltonES@stantec.com
Project Webpage: Enbridgegas.com/dawnparkwayrenewal

Stantec

ENBRIDGE
Life Takes Energy

Enbridge Gas Inc.
50 Keil Drive North
Chatham, ON N7M 5M1

August 6, 2026

Dear Neighbour,

Re: Enbridge Gas Inc. (Enbridge Gas) – Dawn Parkway System Renewal Project: Kirkwall to Hamilton

Enbridge Gas is writing to inform you that we will be conducting an Environmental Study for the Dawn Parkway System Renewal Project. Enbridge Gas is considering improvements to install a new NPS 48 inch diameter natural gas pipeline, between its existing Kirkwall valve site, located northeast of the intersection of Safari Road and Valens Road and the existing Hamilton valve site, located east of Highway 6 and north of Carlisle Road. The proposed pipeline location was determined through a route selection process conducted in 2019, and is generally parallel to the three existing Enbridge Gas pipelines, measuring approximately 10.6 kilometers in length.

The Dawn Parkway Transmission System is a critical component of Enbridge Gas's existing natural gas transmission network and one of the most important natural gas transportation routes in Ontario. Its continued operation helps ensure a steady and reliable supply of natural gas for homes, businesses, and industry. The system connects the Dawn Operations Centre in St. Clair Township, the Parkway Compressor Station in the City of Mississauga, and the Kirkwall Valve Site in the City of Hamilton, and forms part of the broader transmission network serving Ontario.

This potential project is in the early stages of development, and the exact routing and footprint will be determined as the detailed design and environmental studies progress. As the field studies commence, you may notice an increased presence of field representatives in your community.

We are committed to engaging openly and respectfully with landowners and stakeholders within the communities we operate. Where potential land access or routing of the pipeline is proposed, we will be reaching out to you in the near future. A land representative will be in contact with you regarding land access if required for upcoming survey work and environmental studies prior to their commencement. Their contact details are also provided in this letter for your reference.

The details for the upcoming Information Session are provided below:

In-Person Information Session:

Millgrove Community Centre

August 25, 5:00 PM to 8:00 PM

855 Millgrove Side Rd

Hamilton, ON

Virtual Information Session (Online):

August 17 to August 31, 2026

https://www.solutions.ca/Kirkwall-HamiltonES

Should you have any questions regarding this letter or about the Dawn Parkway System Renewal Project, please contact:

Chad Brown - Field Land Agent, AiM Land Services

Phone Number: 519-281-1098

Email: chad.brown@aimlandandenviro.ca

For more information, please refer to the 'Notice of Environmental Study Commencement and Information Session' enclosed with this letter, or visit our Project Website at https://www.enbridgegas.com/about-enbridge-gas/projects.

Sincerely,



Erin Whillans

Sr Advisor, Lands and Right of Way

Stantec Consulting Ltd.
100-300 Hagey Boulevard
Waterloo, ON N2L 0A4

August 4, 2026

FIRST NAME LAST NAME
TITLE
ORGANIZATION
DEPARTMENT
ADDRESS
CITY, POSTAL CODE
EMAIL

SENT VIA EMAIL

Dear FIRST NAME LAST NAME,

Reference: Enbridge Gas Inc. – Dawn Parkway System Renewal Project: Kirkwall to Hamilton
Notice of Environmental Study Commencement and Information Sessions

Enbridge Gas Inc. (Enbridge Gas) will be conducting an Environmental Study for the Dawn Parkway System Renewal Project: Kirkwall to Hamilton. Through its integrity management program, Enbridge Gas identified several proactive measures to maintain capacity, safety, and reliability along the Dawn Parkway Transmission System, ranging from targeted segment replacements to broader line upgrades.

For the Environmental Study, Enbridge Gas is considering installing a new 48 - inch diameter natural gas pipeline between its existing Kirkwall Valve Site, located northeast of the intersection of Safari Road and Valens Road and the existing Hamilton Valve Site, located east of Highway 6 and north of Carlisle Road. The proposed pipeline location was determined through a route selection process conducted in 2019 and is generally parallel to three existing Enbridge Gas pipelines, measuring approximately 10.2 km in length. New permanent easements and temporary working space during construction will be required.

Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to reaffirm the findings of the 2019 Kirkwall to Hamilton Environmental Report and prepare an Addendum that will fulfill the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Projects and Facilities in Ontario, 8th Edition (2023).* It is anticipated that the Addendum to the Environmental Report will be completed in Q1 2027, after which Enbridge Gas plans to file a Leave to Construct application for the Project with the OEB. The OEB's approval is required before construction of the proposed Project can proceed. If approved, construction is anticipated to begin in the spring of 2028.

As an agency with jurisdiction or potential interest in developments in the area, you are invited to provide or coordinate comments regarding the proposed Project. Specifically, Stantec is seeking information regarding planning principles or guidelines implemented by your agency that may affect the construction, and operation of the proposed Project. Stantec is also seeking the collection of primary and secondary data to reaffirm and update (as required) the previously compiled environmental and socio-economic inventory. To support the quality of the assessment process, we also request that you share information regarding other proposed developments in the Study Area. This information will be incorporated into the Environmental

Reference: **Enbridge Gas Inc. – Dawn Parkway System Renewal Project: Kirkwall to Hamilton Notice of Environmental Study Commencement and Information Sessions**

Study and related report as a component of the cumulative effects assessment. Stantec will complete an Addendum to the 2019 Environmental Report to reaffirm previously completed efforts. Please contact us to discuss the most efficient way to obtain this information.

Engagement with Indigenous communities, landowners, government agencies, the local municipality, members of the public, and other interested persons is an integral component of the planning process. For this Project, both an In-Person Information Session and Virtual Information Session will be held. Input received will be used to reaffirm the Preferred Route and to develop site-specific environmental protection or mitigation measures for this Project.

In-Person Information Session:
Millgrove Community Centre
August 25, 5:00 PM to 8:00 PM
855 Millgrove Side Rd
Millgrove, ON L0R 1V0

Virtual Information Session (online):
August 17- August 31, 2026
https://www.solutions.com/Kirkwall-HamiltonES

A questionnaire will be available as part of the Information Sessions, and you will have the ability to submit comments and/or questions about the proposed Project.

We kindly request that your agency provide any initial input and comments regarding the Project by September 15, 2026. Please let us know if you are unable to respond by this date but are interested in participating in the consultation process for the Project.

If you have questions or concerns regarding the Project, please do not hesitate to email the Project team at **Kirkwall-HamiltonES@stantec.com** or contact the undersigned.

Regards,

Stantec Consulting Ltd.

Mike Candido, B.Sc. (Env.), CAN-CISEC
Stantec Consulting Ltd.
Environmental Scientist
Assessment and Permitting
Phone: (519) 585-3439

Attachment: Notice of Environmental Study Commencement

Cc: Ryan Park, Specialist, Environment, Enbridge Gas Inc.

Stantec Consulting Ltd.
100-300 Hagey Boulevard
Waterloo, ON N2L 0A4

August 10, 2026

«NAMES»
«ORGANIZATION»
«ADDRESS»
«CITY» «PROVINCE» «POSTAL_CODE»

CORRECTION

Dear «TITLE» «NAMES»,

Reference: Enbridge Gas Inc. – Dawn Parkway System Renewal Project: Kirkwall to Hamilton Notice of Environmental Study Commencement and Information Sessions

Please note that materials dated August 4, 2026 were previously distributed that included the incorrect web address to access the Virtual Information Session. **Please disregard the previous Notice and Letter and use the attached corrected materials.** The correct web address is https://www.solutions.ca/Kirkwall-Hamilton ES, which can be used to access the online materials from August 17, 2026 to August 31, 2026.

If you have questions or concerns regarding the Project, please do not hesitate to email the Project team at **Kirkwall-HamiltonES@stantec.com** or contact the undersigned. Thank you for your understanding.

Sincerely,

Stantec Consulting Ltd.

Michael Candido, B.Sc. (Env.), CAN-CISEC
Stantec Consulting Ltd.
Environmental Scientist
Assessment and Permitting
Phone: (519) 585-3439

Attachment: **CORRECTED Notice of Environmental Study Commencement**
CORRECTED Enbridge Gas Inc. Landowner Letter

Cc: Ryan Park, Specialist, Environment, Enbridge Gas Inc.

Enbridge Gas Inc.
Notice of Environmental Study Commencement and Information Session
Dawn Parkway System Renewal Project: Kirkwall to Hamilton

Enbridge Gas Inc. (Enbridge Gas) will be conducting an Environmental Study for the Dawn Parkway System Renewal Project. Through its integrity management program, Enbridge Gas identified several proactive measures to maintain capacity, safety, and reliability along the Dawn Parkway Transmission System, ranging from targeted segment replacements to broader line upgrades.

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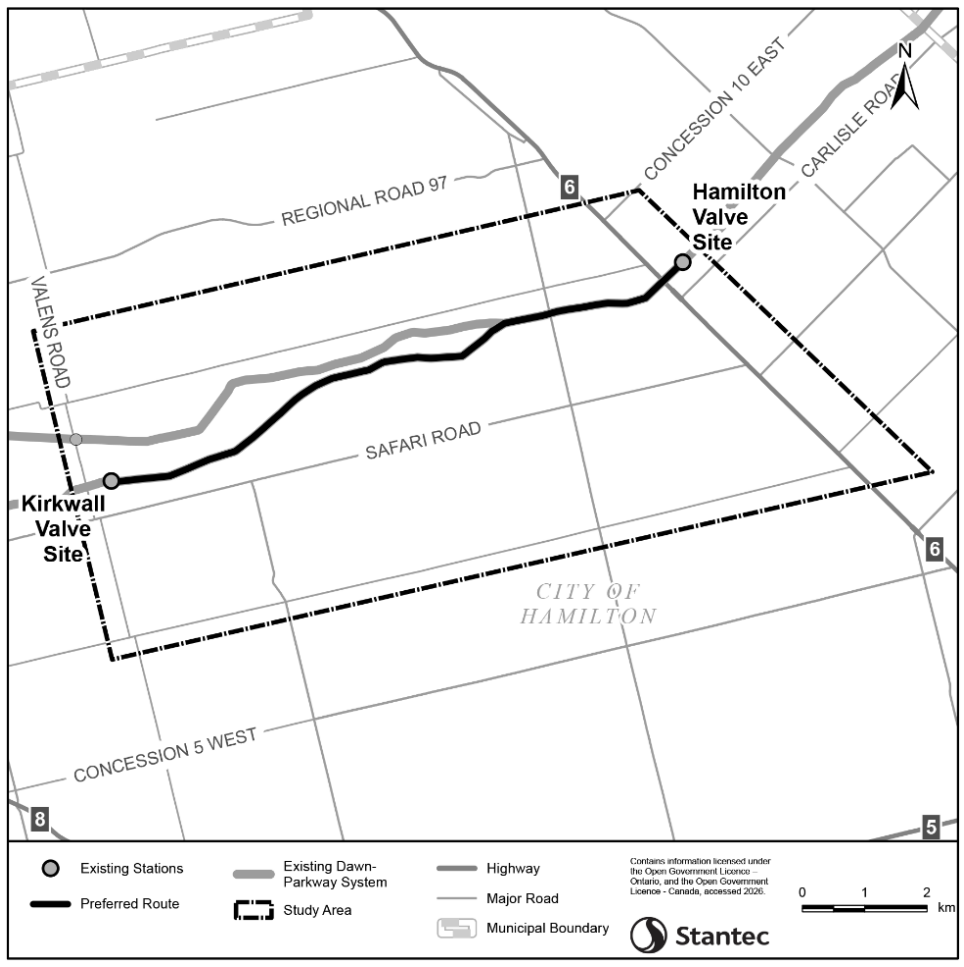

Consultation and engagement with Indigenous communities, landowners, government agencies, the local municipality, and other interested persons is an integral component of the Project's planning process. As such, an Information Session will be held:

In-Person Information Session:
Millgrove Community Centre
August 25, 5:00 PM to 8:00 PM
855 Millgrove Side Road
Millgrove, ON L0R 1V0

Virtual Information Session (Online):
August 17 to August 31, 2026
https://www.solutions.ca/Kirkwall-HamiltonES

A copy of the consultation materials from the In-Person Information Session will be available for viewing on the Enbridge Gas project webpage provided below. A questionnaire will also be available as part of the Information Session, and you will have the opportunity to provide comments or ask questions about the proposed Project. Input received may be used to develop site-specific environmental protection and mitigation measures for the Project. Input and comments about the Project are requested by September 15, 2026.

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For any questions, comments, or input regarding the Environmental Study, please contact:

Michael Candido
Environmental Scientist
Stantec Consulting Ltd.
Telephone: (519) 585-3439
Email: Kirkwall-HamiltonES@stantec.com
Project Webpage: Enbridgegas.com/dawnparkwayrenewal

Stantec

ENBRIDGE
Life Takes Energy

B.5 Newspaper Notice Tear Sheets

DRAFT



Marc Harvey lives at Verolen's Rest Home on Catharine Street South in Hamilton's Corktown neighbourhood. "Every night, I say good night to Billy and he says good night back," he says of his roommate.

TEVIAH MORO PHOTOS/ THE HAMILTON SPECTATOR

Homes

CONTINUED FROM A9

in practice, she also suggests.

Most RCFs, which operate in large, old homes mostly in Hamilton's inner city, aren't equipped for individual meal preparation in self-contained apartments, for instance.

"It sounds great in theory, but if you actually are familiar with the conditions of RCFs, it's something that really doesn't seem tangible," Andersson said.

In presenting the capacity scenarios, the KPMG report also notes Hamilton "maintains a broader portfolio of housing units" outside of RCFs and expects to soon add supportive housing to its stock.

City staff, meanwhile, have emphasized residents, who have rights under the Residential Tenancies Act, won't be abruptly uprooted from RCFs as the network transformation recalibrates to focus on homelessness advances.

As vacancies come up, those spaces will transition to the new operating model, Michelle Baird, housing services director, recently told council, describing a staged implementation with more consultation ahead.

"At this point in time, we're not planning to decrease the number of beds."

Rather, the system will have "different numbers of beds at the different levels of service."

'He says good night back'

Different but similar.

That could be the motto of Verolen's Rest Home, an RCF just south of downtown.

On a recent evening, adults with developmental disabilities sit in a living room while a baseball game plays on TV after dinner.

But Marc Harvey is in his room, flipping through a binder with his hockey cards and lists of songs and movies he likes.

Harvey, 73, says he entered the system after his mother died in her 90s.

The transition from their place in Stoney Creek was difficult, but life in the Catharine Street South residence in Corktown is "not bad," he says.



A shared bedroom at Faith Hope Manor on John Street North in Hamilton.

Harvey shares his room with another older man who has lived there for decades.

"It's someone to talk to," he offers with a smile. "Every night, I say good night to Billy and he says good night back."

That's the sort of harmony operator Yvonne Dunbar says she strives to achieve, noting the home's 13 residents are "on the same level."

"I'm not just trying to fill a bed. I will meet and interview them first to see if they will fit into the fabric of the home," says Dunbar, who also owns Faith Hope Manor.

But she and other operators are anxious as the city advances its plans, which they predict will not improve services and lead to fewer homes for vulnerable residents.

For years, operators have argued subsidies for their homes have been insufficient to keep up with rising operating costs, let alone meet increased service demands.

And, increasingly, violence and conflict have become part of their job as RCFs struggle to accommodate residents with complex mental-health and addiction problems.

"As an operator, it's dangerous," said Calvin Cain at his Sunrise Lodge on Park Street South in the Durand neighbourhood.

That also makes it tough to recruit and retain staff, said Cain who, wearing scrubs, explained he has to be a hands-on owner to keep his RCF running.

But he figures time is running out for already squeezed and exhausted operators. He expects some will sell their buildings once the market rebounds.

"Folks who are sitting on the fence now, as soon as this thing really starts to materialize and they see where they stand in terms of how they can manage their home and business, they're going to opt out."

'A false trade-off'

The RCF system can be improved without serving fewer people.

That's what Chi-Ling Joanna Sinn, a health systems researcher, recently told city officials.

The city's plan includes "important steps forward," such as increasing the personal needs allowance and recognizing more tailored support beyond meal preparation and housekeeping is necessary.

"But it also begs the question how do we fund the additional staff needed to make this model work?"

For instance, placing a new case

SEE HOMES, A11

Enbridge Gas Inc.
Notice of Environmental Study Commencement and Information Session
Dawn Parkway System Renewal Project: Kirkwall to Hamilton

Enbridge Gas Inc. (Enbridge Gas) will be conducting an Environmental Study for the Dawn Parkway System Renewal Project. Through its integrity management program, Enbridge Gas identified several proactive measures to maintain capacity, safety, and reliability along the Dawn Parkway Transmission System, ranging from targeted segment replacements to broader line upgrades.

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Consultation and engagement with Indigenous communities, landowners, government agencies, the local municipality, and other interested persons is an integral component of the Project's planning process. As such, an Information Session will be held:

In-Person Information Session:
Millgrove Community Centre
August 25, 5:00 PM to 8:00 PM
855 Millgrove Side Road
Millgrove, ON L0R 1V0

Virtual Information Session (Online):
August 17 to August 31, 2026
https://www.solutions.ca/Kirkwall-HamiltonES

A copy of the consultation materials from the In-Person Information Session will be available for viewing on the Enbridge Gas project webpage provided below. A questionnaire will also be available as part of the Information Session, and you will have the opportunity to provide comments or ask questions about the proposed Project. Input received may be used to develop site-specific environmental protection and mitigation measures for the Project. Input and comments about the Project are requested by September 15, 2026.

Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to reaffirm the findings of the 2019 Kirkwall to Hamilton Environmental Report and prepare an Addendum that will fulfill the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Projects and Facilities in Ontario, 8th Edition (2023)*. It is anticipated that the Addendum to the Environmental Report will be completed in Q1 2027, after which Enbridge Gas plans to file a Leave to Construct application for the Project with the OEB. The OEB's approval is required before construction of the proposed Project can proceed. If approved, construction is anticipated to begin in the spring of 2028.

For any questions, comments, or input regarding the Environmental Study, please contact:

Michael Candido
Environmental Scientist
Stantec Consulting Ltd.
Telephone: (519) 585-3439
Email: Kirkwall-HamiltonES@stantec.com
Project Webpage: Enbridgegas.com/dawnparkwayrenewal

Stantec

ENBRIDGE
Life Takes Energy

4:06
thespec.com/new
31
HAMILTON THE SPECTATOR
Subscribe Now
Hamilton's ninth homicide of the year

Flamborough Public Notices

Stantec

FLAMBOROUGH PUBLIC NOTICES

PUBLIC NOTICE

Aug 8, 2026

Enbridge Gas Inc. Notice of Environmental Study Commencement and Information Session Dawn Pa...

Helping you keep more of what's yours
Learn more
Ontario
Paid for by the Government of Ontario

B.6 Information Session Materials

DRAFT



Dawn Parkway System Renewal Project: Kirkwall to Hamilton

Information Session: Thursday, August 25, 2026

Location: Millgrove Community Centre
855 Millgrove Side Rd, Millgrove, ON L0R 1V0

Time: 5:00 PM to 8:00 PM

Stantec

ENBRIDGE
Life Takes Energy™

Dawn Parkway System Renewal Project: Kirkwall to Hamilton Information Session



Enbridge Gas' Commitment

Enbridge Gas is dedicated to engaging with Indigenous communities, landowners, agencies, interest groups, and community members. They commit to providing up-to-date information in an open, honest, and respectful manner while carefully considering your input. With over 3.9 million residential, commercial, and industrial customers, Enbridge Gas is committed to delivering natural gas safely and reliably. Environmental stewardship is also a top priority for Enbridge Gas, and they conduct their operations in an environmentally responsible manner.

Stantec

ENBRIDGE
Life Takes Energy™

Dawn Parkway System Renewal Project: Kirkwall to Hamilton Information Session



Purpose of this Information Session

- Consult with Indigenous communities, and engage with landowners, members of the public and regulatory authorities regarding the proposed pipeline route, potential impacts, and proposed mitigation measures.
- Provide an opportunity for these individuals to review the proposed Project, ask any questions, and/or provide comments to representatives from Enbridge Gas and Stantec.

Stantec

ENBRIDGE
Life Takes Energy™

Dawn Parkway System Renewal Project: Kirkwall to Hamilton Information Session



Enbridge Gas' Engagement with Indigenous Peoples

Enbridge recognizes the diversity of Indigenous peoples who live where we work and operate. We understand that certain laws and policies have had destructive impacts on Indigenous cultures, languages, and the social and economic well-being of Indigenous peoples. We also recognize the importance of reconciliation between Indigenous peoples and broader society. We are committed to building positive and sustainable relationships with Indigenous peoples based on trust and respect and are focused on finding common goals through open dialogue.

The Indigenous engagement program is based on adherence to the OEB's Guidelines and Enbridge Inc.'s company-wide Indigenous Peoples Policy, which Enbridge Gas follows. Enbridge's Indigenous Peoples Policy lays out key principles for establishing relationships with Indigenous groups, including:

- Recognizing the importance of the United Nations Declaration on the Rights of Indigenous Peoples in the context of existing Canadian law;
- Recognizing the legal and constitutional rights possessed by Indigenous peoples in Canada and the importance of the relationship between Indigenous peoples and their traditional lands and resources;
- Engaging early to achieve meaningful relationships with Indigenous groups by providing timely exchanges of information, understanding and addressing Indigenous project-specific concerns, and ensuring ongoing dialogue regarding its projects, their potential impacts and benefits; and
- Aligning Enbridge's interests with those of Indigenous peoples through meaningful, direct Indigenous economic activity in projects corresponding to community capacity and project needs, where possible.

Stantec

ENBRIDGE
Life Takes Energy™

Dawn Parkway System Renewal Project: Kirkwall to Hamilton Information Session



Project Overview

- Enbridge Gas is considering installing a new 48-inch diameter natural gas pipeline between its existing Kirkwall Valve Site, located northeast of the intersection of Safari Road and Valens Road and the existing Hamilton Valve Site, located east of Highway 6 and north of Carlisle Road. The proposed pipeline location was determined through a route selection process conducted in 2019 and is generally parallel to three existing Enbridge Gas pipelines, measuring approximately 10.2 km in length. New permanent easements and temporary working space during construction will be required.
- The Project is driven by the need to restore capacity, due to identified integrity features, and to ensure the continued safe and reliable operation of the existing system.

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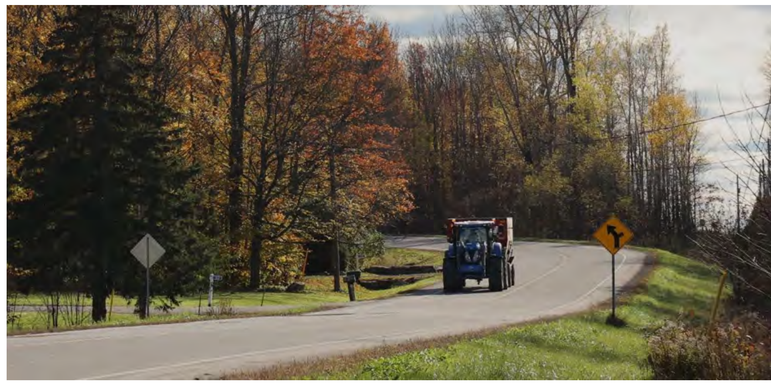

Environmental Study Process

As part of the planning process, Enbridge Gas has retained Stantec to undertake an Environmental Study for the project.

The Environmental Study will fulfill the requirements of the Ontario Energy Board's (OEB) "*Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Projects and Facilities in Ontario, 8th Edition (2023)".*

The Study will:

- Undertake engagement to understand the views of interested and potentially affected parties.
- Consult with Indigenous communities to understand interests and potential impacts.
- Be conducted during the earliest phase of the Project.
- Identify potential impacts of the Project.
- Develop environmental mitigation and protective measures to avoid or reduce potential impacts.
- Develop an appropriate environmental inspection, monitoring, and follow-up program.

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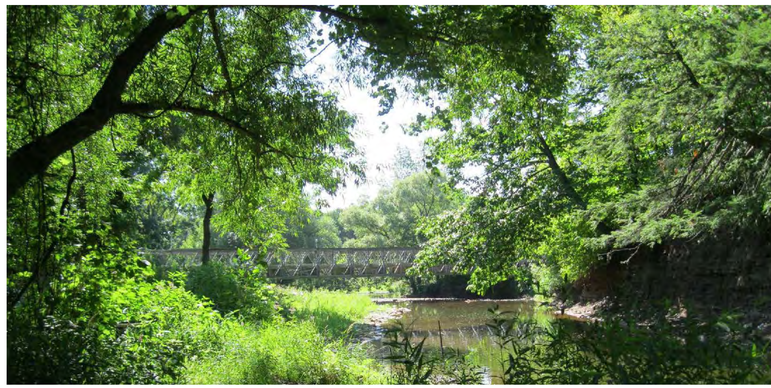

Route Identification

- In June 2016, Stantec conducted a site visit and determined a variety of pipeline routing constraints were present: developed areas (campgrounds, communities and homes), topography (i.e., slope, drumlins), roads, and environmental features such as waterbodies, watercourses, wetlands, and wooded areas.
- Possible pipeline routes were assessed through the routing evaluation methodology which considers routing objectives, existing linear infrastructure, constructability, socio-economic, and environmentally sensitive features. As a result, two potential routes were established as Route A and Route B.

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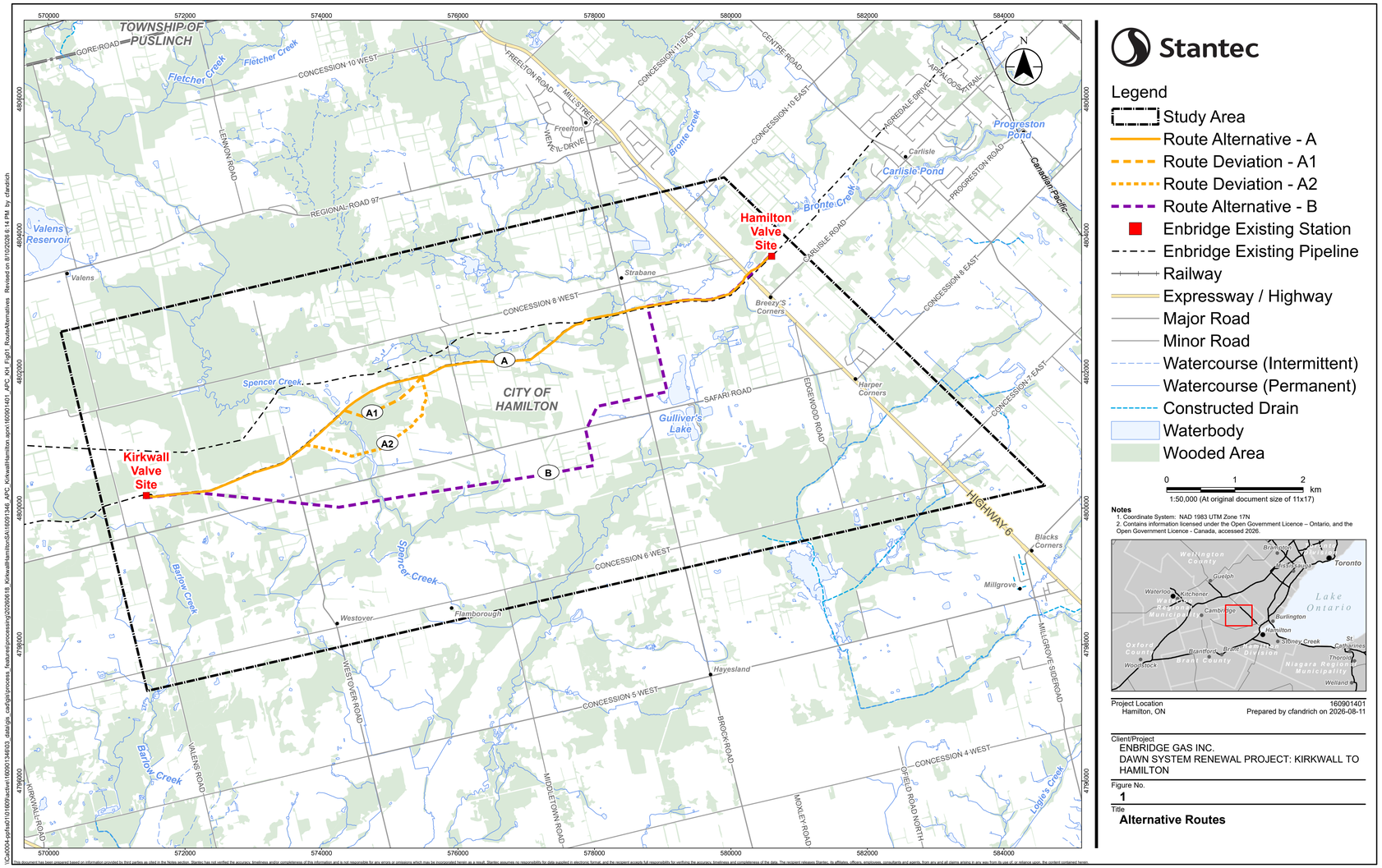
Route Alternatives

- Route A was identified as an existing southern pipeline easement that travelled through the Antrim Glen and Ponderosa Nature Resort communities.
- To avoid these communities, Route A1 and Route A2 were developed.
- Route B was identified and parallels a combination of an existing Hydro One corridor and lot lines. A portion of Route B does not follow the Hydro One corridor and lot lines so as to avoid sensitive environmental features.



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Legend

- Study Area
- Route Alternative - A
- Route Deviation - A1
- Route Deviation - A2
- Route Alternative - B
- Enbridge Existing Station
- Enbridge Existing Pipeline
- Railway
- Expressway / Highway
- Major Road
- Minor Road
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Constructed Drain
- Waterbody
- Wooded Area

0 1 2 km
1:50,000 (At original document size of 11x17)

Notes
1. Coordinate System: NAD 1983 UTM Zone 17N
2. Contains information licensed under the Open Government Licence – Ontario, and the Open Government Licence - Canada, accessed 2026.

Project Location
Hamilton, ON

160901401
Prepared by cfandrich on 2026-08-11

Client/Project
ENBRIDGE GAS INC.
DAWN SYSTEM RENEWAL PROJECT: KIRKWALL TO HAMILTON

Figure No.
1

Title
Alternative Routes

\\Cal2004-pfs\ad101609\active\160901346\03_data\gis_cad\gis\process_features\processing\20260618_KirkwallHamiltonSA\160901346_APC_KirkwallHamilton.aprx\160901401_APC_Kh1_Fig01_RouteAlternatives_Revised on 8/10/2026 6:14 PM by cfandrich

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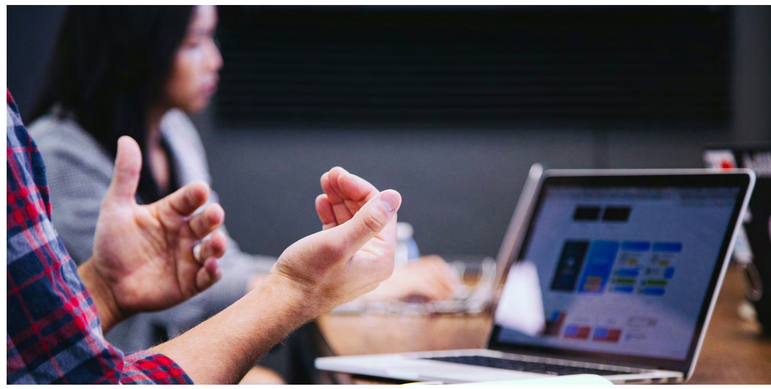

Selection of the Preferred Route

- A comparative evaluation found both Route A and Route B to be environmentally acceptable; however, Route A was preferred because it offers greater operational and construction efficiencies by paralleling and overlapping an existing Enbridge Gas pipeline easement. This reduces impacts on agricultural lands, residential properties, and natural heritage features. As a result, Route A was selected as the Preliminary Preferred Route.
- Input on the Preliminary Preferred Route, route deviations and the alternative route was sought through consultation. Landowners along Route deviations A1 and A2 expressed concerns about impacts on local businesses and tree removal. Landowners along Route A2 expressed concerns due to slope/topography, the crossing of Spencer Creek and tree removal. Feedback on the Preliminary Preferred Route from the community of Antrim Glen included access to residences during construction, access/use of trails during construction, and tree removal.
- The majority of feedback received favoured the Preliminary Preferred Route. As such the Preliminary Preferred Route was confirmed as the Preferred Route.

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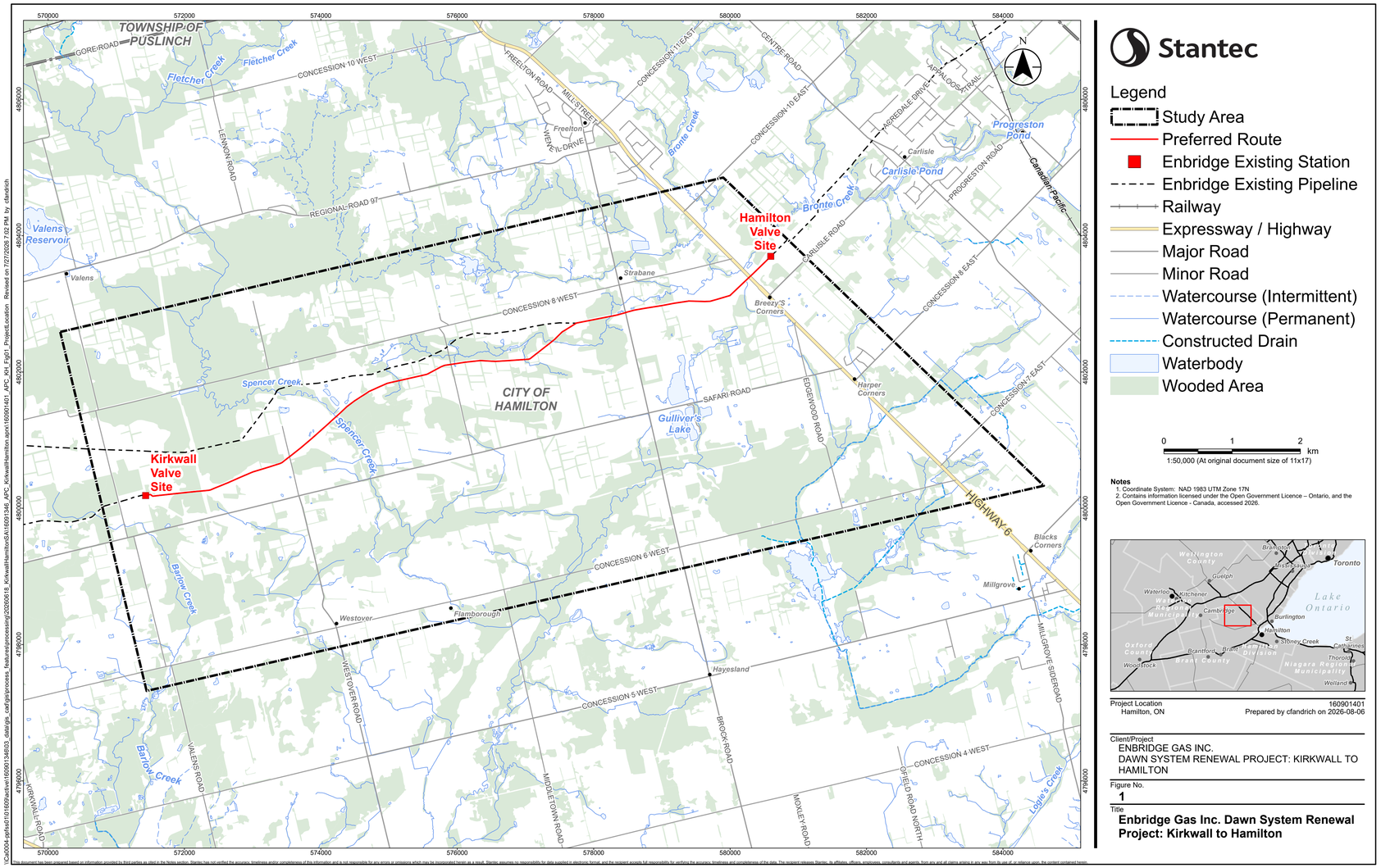
Preferred Route

- This map does not represent the final Project scope/ design. Enbridge Gas will undertake detailed design to determine the exact location of the running line, permanent easement, temporary land use requirements and road/ watercourse crossing methods. Detailed design will also be influenced by supplemental studies (including environmental studies) and site-specific requests from Indigenous communities, landowners and agencies.
- An interactive map of the preferred route can be accessed at: https://www.solutions.ca/Kirkwall-HamiltonES



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OEB Review and Approval Process

An Addendum to the 2019 Environmental Report (ER) for the study is scheduled to be completed in Q1 2027. Once complete, Enbridge Gas plans to file a Leave to Construct (LTC) application with the Ontario Energy Board (OEB) regarding the Project. The LTC application will include the following information about the Project:

- The need for the Project
- Environmental Report Addendum and mitigation measures
- Project costs and economics
- Pipeline design and construction
- Land requirements
- Consultation with Indigenous communities

The OEB's approval is required before construction of the proposed Project can proceed. If approved, construction could begin in spring 2028.

Additional information about the OEB process can be found online at: www.oeb.ca

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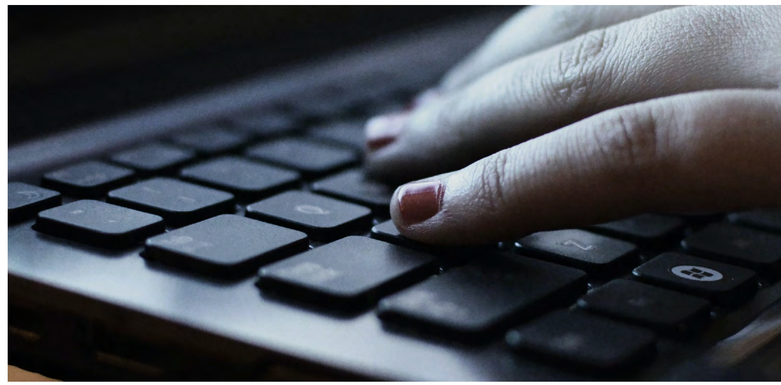

Consultation and Engagement

- Consultation and engagement are key components of the ER.
- At the outset of the project, Enbridge Gas submits a Project Description to the Ministry of Energy (MOE). Upon review, the MOE determines potential impacts on Indigenous or treaty rights and identifies Indigenous communities that Enbridge Gas will consult with during the entirety of the project.
- The consultation and engagement program helps identify and address Indigenous community and stakeholder concerns and issues, provides information about the project to the stakeholders and allows for participation in the project review and development process.
- Input during engagement and consultation will be used to help finalize the pipeline route and mitigation objectives for the project.
- Once the LTC application is made to the OEB, any party with an interest in the project, including members of the public, can participate in the process.

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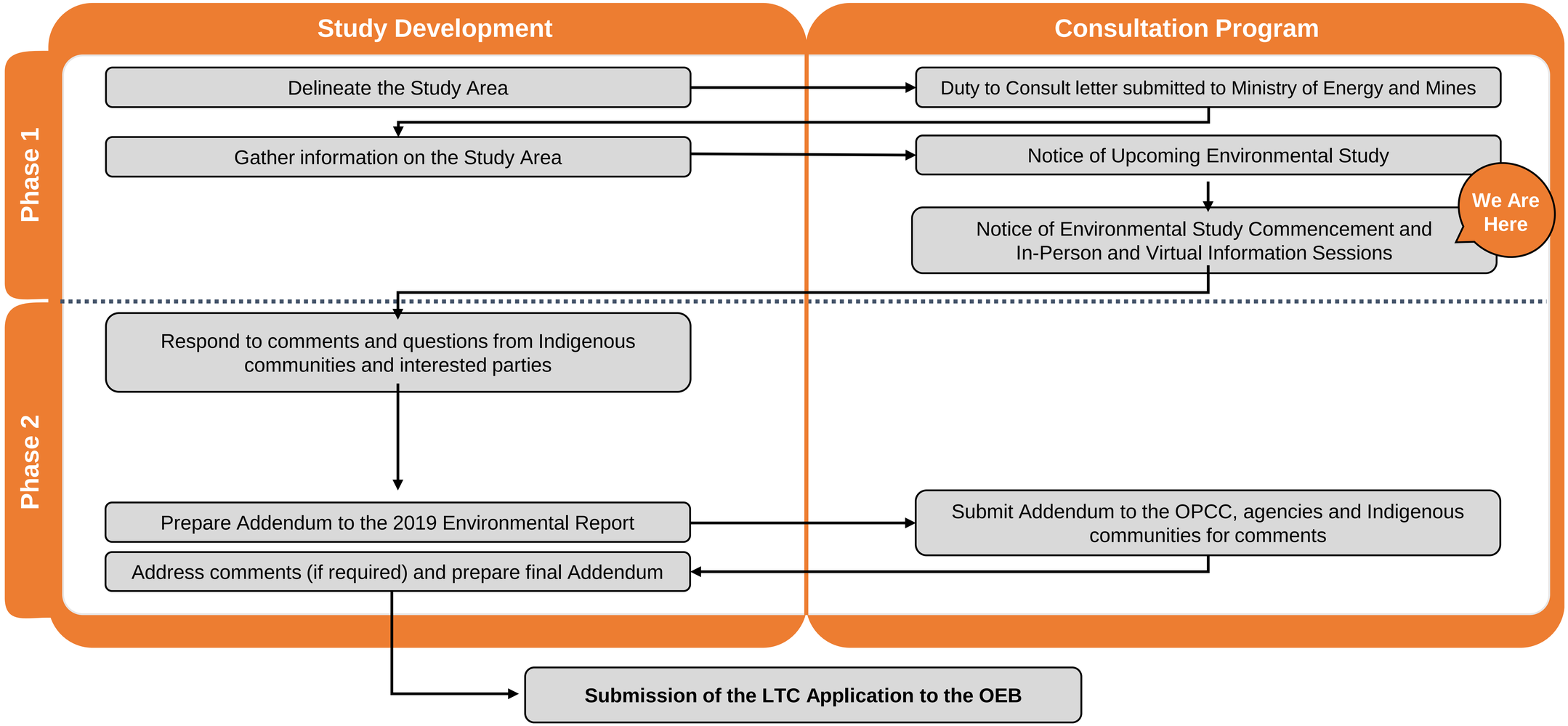
Environmental Study Process



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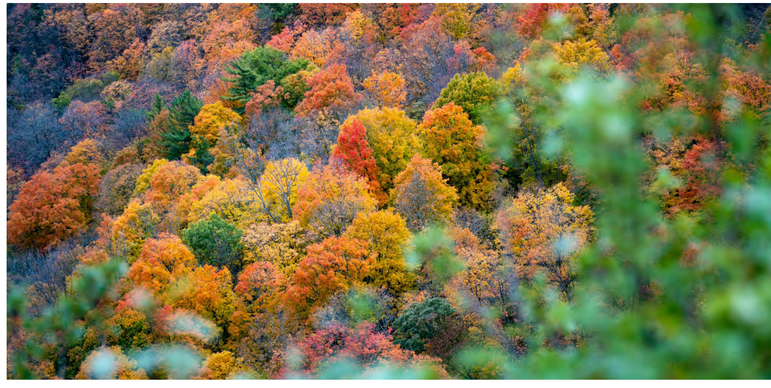

Environment, Health and Safety Policy

Our Commitment

- Enbridge Gas is committed to protecting the health and safety of all individuals affected by our activities.
- Enbridge Gas will provide a safe and healthy working environment and will not compromise the health and safety of any individual.
- The goal is to have no safety incidents and to mitigate impacts on the environment by working with our stakeholders, peers, and others to promote responsible environmental practices and continuous improvement.
- Enbridge Gas is committed to environmental protection and stewardship and recognizes that pollution prevention, biodiversity, and resource conservation are key to a sustainable environment.
- 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.

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Pipeline Design

The natural gas pipeline is designed to meet or exceed the regulations of the Canadian Standards Association *(Z662 Oil and Gas Pipeline Systems)* and the applicable regulations of the Technical Standards and Safety Association (TSSA).

Pipeline Safety and Integrity

Many steps are taken for a safe, reliable operation of the Enbridge Gas network of natural gas pipelines, including:

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

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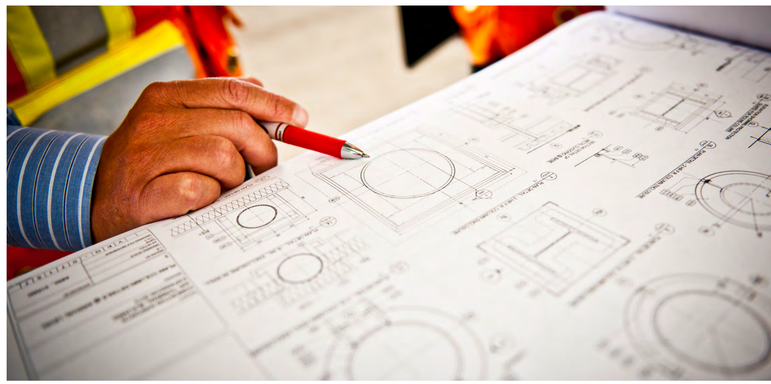

Access and Land Requirements

The proposed pipeline will require access agreements, permanent easement, or temporary working space during construction.

Enbridge Gas has a comprehensive Landowner Relations Program that utilizes dedicated Project Land Agents who would:

- Provide direct contact and act as a liaison between landowners and Enbridge Gas.
- Be available to landowners during the length of the Project and throughout construction activities.
- Act as a point of contact for concerns and questions.
- Address any legal matters relating to the temporary use of property, access agreements, permanent easements, and impacts or remedies to property.

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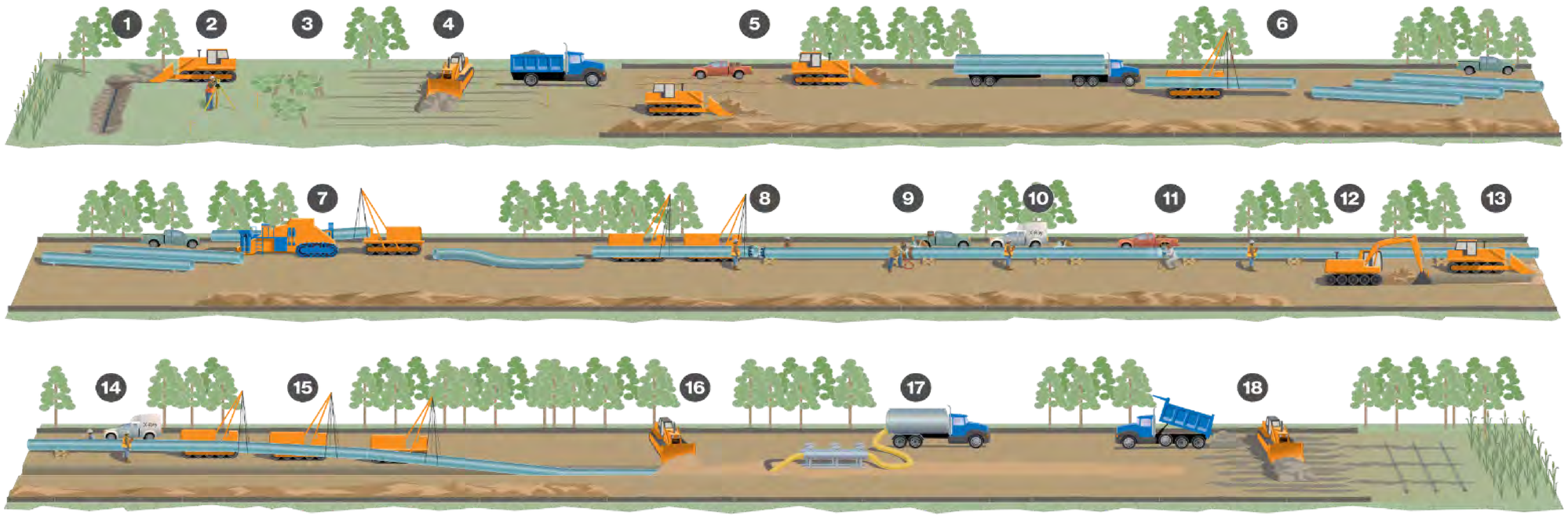
Constructing an Enbridge Gas Pipeline (Open Trenching)



1. Pre-construction tiling
2. Surveying and staking
3. Clearing
4. Right-of-way topsoil stripping
5. Front-end grading
6. Stringing pipe
7. Field bending pipe
8. Lining-up pipe
9. Welding process
10. X-ray or ultrasonic inspection, weld repair
11. Field coating
12. Digging the trench
13. Padding trench bottom
14. Final inspection and coating repair
15. Lowering pipe
16. Backfilling
17. Hydrostatic testing
18. Site restoration and post-construction tiling

Note: The construction infographic is specifically for open-cut steel pipe installation and serves for reference purposes only.

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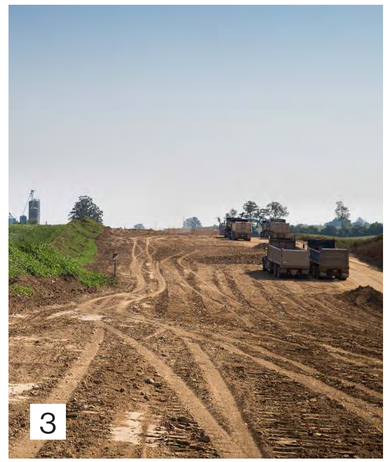
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4

Constructing an Enbridge Gas Pipeline (Open Trenching, continued)

The pipeline construction process includes various procedures, as described in the previous slide.

- **Photo 1:** Shows a typical Enbridge Gas natural gas pipeline. This Project will involve the installation of a 48-inch diameter pipeline.
- **Photo 2:** Represents a typical trench that is created during the installation process.
- **Photo 3:** Represents the backfilled trench.
- **Photo 4:** Represents final clean-up and restoration. Once the pipeline has been installed, clean-up will involve the restoration of the easement, landowner property and other work areas.

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Socio-economic Features

The Project will be constructed through private business areas, agricultural and residential land, along with land owned by Hydro One and the Hamilton Conservation Authority.

Potential Impacts

- Temporary increases in noise, dust and air emissions.
- Increased construction traffic volumes.
- Temporary impairment of the use of residential and/or commercial/industrial properties.
- Ornamental vegetation clearing along the pipeline route.

Example Mitigation Measures

- Provide access across the construction area.
- Restrict construction to daylight hours and adhere to applicable noise by-laws.
- Develop and implement a Traffic Control Plan.
- Place fencing at appropriate locations for safety.
- Designate an Enbridge Gas representative to be available prior to and throughout construction.
- Implement dust control measures.
- Re-vegetation of cleared ornamental vegetation areas as needed (including seeding/planting).

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Cultural Heritage Resources

Cultural heritage features such as archaeological finds, heritage buildings, fences, and landscapes may be encountered during construction.

Detailed field surveys will be conducted by independent, third-party archaeologists and cultural heritage professionals prior to construction, if required.

Potential Impacts

- Damage or destruction of archaeological or historical resources.

Example mitigation measures

- Archaeological assessment of the construction footprint, with review and acceptance from the Ministry of Citizenship and Multiculturalism (MCM).
- Cultural heritage assessment (for built heritage features and cultural heritage landscapes) of the construction right-of-way, with review and comment from the MCM.
- Reporting of any previously unknown archaeological or historical resources uncovered, or suspected to be uncovered, during excavation.

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Aquatic Resources

Enbridge Gas understands the importance of protecting watercourses, wetlands, and associated wildlife during construction and therefore will implement recognized mitigation measures to reduce possible environmental effects.

Potential Impacts

- Disruption or alteration to aquatic species and habitat and/or nuisance effects.
- Temporary reduction in surface water quality, fish habitat and alteration of waterflow during construction.
- Increased erosion, sedimentation, and turbidity resulting from removal of vegetation.

Example Mitigation Measures

- Conduct surveys of waterbodies.
- Obtain and abide by all agency permits and approvals.
- Install and maintain erosion and sediment control measures.
- Conform to fish timing window guidelines.
- For in-channel construction, protect aquatic species through methods such as flow diversion/dewatering, fish rescue planning etc., and manage sedimentation and turbidity.
- Restore and seed disturbed areas to establish habitat and reduce erosion.

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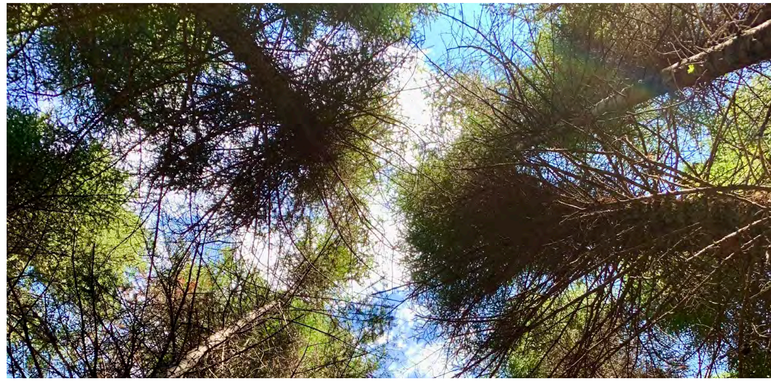

Terrestrial Resources

Natural environment features such as wildlife habitat and vegetated/wooded areas may need to be crossed during construction.

Potential Impacts

- Damage or removal of vegetation and wildlife habitat in the construction area.
- Disturbance and/or mortality to local wildlife.

Example Mitigation Measures

- Conduct surveys (including Species at Risk surveys) in advance of construction to determine opportunities for wildlife habitat to exist.
- Complete tree and vegetation removal outside of sensitive wildlife windows, to the extent possible.
- Clearly mark the construction area to avoid accidental damage.
- Restore and seed disturbed areas to establish habitat and reduce erosion, where appropriate.
- Secure all necessary permits and follow conditions of approval.

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Agricultural Soils

Enbridge Gas has established and tested measures to preserve the integrity of agricultural soils throughout the construction phase:

- A third-party soils specialist will determine topsoil depth prior to stripping and supervise activities so the proper depth of topsoil is removed and replaced.
- Topsoil will be stripped from the right-of-way and other work areas and stockpiled along the right-of-way. A separation will be maintained between topsoil and subsoil.
- Enbridge Gas will implement a wet soil shutdown protocol on agricultural lands to reduce soil structure damage.
- The subsoil on the stripped portion of the right-of-way will be chisel ploughed or sub-soiled during cleanup activities to alleviate compaction.
- Any agricultural drainage systems impacted by construction will be repaired.
- Enbridge Gas will develop and implement a sampling program on agricultural easements along the pipeline route for potential pests and/or diseases that are known to the area, where appropriate.
- The entire outside boundaries of the work-space necessary for construction of the Project will be staked at regular intervals.
- A post-construction cover crop program will be available to landowners.

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Maintaining Agricultural Drainage Systems

- Landowners will be contacted prior to construction to confirm the location and type of existing drains. Any future drainage plans will also be discussed with the landowner.
- Field tile will be temporarily re-routed during pre-construction activities where required to allow proper drainage during construction.
- Damaged and severed drains will be repaired following construction. After repair and prior to backfilling, landowners will be invited to inspect and approve the repair. Any on-going field tile issues resulting from pipeline construction will be addressed by Enbridge Gas as required.

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Next Steps

After this Information Session, Enbridge Gas intends to pursue the following schedule of activities:

- **Q1 2027** – Complete Addendum to the 2019 Environmental Report
- **Q1 2027** – File a Leave to Construct application with the OEB
- **Q3 2027** – Anticipated OEB approval, complete permitting, pipeline design and construction planning
- **Q2 2028** – Begin construction

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Dawn Parkway System Renewal Project: Kirkwall to Hamilton Information Session



Thank-you!

On behalf of the Project Team, thank you for attending the session. Please complete a questionnaire by **September 15, 2026** to have your comments included in the Environmental Report.

Michael Candido
Environmental Scientist
Assessment & Permitting

Stantec Consulting Ltd.
300 Hagey Blvd #100
Waterloo, ON N2L 0A4
Phone: (519) 585-3489

Email: **Kirkwall-HamiltonES@stantec.com**

For more information about the proposed project, please visit the Enbridge Gas project website at:
enbridgegas.com/dawnparkwayrenewal

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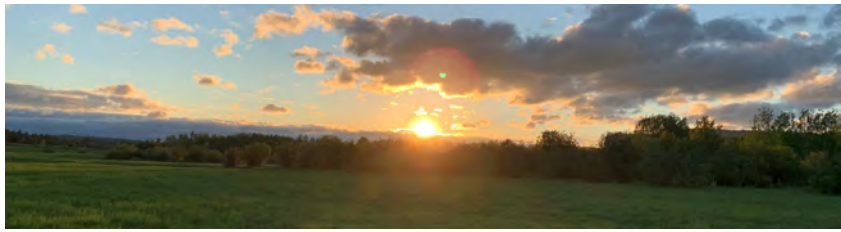

Welcome

Press the next button to navigate to the next slide at any time.

- To return to the previous slide, press the previous button.
- You can mute the audio at any time by pressing the speaker icon.
- This presentation is available for download (see the Resources tab in the top right corner).
- Questions and comments can be submitted using the questionnaire found in the Resources tab.
- If you would like to receive future project updates, please complete the “Contact Information" section of the questionnaire.

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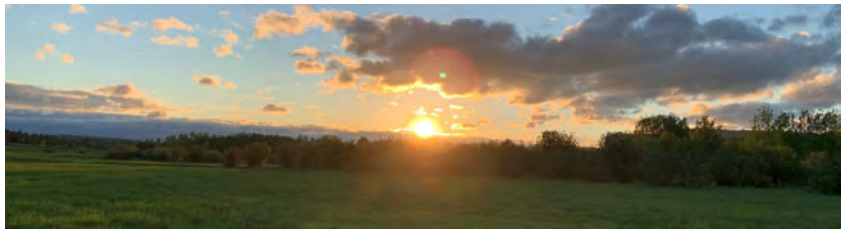

Dawn Parkway System Renewal Project: Kirkwall to Hamilton

Virtual Information Session: Monday August 17, 2026, to Monday, August 31, 2026.

In-Person Information Session: Tuesday, August 25, 2026

Location: Millgrove Community Centre
855 Millgrove Side Rd, Millgrove, ON L0R 1V0

Time: 5:00 PM to 8:00 PM

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Dawn Parkway System Renewal Project: Kirkwall to Hamilton Information Session



Enbridge Gas' Commitment

Enbridge Gas is dedicated to engaging with Indigenous communities, landowners, agencies, interest groups, and community members. They commit to providing up-to-date information in an open, honest, and respectful manner while carefully considering your input. With over 3.9 million residential, commercial, and industrial customers, Enbridge Gas is committed to delivering natural gas safely and reliably. Environmental stewardship is also a top priority for Enbridge Gas, and they conduct their operations in an environmentally responsible manner.

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Dawn Parkway System Renewal Project: Kirkwall to Hamilton Information Session



Purpose of the Information Session

- Consult with Indigenous communities, and engage with landowners, members of the public and regulatory authorities regarding the proposed pipeline route, potential impacts, and proposed mitigation measures.
- Provide an opportunity for these individuals to review the proposed Project, ask any questions, and/or provide comments to representatives from Enbridge Gas and Stantec.

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Enbridge Gas' Engagement with Indigenous Peoples

Enbridge recognizes the diversity of Indigenous peoples who live where we work and operate. We understand that certain laws and policies have had destructive impacts on Indigenous cultures, languages, and the social and economic well-being of Indigenous peoples. We also recognize the importance of reconciliation between Indigenous peoples and broader society. We are committed to building positive and sustainable relationships with Indigenous peoples based on trust and respect and are focused on finding common goals through open dialogue.

The Indigenous engagement program is based on adherence to the OEB's Guidelines and Enbridge Inc.'s company-wide Indigenous Peoples Policy, which Enbridge Gas follows. Enbridge's Indigenous Peoples Policy lays out key principles for establishing relationships with Indigenous groups, including:

- Recognizing the importance of the United Nations Declaration on the Rights of Indigenous Peoples in the context of existing Canadian law;
- Recognizing the legal and constitutional rights possessed by Indigenous peoples in Canada and the importance of the relationship between Indigenous peoples and their traditional lands and resources;
- Engaging early to achieve meaningful relationships with Indigenous groups by providing timely exchanges of information, understanding and addressing Indigenous project-specific concerns, and ensuring ongoing dialogue regarding its projects, their potential impacts and benefits; and
- Aligning Enbridge's interests with those of Indigenous peoples through meaningful, direct Indigenous economic activity in projects corresponding to community capacity and project needs, where possible.

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Dawn Parkway System Renewal Project: Kirkwall to Hamilton Information Session



Project Overview

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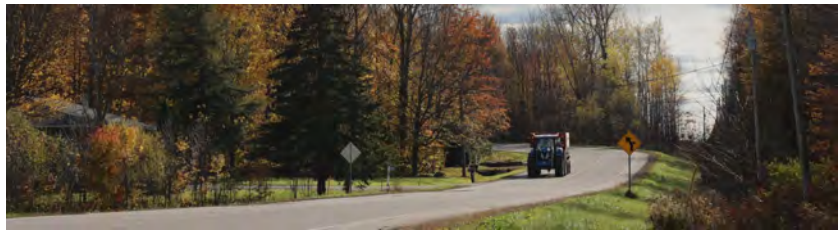

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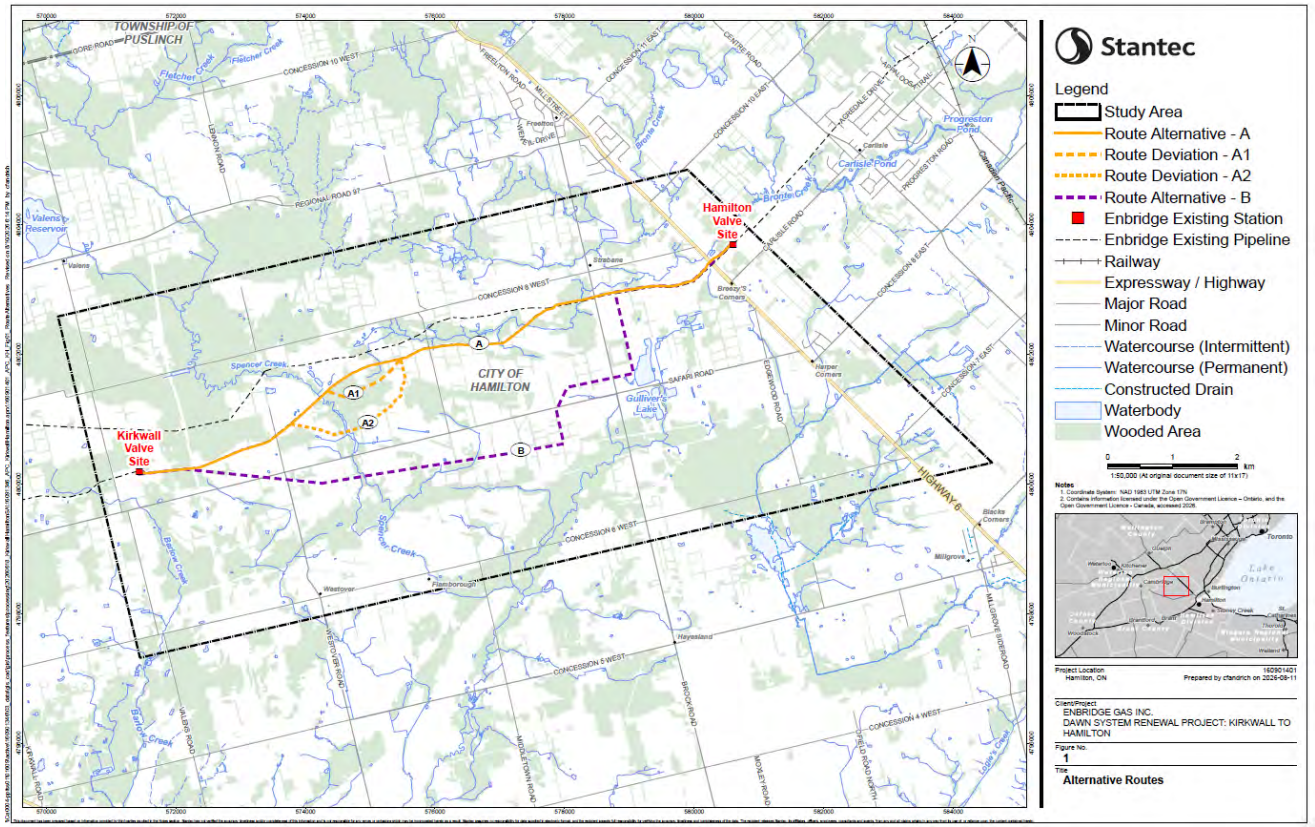
Route Alternatives

- Route A was identified as an existing southern pipeline easement that travelled through the Antrim Glen and Ponderosa Nature Resort communities.
- To avoid these communities, Route A1 and Route A2 were developed.
- Route B was identified and parallels a combination of an existing Hydro One corridor and lot lines. A portion of Route B does not follow the Hydro One corridor and lot lines so as to avoid sensitive environmental features.



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Selection of the Preferred Route

- A comparative evaluation found both Route A and Route B to be environmentally acceptable; however, Route A was preferred because it offers greater operational and construction efficiencies by paralleling and overlapping an existing Enbridge Gas pipeline easement. This reduces impacts on agricultural lands, residential properties, and natural heritage features. As a result, Route A was selected as the Preliminary Preferred Route.
- Input on the Preliminary Preferred Route, route deviations and the alternative route was sought through consultation. Landowners along Route deviations A1 and A2 expressed concerns about impacts on local businesses and tree removal. Landowners along Route A2 expressed concerns due to slope/topography, the crossing of Spencer Creek and tree removal. Feedback on the Preliminary Preferred Route from the community of Antrim Glen included access to residences during construction, access/use of trails during construction, and tree removal.
- The majority of feedback received favoured the Preliminary Preferred Route. As such the Preliminary Preferred Route was confirmed as the Preferred Route.

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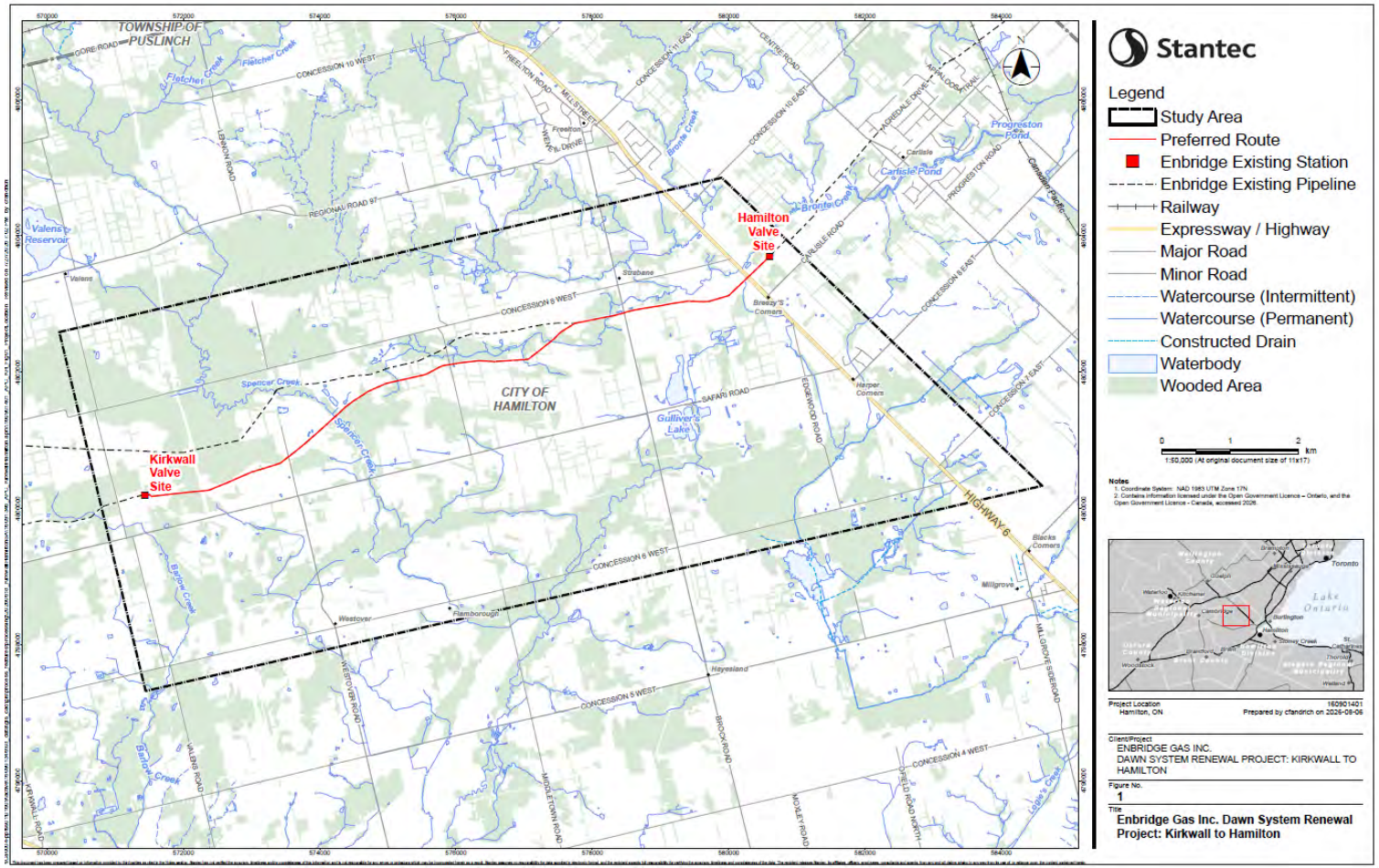
Preferred Route

- This map does not represent the final Project scope/design. Enbridge Gas will undertake detailed design to determine the exact location of the running line, permanent easement, temporary land use requirements and road/watercourse crossing methods. Detailed design will also be influenced by supplemental studies (including environmental studies) and site-specific requests from Indigenous communities, landowners and agencies.
- An interactive map of the preferred route can be accessed at: https://www.solutions.ca/Kirkwall-HamiltonES



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OEB Review and Approval Process

An Addendum to the 2019 Environmental Report (ER) for the study is scheduled to be completed in Q1 2027. Once complete, Enbridge Gas plans to file a Leave to Construct (LTC) application with the Ontario Energy Board (OEB) regarding the Project. The LTC application will include the following information about the Project:

- The need for the Project
- Environmental Report Addendum and mitigation measures
- Project costs and economics
- Pipeline design and construction
- Land requirements
- Consultation with Indigenous communities

The OEB's approval is required before construction of the proposed Project can proceed. If approved, construction could begin in spring 2028.

Additional information about the OEB process may be found online at: www.oeb.ca

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Consultation and Engagement

- Consultation and engagement are key components of the ER.
- At the outset of the Project, Enbridge Gas submits a Project Description to the Ministry of Energy and Mines (MEM). Upon review, the MEM determines the potential impacts on Aboriginal or treaty rights and identifies Indigenous communities that Enbridge Gas will consult with during the entirety of the Project.
- The consultation and engagement program helps to identify and address Indigenous communities' and stakeholders' concerns, provides information about the Project to the stakeholders, and allows participation in the Project's review and development process.
- Input from consultation and engagement will help to finalize the Project details and mitigation plans for the Project.
- Once the LTC application is made to the OEB, any party with an interest in the Project, including members of the public, can participate in the process.

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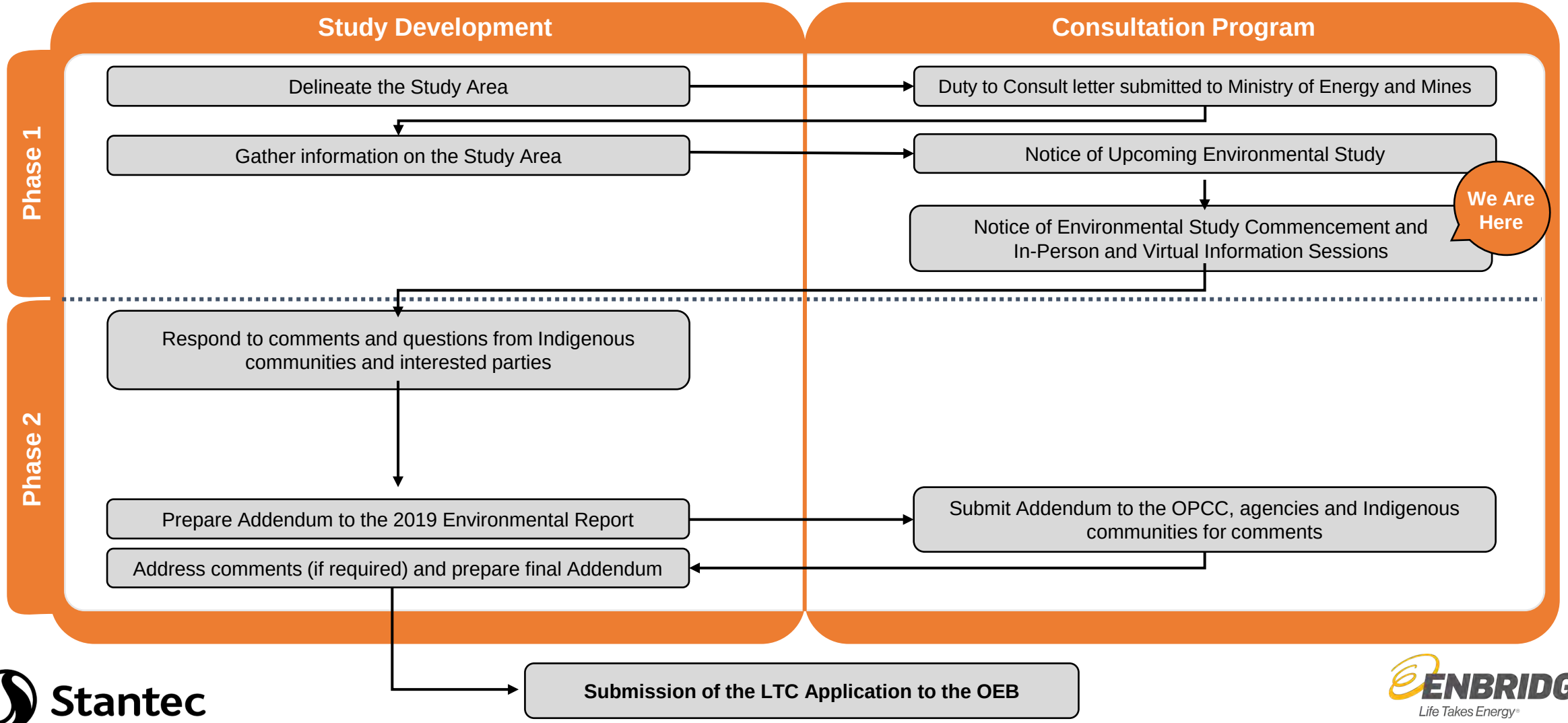
Environmental Study Process



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Environment, Health and Safety Policy

Our Commitment

- Enbridge Gas is committed to protecting the health and safety of all individuals affected by our activities.
- Enbridge Gas will provide a safe and healthy working environment and will not compromise the health and safety of any individual.
- The goal is to have no safety incidents and to mitigate impacts on the environment by working with our stakeholders, peers, and others to promote responsible environmental practices and continuous improvement.
- Enbridge Gas is committed to environmental protection and stewardship and recognizes that pollution prevention, biodiversity, and resource conservation are key to a sustainable environment.
- 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.

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Pipeline Design

The natural gas pipeline is designed to meet or exceed the regulations of the Canadian Standards Association (*Z662 Oil and Gas Pipeline Systems*) and the applicable regulations of the Technical Standards and Safety Association (TSSA).

Pipeline Safety and Integrity

Many steps are taken for a safe, reliable operation of the Enbridge Gas network of natural gas pipelines, including:

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

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Access and Land Requirements

The proposed pipeline will require access agreements, permanent easement, or temporary working space during construction.

Enbridge Gas has a comprehensive Landowner Relations Program that utilizes dedicated Project Land Agents who would:

- Provide direct contact and act as a liaison between landowners and Enbridge Gas.
- Be available to landowners during the length of the Project and throughout construction activities.
- Act as a point of contact for concerns and questions.
- Address any legal matters relating to the temporary use of property, access agreements, permanent easements, and impacts or remedies to property.

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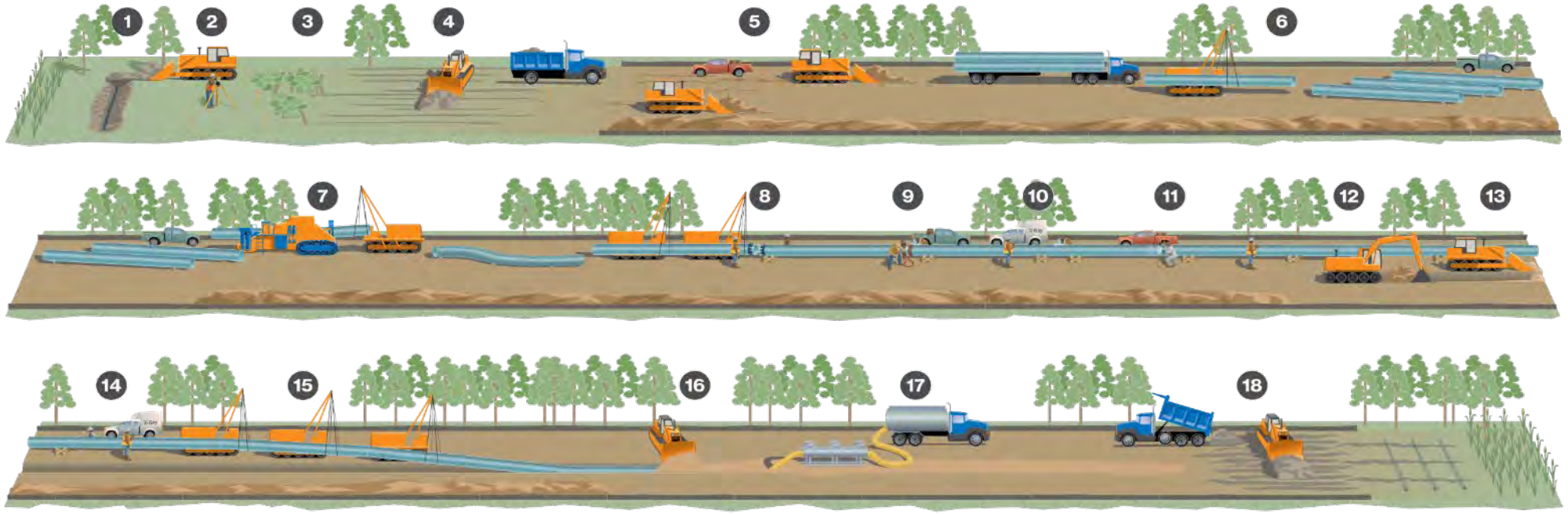
Constructing an Enbridge Gas Pipeline (Open Trenching)



1. Pre-construction tiling
2. Surveying and staking
3. Clearing
4. Right-of-way topsoil stripping
5. Front-end grading
6. Stringing pipe
7. Field bending pipe
8. Lining-up pipe
9. Welding process
10. X-ray or ultrasonic inspection, weld repair
11. Field coating
12. Digging the trench
13. Padding trench bottom
14. Final inspection and coating repair
15. Lowering pipe
16. Backfilling
17. Hydrostatic testing
18. Site restoration and post-construction tiling

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Note: The construction infographic is specifically for open-cut steel pipe installation and serves for reference purposes only.

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Constructing an Enbridge Gas Pipeline (Open Trenching, continued)

The pipeline construction process includes various procedures, as described in the previous slide.

- **Photo 1:** Shows a typical Enbridge Gas natural gas pipeline. This Project will involve the installation of a 48-inch diameter pipeline.
- **Photo 2:** Represents a typical trench that is created during the installation process.
- **Photo 3:** Represents the backfilled trench.
- **Photo 4:** Represents final clean-up and restoration. Once the pipeline has been installed, clean-up will involve the restoration of the easement, landowner property and other work areas.

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Socio-economic Features

The Project will be constructed through private business areas, agricultural and residential land, along with land owned by Hydro One and the Hamilton Conservation Authority.

Potential Impacts

- Temporary increases in noise, dust and air emissions.
- Increased construction traffic volumes.
- Temporary impairment of the use of residential and/or commercial/industrial properties.
- Ornamental vegetation clearing along the pipeline route.

Example Mitigation Measures

- Provide access across the construction area.
- Restrict construction to daylight hours and adhere to applicable noise by-laws.
- Develop and implement a Traffic Control Plan.
- Place fencing at appropriate locations for safety.
- Designate an Enbridge Gas representative to be available prior to and throughout construction.
- Implement dust control measures.
- Re-vegetation of cleared ornamental vegetation areas as needed (including seeding/planting).

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Cultural Heritage Resources

Cultural heritage features such as archaeological finds, heritage buildings, fences, and landscapes may be encountered during construction.

Detailed field surveys will be conducted by independent, third-party archaeologists and cultural heritage professionals prior to construction, if required.

Potential Impacts

- Damage or destruction of archaeological or historical resources.

Example Mitigation Measures

- Archaeological assessment of the construction footprint, with review and acceptance from the Ministry of Citizenship and Multiculturalism (MCM).
- Cultural heritage assessment (for built heritage features and cultural heritage landscapes) of the construction right-of-way, with review and comment from the MCM.
- Reporting of any previously unknown archaeological or historical resources uncovered, or suspected to be uncovered, during excavation.

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Aquatic Resources

Enbridge Gas understands the importance of protecting watercourses, wetlands, and associated wildlife during construction and therefore will implement recognized mitigation measures to reduce possible environmental effects.

Potential Impacts

- Disruption or alteration to aquatic species and habitat and/or nuisance effects.
- Temporary reduction in surface water quality, fish habitat and alteration of waterflow during construction.
- Increased erosion, sedimentation, and turbidity resulting from removal of vegetation.

Example Mitigation Measures

- Conduct surveys of waterbodies.
- Obtain and abide by all agency permits and approvals.
- Install and maintain erosion and sediment control measures.
- Conform to fish timing window guidelines.
- For in-channel construction, protect aquatic species through methods such as flow diversion/dewatering, fish rescue planning etc., and manage sedimentation and turbidity.
- Restore and seed disturbed areas to establish habitat and reduce erosion.

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Terrestrial Resources

Natural environment features such as wildlife habitat and vegetated/wooded areas may need to be crossed during construction.

Potential Impacts

- Damage or removal of vegetation and wildlife habitat in the construction area.
- Disturbance and/or mortality to local wildlife.

Example Mitigation Measures

- Conduct surveys (including Species at Risk surveys) in advance of construction to determine opportunities for wildlife habitat to exist.
- Complete tree and vegetation removal outside of sensitive wildlife windows, to the extent possible.
- Clearly mark the construction area to avoid accidental damage.
- Restore and seed disturbed areas to establish habitat and reduce erosion, where appropriate.
- Secure all necessary permits and follow conditions of approval.

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Agricultural Soils

Enbridge Gas has established and tested measures to preserve the integrity of agricultural soils throughout the construction phase:

- A third-party soils specialist will determine topsoil depth prior to stripping and supervise activities so the proper depth of topsoil is removed and replaced.
- Topsoil will be stripped from the right-of-way and other work areas and stockpiled along the right-of-way. A separation will be maintained between topsoil and subsoil.
- Enbridge Gas will implement a wet soil shutdown protocol on agricultural lands to reduce soil structure damage.
- The subsoil on the stripped portion of the right-of-way will be chisel ploughed or sub-soiled during cleanup activities to alleviate compaction.
- Any agricultural drainage systems impacted by construction will be repaired.
- Enbridge Gas will develop and implement a sampling program on agricultural easements along the pipeline route for potential pests and/or diseases that are known to the area, where appropriate.
- The entire outside boundaries of the work-space necessary for construction of the Project will be staked at regular intervals.
- A post-construction cover crop program will be available to landowners.

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Maintaining Agricultural Drainage Systems

- Landowners will be contacted prior to construction to confirm the location and type of existing drains. Any future drainage plans will also be discussed with the landowner.
- Field tile will be temporarily re-routed during pre-construction activities where required to allow proper drainage during construction.
- Damaged and severed drains will be repaired following construction. After repair and prior to backfilling, landowners will be invited to inspect and approve the repair. Any on-going field tile issues resulting from pipeline construction will be addressed by Enbridge Gas as required.

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Next Steps

After this Information Session, Enbridge Gas intends to pursue the following schedule of activities:

- **Q1 2027** — Complete Addendum to the 2019 Environmental Report
- **Q1 2027** — File a Leave to Construct application with the OEB
- **Q3 2027** — Anticipated OEB approval, complete permitting, pipeline design and construction planning
- **Q2 2028** — Begin construction

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Thank you!

On behalf of the Project Team, thank you for attending the session. Please complete a questionnaire by **September 15, 2026, to have** your comments included in the Environmental Report.

Michael Candido
Environmental Scientist
Assessment & Permitting

Stantec Consulting Ltd.
300 Hagey Blvd #100
Waterloo, ON N2L 0A4
Phone: (519) 585-3489

Email: **Kirkwall-HamiltonES@stantec.com**

For more information about the proposed Project, please visit the Enbridge Gas project webpage at: **Enbridgegas.com/dawnparkwayrenewal**

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Dawn Parkway System Renewal Project: Kirkwall to Hamilton
Information Session Questionnaire

Thank you for attending the Dawn Parkway System Renewal Project: Kirkwall to Hamilton Information Session! We hope the session was informative and we would appreciate your comments and feedback. If you require any assistance or clarification while completing this questionnaire, please send an email to **Kirkwall-HamiltonES@stantec.com**. If you have a question that requires a response, please fill out the **Contact Information** section at the end of this form, and a representative will respond as soon as possible.

Please complete this questionnaire by **September 15, 2026** for feedback to be considered as part of the Environmental Report submitted to the Ontario Energy Board (OEB). Your feedback is important and will also be considered during the planning and permitting stages of the project.

1. **What is your interest in this project?**

   ☐ Directly affected landowner
   ☐ Member of an Indigenous community
   ☐ Business owner
   ☐ Surrounding landowner
   ☐ Interested citizen
   ☐ Member of interest group
   ☐ Government official
   ☐ Other: _____

2. **What is your view of the proposed project?**

3. **Please indicate if the project will have any potential impacts to you, your property, or your business that you would like addressed** (i.e., access, noise, dust, traffic, etc.).

4. **Please identify any features along the pipeline route you feel are important to consider during the environmental study.**

Dawn Parkway System Renewal Project: Kirkwall to Hamilton
Information Session Questionnaire

5. **Were you provided with an adequate understanding of the project as well as the Environmental Study and OEB review and approval process?**

   ☐ Yes

   ☐ No

6. **Do you require additional information about the project and/or planning and review/approval processes? Please note below:**

7. **Are you interested in receiving an electronic copy of the Environmental Report Addendum?**

   ☐ Yes

   ☐ No

8. **Did the content provided in the Information Session meet your needs?**

9. **How did you hear about the Information Session? Check all that apply:**

   ☐ Project Notification Letter

   ☐ Word of Mouth

   ☐ Social Media Post

   ☐ Newspaper

Dawn Parkway System Renewal Project: Kirkwall to Hamilton
Information Session Questionnaire

10. **Do you have any questions or comments about this project, not addressed above, you would like to bring to our attention?**

_____
_____
_____
_____
_____
_____

Thank you for completing this questionnaire. If you would like to be informed of project updates, please provide us with your full contact information. If you have a question about the project that has not been addressed or for which you would like more information, please email us at: **Kirkwall-HamiltonES@stantec.com.**

Contact Information

Name: _____
Address: _____
Email: _____
Phone: (____)_____

Any personal information (PI), such as names and addresses, collected by Enbridge Gas Inc. (EGI) on this comment form (or through the Information Session process) for this project will be used for the purpose of conducting an environmental assessment and related activities, such as creating an environmental assessment report. EGI may also share PI with its consultant(s) for this purpose and will share PI with the Ontario Energy Board (OEB) and other government agencies as required for the project. In accordance with the Ontario Freedom of Information and Protection of Privacy Act, PI provided to the OEB will not be disclosed on the public record or to any third parties. However, comments, questions and other information collected may be disclosed on the public record provided that any PI will be redacted.

B.7 Project Correspondence

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Appendix B.7 Project Correspondence

Consultation Correspondence

Agencies and Elected Officials

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
1	Agencies on the Contact List	Stantec	Email	N/A	N/A	July 6, 2026	Notice of Upcoming Environmental Study (NUES) circulated via email.	N/A	N/A
2	Ministry of Environment, Conservation and Parks (MECP)	Saif Sumbal	Email	Saifullah.Sumbal@ontario.ca	519-873-5001	July 6, 2026	Saif passed on the NUES to a colleague at the West Central MECP office- Aaron Todd.	N/A	N/A
3	Ministry of Environment, Conservation and Parks (MECP)	Aaron Todd	Email	Aaron.Todd@ontario.ca	647-633-3351	July 6, 2026	Confirmed Saif's message (above), shared NUES with Hamilton District office.	N/A	N/A
4	Grand River Conservation Authority (GRCA)	Trevor Heywood	Email	theywood@grandriver.ca	519-621-2761 ext. 2292	July 14, 2026	Acknowledged NUES. GRCA does not anticipate input on the project as it is on the edge of their watershed and there are no regulated features intersecting main valve site or pipeline corridor (map attached). Noted that Hamilton Conservation Authority may have more comments. Requested that main contact be changed to Angela Wang.	N/A	N/A

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
5	Government of Ontario Elected Officials	Enbridge Gas	Email	N/A	N/A	July 17, 2026 & July 21	NUES sent to Member of Provincial Parliament.	N/A	N/A
6	Hamilton Conservation Authority (HCA)	Jeff Tweedle	Email	jtweedle@conservationhamilton.ca	905-525-2181 Ext. 164	July 24, 2026	Confirmed as HCA's contact for project. Permit from the HCA may be required for development activities, as portions of study area and preferred route are regulated by HCA. Portions of study area are also owned by HCA. Requested to be included in any future consultation and engagement and circulate any updates or technical materials as available.	N/A	N/A
7	Hamilton Conservation Authority	Jeff Tweedle	Email	jtweedle@conservationhamilton.ca	905-525-2181 Ext. 164	July 29, 2026	Additional comments from land management team: If access to HCA properties for testing/construction purposes a Temporary Land Access Agreement Letter may be required. Request to be personally notified if there is proposed access to HCA owned lands as part of the Environmental Study. Also, Environmental Study should identify when access to HCA lands is required for construction activities.	N/A	N/A

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
8	Agencies on Contact List	Stantec	Email	N/A	N/A	August 4, 2026	Notice of Environmental Study Commencement (NESC) circulated via email.	N/A	N/A
9	Conservation Ontario	Robyn Rumney	Email	rrumney@conservationontario.ca	289-338-8725	August 5, 2026	Acknowledgement of NESC.	N/A	N/A
10	GRCA	Angela Wang	Email	awang@grandriver.ca	519-621-2763 ext. 2270	August 6, 2026	Acknowledgement of NESC. GRCA requests to review any draft reports and documentation as there are some regulated features in the study area.	N/A	N/A
11	Huy Thai and Carrie Mnanchuck - Misintry of Economic Development, Job Creation and Trade	Enbridge Gas	Email	huy.thai@ontario.ca ; carrie.manchuk@ontario.ca	N/A	August 6, 2026	An Enbridge Gas representative sent Brian Morris a copy of the Kirkwall to Hamilton NESC, the Dawn to Enniskillen NESC as well as the Guelph Tie-Over NESC.	N/A	
12	John Thomas and Sylvester Tuz – Invest Ontario	Enbridge Gas	Email	john.thomas@investontario.ca ; sylvester.tuz@investontario.ca	N/A	August 6, 2026	An Enbridge Gas representative sent Brian Morris a copy of the Kirkwall to Hamilton NESC, the Dawn to Enniskillen NESC as well as the Guelph Tie-Over NESC.	N/A	
13	Agencies on Contact List	Stantec	Email	N/A	N/A	August 7, 2026	Update provided noting that NESC circulated on August 4, 2026 had incorrect Virtual Information Session (VIS) web address. An updated NESC with correct VIS address was circulated via email.	N/A	N/A

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
14	Government of Ontario Elected Officials	Enbridge Gas	Email	N/A	N/A	August 11, 2026 & August 13, 2026	NESC sent to members of provincial parliament.	N/A	N/A
15	Hamilton Conservation Authority (HCA)	Stantec	Email	N/A	N/A	August 26, 2026	Follow-up: Stantec forwarded VIS link, and copies of boards to Mike Stone (HCA), who attended the Open House.	August 26, 2026	Mike Stone will review the attached materials, and follow up with any notes. HCA is in contact with Aim Land re HCA land access agreements and will hopefully have them in place soon.

Ontario Pipeline Coordinating Committee (OPCC)

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
1	OPCC Members on Contact List	Stantec	Email	N/A	N/A	July 6, 2026	NUES circulated via email.	N/A	N/A
2	Technical Standards and Safety Authority (TSSA), Fuels Safety Program	Robin Yu	Email	ryu@tssa.org	416-734-3402	July 7, 2026	TSSA has no comments at the current stage, request for the submission of an Application for Review of Pipeline Project (link provided).	N/A	N/A

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
3	Ministry of Citizenship and Multiculturalism	Anastasia Abrazhevich	Email	Anastasia.Abrazhevich@ontario.ca	437-240-2379	July 30, 2026	Acknowledgement of NUES. Advice on how to incorporate consideration of cultural heritage in pipeline projects. Recommendations: combined Stage 1-2 archaeological assessment (AA) for entire study area; minimum Stage 1 AA; make every attempt to complete an Existing Conditions and Preliminary Impact Assessment.	N/A	N/A
4	OPCC Members on Contact List	Stantec	Email	N/A	N/A	August 4, 2026	NESC circulated vis email.	N/A	N/A
5	Technical Standards and Safety Authority (TSSA)	Andre Nurgel	Email	anurgel@tssa.org	416-734-3521	August 5, 2026	TSSA has no comments at the current stage, request for the submission of an Application for Review of Pipeline Project (link provided).	N/A	N/A
6	OPCC Members on Contact List	Stantec	Email	N/A	N/A	August 7, 2026	Update provided noting that NESC circulated on August 4, 2026 had incorrect Virtual Information Session (VIS) web address. An updated NESC with correct VIS address was circulated via email.	N/A	N/A
7	Ministry of Citizenship and Multiculturalism	James Hamilton	Email	James.Hamilton@ontario.ca	416-995-8404	August 7, 2026	Acknowledgement of the NESC and correction. *Replied on behalf of Karla Barboza.	N/A	N/A

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
8	Ministry of Municipal Affairs and Housing Office	Elain Hardy	Email	Elaine.Hardy@ontario.ca	437-335-7093	August 7, 2027	Request to change contact to Carly Basu.	N/A	N/A
9	Technical Standards and Safety Authority (TSSA)	Robin Yu	Email	ryu@tssa.org	416-734-3402	August 27, 2026	Thanked Stantec for providing the corrected web address. TSSA does not have any comments at this time. Enbridge is to submit an Application for Review of Pipeline Project to TSSA.	N/A	N/A

Municipal

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
1	Municipal Staff on Contact List	Stantec	Email	N/A	N/A	July 6, 2026	NUES circulated via email.	N/A	N/A
2	City of Hamilton	Christina Fahel	Email	Christina.Fahel@hamilton.ca	905-546-2489 ext. 4887	July 8, 2026	NUES has been passed on to appropriate staff member from Engineering services division.	N/A	N/A
3	Municipal Staff on Contact List	Stantec	Email	N/A	N/A	August 4, 2026	NESC circulated via email.	N/A	N/A
4	Brian Morris-City of Hamilton	Enbridge Gas	Email	brian.morris@hamilton.ca	N/A	August 6, 2026	An Enbridge Gas representative sent Brian Morris a copy of the Kirkwall to Hamilton NESC as well as the Guelph Tie-Over NESC.	N/A	N/A

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
5	Municipal Staff on Contact List	Stantec	Email	N/A	N/A	August 7, 2026	Update provided noting that NESC circulated on August 4, 2026 had incorrect Virtual Information Session (VIS) web address. An updated NESC with correct VIS address was circulated via email.	N/A	N/A
6	City of Hamilton	Charlie Lauricella	Email	Charlie.Lauricella@hamilton.ca	905-546-2424 ext. 2440	August 13, 2026	Confirmation that division has logged the proposal for review. Request to include Jason Peele and Rich Shebib in future correspondence. Request to provide updated project timelines and let this division know if outreach with the Mayor's office or other departments have been initiated.	N/A	N/A

Indigenous Communities

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
1	Indigenous Communities	Enbridge Gas	Email	N/A	N/A	July 6, 2026	NUES and PSM circulated via email.	N/A	N/A
2	Indigenous Communities	Enbridge Gas	Email	N/A	N/A	August 6, 2026	NESC circulated via email.	N/A	N/A

Landowners and Stakeholders

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
1	Landowners and Stakeholders on Contact List	Stantec	Mail	N/A	N/A	July 6, 2026	NUES circulated via letter to Landowners. NUES circulated via email to Stakeholders.	N/A	N/A
2	Conservation Ontario	Robyn Rumney	Email	rrumney@conservationontario.ca	289-338-8725	July 6, 2026	Robyn thanked Stantec for sending the NUES and said that they would send to the Conservation Authorities within the Project Area.	July 6, 2026	A Stantec representative confirmed that the NUES was also sent to Grand River Conservation Authority, Hamilton Conservation Authority and Conservation Halton.
3	Ontario Woodlot Association	Glen Prevost	Email	glen.prevost@ontariowoodlot.com	705-358-7913	July 13, 2026	Thanked Stantec, acknowledgement of NUES.	N/A	N/A
4	Hydro One	Secondary Land Use Dep.	Email	N/A	N/A	July 29, 2026	Summary of attached document: Confirmation of existing high voltage Transmission facilities in study area. Request to stay informed on informed on project so they can provide alternative solutions if there are conflicts with their assets. If Kirkwall-Hamilton project results in Hydro One station expansionor transmission line relocation/ replacement an Environmental Assessment is required (minimum 6 months for the process, up to 18 months). Hydro One must be consulted.	N/A	N/A

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
							If possible, at current stage, confirm that Hydro One infrastructure and rights-of-way will be avoided. If not, allocate lead-time in the project schedule to work through conflicts with Hydro One. Proponent is responsible for costs associated with modifications/ relocations to Hydro One infrastructure and added costs from increased efforts to maintenance. The map attached to this email shows the Enbridge Valve Site located at 1374 Valens Road in relation to the nearby Hydro One corridor as well as other transmission lines. *Note: project may require submission of a Compatibility Review for Hydro One to fully assess the impact to our assets. *Note: Just response is not approval, Hydro One must be consulted on project.		

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
5	Hydro One	Tiffany Fung	Email	Tiffany.Fung@HydroOne.com	416-436-9669	July 29, 2026	Confirmation of impact on Hydro One's transmission lines. HONI technical review is required. Non-refundable engineering review fee with a minimum of 10–12-week review period. Re-submission results in longer review period. Document provided by HONI to explain level of detail required.	N/A	N/A
6	Landowners and Stakeholders on Contact List	Stantec	Mail and Email	N/A	N/A	August 4, 2026	NESC circulated via letter to Landowners. NESC circulated via email to Stakeholders.	N/A	N/A
7	Landowners and Stakeholders on Contact List	Stantec	Mail	N/A	N/A	August 6, 2026	NESC admail was circulated to Study Area via Canada Post.	N/A	N/A
8	Stakeholders on Contact List	Stantec	Email	N/A	N/A	August 7, 2026	Update provided noting that NESC circulated on August 4, 2026 had incorrect Virtual Information Session (VIS) web address. An updated NESC with correct VIS address was circulated via email.	N/A	N/A
9	Landowners and Stakeholders on Contact List	Stantec	Mail	N/A	N/A	August 10, 2026	NESC with corrected VIS web address) circulated via letter to Landowners.	N/A	N/A

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
10	Landowner	Larry Dee	Email	LJD-CLM@outlook.com	N/A	August 17, 2026	Landowner is upset that they received two notices and is located outside of the Study Area. Note: Likely Canada Post circulation, which distributes more broadly.	N/A	N/A
11	Media-Hamilton Spectator	Andrew Baulcomb	Email	ven-abaulcomb@thespec.com	N/A	August 19, 2026	Andrew requested a phone call with the Stantec Project Manager to discuss the Project.	August 21, 2026	The Stantec Project Manager provided available times to discuss the project with The Hamilton Spectator. The Hamilton Spectator did not respond.
12	Fothergill Planning & Development Inc.	Ed Fothergill	Email	ed@fothergillplanning.ca	905-577-1077	August 20, 2026	Mr. Fothergill's firm represents the interests of the Ponderosa Nature Park and has had previously discussions with Enbridge and the owner of the Ponderosa. Mr. Fothergill requested to be added to contact list and be provided with info regarding the EA process.	N/A	N/A
13	Hydro One	Hongxia Sun	Email	Susan.SUN@HydroOne.com on behalf of Department.SecondaryLandUse@hydroone.com	N/A	August 26, 2026	Hydro One advised that existing transmission and distribution infrastructure is present within the study area and requested continued consultation as project details are refined. Hydro One could not determine whether project alternatives would conflict with its assets. Noted that any required relocation or modification of	N/A	N/A

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
							its infrastructure could trigger additional EA requirements, schedule implications, and costs to the proponent. Hydro One emphasized the need to maintain required electrical clearances, access to infrastructure, and appropriate drainage conditions within transmission corridors, and indicated that a Compatibility Review may be required as the project advances.		
14	Stantec	N/A	Email	N/A	N/A	August 26, 2026	Follow-up: Stantec forwarded VIS link, and copies of boards and questionnaire to Marian Bremer (Cogeco), who attended the Open House.	N/A	N/A
15	Landowner	[redacted]	Email	[redacted]	[redacted]	August 28, 2026	[redacted] expressed support for the project and offered his assistance with security for the Project.	August 31, 2026	Stantec reply provided and [redacted] information to contact list.
16	TransCanada Pipelines Ltd. (TCPL)	Ashley Anderson	Email	tcenergy@mhbcplan.com	705-728-0045 ext. 241	September 16, 2026	A representative from TCPL provided a response letter and requested to be added to the contact list for future notifications. The letter included TCPL general building restrictions, constructionrequirements, crossing TCPL utilities and protocols regarding accessing the TCPL right-of-way.	N/A	N/A

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
17	New Country Investors- Ponderosa Nature Resort	Bill Pearsall	Letter	N/A	N/A	October 20, 2026	Provided a letter which included questions pertaining to project routing, emergency accessibility, seasonal and hourly work timing, fieldwork scope, property restoration and other past commitments made by Enbridge Gas.	October 26, 2026	Enbridge Gas will continue to consult this landowner as the Project progresses.

Information Session Questionnaire Comments

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
1	Interested citizen	[redacted]	In-person questionnaire form	[redacted]	N/A	August 25, 2026	Concerns about the project: • How the environment, lands and species at risk, will be impacted. • Construction concerns (traffic, noise) Would like to receive a copy of the ER Addendum.	N/A	N/A
2	Interested citizen + member of interest group	[redacted]	In-person questionnaire form	[redacted]	[redacted]	August 25, 2026	Concerns about the project: • Wetland and wildlife preservation. • Restoration of effected land (erosion). Would like the Project Team to consult with local environmental and climate groups. Would like to receive a copy of the ER Addendum.	N/A	N/A

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
3	Interested citizen + member of interest group	[redacted]	In-person questionnaire form	[redacted]	[redacted]	August 25, 2026	Not in support of the project. Has concerns about the following: • Endangered Blanding Turtles in area. • Reliance on fossil fuels • The use of the pipeline in relation to domestic use. • Support for the route B option (reduced tree removals) • Woud like the Project Team to consult local organizations (wildlife specialists, the Hamilton Naturalists club and HCA. • Asks: what percentage of Canadian domestic gas will be going through the proposed pipeline? Would like to receive a copy of the ER Addendum.	N/A	N/A
4	Interested citizen + member of interest group	[redacted]	In-person questionnaire form	[redacted]	[redacted]	August 25, 2026	Has concerns about environmental impacts, and species at risk preservation. • Would like to receive updates on reviews and approvals. Would like to receive a copy of the ER Addendum.	N/A	N/A

B.8 Preliminary Desktop Environmental and Cultural Heritage Summary Memo

DRAFT

Dawn Parkway System Renewal Project – Kirkwall to Hamilton Section: Preliminary Desktop Environmental and Cultural Heritage Summary Memo

Final Memo

June 30, 2026

Prepared for:
Enbridge Gas Inc.
50 Keil Drive
Chatham, Ontario N7M 5J5

Prepared by:
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300 Hagey Boulevard, Suite 100
Waterloo, Ontario N2L 0A4

Project/File:
160901401

Stantec

Limitations and Sign-off

The conclusions in the Memo titled Dawn Parkway System Renewal Project – Kirkwall to Hamilton Section: Preliminary Desktop Environmental and Cultural Heritage Summary Memo are Stantec's professional opinion, as of the time of the Memo, and concerning the scope described in the Memo. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Memo relates solely to the specific project for which Stantec was retained and the stated purpose for which the Memo was prepared. The Memo is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

Stantec has assumed all information received from Enbridge Gas Inc. (the "Client") and third parties in the preparation of the Memo to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

This Memo is intended solely for use by the Client in accordance with Stantec's contract with the Client. While the Memo may be provided by the Client to applicable authorities having jurisdiction and to other third parties in connection with the project, Stantec disclaims any legal duty based upon warranty, reliance or any other theory to any third party, and will not be liable to such third party for any damages or losses of any kind that may result.

Prepared by  Kelly, Dominique 2026.06.30 13:57:59 -04'00'

(signature)

Dominique Kelly, B.A.
Environmental Planner

Reviewed by Candido, Mike  Digitally signed by Candido, Mike Date: 2026.06.30 13:44:38 -04'00'

(signature)

Mike Candido, B.Sc. (Env.), CAN-CISEC
Project Manager

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Appendix A Stage 1 Archaeological Assessment – Kirkwall to Hamilton
Appendix B DFO Enbridge Gas Inc. Drawings

1 Preliminary Desktop Environmental and Cultural Heritage Summary Memo

1.1 Content and Purpose

This Preliminary Desktop Environmental and Cultural Heritage Summary Memo (PSM) provides a description of the Project, summarizes the regulatory process, outlines environmental surveys and the construction process, and lists potential impacts and mitigation measures.

It should be noted that more details are known about the Project than would typically be expected at this very early planning stage due to previous environmental studies completed in the Study Area. As the Project evolves, these details will be subject to change as design progresses, and as Enbridge Gas Inc. (Enbridge Gas) obtains access to the private property upon which the project will be constructed.

The purpose of the PSM is to both provide Indigenous communities with project details in advance of the public consultation period, and to seek Indigenous input and knowledge to enhance the Project Team's understanding of the Study Area. Enbridge Gas and Stantec respectfully acknowledge the value of traditional knowledge and oral history that is shared among Indigenous peoples. We recognize that Indigenous peoples have strong ties to their lands and that the use of these lands, from a development, ecosystems, and sustainability perspective, is of vital importance to communities. We also recognize that the worldviews shared by Indigenous peoples contain a rich knowledge of rare plants and animals. An Indigenous worldview is one that is developed through a mutually beneficial relationship, where one see's themselves as deeply connected to the natural world. This PSM is the product of Western knowledge and a Western worldview. In this vein, we acknowledge that the discussions in this Memo on Provincially and Federally protected species, for instance, do not capture the full breadth of the value these species have to Indigenous peoples.

We welcome the opportunity for Indigenous peoples to share context and background so that we may gain a broader understanding of the Study Area. We request your review of this PSM, and your feedback on the Study Area and items of importance that should be considered as the Project unfolds.

2 Project Overview

Through Enbridge Gas's Integrity Management Program (IMP), which involves regular inspection and condition monitoring on assets, certain integrity-related features were identified on the NPS 26 Dawn Parkway natural gas pipeline. To support continued safe operation, Enbridge Gas reduced the operating pressure of the pipeline, resulting in a significant reduction in throughput across the Dawn Parkway Transmission System. This capacity reduction is not sustainable in the long term because it limits the system's ability to meet firm design day commitments and will create future gas supply and system capacity risks.

Enbridge Gas is proposing to construct the Dawn Parkway System Renewal Project – Kirkwall to Hamilton Section (the Project). The purpose of the Project, along with the proposed work on the Dawn to Enniskillen Section, is to recover a portion of the lost capacity within the Dawn Parkway Transmission System, while supporting the continued safe, reliable, economic, and secure delivery of natural gas to serve existing demand.

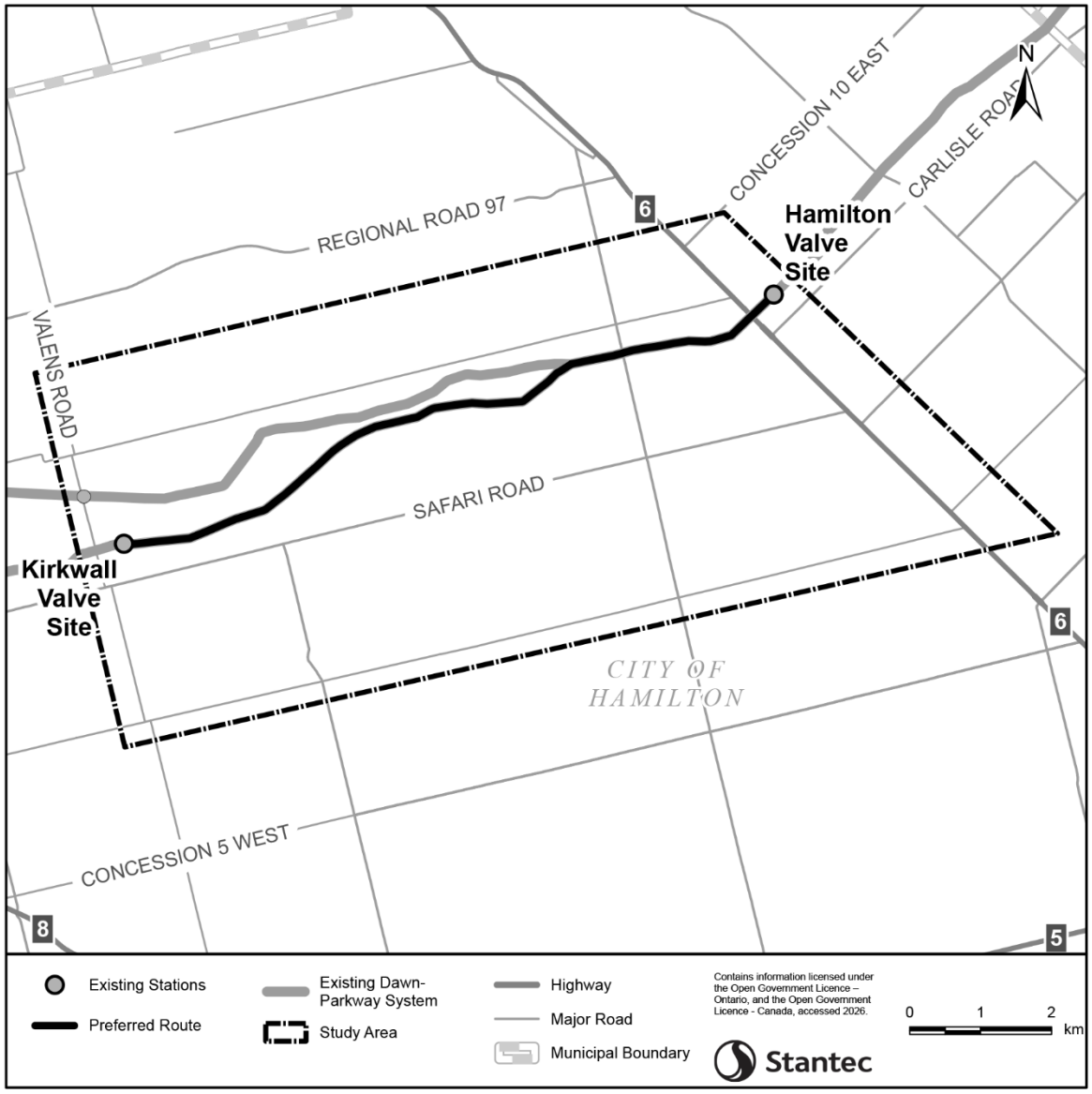
This PSM focuses on the Kirkwall to Hamilton section. The Dawn Parkway Transmission System was built in the 1950s and is the backbone of the natural gas system supporting energy security and economic competitiveness in Ontario and across Canada. It is part of a broader integrated supply network that serves homes and businesses across 500 municipalities in Ontario, Quebec, the Maritimes, and the Northeastern United States.

For this Project, Enbridge Gas is considering improvements to install new 48- inch diameter natural gas pipeline between its existing Kirkwall Valve Site, located northeast of the intersection of Safari Road and Valens Road and the existing Hamilton Valve Site, located east of Highway 6 and north of Carlisle Road. The Preferred Route was determined through a route selection process conducted in 2019 and is generally parallel to the three existing Enbridge Gas pipelines, measuring 10.2 km in length. New

permanent easements and temporary working space during construction will be required.

The Preferred Route is shown on Figure 1.

Figure 1 Preferred Pipeline Route



3 Regulator Process

3.1 Ontario Energy Board Application

The Project involves the construction of a hydrocarbon pipeline in Ontario, which requires Leave to Construct approval under section 90(1) of the *Ontario Energy Board Act*, 1998. As such, Enbridge Gas will submit a Leave to Construct application to the Ontario Energy Board for this Project. The Leave to Construct application will include technical details for the Project, including project need, alternatives, engineering, costs, environmental, lands, and Indigenous consultation.

3.2 Environmental Study Process

3.2.1 Overview

As part of the planning process, Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to complete an Environmental Study for the Project. The findings of the Environmental Study will be summarized in an Environmental Report which will form part of the Leave to Construct application.

It should be noted that while the term environmental assessment is often used to describe the Environmental Study, the process does not fall under the Ontario *Environmental Assessment Act*. The Environmental Study and resultant Environmental Report will follow the Ontario Energy Board *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Projects and Facilities in Ontario, 8th Edition (2023)*.

3.2.2 Route Evaluation and Selection

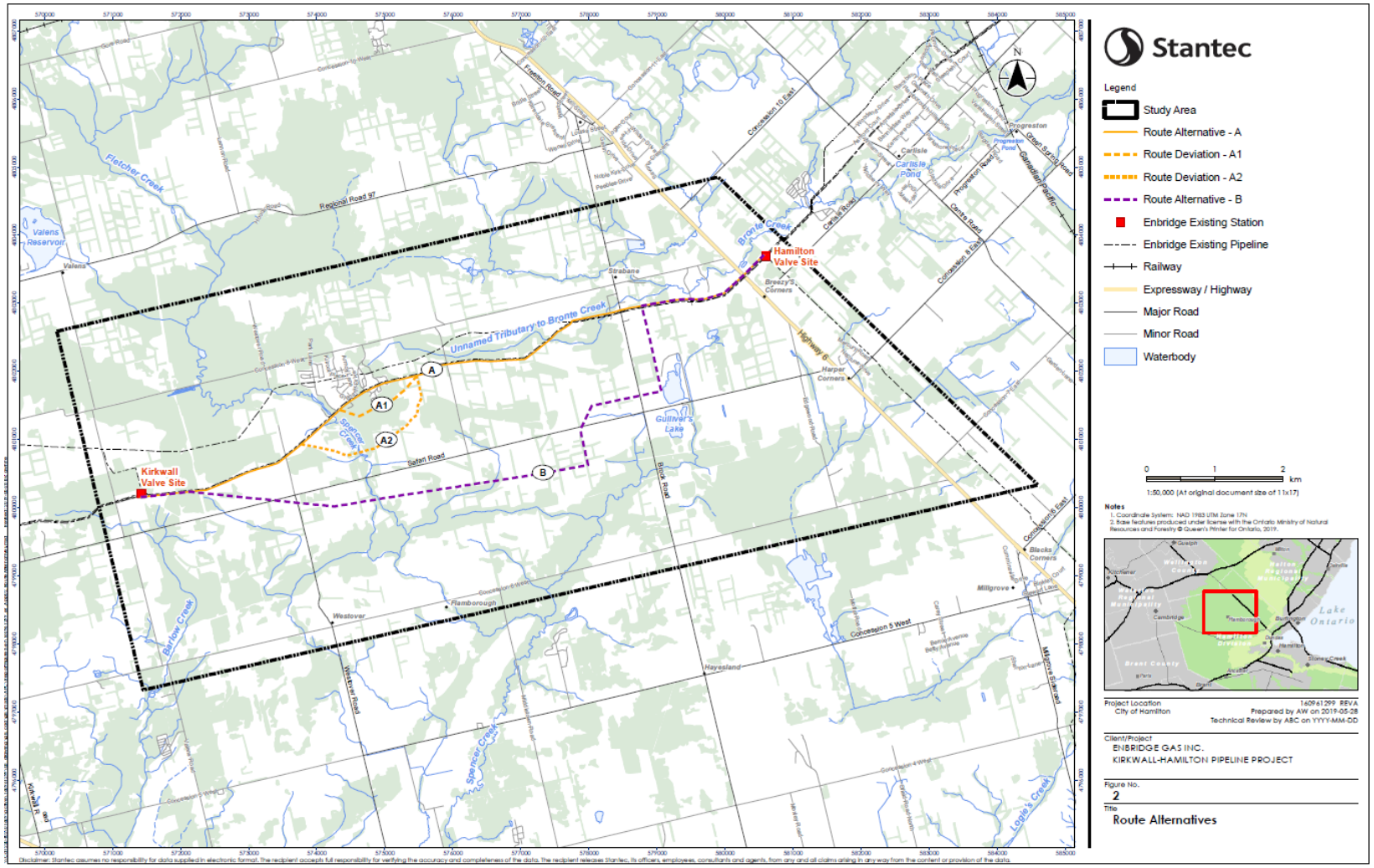
The Environmental Study begins with the route evaluation and selection process. The first step is the development of the routing methodology. The overarching objective is to identify routes with the least potential for adverse environmental and socio-economic impacts; which is supported by the objectives of direct routes, reducing impacts, and

paralleling existing infrastructure. An initial Study Area will then be developed to allow for a reasonable number of alternative routes to be considered. The size of the initial Study Area can vary based on surrounding existing features and infrastructure.

Once alternative routes are identified, they will undergo a comparative evaluation to select the Preliminary Preferred Route. The Route is considered 'Preliminary' until it has been presented to stakeholders and Indigenous Communities for feedback, which will occur through an in-person and virtual information session, and various meetings. Based on feedback the Preliminary Preferred Route will be adjusted as required, and a Preferred Route will be determined.

In the 2019 Environmental Report, three pipeline routing opportunities were identified: two existing Enbridge Gas pipeline easements (referred to as the northern and southern easements) and a hydroelectric corridor operated by Hydro One Networks Inc. (see Figure 2). A field review conducted by Stantec and Enbridge Gas (June 1, 2016) found that the northern existing pipeline easement is not feasible for adding another pipeline due to wetlands, wooded areas, and nearby residential development. As a result, two alternative routes were proposed that generally follow existing corridors while reducing environmental and community impacts – Route A, and Route B. Based on further investigation, there were some revisions to the original proposed route alternatives due to constructability. Environmental and socioeconomic challenges such as watercourse crossings and proximity to existing communities were the main concerns that drove the revisions to the alternative routes.

Figure 2 Route Alternatives from the 2019 Environmental Report



The evaluation found both alternatives to be environmentally acceptable, but Route A was preferred for operational efficiency because it can largely parallel and overlap an existing Enbridge Gas easement. About 40% of the required easement (12 of 28 m) could reuse previously disturbed land, reducing new impacts to 16 m across agricultural, residential, and natural areas. A 2018 field visit confirmed Route A was feasible to construct through Antrim Glen, and the overlap allows the project to benefit from knowledge gained during the 1991 pipeline construction, such as groundwater and archaeological considerations. As such, Route A was confirmed as the Preferred Route.

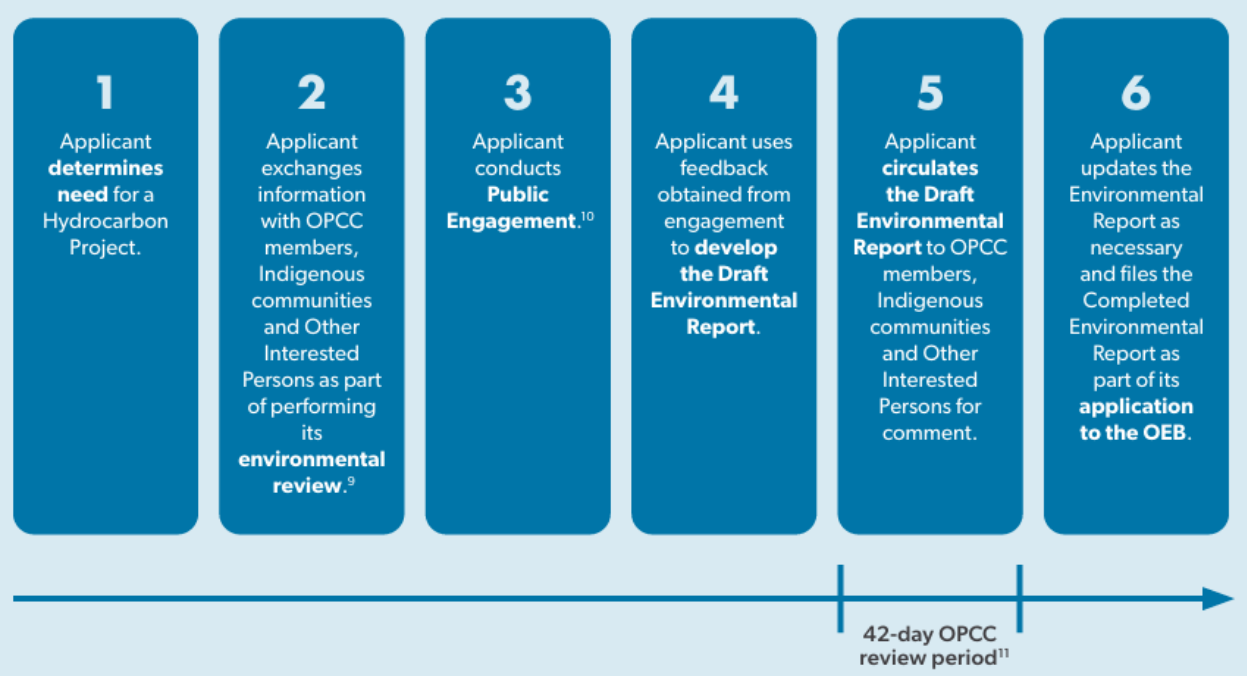
3.2.3 Impact Assessment and Environmental Report

Once a route is determined, a reduced Study Area will be established to cover environmental and socio-economic features with which the Project may interact. Existing features in the Study Area will be summarized, and an assessment will be conducted to determine potential environmental and socio-economic impacts, and cumulative effects, that would result from the Project. Based on the assessment, mitigation and protective measures, supplemental studies, monitoring, and contingency plans will be outlined to reduce or avoid impacts.

The Environmental Study concludes with the preparation of the Environmental Report, as well as Environmental Alignment Sheets to identify site-specific mitigation and protective measures to be implemented during construction.

The process for the preparation and review of the Environmental Report can be found in Figure 3. As noted, a draft version of the Environmental Report will be circulated for a 42-day review and comment period. Comments received outside of the 42-day period will be considered but will not be reflected in the final Environmental Report.

Figure 3 Process for the Preparation and Review of the Environmental Report



In June 2019 Stantec completed the *Dawn-Parkway System Expansion: Kirkwall-Hamilton Pipeline Section: Environmental Report*. This Project will reaffirm the 2019 Environmental Report, as well as completed surveys, and an Addendum will be completed noting any changes to the current scope. This Addendum will fulfill the requirements of the Ontario Energy Board *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Projects and Facilities in Ontario, 8th Edition* (2023).

3.3 Project Schedule

The Project Schedule includes the following main milestones:

- Preferred Route presented for feedback – Summer 2026
- 2019 Environmental Report and Draft Addendum to the 2019 Environmental Report circulated for 42-day review – Fall 2026
- Ontario Energy Board regulatory process – Early 2027
- Environmental and Cultural Heritage Surveys – 2027

- Construction – 2028
- In-Service – End of 2028

4 Environmental Surveys

Environmental surveys will be completed as part of the Project. By necessity, data becomes available at various stages of the Project. The level of data increases as the Project moves from the Environmental Study (which will largely use desktop information), to site-specific surveys which will be completed in advance of construction to confirm the recommendations of the Environmental Report. Environmental surveys will only be undertaken after detailed design is complete and landowner permission is obtained. Environmental surveys will be completed using Study Areas unique to each discipline. For example, ecological surveys typically occur within 120 m of a Project Footprint, where land access allows, to align with Natural Heritage survey guidance. On the other hand, cultural heritage surveys typically occur within 50 m of a Project Footprint to capture Project vibration impacts. And archaeological surveys typically occur only on the Project Footprint to capture areas of ground disturbance. The specific Study Area for each survey will be determined at the time of future surveys.

4.1 Ecology

4.1.1 Methodology

Ecological surveys are completed to document the presence of vegetation communities, wildlife habitat features, and aquatic features in a Study Area. Additional ecological surveys that may need to be completed are species specific surveys, and wetland identification and boundary delineation. The timing of ecological surveys is dictated by species-specific survey windows and seasonal considerations. Surveys are typically conducted during periods when target species are most active or detectable, such as breeding seasons or periods of increased activity (see Table 1, below). Ecological field programs are developed based on existing conditions and habitat present in a Study Area and therefore may not include all the outlined surveys.

All ecological surveys follow regulatory requirements and accepted survey standards.

Table 1 Timing Windows for Ecological Surveys

Category	Months											
	Jan	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Bats						✓						
Birds					✓	✓	✓					
Frogs and Toads				✓	✓	✓						
Insects							✓	✓				
Plants				✓	✓	✓	✓	✓	✓			
Salamanders			✓									
Snakes			✓	✓	✓	✓	✓	✓	✓			
Turtles			✓	✓	✓	✓	✓	✓	✓			
Aquatic Assessments			✓	✓	✓	✓	✓	✓	✓	✓		
Habitat Assessments	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

4.1.2 Existing Conditions and Future Surveys

Based on previous work that has been completed by Stantec in 2019 between the existing Kirkwall Valve Site and the existing Hamilton Valve Site, the area contains woodlands that have pockets of wetlands including provincially significant wetlands (PSWs), significant wildlife habitat (such as seasonal concentration areas, animal movement corridors, rare vegetation communities or specialized habitats, and habitat for 23 species of conservation concern – see Table 2), potential habitat for 26 Species at Risk – see Table 3 and Table 4 watercourse crossings in the Grand River, Spencer Creek, and Bronte Creek watersheds that include a variety of aquatic species (see Table 4).

Table 2 Potential Terrestrial Species of Conservation Concern

Species of Concern	Scientific Name	Provincial Status (COSSARO)	National Status (COSEWIC)
Plants			
Broad Beech Fern	*Phegopteris hexagonoptera*	Special Concern	Special Concern
Downy Yellow False Foxglove	*Aureolaria virginica*	-	-
Eastern Burning Bush	*Euonymus alatus*	-	-
Eastern Few-fruited Sedge	*Carex oligocarpa*	-	-
Fern-leaved Yellow False Foxglove	*Aureolaria pedicularia*	Special Concern	Special Concern
Green Arrow Arum	*Peltandra virginica*	-	-
Perfoliate Bellwort	*Uvularia perfoliata*	-	-
Scarlet Beebalm	*Monarda didyma*	-	-
Slender Mountain-mint	*Pycnanthemum tenuifolium*	Special Concern	Special Concern
Insects			
Gypsy Cuckoo Bumble Bee	*Bombus bohemicus*	-	-
River Bluet	*Enallagma anna*	-	-
Sleepy Duskywing	*Erynnis brizo*	-	-
Reptiles			
Ribbonsnake	*Thamnophis saurita*	Special Concern	Special Concern
Eastern Musk Turtle	*Sternotherus odoratus*	-	-

Species of Concern	Scientific Name	Provincial Status (COSSARO)	National Status (COSEWIC)
Northern Map Turtle	*Sternotherus odoratus*	-	-
Eastern Milksnake	*Lampropeltis triangulum*	-	-
Snapping Turtle	*Chelydra serpentina*	-	-
Birds			
Canada Warbler	*Cardellina canadensis*	Special Concern	Threatened
Caspian Tern	*Hydroprogne caspia*	Special Concern	Special Concern
Eastern Wood-Pewee	*Hydroprogne caspia*	Special Concern	Special Concern
Grasshopper Sparrow	*Ammodramus savannarum*	Special Concern	Threatened
Prairie Warbler	*Setophaga discolor*	Special Concern	Threatened
Wood Thrush	*Hylocichla mustelina*	Special Concern	Threatened

Table 3 Potential Terrestrial Species at Risk

Common Name	Scientific Name	Provincial Status (COSSARO)	National Status (COSEWIC)
Plants			
American Chestnut	*Castanea dentate*	Endangered	Endangered
American Columbo	*Frasera caroliniensis*	Endangered	Endangered
Butternut	*Juglans cinerea*	Endangered	Endangered

Common Name	Scientific Name	Provincial Status (COSSARO)	National Status (COSEWIC)
Few-Flowered Club-rush	*Trichophorum planifolium*	Endangered	Endangered
Eastern Flowering Dogwood	*Cornus Florida*	Endangered	Endangered
Red Mulberry	*Morus rubra*	Endangered	Endangered
Spotted Wintergreen	*Chimaphila maculata*	Endangered	Endangered
Reptiles			
Blandings Turtles	*Emydoidea blandingii*	Threatened	Endangered
Spiny Softshell	*Apalone spinifera*	Threatened	Endangered
Amphibians			
Jefferson Salamander	*Ambystoma jeffersonianum*	Endangered	Endangered
Jefferson X Blue-spotted Salamander, Jefferson genome dominates	*Ambystoma jeffersonianum X Ambystoma laterale*	Endangered	Endangered
Birds			
Bank Swallow	*Riparia riparia*	Threatened	Threatened
Barn Swallow	*Hirundo rustica*	Threatened	Threatened
Bobolink	*Dolichonyx oryzivorus*	Threatened	Threatened
Cerulean Warbler	*Setophaga cerulea*	Threatened	Threatened
Chimney Swift	*Chaetura pelagica*	Threatened	Threatened
Eastern Meadowlark	*Sturnella magna*	Threatened	Threatened

Common Name	Scientific Name	Provincial Status (COSSARO)	National Status (COSEWIC)
Eastern Whip-poor-will	*Antrostomus vociferus*	Threatened	Threatened
Least bittern	*Ixobrychus exilis*	Threatened	Threatened
Loggerhead Shrike	*Lanius ludovicianus*	Threatened	Threatened
Louisiana Waterthrush	*Parkesia motacilla*	Threatened	Threatened
Yellow-breasted Chat	*Icteria virens*	Threatened	Threatened
Mammals			
Eastern Small-footed Myotis	*Myotis leibii*	Endangered	Endangered
Little Brown Myotis	*Myotis lucifugus*	Endangered	Endangered
Northern Myotis	*Myotis septentrionalis*	Endangered	Endangered
Tri-coloured Bat	*Perimyotis subflavus*	Endangered	Endangered

Table 4 Background Review of Fish Species Along the Preferred Route

Fish Species		Grand River Watershed (GRCA 2005)	Spencer Creek Watershed (Bowlby et al. 2009)		Bronte Creek Watershed (CH 2013)
Common Name	**Latin Name**	**Barlow Creek Warmwater Habitat (No Crossings)**	**Small Riverine Warmwater Habitat (SC1)**	**Intermediate Riverine Coldwater Habitat (SC2)**	**SC3 and SC4**
Black Crappie	*Pomoxis nigromaculatus*		✓		
Blacknose Dace	*Rhinichthys atratulus*			✓	✓
Blacknose Shiner	*Notropis heterolepis*		✓	✓	
Blackside Darter	*Percina maculata*				✓
Bluntnose Minnow	*Pimephales notatus*			✓	✓
Brook Stickleback	*Culaea inconstans*	✓			✓
Brown Bullhead	*Ameiurus nebulosus*		✓		✓
Brown Trout	*Salmo trutta*				✓
Central Mudminnow	*Umbra limi*	✓	✓	✓	✓
Common Carp	*Cyprinus carpio*				✓
Common Shiner	*Luxilus cornutus*		✓	✓	✓

Fish Species		**Grand River Watershed (GRCA 2005)**	**Spencer Creek Watershed (Bowlby et al. 2009)**		**Bronte Creek Watershed (CH 2013)**
Common Name	**Latin Name**	**Barlow Creek Warmwater Habitat (No Crossings)**	**Small Riverine Warmwater Habitat (SC1)**	**Intermediate Riverine Coldwater Habitat (SC2)**	**SC3 and SC4**
Creek Chub	*Semotilus atromaculatus*	✓	✓	✓	✓
Fathead Minnow	*Pimephales promelas*			✓	✓
Green Sunfish	*Lepomis cyanellus*				✓
Hornyhead Chub	*Nocomis biguttatus*			✓	
Johnny Darter	*Etheostoma nigrum*			✓	✓
Largemouth Bass	*Micropterus salmoides*		✓		
Mottled Sculpin	*Cottus bairdii*			✓	
Northern Hog Sucker	*Hypentelium nigricans*				✓
Northern Pearl Dace	*Margariscus nachtriebi*				✓
Northern Pike	*Esox lucius*	✓			✓
Pumpkinseed	*Lepomis gibbosus*	✓	✓		✓
Redside Dace	*Clinostomus elongatus*			✓	
River Chub	*Nocomis micropogon*			✓	

Fish Species		**Grand River Watershed (GRCA 2005)**	**Spencer Creek (Bowlby et al.**	**Watershed 2009)**	**Bronte Creek Watershed (CH 2013)**
Common Name	**Latin Name**	**Barlow Creek Warmwater Habitat (No Crossings)**	**Small Riverine Warmwater Habitat (SC1)**	**Intermediate Riverine Coldwater Habitat (SC2)**	**SC3 and SC4**
Rosyface Shiner	*Notropis rubellus*			✓	
White Sucker	*Catostomus commersonii*				✓

Additionally, amphibian call count surveys, turtle surveys, breeding bird surveys and Ecological Land Classification and botanical surveys were completed in 2020. While the above information is a good starting point, given the age of the information it will need to be reviewed and updated. A roadside assessment will be conducted in the summer of 2026 to confirm previous surveys and plan for future surveys. Stantec and Enbridge Gas will provide communication to Indigenous Communities ahead of the roadside assessment to offer participation. Any formal agreements for participation will occur directly with Enbridge Gas.

It is anticipated that on-site fieldwork will occur in 2027 after detailed design is complete (so the Project Footprint can be finalized) and access to private land is obtained. The nature of the surveys will depend on the features present and the anticipated project impacts. Stantec and Enbridge Gas will provide communication to Indigenous Communities ahead of the 2027 fieldwork program to offer participation. Any formal agreements for participation will occur directly with Enbridge Gas.

4.2 Archaeology

4.2.1 Methodology

Archaeological assessments are completed to identify and document potential archaeological resources that may be impacted by a Project. Initial assessments (Stage 1) determine the potential for archaeological sites, followed by field investigations (Stage 2-4) where warranted. These investigations may include pedestrian surveys or test pit surveys, depending on site conditions.

The pedestrian survey involves archaeologists walking across a property looking for artifacts, such as stone tools or pottery, ceramics, bones from wild or domesticated animals, or any other possible evidence of past human activity in the area. A pedestrian survey requires the landowner to plough their fields so that the so that the ground is visible. These surveys can be conducted any time of year and in any weather condition, except when snow cover or excessive rain impedes ground visibility.

A test pitting survey is conducted in areas that cannot be ploughed, such as woodlots, manicured lawns, areas of scrub or brush, and rocky areas. Small pits about 30 centimetres in diameter are dug every five metres across the entire project footprint. The contents of the test pit are filtered through a wire screen until only solid materials are left. Test pit surveys need to be conducted when the soil is soft enough to excavate.

4.2.2 Existing Conditions and Future Surveys

Based on the Stage 1 Archaeological Assessment conducted between the Kirkwall and Hamilton Valve Sites in 2019, it was determined that the entire area has potential for as-yet undiscovered archaeological remains (see Appendix A).

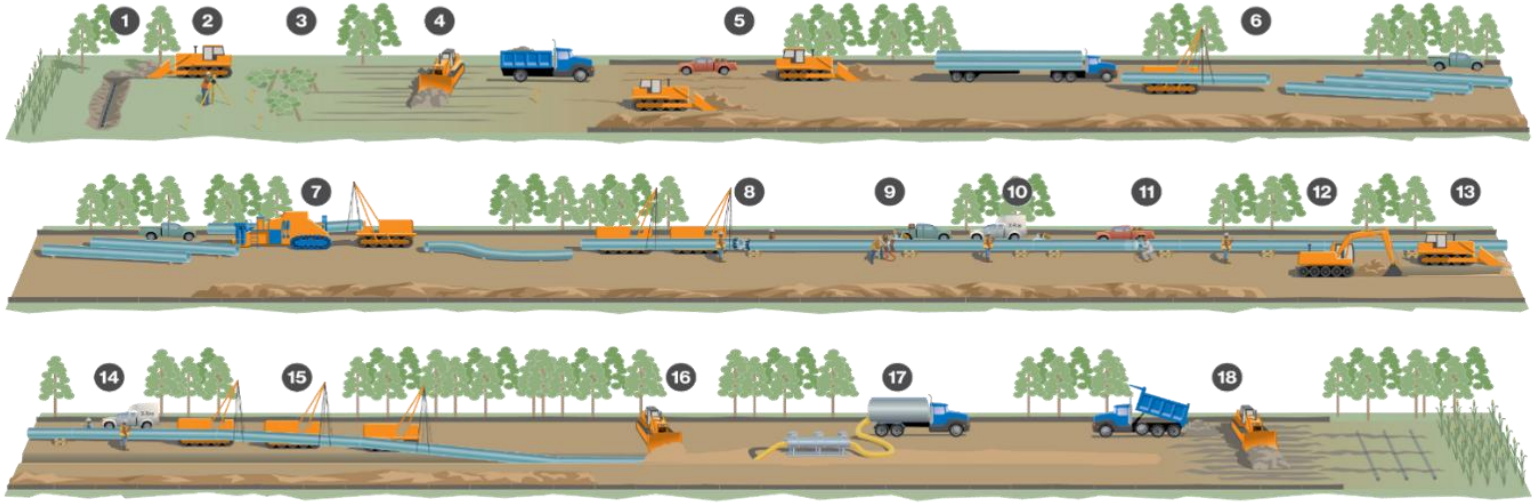
A Stage 2 Archaeological Assessment was conducted between May – November 2020. During the Stage 2 survey, 34 archaeological locations were identified. Of these 34 locations, 27 do not fulfill the criteria for a Stage 3 Archaeological Assessment as the cultural heritage value or interest of these sites has been sufficiently documented and no further archaeological work is recommended. Seven of the locations retain further cultural heritage value or interest and fulfill the criteria for Stage 3 Archaeological Assessment. Therefore, Stage 3 Archaeological Assessment will occur for these seven locations to further evaluate each site’s cultural heritage value or interest.

In addition to the above, a portion of the Study Area (approximately 4.9%) comprises lands that were not surveyed during the Stage 2 assessment and which retains potential for the identification and documentation of archaeological resources. Thus, a Stage 2 archaeological assessment is required for this portion of the Study Area.

It is anticipated that the Stage 2 fieldwork will occur in the spring of 2027 after detailed design is complete (so the Project Footprint can be finalized) and access to private land is obtained. Stantec and Enbridge Gas will provide communication to Indigenous Communities ahead of the Stage 2 fieldwork to offer participation. Any formal agreements for participation will occur directly with Enbridge Gas.

5 Construction Process and Steps

Figure 4 Constructing an Enbridge Gas Pipeline



1. Pre-construction tiling
2. Surveying and staking
3. Clearing
4. Right-of-way topsoil stripping
5. Front-end grading
6. Stringing pipe
7. Field bending pipe
8. Lining-up pipe
9. Welding process
10. X-ray or ultrasonic inspection, weld repair
11. Field coating
12. Digging the trench
13. Padding trench bottom
14. Final inspection and coating repair
15. Lowering pipe
16. Backfilling
17. Hydrostatic testing
18. Site restoration and post-construction tiling

Photo 1 Site Grading and Soil Stripping



Photo 2 Pipeline Installation in a Trench



Photo 3 Damn and Pump Watercourse Crossing



Photo 4 Pipeline Backfill and Regrading to Previous Conditions



The full 18-step pipeline construction process is shown above on Figure 2. In a simplified manner, Project construction will involve 4 main steps. First, the Project footprint is prepared, including staking, clearing, topsoil stripping, and grading (see Photo 1). Next, the new 48-inch natural gas pipeline will be installed (see Photo 2). Any watercourse crossings will be constructed via dam and pump and temporary bridges (see Photo 3, and the specifications provided in Appendix B). Lastly, the trench is backfilled, and the site is regraded to previous conditions (see Photo 4). Following site restoration, there will be little indication that a natural gas pipeline exists.

6 Potential Impacts and Mitigation Measures

The sections below outline typical impacts and mitigation measures for natural gas pipeline projects. A Project-specific assessment of impacts and mitigation will be undertaken following determination of the Preferred Route and will be summarized in the Environmental Report. Impacts and mitigation will be further refined following the completion of the surveys outlined in Sections 4.1.2 and 4.2.2, and through the permitting process with relevant agencies.

The standard process for mitigation, monitoring, and contingency measures is that a third-party consultant, in this case Stantec, will make recommendations in the Environmental Report. Enbridge Gas will commit to the OEB to implement the recommendations. To support implementation, Enbridge Gas will have a full-time Environmental Advisor and on-site Inspector during the design and construction phases of the Project. The Environmental Advisor will be involved throughout the consultation process and will provide input on the Environmental Report including mitigation and monitoring measures. During construction, the on-site Inspector will be present to confirm that construction activities are following the recommendations of the Environmental Report and any conditions of environmental permits.

6.1 Socio-Economic Features

The Project will be primarily constructed through agricultural fields, and near rural homes and businesses.

6.1.1 Potential Impacts

Potential impacts include:

- Temporary increases in noise, dust and air emissions.
- Increased construction traffic volumes.
- Temporary impairment of the use of rural homes and businesses.

- Ornamental vegetation clearing along the pipeline route.

6.1.2 Mitigation Measures

Mitigation measures include:

- Provide access across the construction area.
- Restrict construction to daylight hours and adhere to applicable noise by-laws.
- Develop and implement a Traffic Control Plan.
- Place fencing at appropriate locations for safety.
- Ensure that a designated Enbridge Gas representative is available prior to and throughout construction.
- Implement dust control measures.
- Re-vegetation of cleared ornamental vegetation areas as needed (including seeding/planting).

6.2 Cultural Heritage Resources

Cultural heritage features such as archaeological finds, heritage buildings, fences, and landscapes may be encountered during construction.

6.2.1 Potential Impacts

Potential impacts include:

- Damage or destruction of archaeological or historical resources.

6.2.2 Mitigation Measures

Mitigation measures include:

- Archaeological assessment of the construction footprint.
- Cultural heritage assessment (for built heritage features and cultural heritage landscapes).
- Reporting of any previously unknown archaeological or historical resources uncovered, or suspected to be uncovered, during excavation.

6.3 Aquatic Resources

Aquatic features such as watercourses and aquatic wildlife may be crossed during construction.

6.3.1 Potential Impacts

Potential Impacts include:

- Disruption or alteration to aquatic species and habitat and/or nuisance effects.
- Increased erosion, sedimentation, and turbidity resulting from removal of vegetation.

6.3.2 Mitigation Measures

Mitigation measures include:

- Implement measures consistent with the Fisheries and Oceans Canada's (DFO) Measures to Protect Fish and Fish Habitat.
- Follow the measures outlined in the DFO and Enbridge Gas Inc. Agreement related to Watercourse Crossings for Pipeline Construction and Maintenance in Ontario (2022) – see Appendix B.
- Install erosion and sediment control measures.
- Obtain and abide by all agency permits and approvals.
- Conform to fish timing window guidelines.
- For in-channel construction, protect aquatic species through methods such as flow diversion/dewatering, controlled pumping rates, intake screening, and fish rescue planning.
- Restore and seed disturbed areas to establish habitat and reduce erosion.

6.4 Terrestrial Resources

Natural environment features such as woodlands, wetlands, and wildlife habitat may need to be crossed during construction.

6.4.1 Potential Impacts

Potential impacts include:

- Damage or removal of vegetation and wildlife habitat in the construction area.
- Disturbance and/or mortality to local wildlife.

6.4.2 Mitigation Measures

Mitigation measures include:

- Conduct ecological surveys in advance of construction.
- Complete tree removal outside of migratory bird windows to the extent possible.
- Enbridge Gas commits to a 3:1 Tree Replacement program for the wooded areas to be removed.
- Clearly mark the construction area to avoid accidental damage.
- Restore and seed disturbed areas to establish habitat and reduce erosion, where appropriate.
- Secure all necessary permits and follow conditions of approval.

7 Closing

Enbridge Gas is committed to working collaboratively with Indigenous communities to ensure that treaty rights and interests are respected throughout the planning and development process. We encourage the early sharing of knowledge, including field observations and community perspectives, to help us effectively identify and assess potential impacts. This early engagement is vital to developing appropriate mitigation measures and ensuring that community values and priorities are meaningfully reflected in the project.

Appendices

Appendix A Stage 1 Archaeological Assessment – Kirkwall to Hamilton

Stage 1 Archaeological Assessment: Kirkwall – Hamilton Pipeline Project

Parts of Various Lots and Concessions,
Geographic Townships of Beverly, West Flamborough, and East Flamborough,
former Wentworth County,
now City of Hamilton, Ontario

June 18, 2019

Prepared for:

Enbridge Gas Inc.
50 Keil Drive North
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Prepared by:

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PIF Number: P256-0564-2018
Project Number: 160961299

ORIGINAL REPORT

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Executive Summary

Stantec Consulting Ltd. (Stantec) was retained by Enbridge Gas Inc. (Enbridge Gas) to complete a Stage 1 archaeological assessment for the Kirkwall – Hamilton Pipeline Project (the Project). Note: As of January 1, 2019, Union Gas Ltd. and Enbridge Gas Distribution have amalgamated into one utility with the legal name Enbridge Gas Inc. The Project Area, or study area, for the Stage 1 assessment of the Project comprises approximately 6,400 hectares of various Lots and Concessions, Geographic Townships of Beverly, West Flamborough, and East Flamborough, former Wentworth County, now City of Hamilton, Ontario. The Stage 1 archaeological assessment was conducted during the preliminary planning phase of the Project in accordance with the provisions of the *Ontario Heritage Act* (Government of Ontario 1990a) and the requirements of Section 4.3.4 of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition* (OEB 2016). The final route and construction easement, including any temporary land use, for the Project will be determined at a later date. Thus, the current study area for the Stage 1 archaeological assessment is large and serves to capture a broad and generalized geographic area associated with the Project.

The Stage 1 archaeological assessment was completed under Project Information Form (PIF) # P256-0564-2019 issued to Parker Dickson, MA, of Stantec, by the Ministry of Tourism, Culture and Sport (MTCS). Permission for Stantec staff to enter the study area for the purposes of the Stage 1 archaeological assessment was not required as a property inspection was not required.

The Stage 1 archaeological assessment determined that the entirety of the study area retains potential for the identification of pre-contact Indigenous, post-contact Indigenous, and Euro-Canadian archaeological resources. Numerous farm complexes, residences, municipal rights-of-way (ROWs), and other existing features (i.e., existing roads, railways, residential and commercial complexes, and buried utilities and infrastructure) are located throughout the study area; however, they were not specifically examined as part of a Stage 1 property inspection and may still retain archaeological potential. As such, these areas have been included as part of the determination that the study area exhibits potential for the identification and recovery of archaeological resources.

In accordance with Section 1.3.1 and Section 7.7.4 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is required for any portion of the Project's anticipated construction activities which impacts an area of archaeological potential**. Further details regarding Stage 2 archaeological assessment recommendations are provided in the body of the report.

The MTCS is asked to review the results presented and to accept this report into the *Ontario Public Register of Archaeological Reports*. Archaeological sites recommended for further archaeological fieldwork remain subject to Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990a) and may not be altered, or have artifacts removed, except by a person holding an archaeological license.

The Executive Summary highlights key points from the report only; for complete information and findings, the reader should examine the complete report.

Project Personnel

Project Manager:	Michael Candido, B.Sc. (Env)
Licensed Archaeologist:	Parker Dickson, MA (P256)
GIS Specialist:	Andrew White, M.Sc.; Patrick Worsell, BES, DGIS
Report Writer:	Parker Dickson, MA (P256)
Quality Review:	Peter Popkin, Ph.D., CAHP, MCIfA (P362)
Independent Review:	Tracie Carmichael, BA, B.Ed. (R140)

Acknowledgements

Proponent Contacts:	Doug Schmidt – Supervisor, Environmental Planning Ken McCorkle – Manager, Indigenous Affairs
Ministry of Tourism, Culture and Sport:	Robert von Bitter – Archaeological Sites Database Coordinator
Ministry of Natural Resources and Forestry:	Lisa Casselman – Survey Records Clerk

1.0 PROJECT CONTEXT

1.1 DEVELOPMENT CONTEXT

Stantec Consulting Ltd. (Stantec) was retained by Enbridge Gas Inc. (Enbridge Gas) to complete a Stage 1 archaeological assessment for the Kirkwall – Hamilton Pipeline Project (the Project). Note: As of January 1, 2019, Union Gas Ltd. and Enbridge Gas Distribution have amalgamated into one utility with the legal name Enbridge Gas Inc. The Project Area, or study area, for the Stage 1 assessment of the Project comprises approximately 6,400 hectares of various Lots and Concessions, Geographic Townships of Beverly, West Flamborough, and East Flamborough, former Wentworth County, now City of Hamilton, Ontario (Figure 1). The Stage 1 archaeological assessment was conducted during the preliminary planning phase of the Project in accordance with the provisions of the *Ontario Heritage Act* (Government of Ontario 1990a) and the requirements of Section 4.3.4 of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition* (OEB 2016).

To increase existing capacity and accommodate additional demand for natural gas, Enbridge is proposing to construct a new 48-inch diameter natural gas pipeline. The proposed Project will be constructed between Enbridge's existing Kirkwall valve site, located northeast of the intersection of Safari Road and Valens Road, and Enbridge's existing Hamilton valve site, located east of Highway 6 and north of Carlisle Road, generally paralleling three existing Enbridge pipelines. The length of the proposed pipeline will be determined by the final route chosen and will be approximately 10 to 14 kilometres in length (Figure 2). Construction activities related to the Project are anticipated to begin as early as Spring/Summer 2021 and be completed by the end of 2021.

As noted above, the final route and construction easement, including any temporary land use, for the Project will be determined at a later date. Thus, the current study area for the Stage 1 archaeological assessment is large and serves to capture a broad and generalized geographic area associated with the Project.

1.1.1 Objectives

The objectives of the Stage 1 archaeological assessment were to compile available information about the known and potential archaeological resources within the study area and to provide specific direction for the protection, management and/or recovery of these resources. In compliance with the provincial standards and guidelines set out in the Ministry of Tourism, Culture and Sport's (MTCS) 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the objectives of the Stage 1 Archaeological Overview/Background Study are as follows:

- To provide information about the study area's geography, history, previous archaeological fieldwork, and current land conditions;
- To evaluate the study area's archaeological potential which will support recommendations for Stage 2 survey for all or parts of the study area; and
- To recommend appropriate strategies for Stage 2 survey.

To meet these objectives, Stantec archaeologists employed the following research strategies:

- A review of relevant archaeological, historic, and environmental literature pertaining to the study area;
- A review of the land use history, including pertinent historic maps;
- A review of the *City of Hamilton Archaeology Management Plan* to identify predetermined areas of archaeological potential (City of Hamilton 2016); and,
- An examination of the *Ontario Archaeological Sites Database* to determine the presence of registered archaeological sites in and around the study area.

Permission for Stantec staff to enter the study area for the purposes of the Stage 1 archaeological assessment was not required.

1.2 HISTORICAL CONTEXT

1.2.1 Post-contact Indigenous Resources

"Contact" is typically used as a chronological benchmark in discussing Indigenous archaeology in Canada and describes the contact between Indigenous and European cultures. The precise moment of contact is a constant matter of discussion. Contact in what is now the province of Ontario is broadly assigned to the 16th century (Loewen and Chapdelaine 2016).

The post-contact Indigenous occupation of southern Ontario was heavily influenced by the dispersal of various Iroquoian-speaking communities by the New York State Iroquois and the subsequent arrival of Algonkian speaking groups from northern Ontario at the end of the 17th century and the beginning of the 18th century (Konrad 1981; Schmalz 1991). By 1690, Ojibwa speaking people had begun moving south into the lower Great Lakes basin. The Indigenous economy since the turn of the 18th century focused on fishing and the fur trade, supplemented by agriculture and hunting (Konrad 1981; Rogers 1978). Numerous Indigenous groups and communities are associated with the post-contact occupation of southern Ontario and the general area of the Project.

At the turn of the 17th century, the region of the study area was occupied by Iroquoian populations who are historically described as the *Neutre* Nations (by the French) or the *Attiwandaron* (by the Huron-Wendat); their autonym is not conclusively known (Birch 2015). Claude Bernou's 1680 map indicates the then dispersed *Attiragenga* (near modern day Hamilton) and *Antouaronon* (west of the Grand River along the Lake Erie north shore) Nations occupied the region of the study area (White 1978: Figure 2) and settlements dating to the 17th century have been identified in the Fairchild-Big Creeks, Upper Twenty Mile Creek, and Lower Grand River settlement clusters, near to the study area (Lennox and Fitzgerald 1990: Table 13.1). In 1649, the Seneca and the Mohawk led a campaign into southern Ontario and dispersed the Attiwandaron (Neutral) Nations and the Seneca established dominance over the region (Heidenreich 1978; Konrad 1981). By 1690, Ojibwa speaking people had begun moving south into the lower Great Lakes basin (Konrad 1981; Rogers 1978); particularly, the Mississauga Nations gained dominance in the region. The Indigenous economy since the turn of the 18th century focused on fishing and the fur trade, supplemented by agriculture and hunting.

The expansion of the fur trade led to increased interaction between European and Indigenous people, and ultimately intermarriage between European men and Indigenous women. During the 18th century the progeny of these marriages began to no longer identify with either their paternal or maternal cultures, but instead as Métis. The ethnogenesis of the Métis progressed with the establishment of distinct Métis communities along the major

waterways in the Great Lakes of Ontario. Métis communities were primarily focused around the upper Great Lakes and along Georgian Bay, however Métis people have historically lived throughout Ontario (Métis Nation of Ontario 2016; Stone and Chaput 1978:607-608).

The study area falls within the historic and traditional territory of a number of Indigenous communities, including but not limited to the Mississaugas of the Credit First Nation (Mississaugas of the New Credit First Nation n.d.), the Six Nations of the Grand River, and the Haudenosaunee Confederacy. Since contact with European explorers and immigrants, and, later, with the establishment of provincial and federal governments (the Crown), the lands within Ontario and the Geographic Townships of Beverly, West Flamborough, and East Flamborough have been included in various treaties, land claims, and land cessations. Though not an exhaustive list, Morris (1943) provides a general outline of some of the treaties within the Province of Ontario from 1783 to 1923. While it is difficult to exactly delineate treaty boundaries today, an approximate outline of the treaty lands described by Morris is provided in Figure 3 (1943). According to Morris (1943), the study area is situated within the described limits of the 1792 indenture of the 1784 Between the Lakes Purchase between the English government (referred to as “the Crown”) and the Mississaugas). This treaty:

> *...was made with the Mississa[ug]a Indians 7th December, 1792, though purchased as early as 1784. This purchase in 1784 was to procure for that part of the Six Nation Indians coming into Canada a permanent abode.*
>
> *The area included in this Treaty is, Lincoln County excepting Niagara Township; Saltfleet, Binbrook, Barton, Glanford and Ancaster Townships, in Wentworth County; Brantford, Onondaga, Tusc[a]r[o]ra, Oakland and Burford Townships in Brant County; East and West Oxford, North and South Norwich, and Dereham Townships in Oxford County; North Dorchester Township in Middlesex County; South Dorchester, Malahide and Bayham Township in Elgin County; all Norfolk and Haldimand Counties; Pelham, Wainfleet, Thorold, Cumberland and Humberstone Townships in Welland County ... .*
>
> (Morris 1943:17-18)

As demonstrated above, the nature of Indigenous settlement size, population distribution, and material culture shifted as European settlers encroached upon Indigenous territory. However, despite this shift, “written accounts of material life and livelihood, the correlation of historically recorded villages to their archaeological manifestations, and the similarities of those sites to more ancient sites have revealed an antiquity to documented cultural expressions that confirms a deep historical continuity to…systems of ideology and thought” (Ferris 2009:114). As a result, Indigenous peoples of southern Ontario have left behind archaeologically significant resources throughout the region which show continuity with past peoples, even if they have not been explicitly recorded in Euro-Canadian documentation.

1.2.2 Euro-Canadian Resources

At its inception, Upper Canada was only sparsely settled by Europeans and the land had not been officially surveyed to any great extent. Thus, there was an urgency, by the then Lieutenant Governor of Upper Canada John Graves Simcoe, to survey this new province in order to establish military roads and to prevent settlers from clearing and settling land not legally belonging to them. In 1791, the Provinces of Upper Canada and Lower Canada were created from the former Province of Quebec by an act of British Parliament (Craig 1963:17). At this time, Colonel John Graves Simcoe was appointed as the Lieutenant Governor of Upper Canada and was tasked with governing the new

province, directing its settlement and establishing a constitutional government modelled after that of Britain's (Coyne 1895). The change was affected at the behest of United Empire Loyalists who wished to live under the British laws and customs they were familiar with in Great Britain and the former 13 Colonies (Craig 1963:10-11). John Graves Simcoe had ambitious plans to create a model British society in North America, stating a desire to "inculcate British customs, manners, and principles in the most trivial, as well as most serious matters" in Upper Canada (Craig 1963:21). In 1792, Simcoe divided Upper Canada into 19 counties consisting of previously-settled lands, new lands opened for settlement, and lands not yet acquired by Crown. These new counties stretched from Essex in the west to Glengarry in the east.

1.2.2.1 Wentworth County

In 1792, at Simcoe's behest, the Eighth Act of the Upper Canada Parliament divided the province into four districts: Eastern, Midland, Home, and Western (Kernighan 1875:iii). The four districts were subdivided into 19 counties. The future location of Wentworth County was in the Home District, and was in parts of Haldimand, Lincoln, and York Counties. In 1816, the Gore District was created from lands in the Home and Niagara Districts, and the County of Wentworth was formed (Archives of Ontario 2015). Wentworth County was named in honour of John Wentworth, Royal Governor of New Hampshire from 1766-1775, and later a Lieutenant Governor of Nova Scotia (Johnston 1967:3-4). In 1849, the District System was abolished (Archives of Ontario 2015), and the Counties of Halton and Wentworth formed a single municipality. In 1853, the two counties were separated. Wentworth County totaled 272,000 acres (110,074.5 hectares) and comprised the City of Hamilton, Town of Dundas, and the Townships of Beverly, Binbrook, Barton, Ancaster, Saltfleet, East and West Flamborough (alternatively spelled Flamboro), and the Township of Glanford, where the study area is located (Kernighan 1875:iii-iv).

Early 19th century communities in Wentworth County included Dundas, Ancaster, and Hamilton. The completion of the Burlington Bay Canal in 1832 (Craig 1963:158) and the opening of the Great Western Railway in 1853, led to Hamilton's ascent as the dominant settlement and place of trade in the county (Kernighan 1875:v). Hamilton developed into a major manufacturing centre of Ontario, while the rest of the county was primarily agricultural. Wentworth County was especially known for its orchards and vineyards and was an important part of the Niagara Fruit Belt (Johnston 1967:209). Other crops grown in Wentworth County included wheat, barley, and tobacco (Johnston 1967:205-206).

At the turn of the 20th century, Hamilton had a population of 50,000 (Johnston 1967:247). The widespread adoption of the automobile opened rural portions of Wentworth County to suburban development. As a result, the population of Wentworth's townships began to increase and the City of Hamilton annexed portions of Barton, Ancaster, and Saltfleet Townships. By the 1950s, the population of Wentworth not within the city of Hamilton was about 60,000 (Johnston 1967:288-289). The population of Hamilton had grown to nearly 300,000 by 1966 (Dominion Bureau of Statistics 1967:10-12). In 1973, Wentworth County was amalgamated into the new Regional Municipality of Hamilton-Wentworth, which was restructured into the single-tier City of Hamilton in 2001 (Archives of Ontario 2015).

The Stage 1 study area for the Project comprises numerous lots and concessions in the Geographic Townships of Beverly, West Flamborough, and East Flamborough. Table 1 provides a summary of various lots and concessions within the Stage 1 study area.

Table 1: Summary of Lots and Concessions with the Study Area

Lot	Concession	Geographic Township
23 to 36	5	Beverly
24 to 36	6	
24 to 36	7	
24 to 36	8	
1 to 17	5	West Flamborough
1 to 17	6	
1 to 14	7	
1 to 10	8	
12 and 13	6	East Flamborough
12 and 13	7	
12 and 13	8	
12 and 13	9	
12 and 13	10	

1.2.2.2 Township of Beverly

Established in 1792, Beverly Township (alternatively spelled Beverley) took its name from the Town of Beverly, located in East Yorkshire, England. The first survey of the Township of Beverly was undertaken by Augustus Jones in 1794 and included Concessions 1 through 5. Large portions of the township were swampy and known as “Beverly Swamp”. The remaining concessions, i.e., 6 through 10, were initially surveyed in 1797 by John Stegman, but due to the challenging landscape and Beverly swamp, the survey was completed again in 1832 by James Kirkpatrick (Collins 2001:7). The township was laid out in relation to the survey of the Governor’s Road (Dundas Street), also completed by Jones from 1793 to 1795.

The majority of European settlement occurred after James Kirkpatrick’s survey in 1832. The first settlers in the Township of Beverly were Jacob Cope and George Jones, who arrived following the survey (Page & Smith 1875:x). The majority of early landowners in the township were absentee owners, which included merchants and officeholders in York (now Toronto), Niagara, and Montreal (Collins 2001:7).

Settlement in the Township of Beverly occurred primarily at road intersections and was influenced by the establishment of mills and railway development. In the 1820s, Governor’s Road, south of the study area, was planked through the township, influencing the location of the settlements of Lynden and Copetown. The Dundas and Waterloo Road was opened in the township in the early 19th century and planked in 1837 between the Desjardins Canal to the Village of Waterloo to the northeast. The roadway, west of the study area, allowed for the settlement of Rockton, Romulus, and Sheffield (Collins 2001:8). By 1859, the Dumfries and Beverly Road was planked and connected to the Dundas and Waterloo Road from the adjacent Township of North Dumfries, in the County of Brant.

Settlement in the township was slow due to the challenging terrain composed of rock, swamps, and forests. The township remained an unbroken forest until 1810, when a portion of land was cleared near Sheffield (Cornell 1967:8). By 1820, the township had only a population of 81, with 1,883 acres of cultivated land, out of a total 70,200 acres (Page & Smith 1875:x). In the 1830s, settlers from the British Isles began to arrive in the township and impact the population growth. The first settlements in the northern portion of the township in relation to the study area occurred in 1832 with the first settlers of John and William McKnight. They were followed soon after by John Valens, the Pentland, and the Macdonald families (Irwin & Co. 1883:37).

In the first few decades of the 19th century, the population grew steadily from 617 in 1824, to 2,382 in 1839. In 1837, the community of Kirkwall commenced to settle, with the majority of settlers being of Scottish decent. After 1840, the settlement of the township grew quickly and by 1850 there was very little unclaimed land (Page & Smith 1875:X). In 1846, the township had 52,159 acres taken up, with 16,332 under cultivation. William Henry Smith described the township that year as well settled, with fine farms, and two or three excellent mill streams (Smith 1846:15).

In relation to the study area, the closest early settlement in the township is Kirkwall, which was established to the west at the present-day intersection of Kirkwall Road and Concession Road 8. Kirkwall, also known as “Little Scotland,” was settled by six families from Scotland in 1832 (Collins 2001:35). A year later the settlers were joined by 12 additional families from Scotland, as well as an English family and four families from Northern Ireland (Collins 2001:35). Within three years of the arrival of the first European settlers, a log church was constructed to accommodate the growing congregation. In 1848, the log structure was replaced with a stone church (Collins 2001:35). In 1866, Kirkwall was a small post office village with a population of about 60. At the time the village had two stores, a church, a hotel, a blacksmith shop, and a boot and shoe shop (Mitchell 1866:343). Kirkwall remained a small village throughout the late 19th century, with a population of only 60 in 1886 (Irwin & Co. 1886:103).

The Great Western Railway (GWR) was constructed through the southern portion of the Township of Beverly from 1851 to 1853 (Page & Smith 1875:iv). The line opened in January 1854 operating between Windsor and Niagara Falls (Houghton 2008:88). Stations in the township were located in the hamlets of Lynden and Copetown. In 1883, the Township of Beverly reached a population of 4,890 (Irwin & Co. 1883:38). A portion of the 1859 map of Wentworth County featuring Beverly Township is illustrated in Figure 4 (Surtees 1859). A portion of the 1875 map of Beverly Township is illustrated in Figure 5 (Page & Smith 1875). The mid-to-late 19th century development of the study area within the Township of Beverly is illustrated on both maps with numerous landowners and structures depicted.

During the 20th century, the study area in the Township of Beverly continued to be part of a rural landscape, surrounded, primarily, by agricultural lands. The hamlets and villages in the township witnessed a decline in the early 20th century, influenced by the nearby larger markets and industries in Hamilton and Toronto. In 1974, with the creation of the Regional Municipality of Hamilton-Wentworth, the Township of Beverly was amalgamated with the Townships of West and East Flamborough, to form the Town of Flamborough. Later, in 2001, the Town of Flamborough was amalgamated into the new City of Hamilton (Hamilton Public Library 2017b).

1.2.2.3 Township of West Flamborough

The Township of West Flamborough was surveyed by Augustus Jones in 1793 using a single-front system. The township survey, similarly, to the Township of Beverly was also laid out in relation to the survey of the Governor's Road. The township was named after a small east coast village in Yorkshire, England. It was surveyed into west and east portions that remained administratively joined until 1854 (Hamilton Public Library 2017b). The west portion was laid out in the shape of a triangle with the Governor's Road serving as the base. It has 11 concessions running west to east that were numbered north from Governor's Road (Burkholder 1950). Laid out using the single-front system, each concession was composed of long and narrow lots that were approximately 200 acres in size. However, some lot sizes in the township are irregular, due to its triangular shape and Cootes Paradise along the southeast portion (Green *et al*. 2003:2).

As part of the survey of the township, Simcoe ordered that a 60-acre plot be set aside for the creation of a town plot. The town was surveyed in 1801 by Deputy Surveyor John Stegman and named Cootes Paradise (now Dundas) after Captain Thomas Cootes, a British Naval Officer who hunted waterfowl in the area in the 1780s (Royal Botanical Gardens n.d.). The town plot was laid out on a portion of Lot 17, Concession 1, in the Township of West Flamborough and a portion of Lot 53, Concession 1, in the Township of Ancaster (Page & Smith 1875:ix).

The first European settlers in the township were Ann Morden and her family, who were United Empire Loyalists that came to the township in 1787. When Jones surveyed the township, he noted the Morden family as squatters in the Dundas Valley (Woodhouse 1965:10). Other early European settlers prior to 1800 included: Andrew Vanevery, John Purbus, Isaac Durham, William Chrysler, David Vanevery, Frederick Schram, John Rosebrough, Peter Vanevery, Isaac Smith, John Showers, Michael Showers, William Frances, Harcar Lyons, and James Durand (Woodhouse 1965:12).

One of West Flamborough Township's main features is Spencer Creek. In the early 19th century, the water flow of the creek was sufficiently strong to power a number of mills; particularly in the Greensville area, where Honourable James Crooks established several mills of various types. The industrial and residential community came to be known as Crook's Hollow and included saw mills, grist mills, flour mills, and one of the first large-scale paper mills in Upper Canada at the time. Spencer Creek, as it flows through West Flamborough Township, provides the water for two of the region's most scenic waterfalls, Webster's Falls and Tew's Falls. Both waterfalls are located along the edge of the Niagara Escarpment, just downstream from the historic village of Bullock's Corners, location of the West Flamborough Township Hall.

Settlement in the Township of West Flamborough developed primarily along the waterways and road intersections. South of the study area, Edward Peer purchased 30 acres on Spencer Creek in 1801 and built the first mill in Dundas, known as Dundas Mills (Woodhouse 1965:14). Other mills developed along watercourses in the township and by 1823 the township had 11 grist mills and eight saw mills in operation (Page & Smith 1875:iii). The community of Dundas flourished in the 19th century as it was located at the junction of large roadways and on the shoreline of Coote's Paradise Marsh. The town developed into a trading and transportation centre in the township (Freeman 2001:21). The town received the first post office in the township in 1814 and was given the name Dundas after the main thoroughfare in the settlement, Dundas Street (Conservation Hamilton n.d.).

Growth within the township accelerated with the construction of the Desjardins Canal between 1826 and 1837. The canal was constructed along the mouth of Spencer Creek to connect Dundas with Burlington Bay. Dundas served as the location for company headquarters and offices, as well as a community for workers (Page & Smith 1875:ix). Following the construction of the Desjardins Canal, Dundas became a busy port on Lake Ontario (Freeman 2001:37). In the northern portion of the township, the opening of the Guelph to Dundas Road began in 1827, following the founding of the Town of Guelph by John Galt, north of the study area. Galt instigated the development of a roadway through the Township of Puslinch towards the Township of West Flamborough. The Guelph to Dundas Road, also known as Aboukir Road, was laid out following an Indigenous trail. Although it was an open route, the Guelph to Dundas Road remained a trail until the mid-19th century. In 1846, the Guelph and Dundas Road Company was established by a group of Guelph businessmen to further open the roadway. By 1850, the roadway was nearly completed running through the eastern portion of the study area (Clark 2016). The roadway is depicted as an open road on the 1859 map of Wentworth County forming the boundary between the townships of West and East Flamborough before heading south through the villages of Freelton and Strabane (see Figure 4).

Dundas was incorporated as a town on July 28, 1847 (Page & Smith 1875:ix). With the construction of the GWR in 1854, Dundas witnessed a shift from canal shipments to utilization of the railway for the shipment of goods. By the end of the 19th century, the Town of Dundas had become one of the major manufacturing towns in the province with industries producing such goods as flour, cotton, clothing, agricultural implements, and furniture (Page & Smith 1875:ix).

In relation to the study area, the closest early settlement in the township was Strabane, which developed at the intersection of Brock Road and Concession Road 8 West. It was first settled by Matthew Peebles in 1842 (Mitchell 1866:352). A post office was established at the intersection in 1851 with Peebles as the first postmaster (Library and Archives Canada 2014). By 1866, the village had a population of about 100, and included a hotel, two saw mills, a school, a church, and a boot and shoemaker (Mitchell 1866:352-353). Strabane remained a small community throughout the late 19th century, with a population in 1898 of only about 50 (Vernon 1898:149). A portion of the 1859 map of Wentworth County featuring West Flamborough Township is illustrated in Figure 4 (Surtees 1859). A portion of the 1875 map of West Flamborough Township is illustrated in Figure 5 (Page & Smith 1875). The mid-to-late 19th century development of the study area within the Township of West Flamborough is illustrated on both maps with numerous landowners and structures depicted.

At the turn of the 20th century, the Town of Dundas witnessed a change in settlement patterns as retired farmers began to move into the town from the surrounding township. The proximity of Dundas to the City of Hamilton also created the possibility for many town residents to work in Hamilton while maintaining their home in Dundas (Meyers 1954:42). Traffic between Dundas and Hamilton increased with the development of better roads and highways beginning in the 1920s. In 1920, the Department of Public Highways Ontario assumed roads from Hamilton to Owen Sound and established King's Highway 6 (Bevers 2019). The highway, situated within the study area, is now a busy commuter route in the City of Hamilton, with connections to Highways 401 and 403. In January 2001, the Towns of Flamborough and Dundas amalgamated with the City of Hamilton (Hamilton Public Library 2017a). Dundas remains a small suburban community within the City with a population of 24,710 in 2006 (Social Planning & Research Council of Hamilton 2008).

1.2.2.4 Township of East Flamborough

The Township of East Flamborough was surveyed in 1793 by Augustus Jones using a single-front system. Similar to the Township of West Flamborough, the Township of East Flamborough was laid out in relation to the Governor's Road. The Township of East Flamborough has fourteen concessions running south to north, with a broken front along Burlington Bay. Lots in the township are numbered east to west. Laid out using the single-front system, each concession comprises long and narrow lots that are approximately 200 acres in size.

The Township of East Flamborough was named after the Town of Flamborough in East Yorkshire, England. The first European settler to the Township of East Flamborough was David Fonger who arrived in 1783; he was followed by William Applegarth in 1791 (Green *et al*. 1997:5). Land grants were given beginning in 1796 in the lower portions of the township. One of the first grants was given to Alexander McDonnelll in 1796, which included 800 acres along Grindstone Creek (WEFCC 1967:12).

Settlement in the Township of East Flamborough developed primarily at road intersections and along the waterways, which acted as a source of power for mills. The first mill in the township was constructed on Grindstone Creek by William and John Applegarth (Green *et al*. 1997:5), followed in the early 1800s by a saw mill on the creek near the Great Falls. The settlement of Waterdown developed around Brown's mill, at the crossroads of Dundas Street and Mill Street (Green *et al*. 1997:18) and became the largest village in the township throughout the 19th century.

The southern portion of the township was first settled in the early 19th century, while the remaining portions of the township remained heavily wooded until the 1820s and 1830s. By 1846, 25,537 acres in the township had been taken up with 8,750 acres under cultivation. By this time, the township had two grist mills and nine saw mills (Smith 1846:59). In 1854, the Township of East Flamborough was incorporated as a separate township from West Flamborough (Hamilton Public Library 2017b).

In relation to the study area, the closest early settlement in the township is Carlisle, which was established to the east in 1828 by John Eaton. Eaton and his wife Catherine settled on 400 acres of land in Lots 8 and 9, Concession 8, in the Township of East Flamborough in 1828 (Lake and Reynolds Genealogy 2017). A small village plot, originally known as Eaton, was laid out on Eaton's property by his son Anson Eaton, along with Andrew Patton and George Abery (Mitchell 1866:335). Early European settlers to this hamlet included the Fords, Pattons, Kievels, Hamiltons, McColls, Crookers, Gunbys, Mordens, Adamsons, Binkleys, Hunts, Greens, Mills, and Bennetts (WEFCC 1967:35). A post office was established in the hamlet in 1851, with G.R. Lister as the first postmaster (Library and Archives Canada 2014). In 1853, the hamlet was renamed to Carlisle (WEFCC 1967:35). Also, in 1853, the Hamilton, Waterdown, and Carlisle Road was constructed from Hamilton to Carlisle. In 1866, Carlisle had a population of 150, with two general stores, several saw mills, two schools, and two churches (Mitchell 1866:335).

By 1867, all the lots in the township were taken up by residents or land speculators (Green *et al*. 1997:3). In 1883, the township reached a population of 2,377 with the villages of Aldershot, Carlisle, Clappison, Flamboro Centre, Mountsberg, and Waterdown (Irwin & Co. 1883:54). The largest village was Waterdown with a population of about 700, while Carlie had a population of 150 (Irwin & Co. 1883). A portion of the 1859 map of Wentworth County featuring East Flamborough Township is illustrated in Figure 4 (Surtees 1859). A portion of the 1875 map of East Flamborough Township is illustrated in Figure 5 (Page & Smith 1875). The mid-to-late 19th century development of the study area within the Township of East Flamborough is illustrated on both maps with numerous landowners and structures depicted.

At the beginning of the 20th century, the study area remained within a rural portion of the Township of East Flamborough, just west of the hamlet of Carlisle, and was surrounded by agricultural lands. Carlisle received a small period of growth with the construction in 1911 of the Canadian Pacific Railway (C.P.R.) between Hamilton and Guelph. Traffic surrounding the study area increased with the development of better roads and highways beginning in the 1920s. The Township of East Flamborough was similarly influenced by the development of Highway 6, which influenced the development of subdivisions in Carlisle following the Second World War (WEFCC 1967:37). In January 1974, the Township of East Flamborough became part of the Regional Municipality of Hamilton-Wentworth. In January 2001, the township was amalgamated into the new City of Hamilton (Hamilton Public Library 2017b). Carlisle remains a small community within the City, with a population in 2016 of 1,869 (Statistics Canada 2016).

1.2.2.5 Summary

As illustrated above, the historical context of the Stage 1 study area for the Project includes numerous examples of Indigenous and early Euro-Canadian resources. In discussing the late 19th century historical mapping it must be remembered that historical county atlases were produced primarily to identify factories, offices, residences and landholdings of subscribers and were funded by subscription fees. Landowners who did not subscribe were not always listed on the maps (Caston 1997:100). As such, all structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984). Further, review of historic mapping, including treaty maps, also has inherent accuracy difficulties due to potential error in geo-referencing. Geo-referencing is conducted by assigning spatial coordinates to fixed locations and using these points to spatially reference the remainder of the map. Due to changes in “fixed” locations over time (e.g., road intersections), errors/difficulties of scale and the relative idealism of the historic cartography, historic maps may not translate accurately into real space points. This may provide obvious inconsistencies during the historic map review. Nonetheless, the majority of the study area has been subject to European-style agricultural practices for over 100 years, having been densely populated by Euro-Canadian farmers by the late 19th century. Portions of the study area have been cleared of woodlot and have had extensive drainage systems installed to reclaim swamp and marshland as agricultural field.

1.3 ARCHAEOLOGICAL CONTEXT

1.3.1 The Natural Environment

The Stage 1 study area for the Project includes portions of two broad physiographic regions: the Flamborough Plain and the Norfolk Sand Plain. The Flamborough Plain physiographic region consists of:

> *An isolated tract of shallow drift on the Niagara cuesta…It is an area of about 150 square miles, bounded on the northwest by the Galt Moraine, and on the south by the silts and sands of glacial Lake Warren. A few drumlins are found scattered over this limestone plain and swamps are plentiful. The limestone has been swept bare in places…what little overburden there is on the bedrock, apart from the drumlins, is either bouldery glacial till or sand and gravel…Good soil is not plentiful in the little region: the soil is either wet or stony and shallow.*
>
> (Chapman and Putnam 1984:129-130)

Generally, two streams, i.e., Spencer Creek and small tributaries of Bronte Creek, serve to drain the Flamborough Plains physiographic region. Portions of these two streams traverse the study area. Additional secondary and tertiary creeks and streams from these primary sources (i.e., Barlow Creek) are noted throughout the study area. Moreover, additional ancient and/or relic tributaries of water sources may have existed but are not identifiable today and are not indicated on historic mapping. As noted previously, much of the Geographic Township of Beverly comprises swampy soils. These swamps "serve as water reservoirs and produce cedar posts and other wood" (Chapman and Putnam 1984:130). Soils within the region are generally of poor quality as they are often wet or stony and shallow (Chapman and Putnam 1984:130). However, these soils would be suitable for Indigenous agricultural practices and, with 19th century tiling, would become suitable for large-scale agriculture.

The Norfolk Sand Plain physiographic region includes a large area of fine textured, water deposited sands laid down as part of the delta of the glacial Grand River (Chapman and Putnam 1984). Moreover:

> *The sands and silts of this region were deposited as a delta in glacial Lakes Whittlesy and Warren. A great discharge of meltwater from the Grand River area entered the lakes between the ice front and the moraines to the northwest, building the delta from west to east as the glacier withdrew.*
>
> (Chapman and Putnam 1984:154)

Much of the Norfolk Sand Plain physiographic region is located to the south of the study area, along the north shore of Lake Erie. Thus, much of the region's drainage occurs through small rivers and streams flowing directly to Lake Erie. However, a small portion of the northern part of the region drains through the Grand River via Otter Creek and Big Creek. The northern part of the region also drains to Lake Ontario via Grindstone Creek, which traverses the study area. Additional secondary and tertiary creeks and streams from these primary sources are noted throughout the study area. Moreover, additional ancient and/or relic tributaries of water sources may have existed but are not identifiable today and are not indicated on historic mapping. Generally, the soils within the region are suitable for Indigenous and non-Indigenous agricultural practices, with tobacco farming being the dominant practice in much of the region.

1.3.1.1 Recent Heritage Reports

A Cultural Heritage Assessment Report (CHAR) is being prepared by Stantec (*in press*) to identify the presence of heritage resources within the study area; understand the potential impacts of the Project on these resources; and, prepare mitigation strategies to minimize these impacts. The preliminary information from the CHAR suggests there are 26 cultural heritage resources situated within the study area for the Project. Once the preferred route for the proposed pipeline is determined, appropriate mitigation measures will be evaluated. Further information regarding heritage resources will be detailed in the CHAR once completed.

1.3.2 Pre-contact Indigenous Resources

It has been demonstrated that Indigenous people began occupying southern Ontario as the Laurentide glacier receded, as early as 9000 BCE (Ellis and Ferris 1990:13). Much of what is understood about the lifeways of these Indigenous peoples is derived from archaeological evidence and ethnographic analogy. In Ontario, Indigenous culture prior to the period of contact with European peoples has been distinguished into cultural periods based on observed changes in material culture. These cultural periods are largely based on observed changes to formal lithic tools, and

separated into the Early Paleo-Indian, Late Paleo-Indian, Early Archaic, Middle Archaic, Late Archaic and Terminal Archaic periods. Following the advent of ceramic technology in the Indigenous archaeological record, cultural periods are separated into the Early Woodland, Middle Woodland, and Late Woodland periods, based primarily on observed changes in formal ceramic decoration. It should be noted that these cultural periods do not necessarily represent specific cultural identities but are a useful paradigm for understanding changes in Indigenous culture through time. The current understanding of Indigenous archaeological culture is summarized in Table 2, based on Ellis and Ferris (1990). The provided time periods are based on the "Common Era" calendar notation system, i.e., Before Common Era (BCE) and Common Era (CE).

Table 2: Generalized Cultural Chronology of the Study Area

Period	Characteristics	Time Period	Comments
Early Paleo-Indian	Fluted Projectiles	9000 – 8400 BCE	spruce parkland/caribou hunters
Late Paleo-Indian	Hi-Lo Projectiles	8400 – 8000 BCE	smaller but more numerous sites
Early Archaic	Kirk and Bifurcate Base Points	8000 – 6000 BCE	slow population growth
Middle Archaic	Brewerton-like points	6000 – 2500 BCE	environment similar to present
Late Archaic	Narrow Points	2500 – 1800 BCE	increasing site size
	Broad Points	1800 – 1500 BCE	large chipped lithic tools
	Small Points	1500 – 1100 BCE	introduction of bow hunting
Terminal Archaic	Hind Points	1100 - 950 BCE	emergence of true cemeteries
Early Woodland	Meadowood Points	950 - 400 BCE	introduction of pottery
Middle Woodland	Dentate/Pseudo-Scallop Pottery	400 BCE – 500 CE	increased sedentism
	Princess Point	550 – 900 CE	introduction of corn
Late Woodland	Early Ontario Iroquoian	900 – 1300 CE	emergence of agricultural villages
	Middle Ontario Iroquoian	1300 – 1400 CE	long longhouses (100m +)
	Late Ontario Iroquoian	1400 – 1650 CE	tribal warfare and displacement
Contact Indigenous	Various Algonkian Groups	1650 – 1875 CE	early written records and treaties
Late Historic	Euro-Canadian	1796 CE – present	European settlement

Between 9000 and 8000 BCE, Indigenous populations were sustained by hunting, fishing, and foraging and lived a relatively mobile existence across an extensive geographic territory. Despite these wide territories, social ties were maintained between groups. One method of maintaining social ties was through gift exchange, evident through exotic lithic material documented on many sites (Ellis 2013:35-40).

By approximately 8000 BCE, evidence exists and becomes more common for the production of ground-stone tools such as axes, chisels, and adzes. These tools themselves are believed to be indicative specifically of woodworking. This evidence can be extended to indicate an increase in craft production and arguably craft specialization. This latter statement is also supported by evidence, dating to approximately 7000 BCE of ornately carved stone objects which would be laborious to produce and have explicit aesthetic qualities (Ellis 2013:41). This is indirectly indicative of changes in social organization which permitted individuals to devote time and effort to craft specialization. Since 8000 BCE, the Great Lakes basin experienced a low-water phase, with shorelines significantly below modern lake levels

(Stewart 2013: Figure1.1.C). It is presumed that the majority of human settlements would have been focused along these former shorelines. At approximately 6500 BCE the climate had warmed considerably since the recession of the glaciers and the environment had grown more similar to the present day. By approximately 4500 BCE, evidence exists from southern Ontario for the utilization of native copper (naturally occurring pure copper metal) (Ellis 2013:42). The known origin of this material along the north shore of Lake Superior indicates the existence of extensive exchange networks across the Great Lakes basin.

At approximately 3500 BCE, the isostatic rebound of the North American plate following the melt of the Laurentide glacier had reached a point which significantly affected the watershed of the Great Lakes basin. Prior to this, the Upper Great Lakes had drained down the Ottawa Valley via the French-Mattawa river valleys. Following this shift in the watershed, the drainage course of the Great Lakes basin had changed to its present course. This also prompted a significant increase in water-level to approximately modern levels (with a brief high-water period); this change in water levels is believed to have occurred catastrophically (Stewart 2013:28-30). This change in geography coincides with the earliest evidence for cemeteries (Ellis 2013:46). By 2500 BCE, the earliest evidence exists for the construction of fishing weirs (Ellis *et al.* 1990: Figure 4.1). Construction of these weirs would have required a large amount of communal labour and are indicative of the continued development of social organization and communal identity. The large-scale procurement of food at a single location also has significant implications for permanence of settlement within the landscape. This period is also marked by further population increase and by 1500 BCE evidence exists for substantial permanent structures (Ellis 2013:45-46).

By approximately 950 BCE, the earliest evidence exists for populations using ceramics. Populations are understood to have continued to seasonally exploit natural resources. This advent of ceramic technology correlated, however, with the intensive exploitation of seed foods such as goosefoot and knotweed as well as mast such as nuts (Williamson 2013:48). The use of ceramics implies changes in the social organization of food storage as well as in the cooking of food and changes in diet. Fish also continued to be an important facet of the economy at this time. Evidence continues to exist for the expansion of social organization (including hierarchy), group identity, ceremonialism (particularly in burial), interregional exchange throughout the Great Lakes basin and beyond, and craft production (Williamson 2013:48-54).

By approximately 550 CE, evidence emergences for the introduction of maize into southern Ontario. This crop would have initially only supplemented Indigenous people's diet and economy (Birch and Williamson 2013:13-14). Maize-based agriculture gradually became more important to societies and by approximately 900 CE permanent communities emerge which are primarily focused on agriculture and the storage of crops, with satellite locations oriented toward the procurement of other resources such as hunting, fishing, and foraging. By approximately 1250 CE, evidence exists for the common cultivation of historic Indigenous cultigens, including maize, beans, squash, sunflower and tobacco. The cultural affiliation of populations within the region of the study area at this time period is debated, whether they may have spoken a form of Iroquoian language or Algonquian (Murphy and Ferris 1990). The extant archaeological record demonstrates many cultural traits similar to historic Indigenous nations (Williamson 2013:55).

1.3.3 Known Archaeological Sites and Surveys

In Canada, archaeological sites are registered within the Borden system, a national grid system designed by Charles Borden in 1952 (Borden 1952). The grid covers the entire surface area of Canada and is divided into major units containing an area that is two degrees in latitude by four degrees in longitude. Major units are designated by upper case letters. Each major unit is subdivided into 288 basic unit areas, each containing an area of 10 minutes in latitude by 10 minutes in longitude. The width of basic units reduces as one moves north due to the curvature of the earth. In southern Ontario, each basic unit measures approximately 13.5 kilometres east-west by 18.5 kilometres north-south. In northern Ontario, adjacent to Hudson Bay, each basic unit measures approximately 10.2 kilometres east-west by 18.5 kilometres north-south. Basic units are designated by lower case letters. Individual sites are assigned a unique, sequential number as they are registered. These sequential numbers are issued by the MTCS who maintain the *Ontario Archaeological Sites Database*. The study area is located within Borden blocks AiHa and AiGx, with Borden block AhHa situated immediately to the south.

Information concerning specific site locations is protected by provincial policy and is not fully subject to the *Freedom of Information and Protection of Privacy Act* (Government of Ontario 1990b). The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to all media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The MTCS will provide information concerning site location to the party or an agent of the party holding title to a property, or to a licensed archaeologist with relevant cultural resource management interests.

An examination of the *Ontario Archaeological Sites Database* has shown that there are 14 registered archaeological sites within the broad Stage 1 study area (Government of Ontario 2019a); none are within 50 metres of the Preliminary Preferred or Alternate Route options. A further five registered archaeological sites are within one kilometre of the study area; however, none of these sites are located within 50 metres of the study area (Government of Ontario 2019a). Table 3 provides a summary of the previously registered archaeological sites. The locations of the registered archaeological sites related to the study area are illustrated in Tile 1 in the Supplementary Documentation for this report.

Table 3: Registered Archaeological Sites

Borden #	Site Name	Site Type	Cultural Affiliation
AiHa-1	**Shaver Hill Ossuary**	**Ossuary**	**Indigenous**
AiHa-2	**Christianson**	**Village**	**Indigenous**
AiHa-3	**Dwyer Ossuary**	**Ossuary**	**Indigenous**
AiHa-5	**Hamilton / Hunter-Beaton**	**Village**	**Indigenous**
AiHa-7	Hood	Village / Burial	Indigenous
AiHa-8	**Mills**	**Village**	**Indigenous**
AiHa-9	MacDonald	Village	Indigenous
AiHa-10	**Bogle I**	**Hamlet**	**Indigenous**
AiHa-11	**Bogle II**	**Hamlet**	**Indigenous**
AiHa-12	**Robertson**	**Village**	**Indigenous**

Borden #	Site Name	Site Type	Cultural Affiliation
AiHa-14	**Freelton / Kynast**	**Village**	**Indigenous**
AiHa-18	**Kralt**	**Hamlet**	**Indigenous**
AiHa-23	**UG Kirkwall 1**	**Lithic scatter**	**Indigenous**
AiHa-29	**Groen**	**Camp**	**Indigenous**
AiHa-36	**Rutherford**	**Homestead**	**19th century Euro-Canadian**
AiGx-70	**Gamble**	**Indeterminate**	**Indigenous**
AiGx-232	MillGrove North	Homestead	19th century Euro-Canadian
AiGx-235	Abrey Zimmerman	Homestead	19th century Euro-Canadian
AhHa-322	Tract 1036, Location 1	Camp	Indigenous

Note: sites in **bold** are located within the Stage 1 study area

As noted, 14 registered archaeological sites are located within the broad Stage 1 study area (Government of Ontario 2019a). However, none of the registered sites are within 50 metres of the Preliminary Preferred or Alternate Route options for the Project. The potential for Project related construction activity to impact any of the registered archaeological sites within the study area will be re-evaluated as part of the Stage 2 archaeological assessment for the Project following confirmation of the selected route and delineation of any temporary construction easement.

Many of the registered archaeological sites within the study area are known only by their corresponding Site Record Form in the *Ontario Archaeological Sites Database* (Government of Ontario 2019a). As a result, detailed information regarding past archaeological activities and current status are not available for AiHa-5, AiHa-8, AiHa-10, AiHa-11, AiHa-12, AiHa-14, AiHa-18, AiHa-36, and AiGx-70. A summary of the information available from their respective Site Record Form is provided below.

AiHa-5 was registered in 1977 as the Hamilton site. The site was identified as an Indigenous village and was partially excavated by William Noble in 1972. Based on the artifacts recovered, the Hamilton site (AiHa-5) is affiliated with the historic Neutral. Later, in 1986, the same site was registered as the Hunter-Beaton site by William Finlayson and assigned Borden number AiHa-21. However, upon review of the site's locational data, it was determined that the two sites are the same and Borden number AiHa-21 was removed.

AiHa-8 was registered in 1977 as the Mills site. The site was identified as an Indigenous village located in a ploughed field. A small sample of artifacts was collected through excavation in 1971 by Ian Kenyon. The collected artifacts suggest the site is affiliated with the historic Neutral.

AiHa-10 was registered in 1977 as the Bogle I site. The site was identified as an Indigenous hamlet located in a ploughed field. A small sample of artifacts from the site was analyzed by Ian Kenyon. The sample of artifacts from the site suggest an affiliation with the historic Neutral.

AiHa-11 was registered in 1977 as the Bogle II site. The site was identified as an Indigenous hamlet located in a ploughed field. A small sample of artifacts from the site was analyzed by Ian Kenyon. The sample of artifacts from the site suggest an affiliation with the historic Neutral. The Bogle I (AiHa-10) and Bogle II (AiHa-11) sites are situated near each other.



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AiHa-12 was registered in 1977 as the Robertson site. A small sample of artifacts from the site was analyzed by Ian Kenyon. The sample of artifacts from the site suggest an affiliation with the historic Neutral. The site was identified as an Indigenous village near Spencer Creek. The Robertson site (AiHa-12) is located near the Dwyer Ossuary (AiHa-3).

AiHa-14 was registered in 1983 as the Freelton site and was also referred to as the Kynast site. Located within a hardwood forest, the site was identified as an Indigenous village. Test excavations were conducted at the site by William Fox in 1983. The test excavations suggest the site may retain a series of longhouses, possibly surround by a palisade. The artifacts recovered suggest a historic Neutral affiliation, with recovered trade goods indicating a period of use *circa* 1630 CE.

AiHa-18 was registered in 1983 as the Kralt site. The site was identified as an Indigenous hamlet located in a low land area near a swamp. A small sample of artifacts was collected from the surface of the site area. The sample of artifacts from the site suggest an affiliation with the historic Neutral, with recovered trade goods indicate a period of use in the early 1600s CE.

AiHa-36 was registered in 1992 as the Rutherford site. The site was identified as a Euro-Canadian homestead dating to *circa* 1840-1860 CE. A surface collection of artifacts, dominated by refined ceramics and glass, was retained. No further archaeological activities were planned for the site as it was to be protected with a 10 metre buffer around it.

The Shaver Hill Ossuary (Aiha-1) is associated with the Indigenous Christianson village (AiHa-2). Smith (1897:33) describes a large Indigenous settlement near Westover with numerous burial features. Though not named, the description of the site likely corresponds to the Christianson village (AiHa-2) and Shaver Hill Ossuary (AiHa-1). The period of use at the Christianson site (AiHa-2) and Shaver Hill Ossuary is between *circa* 1615 and 1632 CE (Fitzgerald 1982a). The Christianson site (AiHa-2) and Shaver Hill Ossuary have been the subject of numerous archaeological investigations (e.g., Fitzgerald 1981; Fitzgerald 1982b; Lennox and Fitzgerald 1990; Noble 1984; Stothers 1968; Stothers 1972).

The Dwyer Ossuary (AiHa-3) is associated with the Indigenous Robertson village (AiHa-12). The earliest recorded investigations at the Dwyer Ossuary occurred in 1938-1938 by Rutherford Smith. The Robertson site was surveyed by Ian Kenyon in 1971 (Sustainable Archaeology McMaster 2019). The period of use at the Robertson village (AiHa-12) and Dwyer Ossuary (AiHa-3) is between *circa* 1632 and 1651 CE (Fitzgerald 1982a; Fitzgerald 1982b). Few archaeological reports are available for the Robertson village (AiHa-12), while the Dwyer Ossuary (AiHa-3) has been the subject of previous archaeological investigations (e.g., Fitzgerald 1982b; Ridley 1961; Smith and Murphy 1939).

AiHa-23 was registered in 1988 as the UG Kirkwall 1 site. It was identified as a sparse surface scatter comprising four lithic artifacts: an end scraper, a wedge, a utilized flake, and an abrader. The site was identified by Mayer, Pihl, Poulton and Associates Incorporated (MPP) during the archaeological assessment for Union Gas' Kirkwall Ancaster Line (MPP 1988). The site would not be impacted by the preferred pipeline route and a Stage 3 archaeological assessment was not conducted.

AiHa-29 was registered in 1990 as the Groen site by Archaeological Research Associates Ltd. (ARA) during a property assessment for the Kirkwall Valve Site to Hamilton Take-off NPS 42 Pipeline Loop (ARA 1990a). The site was identified as an Indigenous camp and, later, a portion of the site was fully excavated, including mechanical topsoil removal (ARA 1990b). The partial excavation recovered lithic tools and flakes, as well as Indigenous pottery



and faunal remains. Several features and post moulds were also identified. The archaeological work was completed by Archaeological Research Associates Ltd. (ARA) in advance of proposed project impacts (ARA 1990b). The site is associated with the Neutral and dates to between 1620 and 1650 CE.

AiGx-70 was registered as the Gamble Site by Stew Leslie in the early 1970s. The site is identified as an Indigenous archaeological site, with Archaic and Woodland components. No information regarding site type or function is available.

Located outside of the study area, the MacDonald site (AiHa-9) was identified as an Indigenous village in 1838 (Smith 1897:31). The site was described as being between five and six acres in size and was protected by palisades (Smith 1897:31-32). The original identification of the MacDonald site (AiHa-9) confirmed the presence of "pipes, beads, wampum, totems and other mementos…[and] upwards of 300 iron tomahawks…" (Smith 1897:32). Similarly, the Hood site (AiHa-7) was identified outside of the study area in the early 1800s. The site was originally described as large and retained remnants of a palisade (Smith 1897:32). Burial pits had been identified and, from them, various items had been collected including "French axes, iron tomahawks, brass kettles, [and] brass arrow tips…" (Smith 1897:32). The Hood site (AiHa-7) was further described in Lennox (1978) and Fitzgerald (1979).

A query of the *Ontario Public Register of Archaeological Reports* identified several archaeological assessments which may document work within the broad Stage 1 study area or within 50 metres of it (Government of Ontario 2019b). Based on an examination of the queried reports, none document registered archaeological sites within 50 metres of the study area. Many of these reports represent archaeological assessments from the 1970s and 1980s when mapping and artifact recording standards were less precise than today's standards. As it relates to the current and broad Stage 1 study area for the Project, a detailed review of all possible early assessments and reports is not relevant. Rather, a summary of recent archaeological assessment work related to the study area is provided below. Despite some previous archaeological assessments overlapping with the current Stage 1 study area, Stantec has determined that illustrating all previously surveyed areas is not practical given the size and scale of the current study area. Following confirmation of the preferred route and delineation of any temporary construction easement required for the Project, the proximity of previous archaeological assessments and previously surveyed lands can be re-evaluated. Table 4 provides a summary of some of the relevant reports pertaining to previous archaeological work within the study area.

Table 4: Previous Archaeological Assessments

Year	Report	Author	PIF #
1984	*An Archaeological Resource Assessment of the Proposed Union Gas Loop of the NPS 34 Trafalgar Line, Brantford Take-Off to Kirkwall Valve Site, Waterloo and Hamilton-Wentworth Regional Municipalities*	MPP	Not applicable (Licence No. 1984-34)
1987	*Preliminary Report on the Archaeological Survey of Union Gas Pipeline, Kirkwell Valve to Hamilton Valves*	ARA	Not applicable
1988	*An Archaeological Resources Assessment of the Union Gas Pipeline from Kirkwall Valve Sites to the Hamilton Gate Station No. 3, Regional Municipality of Hamilton-Wentworth, Ontario*	MPP	Not applicable (Licence No. 86-92)

Year	Report	Author	PIF #
1990a	*Archaeological Assessment. Groen Property – Phase II, NPS 42 Trafalgar Gasline, Kirkwell Valve to Hamilton Valve, Wentworth County, Ontario*	ARA	Not applicable (Licence No. 90-045)
1990b	*Archaeological Mitigation Groen Site (AiHa-29) NPS 42 Trafalgar Gasline Kirkwell Valve to Hamilton Valve*	ARA	Not applicable (Licence No. 90-045)
1999	*Stage 1 to 3 Archaeological Assessment of Highway 6, From Highway 5 to South of Concession Road 6W, Flamborough Township, Regional Municipality of Hamilton-Wentworth (W.P. 163-80-01)*	New Directions Archaeology	Not applicable (Licence No. 99-025)
2008	*Stage 1 Archaeological Assessment of the Proposed NPS 48 Brantford Take-Off to Kirkwall Valve Site Pipeline, Township of North Dumfries & City of Hamilton, Ontario*	D.R. Poulton & Associates Inc. (DPA)	P053-179-2018
2014a	*The 2013 Stage 1 Archaeological Assessment of the Proposed Enbridge Pipelines Inc. Line 11 Westover Segment Replacement Project, City of Hamilton, Regional Municipality of Hamilton-Wentworth, Ontario*	DPA	P316-198-2013
2014b	*The 2014 Stage 2 Archaeological Assessment of the Enbridge Pipelines Inc. Line 11 Westover Segment Replacement Project, City of Hamilton, Regional Municipality of Hamilton-Wentworth, Ontario*	DPA	P316-0278-2013
2014c	*The 2013-2014 Stage 2 Archaeological Assessment of Infrastructure Ontario Lands on the Proposed NPS 48 Brantford Take-Off to Kirkwall Valve Site Pipeline, Township of North Dumfries & City of Hamilton, Ontario*	DPA	P316-196-2013
2015a	*The 2013-2014 Stage 2 Archaeological Assessment of the Proposed NPS 48 Brantford Take-Off to Kirkwall Valve Site Pipeline, Township of North Dumfries & City of Hamilton, Ontario*	DPA	P316-0304-2014
2015b	*The 2015 Stage 1 Archaeological Assessment of the Proposed Enbridge Pipelines Inc. Line 10 Westover Segment Replacement Project, City of Hamilton, Ontario*	DPA	P316-0306-2015
2015	*Stage 2 Archaeological Assessment, Enbridge Pipelines Inc., Line 10 Westover Segment Replacement Project, Geotechnical Borehole Work Area and Access Routes, City of Hamilton, Ontario*	Timmins Martelle Heritage Consultants Inc. (TMHC)	P1075-0017-2015
2016	*Stage 2 Archaeological Assessment, Enbridge Pipelines Inc., Line 10 Westover Segment Replacement Project, 2015 Fieldwork, City of Hamilton, Ontario*	TMHC	P1075-0018-2016
2017	*Stage 2 Archaeological Assessment Enbridge Pipelines Inc. Line 10 Westover Segment Replacement Project Spring, Summer and Early Fall 2016 Fieldwork City of Hamilton, Ontario*	TMHC	P324-0098-2016
2018	*Stage 1 Archaeological Assessment Municipal Class EA Hydro One B5C/B6C Line Refurb Hydro One Refurb between the Burlington TS & Enbrg Westover SCTS Part of, Lots 28 & 29, Con 5-Lots 28 to 36, Con 6-Lots 28 to 30, Con 7, G.Twp. of Beverly Part of Lots 1 to 16, Con 6, G.Twp. of West Flamborough Part of, Lot 1, Con 1-Lots 1 to 3, Con 2-Lots 3 to 6, Con 3-Lots 5 to 8, Con 4-Lots 8 to 11, Con 5-*	TMHC	P1075-0039-2017

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Year	Report	Author	PIF #
	Lots 11 to 13, Con 6-Lot 13, Con 7, G.Twp. of East Flamborough Former Wentworth County, Now City of Hamilton, ON Part of Brant's Block, G.Twp. of Nelson Former Halton County, Now City of Burlington, ON		

MPP completed an archaeological assessment for Union Gas' NPS 34 Trafalgar Line Brantford Take-Off to Kirkwall Valve Site (MPP 1984). This early assessment examined most of the pipeline corridor by pedestrian survey and test pit survey, however no specific ploughing of lands had occurred prior to pedestrian survey and the test pit survey interval was 10 metres. A small eastern portion of the study area corridor overlaps with the current study area for the Project. No archaeological resources were identified in the area of overlap by MPP (1984). Much of the study area corridor for the NPS 34 Trafalgar Line Brantford Take-Off to Kirkwall Valve Site was re-examined as part of a later assessment (see DPA 2008; DPA 2014c; DPA 2015).

In 1987, ARA completed an archaeological assessment for Union Gas' Kirkwell [*sic*] Valves to Hamilton Valves (ARA 1987). Much of the pipeline corridor for ARA (1987) is believed to follow Preliminary Preferred Route A of the current Project, however, a copy of the report could not be obtained for review (see Supplementary Documentation). A partial summary of the ARA (1987) is provided in Ecological Services for Planning Ltd.'s (ESP) *Kirkwall Valve Site to Hamilton Take-off NPS 42 Pipeline Loop Route Selection and Environmental Impact Assessment* (ESP 1987). The ESP (1987:59) report notes that archaeological staff "walked, surface inspected and test pitted areas of high potential." No mapping of the survey areas was provided in the ESP (1987) report and no detailed description of the archaeological survey methods was provided. Two archaeological sites, the Robertson Village (AiHa-12) and Dwyer Ossuary (AiHa-11), are located within the study corridor for the Kirkwall Valve Site to Hamilton Take-off NPS 42 Pipeline Loop (ESP 1987). However, no archaeological resources were identified during ARA's survey work between the Kirkwall Valve Site and Brock Road.

In association with the Kirkwall Valve Site to Hamilton Take-off NPS 42 Pipeline Loop, ARA completed an archaeological assessment of the Groen Property (ARA 1990a). One archaeological site, the Groen site (AiHa-29), was identified within the study corridor east of Brock Road. The site was identified as an Indigenous camp and, later, a portion of the site was fully excavated, including mechanical topsoil removal (ARA 1990b). The partial excavation recovered lithic tools and flakes, as well as Indigenous pottery and faunal remains. Several features and post moulds were also identified. The archaeological work was completed by ARA in advance of proposed project impacts (ARA 1990b). The site is associated with the Neutral and dates to between 1620 and 1650 CE.

In 1999, New Directions Archaeology (NDA) completed a Stage 1 to 3 archaeological assessment for approximately six kilometres of road improvements for Highway 6, from Highway 5 to 100 metres south of Concession Road 6 West (NDA 1999). The northern end of the NDA (1999) study area is located adjacent to the southern end of the current study area for the Project. NDA (1999) identified two archaeological sites, one of which, the Millgrove North site (AiGx-232), is located within one kilometre of the current study area. Neither site identified by NDA (1999), i.e., Red Tulip Site (AiGx-231) and Millgrove North Site (AiGx-232), are located within 50 metres of the current study area.

In 2008, DPA completed a Stage 1 archaeological assessment for Union Gas Limited's Proposed NPS 48 Brantford Take-Off to Kirkwall Valve Site Pipeline (DPA 2008). A Stage 2 for the project followed in 2013 and 2014 (DPA 2014c; DPA 2015). The easternmost portion of the Stage 2 study area (see BK31 and BK32) overlaps the current study area for the Project. During the Stage 2 survey, DPA (2015a) identified 17 archaeological locations. None of the

archaeological locations are located within the segment which overlaps the current study area. As part of the specific Stage 2 survey for Infrastructure Ontario Lands associated with the Proposed NPS 48 Brantford Take-Off to Kirkwall Valve Site Pipeline (DPA 2014c) an isolated findspot of Indigenous nature was identified and was not registered as an archaeological site. Similar archaeological assessments for proposed pipeline routes had been completed in the 1980s and early 1990s (e.g., MPP 1984; MPP 1989; DPA 1995).

In 2013, DPA completed a Stage 1 archaeological assessment for Enbridge Pipeline Inc.'s proposed Line 11 Westover Segment Replacement project (DPA 2014a). The northernmost portion of the Line 11 Westover Segment Replacement project, i.e., an approximate 280 metre gravel access road, overlaps with the southern end of the current study area. Stage 2 archaeological assessment was recommended in advance of proposed construction impacts and was completed by DPA (2014b). No archaeological resources within the current study area or within 50 metres of the current study area were identified during DPA's Stage 2 assessment (DPA 2014b).

Also, in 2013, DPA completed a Stage 1 archaeological assessment for Enbridge Pipeline Inc.'s proposed Line 10 Westover Segment Replacement project (DPA 2015b). Portions of Line 10 and 11 parallel each other in the same existing easement. The Stage 1 assessment determined that Stage 2 assessment is required in advance of proposed construction activities. The northernmost portion of the Line 10 Westover Segment Replacement projects, i.e., an approximate 280 metre gravel access road, overlaps with the southern end of the current study area. Stage 2 archaeological assessment was recommended in advance of proposed construction impacts. Various Stage 2 archaeological assessments for the Line 10 Westover Segment Replacement project have been completed by TMHC. In addition, numerous Stage 3 assessments and Stage 4 mitigations were completed by TMHC and other archaeological consultants in support of the Line 10 Westover Segment Replacement. However, no archaeological resources within the current study area or within 50 metres of the current study area were identified during the various Stage 2 assessments for the Line 10 Westover Segment Replacement project (e.g., TMHC 2015; TMHC 2016; TMHC 2017).

In 2017, TMHC completed a Stage 1 archaeological assessment for the 114-kiloVolt circuit B5C and B5C/B6C lines located between the Enbridge Westover Southern Consumer Transmission Station (SCTS), City of Hamilton and Burlington Transmission Station (TS), City of Burlington (TMHC 2018). The study area for TMHC (2018) follows the existing transmission line running through the current study area for the Project, specifically a portion of Alternate Route B. Stage 2 archaeological assessment was recommended for all lands retaining archaeological potential (TMHC 2018). Stantec understands that a Stage 2 archaeological assessment has not been completed for this project.

1.3.4 City of Hamilton's Archaeological Management Plan

The City of Hamilton's municipal archaeological management plan, entitled *The City of Hamilton Archaeology Management Plan* (AMP) was consulted and illustrates the study area as a locale of archaeological potential for Indigenous and Euro-Canadian archaeological resources (City of Hamilton 2016). To identify archaeological potential, an archaeological potential model was created using cultural and physiographic information, such as the presence of identified/registered sites or proximity to water. Generally, the AMP uses the following criteria to aid in the determination of archaeological potential of a property:

- 250 metre catchment area for registered archaeological sites;
- 250 metre catchment area for unregistered but known or reported archaeological sites;



- 300 metre catchment area for primary watercourses;
- 100 metre catchment area for historic activities;
- 100 metre catchment area for historic transportation corridors;
- 100 metre catchment area for unusual landforms;
- Areas within the historic urban boundary that have not been substantially disturbed;
- Rural historic settlements;
- Properties designated under the *Ontario Heritage Act*; and
- Modern and historic aerial photography.

Based on the criteria identified above, the AMP identifies the study area for the Project with general archaeological potential (City of Hamilton 2016).

1.3.5 Existing Conditions

The Stage 1 archaeological assessment was completed under PIF # P256-0564-2019 issued to Parker Dickson, MA, of Stantec, by the MTCS. The study area for the Stage 1 archaeological assessment of the Project comprises approximately 6,400 hectares of various Lots and Concessions, Geographic Townships of Beverly, West Flamborough, and East Flamborough, former Wentworth County, now City of Hamilton, Ontario (Figure 1 and Figure 2). The proposed Project will be constructed between Enbridge's existing Kirkwall valve site, located northeast of the intersection of Safari Road and Valens Road, and Enbridge's existing Hamilton valve site, located east of Highway 6 and north of Carlisle Road, generally paralleling three existing Enbridge pipelines. The length of the proposed pipeline will be determined by the final route and will be approximately 10 to 14 kilometres in length (Figure 2).

Broadly, much of the study area consists of active agricultural field with smaller pockets of sparse woodlot. The study area is also inundated with numerous water sources, municipal road ROWs, and municipally constructed drains, as well as the small communities of Westover, Flamborough, Harper Corners, Breezy's Corners, and Strabane. Existing Enbridge infrastructure, such as metering stations, pumping stations, and storage facilities, are located within the study area. For example, much of the Preliminary Preferred Route A parallels the existing Kirkwall Valve Site to Hamilton Take-off NPS 42 Pipeline, which, itself, parallels an existing line constructed in the early 1950s. The final route and construction easement, including any temporary land use, for the Project will be determined at a later date. Thus, the current study area for the Stage 1 archaeological assessment is large and serves to capture a broad and generalized geographic area associated with the Project. A property inspection was not completed in association with the Stage 1 archaeological assessment.

2.0 ANALYSIS AND CONCLUSIONS

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Stantec applied archaeological potential criteria commonly used by the MTCS (Government of Ontario 2011) to determine areas of archaeological potential within the region under study. These variables include proximity to previously identified archaeological sites, distance to various types of water sources, soil texture and drainage, glacial geomorphology, elevated topography, and the general topographic variability of the area. However, it is worth noting that extensive land disturbance can eradicate archaeological potential (Government of Ontario 2011).

Potable water is the single most important resource for any extended human occupation or settlement and since water sources in Ontario have remained relatively stable over time, proximity to drinkable water is regarded as a useful index for the evaluation of archaeological site potential. In fact, distance to water is one of the most commonly used variables for predictive modeling of archaeological site locations. Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and, considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils or topographic variability, may also indicate archaeological potential.

When evaluating distance to water it is important to distinguish between water and shoreline, as well as natural and artificial water sources, as these features affect site location and type to varying degrees. The MTCS categorizes water sources in the following manner:

- Primary water sources: lakes, rivers, streams, creeks;
- Secondary water sources: intermittent streams and creeks, springs, marshes and swamps;
- Past water sources: glacial lake shorelines, relic river or stream channels, cobble beaches, shorelines of drained lakes or marshes; and
- Accessible or inaccessible shorelines: high bluffs, swamp or marshy lake edges, sandbars stretching into marsh.

Primary water sources are abundant within the Stage 1 study area. Transecting the study area are primary sources such as Spencer Creek, Fairchild Creek, Barlow Creek, Grindstone Creek, and Bronte Creek. Much of the Geographic Township of Beverly comprises swampy soils. These swamps “serve as water reservoirs and produce cedar posts and other wood” (Chapman and Putnam 1984:130). The swamps in the study area would have also provided faunal and floral resources for use. Additional ancient and/or relic tributaries of water sources may have existed but are not identifiable today and are not indicated on historic mapping.

Further examination of the study area’s natural environment identified soil conditions suitable for Indigenous and Euro-Canadian agriculture, especially in the 19th and 20th centuries following the implementation of municipal drainage systems and agricultural field tiling. The study area is situated within portions of two broad physiographic regions: the Flamborough Plain and the Norfolk Sand Plain. Both physiographic regions contain drumlins, eskers, and other landforms comprising elevated topography. Storck (1982) notes that archaeological sites, particularly Paleo-Indian sites, tend to be in situated in areas of elevated topography as these areas would possess better drainage and would provide a broad view of the surrounding terrain for game watching.

An examination of the *Ontario Archaeological Sites Database* has shown that there are 14 registered archaeological sites within the broad Stage 1 study area; of which, 13 are Indigenous. While no registered site is located within 50 metres of a Preliminary Preferred or Alternate Route option, it is important to recognize that several significant archaeological sites, such as Indigenous villages and ossuaries (i.e., Christianson Village [AiHa-2], Shaver Hill Ossuary [AiHa-1], Robertson Village [AiHa-12], and Dwyer Ossuary [AiHa-3]), are located within the study area and are of special significance to extant Indigenous communities in the region. A further three registered Indigenous archaeological sites are within one kilometre of the study area, including the Hood Village (AiHa-7) and MacDonald Village (AiHa-9).

For Euro-Canadian sites, archaeological potential can be extended to areas of early Euro-Canadian settlement, including places of military or pioneer settlements; early transportation routes; and properties listed on the municipal register or designated under the *Ontario Heritage Act* (Government of Ontario 1990a) or property that local histories or informants have identified with possible historical events, activities, or occupations. Historical mapping demonstrates that the study area includes early concession roads with structures illustrated as fronting these roads; particularly along major arterial roads, i.e., Dundas Street (Highway 5), Safari Road, Brock Road, and Highway 6. It is also worth noting that preliminary information from the CHAR for the Project suggests there are 26 cultural heritage / built heritage resources situated within the study area. Much of the established road and rail networks and agricultural settlement from the 19th century is still visible today.

The City of Hamilton's municipal archaeological management plan, entitled *The City of Hamilton Archaeology Management Plan* (AMP) was consulted and illustrates the study area as a locale of archaeological potential for Indigenous and Euro-Canadian archaeological resources (City of Hamilton 2016).

As noted above, extensive and deep land alteration can eradicate archaeological potential. Based on aerial imagery of the broad Stage 1 study area, there are likely to be pockets of modern disturbance from municipal road ROWs, and municipally constructed drains, buildings and structures associated with the communities of Westover, Flamborough, Harper Corners, Breezy's Corners, and Strabane, as well as rural properties. However, while a visual examination of the road surface, gravel shoulder, and adjacent ditching of municipal roads may be sufficient to confirm extensive disturbance and removal of archaeological potential, it may not be possible to confirm extensive disturbance of other portions of the municipal road ROWs, particularly those portions immediately adjacent to agricultural fields, through visual examination alone. Thus, these areas are judged to retain archaeological potential and require confirmation of disturbance through additional archaeological assessment.

Further to the above, existing Enbridge infrastructure (as well as other buried utility infrastructure), such as metering stations, pumping stations, and storage facilities, are located within the study area. For example, much of the Preliminary Preferred Route A parallels the existing Kirkwall Valve Site to Hamilton Take-off NPS 42 Pipeline, which, itself, parallels an existing line constructed in the early 1950s. However, a Stage 1 property inspection was not completed for the study area and these areas were not specifically examined for evidence of modern disturbance.

A cursory review of available previous archaeological assessments is provided in Section 1.3.3. Few recent surveys have been completed within the study area and those that have been completed did not identify any archaeological sites. Much of the Preliminary Preferred Route A parallels the existing Kirkwall Valve Site to Hamilton Take-off NPS 42 Pipeline and Brantford Take-Off to Kirkwall Valve Site Pipeline, which have been subject, to varying degrees, to archaeological survey (e.g., ARA 1987; ARA 1990a; DPA 2008; DPA 2014c; DPA 2015a; ESP 1987; MPP 1984; and MPP 1988). However, the survey work during the early assessments, e.g., those completed in the 1980s and 1990s,



may have only sampled “high potential” areas and used survey methods not consistent with the MTCS’ 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). As such and given the difficulties in geo-referencing older survey maps, as well as the relatively close proximity of known Indigenous village and ossuaries, existing easements are judged to retain archaeological potential. Further, TMHC (2018) recently completed a Stage 1 archaeological assessment for a project which parallels the existing transmission line running through the current study area for the Project, specifically a portion of Alternate Route B. TMHC (2018) determined that their study area retained further archaeological potential and recommended a Stage 2 archaeological assessment.

In summary, it has been determined that the entirety of the study area retains potential for the identification of pre-contact Indigenous, post-contact Indigenous, and Euro-Canadian archaeological resources. As noted above, numerous farm complexes, residences, municipal ROWs, and other existing features of potential disturbance (i.e., existing roads, railways, residential and commercial complexes, and buried utilities and infrastructure) are located throughout the study area; however, they were not specifically examined as part of a Stage 1 property inspection and may still retain archaeological potential. Further, low and permanently wet areas and areas of steep slope may exist within the study area but were not specifically examined as part of a Stage 1 property inspection. As such, these areas have been included as part of the determination that the study area exhibits potential for the identification and recovery of archaeological resources. The final route and construction easement, including any temporary land use, for the Project will be determined at a later date. A refinement of archaeological potential specific to the Project’s anticipated impacts will be included as part of the Stage 2 archaeological assessment for the Project.

3.0 RECOMMENDATIONS

The Stage 1 archaeological assessment determined that the entirety of the study area for the Project retains potential for the identification and documentation of archaeological resources. In accordance with Section 1.3.1 and Section 7.7.4 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is required for any portion of the Project's anticipated construction activities which impacts an area of archaeological potential (Figure 6).**

The objective of the Stage 2 archaeological assessment will be to document any archaeological resources within the study area and to determine whether these archaeological resources require further assessment. The Stage 2 archaeological assessment will include the systematic walking of open ploughed fields as outlined in Section 2.1.1 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The MTCS standards further require that all agricultural land, both active and inactive, be recently ploughed and sufficiently weathered to improve the visibility of archaeological resources. Ploughing must be deep enough to provide total topsoil exposure, but not deeper than previous ploughing, and must provide at least 80% ground surface visibility.

Moreover, for areas inaccessible for ploughing, the Stage 2 archaeological assessment will include a test pit survey as outlined in Section 2.1.2 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The MTCS standards require that each test pit be approximately 30 centimetres in diameter, excavated to at least five centimetres in to subsoil, and have all soil screened through six millimetre hardware cloth to facilitate the recovery of any cultural material that may be present. Prior to backfilling, each test pit will be examined for stratigraphy, cultural features, or evidence of fill.

In addition to the above, the specific roadways and ROWs will require further archaeological assessment in accordance with Section 2.1.8 of Standard 2 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Any portion of the ROW within agricultural or accessible land may require ploughing and pedestrian survey in accordance with Section 2.1.1 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), depending on the specific Project impact. Confirmation of disturbance will also be required for any anticipated Project impact to other existing features (i.e., existing roads, railways, farm complexes, residences, buried utilities and other infrastructure).

If the archaeological field team determines any lands to be low and wet, steeply sloped, or disturbed during the Stage 2 field work, those areas will not require survey, but will be photographically documented in accordance with Section 2.1 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

The MTCS is asked to review the results presented and to accept this report into the *Ontario Public Register of Archaeological Reports*. Archaeological sites recommended for further archaeological fieldwork remain subject to Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990a) and may not be altered, or have artifacts removed, except by a person holding an archaeological license.

4.0 ADVICE ON COMPLIANCE WITH LEGISLATION

This report is submitted to the Minister of Tourism, Culture and Sport as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c O.18 (Government of Ontario 1990a). The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the study area of a development proposal have been addressed to the satisfaction of the MTCS, 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* (Government of Ontario 1990a) 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 fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the *Ontario Public Register of Archaeological Reports* referred to in Section 65.1 of the *Ontario Heritage Act* (Government of Ontario 1990a)

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* (Government of Ontario 1990a) The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990a)

The *Funeral, Burial and Cremation Services Act,* 2002, S.O. 2002, c.33 (Government of Ontario 2002), requires that any person discovering or having knowledge of a burial site shall immediately notify the police or coroner. It is recommended that the Registrar of Cemeteries at the Ministry of Government and Consumer Services is also immediately notified.

Archaeological sites recommended for further archaeological fieldwork remain subject to Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990a) and may not be altered, or have artifacts removed, except by a person holding an archaeological license.

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Lots 28 & 29, Con 5-Lots 28 to 36, Con 6-Lots 28 to 30, Con 7, G.Twp. of Beverly Part of Lots 1 to 16, Con 6, G.Twp. of West Flamborough Part of, Lot 1, Con 1-Lots 1 to 3, Con 2-Lots 3 to 6, Con 3-Lots 5 to 8, Con 4-Lots 8 to 11, Con 5-Lots 11 to 13, Con 6-Lot 13, Con 7, G.Twp. of East Flamborough Former Wentworth County, Now City of Hamilton, ON Part of Brant's Block, G.Twp. of Nelson Former Halton County, Now City of Burlington, ON. Report on file, Toronto: Ministry of Tourism, Culture and Sport. PIF P1075-0039-2017.

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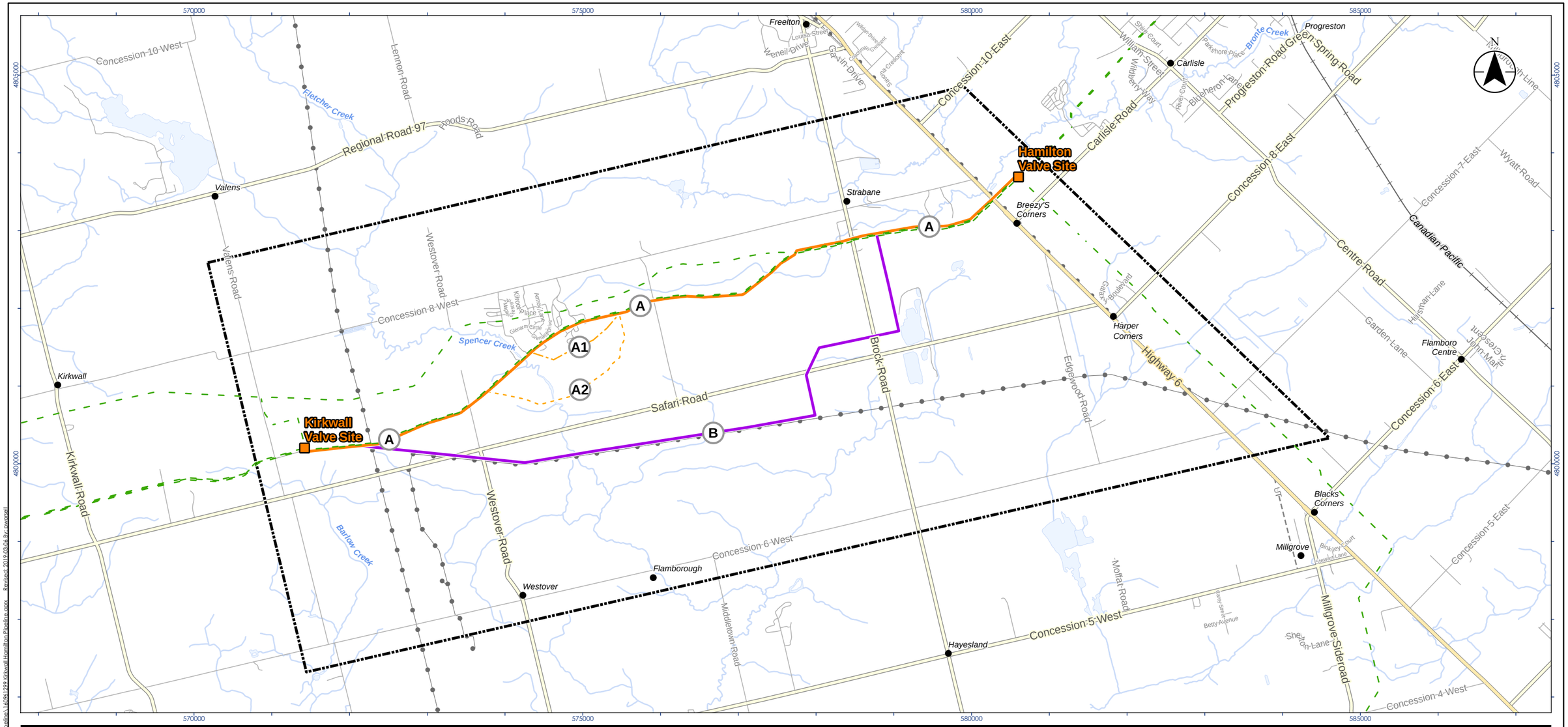
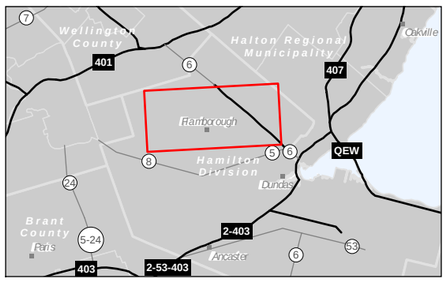
6.0 MAPS

General maps of the broad Stage 1 study area are provided on the following pages. Maps identifying exact archaeological site locations do not form part of this public report; they may be found in the Supplementary Documentation.





Legend

- Existing Enbridge Station
- A - Preliminary Preferred Route
- A1 - Route Deviation
- A2 - Route Deviation
- B - Alternate Route
- Existing Pipeline
- General Study Area
- Highway
- Major Road
- Minor Road
- Minor Road
- Railway
- Hydro Line
- UT Unknown Transmission Line
- Watercourse
- Waterbody

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Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2019.

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Project Location
City of Hamilton

160961299
Prepared by PW on 2019-03-06

Client/Project
ENBRIDGE GAS INC.
KIRKWALL-HAMILTON PIPELINE PROJECT
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
1

Title
Location of the Project

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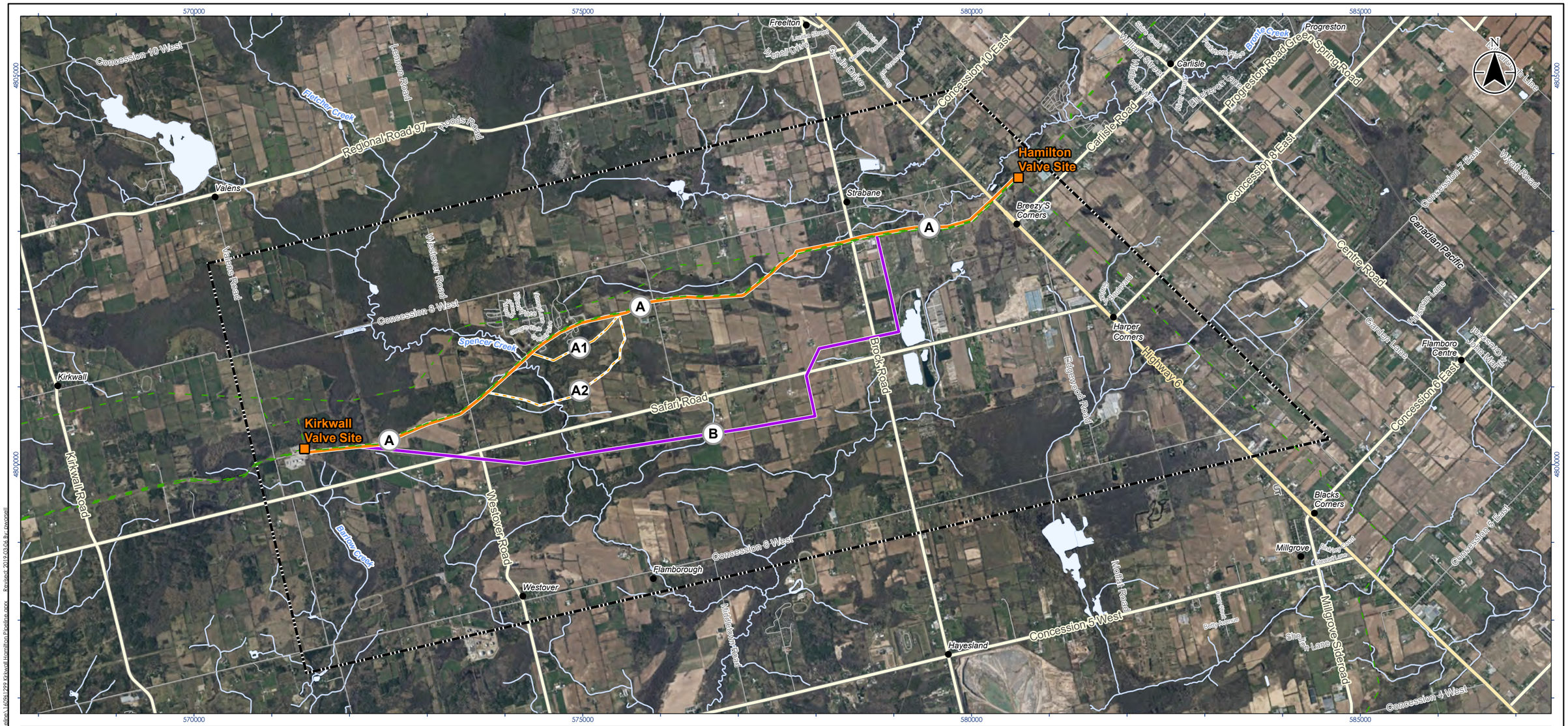

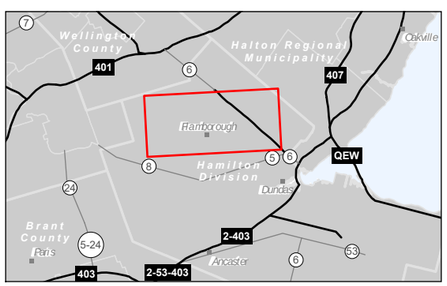

Legend

- Existing Enbridge Station
- A - Preliminary Preferred Route
- A1 - Route Deviation
- A2 - Route Deviation
- B - Alternate Route
- Existing Pipeline
- General Study Area
- Highway
- Major Road
- Minor Road
- Minor Road
- Railway
- Hydro Line
- Unknown Transmission Line
- Watercourse
- Waterbody

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Notes

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Prepared by PW on 2019-03-06

Client/Project
ENBRIDGE GAS INC.
KIRKWALL-HAMILTON PIPELINE PROJECT
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
2

Title
Location of the Study Area

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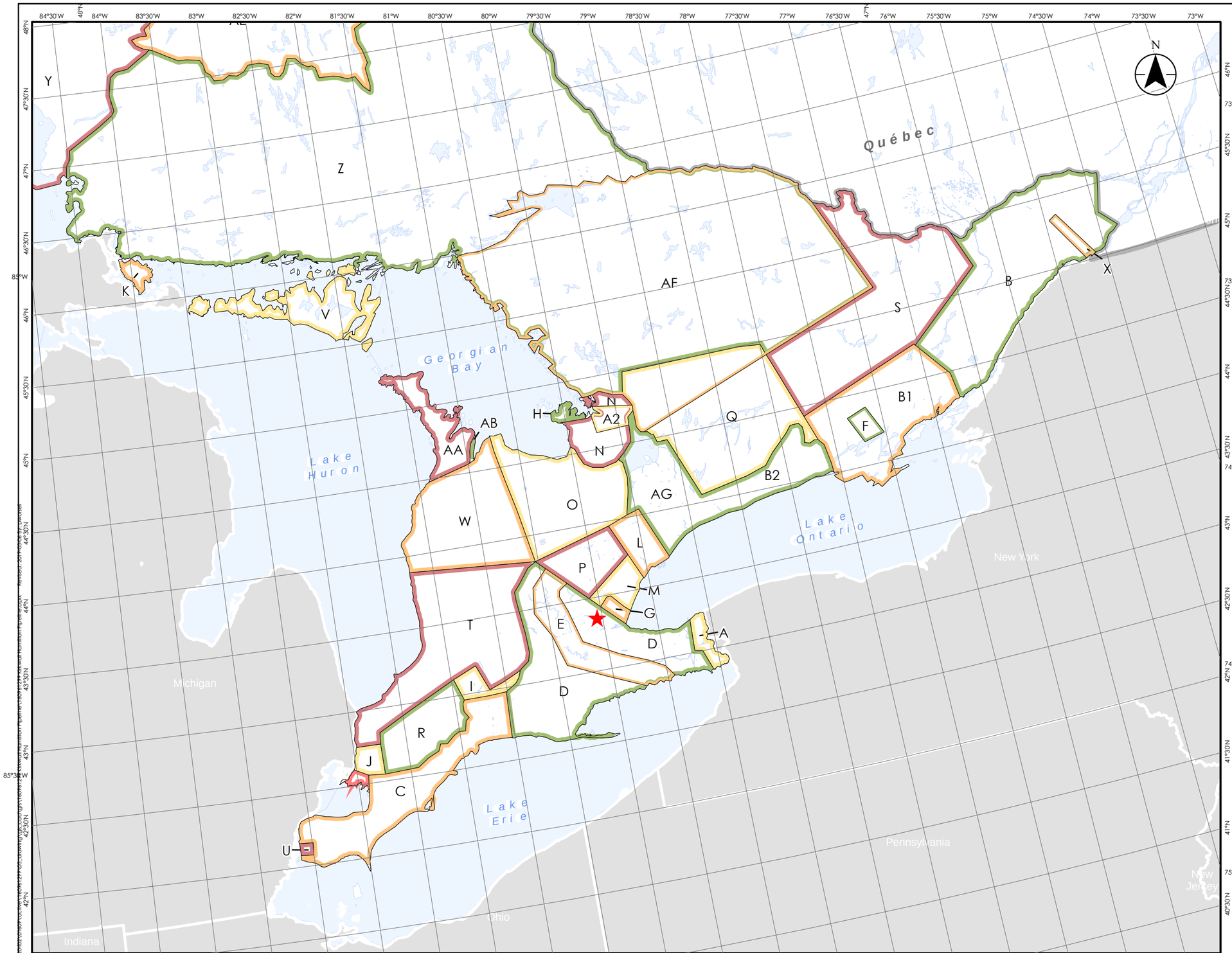

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Legend

★ Project Location

A Treaty No. 381, May 9th, 1781 (Mississauga and Chippewa)
AA Treaty No. 72, October 30th, 1854 (Chippewa)
AB Treaty No. 82, February 9th, 1857 (Chippewa)
AE Treaty No. 9, James Bay 1905, 1906 (Ojibway and Cree)
AG Williams Treaty, October 31st, 1923 (Chippewa)
A2 John Collins' Purchase, 1785 (Chippewa)
B Crawford's Purchase, October 9th, 1783 (Algonquin and Iroquois)
B1 Crawford's Purchase, October 9th, 1783 (Mississauga)
B2 Crawford's Purchase, 1783, 1787, 1788 (Mississauga)
C Treaty No. 2, May 19th, 1790 (Odawa, Chippewa, Pottawatomi, and Huron)
D Treaty No. 3, December 2nd, 1792 (Mississauga)
E Haldimand Tract: from the Crown to the Mohawk, 1793
F Tyendinaga: from the Crown to the Mohawk, 1793
G Treaty No. 3 3/4: from the Crown to Joseph Brant, October 24th, 1795
H Treaty No. 5, May 22nd, 1798 (Chippewa)
I Treaty No. 6, September 7th, 1796 (Chippewa)
J Treaty No. 7, September 7th, 1796 (Chippewa)
K Treaty No. 11, June 30th, 1798 (Chippewa)
L Treaty No. 13, August 1st, 1805 (Mississauga)
M Treaty No. 13A, August 2nd, 1805 (Mississauga)
N Treaty No. 16, November 18th, 1815 (Chippewa)
O Treaty No. 18, October 17th, 1818 (Chippewa)
P Treaty No. 19, October 28th 1818 (Chippewa)
Q Treaty No. 20, November 5th, 1818 (Chippewa)
R Treaty No. 21, March 9th, 1819 (Chippewa)
S Treaty No. 27, May 31st, 1819 (Mississauga)
T Treaty No. 27½, April 25th, 1825 (Ojibwa and Chippewa)
U Treaty No. 35, August 13th, 1833 (Wyandot or Huron)
W Treaty No. 45½, August 9th, 1836 (Saugeen)
X Treaty No. 57, June 1st, 1847 (Iroquois of St. Regis)
Y Treaty No. 60, Robinson, Superior, September 7th, 1850 (Ojibwa)
Z Treaty No. 61, Robinson, Huron, September 9th, 1850 (Ojibwa)

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Notes
1. Coordinate System: NAD 1983 Statistics Canada Lambert
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2019.
3. Treaty boundaries adapted from Morris 1943 (1964 reprint). For cartographic representation only.

Project Location
City of Hamilton

160961299
Prepared by PW on 2019-03-06

Client/Project
ENBRIDGE GAS INC.
KIRKWALL-HAMILTON PIPELINE PROJECT
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
3

Title
Treaties and Purchases (Adapted from Morris 1943)

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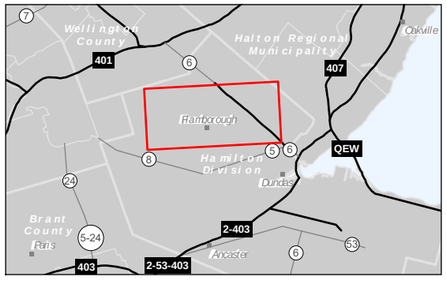

Legend

General Study Area (Approximate)

Notes

1. Map is not to scale.
2. Historic map source:

Stantec

Project Location
City of Hamilton

160961299
Prepared by PW on 2019-03-06

Client/Project
ENBRIDGE GAS INC.
KIRKWALL-HAMILTON PIPELINE PROJECT
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
4

Title
1859 County of Wentworth Map

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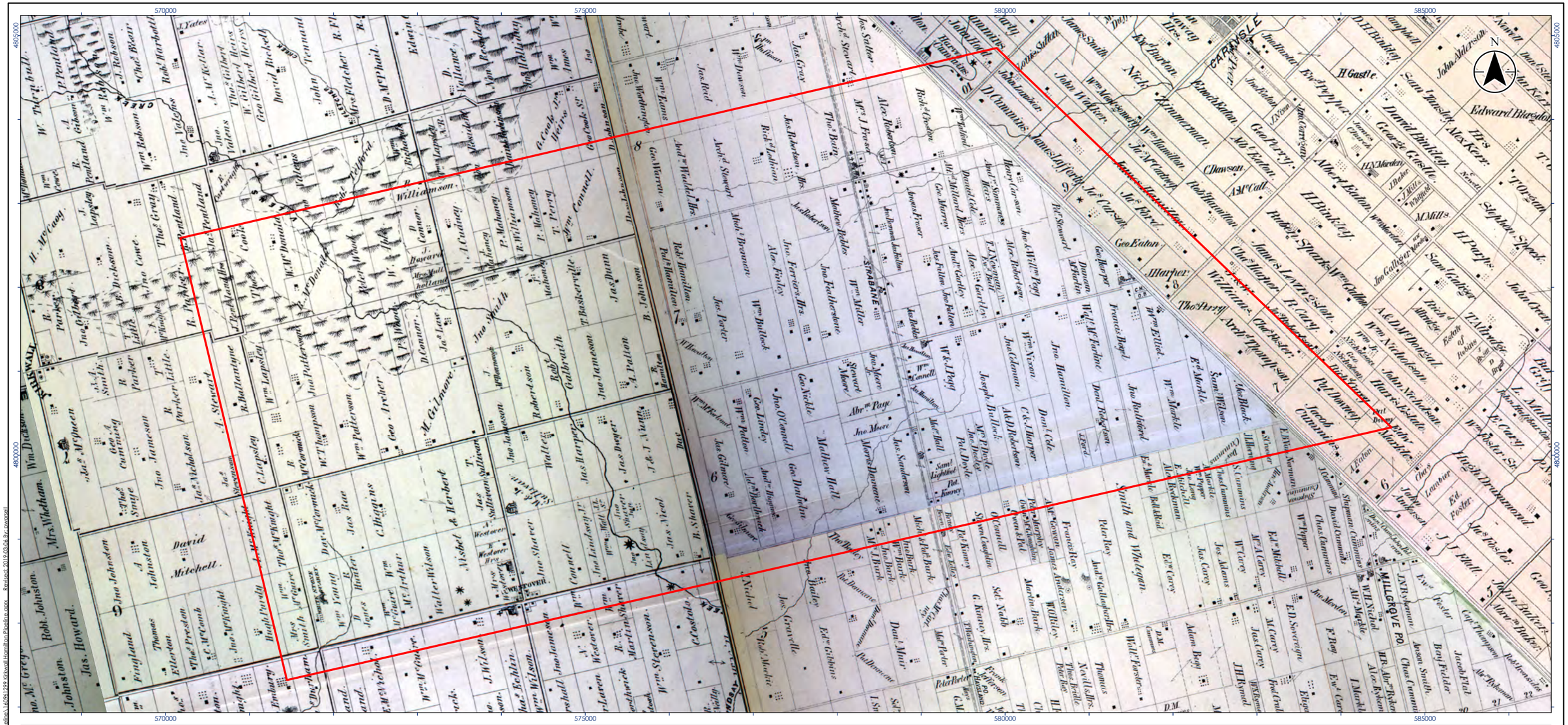

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General Study Area (Approximate)

Notes

1. Map is not to scale.
2. Historic map source:

Stantec

Project Location
City of Hamilton

160961299
Prepared by PW on 2019-03-06

Client/Project
ENBRIDGE GAS INC.
KIRKWALL-HAMILTON PIPELINE PROJECT
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
5

Title
1875 County of Wentworth Map

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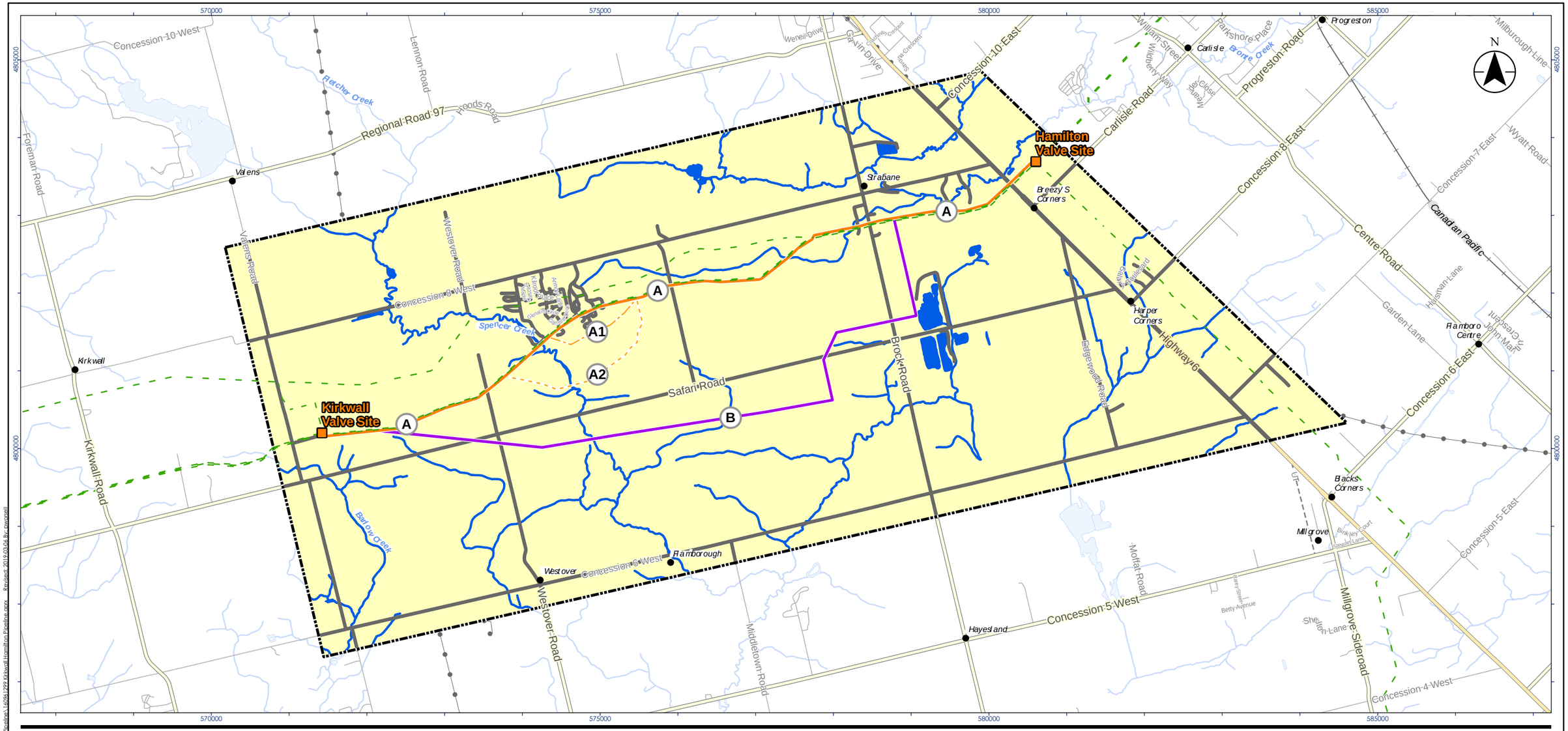

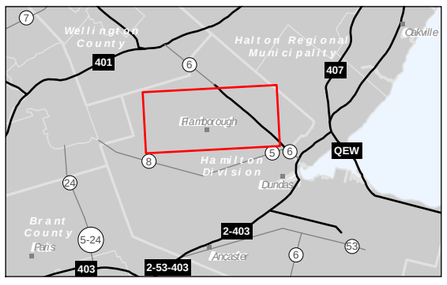

Legend

- Existing Enbridge Station
- A - Preliminary Preferred Route
- A1 - Route Deviation
- A2 - Route Deviation
- B - Alternate Route
- Existing Pipeline
- General Study Area
- Highway
- Major Road
- Minor Road
- Minor Road
- Railway
- Hydro Line
- UT Unknown Transmission Line
- Watercourse
- Waterbody

Stage 1 Archaeological Potential

- Retains Archaeological Potential; Stage 2 Assessment Required
- Municipal/Provincial Road ROW, May Retain Archaeological Potential; Stage 2 Assessment Required to Confirm Disturbance
- Low and Permanently Wet Areas, Low to No Archaeological Potential; Stage 2 Assessment Required to Confirm Presence

0 1 2 km

1:50,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2019.

Stantec

Project Location
City of Hamilton

160961299
Prepared by PW on 2019-03-06

Client/Project
ENBRIDGE GAS INC.
KIRKWALL-HAMILTON PIPELINE PROJECT
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
6

Title
Archaeological Potential of the Study Area

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7.0 CLOSURE

This report documents work that was performed in accordance with generally accepted professional standards at the time and location in which the services were provided. No other representations, warranties or guarantees are made concerning the accuracy or completeness of the data or conclusions contained within this report, including no assurance that this work has uncovered all potential archaeological resources associated with the identified property.

All information received from the client or third parties in the preparation of this report has been assumed by Stantec to be correct. Stantec assumes no responsibility for any deficiency or inaccuracy in information received from others.

Conclusions made within this report consist of Stantec's professional opinion as of the time of the writing of this report and are based solely on the scope of work described in the report, the limited data available and the results of the work. The conclusions are based on the conditions encountered by Stantec at the time the work was performed. Due to the nature of archaeological assessment, which consists of systematic sampling, Stantec does not warrant against undiscovered environmental liabilities nor that the sampling results are indicative of the condition of the entire property.

This report has been prepared for the exclusive use of the client identified herein and any use by any third party is prohibited. Stantec assumes no responsibility for losses, damages, liabilities, or claims, howsoever arising, from third party use of this report. We trust this report meets your current requirements. Please do not hesitate to contact us should you require further information or have additional questions about any facet of this report.

Quality Review _____
(signature)

Peter Popkin, Associate, Senior Archaeologist

Independent Review _____
(signature)

Tracie Carmichael, Managing Principal, Environmental Services

Appendix B DFO Enbridge Gas Inc. Drawings

Disclaimer: The following Appendix falls under the category of exceptions as the information came from another organization, not Stantec. Therefore, this appendix is not accessible as per Accessibility for Ontarians with Disabilities Act, 2005 (AODA).

Generic Sediment Control Plan – Horizontal Directional Drill

This Plan is applicable to Enbridge Gas Inc. (EGI) workers and Contractors involved in HDD activities. It establishes best management practices to prevent and/or mitigate an unauthorized death of fish or harmful alteration, disruption or destruction (HADD) of fish and fish habitat or the impairment of water quality from an inadvertent release of drilling fluid or sedimentation in the vicinity of, or beneath, watercourses. **NOTE:** There is a Duty to Notify and Duty to Take Corrective Measures to report death of fish or a HADD of fish habitat to DFO.

Drilling fluid is typically composed of bentonite clay-water mixture, which is considered non-toxic/hazardous, however, if it is released to a watercourse, there is the potential for the drilling fluid to adversely impact fish and invertebrates. EGI recognizes the need to protect downstream water users, as well as aquatic species and their habitat, from sedimentation. As such, extensive planning prior to, and constant vigilance during, construction operations are essential.

Conditions for use

- Work is taking place outside of Critical Habitat including any identified riparian areas
- Work is taking place at least 30m from any watercourse that has aquatic species at risk
- Work is taking place at least 15m from any watercourse

Planning and Pre-Construction

The following precautionary measures should be implemented to minimize the risk of an inadvertent release or sedimentation during HDD activities:

- Select a pipeline route to minimize the number of watercourse crossings;
- If possible, schedule HDD activities during low flow times;
- Ensure watercourse crossing permits and approvals are obtained, reviewed and remain on-site throughout the duration of the project;
- Where necessary, EGI will notify the required regulatory authorities (i.e. Conservation Authority) prior to the watercourse crossing;
- Ensure that all construction personnel are aware of this contingency plan prior to the commencement of drilling activity;
- Conduct a feasibility assessment (i.e. geotechnical assessment) to assess the suitability of subsurface conditions (if required);
- Maximize distance of HDD entry and exit points from the watercourse and ensure they are at least 10 m from a watercourse if aquatic species at risk are not present in 30 m if present; and
- Maximize depth of the drill path beneath the watercourse.

Construction Mitigation Measures

The steps and precautions that follow should be completed when conducting HDD activities beneath, or in the vicinity of, a watercourse:

- Clearly flag the expected drill path prior to commencing any drilling operations, to facilitate monitoring for potential drilling fluid releases.
- Assign personnel to monitor the drill path for inadvertent returns of drilling fluid or sedimentation.
- Fluid volumes, annular pressure and cutting returns will be continuously monitored to ensure potential drilling fluid losses are detected and addressed immediately. Dedicated personnel should be assigned to continuously monitor drilling pressure and fluid volumes.
- Ensure an approved spill kit is on site and readily available, as per the Spill Response Procedure.
- Sediment control measures (i.e. silt fencing, SiltSoxx™, etc.) should be set-up prior to initiating HDD operations to contain potential releases of drilling fluid, sediment-laden groundwater or run-off along the proposed drill path. Sediment control measures shall be installed:
- Around entry and exit pits;
- Around drilling fluid containment pits;
- Surrounding spoil piles;
- Between all HDD operations and watercourse as identified on this drawing;
- Over-excavate the entry and exit pits to create drilling fluid sump pits;
- Drilling fluid must be contained in entry and exit pits (sump pits) and as they are filled, drilling fluids should be promptly removed and/or removed at the completion of HDD operations at an approved location;
- All vehicles, machinery and other equipment shall not enter the water. There must be no fording of any watercourse;
- If possible, refueling of equipment should not occur within a minimum of 30 m from a watercourse, however, if required, secondary containment must be used around the refuelling area to prevent entry into the watercourse; and
- If necessary, ensure dewatering occurs through a 'sediment-bag' and utilizes other erosion and sediment control (ESC) measures, as required, and is released greater than 30 m from the top-of-bank into a vegetated area.

During HDD operations, workers should keep enough spill response material on-site and readily available to contain any inadvertent releases of drilling fluid or release of sediment-laden groundwater, including (but not limited to):

- Sandbags
- Filter cloth (i.e. silt fence)
- T-Posts
- Corrugated culverts
- Numerous 5-gallon pails
- Vacuum trucks
- Straw bales
- Snow fencing
- Sediment control lots (i.e. SiltSoxx™) or equivalent
- Polyethylene sheets
- Shovels

In addition to the above, for larger watercourse crossings, the following materials should also be kept on-site:

- Turbidity curtains
- Floating sediment boom
- Trash pumps complete with sufficient lengths of leak-free hose, suction heads, and fish screens

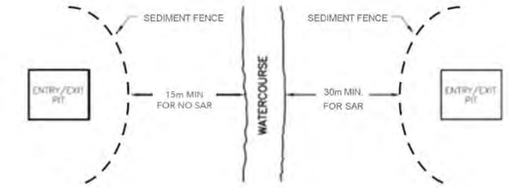
Contingency Plan for Inadvertent Release (see Horizontal Directional Drilling Contingency Plan Guide, 2022)

Bank and Riparian Zone Areas

The steps that follow should be completed when pipeline installation by HDD is occurring adjacent to a watercourse bank or riparian zone and drilling fluid is identified along the drill path.

- HDD operations should stop immediately and spill containment be established using EGI's approved methods including, but not limited to:
- Straw bales and sediment control fencing;
- Sandbags and polyethylene sheets;
- Containment pits, rings and/or absorbent booms;
- Vacuum trucks; and,
- Site re-grading (berms).
- The EGI Supervisor and Environmental Inspector (if applicable) must be notified of the inadvertent release of drilling fluid or sedimentation.
- The EGI Supervisor must follow the reporting requirements outlined in the Spill Response Procedure and at a minimum, contact, the Environmental Advisor at **1-855-336-2056** to ensure regulatory reporting requirements are met and to ensure clean-up operations are completed.
- If in doubt, report the spill. At a minimum, the following information will be required when reporting to the Environmental Advisor:
  1. Date and time of spill
  2. How the spill occurred
  3. Location of spill
  4. Type of material spilled
  5. Volume of material spilled
  6. Any impacts from the spill
  7. Immediate spill response actions
  8. Photographs
- Contact an approved environmental consultant to support spill cleanup and restoration, if deemed necessary based on the extent and impacts of the release.
- Workers including the EGI Inspector, Environmental Advisor and Contractor and Environmental Inspector (if used) should check for the root cause of release and identify potential solutions including (but not limited to):
- Reducing the pressure of slurry flow (i.e. excavate pressure relief pits);
- Reducing the speed of drill rotation;
- Reducing the speed of drill rod advancement;
- Moving the drill location (laterally, depth, etc.); and,
- Utilizing water to replace the bentonite drilling fluid, if site conditions allow.
- Any substantial deviation (i.e. installation method, crossing location/depth) from approved pipeline construction drawings must be resubmitted to the respective regulatory agencies (i.e. Conservation Authority) prior to resuming work.
- Residual drilling fluid must be removed by shovel or vacuum truck. Clean-up activities must minimize further disruption to the bank and riparian zone area.
- Any damage must be repaired, such as settlement and/or heaving.
- HDD activities may resume when preventative actions have been implemented and all parties are satisfied with the approach (i.e. EGI Supervisor, Environmental Advisor, Environmental Inspector and regulatory authorities [if involved]).

Minimum Horizontal Directional Drill Setback and Depth



PLAN

NOTES

- SEDIMENT FENCE TO BE SET UP A MINIMUM OF 15m FROM A NO SPECIES AT RISK WATERCOURSE AND 30m FOR A SPECIES AT RISK WATERCOURSE.
- HORIZONTAL DIRECTIONAL DRILL TO BE SET UP BEHIND SEDIMENT FENCE.
- MINIMUM OF 1.5m COVER FROM TOP OF PIPE TO BED OF WATERCOURSE.
- ALL DISTURBED AREAS TO BE RESTORED TO PRE-CONSTRUCTION CONDITIONS OR AS CLOSE AS POSSIBLE.



PROFILE

Watercourses

In addition to the above steps and precautions for bank and riparian zone areas, the following should be completed when pipeline installation by HDD is occurring beneath a watercourse and drilling fluid is identified or suspected in the watercourse itself:

- Where leakage of drilling fluids is suspected in a watercourse (i.e. sediment plume) operations should stop immediately and a visual inspection be conducted to verify the presence and extent. All necessary steps should be taken to minimize the impacts.
- Containment and clean-up activities must be initiated as soon as possible, where appropriate.
- Where the release is small with no visible sediment plume it should be allowed to dissipate naturally. Clean-up efforts within the watercourse may potentially be disruptive and cause further suspension of sediment in the water column than if the release were left to dissipate.
- Where the release is large with a visible sediment plume extending beyond the drilling site, the Environmental Advisor must be contacted to retain an environmental consultant to monitor the turbidity levels of the plume and associated potential impacts. In addition, the location of the inadvertent release should be isolated from the watercourse by installing a cofferdam or other containment system by utilizing the following materials:
  - Sandbags and polyethylene sheets;
  - Siltsoxx™, filter cloth (silt fence), straw bales;
  - Corrugated culverts; and/or,
  - Turbidity curtains.
  - The following materials can be used to control and clean up the release:
  - Shovels and 5-gallon pails (if conditions are dry)
  - Trash pumps with hose, suction head and fish screens; and/or
  - Vacuum trucks.
- If subsequent drilling attempts result in additional inadvertent returns of drilling fluid, the crossing should be halted, the Supervisor contact the Environment Department at **1-855-336-2056** and refer to the Contingency Plan for Installation Alternatives below.

Contingency Plan for Installation Alternatives

If EGI is unable to use HDD methodology to install the pipeline even with the mitigation implemented above, construction activities must be suspended, and the Environmental and/or Permit Advisor must be contacted to discuss alternate crossing methods. Any changes to the permitted crossing method may require permit amendments or government agency approval.

EGI should consider the following (from most to least preferred):

- Further geotechnical investigations to revise the pipeline alignment or depth
- Implement another crossing method as outlined in the Enbridge Gas Inc. and Department of Fisheries and Oceans Agreement Related to Watercourse Crossings for Pipeline Construction and Maintenance in Ontario (EGI DFO Agreement)
- Implement another crossing method such as a Non-Isolated Trench/Wet Open Cut method (work area is not isolated from flowing water)

Once the crossing method is reviewed by all internal parties and has been revised, the revised crossing method must be resubmitted for review and approval to the respective regulatory agencies (i.e. Conservation Authority, DFO [if required]) prior to resuming work.

Death of Fish or Harmful Alteration, Disruption or Destruction of Fish Habitat (HADD)

- If death of fish or HADD has occurred due to failure of this plan, a restoration plan should be developed and implemented by the company in consultation with and upon receipt of approval from the respected Conservation Authority and the DFO.

If a HADD occurs, notification are required as per the Contingency Plan for Inadvertent Release section above. **NOTE:** There is a Duty to Notify and Duty to Take Corrective Measures to report death of fish or a HADD to DFO.

Restoration

The following conditions should be considered when restoring any areas impacted by an inadvertent release of drilling fluid:

- Ensure the drilling exit and entry pits are cleaned of drilling fluid and the fluids are disposed of at an approved location.
- Any disturbed areas adjacent to the watercourse should be seeded, covered with erosion control matting (or equivalent) and restored as close as possible to pre-construction condition.
- All seeding and vegetation replacement will be with native species and as directed by the landowner or regulator (as required).
- If post-construction monitoring reveals erosion, remedial work will be taken as quickly as possible.
- If there is insufficient time in the growing season, the site should be stabilized (i.e. cover exposed soils with erosion control matting) and seeded the following spring.
- Maintain effective erosion and sediment controls until revegetation of disturbed areas is achieved, then remove the control measures.
- All debris and garbage shall be removed from the construction site to an approved location.

NOTES

ENBRIDGE

LOCATION

ALL HORIZONTAL DIRECTIONAL DRILL CROSSINGS IN ONTARIO

DRAWING TITLE

GENERIC SEDIMENT CONTROL PLAN HORIZONTAL DIRECTIONAL DRILL

SCALE	DATE
NTS	DECEMBER 2021
FILE No.	PROJECT No.

DRAWN	CHECKED	DRAWING	REV
GTH			0

APPROVED

Generic Sediment Control Plan - Temporary Vehicle Crossings

This plan sets out the measures that will be taken by Enbridge Gas Inc. (EGI) and its contractors to control downstream sediment to the lowest level practically achievable during the construction, use and removal of temporary vehicle water crossing at any watercourse (e.g., streams, rivers and ponds). The conditions and techniques set out on this plan are to be followed unless approved otherwise by the Department of Fisheries and Oceans (DFO).

General Measures

EGI must use materials, construction practices, mitigation techniques and monitoring of operations at every water crossing in order to prevent the unauthorized harmful alteration, disruption or destruction of fish habitat or the impairment of water quality. General measures are available at https://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures-eng.html. Vehicle crossings typically include temporary bridges (e.g., Bailey bridges, log stringer bridges) and winter crossings such as ice bridges and snow fills. The following requirements apply to any watercourse and areas adjacent to it:

- Temporary vehicle crossings to be in place no longer than a single restricted activity timing window.
- Use existing vehicle access across watercourses wherever possible.
- Prior to removal of the low vegetative cover, effective mitigation techniques for erosion and sediment control must be in place to protect water quality. Limit the areal extent of disturbance to the minimum needed for construction and delay grubbing to immediately prior to grading operations.
- Prior to commencing the installation of temporary vehicle crossings, local weather stations will be monitored to determine whether any precipitation is forecasted. If practical work will be delayed until weather conditions are favourable. If necessary, to proceed with work under unfavourable conditions, EGI will exercise due diligent.
- Vehicle crossing structures capable of handling anticipated high water flows during the construction period will be used. See guidelines below on sizing of water opening.
- Coarse cobbles, sandbags, geotextile liners and/or curb stringers will be used to protect culvert and ramp approach fills from erosion and to prevent sediment from entering a watercourse.
- On the approaches to vehicle crossing structures, road ditches constructed for drainage control will incorporate the necessary erosion and sedimentation control measures (e.g., silt fence, check dams) to prevent sediment from entering a watercourse.
- Except during construction of the crossing, EGI will not obstruct any watercourse so as to impede the free movement of water and fish.
- All exposed mineral soil must be graded to a stable slope and treated as quickly as possible to prevent erosion and sediment from entering a watercourse.
- All temporary vehicle crossing structures will be removed upon completion of construction. Banks and approaches will be restored and stabilized immediately upon removal of a vehicle crossing structure.
- The area around water crossings is to be regularly monitored and if erosion problems develop, immediate action is to be taken with appropriate treatments and completed as quickly as possible. Accumulated sediment is to be removed regularly from sediment control mitigations.
- Equipment fording will only be allowed if the Code of Practice can be met. It is available at https://www.dfo-mpo.gc.ca/pnw-ppe/codes/temporary-crossings-traversees-temporaires-eng.html.
- The Company will be held responsible for implementation of this plan. Any questions regarding the implementation of this plan should be directed towards the Environmental Advisor assigned to the project.

Sizing of Water Opening

It is important that the size of the water opening be selected so the structure can safely pass flood flows that can reasonably be expected to occur during the life of the crossing. **These structures must also allow for fish passage at all times except during the pipeline installation.** Any one of the following methods can be followed:

- Install a bridge that clear spans the watercourse from top of bank to top of bank where banks are defined (i.e. ordinary high water mark), and ensure adequate freeboard to allow for anticipated increase in stream discharge and passage of debris. In cases where banks are undefined: use cribbing or other footing material to hold the bridge and ensure adequate freeboard to allow for anticipated increase in steam discharge and passage of debris.
- Maximum culvert length will be 12.2 m (40 ft).
- Conduct a hydrology and hydraulics analysis to determine theoretical opening size. The design flow will be the two year flood (Q2), unless the culvert is to be left in place through the spring freshet, in which case the theoretical opening size will be based on the five year flood (Q5).
- Culvert sizes may also be selected to be the same as nearby culverts that have been in place for many years and have performed satisfactorily.
- If culverts are used, the approved size or equivalent multiple culverts must be installed. If multiple culverts are used a low-flow channel through one culvert must be established.

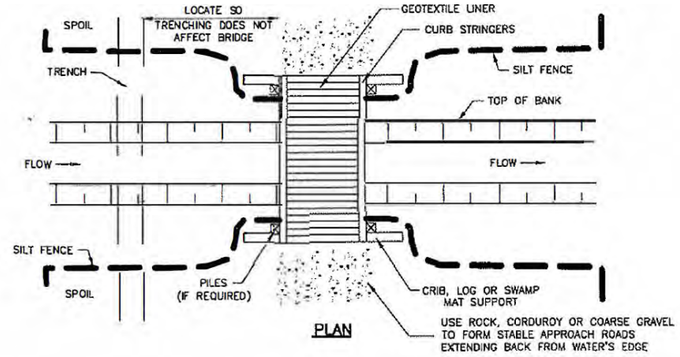
Detailed Construction Sequence - Temporary Bridges

In general terms, the following sequence of construction and mitigation measures will be followed at all temporary bridges.

Conditions for use

- The temporary bridge is no greater than one lane wide.
- The crib, log or swamp mat support is above the ordinary high water mark.

1. Generally, there are no restrictions on timing for the construction of clear-span structures as they do not involve in-water work. However, if there are any activities with the potential to disrupt fish or fish habitat (e.g., in-water crossing of watercourse by machinery), these should be undertaken outside of the restricted activity timing windows.
2. Install the bridge in a manner that will minimize sediment entering the watercourse. Stringers must be engineered to support the loads expected on the bridge. Curbs at least 150 mm high must be installed along the edge of the deck and if necessary, the deck lined with geotextile to contain mud on the bridge. Fasteners connecting components must be strong enough to hold them in position during the life of the bridge.
3. Road approaches leading to the bridges must be raised and stable, so equipment loads are supported a sufficient distance back from the watercourse to reduce sediment entering the watercourse from equipment. This may require using materials such as gravel, rock or corduroy. If cuts are needed to obtain a satisfactory grade, they are to be dug with side ditches and stable slopes. Erosion and sediment control measures are to be installed to keep sediment from entering the watercourse (e.g., check dams, filler cloth, rip rap, seed and mulch, sediment traps, etc.)
4. While the bridge is in use, any buildup of sediment on the bridge deck or approaches that has the potential to enter the watercourse is to be scraped off and disposed of in an approved location.
5. Temporary crossings will be removed as quickly as possible when no longer required. Surplus gravel and bridge materials are to be removed from the crossing area and stabilized above the floodplain in an approved location. The watercourse bed and banks are to be restored to a stable angle and protected with erosion resistant material compatible with flow velocity (e.g., coarse gravel or rip rap). Measures such as berms or logs may be needed to prevent sediment laden water from entering the watercourse.
6. Vegetate any disturbed areas by planting and seeding native trees, shrubs or grasses and cover such areas with mulch or erosion control matting to prevent soil erosion and to help seeds germinate.



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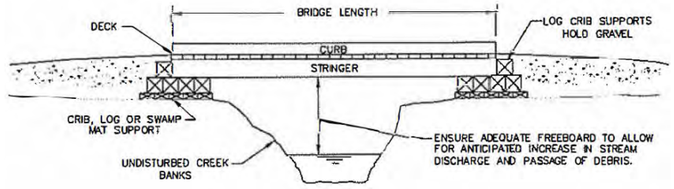
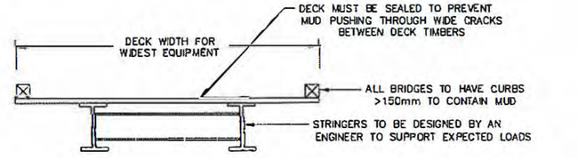


BRIDGE PROFILE



TYPICAL STEEL BRIDGE SECTION

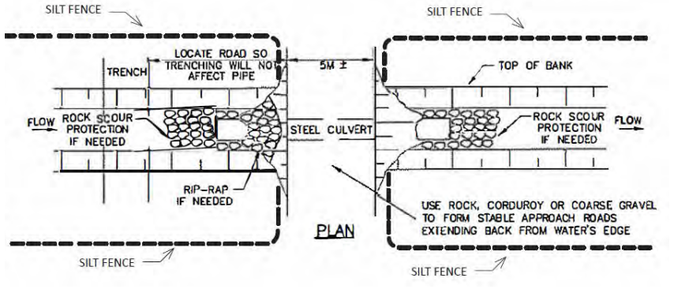
Detailed Construction Sequence - Temporary Culverts

Conditions for use

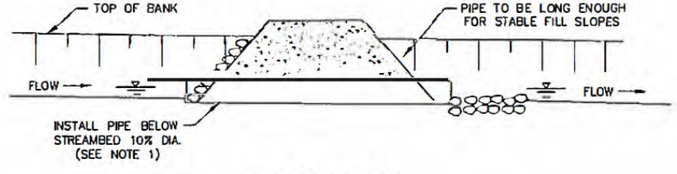
- The use of explosives is not required to complete the works, undertakings and activities
- Fish passage is maintained during the works, undertakings and activities
- No sensitive habitat exists at the crossing location
- The temporary culvert does not result in the draining of upland ponded or wetland features
- The culverts have a maximum length of no longer than 12.2m (40ft)
- The installation and removal of culverts must occur within a single allowable activity timing window

In general terms, the following sequence of construction and mitigation measures will be followed at all temporary culverts. Pre-, during-, and post-construction photographs showing the culvert location will be taken.

1. Install culvert pipe of diameter and length as per the Sizing of Water Opening requirements to ensure for stable fill slopes and safe vehicle/equipment passage. Culvert invert is to be set to allow a minimum of 10cm water depth for fish passage. Culvert installation can be done in flowing water as long as the installation occurs outside the restricted activity timing window. Culvert backfill and fill for the road is to be course granular or rock fill material. Erosion protection may be needed on the upstream road fill slope and if scour is possible, rip rap is to be placed in the watercourse upstream and downstream of the culvert outlet.
2. Road approaches leading to the culvert crossing must be raised and stable, so equipment loads are supported a sufficient distance back from the watercourse to reduce sediment entering the watercourse from equipment. This may require using materials such as gravel, rock, or corduroy. If cuts are needed to obtain a satisfactory grade, they are to be dug with side ditches and stable slopes. Erosion and sediment control measures are to be installed to keep sediment from entering the watercourse (e.g., check dams, filter cloth, rip rap, seed and mulch, sediment traps, etc.).
3. While the culvert is in use, any build-up of sediment on the road surface or approaches that has the potential to enter the watercourse is to be scraped off and disposed of in an approved location.
4. Temporary crossings will be removed as quickly as possible when no longer required. Removal must occur outside the restricted activity timing window. Surplus gravel and culvert materials are to be removed from the crossing area and stabilized above the floodplain in an approved location. The watercourse bed and banks are to be restored to a stable angle and protected with erosion resistant material compatible with flow velocity (e.g., coarse gravel or rip rap). Measures such as berms or logs may be needed to prevent sediment laden water from entering the watercourse.
5. Vegetate any disturbed areas by planting and seeding native trees, shrubs or grasses and cover such areas with mulch or erosion control matting to prevent soil erosion and to help seeds germinate.



PLAN



STREAM PROFILE

NOTES

ENBRIDGE

LOCATION

ALL TEMPORARY VEHICLE CROSSINGS (BRIDGES & CULVERTS) IN ONTARIO

DRAWING TITLE

GENERIC SEDIMENT CONTROL PLAN TEMPORARY VEHICLE CROSSINGS

SCALE		DATE
NTS		DECEMBER 2021
FILE No.		PROJECT No.
DRAWN GTH	CHECKED	DRAWING / REV 0

APPROVED

Generic Sediment Control Plan - Dry Flume Water Crossings

This plan sets out the measures that will be taken by Enbridge Gas Inc. (EGI) and its contractors to control downstream sediment to the lowest level practically achievable during the construction, use and removal of dry flume type crossings. The conditions and techniques set out on this plan are to be followed unless approved otherwise by the Department of Fisheries and Oceans (DFO).

Conditions for using the Standard

- The crossing can be completed in 7 calendar days or less avoiding the restricted activity timing window
- The watercourse is 15 m or less wide (current water level) AND flow conditions are 1.5m^3/sec or less
- The in-water work site disturbs a maximum of 50 linear m or less of the watercourse

Note: fish passage in a dry flume is not required

General Measures

EGI must use materials, construction practices, mitigation techniques and monitoring of operations at every water crossing in order to prevent the death of fish, unauthorized harmful alteration, disruption or destruction of fish habitat or the impairment of water quality. General measures are available at https://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures-eng.html. The following requirements apply to any permanent or intermittent watercourse (stream, river, pond) and areas adjacent to it.

- EGI will adhere to all permits and approvals of federal and provincial agencies related to watercourse crossings.
- EGI will notify the appropriate federal or provincial agencies prior to commencement of a watercourse crossing in accordance with regulatory permit conditions.
- In-stream work will occur outside of the restricted activity timing windows for the geographic region and for the fish species present unless otherwise permitted by the appropriate agencies.
- Prior to removal of the low vegetative cover, effective mitigation techniques for erosion and sediment control must be in place to protect water quality. Limit the areal extent of disturbance to the minimum needed for construction and delay grubbing to immediately prior to grading operations.
- All watercourses will require a minimal disturbance zone (MDZ) to be clearly marked with flagging prior to the commencement of clearing activities or any construction activity near the watercourse. This flagging will be set back a minimum of 5m from the watercourse and will be based on site specific conditions. Extra work area required at watercourse crossings will be situated away from the watercourse outside of the MDZ.
- Materials removed or stockpiled during construction (e.g., excavated soil, backfill material) must be deposited in a manner to ensure sediment does not enter a watercourse. Appropriate erosion and sediment controls (e.g. revegetation, vegetated buffer strips, drainage control, sediment settling devices, and sediment fence or other appropriate mitigation measures) will be installed around spoil or stockpiles to prevent sediment from stockpile runoff from entering a watercourse.
- All vehicles, machinery and other construction equipment should not enter the water. There should be no fording of any stream.
- Except during construction of the crossing, EGI will not obstruct any watercourse so as to impede the free movement of fish.
- Flow will be maintained at all times downstream of the water crossing.
- All exposed soil must be stabilized (e.g. graded to a stable slope and erosion control measures implemented) as quickly as possible to prevent erosion.
- EGI is to adhere to the Generic Sediment Control Plan For Temporary Vehicle Crossings.
- All required materials (e.g., silt fencing, filter cloth, polyethylene liners, granular material, rip rap, dam materials) and installation equipment (e.g., pipe, flumes, pumps, pump hoses, generators, spores, energy dissipaters) will be on-site and in good working order prior to construction.
- Prior to commencing watercourse crossings, local weather stations will be monitored to determine whether any precipitation is forecasted. In-stream activity will be delayed if flows are in flood stage and until weather conditions are favourable. If practical work will be delayed until weather conditions are favourable. If necessary, to proceed with work under unfavourable conditions, EGI will exercise due diligence
- Water intakes used in fish bearing waters will be screened in accordance with current DFO Code of Practice for end-of-pipe fish protection screens for small water intakes in freshwater https://www.dfo-mpo.gc.ca/pnw-ppe/codes/screen-ecran-eng.html.
- Fish recovery and transfer will be conducted prior to and during the isolation of flow and in accordance with permit regulations. See detailed construction sequence for timing of fish recovery operations.
- In-stream activities in all watercourses (e.g., trenching, pipe installation, backfilling) will be completed in as short a time as possible to minimize disturbance to water quality, fish and fish habitat.
- In situations where the crossing can be completed in one day, in-stream excavation will begin in the early morning to allow for same day installation.
- Refueling and lubrication of equipment will be conducted in areas that will allow any accidental spill of deleterious substance to be disposed of in an approved location before it reaches any watercourse. Appropriate spill prevention kits will be readily available on site.
- The area around water crossings is to be regularly monitored and if erosion problems develop, immediate action is to be token with appropriate treatments and completed as quickly as possible. Accumulated sediment is to be removed regularly.
- Revegetation must be completed as quickly as possible. Revegetate any disturbed areas by planting and seeding native trees, shrubs or grasses and cover such areas with mulch or erosion control matting to prevent soil erosion and to help seeds germinate.
- All use of silt fence, rock check dams and dewatering traps shall be constructed/installed in accordance to the most up to date Company specifications and drawings. Where these mitigation measures are not sufficient to prevent sediment from entering the watercourse, additional mitigation measures will be implemented to prevent sediment from entering the watercourse.
- EGI will be held responsible for implementation of this plan. Any questions regarding the implementation of this plan should be directed towards the Environmental Advisor assigned to the project.

Contingency Plan

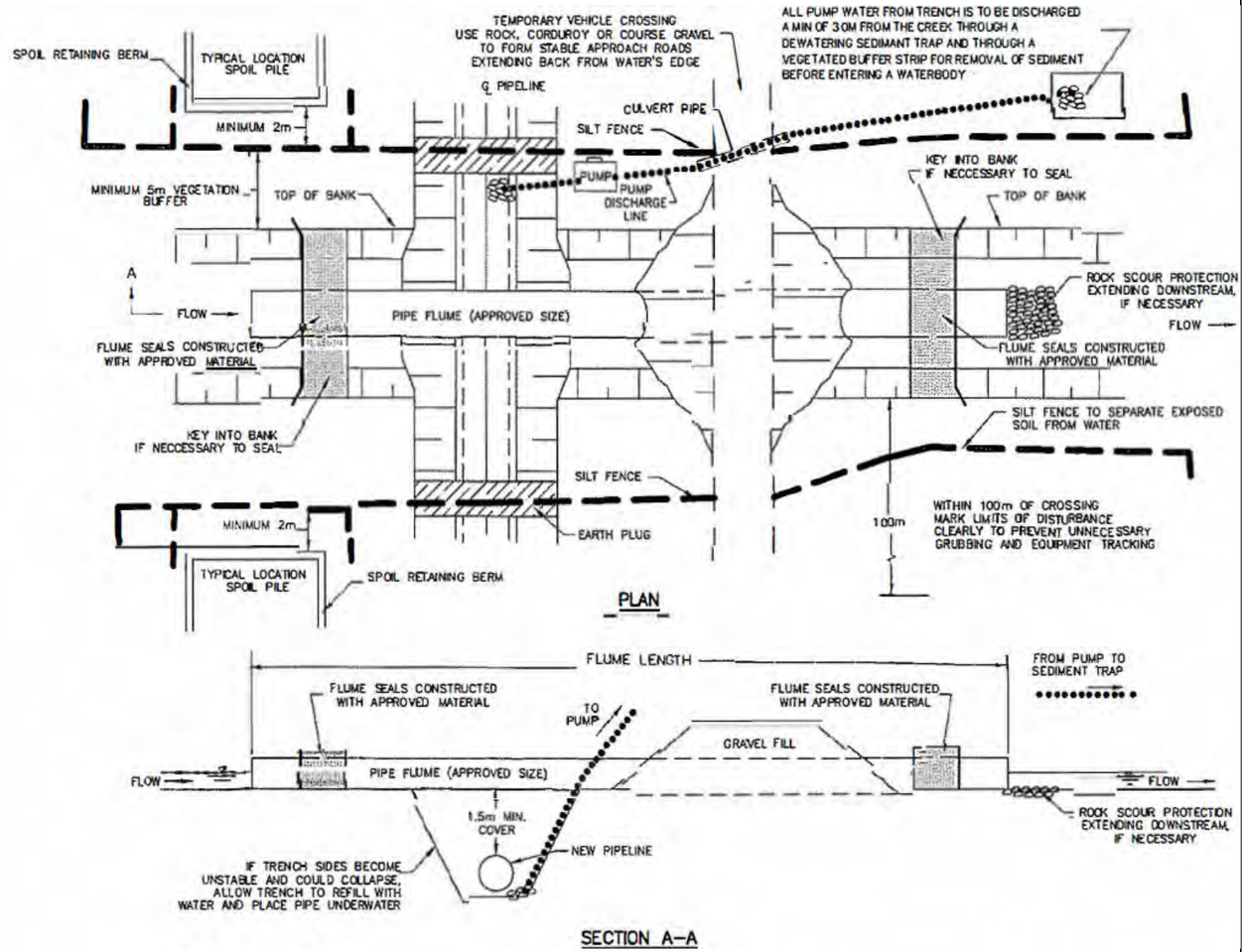
If unforeseen events (e.g. bedrock in trench, flume washout) cause the strategies set out in this pion to be insufficient or inappropriate to meet the objective, EGI is expected to respond in a timely manner with all reasonable measures consistent with safety, to prevent, counteract or remedy any effects on fish or fish habitat that may result. DFO is to be notified as soon as practical. **NOTE:** There is a Duty to Notify and Duty to Take Corrective Measures to report death of fish or a HADD of fish habitat to DFO.

Spill reporting procedures established by EGI will be used to report any unexpected discharge of silt or sediment or other deleterious substance of the water crossing. At a minimum contact the Environmental Advisor at **1-855-336-2056.**

If DFO determines that tong term damage to fish habitat has occurred due to failure of this plan to control sediment, a restoration plan will be developed by EGI, in consultation with and approval from DFO for implementation by EGI.

Flume Sizing

- Flumes will be sized initially based on hydrology and hydraulic analysis to determine theoretical opening size. The capacity of the flumes will be sized to handle 150% of the anticipated flow.
- The approved size or equivalent multiple flumes must be installed.
- Flume sizes may also be selected to be the same as existing nearby culverts that have been in place for many years and have performed satisfactorily.



Detailed Construction Sequence - Dry Flume Crossings

In general terms, the following sequence of construction and mitigation measures will be followed at all "dry flume" type water crossings.

1. Mark out and maintain limits of authorized work areas with fencing or flagging tape to avoid unnecessary disturbance of vegetation. Ensure equipment operators working on the crossing have been briefed about this plan and the measures needed to protect water quality. Install pre-work sediment control measures, including silt fences and measures to contain excavated spoil and backfill. All necessary equipment and materials to build the flume must be on site or readily available prior to commencing in-water construction. Pipe shall be strung, welded and coated ready for installation prior to watercourse trenching.
2. Install flumes equal to or larger than the diameter determined by the methods described above. Place impervious dams at each end of the flume, upstream first then downstream. Alternative dam materials include coarse gravel with rip rap protection, pea stone bags, steel plate and metre bags. During placement, install an impervious membrane, if necessary, to prevent leakage. Dams may need keying into the bank and streambed. Once the area is isolated, conduct fish recovery and transfer operations and dewater the area between the dams. All pump water is to be discharged well away (minimum 30 m) from the watercourse and through a sediment trap to prevent reentry of sediment into the watercourse. Pump discharge lines will be installed to keep pumped water from coming into contact with soil on the construction site.
3. Excavate trench through plugs and under flume, then dewater. Work area dewatering will be filtered to remove suspended solids. Lower in pipe by passing under flume and backfill immediately. The top 300 mm of trench backfill is to be clean rock, cobble material or native streambed material. EGI is to use granular backfill if the native material is not suitable. Any excess material is to be disposed of in an approved location and stabilized to prevent reentry into the watercourse. Work is to be completed as quickly as possible.
4. Once the pipe installation is complete and the flume(s) are no longer necessary, they will be removed as quickly as possible and in the following manner: remove the downstream dam; remove the upstream dam; remove flume(s).
5. Restore, stabilize and reclaim bed and banks of watercourse to preconstruction profiles and protected with erosion resistant material compatible with flow velocity (e.g., do not use erosion control matting in the bankfull channel coarse gravel or rip rap) to the maximum extent possible between dams. All construction material (e.g. dams, rip rap) not required to return the watercourse to preconstruction condition will be removed from the site and stabilized above the high-water mark in an approved location. Removal of all materials will be done in a manner that will not introduce sediment to the watercourse.
6. Site stabilization, which includes control of stormwater drainage using a combination of methods such as silt fences, erosion blankets, diversion berms and check dams etc., is to be completed immediately upon removal of the flume or as directed by the Environmental Advisor. If stabilization is delayed, short term erosion control measures will be used to prevent sediment entering the watercourse. Material accumulated at silt fences is to be removed or stabilized in place. Silt fences are to be removed when the site is permanently stabilized.
7. Vegetate any disturbed areas by planting and seeding native trees, shrubs or grasses and cover such areas with mulch or erosion control matting to prevent soil erosion and to help seeds germinate.
8. If post-construction monitoring reveals erosion problems, remedial work is to be undertaken as quickly as possible.

NOTES

ENBRIDGE

LOCATION: ALL DRY FLUME WATER CROSSINGS IN ONTARIO			
DRAWING TITLE: GENERIC SEDIMENT CONTROL PLAN DRY FLUME WATER CROSSINGS			
SCALE: NTS		DATE: DECEMBER 2021	
FILE No.		PROJECT No.	
DRAWN: GTH	CHECKED	DRAWING	REV: 0
APPROVED			

Generic Sediment Control Plan Dam and Pump Water Crossings

This plan sets out the measures that will be taken by Enbridge Gas Inc. (EGI) and its contractors to control downstream sediment to the lowest level practically achievable during the construction, use and removal of dam and pump type crossings. The conditions and techniques set out on this plan are to be followed unless approved otherwise by the Department of Fisheries and Oceans (DFO). This includes the current DFO Code of Practice for temporary cofferdams and diversion channels available at https://www.dfo-mpo.gc.ca/pnw-ppe/codes/cofferdams-batardeaux-eng.html

Conditions for using the Standard

- The crossing can be completed in 7 calendar days or less avoiding the restricted activity timing window
- The watercourse is 15 m or less wide (current water level) AND flow conditions are 1.5m^3/sec or less
- The in-water work site disturbs a maximum of 50 linear m or less of the watercourse

Note: fish passage in a dam and pump crossing is not required

General Measures

EGI must use materials, construction practices, mitigation techniques and monitoring of operations at every water crossing in order to prevent the death of fish, unauthorized harmful alteration, disruption or destruction of fish habitat or the impairment of water quality. General measures are available at https://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures-eng.html. The following requirements apply to any permanent or intermittent watercourse (stream, river, pond) and areas adjacent to it.

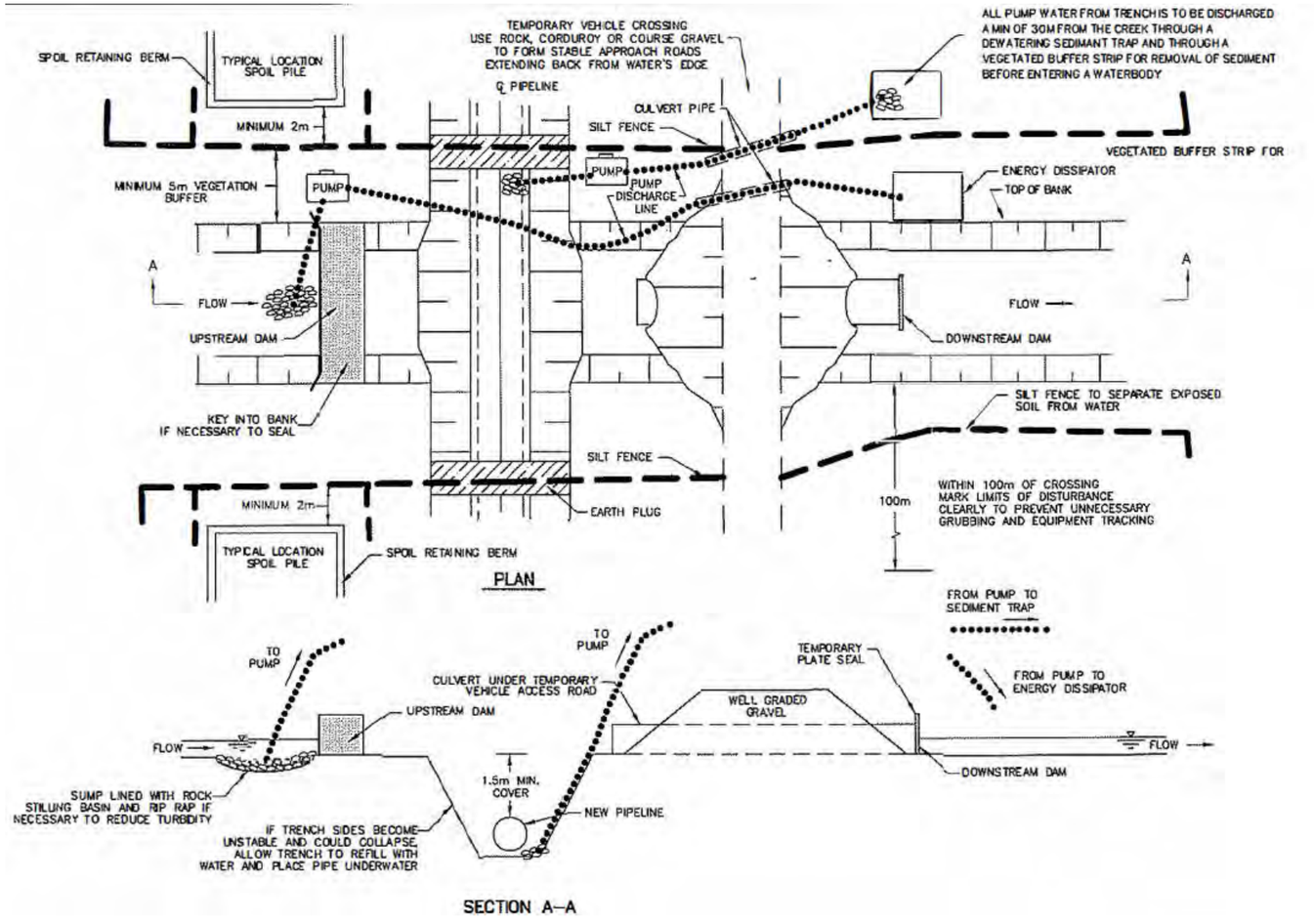
- EGI will adhere to all permits and approvals of federal and provincial agencies related to watercourse crossings.
- EGI will notify the appropriate federal or provincial agencies prior to commencement of a watercourse crossing in accordance with regulatory permit conditions.
- In-stream work will occur during the appropriate time windows for the geographic region and for the fish species present unless otherwise permitted by the appropriate agencies.
- Prior to removal of the low vegetative cover, effective mitigation techniques for erosion and sediment control must be in place to protect water quality. Limit the areal extent of disturbance to the minimum needed for construction and delay grubbing to immediately prior to grading operations.
- All watercourses will require a minimal disturbance zone (MDZ) to be clearly marked with flagging prior to the commencement of clearing activities or any construction activity near the watercourse. This flagging will be set back a minimum of 5m from the watercourse and will be based on site specific conditions. Extra work area required at watercourse crossing will be situated away from the watercourse outside of the MDZ.
- Materials removed or stockpiled during construction (e.g., excavated soil, backfill material) must be deposited in a manner to ensure sediment does not enter a watercourse. Appropriate erosion and sediment controls (e.g. revegetation, vegetated buffer strips, drainage control, sediment settling devices, and sediment fence or other appropriate mitigation measures) will be installed around spoil or stockpiles, to prevent sediment from stockpile runoff from entering a watercourse.
- All vehicles, machinery and other construction equipment shall not enter the water. There must be no fording of any stream.
- Except during construction of the crossing, EGI will not obstruct any watercourse so as to impede the free movement of fish.
- Flow will be maintained at all times downstream of the watercrossing.
- All exposed soil must be stabilized (e.g. graded to a stable slope and erosion control measures implemented) as quickly as possible to prevent erosion.
- EGI is to adhere to the Generic Sediment Control Plan For Temporary Vehicle Crossings.
- All required materials (e.g., silt fencing, filter cloth, polyethylene liners, granular material, rip rap, dam materials) and installation equipment (e.g., pipe, flumes, pumps, pump hoses, generators, spores, energy dissipaters) will be on-site and in good working order prior to construction.
- Prior to commencing watercourse crossings, local weather stations will be monitored to determine whether any precipitation is forecasted. In-stream activity will be delayed if flows are in flood stage and until weather conditions are favourable. If practical work will be delayed until weather conditions are favourable. If necessary, to proceed with work under unfavourable conditions, EGI will exercise due diligence.
- If there is any flow in the watercourse, EGI is to install pumps to maintain streamflow around the blocked off section of channel. An energy dissipater is to be built to accept pump discharge and prevent watercourse erosion.
- Adequate pump capacity will be on site to handle anticipated water flows and any potential increases in flow during the construction period. Backup pumps with adequate capacity to handle 100% of the downstream flow must be on site and ready for immediate replacement, should the primary operating pump(s) fail.
- Water intakes used in fish bearing waters will be screened in accordance with current DFO Code of Practice for end-of-pipe fish protection screens for small water intakes in freshwater https://www.dfo-mpo.gc.ca/pnw-ppe/codes/screen-ecran-eng.html.
- Fish recovery and transfer will be conducted prior to and during the isolation of flow and in accordance with permit regulations. See detailed construction sequence for timing of fish recovery operations.
- Instream activities in all watercourses (e.g., trenching, pipe installation, backfilling) will be completed in as short a time as possible to minimize disturbance to water quality, fish and fish habitat.
- In situations where the crossing can be completed in one day, in-stream excavation will begin in the early morning to allow for same day installation.
- Refueling and lubrication of equipment will be conducted in areas that will allow any accidental spill of deleterious substance to be disposed of in an approved location before it reaches any watercourse. Appropriate spill prevention kits will be readily available on site.
- The area around water crossings is to be regularly monitored and if erosion problems develop, immediate action is to be taken with appropriate treatments and completed as quickly as possible. Accumulated sediment is to be removed regularly.
- Revegetation must be completed as quickly as possible. Revegetate any disturbed areas by planting and seeding native trees, shrubs or grasses and cover such areas with mulch or erosion control matting to prevent soil erosion and to help seeds germinate.
- All use of silt fence, rock check dams and dewatering traps shall be constructed/installed in accordance to the most up to date EGI specifications and drawings. Where these mitigation measures are not sufficient to prevent sediment from entering the watercourse, additional mitigation measures will be implemented to prevent sediment from entering the watercourse.
- EGI will be held responsible for implementation of this plan. Any questions regarding the implementation of this plan should be directed towards the Environmental Advisor assigned to the project.

Contingency Plan

If unforeseen events (e.g., bedrock in trench, dam washout) cause the strategies set out in this plan to be insufficient or inappropriate to meet the objective, EGI is expected to respond in a timely manner with all reasonable measures consistent with safety, to prevent, counteract or remedy any effects on fish or fish habitat that may result. DFO is to be notified as soon as practical. **NOTE:** There is a Duty to Notify and Duty to Take Corrective Measures to report death of fish or a HADD of fish habitat to DFO.

Spill reporting procedures established by EGI shall be used to report any unexpected discharge of silt or sediment or other deleterious substance at the water crossing. At a minimum contact the Environmental Advisor at **1-855-336-2056.**

If DFO determines that long term damage to fish habitat has occurred due to failure of this plan to control sediment, a restoration plan will be developed by EGI, in consultation with and approval from DFO for implementation by EGI.



Detailed Construction Sequence - Dam and Pump Crossings

In general terms, the following sequence of construction and mitigation measures will be followed at all "dam and pump" type water crossings.

1. Mark out and maintain limits of authorized work areas with fencing or flagging tape to avoid unnecessary disturbance of vegetation. Ensure equipment operators working on the crossing have been briefed about this plan and the measures needed to protect water quality. Install pre-work sediment control measures, including silt fences and measures to contain excavated spoil and backfill. All necessary equipment and materials to build the dams and to pump water must be on site or readily available prior to commencing in-water construction. Pipe shall be strung, welded and coated ready for installation prior to watercourse trenching.
2. If possible, install pumps in a natural pool upstream of the excavation. Excavate temporary sump within right-of-way if no natural pool exists. Check pump operation to equalize flow and ensure water intakes used in fish bearing waters are screened in accordance with DFO Code of Practice. Rip rap, stilling wells, filter cloth, gravel filters or other mitigation measures will be used at the upstream inlet of the pump to prevent suspension of sediment from pumping when necessary. Rip rap and rock check dams will be used when necessary to prevent scouring and erosion at the pump outlet. Pump discharge lines shall be installed to keep pumped water from coming into contact with soil on the construction site.
3. Dams are to be made of steel plate, inflatable rubber dam (aquadam), pea stone bags, or metre bags and constructed so that sediment is not introduced to the watercourse. An impervious membrane is to be incorporated into the dam if necessary, to control seepage flow. Dams may need keying into the banks and streambed. Install downstream dam only if needed to keep the trench area dry. Dewater the area between dams and for fish bearing streams, conduct fish recovery operations. All pump water is to be discharged well away (minimum 30 m) from the creek and through a sediment trap to prevent reentry of sediment into the watercourse.
4. Excavate trench through plugs and streambed as quickly as possible, re-positioning discharge hose as necessary. Lower the pipe in the trench and backfill immediately. During pumping activities, monitor flow upstream and downstream to ensure normal flow levels. The top 300 mm of trench backfill is to be clean rock, cobble material or native streambed material. EGI is to use granular backfill if the native material is not suitable. Any excess material is to be disposed of above the high-water mark in an approved location and stabilized to prevent reentry into the watercourse. Work is to be completed as quickly as possible.
5. Restore, stabilize and reclaim bed and banks of watercourse to preconstruction profiles and protected with erosion resistant material compatible with flow velocity (e.g., coarse gravel or rip rap) to the maximum extent possible between dams. Do not use erosion control matting in the bankfull channel. All construction material (e.g. dams, rip rap, pea stone bags) will be removed from the site to an approved location. Removal of all materials will be done in a manner to prevent entry of sediment to the watercourse. The downstream dam will be removed first. Keep pump running until normal flow is resumed. Complete bank trimming and erosion protection. If pea stone bags are used for the dams, place and remove by hand to avoid equipment breaking bags.
6. Site stabilization, which includes control of stormwater drainage using a combination of methods such as silt fences, erosion blankets, diversion berms and check dams etc. is to be completed immediately upon trench backfilling or as directed by the Environmental Advisor. If stabilization is delayed, short term erosion control measures will be used to prevent sediment entering the watercourse. Material accumulated at silt fences is to be removed or stabilized in place. Silt fences are to be removed when the site is permanently stabilized.
7. Vegetate any disturbed areas by planting and seeding native trees, shrubs or grasses and cover such areas with mulch or erosion control matting to prevent soil erosion and to help seeds germinate.
8. If post-construction monitoring reveals erosion problems, remedial work is to be undertaken as quickly as possible.

NOTES

ENBRIDGE

LOCATION

All DAM AND PUMP WATER CROSSINGS IN ONTARIO

DRAWING TITLE

GENERIC SEDIMENT CONTROL PLAN DAM AND PUMP WATER CROSSINGS

SCALE	DATE
NTS	DECEMBER 2021
FILE No.	**PROJECT No.**
DRAWN GTH / **CHECKED**	**DRAWING** / **REV** 0

APPROVED

B.9 Indigenous Consultation Record

DRAFT

Appendix B9 Enbridge Gas Inc. Indigenous Consultation Record for the Kirkwall to Hamilton Dawn Parkway System Renewal Program (“Project”) Record updated as of October 23, 2026

Mississaugas of the Credit First Nation [MCFN]

Line item	Date	Method	Summary of Enbridge Activity	Summary of Community Activity	Issues or Concerns Raised & Responses
1.0	July 6, 2026	Email	An Enbridge Gas representative emailed the MCFN representative to provide the Notice of Upcoming Environmental Study and Preliminary Desktop Environmental and Cultural Heritage Summary Memo for the Project (the “Memo”). Enbridge Gas advised that capacity funding was available for MCFN to support technical review, fieldwork participation, and meaningful consultation, and invited questions or a meeting to discuss the Project. The Notice provided information regarding the proposed Project, Environmental Study, anticipated regulatory process and consultation, and engagement. The Memo outlined the Project, regulatory process, environmental and archaeological studies, potential impacts and mitigation measures and opportunities for Indigenous input and participation in future fieldwork.		
1.1	July 17, 2026	Email		An MCFN representative emailed the Enbridge Gas representative to provide a response letter to the Project. The letter requested participation in any archaeological or environmental assessments, including reviewing draft reports, and requested capacity funding. An MCFN representative advised that MCFN would begin its review of the Memo once the Technical Review Agreement was completed.	
1.2	July 22, 2026	Email	An Enbridge Gas representative emailed the MCFN representative to provide the Field Participation Agreement and Technical Review Agreement executed on behalf of Enbridge Gas.		
1.3	July 23, 2026	Email		An MCFN representative emailed the Enbridge Gas representative to return the Field Participation Agreement and Technical Review Agreement. The MCFN representative advised that comments on the Memo would be provided.	

Line item	Date	Method	Summary of Enbridge Activity	Summary of Community Activity	Issues or Concerns Raised & Responses
1.4	August 4, 2026	Email	An Enbridge Gas representative emailed the MCFN representative to invite participation in a virtual information session to be held between August 17 and August 31, 2026, regarding the study. The representative explained that feedback from the virtual information session would help confirm a preferred route and inform mitigation plans, provided contact information for the Project Manager at Dillon, and asked MCFN to indicate whether it wished to participate in the session or provide comments directly on the materials provided. Comments were requested by September 15, 2026.		
1.5	August 6, 2026	Email	An Enbridge Gas representative emailed the MCFN representatives to advise of a corrected web address for the virtual information session and attached a revised notice containing the web address.		
1.6	September 4, 2026	Email	The Enbridge Gas representative emailed the MCFN representative to follow up on an offer to meet and discuss the Project. The Enbridge Gas representative provided virtual open-house slides and questionnaires, invited comments directly if preferred, requested available meeting dates, and advised that capacity funding was available to support MCFN's participation.		
1.7	September 10, 2026	Email	The Enbridge Gas representative emailed the MCFN representative to provide notification of the proposed Project and advised that a notification letter was attached. The letter described the Project and preliminary work undertaken, including potential authorizations that may be required. Enbridge Gas confirmed that capacity funding was available to support MCFN's participation and advised that Enbridge Gas was available to meet at any time during the Project development process. The letter also advised that an Environmental Report (ER) would be prepared in accordance with the OEB's Environmental Guidelines, with completion anticipated in Q1 2027, and provided Enbridge Gas contact information for further discussion.		
1.8	September 25, 2026	Email	A Stantec Consulting Ltd. (Stantec) representative emailed an MCFN representative to advise that Stage 3 archaeological assessments were planned for several archaeological sites in support of the Project. The Stantec representative advised that fieldwork could begin as early as October 5, 2026, invited MCFN team members to participate in the archaeological fieldwork, noted that mobilization details would be provided once confirmed, and requested that participation agreements be arranged with Enbridge Gas representatives if they desired to participate.		
1.9	September 25, 2026	Email		An MCFN representative emailed the Stantec representative seeking additional information on the Stage 3 Archaeological field visit for MCFN scheduling purposes.	

Line item	Date	Method	Summary of Enbridge Activity	Summary of Community Activity	Issues or Concerns Raised & Responses
1.10	October 1, 2026	Email	A Stantec representative emailed MCFN representatives with mobilization details for upcoming Stage 3 archaeological fieldwork for the Project. Fieldwork was scheduled to begin October 6, 2026. Stantec provided logistics, including the anticipated work period, archaeological site numbers, crew size, required PPE, start time, meeting location, and access and parking information. Stantec noted that access arrangements may change pending landowner confirmation, and that further updates would be provided as work progresses.		
1.11	October 5, 2026	Email	A Stantec representative emailed MCFN with information for field teams about a property they will be accessing during Stage 3 site visits.		
1.12	October 6, 2026	Email	A Stantec representative emailed MCFN representatives to provide information regarding ecological surveys planned for October 14 to 16, 2026.		
1.13	October 6, 2026	Email		An MCFN representative emailed the Stantec representative requesting that, moving forward, notifications regarding environmental fieldwork be provided directly to the identified MCFN representative.	
1.14	October 2026	Field Visit	On October 6, 7, 9, 13, 21, 28, 29, and 30, 2026, Stantec conducted Stage 3 archaeological assessment fieldwork associated with the Project. A representative of MCFN attended the field program in an Indigenous monitoring or participation capacity. The activities were completed within the Project study area. To date, no concerns or recommendations were identified by the MCFN representative arising out of the fieldwork.		
1.15	October 7, 2026	Email	A Stantec representative emailed MCFN representatives to correct the Project name referenced on October 6, 2026, email regarding the meeting location for the ecological surveys.		

Six Nations of the Grand River [SNGR]

Line item	Date	Method	Summary of Enbridge Activity	Summary of Community Activity	Issues or Concerns Raised & Responses
2.0	July 6, 2026	Email	An Enbridge Gas representative emailed the SNGR representative to provide the Notice of Upcoming Environmental Study the Memo. Enbridge Gas advised that capacity funding was available for SNGR to support technical review, fieldwork participation, and meaningful consultation, and invited questions or a meeting to discuss the Project. The Notice provided information regarding the proposed Project, Environmental Study, anticipated regulatory process, consultation, and engagement. The Memo outlined the Project, regulatory process, environmental and archaeological studies, potential impacts and mitigation measures, and opportunities for Indigenous input and participation in future fieldwork.		
2.1	July 7, 2026	Email		An SNGR representative emailed the Enbridge Gas representative to advise that another SNGR representative would reach out with availability for a meeting regarding the Project and asked if SNGR was meaningfully consulted on the 2019 route selection.	
2.2	July 8, 2026	Email	An Enbridge Gas representative emailed the SNGR representative advising that Enbridge Gas would follow up regarding the 2019 route selection engagement.		
2.3	July 15, 2026	Email	An Enbridge Gas representative emailed the SNGR representative requesting potential dates for an introductory meeting for the Project.		
2.4	July 15, 2026	Email		The SNGR representative confirmed that another SNGR representative received the meeting request and assumed that the SNGR representative would reach out within the next couple of weeks with dates.	
2.5	August 4, 2026	Email	An Enbridge Gas representative emailed the SNGR representative to invite participation in a virtual information session to be held between August 17 and August 31, 2026, regarding the study. The representative explained that feedback from the virtual information session would help confirm a preferred route and inform mitigation plans, provided contact information for the Project Manager at Dillon, and asked SNGR to indicate whether it wished to participate in the session or provide comments directly on the materials provided. Comments were requested by September 15, 2026.		
2.6	August 6, 2026	Email	An Enbridge Gas representative emailed the SNGR representatives to advise of a corrected web address for the virtual information session and attached a revised notice containing the web address.		

Line item	Date	Method	Summary of Enbridge Activity	Summary of Community Activity	Issues or Concerns Raised & Responses
2.7	August 7, 2026	Email	An Enbridge Gas representative emailed the SNGR representative in response to questions about historical consultation and engagement and attached records relating to the same.		
2.8	August 10, 2026	Email		An SNGR representative emailed the Enbridge Gas representative to advise that SNGR records indicated consultation on prior route selection for the paused project was incomplete. Records of a June 5, 2019, meeting that identified outstanding commitments, including confirmation of a proposed 10:1 tree replacement ratio and provision of an aquatic study related to Spencer Creek, were provided. SNGR also noted that the records contained no follow-up on these matters, and the commitments were not reflected in the meeting record submitted to the Ontario Energy Board. The SNGR representative requested updates on these issues and advised that consultation on route selection should continue.	
2.9	August 20, 2026	Email	An Enbridge Gas representative emailed the SNGR representative to acknowledge concerns regarding historical consultation activities and advised that these concerns had been shared with the environmental team for review. The Enbridge Gas representative also advised that the environmental team would investigate the request regarding a 10:1 tree replacement ratio and would determine whether an aquatic study related to Spencer Creek was available. The Enbridge Gas representative also noted that a meeting regarding the Project was scheduled for September 1, 2026, and advised that environmental team members and the Project Manager would attend to seek SNGR feedback regarding route selection.		

Line item	Date	Method	Summary of Enbridge Activity	Summary of Community Activity	Issues or Concerns Raised & Responses
2.10	August 20, 2026	Email		An SNGR representative emailed the Enbridge Gas representative to clarify that the September 1 meeting regarding the Project was intended as an introductory discussion of the Project overview, capacity funding, and consultation planning. It was noted that a separate meeting should address meaningful consultation and technical review activities. The SNGR representative also noted that, because of the proposed trench-based construction and the environmentally sensitive setting, SNGR would require an Environmental Impact Statement (EIS) before route selection. SNGR expected to be consulted on the EIS terms of reference and expected the EIS to be available before significant Project decisions were finalized.	
2.11	August 30, 2026	Email	An Enbridge Gas representative emailed the SNGR representative requesting that several monthly meetings be scheduled now to ensure regular and timely meetings are held on this Project. Enbridge Gas also provided the number of people attending the September 1, 2026, meeting at SNGR for room capacity/seating availability consideration.		
2.12	August 31, 2026	Email		The SNGR representative emailed the Enbridge Gas representative to confirm that they would review the calendar for monthly meetings and that there was sufficient space in the meeting room for the September 1 meeting.	
2.13	September 1, 2026	Email		An SNGR representative emailed the Enbridge Gas representative regarding the Project to provide proposed dates and formats for future dialogue sessions. The SNGR representative advised that the dates reflected the introduction of new projects, meeting-space considerations, and seasonal calendar changes. The SNGR representative requested confirmation of availability for two in-person and three virtual sessions and advised that invitations would be issued upon receipt of a response.	

Line item	Date	Method	Summary of Enbridge Activity	Summary of Community Activity	Issues or Concerns Raised & Responses
2.14	September 1, 2026	Meeting	Enbridge Gas representatives and Stantec met with SNGR representatives at SNGR's office to provide Project information. A hard copy of the Draft 2019 Environmental Report, which includes ranking of routes and the Stage 1 archeological assessment, was provided to SNGR at this meeting. Discussion included the 2019 route selection, 10:1 tree replacement, Project need/driver, construction techniques, environmental studies, plant and animal species of significance to SNGR, property ownership, easements and sums paid, potential impacts to Indigenous rights and accommodation, mitigation measures, and the offer of capacity funding for a consultant to assist SNGR in the participation and review of Project documents. During the meeting, SNGR noted that it disagreed with the route selection process in 2019. In response, Enbridge Gas noted SNGR was invited to provide feedback on the routes at this time, and Stantec is to provide additional information on the route rankings. A discussion regarding the 10:1 tree replacement request from SNGR ensued. It was noted by Enbridge Gas of the need for the current Project to restore system capacity. SNGR requested additional studies prior to route selection; however, Enbridge Gas noted the process followed was appropriate. It was noted that construction for the Project would be trench-based. SNGR inquired about compensation for crop losses and suggested this information would be used for their own metrics and for accommodation discussions. Enbridge Gas inquired as to which Aboriginal or Treaty rights SNGR anticipated could be impacted by the Project. SNGR identified harvesting rights, but more information would be needed to determine the extent of potential impacts. Enbridge. Enbridge Gas reviewed mitigation measures and committed to providing a draft Spencer Creek restoration plan, and asked SNGR for quotes for capacity funding.		
2.15	September 4, 2026	Email	An Enbridge Gas representative emailed the SNGR representatives regarding the Project to confirm that the proposed dates were acceptable and requested that calendar invitations be sent. The Enbridge Gas representative thanked the SNGR team for a recent meeting, advised that follow-up actions were already being addressed, and stated that meeting notes would be provided for review and records. The Enbridge Gas representative advised that slides presented at the virtual open houses and questionnaires for the Projects were attached to supplement information previously provided, noted that completion of the questionnaires was not required because comments could be submitted directly, and invited comments through any preferred method. The Enbridge Gas representative also advised that a quote for capacity funding to support SNGR engagement in both Projects, including the hiring of a consultant, was anticipated and invited any questions.		

Line item	Date	Method	Summary of Enbridge Activity	Summary of Community Activity	Issues or Concerns Raised & Responses
2.16	September 10, 2026	Email		An SNGR representative emailed the Enbridge Gas representative and advised that Shared Value Solutions (SVS) was supporting SNGR as its consultant and would expedite preparation of the capacity funding estimate, which was expected to be provided by September 21.	
2.17	September 10, 2026	Email	An Enbridge Gas representative emailed the SNGR representative to provide notification of the proposed Project and advised that a notification letter was attached. The letter described the Project and preliminary work undertaken, including potential authorizations that may be required. Enbridge Gas confirmed that capacity funding was available to support SNGR's participation and advised that Enbridge Gas was available to meet at any time during the Project development process. The letter also advised that an Environmental Report (ER) would be prepared in accordance with the OEB's Environmental Guidelines, with completion anticipated in Q1 2027, and provided Enbridge Gas contact information for further discussion.		
2.18	September 11, 2026	Email		An SNGR representative emailed the Enbridge Gas representative to advise that SNGR had been introduced to the Project and had discussed the subjects identified in the Project notification letter. The representative stated that a response was being provided to ensure the record did not indicate that SNGR had failed to respond.	
2.19	September 14, 2026	Email	An Enbridge Gas representative emailed the SNGR representative to acknowledge receipt of communication and express appreciation for the response.		

Line item	Date	Method	Summary of Enbridge Activity	Summary of Community Activity	Issues or Concerns Raised & Responses
2.20	September 16, 2026	Email		An SVS representative emailed an Enbridge Gas representative regarding preparation of a technical review estimate on behalf of SNGR for the Project. SVS advised that it had been retained by SNGR to complete a technical review and requested the unredacted Environmental Report and other relevant environmental studies completed to date to support preparation of the estimate. SVS also advised that the proposed budget was intended to include additional consultation activities and preliminary investigation of cumulative disturbance to Six Nations land, identified as priorities for SNGR in relation to the Project.	
2.21	September 16, 2026	Email	An Enbridge Gas representative emailed the SVS representative regarding the technical review estimate being prepared on behalf of SNGR for the Project. Enbridge Gas provided the Spencer Creek Restoration Plan, Geomorphic Assessment, and draft Natural Heritage Report for information, noting that the first two documents would be reviewed and updated to reflect current site conditions and that a new Natural Heritage Report would be prepared following completion of the current field programs. Enbridge Gas also advised that the previously provided Environmental Report contained redactions related to names and personal information, rather than study findings, and asked SVS to confirm whether an unredacted version was still required.		
2.22	September 17, 2026	Email		An SVS representative emailed an Enbridge Gas representative regarding preparation of a technical review estimate on behalf of SNGR for the Project. SVS confirmed that an unredacted version of the Environmental Report was not required and requested information regarding the anticipated field programs, including scheduling and associated reporting.	
2.23	September 18, 2026	Email	An Enbridge Gas representative emailed the SVS representative regarding information requested to support preparation of a technical review estimate on behalf of SNGR for the Project. Enbridge Gas advised that a detailed schedule was not yet available; however, field programs were anticipated to begin in early October 2026 and continue through July-August 2027, with the Natural Heritage report anticipated in winter 2027-2028. Enbridge Gas further advised that archaeology reports would be prepared as early as possible to support SNGR review and submission to MCM, with the goal of receiving clearance prior to March 2028.		

Line item	Date	Method	Summary of Enbridge Activity	Summary of Community Activity	Issues or Concerns Raised & Responses
2.24	September 22, 2026	Email		An SNGR representative emailed the Enbridge Gas representative to provide a capacity funding estimate from a consultant.	
2.25	September 25, 2026	Email	A Stantec representative emailed SNGR representatives to advise that Stage 3 archaeological assessments were planned for several archaeological sites in support of the Project, that fieldwork may begin as early as October 5, 2026, and to invite members of SNGR to participate in the archaeological fieldwork. The Stantec representative advised that additional mobilization details would be provided once plans were finalized and requested that participation agreements or contracts be arranged through Enbridge Gas representatives copied on the email.		
2.26	September 25, 2026	Email		A SNGR representative emailed Stantec to acknowledge receipt of the Stage 3 archeology field visit information.	
2.27	September 28, 2026	Email		An SNGR representative emailed the Enbridge Gas representative to provide the 2026 Standard Archaeology Construction Monitor Agreement, requested that it be completed, signed, and returned as soon as possible for processing, advised that the standard agreement was not to be altered, and noted that any additional information could be included in an appendix.	
2.28	September 29, 2026	Email	An Enbridge Gas representative emailed the SNGR representative to provide a completed Archeology Construction Monitor Agreement for SNGRs signature.		
2.29	October 1, 2026	Email	A Stantec representative emailed SNGR representatives with mobilization details for upcoming Stage 3 archaeological fieldwork for the Project. Fieldwork was scheduled to begin on October 6, 2026. Stantec provided logistics, including the anticipated work period, archaeological site numbers, crew size, required PPE, start time, meeting location, and access and parking information. Stantec noted that access arrangements may change pending landowner confirmation, and that further updates would be provided as work progresses.		

Line item	Date	Method	Summary of Enbridge Activity	Summary of Community Activity	Issues or Concerns Raised & Responses
2.30	October 2, 2026	Email	An Enbridge Gas representative emailed the SNGR representatives with draft minutes of September 1, 2026, meeting for SNGR review. The email also provided updates to the Projects since the meeting, including an increase in the estimated area of tree loss. It gave the status of follow-up items from the meeting: a reminder that route rankings were included in the 2019 Draft Environmental Report, a link to which was provided to SNGR on August 7, 2026 (the email erroneously noted August 8), and the requested documents, namely the 2020 Draft Natural Heritage Report, Draft Spencer Creek Restoration Plan, and Draft Geomorphic Assessment. Enbridge Gas also acknowledged receipt of the request for capacity funding and noted its response, also on October 2, 2026, asking for minor edits and clarification on the SVS quote.		
2.31	October 2, 2026	Email	An Enbridge Gas representative emailed the SNGR representative regarding the capacity funding estimate for the Project. Enbridge Gas requested revisions to correct the scope period to May 2027, including a review of the Addendum to the draft Environmental Report (ER), and confirm that SVS would provide comments on the ER and Addendum within the 45-day review period. Enbridge Gas advised that once the requested revisions were made, it could approve the quote and provide funding.		
2.32	October 2, 2026	Email	An Enbridge Gas representative emailed the SNGR representative regarding the capacity funding quote for the Projects and requested clarification on certain fees. Enbridge Gas asked SNGR to confirm the calculations with SVS.		
2.33	October 5, 2026	Email	A Stantec representative emailed SNGR representatives with an update regarding site access for upcoming Stage 3 archaeological work for the Project. Stantec provided information from the Project lands agent regarding site access conditions and requested that the information be shared with SNGR staff participating in the work.		
2.34	October 6, 2026	Email	A Stantec representative emailed SNGR representatives regarding upcoming ecological surveys, inviting SNGR participation and requesting that monitoring agreements were in place with Enbridge Gas.		
2.35	October 7, 2026	Email		A SNGR representative requested that another SNGR representative be included in any discussions on all fieldwork.	
2.36	October 7, 2026	Email		The SNGR representative emailed the Enbridge Gas representative to add to the discussion on fieldwork saying an SNGR representative would be on site.	

Line item	Date	Method	Summary of Enbridge Activity	Summary of Community Activity	Issues or Concerns Raised & Responses
2.37	October 7, 2026	Email		An SNGR representative emailed the Enbridge Gas representative to return a signed monitoring agreement.	
2.38	October 8, 2026	Email	An Enbridge Gas representative emailed the SNGR representative to follow up regarding the October 2, 2026, email asking for edits to the SVS quote		
2.39	October 8, 2026	Email	An Enbridge Gas representative emailed the SNGR representative to follow up and confirm receipt of an October 2, 2026, email that included draft September 1, 2026, meeting notes and attachments.		
2.40	October 9, 2026	Email	A Stantec representative emailed a SNGR representative to advise that they can meet Stantec's ecological survey representative at 9:00 a.m. on October 14, 2026.		
2.41	October 9, 2026	Email	A Stantec archaeological representative emailed an SNGR representative to advise that the team would return to the same property the following week, aiming to be on site at 8:00 a.m. A Stantec representative advised that no fieldwork would occur on Monday, October 12, 2026, and that the team would be on site from Tuesday, October 13 through Friday, October 16, 2026.		
2.42	October 2026	Field Visit	On October 6, 7, 9, 13, 21, 28, 29, and 30, 2026, Stantec conducted Stage 3 archaeological assessment fieldwork associated with the Project. An SNGR representative attended the field program in an Indigenous monitoring or participation capacity. The activities were completed within the Project study area. To date, no concerns or recommendations were identified by the SNGR representative arising from the fieldwork.		
2.43	October 15, 2026	Email	A Stantec representative emailed an SNGR representative to advise that, due to forecasted rain overnight and the following morning, archaeological fieldwork for the Project would not occur on Friday, October 16, 2026. A Stantec representative advised that the team would return October 19 to 23, 2026, to resume Stage 3 activities.		

Line item	Date	Method	Summary of Enbridge Activity	Summary of Community Activity	Issues or Concerns Raised & Responses
2.44	October 20, 2026	Email		A SNGR representative emailed the Enbridge Gas representative confirming receipt of the October 2 email with meeting minutes and attachments. The SNGR representative also informed Enbridge Gas that in addition to the funding Enbridge Gas offered for an external consultant to assist with SNGR participation in the Project, SNGR was also seeking capacity funding for internal staff time.	
2.45	October 20, 2026	Email		A SNGR representative acknowledged receipt of the October 2, 2026, email from Enbridge Gas asking for edits to the SVS quote and proposal and indicated they would locate the updated quote and forward.	
2.46	October 20, 2026	Email		SNGR provided an updated quote from SVS incorporating the changes Enbridge Gas requested and correcting tax/calculation errors in the quote.	
2.47	October 21, 2026	Email	A Stantec archeological representative emailed an SNGR representative to advise that field staff had already been informed of access arrangements for Thursday and to ensure the same information was available if different staff were dispatched. A Stantec representative advised that the team would move to a different site and access the site area from an adjacent property. A Stantec representative advised that the lands agents identified an orange route for pickup driving only, a parking area just south of the tree stand where no hunting was occurring at that time, and a black walking route to the archaeology area through a break in the fence. A Stantec representative advised that cameras were located along the laneway to alert the landowner of activity on the property.		
2.48	October 21, 2026	Email		A SNGR representative emailed a Stantec representative thanking them.	
2.49	October 23, 2026	Email	An Enbridge Gas representative emailed the SNGR representatives regarding the upcoming October 29, 2026, Project meeting and asked SNGR to identify any items it would like included on the meeting agenda.		

Haudenosaunee Development Institute [HDI]

Line item	Date	Method	Summary of Enbridge Activity	Summary of Community Activity	Issues or Concerns Raised & Responses
3.0	July 6, 2026	Email	An Enbridge Gas representative emailed the HDI representative to provide the Notice of Upcoming Environmental Study and Memo. Enbridge Gas advised that capacity funding was available for HDI to support technical review, fieldwork participation, and meaningful consultation, and invited questions or a meeting to discuss the Project. The Notice provided information regarding the proposed Project, Environmental Study, anticipated regulatory process, consultation, and engagement. The Memo outlined the Project, regulatory process, environmental and archaeological studies, potential impacts and mitigation measures, and opportunities for Indigenous input and participation in future fieldwork.		
3.1	August 4, 2026	Email	An Enbridge Gas representative emailed the HDI representative to invite participation in a virtual information session to be held between August 17 and August 31, 2026, regarding the study. The representative explained that feedback from the virtual information session would help confirm a preferred route and inform mitigation plans, provided contact information for the Project Manager at Dillon, and asked HDI to indicate whether it wished to participate in the session or provide comments directly on the materials provided. Comments were requested by September 15, 2026.		
3.2	August 6, 2026	Email	An Enbridge Gas representative emailed the HDI representatives to advise of a corrected web address for the virtual information session and attached a revised notice containing the web address.		
3.3	September 4, 2026	Email	An Enbridge Gas representative emailed the HDI representative to follow up on an offer to meet and discuss the Project. The Enbridge Gas representative provided virtual open-house slides and questionnaires, invited comments directly if preferred, requested available meeting dates, and advised that capacity funding was available to support HDI’s participation.		
3.4	September 10, 2026	Email	An Enbridge Gas representative emailed the HDI representative to provide notification of the proposed Project and advised that a notification letter was attached. The letter described the Project and preliminary work undertaken, including potential authorizations that may be required. Enbridge Gas confirmed that capacity funding was available to support HDI’s participation and advised that Enbridge Gas was available to meet at any time during the Project development process. The letter also advised that an Environmental Report (ER) would be prepared in accordance with the OEB’s Environmental Guidelines, with completion anticipated in Q1 2027, and provided Enbridge Gas contact information for further discussion.		

Line item	Date	Method	Summary of Enbridge Activity	Summary of Community Activity	Issues or Concerns Raised & Responses
3.5	September 25, 2026	Email	A Stantec representative emailed an HDI representative to advise that Stage 3 archaeological assessments were planned for several archaeological sites in support of the Project. The Stantec representative advised that fieldwork could begin as early as October 5, 2026, invited HDI team members to participate in the archaeological fieldwork, noted that mobilization details would be provided once confirmed, and requested that participation agreements or contracts be arranged with Enbridge Gas representatives.		
3.6	October 6, 2026	Email	The Stantec representative emailed the HDI representative to inform of ecological surveys expected to take place October 14-16, 2026, asking to coordinate an agreement with Enbridge Gas if there is interest in participating.		
3.7	October 7, 2026	Email	The Stantec representative corrected the October 6, 2026 email in which the incorrect project was named for upcoming ecological surveys.		
3.8	October 9, 2026	Email	Stantec representative provided meeting location and time for October 14, 2026, ecological fieldwork.		