

Cherry Valley Community Expansion Project: Environmental Report

Final Report

Prepared for: Enbridge Gas Inc. 101 Honda Blvd. Markham, ON L6C 0M6

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

File: 160951365

July 11, 2023

Limitations and Sign-off

This document entitled Cherry Valley Community Expansion Project: Environmental Report was prepared by ("Stantec") for the account of Enbridge Gas Inc. (the "Client"). The material in it reflects Stantec's professional judgment in light of the scope, schedule, and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by ______(signature)

Rooly Georgopoulos, B.Sc., Principal, Assessment and Permitting

Reviewed by _____(signature)

Mark Knight, MA, MCIP, RPP Senior Associate – Assessment and Permitting

Reviewed by ______(signature)

David Wesenger, BES Operations Leader – Environmental Management

Executive Summary

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Cherry Valley Community Expansion Project to supply the community of Cherry Valley in Prince Edward County with affordable natural gas (the "Project"). The Project will involve the construction of up to approximately 14 kilometers of a combination of 2- and 4-inch Nominal Pipe Size polyethylene natural gas pipeline. The proposed pipeline will tie into an existing Enbridge Gas system south of Warings Corner, along Sandy Hook Road (County Road 1). From the commencing point, the pipeline will travel southeast along County Road 1, then south along County Road 10 to the County Road 10 and County Road 18 intersection. At this intersection, a portion of the pipeline will continue south down County Road 10 for approximately 1 km, and a portion of the pipeline will continue west along Country Road 18 to the terminating point, located near the Curry Lane and County Road 18 intersection. To accommodate the increased supply of natural gas, the Project may also involve the building of a new distribution station.

Enbridge Gas has retained Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016)* (OEB Environmental Guidelines).

Enbridge Gas is also required to obtain additional permits and approvals from federal, provincial, and municipal agencies that have jurisdiction in the Study Area. This ER will serve to support these permit and approval applications.

The potential effects and impacts of the Project on physical, biophysical, and socioeconomic features have been assessed for the Project. In the opinion of Stantec, the recommended program of supplemental studies, mitigation, protective and contingency measures are considered appropriate to protect the features encountered. Monitoring will assess that mitigation and protective measures have been effective in both the short and long term.

The potential cumulative effects of the Project were assessed by considering development that may begin during construction or that may begin sometime in the future. The Study Area boundary was used to assess potential effects of the Project and other developments on environmental and socio-economic features. The cumulative effects assessment determined that, provided ongoing consultation, appropriate mitigation, and protective measures are implemented, potential cumulative effects will be of low probability and magnitude, short duration, and reversible, positive, and are, therefore, not anticipated to be significant.

Cherry Valley Community Expansion Project: Environmental Report July 11, 2023

With the implementation of the recommendations in the ER, ongoing communication and consultation, and adherence to permit, regulatory, and legislative requirements, potential adverse residual environmental and socio-economic impacts of this Project are not anticipated to be significant.

Table of Contents

Execu	Executive Summaryii			
Table	of Cor	ntents		. iv
1		uction Project	Description mental Study Objectives Process The Environmental Report The OEB Regulatory Process Additional Regulatory Processes	 1 1 1 2 3 4
2	Route 2.1 2.2	The Pro	cation and Confirmation ocess nation of the Pipeline Route	12
3	Consu 3.1 3.2 3.3	Objectiv Identify 3.2.1 3.2.2	and Engagement Program	13 14 14 15 15 15
	3.4 3.5	3.3.4 Consult 3.4.1 3.4.2	Map and Exit Questionnaire. Project Webpage ation Events Meetings Virtual Information Session eceived Public Input Agency Input Municipal Input Indigenous Input Interest Group Input and Third-Party Utility Owners/Operators	16 17 17 18 18 18 19 19

	3.6	Refinen	nents based on Input	20
4	4.1	Study A	ditions Area	21
	4.2 4.3		ources al Features	
	4.3	4.3.1	Bedrock Geology and Drift Thickness	
		4.3.1	Physiography and Surficial Geology	
		4.3.3	Groundwater	
		4.3.4	Aggregates and Petroleum Resources	
		4.3.5	Soil and Soil Capability	
		4.3.6	Agricultural Tile Drainage	
		4.3.7	Natural Hazards	
	4.4	Biophys	sical Features	
		4.4.1	Aquatic Resources	
		4.4.2	Terrestrial Resources	30
	4.5	Socio-E	Economic Environment	48
		4.5.1	Residents and Businesses	48
		4.5.2	Demographics	
		4.5.3	Economy & Employment	
		4.5.4	Community Services & Municipal Infrastructure	
		4.5.5	Infrastructure	
		4.5.6	Culture, Tourism and Recreational Facilities	
		4.5.7	Air Quality and Noise	
		4.5.8 4.5.9	Indigenous Interests, Land Use and Traditional Knowledge Land Use	
		4.5.10	Landfills and Contaminated Sites	
		4.5.11	Archaeological Resources	
		4.5.12	Built Heritage Resources and Cultural Heritage Landscapes	
5			acts, Mitigation and Protective Measures and Net Impacts	
	5.1	5.1.1	ology Pipeline Construction Process	
		-	Distribution Station Construction Process	
		5.1.2	Operation and Maintenance	
	5.2		ary Table	
6	Cumu	Iative E	ffects Assessment	91
-	6.1		ology	
	6.2		Boundaries	
	6.3	•	Inclusion List	
	6.4		s of Cumulative Effects	
		6.4.1 6.4.2	Construction – October 2023 to July 2025 (not continuous) Operation and Maintenance – Year 2026 to 2076	95

	6.5	Summa	ary of Cumulative Effects	
7	Monit	oring a	nd Contingency Plans	
	7.1	Monito	ring	
		7.1.1	Exposed Soils	
		7.1.2	Water Wells	
		7.1.3	Watercourse and Wetland Crossings	
		7.1.4	Vegetation	
		7.1.5	Residents, Recreational Facilities and Businesses	
		7.1.6	Municipal Roads	100
		7.1.7	Built Cultural Heritage Resources and Cultural Heritage	
			Landscapes	100
	7.2	Conting	gency	
		7.2.1	Private Water Well Complaint	
		7.2.2	Contaminated Sites (Suspect Soils Program)	
		7.2.3	Watercourse Sedimentation	
		7.2.4	Inadvertent Returns During HDD	
		7.2.5	Accidental Spills	
		7.2.6	Unexpected Finds: Archaeological Resources	
8	Concl	lusion		104
9	Refer	ences		105
-				

List of Tables

Table 1.1:	Summary of Potential Environmental Permit and Approval Requirements	5
Table 4.1:	Subwatersheds and Associated Watercourse Crossings	
Table 4.2:	Fish Community known to Occur in the Study Area	
Table 4.3:	Aquatic Species at Risk and Species of Conservation Concern	
	Known to Occur in the Study Area	29
Table 4.4:	Terrestrial Species of Conservation Concern	36
Table 4.5:	Terrestrial Species at Risk	44
Table 4.6:	Population, 2021	
Table 4.7:	Population Growth from 2016-2021	49
Table 4.8:	Labour Characteristics for Persons > 15 years, 2016 and 2020	50
Table 4.9:	Median income of individuals and households, 2020	51
Table 4.10:	Screening for Cultural Heritage Value or Interest	60
Table 5.1:	Potential Impacts and Recommended Mitigation and Protective	
	Measures	66
Table 6.1:	Project Inclusion List for Cumulative Effects	
	-	

List of Figures

Figure 4.1:	Distribution of Workforce by Percentage5	1
-------------	------------------------------------------	---

List of Appendices

Appendix A Figures

- Figure A.1: Study Area
- Figure A.2: Preliminary Preferred Route

Appendix B Consultation

- B.1 Letter of Delegation
- B.2 Project Contact List
- B.3 Newspaper Notice Tear Sheets
- B.4 Notification Letters
- B.5 Virtual Open House Materials
- B.6 Project Correspondence

Appendix C Existing Conditions Figures

- Figure C.1: Socio-Economic Features
- Figure C.2: Regulation Area and Natural Hazards
- Figure C.3: Watercourse Crossing Locations and Existing Conditions Data
- Figure C.4: Natural Environmental Features
- Appendix D Wildlife Habitat Assessment
- Appendix E Stage 1 Archaeological Assessment
- Appendix F Cultural Heritage Checklist
- Appendix G Alignment Sheets

Abbreviations

AA	Archaeological Assessment
AMO	Atlas of Mammals of Ontario
ANSI	Area of Natural and Scientific Interest
AAFC	Agriculture and Agri-Food Canada
BGS	Below ground surface
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
COSSARO	Committee on the Status of Species at Risk in Ontario
HADD	Harmful Alteration, Disruption
HDD	Horizontal Directional Drilling
DFO	Fisheries and Oceans Canada
EASR	Environmental Activity and Sector Registry
ECCC	Environment and Climate Change Canada
Enbridge Gas	Enbridge Gas Inc.
END	Endangered
EPP	Environmental Protection Plan
ER	Environmental Report
ESA	Endangered Species Act, 2007
ESC	Erosion and Sediment Control
ha	Hectare(s)
HADD	Harmful Alteration, Disruption or Destruction
HDD	Horizontal Directional Drill
HVA	Highly Vulnerable Aquifer
\odot	

IPZ	Intake Protection Zone
km	Kilometre(s)
LIO	Land Information Ontario
MBCA	Migratory Birds Convention Act, 1994
MBR	Migratory Bird Regulations
MCM	Ministry of Citizenship and Multiculturalism
MECP	Ministry of the Environment, Conservation and Parks
MENDM	Ministry of Energy, Northern Development and Mines
MOE	Ministry of Energy
MHSTCI	Ministry of Heritage, Sport, Tourism and Culture Industries
МТО	Ministry of Transportation
NAR	Not at Risk
MNRF	Ministry of Natural Resources and Forestry
NHIC	Natural Heritage Information Centre
OBBA	Ontario Breeding Bird Atlas
OEB	Ontario Energy Board
OGS	Ontario Geological Survey
ОНА	Ontario Heritage Act
OOAD	Ontario Odonata Atlas Database
OPCC	Ontario Pipeline Coordinating Committee
OPP	Ontario Provincial Police
O. Reg.	Ontario Regulation
ORAA	Ontario Reptile and Amphibian Atlas

PPR	Preliminary Preferred Route
PR	Preferred Route
PTTW	Permit to Take Water
PSW	Provincially Significant Wetland
RSC	Record of Site Condition
RoW	Right-of-Way
SAR	Species at Risk
SARA	Species at Risk Act
SGRA	Significant Groundwater Recharge Area
SOCC	Species of Conservation Concern
SC	Special Concern
Stantec	Stantec Consulting Ltd.
SWH	Significant Wildlife Habitat
TEA	Ontario Butterfly Atlas
THR	Threatened
TSSA	Technical Standards and Safety Authority
WHPA	Wellhead Protection Area
WWR	Water Well Record(s)

1 Introduction

1.1 **Project Description**

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Cherry Valley Community Expansion Project to supply the community of Cherry Valley in Prince Edward County with affordable natural gas (the "Project"). The Project will involve the construction of up to approximately 14 kilometers (km) of a combination of 2- and 4-inch Nominal Pipe Size polyethylene natural gas pipeline. The proposed pipeline will tie into an existing Enbridge Gas system near the Sandy Hook Road and County Road 10 intersection. From the commencing point, the pipeline will travel south along County Road 10 to the County Road 10 and County Road 18 intersection. At this intersection, a portion of the pipeline will continue south down County Road 10 for approximately 1 km, and a portion of the pipeline will continue west along Country Road 18 to the terminating point, located near the Curry Lane and County Road 18 intersection. To accommodate the increased supply of natural gas, the Project may also involve the building of a new distribution station.¹ The proposed route, as described and as shown on the figures associated with this Environmental Report (ER), have been developed for the purposes of an assessment of potential environmental and socioeconomic impacts; detailed design will be undertaken to determine the final location of the running line.

Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an environmental study of the construction and operation of the proposed pipeline. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016)* (OEB Environmental Guidelines).

1.2 Environmental Study

1.2.1 Objectives

A multidisciplinary team of environmental planners and scientists from Stantec conducted the environmental study. Enbridge Gas provided environmental support and engineering expertise throughout the study.

The environmental study was completed in accordance with the OEB *Environmental Guidelines* (2023), as well as relevant federal and provincial environmental guidelines and regulations.

¹ At the time of writing the Environmental Report (ER), the location of the distribution station had not been determined. As such, its location is not shown on the figures associated with this ER, however, it <u>can be assumed that the station will occur somewhere within the defined Project Study Area</u>.



The principal objective of the environmental study was to outline various environmental mitigation and protection measures for the construction and operation of the Project while meeting the intent of the OEB *Environmental Guidelines* (2023). To meet this objective, the environmental study was prepared to:

- Identify a Preferred Route (PR) that reduces potential environmental impacts
- Complete a detailed review of environmental features along the PR and assess the potential environmental and socio-economic impacts of the Project on these features
- Establish mitigation and protective measures that may be used to reduce or eliminate potential environmental and socio-economic impacts of the Project
- Develop a consultation program to receive input from interested and potentially affected parties
- Identify any necessary supplemental studies, monitoring and contingency plans

1.2.2 Process

The environmental study was divided into two main phases:

Phase I: Identification and Consultation on a Preliminary Preferred Route

The environmental study began by identifying the Preliminary Preferred Route, herein 'PPR'. The PPR was determined by Enbridge Gas based on their engineering and tie-in location considerations, maximizing potential servicing locations as well as consideration of environmental and socio-economic constraints as identified by Stantec.

The Study Area for the Project was then delineated and the following entities were notified of the Project:

- Indigenous communities
- Federal and provincial agencies and authorities
- Municipal personnel
- Special interest groups
- Third party utilities

- Directly affected landowners
- Residents and businesses in proximity to the PPR

Feedback on the PPR was sought from these entities through newspaper notices. letters, and a Virtual Information Session held from February 21, 2023 to March 7, 2023.

Concurrent with consultation, environmental and socio-economic features in the Study Area were mapped and characterized using relevant published literature, maps, and digital data. Geographically based features were incorporated onto a series of digital base maps. Discussions with relevant agencies provided information for compiling the existing conditions inventory and mapping.

The maps produced during the route identification and confirmation process are located in Appendix A (Figures A.1 and A.2) and the maps of existing conditions are located in Appendix C (Figures C.1, C.2, C.3, and C.4).

Phase II: Confirmation of the Preferred Route; Environmental Report

Based on feedback received during the consultation and engagement, the PPR was confirmed to be the PR. The final phase of the study involved determining potential environmental and socio-economic impacts and cumulative effects that would result from the Project and developing mitigation and protective measures, supplemental studies, monitoring, and contingency plans to reduce or avoid potential impacts.

The environmental study concluded with the preparation of this ER as well as Environmental Alignment Sheets to identify site-specific mitigation and protective measures to be implemented during construction (see Appendix G).

1.2.3 The Environmental Report

The environmental study has relied on technically sound and consistently applied procedures that are replicable and transparent. The ER, which documents the environmental study, will form the foundation for future environmental management activities related to the Project.

The ER is organized into the following sections:

- 1. **Introduction:** provides a description of the Project and the environmental study
- 2. Route Identification and Confirmation: provides an overview of the pipeline route identification and confirmation process
- 3. Consultation and Engagement Program: describes the consultation and engagement activities undertaken during the environmental study

Cherry Valley Community Expansion Project: Environmental Report 1 Introduction

July 11, 2023

- 4. **Existing Conditions:** describes the existing conditions on physical, biophysical, and socio-economic features in the Study Area
- 5. **Potential Impacts, Mitigation and Protective Measures:** describes the mitigation and protective measures to eliminate or reduce the potential effects and impacts of the Project on physical, biophysical, and socio-economic features that have been assessed in the Study Area
- 6. **Cumulative Effects Assessment**: provides an analysis of potential cumulative effects associated with the proposed Project
- 7. **Monitoring and Contingency Plans**: describes monitoring and contingency plans to address potential environmental impacts of the proposed Project
- 8. **Conclusion:** provides a discussion and consideration of the potential environmental impacts associated with the proposed Project

The ER also includes references and appendices for documentation.

1.2.4 The OEB Regulatory Process

Once complete, the ER is circulated directly to Indigenous communities, agencies, affected municipalities, conservation authorities, and to the Ontario Pipeline Coordinating Committee (OPCC) for their review and comment. The OPCC is an interministerial committee that includes provincial government ministries, boards, and authorities with potential interest in the construction and operation of hydrocarbon transmission and storage facilities. The ER is also made available on the Enbridge Gas Project webpage for the public, interetsedted parties and landowners to review. The ER will accompany a future Enbridge Gas 'Leave-to-Construct' application to the OEB for the proposed Project.

Upon receiving the application, the OEB will hold a public hearing. Communication about the hearing will include notices in local newspapers and letters to directly affected landowners, both of which will outline how the general public and landowners can get involved with the hearing process. If after the public hearing the OEB finds the Project is in the public interest, it will approve construction of the Project. The OEB typically attaches conditions to approved projects. Enbridge Gas must comply with these conditions at all stages of the Project, including during construction and site restoration.

1.2.5 Additional Regulatory Processes

Enbridge Gas will also be required to obtain additional environmental permits, approvals, and notifications from federal, provincial, and municipal agencies as outlined in **Table 1.1** below. This ER will serve to support these permit and approval applications and notifications.

Cherry Valley Community Expansion Project: Environmental Report 1 Introduction

July 11, 2023

Permit/Approval Name	Administering Agency	Description
Federal Permits and App	rovals	
Clearing of vegetation in accordance with the <i>Migratory Bird Convention</i> <i>Act, 1994</i> (MBCA) and <i>Migratory Birds Regulation</i> (2022)	Environment and Climate Change Canada (ECCC)	The MBCA affords protection and conservation to migratory bird populations, individuals, and their nests within Canada. Most bird species in Canada are afforded protection, except for a few families (e.g., cormorants, pelicans, grouse, quail, pheasants, ptarmigan, hawks, owls, eagles, falcons, kingfishers, and corvids). The MBCA is the enabling statute for the Migratory Birds Regulations, which were updated in May 2022 (<i>Migratory Birds Regulations,</i> 2022; MBR). Section 6 of this regulation states that without the authorization of a permit, the disturbance, destruction, or taking of a nest, egg, nest shelter, or duck box of a migratory bird is prohibited. Under the 2022 MBR, nests for 18 bird species (7 of which occur in Ontario) receive year-round protection for a prescribed length of time ranging from 24-36 months (Schedule 1), and all other nests of migratory birds are protected when they contain a live bird or viable egg (S. 5(2)(b)). If a nest of a species identified on Schedule 1 of the MBR is determined to be empty of live birds or viable eggs, then the nest can be registered under ECCC's Abandoned Nest Registry, at which point the prescribed period of inactivity can begin. The main migratory bird nesting period is April 1 – August 31 but nests are protected as long as they are active and certain nests (species identified on Schedule 1 of the MBR) are protected year-round.

Table 1.1: Summary of Potential Environmental Permit and Approval Requirements

Cherry Valley Community Expansion Project: Environmental Report 1 Introduction July 11, 2023

Permit/Approval Name	Administering Agency	Description
		A pre-nest nest survey should be conducted by a qualified individual (i.e., avian biologist) within 24 to 48 hours of work commencing. If an active or inactive nest of these species is identified (or any species identified on Schedule 1 of the MBR), a permit would be required to remove the tree and/or nest.
Review and/or authorization under the <i>Fisheries Act</i> (1985)	Fisheries and Oceans Canada (DFO)	The federal Fisheries Act (1985) is the primary legislation governing fish and fish habitat in Canada. The Fisheries Act defines fish habitat as "waters frequented by fish and any other areas on which fish depend directly or indirectly in order to carry out their life processes including spawning grounds and nursery, rearing, food supply and migration areas." The fish and fish habitat protection provisions of the Fisheries Act apply to all fish and fish habitat in Canada. The Act prohibits activities that result in the death of fish or the harmful alteration, disruption or destruction (HADD) of fish habitat unless authorized by the Minister of Fisheries, Oceans and the Canadian Coast Guard. If it is determined that the death of fish or HADD of fish habitat is unavoidable as part of a project, an authorization under the Fisheries Act may be required.
		At detailed design, the final crossing methods will include a review of DFO's "Measures to Protect Fish and Fish habitat" to determine applicable mitigation and protective measures that are implementable for crossing approaches and activities at specific crossing locations. For crossings and activities not covered by these measures, the DFO-Enbridge Gas agreements on standard sediment control plans for crossing alternatives will be reviewed for applicability and practice. For any remaining crossings and activities not specifically covered by the above measures, DFO review may be required.

Cherry Valley Community Expansion Project: Environmental Report 1 Introduction July 11, 2023

Permit/Approval Name	Administering Agency	Description
		The proposed method for pipeline water crossings (i.e., horizontal directional drilling) will not require DFO review or a <i>Fisheries Act</i> authorization, provided that the Project can follow the construction standards outlined in the DFO and Enbridge Gas Inc. Agreement related to Watercourse Crossings for Pipeline Construction and Maintenance in Ontario (DFO 2022a). If these standards are followed, a project of this nature is low risk to fish and fish habitat and can proceed without DFO review.
Permitting under the <i>Species at Risk Act</i> (SARA) (2002)	DFO and ECCC	The SARA prohibits the killing, harming, harassing, capturing, or taking of a species (s.32) or damaging or destroying the residence of a species (s.33) that is listed as extirpated, endangered, or threatened. For federally regulated aquatic species, these activities may be permitted through a SARA Permit, issued by DFO. A SARA permit is required to capture, handle, and relocate SARA Schedule 1 fish or mussel species during construction.
		As indicated in section 32 (1) of the SARA, "No person shall kill, harm, harass, capture or take an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species."
		As indicated in section 73 (1) of the SARA, "The competent minister may enter into an agreement with a person, or issue a permit to a person, authorizing the person to engage in an activity affecting a listed wildlife species, any part of its critical habitat or the residences of its individuals."
		If the Project prescribes Horizontal Directional Drill (HDD) in areas with aquatic SAR and the Project meets all the conditions outlined in the DFO-Enbridge Standard for Horizontal Directional Drill outlined in the Agreement, submission to DFO for review is not required.

Cherry Valley Community Expansion Project: Environmental Report 1 Introduction

July 11, 2023

Permit/Approval Name	Administering Agency	Description
Provincial Permits and Ap	oprovals	
Development Permits under Ontario Regulation (O. Reg) 319/09 (Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses), as per the Conservation Authorities Act (1990a)	Quinte Conservation	Required for works in Quinte Conservation Regulated Areas, including shorelines, wetlands, watercourses, and hazardous lands (flooding and erosion hazards, and unstable soils and bedrock).
Permit to Take Water (PTTW) or Environmental Activity and Sector Registry (EASR) (surface and groundwater) under the <i>Ontario Water</i> <i>Resources Act</i> (1990b)	Ministry of the Environment, Conservation and Parks (MECP)	Under O. Reg. 64/16 and O. Reg. 63/16, the MECP requires a PTTW for dewatering in excess of 400,000 L/day, and an EASR for dewatering between 50,000 and 400,000 L/day. This can include trench dewatering and taking water for hydrostatic testing from a pond, lake, or other natural source. There are some exceptions for surface water takings where active or passive surface water diversions occur such that all water taken is returned to within another portion of the same surface water feature.
Permitting or registration (e.g., O. Reg. 242/08, 830/21) under the <i>Endangered Species Act,</i> 2007 (ESA) (2007)	MECP	An ESA permit or Registration is required for activities that could impact species protected under the ESA. Consultation will occur with the MECP to determine ESA permitting requirements. As indicated in Section 9 (1)(a) of the ESA (2007), "No person shall will be made a provide a divisor membra of a conscious that is
		kill, harm, harass, capture or take a living member of a species that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species."

Cherry Valley Community Expansion Project: Environmental Report 1 Introduction July 11, 2023

Permit/Approval Name	Administering Agency	Description
		As detailed in Section 10 (1) of the ESA (2007), "No person shall damage or destroy the habitat of, (a) a species that is listed on the Species at Risk in Ontario List as an endangered or threatened species; or (b) a species that is listed on the Species at risk in Ontario Listed as an extirpated species, if the species is prescribed by the regulations for the purpose of this clause.
		As indicated in Section 17 (1), "the Minister may issue a permit to a person that, with respect to a species specified in the permit that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species, authorizes the person to engage in an activity specified in the permit that would otherwise be prohibited by section 9 or 10."
		O. Regs 242/08 and 830/21 allow certain activities to proceed that could affect threatened, endangered or extirpated species and that would otherwise not be allowed, provided specific conditions are followed to protect species and their habitat. Specific criteria must be met to apply and only certain species are eligible.
under the Ontario Heritage	Ministry of Citizenship and Multiculturalism (MCM)	A Stage 1-2 archaeological assessment (AA) is required along the road allowance and temporary land use areas to identify areas of archaeological potential prior to any ground disturbances and/or site alterations. Depending on the results of the Stage 1-2 AA, Stage 3 and 4 AA's may be required. The completed archaeological assessment reports are provided to the MCM for review and comment.

Cherry Valley Community Expansion Project: Environmental Report 1 Introduction

July	11,	2023	

Permit/Approval Name	Administering Agency	Description
Review of Built Heritage and Cultural Landscape under the OHA (1990c)	МСМ	The MCM Criteria for Evaluating Potential Built Heritage Resources and Cultural Heritage Landscapes (Checklist) was completed to determine the presence or absence of heritage resources in the Study Area and identify if further work is required. The Checklist determined the potential cultural heritage resources within the Study Area and a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (CHECPIA) as recommended. The CHECPIA is currently being undertaken to identify the presence of cultural heritage resources within the Study Area, and to understand the potential impacts of the Project on these resources.
Municipal Permits and Ap	provals	
By-law No. 900 - 2002 Noise Nuisance Amending By-law 2819-2011	Prince Edward County	The Noise Abatement By-law regulates and prohibits noise nuisance caused by construction and other noise emitting sources. Project activities should adhere to the local noise by-law.
By-law 643-2001 – Littering and Amending By-law 1977-2009 – Littering	Prince Edward County	The Littering By-law prohibits the throwing, placing, or depositing of refuse or debris on private property or on property of the Municipality. Enbridge Gas employees and contractors should adhere to the littering by-law during construction of the Project.

Cherry Valley Community Expansion Project: Environmental Report 1 Introduction

July 11, 2023

Permit/Approval Name	Administering Agency	Description
Tree Management and Preservation Policy (2020)	Prince Edward County	The Tree Management and Preservation Policy (2020) aims to preserve and protect trees in Prince Edward County through a series of guidelines on the management of trees on County property and private developments. As this Project falls under the scope of "infrastructure works" and not "development", this policy does not apply to the Project. Enbridge Gas is encouraged, however, to apply environmental mitigation measures during construction to reduce impacts to trees.
Road Closure Permit	Prince Edward County	When working on municipal property (including roads, sidewalks, and ditches), a permit is required. To complete construction on municipal property, the following permits may apply:
		• Right of Way Permit: Required when working on municipal property including boring, road cuts, paving, ditching, grading, etc.
		• Road Occupancy Permit Application: Required for the placement of dumpsters, moving trucks, window cleaning, etc. or any activity that involves the use of municipal property.
		 Oversized Load Permit: Required when the dimensions or weight of a vehicle(s) exceeds the normal limits permitted by legislation. Oversized load Permits can be obtained for a single trip (Single Trip Oversized Load Permit Application) or on an annual basis (Annual Oversized Load Permit Application).

2 Route Identification and Confirmation

2.1 The Process

 \bigcirc

The route identification and confirmation process was undertaken in accordance with the OEB *Environmental Guidelines* (2023). The OEB *Environmental Guidelines* (2023) identify the environmental and socio-economic features to take into consideration and the routing principles to be considered. As noted in the Project Description (Section 1.1), Enbridge Gas identified a PPR and no alternative routes were proposed.

2.2 Confirmation of the Pipeline Route

Input on the PPR was sought through consultation. Comments received were generally positive. As no comments were received that would cause a change in the PPR, it was confirmed as the PR (Figure A.2, Appendix A).

The PR is currently illustrated in a general location on figures presented as part of the environmental study and ER. The PR has been developed for purposes of the study and does not represent the final Project scope and/or design that will provide access to natural gas to end-use customers. Enbridge Gas will undertake detailed design to determine the final location of the running line, temporary land use requirements, and road crossing method. Stantec reviewed comments from the consultation program, aerial mapping along the PR, and provided advice on environmental constraints. It is understood that Enbridge Gas will consider the above advice during detailed design as well as the other recommendations made in the ER. Detailed design will also be influenced by supplemental studies and site-specific requests from landowners and agencies.

12

3 Consultation and Engagement Program

3.1 Objectives

Consultation is an important component of the OEB *Environmental Guidelines* (2023). As noted by the OEB *Environmental Guidelines* (2023), consultation is the process of identifying interested and potentially affected parties and informing them about the Project, soliciting information about their values and local environmental and socioeconomic circumstances, and receiving input into key Project decisions before those decisions are finalized.

Stantec believes that community involvement and consultation is a critical and fundamental component of this environmental study, and that Indigenous community participation is essential to the Project. We also recognize that each potentially affected Indigenous community has unique conditions and needs and that the process followed may not satisfy the "duty to consult" component from an Indigenous community's perspective. To demonstrate that we respect this view, we will use the terms "consultation" and "engagement" throughout the remainder of this Report when we refer to seeking input from Indigenous communities.

The consultation and engagement program for the Project included the following objectives:

- Identify interested and potentially affected parties early in the process
- Inform and educate interested parties about the nature of the Project, potential impacts, proposed mitigation measures, and how to participate in the consultation and engagement program
- Provide a forum for the identification of issues
- Identify how input will be used in the planning stages of the Project
- Summarize issues for resolution, and resolve as many issues as feasible
- Revise the program to meet the needs of those being consulted, as feasible
- Develop a framework for ongoing communication and engagement during the construction and operation phases of the Project

3.2 Identifying Interested and Potentially Affected Parties

3.2.1 Identifying Indigenous Communities

Consultation and engagement with Indigenous communities was guided by the OEB *Environmental Guidelines* (2023), as noted above, but also by the Enbridge Gas' Indigenous Peoples Policy.

Indigenous engagement commenced with the submission of a Project description to the Ministry of Energy (MOE), formerly the Ministry of Energy, Northern Development and Mines (MENDM).² This submission to the MOE provided details on the Project location and sought to determine the requirements of the duty to consult. Potentially impacted Indigenous communities were identified by the MOE in a Letter of Delegation dated October 20, 2021 (See Appendix B1).

The Letter of Delegation confirmed that the MOE would be delegating the procedural aspects of consultation in respect to the Project and that, based on the Crown's assessment, the following Indigenous communities should be consulted:

- Alderville First Nation
- Beausoleil First Nation
- Curve Lake First Nation
- Chippewas of Georgina Island
- Chippewas of Rama First Nation
- Hiawatha First Nation
- Huron-Wendat Nation
- Kawartha Nishnawbe First Nation
- Mississaugas of Scugog Island First Nation
- Mohawks of the Bay of Quinte

² On June 18, 2021, the Ontario government implemented changes to several ministries. The MOE will continue to handle matters pertaining to delegation of Duty to Consult, while the rest of the MENDM has been combined with the former Ministry of Natural Resources and Forestry to become the Ministry of Northern Development, Mines, Natural Resources and Forestry.



Cherry Valley Community Expansion Project: Environmental Report 3 Consultation and Engagement Program

July 11, 2023

3.2.2 Identifying Interested and Potentially Affected Parties

Identification of interested and potentially affected parties was undertaken using a variety of sources, including the OEB's OPCC Members List, the MECP's Environmental Assessment Government Review Team Master Distribution List, and the experience of Enbridge Gas and Stantec.

The parties listed below were among those considered when developing the initial stakeholder Contact List:

- Federal and provincial agencies and authorities
- Municipal personnel
- Special interest groups and third-party utility owners/operators

As the environmental study progressed, the initial stakeholder Contact List evolved, and updates were made in response to changes in personnel, correspondence, and feedback gathered from the Notice of Study Commencement and Virtual Information Session. Updates to the Contact List also included adding directly impacted or surrounding landowners who had received the Notice and who had contacted the Project Team. The Contacts Lists are provided in Appendix B2.

3.3 Communication Methods

3.3.1 Newspaper Notices

A Notice of Study Commencement and Virtual Information Session was published on February 8 and 15, 2023, in the Wellington Times and on February 9 and 16, 2023, in the Picton Gazette. The Notice introduced and described the Project, provided a map of the PPR, noted the format and dates of the Virtual Information Session, and listed Project contact information.

Copies of tear sheets from the newspaper notice are provided in Appendix B3.

3.3.2 Letters and Emails

3.3.2.1 Notice of Study Commencement and Virtual Information Session

Letters were sent via email to all parties identified on the Indigenous Contact List on February 13, 2023, and to parties identified on the OPCC and Agency Contact List on February 7, 2023, to provide information on the Project and on the Virtual Information Session. Letters were mailed to properties located in the Study Area via Canada Post unaddressed admail on February 9, 2023. Appended to these letters and emails was a map of the Study Area and PPR.

Generic copies of the letters are included as Appendix B4.

3.3.3 Virtual Information Session – Presentation Slides, Interactive Map and Exit Questionnaire

Presentation slides were developed for the Virtual Information Session The presentation slides provided information on the Project, the OEB regulatory process, environmental study process, the PPR, anticipated environmental and socio-economic impacts and mitigation, and next steps. A voiceover recording was paired with the presentation slides.

Following the slideshow presentation, a link to an exit questionnaire and an interactive map were provided. A downloadable version of the presentation slides, script, and the exit questionnaire were provided in the "Resources" tab on the Virtual Information Session Project webpage (as described below). The exit questionnaire requested feedback on potential impacts, important features along the PPR, and the content of the Virtual Open House. The interactive map allowed attendees to view the PPR and Study Area on a web-based map. A search function was made available on the interactive map to locate a specific address, and to review natural environment map layers such as waterways and wooded areas.

Copies of the first Virtual Information Session presentation slides, presentation script, and exit questionnaire are provided in Appendix B5.

3.3.4 Project Webpage

Information on the Project, the OEB regulatory process, environmental study process, and Enbridge Gas' commitment to the environment was provided on the two webpages created for the Project.

Cherry Valley Community Expansion Project: Environmental Report 3 Consultation and Engagement Program

July 11, 2023

The first webpage was created by Stantec using the ArcGIS StoryMaps platform https://solutions.ca/CherryValleyEA. This webpage was developed specifically to host the Virtual Information Session presentation. The webpage contained a "Resources" tab with a link to a downloadable version of the presentation slides, the exit questionnaire, and the presentation voiceover script.

The second webpage was developed by Enbridge Gas and is still active under the "Projects" tab on the Enbridge Gas website (https://www.enbridgegas.com/aboutenbridge-gas/projects/cherryvalley). This webpage was designed to provide information on the Project and a link to the Virtual Information Session. Upon completion of this ER, additional details on the Project and future Project notices will be published on the Enbridge Gas webpage.

The Project webpages were communicated to interested and potentially affected parties in the newspaper notice, letters, emails, and Virtual Information Session presentation.

3.4 Consultation Events

3.4.1 Meetings

Meetings regarding the Project have or may occur, if required or requested, between Enbridge Gas and Prince Edward County, Quinte Conservation, key stakeholders, Indigenous communities, third party utilities owners and operators, and directly impacted and surrounding landowners, and will continue as the Project progresses towards detailed design and construction.

3.4.2 Virtual Information Session

The Project's Information Session was hosted online. The Virtual Information Session was accessible from February 21, 2023, to March 7, 2023. This two-week period was selected to allow ample opportunity to review the Project information and provide input.

A Project email address and phone number were provided in the Virtual Information Session for attendees to ask questions and leave comments. The Virtual Open House received 77 visits to the ArcGIS StoryMaps webpage, with 13 visits to the presentation; of those that visited the webpage, 57 were from Ontario. Following the Virtual Information Session, three (3) questionnaires were submitted via either the Project email address or through the questionnaire link in the presentation.

Redacted copies of the completed exit questionnaires are included in Appendix B6.

3.5 Input Received

The consultation and engagement program allowed Indigenous Communities and interested or potentially affected parties to provide input into the Project. Input was evaluated and where applicable, integrated into the ER and Project. Comment-response summary tables and a copy of all written comments and responses are provided in Appendix B6.

3.5.1 Public Input

Ten (10) comments were received as of March 28, 2023, in the form of three (3) completed questionaries, six (6) emails, and one (1) telephone conversation regarding the Project. The main areas of comment include:

- clarification on the proximity of the pipeline in relation to the landowner's property;
- Landowners interested in receiving natural gas inquired on how they might be connected to the pipeline;
- potential timelines to complete the Project and the approval process, specifically if Enbridge needs approval from the Prince Edward County Municipal Council to be a willing host for the Project prior to OEB approval;
- the scope of the ER and the OEB approval process; and
- the design aspect i.e., what side of the road the pipeline would be installed and general construction, if any private land would be crossed, information on the potential need to build a new distribution station (i.e., location, would landowners be consulted, what the distribution station would like, e.g.).

3.5.2 Agency Input

Six (6) comments were received as of March 28, 2023, from federal and provincial agencies and considered in the preparation of this ER. A summary of the comments received is provided below.

Federal Agencies

• The MOE provided Enbridge Gas with a Letter of Delegation detailing the Indigenous communities who's Aboriginal and treaty rights may be impacted by the Project.



Cherry Valley Community Expansion Project: Environmental Report 3 Consultation and Engagement Program

July 11, 2023

- Transport Canada noted that project proponents are required to self-assess if a project: (1) will interact with a federal property and/or waterway by reviewing the Directory of Federal Real Property and (2) will require approval and/or authorization under any Acts administered by Transport Canada.
- The Impact Assessment Agency of Canada provided information to determine if the proposed project is described under the regulations of the *Impact Assessment Act*.

Provincial Agencies and Authorities

- The Technical Standards and Safety Authority (TSSA) noted that an Application for Review of a Pipeline Project will need to be submitted for review to the TSSA.
- The MECP requested a shape file for the Study Area in order to provide a preliminary review and comment on the Project. The MECP also requested that Stantec confirm if the Species at Risk Branch had been notified of the Project.
- Conservation Ontario advised Stantec to contact the local conservation authority about the Project.
- The Ministry of Transportation (MTO) noted that they had no concerns with the proposed Project, unless Enbridge intends to connect to the existing line south of Warings Corner, along Sandy Hook Road (County Road 1), or if a Traffic Management Plan will affect Highway 33.

3.5.3 Municipal Input

One (1) comment was received from Prince Edward County as of March 28, 2023:

• Councillor John Hirsch advised the Project team that a number of residents have raised a concern about the planned pipeline expansion as it crosses Waring's Creek and the Waring's Creek Watershed near Sandy Hook Road. The Councillor inquired as to when there will be an opportunity for public input and/or information available about mitigation measures regarding Waring's Creek.

3.5.4 Indigenous Input

Enbridge Gas is committed to creating processes that support meaningful engagement with potentially affected Indigenous groups. Enbridge Gas works to build an understanding of project related interests, ensure regulatory requirements are met, mitigate, or avoid project-related impacts on Aboriginal interests including rights, and provide mutually beneficial opportunities where possible.

Cherry Valley Community Expansion Project: Environmental Report 3 Consultation and Engagement Program

July 11, 2023

On January 23, 2023, Enbridge Gas provided the potentially affected Indigenous communities with an initial notification of the Project. This was followed with a formal Notice of Study Commencement letter, which was distributed to communities on February 13, 2023, and provided details on the Virtual Open House.

Enbridge Gas will continue to meaningfully engage with affected Indigenous communities through phone calls, virtual and in-person meetings, and email communications. During these engagement activities, Enbridge Gas representatives will provide an overview of the Project, respond to questions and concerns, and address any interests or concerns expressed by Indigenous communities to appropriately mitigate any Project-related impacts. In order to accurately document Indigenous engagement activities and ensure follow-up, applicable supporting documents are tracked using a database. The Indigenous Consultation report, which includes the comment-response summary table and corresponding comment records, will be submitted to the OEB upon the filing of the Project application.

3.5.5 Interest Group Input and Third-Party Utility Owners/Operators

No comments were received from interest groups or third-party utility owners/operators at the time of writing this ER.

3.6 Refinements based on Input

At each stage of the consultation program, input received was compiled, reviewed, and incorporated into the environmental study process. Responses were provided, as applicable, to questions and comments received. Given that no comments or concerns were received to cause a change in the Project and proposed route, no refinements were required and the PPR was confirmed to be the PR.

Enbridge Gas has committed to on-going consultation and engagement with Indigenous Communities and directly affected and interested parties through detailed design and construction and will continue to respond to concerns through the life of the Project. Input was also reviewed and considered during the identification of potential impacts and determination of mitigation and protective measures.

4 **Existing Conditions**

4.1 **Study Area**

A Study Area is the area in which direct interactions with the socio-economic and natural environment could occur. For the purposes of the environmental study, the southern northern, eastern, and western extents of the Study Area were determined by applying an approximate buffer of 500 m from the centre line of the PR. In the southern portion of the Study Area, East Lake was selected to represent the western / northwestern boundary (see Figure A.1, Appendix A).

4.2 **Data Sources**

Information requests were made to agencies and municipalities as described in section 3.5.2. The information collected assisted in identifying environmental and socio-economic features located in the Study Area.

The existing conditions maps (Appendix C) have been generated from data obtained from GeoHub, Land Information Ontario (LIO) (Ministry of Natural Resources and Forestry [MNRF] 2022a). Conservation Authority regulated area data was obtained from Quinte Conservation. Stantec has digitally reproduced features added to the base maps. Additional mapping sources are identified on the respective map, and in the references.

For the socio-economic elements of the assessment, the most recent economy and employment statistics were extracted from the 2016 and 2021 Census of Population (Statistics Canada 2017, 2022). The selected census divisions included Ontario and Prince Edward County (Statistics Canada 2017, 2022.).

4.3 **Physical Features**

4.3.1 **Bedrock Geology and Drift Thickness**

The uppermost bedrock formations include Bioclastic limestone, shale, and claystone of Upper Ordovician age, deposited between 480 to 455 million years before the present (Freeman 1979; Ontario Geological Survey [OGS] 1991).

Limestone of the Ordovician age Lindsay Formation upper member form the bedrock beneath the site. It consists of pale to medium grey, sublitographic to finely crystalline, nodular and shaly limestone. Bioclastic limestone is locally common. The calcareous shale interbeds are up to 5 cm thick and are dark grey. The total thickness of the formation is estimated to be 90 m (Carson, 1981).

To determine the general depth from the soil surface to the bedrock, drift thickness (also referred to as overburden) was reviewed, and results indicate that, in the Study Area, the layer of overburden ranges from 1 m to >15 m (OGS, 1999). A review of available Water Well Records (WWR) within 1 km of the Project confirms these results as it indicates that the depth to bedrock is between is between 0 m to 25.3 m below ground surface (BGS), the average depth being approximately 5.49 m BGS (Government of Ontario n.d.).

4.3.2 Physiography and Surficial Geology

The topography of the Study Area tends to be flat to gently rolling and gradually sloping towards the Lake Ontario shoreline and watercourses.

According to available mapping, the Study Area traverses sandy till plains (Chapman and Putnam 1984). Available surficial geology mapping shows that the Study Area is underlain by Paleozoic bedrock-drift complex and massive well laminated fine-textured glaciolacustrine deposits. Stone-poor, carbonate-derived silty to sandy soil also underlays parts of the PR in the Study Area.

4.3.3 Groundwater

The Study Area is located in the Quinte Source Protection Region. The Quinte Region Source Protection Plan (Quinte Region Source Protection Committee [QRSPC] 2019) and associated technical studies (Assessment Reports) identify potential threats to drinking water in the County and map areas of significance, such as Wellhead Protection Areas (WHPA), Highly Vulnerable Aquifers (HVAs), Intake Protection Zones (IPZs), and Significant Groundwater Recharge Areas (SGRAs).

According to the Official Plan (OP) of Prince Edward County Schedule D: Resource Areas mapping, SGRAs are present in the areas of County Road 18 and County Road 10 in the southern extent of the Study Area, and in the areas of County Road 10 and Sandy Hook Road in the northern extent of the Study Area (Prince Edward County 2021a). No WHPAs or HVAs are identified.

No IPZ's, municipal drinking water wells or municipal drinking water intakes are located in the Study Area (QRSPC 2019). The nearest of these features is a Source Protection Plan Policy Area located in the Community of Picton, northeast of the Study Area. This area corresponds to the presence of an IPZ 2, which is defined as:

"generally the land and within a surface water body where water may flow to the intake, typically within two hours" (QRSPC 2019).

In addition to identifying source protection features, the Quinte Region Source Protection Plan (2019) provides an overview of water supply infrastructure and services in the Region. The drinking water systems in the Quinte Source Protection Region include municipal systems of various sizes that draw raw water from both groundwater and surface water sources. The majority of existing development in the Study Area is served by individual private or on-site water supply (Prince Edward County 2021a). In the Study Area, most residents rely on private wells for domestic water supply. MECP WWR's indicated that 434 well records occur within 1 km of the Study Area; 268 of these well records have uses designated as domestic, 9 wells are designated for public use, 31 are not used, and the remaining are either unknown well types, abandoned, or observation/test wells. Private wells are not regulated under the *Safe Drinking Water Act.* For more details on municipal water supply, see Section 4.5.4 and Figure C.1, Appendix C, for a map of nearby domestic and municipal wells.

The County is subdivided into ten quaternary sub-watersheds which drain into the larger recognizable lakes and bays. The Waring's Creek sub-watershed flows into West Lake. The headwaters of the creek begin in the Picton-Hallowell urban boundary, and the watershed encompasses a significant portion of the urban area. A portion of wetland linked to the creek is located in the southeast corner of the property and Waring's Creek is located adjacent to the property. Surface water from adjacent land is directed towards the wetland and creek which flows south to the Beaver Meadow complex to finally to the West Lake. An unnamed creek is located west of the property.

Groundwater flow follows the land topography flowing outwards from the flat land toward the shorelines. The pathways of many streams are controlled by bedrock depressions shaped by bedrock faults. The groundwater quality in the area is generally hard, sometimes sulphury with poor yields.

4.3.4 Aggregates and Petroleum Resources

A review of the Prince Edward County OP (2021a) indicates the presence of an aggregate area located in the southern portion of the Study Area off County Road 10. As shown on Schedule 'B' of the OP (2021a), a designated Selected Bedrock Area is in the portion of the Study Area from Nawautin Drive eastward to the boundary of the Study Area. No other aggregate or petroleum resources were identified. See Section 4.5.8 for a fuller discussion on the policies which apply to Selected Bedrock Areas.

4.3.5 Soil and Soil Capability

There are several soil types identified in the Study Area: Percy Fine Sandy Loam, Brighton Sandy Loam, Pontypool Sand, Elmbrook Clay, Ameliasburg Loam, Darlington Loam, Farmington Loam, South Bay Clay Loam, Bottom Land, Rockland and Marsh (Government of Ontario 1948). Of the soil types noted in the Study Area, the PR crosses all of these soil types with the exception of Rockland, which is located in the northeastern extent of the Study Area, between County Road 10 and County Road 22.

Soil capability for agriculture is mapped by Agriculture and Agri-Food Canada (AAFC 2005). Lands classified as Class 1 are the most agriculturally productive, while those classified as Class 7 have the lowest capability for agriculture. Class 1 to 5 agricultural lands are generally arable, while classes 1 through 3 are defined by the Ontario Ministry of Agriculture, Food and Rural Affairs to be prime agricultural soils for common field crop production. Soil Classes 1 through 7 occur in the Study Area and are traversed by the PR. There is a very small segment of Class 1 soil crossed by the PR in the northwestern extent of the Study Area along Sandy Hook Road. The Majority of the PR crosses Class 2 and Class 3 soils. Soils in Class 2 have moderate limitations that restrict the range of crops or require moderate conservation practices, soils in Class 3 have moderately severe limitations that restrict the range of crops or require special conservation practices.

4.3.6 Agricultural Tile Drainage

Agricultural tile drains are perforated tubing inserted into the ground below the topsoil with the intentions of improving drainage in the upper root zone and, ultimately, agricultural productivity. In the Study Area, there are no occurrences of mapped random tile drainage, and a small area of systematic tile drainage located along County Road 24 between County Road 18 and Brummell Road.

Agricultural tile drains are mapped in Figure C.1, Appendix C.

4.3.7 Natural Hazards

Natural hazards are elements of the physical environment that have the potential to affect a project in an adverse manner. The Study Area traverses Quinte Conservation Regulated Areas. A map of Quinte Conservation's Regulated Areas is located in Figure C.2, Appendix C.

The Prince Edward County OP (2021a) limits or restricts development in areas subject to natural hazards or human-made hazards. The OP maps environmental constraints located in the Study Area. Potential natural hazards in the Study Area are limited and would likely be the result of flooding of watercourses, the pipelines proximity to East Lake and associated flooding/high-water levels, and seismic activity.

Regarding the latter, the Study Area lies in the Southern Great Lakes Seismic Zone (Natural Resources Canada 2019). This zone has a low to moderate level of seismicity when compared to the more active seismic zones to the east, such as the Western Quebec Seismic Zone which captures the area along the Ottawa River and in Quebec. According to data from Natural Resources Canada (2019), over the last 30 years, on average, 2 to 3 magnitude 2.5 or larger earthquakes have been recorded in the Southern Great Lakes region. By comparison, over the same time period, the smaller region of Western Quebec experienced 15 magnitude 2.5 or greater earthquakes per year.

Three moderately sized (magnitude 5) events have occurred in the 250 years of European settlement of this region, all of them in the United States - 1929, Attica, New York, 1986, near Cleveland, Ohio, and 1998, near the Pennsylvania/Ohio border. All three earthquakes were widely felt but caused no damage in Ontario.

While the likelihood of seismic activity occurring in the Study Area is low, flooding is more prevalent a risk as it is the most frequent natural hazard experienced in the County (Quinte Conservation n.d. a.). Flooding can occur throughout the year as a result of heavy rainfall but often occurs in the in the spring and is the result of rapid snow melt or ice melt (Quinte Conservation n.d. a.). In extreme rainfall or snow melt events, flooding may result in shoreline erosion, damage to buildings, and the potential contamination of drinking water. Quinte Conservation mapping has identified Cherry Valley as a high-risk flood area (Quinte Conservation n.d. b.).

4.4 **Biophysical Features**

4.4.1 Aquatic Resources

As part of the assessment of potential environmental impacts, a background data review on aquatic resources and site reconnaissance was undertaken to document and characterize aquatic features in the Study Area. The assessment was undertaken to identify potential impacts and provide recommendations for mitigation measures.

Indigenous engagement with Rights-holders in the Treaty territory has highlighted the importance of water and aquatic resources. The Study Area is in close proximity to waterbodies of high historical value to local Indigenous peoples; places where Rights-holders continue to this day to exercise their Aboriginal or treaty rights. Enbridge values Indigenous conceptions of water stewardship and management and will continue to engage with Rights-holders to distinctively understand potential impacts the proposed Project may have.

July 11, 2023

4.4.1.1 Methods

4.4.1.1.1 Background Data Review

A background data review was conducted to determine locations of potential water features in the Study Area. Data were gathered through agency requests and by accessing the following online databases and sources:

- Ontario GeoHub LIO (MNRF 2022a)
- Natural Heritage Information Centre (NHIC) Database (MNRF 2022b)
- DFO Aquatic Species at Risk Map (DFO 2022a)

4.4.1.1.2 Field Investigations

A site reconnaissance of the PR occurred on October 24 and 25, 2022. The purpose of the field investigation was to:

- Confirm existing watercourse crossings along the PR and the potential for aquatic resources/fish habitat at each crossing
- Determine if there were additional watercourse crossings along the PR, other than those identified in the MNRF databases

4.4.1.2 Results

4.4.1.2.1 Background Data Review

The Study Area falls within two subwatersheds; the West Lake subwatershed and the East Lake – Outlet River subwatershed (MNRF 2022a) (Table 4.1). There are 12 mapped watercourse crossings along the PR (Figure C.3, Appendix C). Watercourses in the Study Area are unnamed. For the purpose of the assessment, Stantec created watercourse/crossing identifiers of WC-01 through WC-12 (Table 4.1).

Table 4.1: Subwatersheds and Associated Watercourse Crossings

Subwatershed	Watercourse/Crossing ID
West Lake	WC-01
East Lake – Outlet River	WC-02, WC-03, WC-04, WC-05, WC-06, WC07, WC-08, WC-09, WC-10, WC-11, WC-12

Table 4.2 summarizes MNRF records (MNRF 2022a) for fish species that have been recorded in watercourses crossed by the PR. Fish community data were available for one watercourse in the Study Area (WC-01) and for East Lake. Fish species in East Lake have the potential to occur at WC-06, WC-08, and WC-12 based on direct connectivity; however, barriers to fish passage were not assessed as part of this Project. East Lake is also known to support aquatic SAR (DFO 2022a, MNRF 2022a).

Watercourse/ Crossing ID	Species Present (MNRF 2022b)						
WC-01	Brook Stickleback (Culaea inconstans)						
	Central Mudminnow (<i>Umbra limi</i>)						
	Fathead Minnow (Pimephales promelas)						
	Northern Redbelly Dace (Chrosomus eos)						
East Lake (potential	American Eel (Anguilla rostrata) (Species at Risk [SAR])						
fish community for	Bluegill (Lepomis macrochirus)						
WC-06, WC-08 and	Bluntnose Minnow (<i>Pimephales notatus</i>)						
WC-12)	Bowfin (Amia calva)						
	Bridle Shiner (<i>Notropis bifrenatus</i>) (SAR)						
	Brown Bullhead (Ameiurus nebulosus)						
	Cisco (Coregonus artedi)						
	Common Carp (Cyprinus carpio)						
	Largemouth Bass (Micropterus salmoides)						
	Logperch (Percina caprodes)						
	Longnose Gar (Lepisosteus osseus)						
	Northern Pike (<i>Esox lucius</i>)						
	Pugnose Shiner (<i>Notropis anogenus</i>) (SAR)						
	Pumpkinseed (Lepomis gibbosus)						
	Rock Bass (Ambloplites rupestris)						
	Rosyface Shiner (<i>Notropis rubellus</i>)						
	Smallmouth Bass (Micropterus dolomieu)						
	Spottail Shiner (Notropis hudsonius)						
	Spotted Gar (<i>Lepisosteus oculatus</i>) (SAR)						
	Walleye (Sander vitreus)						
	White Perch (Morone americana)						
	White Sucker (Catostomus commersonii)						
	Yellow Perch (Perca flavescens)						

Table 4.2: Fish Community known to Occur in the Study Area

Watercourse thermal regime data was not available for watercourses in the Study Area.

4.4.1.2.2 Aquatic Species at Risk

The federal SARA prohibits the killing, harming, harassing, capturing, or taking of an individual of a species that is listed as extirpated, endangered or threatened on Schedule 1 of the Act. It also prohibits the damage or destruction of the habitat of a species that is listed as endangered or threatened; or the habitat of an extirpated species provided that a recovery strategy has recommended the reintroduction of the extirpated species into the wild in Canada. DFO is responsible for federal aquatic SAR, as defined above.

The provincial ESA protects species that are threatened, endangered, or extirpated in Ontario by prohibiting anyone from killing, harming, harassing, or possessing protected species, and by prohibiting damage or destruction to the habitat of the listed species. These SAR are provided with general habitat protection under the ESA, with the goal of protecting areas that species depend on to carry out their life processes (e.g., reproduction, rearing, hibernation, migration, or feeding). Some species have detailed habitat regulations that define the extent and characteristics of protected habitats.

Activities that may impact a protected species or its habitat require the prior issuance of a permit from the MECP, unless otherwise exempted under O. Reg 242/08 (as discussed in Table 1.1).

Five (5) aquatic SAR are known to occur in East Lake and some tributaries (DFO 2022a; MNRF 2022a) and aquatic SAR distribution is mapped downstream of, and nearby to crossings WC-06, WC-08, and WC-12 (DFO 2022a). The aquatic SAR known to occur in East Lake are shown below in Table 4.3.

Critical habitat for Pugnose Shiner is mapped downstream of, and nearby to crossings WC-06, WC-08, and WC-12 (DFO 2022a). Critical habitat is the habitat necessary for the survival or recovery of SAR and that which is identified as critical habitat in a recovery strategy or action plan under the SARA.

Common Name	Scientific Name	Provincial Status (ESA)	National Status (SARA)	Source of Occurrence					
Fish									
American Eel	Anguilla rostrata	END	Not listed	MNRF 2022b					
Bridle Shiner	Notropis bifrenatus	SC	SC	DFO 2022a					
Pugnose Shiner	Notropis anogenus	THR	THR	DFO 2022a, MNRF 2022b					
Spotted Gar	Lepisosteus oculatus	END	END	DFO 2022a, MNRF 2022b					
Mussels									
Eastern Pondmussel	Ligumia nasuta	SC	SC	DFO 2022a, MNRF 2022b					

Table 4.3:Aquatic Species at Risk and Species of Conservation Concern
Known to Occur in the Study Area

DFO (DFO 2022a), NHIC (MNRF 2022a): END - Endangered, THR - Threatened, SC - Special Concern

4.4.1.2.3 Field Investigations

The reconnaissance-level field investigation confirmed the presence of the 12 mapped watercourse crossings identified through the Ontario GeoHub, LIO database (MNRF 2022a). No additional watercourses were observed in the Study Area.

Potential fish habitat was identified at the following nine (9) watercourse crossings: WC-01, WC-02, WC-04, WC-05, WC-06, WC-08, WC-09, WC-10, and WC-12.

Water flow was observed at WC-02, WC-04, WC-05, WC-06, and WC-08. These watercourses may provide permanent fish habitat. Dry channels were observed at WC-01, WC-09, WC-10, and WC-12 but these locations may support potential for seasonal fish habitat. Watercress was observed in the watercourses associated with crossings WC-04 and WC-05, indicating the potential presence of groundwater upwelling, and potential for a coldwater thermal regime.

Fish habitat is not present at crossings WC-03, WC-07 and WC-11 based on the lack of channel definition, connectivity, or the presence of permanent barriers to downstream fish habitat.

\bigcirc

Habitat observed at WC-08 was suitable to support all the aquatic SAR shown in Table 4.3. All other watercourses assessed in the Study Area did not provide suitable habitat for the aquatic SAR identified in the background review.

4.4.2 Terrestrial Resources

As part of the assessment of potential environmental impacts, a background data review on terrestrial resources and site reconnaissance was undertaken to document and characterize terrestrial features, significant wildlife habitat (SWH), and potential for SAR in the Study Area. The assessment was undertaken to identify potential impacts and provide recommendations for mitigation measures.

4.4.2.1 Methods

4.4.2.1.1 Background Data Review

A background data review was conducted to determine natural heritage features and potential for significant wildlife habitat (SWH), species of conservation concern (SOCC), and SAR in the Study Area. Data were gathered through agency requests and by accessing the following online databases and sources:

- Ontario GeoHub LIO (MNRF 2022a)
- NHIC Database (MNRF 2022b)
- Atlas of the Mammals of Ontario (AMO) (Dobbyn 1994)
- Reptiles and Amphibians of Ontario (ORAA) (Ontario Nature 2019)
- Ontario Breeding Bird Atlas (OBBA) (Cadman *et al.* 2007)
- ECCC SAR Range Map Extents (ECCC 2022)
- Species at Risk in Ontario List (MNRF 2022c)
- Ontario Odonata Atlas Database (OOAD), request for information sent to NHIC (2022)
- Ontario Butterfly Atlas (TEA 2022)
- iNaturalist (2022)
- eBird (2022)
- Tree Atlas (MNRF 2022d)

4.4.2.1.2 Field Investigations

A site reconnaissance of the PR occurred on October 24 and 25, 2022. The purpose of the field investigation was to assess terrestrial features and potential for SWH, SAR and SOCC in the Study Area.

4.4.2.2 Forest and Vegetation Communities

The Project Study Area falls in Rowe's (1972) Great Lakes-St. Lawrence Forest Region where the vegetation is known to be relatively diverse. Hardwood forests may be dominated by sugar maple (*Acer saccharum*), American beech (*Fagus grandifolia*), eastern hemlock (*Tsuga canadensis*), with numerous other species found where substrates are well developed on upland sites. Lowlands, including rich floodplain forests, contain silver maple (*Acer saccharinum*), red maple (*Acer rubrum*), eastern white cedar (*Thuja occidentalis*), yellow birch (*Betula alleghaniensis*), and balsam fir (*Abies balsamea*) (Crins 2009). Historically, white ash (*Fraxinus americana*) and green ash (*F. pennsylvanica*) occurred in these forests (Crins 2009) but these species have experienced significant die-off since the invasion of the Emerald Ash Borer first discovered in Ontario in 2002 (MNRF 2014).

The Prince Edward County OP (2021a) contains Natural Heritage System Policies that stipulates conditions for development and protection of features identified in Schedule B, including:

- Areas of Natural and Scientific Interest (ANSIs) Significant and Candidate
- Natural Core Areas
- Natural Core Area Linkages
- Valleylands

 \bigcirc

• Woodlands >40 hectares (ha).

The Prince Edward County OP (2021a) does not map significant woodlands but does map those which meet a minimum size criteria (40 ha) and may therefore may be significant following a detailed evaluation as outlined in MNRF 2010.

Wetlands are part of the Natural Heritage System and are discussed in Section 4.4.2.3, below. The following features are identified by the Prince Edward County OP (2021a) in the Study Area:

- The South Bloomfield Natural Core Area
- Natural Core Area Linkage

- Valleyland
- Woodlands >40 ha.

Other woodlands identified by the MNRF (2022b) natural heritage mapping are shown on Figure C.4, Appendix C. Wetland communities located within the Study Area are discussed in Section 4.4.3.

A reconnaissance site visit occurred along the PR on October 24 and 25, 2022. The Study Area is comprised of agricultural fields and forage crops (hay and pasture) with woodlots, wetlands, meadows, parkland, low-density residential housing, a trailer park, commercial properties, and public works infrastructure occurring along the PR. A detailed vegetation assessment with further botanical inventories is proposed in the future.

4.4.2.3 Wetlands

The Ontario Wetland Evaluation System is used to identify Provincially Significant Wetlands (PSWs). An evaluated wetland may be one contiguous unit or may be a series of smaller wetlands functioning as a whole. Evaluated wetlands that do not qualify as provincially significant may be designated locally significant and may be protected through local planning and policy measures. There may also be unevaluated wetlands in an area.

The Prince Edward County OP (2021a) contains Natural Heritage System Policies which details the protection of Wetlands as well as Watercourses and Shorelines as defined in Schedule B. The following features are identified by the Prince Edward County OP (2021a) in the Study Area:

- Wetland
 - Provincially Significant
 - Other
- Coastal Wetland
 - Provincially Significant
 - Other

A review of Ontario GeoHub, LIO (MNRF 2022a) natural heritage mapping indicated that one PSW and a mosaic of other unevaluated wetlands occur in the Study Area (Figure C.3, Appendix C). The PSW in the Study Area is identified as the East Lake Marsh PSW.



4.4.2.4 Wildlife and Wildlife Habitat

Records of wildlife within the vicinity of the Study Area were compiled from available literature and resources as described in section 4.4.2.1.1.

The potential for species to be present along the PR are limited by the habitat suitability and availability supported by the Study Area. Therefore, the identified species recorded from these databases may not occur along the PR. The following section outlines candidate SWH features and SAR potentially occurring in the Study Area.

Beyond biophysical features identified in alignment with provincial guidelines, Enbridge Gas recognizes the potential presence of cultural keystones species in the Study Area. Through ongoing consultation and engagement, additional shared knowledge will be sought from Indigenous groups to better understand environmental priorities, approaches, and potential mitigations. In addition, Enbridge Gas will be completing additional field studies, as required, which may include species-specific SAR surveys, Butternut Health Assessments, tree inventories, breeding bird surveys, and bat surveys, to inform additional mitigation measures. Interested Indigenous groups will have the opportunity to participate in these field studies, if requested upon invitation. The participation of Indigenous groups in field studies provides opportunities to better understand potential cultural keystone species in the Study Area and other environmental priorities.

4.4.2.4.1 Significant Wildlife Habitat

Wildlife habitat is defined as an area where plants, animals and other organisms live, including areas where species concentrate at a vulnerable point in their life cycle and that are important to migratory and non-migratory species (MNR 2010). Wildlife habitat is considered significant if it is ecologically important in terms of features, functions, representation, or amount, and contributing to the quality and diversity of an identifiable geographic area or Natural Heritage System (MNR 2010).

SWH are grouped into four categories:

- 1. Seasonal concentration areas
- 2. Rare vegetation communities or specialized habitat for wildlife
- 3. Habitats of SOCC
- 4. Animal movement corridor

The presence of candidate and/or confirmed SWH in the Study Area was determined in two ways. First, publicly available data was reviewed for SWH (e.g., MNRF 2022a), although the Prince Edward County OP (2021a) does not map SWH on Schedule B. Second, potential SWH was identified comparing the Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (MNRF 2015) to aerial photography and results of the

habitat assessments conducted in 2022. The presence/absence of SWH are discussed in **Table D-1** (Appendix D). Details and summaries of the significant wildlife assessment are summarized below.

4.4.2.4.2 Seasonal Concentration Areas

Seasonal Concentration Areas are sites where large numbers of a species gather at one time of the year, or where several species congregate. Only the best examples of these concentration areas are typically designated as SWH. Review of the NHIC (MNRF 2022b) database identified colonial nesting bird habitat for waterbirds (ground), and mixed wader nesting colony overlapping with the Study Area. Additional seasonal concentration areas that may occur in the Study Area based on the SWH Criteria Schedule for Ecoregion 6E (MNRF 2015), are assessed in **Table D-1**, Appendix D.

4.4.2.4.3 Rare Vegetation Communities or Specialized Habitat for Wildlife

Rare vegetation communities or specialized habitats are defined as separate components of SWH. Rare vegetation communities are habitats that are considered rare or uncommon in the ecoregion, as defined in the SWH Criteria Schedules (MNRF 2015). These habitats may support wildlife species that are considered significant. Specialized habitats are microhabitats that are critical to some wildlife species. Review of the NHIC (MNRF 2022b) database did not identify any rare vegetation communities or specialized habitats within the Study Area; however, candidate SWH for these components may be present within the Study Area.

4.4.2.4.4 Habitat for Species of Conservation Concern

There are four types of SOCC: those which are rare, those whose populations are significantly declining, those which have been identified as being at risk from certain common activities, and those with relatively large populations in Ontario compared to the remainder of the globe. The Significant Wildlife Habitat Criteria Schedule for Ecoregion 6E (MNRF 2015) identifies marsh, open country, and shrub/early successional bird breeding habitat as well as special concern and rare wildlife species in this category.

Rare species are considered at five levels: globally rare, federally rare with designations by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), provincially rare with designations by the Committee on the Status of Species at Risk in Ontario (COSSARO), regionally rare (at the Site Region level), and locally rare (in the municipality or Site District). This is also the order of priority that should be assigned to the importance of maintaining species.

Some species have been identified as being susceptible to certain practices, and their presence may result in an area being designated SWH. As detailed in **Table D-1** (Appendix D), habitat for marsh, open country, shrub/early successional breeding birds, and/or terrestrial crayfish may occur in the Study Area.

Species designated as special concern provincially or federally are included as SOCC. S-Ranks are status rankings (see list below) assigned for the province by the MNRF and available in the NHIC database. Provincially rare species are those with S-Ranks of S1, S2, or S3 (MNRF 2022b):

- SC
- S1 Critically Imperiled
- S2 Imperiled
- S3 Vulnerable
- S4 Apparently Secure
- S5 Secure

The NHIC database was accessed in November 2022, to obtain records of SOCC in the vicinity of the PR. A review of the NHIC database has indicated that 12 SOCCs have been previously documented in the vicinity of the Study Area. This list includes those species with a provincial ranking of S1 through S3, as well as species considered SC federally or provincially.

Based on the background data review, 29 wildlife SOCC have ranges that overlap the Study Area, including 5 species of reptiles, 2 species of vegetation, 13 species of breeding birds, and 9 species of invertebrates, detailed below in Table 4.4.

Exact locations of species occurrences are not available from these databases or 10642814 atlases, and the potential for species to be present is limited by habitat suitability and availability. Therefore, the identified species recorded from these databases may not occur in the Study Area.

Table 4.4 below provides a summary of the SOCC that have been identified during the NHIC and background review, and whether potential habitat for these species is present in the Study Are

Table 4.4: Terrestrial Species of Conservation Concern

Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area? (Y/N)
Reptiles						
Eastern Musk Turtle	Sternotherus odoratus	S3	SC	SC	ORAA, NHIC, ECCC	Y – East Lake, East Lake Marsh, Beaver Meadow Complex PSW, shallow marshes, watercourses
Eastern Milksnake	Lampropeltis triangulum	S3		SC	ORAA, NHIC, ECCC	Y – Foundations of old structures, pasture, woodlands
Midland Painted Turtle	Chrysemys picta marginata	S5	NAR	SC	ORAA, NHIC	Y – East Lake, East Lake Marsh, Beaver Meadow Complex PSW, shallow marshes, certain watercourses, open aquatic communities

Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area? (Y/N)
Northern Map Turtle	Graptemys geographica	S3	SC	SC	ORAA, NHIC, ECCC	Y – East Lake Marsh, East Lake, Beaver Meadow Complex PSW, open aquatic communities
Snapping Turtle	Chelydra serpentina	S3	SC	SC	ORAA, NHIC, ECCC, iNaturalist	Y – East Lake Marsh, East Lake, Beaver Meadow Complex PSW, shallow marsh and open aquatic communities
Vegetation						
Revolute Plait Moss	Hypnum revolutum	S2			NHIC	Y – Open habitats and woodlands
Limestone Hedge- hyssop	Gratiola quartermaniae	S2			iNaturalist	Y – East Lake Marsh, East Lake, Beaver Meadow Complex PSW, shallow marsh



Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area? (Y/N)
Birds						
Bald Eagle	Haliaeetus leucocephalus	S4B, S2N	SC	NAR	eBird	Y – In woodlands near East Lake Marsh, East Lake, Beaver Meadow Complex PSW, shallow marsh and open aquatic communities
Blue-winged Teal	Spatula discors	S3B, S4M			OBBA	Y – East Lake Marsh, East Lake, Beaver Meadow Complex PSW, shallow marsh and open aquatic communities
Black Tern	Chlidonias niger	S3B	SC	NAR	NHIC, OBBA, eBird, iNaturalist	Y – East Lake Marsh, East Lake, Beaver Meadow Complex PSW
Common Nighthawk	Chordeiles minor	S4B	SC	THR	OBBA, eBird, ECCC	Y – Open habitats with rock/gravel substrate

Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area? (Y/N)
Common Gallinule	Gallinula chloropus	S3B			OBBA, eBird	Y – East Lake Marsh, East Lake, Beaver Meadow Complex PSW, shallow marsh
American Coot	Fulica americana	S3B			OBBA, eBird	Y – East Lake Marsh, East Lake, Beaver Meadow Complex PSW, shallow marsh
Upland Sandpiper	Bartramia longicauda	S2B			OBBA	Y – Open pasture
Eastern Wood- Pewee	Contopus virens	S4B	SC	SC	NHIC, OBBA, eBird, iNaturalist, ECCC	Y – Deciduous forests
Grasshopper Sparrow	Ammodramus savannarum	S4B	SC	SC-NS	OBBA, eBird, ECCC	Y – Large meadows, open pasture
Great Egret	Ardea alba	S2B			eBird, iNaturalist	Y – East Lake, East Lake Marsh, Beaver Meadow Complex PSW

Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area? (Y/N)
Purple Martin	Progne subis	S3B			OBBA, eBird	Y – Residential areas
Short-eared Owl	Asio flammeus	S2N, S4B	SC	SC	OBBA	Y- Large, open meadows and pasture
Wood Thrush	Hylocichla mustelina	S4B	SC	THR-NS	NHIC, OBBA, eBird, iNaturalist, ECCC	Y – Mature deciduous forests
Invertabrates						
Monarch	Danaus plexippus	S4B, S2N	SC	SC	TEA, iNaturalist, ECCC	Y – Meadows where milkweed is found
Juniper Hairstreak	Callophrys gryneus	S3			NHIC, TEA, iNaturalist	Y – Where Eastern red cedar is present
Hermit Sphinx Moth	Lintneria eremitus	S3			iNaturalist	Y – Woodlands, open pastures and meadows



Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area? (Y/N)
Penitent Underwing Moth	Catocala piatrix	S3			iNaturalist	Y – Woodlands, and forested areas where Black Walnut occurs
Swamp Darner	Epiaeschna heros	S2S3			OOAD	Y – East Lake, East Lake Marsh, Beaver Meadow Complex PSW
Horned Clubtail	Arigomphus cornutus	S3			iNaturalist	Y – East Lake, East Lake Marsh, Beaver Meadow Complex PSW, shallow marshes
Lilypad Clubtail	Arigomphus furcifer	S3			iNaturalist	Y – East Lake Marsh, East Lake, Beaver Meadow Complex PSW, shallow marshes
Arrowhead Spiketail	Cordulegaster obliqua	S1			OOAD	Y – East Lake, East Lake Marsh, Beaver Meadow Complex PSW, shallow marshes, streams

July 11, 2023

Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area? (Y/N)
Painted Skimmer	Libellula semifasciata	S2			OOAD	Y – East Lake Marsh, East Lake, Beaver Meadow Complex PSW, shallow marshes

NOTES:

S1:Critically Imperiled - Critically imperiled in the province (often 5 or fewer occurrences)

S2: Imperiled - Imperiled in the province, few populations (often 20 or fewer)

S3: Vulnerable - Vulnerable in the province, relatively few populations (often 80 or fewer)

S4: Apparently Secure - Uncommon but not rare

S?: Rank Uncertain

SH: Possibly Extirpated (Historical)

S#B: Breeding status rank

NAR: Not at Risk

NS: No schedule – not yet on a *Species at Risk Act* schedule

4.4.2.4.5 Animal Movement Corridors

Animal movement corridors are elongated, naturally vegetated parts of the landscape used by animals to move from one habitat to another (MNR 2000). Rivers, creeks, and drains may be used as amphibian movement corridors to/from breeding habitat while forested cover may be used by deer moving to/from wintering habitat. Hedgerows may also serve as small linkages (MNR 2000). Suitable amphibian breeding habitat may occur in the Study Area, associated with identified wetlands and waterbodies during the background review and preliminary site visit. Deer wintering areas were not identified in the background review.

Locally significant movement corridors may occur in the Study Area. As detailed in Section 4.5.9, the Prince Edward County OP (2021a) has identified Core Area Linkages in the Study Area. Preliminary vegetation community classification indicates the presence of watercourses, wetlands, PSWs, and linear hedgerows in the Study Area. Animal movement corridors are discussed in **Table D-1** (Appendix D).

4.4.2.4.6 Species at Risk

SAR are those species given status rankings, by COSEWIC and/or COSSARO, as threatened or endangered according to federal or provincial legislation. Endangered and threatened species receive general habitat protection under the ESA 2007. Special concern species are not afforded habitat protection and have been summarized as SOCC above.

Recent records of endangered and threatened species were obtained through the NHIC database on the LIO Natural Heritage Mapping website, accessed November 2022. The NHIC database uses Element Occurrences to show locations of species. An Element Occurrence is defined as an area of land and/or water on/in which an element (e.g., species or ecological community) is or was present. For protection purposes, exact locations of species are not provided (only within a 1 km grid), and presence of the species in the Study Area are not definite.

Based on the background data review, 14 threatened and endangered species have ranges that overlap the Study Area, including 1 species of reptile, 8 species of breeding birds, 3 species of mammal, and 2 species of plants as shown in Table 4.5

Exact locations of species occurrences are not available from these atlases, and the potential for species to be present is limited by habitat suitability and availability. Therefore, the identified species recorded from these atlases may not occur in the Study Area.

Table 4.5:Terrestrial Species at Risk

Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area? (Y/N)
Reptiles		•				
Blanding's Turtle	Emydoidea blandingi	S3	THR	END	ORAA, NHIC, iNaturalist, ECCC	Y – Ponds, marshes and lakes with shallow water and abundant aquatic vegetation including: East Lake, East Lake Marsh, Beaver Meadow Complex PSW, shallow marshes, watercourses
Birds		•				
Barn Swallow	Hirundo rustica	S4B	THR	THR	OBBA, eBird, ECCC	Y – Human-made structures; culverts and bridges
Bank Swallow	Riparia riparia	S4B	THR	THR	OBBA, NHIC, eBird, ECCC	Y – roadside or waterbody embankments

Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area? (Y/N)
Bobolink	Dolichonyx oryzivorus	S4B	THR	THR	OBBA, NHIC, eBird	Y – Large hayfields and pastures
Chimney Swift	Chaetura pelagica	S4B, S4N	THR	THR	OBBA, eBird, ECCC	Y- Forests and swamps, however prefers human- made structures
Eastern Meadowlark	Sturnella magna	S4B	THR	THR	OBBA, NHIC, eBird, iNaturalist, ECCC	Y – Meadows, hayfields, pastures and woodlands
Eastern Whip- poor-will	Caprimulgus vociferous	S4B	THR	THR	iNaturalist, ECCC	Y – Discontinuous patchy forests
Least Bittern	Ixobrychus exilis	S4B	THR	THR	OBBA, NHIC, eBird, ECCC	Y – Marshes including: East Lake, East Lake Marsh, Beaver Meadow Complex PSW, shallow marshes, watercourses

Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area? (Y/N)
Red-headed Woodpecker	Melanerpes erythrocephalus	S4B	END	END	OBBA, ECCC	Y – open/cultural woodlands, hedgerows, roadside
Mammals		•				
Little Brown Myotis	Myotis lucifugus	S5	END	END	AMO COSEWIC*	Y – Forests and swamps, buildings and old structures
Northern Myotis	Myotis septentrionalis	S3?	END	END	COSEWIC*	Y – Forests and swamps, buildings and old structures
Tri-coloured Bat	Perimyotis subflavus	S3?	END	END	COSEWIC*	Y – Forests and swamps, buildings and old structures
Eastern Small- footed Myotis	Myotis leibii	S2S3	END		MNRF 2022c	Y – Forests and swamps, buildings and old structures

July 11, 2023

Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area? (Y/N)
Plants						
Butternut	Juglans cinerea	S2?	END	END	Tree Atlas NHIC ECCC	Y – Hedgerows, cultural woodlands, openings
Black Ash	Fraxinus nigra	S4	END	THR	Tree Atlas	Y – Swamps, wet areas of forests

NOTES:

S1: Critically Imperiled - Critically imperiled in the province (often 5 or fewer occurrences)

S2: Imperiled - Imperiled in the province, few populations (often 20 or fewer)

S3: Vulnerable - Vulnerable in the province, relatively few populations (often 80 or fewer)

S4: Apparently Secure - Uncommon but not rare

S5: Secure - Common, widespread, and abundant in the province

S?: Rank Uncertain

SH: Possibly Extirpated (Historical)

S#B: Breeding status rank

NS: No schedule - not yet on a Species at Risk Act schedule

Although potential habitat for SAR is present in the Study Area, the proposed PR is located in an existing road allowance that is periodically disturbed for maintenance work. In addition, construction techniques will avoid some sensitive habitats (i.e., through the use of trenchless technologies such as horizontal directional drilling) for areas associated with watercourses and wetlands and the use of timing restrictions. Consultation with MECP is recommended to determine requirements under the ESA.

4.5 Socio-Economic Environment

4.5.1 Residents and Businesses

Cherry Valley is located in Prince Edward County, a single-tier municipality, that encompasses approximately 1,050 square km of land and 800 km of shoreline (Prince Edward County 2021a). Known for its contemporary rural charm, viticulture, and unique natural areas, Prince Edward County is made up of a mosaic rural and agricultural land, small urban centres, environmental protected areas, cottages, and rural residents. It is also made up of a mosaic of settlement patterns, which are broken down by the County into designations called urban settlement areas, villages, and hamlets. Cherry Valley is one of the rural hamlets of the County – that is defined as a small rural service centre with a mix of non-farm housing, tourism and businesses, and community facilities.

In the northern portion of the Study Area, to the south of Warings Corner where the Project commences along County Road 1, there are several rural residential properties and businesses, including agricultural and non-agricultural operations. The non-agricultural businesses include the Lockyer's County Gardens and Shoreline Solutions. Commercial business include Waring House Restaurant Inn and Bailey's Casual Dining.

In the mid portion of the Study Area, several additional rural residential properties as well as a retirement residence, businesses, and agricultural operations occur along County Road 10. The commercial business along this road include the County Design Company, Shelter Valley Mobile Home Park, Sunflower Fields Ice Cream Shoppe, bed and breakfasts, and the Stowaway Vintage Antique Store.

In the southern and most densely populated portion of the Study Area, along County Road 18 and County Road 10, there are a number of residential properties, businesses, (including bed and breakfasts, farmers markets, and convenience stores), and one agricultural operation.

4.5.2 Demographics

The population of Cherry Valley accounts for a small portion of the County's total population and given its' modest population size, no exact statistics on population for Cherry Valley were recorded in the 2021 Census of Population by Statistics Canada. As such, the ER's discussion on demographics (and economics) below has relied on the population breakdown for Prince Edward County, see Table 4.6

Table 4.6:Population, 2021

Location	Total Population	Land Area (km²)	Population Density per km ²	Percent Change from 2016
Ontario	14,223,942	892,411.8	15.9	5.8
Prince Edward County	25,704	1,052.6	24.4	3.9

Source: Statistics Canada 2017 and 2022

According to Statistics Canada (2017 and 2022), between 2016 to 2021, Prince Edward County saw an increase in population that was comparable to the increase in population seen across the province of Ontario. In the five-year period between 2016 to 2021, Prince Edward County experienced an annual population growth rate of 1.0% (Statistics Canada 2022) while Ontario experienced a slightly greater annual growth rate of 1.5% (Statistics Canada 2017). As shown in Table 4.7, during this five-year period, the County's population increased from 24,735 to 25,704 while Ontario's population increased from 13,448,494 to 14,223,942.

Table 4.7:Population Growth from 2016-2021

Location	Total Population 2016	Total Population 2021	Annual Growth (%)
Ontario	13,448,494	14,223,942	1.5
Prince Edward County	24,735	25,704	1.0

Source: Statistics Canada 2017 and 2022

According to population projections, the population for Prince Edward County will continue to grow modestly to 38,834 people and 8,750 jobs by the year 2038 (Watson and Associates 2017). Of the total predicted population, 26,709 people will be permanent residents while the remaining 12,125 will be seasonal – i.e., cottagers and resort goers. This population growth is predicted to be the result of retirees and second homeowners moving to the County from other parts of the province.

Albeit modest, to accommodate the growth anticipated to take place, improvements to municipal services and utilities, such as natural gas, are identified in the Prince Edward County OP (2021a) as an important means of supporting growth and future development.

4.5.3 Economy & Employment

The most recent economy and employment statistics are provided in the 2021 Census of Population (Statistics Canada 2022). At the time of Census, not all labour characteristics, i.e., participation, employment, and unemployment rates, were available. As such, Table 4.8 summarizes the participation, employment, and unemployment rates as recorded in the 2016 Census and the total population and total employed population as recorded in the 2021 Census.

Location	Total Population 15 years and over, 2020	Employment Income Recipients 15 years and over, 2020	Participation Rate (%), 2016	Employment Rate (%), 2016	Unemployment Rate (%), 2016
Ontario	11,782,845	8,153,180	64.7	59.9	7.4
Prince Edward County	22,225	13,820	54.2	51.2	5.7

Table 4.8: Labour Characteristics for Persons > 15 years, 2016 and 2020

Source: Statistics Canada (2017 and 2022).

As shown in Table 4.8:, in 2016, Prince Edward County had a lower participation rate (measure of the total labour force – employed and unemployed, combined – relative to the size of the working-age population) and employment rate (percentage of employed persons in relation to the comparable total population 15 years of age and over) than the province (Statistics Canada 2015). The unemployment rate for the County (unemployed persons in relation to the comparable total population 15 years of age and over) was also lower than the provincial rate (Statistics Canada 2015).

Median income for households and individuals is presented in Table 4.9. As shown in 2020, the median income of individuals and households in Prince Edward County was less than the provincial median by \$1,200 and \$1,000, respectively.

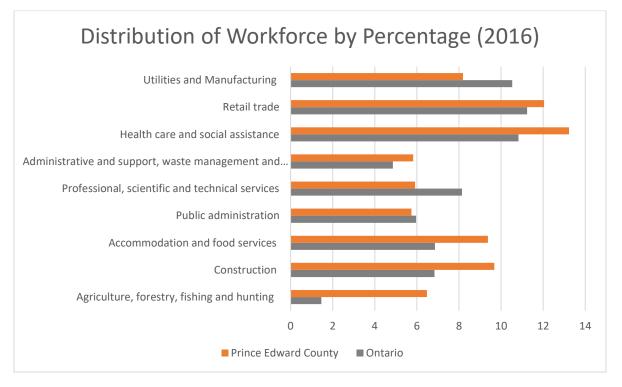
Table 4.9:	Median income of individuals and households, 2020
------------	---------------------------------------------------

Location	Median total income in 2020 among recipients (\$)	Median total income of household in 2020 (\$)	
Ontario	41,200	91,000	
Prince Edward County	40,000	81,000	

Source: Statistics Canada 2017 and 2022

Figure 4.1 shows the percentage of the employed population by industry in 2016.

Figure 4.1: Distribution of Workforce by Percentage



Source: Statistics Canada (2017)

As recorded in the 2016 Census, there were an estimated total of 11,415 jobs in all industry categories in Prince Edward County. The majority were in health care and social assistance at 13%, followed by retail at 12%, construction at 10%, and accommodation and food services at 9%.

 \bigcirc

According to the population and employment projections by Watson and Associates (2017), it is predicted that health care, social assistance, and tourism related industries will continue to serve as the backbone of the County's economy. These projections also indicate that the viticulture and technology-based industries will grow into strong economic industries within the County (Watson and Associates 2017). As these industries continue to grow, it is possible that more businesses related to viticulture and technology will emerge in the Study Area in the coming years.

4.5.4 Community Services & Municipal Infrastructure

Permanent and Temporary Accommodations

At the time of Census in 2021, there were a total of 13,557 private dwellings in Prince Edward County; however, of this total, only 11,332 dwellings were occupied by year-round, permanent residents (the remaining total represent dwellings occupied by seasonal/part-time residents). Of the 11,332 permanent dwellings, most private dwellings were single-detached houses (9,750) and the average household size was 2.2 persons. Most occupants were owners (82%) and not renters (Statistics Canada 2022b). There is one mobile home park (Shelter Valley Mobile Home Park) in the Study Area.

Prince Edward County is located in the Provincial Tourism Region 9 (Southeastern Ontario) (Ministry of Tourism, Culture and Sport [MTCS] 2022). According to the Regional Tourism Profile, guests staying in this tourism region have the option of 59 hotels, 72 hotels, and 68 recreational vehicle (RV) parks and campgrounds (MTCS 2022). Additionally, accommodation in this tourism region is offered in the form of bed and breakfasts, housekeeping cottages and cabins, hunting and fishing camps, recreational and vacation camps, motor hotels, and resorts (MTCS 2022).

Specifically, in Prince Edward County, there are approximately 864 short-term accommodations. According to the County's online interactive mapping, approximately 33 of these short-term accommodations are located directly in the Study Area (Prince Edward County 2020). Several short-term accommodations are also available immediately outside the Study Area, such as the Jackson's Falls County Inn (located 6.2 km southeast of the Study Area), Sleepy Hallowell Bed and Breakfast (located 1.2 km east of the Study Area), and Picton Harbour Inn (located 3.3 km southeast of the Study Area).

Municipal Services and Infrastructure

As outlined in the Quinte Region Source Protection Plan (2019), water systems in the Quinte Region Source Protection Plan include municipal systems of various sizes that draw water from groundwater and surface water sources.

The Prince Edward County's Water and Wastewater Services Department is responsible for the administration, maintenance, and operation of drinking water and wastewater systems. In the Hamlet of Cherry Valley, the majority of residents rely on groundwater for their domestic water supply.

Prince Edward County manages the Township's municipal waste and recycling services, and Environmental 360 Solutions is contracted to conduct weekly curbside pickup of household recycling and garbage (Prince Edward County n.d). In Prince Edward County, there are several landfills and waste management facilities, including: the Sophiasburg Transfer Station (35 County Road 14), Hillier Landfill (450 Bakker Road), South Marysburgh (1132 Old Milford Road), Ameliasburgh Landfill (245 Valley Road, Ameliasburgh), Wellington Landfill (275 Consecon Street, Wellington), Picton Landfill (37 Church Street, Picton), and Hallowell Landfill (1080 Shannon Road).

Health and Education Services and Infrastructure

All of Prince Edward County is served by Quinte Health. Quinte Health operates the Prince Edward County Memorial Hospital, the nearest hospital to the Study Area, located at 403 Picton Main Street. The are two retirement homes (Carriage House Retirement Residence and Revera Hallowell House Long Term Care Home) in the Study Area.

There is one elementary public school, the Athol-South Marysburgh Public School, located in the Study Area at 1764 County Road 10. This school provides schooling for Junior Kindergarten to Grade 8 students and is operated by the Hastings and Prince Edward District School Board. During consultation and engagement for the Project, members of the local school and school board were contacted and advised of the Project and construction timelines.

Roads, Highways and Culverts

The Public Works department of Prince Edward County is responsible for managing the County's Road system, which includes 1,100 km of roadway (Prince Edward County n.d. a.). There are three arterial county roads in the Study Area which will be traversed by the PR, which include: Sandy Hook Road (County Road 1) which travels northwest-southeast, County Road 10 which travels northeast-southwest, and County Road 18 which travels east-west. There are approximately 7 additional local roads in

the Study Area that may be crossed by the PR that are maintained by the Municipality's Public Works department.

Policing, Fire and Emergency Response Services

The Municipality has contracted their Police Services with the Ontario Provincial Police (OPP). The OPP operates approximately 165 detachments across the province, the nearest detachment is located immediately outside the northern portion of the Study Area at 569 County Road 1 (OPP n.d.). The contact number for this detachment is 613 476-2151 (OPP n.d.).

In Prince Edward County, firefighting, emergency response, medical first response, fire prevention and education, transportation accidents, and water and ice rescue services are provided by Prince Edward County Fire and Rescue. The main fire station and administrative office of the Prince Edward County Fire and Rescue is located at 8 McDonald Drive in Picton (approximately 3.5 km northeast of the Study Area). Additionally, there are 9 volunteer (unmanned) stations located throughout the County (Prince Edward County n.d. b.)

Ambulance service in the County is contracted through Hastings-Quinte EMS service and is overseen by the Hastings/Quinte Emergency Services Committee. Service includes emergency and non-emergency ambulance transport (Prince Edward County n.d. c). According to the Municipality's website, "two ambulances operate within the boundaries of Prince Edward County, one of which is on duty 24 hours a day 7 days per week and the second, 12 hours a day 7 days per week". Additionally, the Municipality shares a spare backup with the Hastings County fleet. The service in Prince Edward County operates from the joint emergency services facility located at 8 McDonald Drive, Picton.

4.5.5 Infrastructure

Infrastructure in the Study Area is limited to a variety of buried and overhead utilities (e.g., telephone, natural gas lines, low-voltage hydroelectric, watermains) located in road allowances, and the municipal road system. There are no active railways, or provincial highways, in the Study Area.

4.5.6 Culture, Tourism and Recreational Facilities

Residents of and visitors to Prince Edward County have access to a variety of cultural, tourism, and recreational facilities and activities. Among the variety of opportunities made available to the public, the County is an especially popular vacation destination during the summer and fall months. With over twenty unique conservation areas, parks (including Sand Banks Provincial Park), and many walking/hiking trails, Prince Edward County is frequented by hikers, beach goers, and bird watchers. A portion of the

Millennium Trail, a noted Tourism Route shown on Schedule F-1: Recreation & Tourism of the OP, is located in the northern extent of the Study Area along Sandy Hook Road; however, the PR does not cross the Millennium Trail. The Beaver Meadow Conservation Area is located west of the Study Area boundary near the intersection of County Road 10 and County Road 11 (Prince Edward County 2021a). The East Lake shoreline, truncating the southern extent of the Study Area, also provides opportunity for water activities for residents and cottagers.

County Road's 10, 11 and 18 are designated Municipal Tourism Corridor segments according to Schedule F-1: Recreation & Tourism of the OP. Highway 33, located north of the Study Area, which intersects Sandy Hook Road, is designated as a Provincial Tourism Corridor segment (Prince Edward County 2021a).

Schedule F-2: Recreation & Tourism of the Prince Edward County OP (2021a) shows municipal boat launches, municipal parks and sport complexes. The Athol Recreation Centre, which hosts a variety of community events, is located in the Study Area on County Road 10, near the intersection with County Road 18.

In the Study Area there is also one place of worship (Cherry Valley United Church) and a cemetery adjacent to the place of worship.

4.5.7 Air Quality and Noise

The landscape of the Study Area is a rural, residential/cottage community that is comprised of some agricultural land and open space and/or natural heritage features. Albeit minimal, agricultural operations outside the Study Area and everyday vehicle use from residents have the potential to expel air emissions.

According to the Environmental Noise Guideline (MOECC 2013), the landscape of the Study Area would most likely be categorized as a Class 3 area. This means "a rural area with an acoustical environment that is dominated by natural sounds having little or no road traffic, such as a small community; agricultural area; a rural recreational area such as a cottage or a resort area; or a wilderness area."

The Study Area is expected to experience a low traffic volume that represents a minimal source of noise for most of the PR. Minor noise sources in the Study Area may result from agricultural activities, everyday vehicle use, and domestic activities such as property maintenance and recreation.

4.5.8 Indigenous Interests, Land Use and Traditional Knowledge

There are no Indigenous communities located in the Study Area. Ontario, as the Crown, has a legal duty to consult with Indigenous peoples regarding projects or decisions that may adversely impact constitutionally protected Indigenous or treaty rights. Indigenous communities who were identified through provision of a Project Summary to the MOE on September 20, 2022 (see Appendix B1) are as follows:

- Alderville First Nation
- Beausoleil First Nation
- Curve Lake First Nation
- Chippewas of Georgina Island
- Chippewas of Rama First Nation
- Hiawatha First Nation
- Huron-Wendat Nation
- Kawartha Nishnawbe First Nation
- Mississaugas of Scugog Island First Nation
- Mohawks of the Bay of Quinte

Enbridge Gas and Stantec respectfully acknowledge that the Williams Treaties First Nations hold constitutionally protected rights in the Study Area. The value of traditional knowledge and oral history that is shared among Indigenous communities is acknowledged and welcomed and provides context and background to the findings of archaeological studies. We recognize that Indigenous communities 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 communities 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 ER and the studies and databases that influence the findings within, are the product of Western knowledge and a Western worldview. In this vein, we acknowledge that the discussions in this Report on Provincially and Federally protected species, for instance, do not capture the full breadth of the value these species have to Indigenous communities.

We welcome the opportunity for Indigenous communities to share context and background to the findings of both the archaeological studies as well as the natural heritage studies completed for the Project so that we may gain a sense of the full value of the species and ecosystems (and subsequent impacts) discussed in this Report.

For a discussion on the history of Indigenous communities in the Study Area, refer to the Stage 1 AA, in Appendix E of the ER.

4.5.9 Land Use

Municipal land uses, policies, and practices in the Study Area are governed by the Prince Edward County OP (2021a) and local Zoning By-laws. As per Schedule 'A-4' of the Prince Edward County OP (2021a), the Study Area occurs in the following land use designations: Agricultural Area, Hamlet, Rural Land, Urban Centre, Aggregate Resource Land, and Environmental Protection Area.

A description of each unique land use, according to the Prince Edward County OP (2021a) is as follows (to maintain the intent of the policies which apply to these designations, the following text has been copied almost directly from the OP):

The Agricultural Area designation applies to areas where agricultural lands predominate. This includes: areas of agricultural lands and associated Canada Land Inventory Class 4-7 soils; and additional areas where there is a local concentration of farms which exhibit characteristics of ongoing agriculture. Agricultural areas may be identified by the Ontario Ministry of Agriculture and Food using evaluation procedures established by the Province as amended from time to time, or may also be identified through an alternative agricultural land evaluation system approved by the Province. Agricultural areas are designated on Schedule 'A': Land Use Designations of this Official Plan.

The Hamlet designation applies to small settlements throughout the countryside, where low density housing co-exists with other compatible uses, in a built form that respects and enhances the heritage character of each rural setting.

The Rural Land designation applies to Lands which are located outside Settlement Areas and which are outside Agricultural areas. Rural Lands are designated on Schedule "A": Land Use Designations of this Official Plan.

Urban Centre designation applies to land within the municipal boundaries of Picton, Wellington, and Rossmore.

Aggregate Resource Lands are important resources that shall be protected by directing non-related development, including non-farm residential dwellings to areas where it will not constrain these uses.

\bigcirc

Environmental Protection Area designation applies to

- a. Provincially Significant Wetlands (PSW) and Provincially Significant Coastal wetlands
- b. Areas of Natural and Scientific Interest (ANSIs). Although the province differentiates between those which it has deemed to be of provincial significance and those which it deems to be of regional significance, the County considers all such areas to be important for the purposes of maintaining the ecological integrity of the County.

Areas of Aggregate Resource Land are shown on Schedule 'A-4': Land Use Designations in the southwestern extent of the Study Area along County Road 18, and in the northern extent of the Study Area, west of the intersection of Sandy Hook Road and County Road 10.

There are no policies in the Prince Edward County OP (2021a) indicating the development of natural gas pipelines is not permitted in the above land use designations.

4.5.10 Landfills and Contaminated Sites

Landfills

Waste management areas located in Prince Edward County are on Schedule 'C': Constraint Areas of the Prince Edward County OP (2021a). There are currently seven operating waste management sites and transfer stations in Prince Edward County. There are no open waste disposal sites in the Study Area, and one closed waste disposal site located on Ridge Road in the northern extent of the Study Area. The closed waste disposal site is not located along the PR. The nearest open waste management site, the Picton Transfer Station, is approximately 2.5 km northeast of the Study Area on Church Street in the community of Picton. The closest landfill, the South Marysburgh Landfill Site, is located approximately 6 km east of the Study Area.

In accordance with the MECP's Guideline D-4 Land Use on or Near Landfills and Dumps (1994), active and closed landfills within 500 m of the Study Area were reviewed. The potential location of these sites in the Study Area was determined by cross-referencing the aforementioned Schedule 'C': Constraints Areas of the County's OP (2021a) and the MECP's Landfill Sites listed on the MECP website. Based on a review of the above sources, no landfill sites occur in the Study Area. MECP's Landfill Sites mapping shows the nearest municipal landfill to be the Picton Waste Transfer Site (MECP 2022a). This corresponds to the landfill and transfer sites on the "Landfill & Transfer Sites" mapping produced by Prince Edward County (Prince Edward County 2013).

Contaminated Sites

Contaminated sites in and near the Study Area were determined by reviewing the Prince Edward County OP (2021a), the MECP Record of Site Condition (RSC) Registry for Projects filed between October 1, 2004 and June 30, 2011 (MECP 2018a), the RSC Registry for Projects filed between July 1, 2011 and April 28, 2022 (MECP 2018b), Access Environment for RSCs filed since April 29, 2022 (MECP 2022b) and the Federal Contaminated Sites Inventory accessed through the Treasury Board of Canada Secretariat's website (Treasury Board 2011).

These sources did not identify any potential contaminated, brownfield sites, or former industrial sites within 500 m of the Project.

4.5.11 Archaeological Resources

A Stage 1 AA (Appendix D) has been conducted for the Study Area and will be submitted to the MCM for review and inclusion into the *Public Register of Archaeological Reports*.

Initial background research compiled information concerning registered and/or potential archaeological resources within the study area. A property inspection was conducted on February 17, 2023, as a part of the Stage 1 AA.

The Stage 1 AA of the study area for the Project determined that portions of the study area retain potential for the identification and documentation of archaeological resources. In accordance with Section 1.3.1 and Section 7.7.4 of the MCM's 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 impact area that retains archaeological potential.

The Stage 1 AA also determined that a portion of the study area retains low to no archaeological potential for the identification or recovery of archaeological resources due to intersecting and overlapping areas of previous archaeological assessment, disturbance, steep slope, and low and permanently wet areas. In accordance with Section 1.3.2 and Section 7.7.4 of the MCM's 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), Stage 2 AA is not required for any portion of the Project's anticipated construction which impacts an area of low to no archaeological potential.

The Stage 1 AA identified one cemetery within the study area which retains archaeological potential, the Cherry Valley United Church Cemetery. Stantec completed additional background research as part of this Stage 1 AA but could not confirm the original historical boundaries of this cemetery or the complete layout of burial plots within the cemetery property. Given that the boundaries of the cemetery are proven to be unclear based on the additional research, if construction impacts are planned within a 20 metre buffer of the currently defined cemetery boundaries, after the completion of any necessary Stage 2 AA it is recommended that a Stage 3 cemetery investigation be carried out to determine if burials associated with the cemetery extend beyond the currently defined boundaries into areas proposed to be impacted by the Project.

In addition to the above, background research identified three registered archaeological sites within the study area: the Cherry Valley Site (AlGg-4), the Crawford Site (AlGg-27), and the Herrington Site (AlGg-28). If construction impacts are planned within a 20 metre buffer of each of the currently defined archaeological site locations, after the completion of any necessary Stage 2 archaeological assessment, it is recommended that a Stage 3 archaeological investigation be carried out as previous archaeological assessments of each of the Cherry Valley Site (AlGg-4), the Crawford Site (AlGg-27), and the Herrington Site (AlGg-28) have determined that they retain cultural value or interest.

4.5.12 Built Heritage Resources and Cultural Heritage Landscapes

The MCM *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* (the Checklist) was completed for the Study Area. The Checklist is used to identify protected and potential cultural heritage resources and make recommendations for future work, as appropriate. The Checklist completed for the Project identified three indicators of cultural heritage value or interest in the Study Area. Results of the Checklist are included in Table 4.10 and the completed Checklist is included in Appendix E.

Indicators of Cultural Heritage Value or Interest	ldentified in the Study Area
Property identified, designated or otherwise protected under the OHA as being of cultural heritage value	Identified
A National Historic Site (or part of)	Not Identified
Designated under the Heritage Railway Stations Protection Act	Not Identified
Designated under the Heritage Lighthouse Protection Act	Not Identified

Table 4.10: Screening for Cultural Heritage Value or Interest

Indicators of Cultural Heritage Value or Interest	Identified in the Study Area
Identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office	Not Identified
Located within a United Nations Educational, Scientific and Cultural Organization World Heritage Site	Not Identified
Is subject of a municipal, provincial or federal commemorative or interpretative plaque	Not Identified
Has or is adjacent to a known burial site and/or cemetery	Identified
Is in a Canadian Heritage River watershed	Not Identified
Contains buildings or structures that are 40 or more years old	Identified
Is considered a landmark in the local community or contains any structures or sites that are important in defining the character of the area	Identified
Has a special association with a community, person or historical event	Not Identified
Contains or is part of a cultural heritage landscape	Not Identified

61

 \bigcirc

5 Potential Impacts, Mitigation and Protective Measures and Net Impacts

5.1 Methodology

The potential effects and impacts of the Project on physical, biophysical, and socio-economic features have been assessed in the Study Area upon review of the existing conditions outlined in Sections 4.3 - 4.5. With an understanding of construction and operation activities (see Sections 5.1.1 and 5.1.3, respectively) the assessment:

- Describes the environmental and socio-economic setting
- Predicts the effects and associated impacts of construction and operation activities
- Recommends supplemental studies, mitigation and protective measures (including construction methods and timing, site-specific mitigation, environmental protection measures, and compensation measures)
- Outlines the net impacts that are likely to remain

The determination of effects, impacts, and mitigation and protective measures considered:

- Comments expressed during the consultation and engagement program
- Information available from published and unpublished literature
- Maps and digital data
- Mitigation guidance documents
- The pipeline development experience of Enbridge Gas and Stantec

By necessity, the analysis, integration, and synthesis of the data is an iterative process since information becomes available at various stages of the study and at different mapping scales. The level of detail of data and mapping increases as the study moves from analysis of the Study Area to a site-specific survey of features in the Project footprint. The data available at the current stage of the environmental study is appropriate for predicting effects and potential impacts and recommending mitigation and protective measures.

There are instances where field investigations are recommended before construction. Given the location of the Project components and experience of Stantec in providing environmental services for natural gas pipelines, these supplemental studies are not expected to change the conclusions regarding potential adverse residual impacts. The environmental and socio-economic information presented in the ER is based on sources cited throughout.

Table 5.1 below notes the potential impacts, mitigation, and protective measures, including recommended supplemental studies, and net impacts for the existing conditions as described in Sections 4.3 - 4.5.

5.1.1 **Pipeline Construction Process**

The pipeline construction process includes various activities as described below, and will be undertaken in accordance with the Enbridge Construction and Maintenance Manual (October 27, 2021):

- Site Preparation and Clearing: The first activity is typically the survey and staking, which delineate the boundaries of the Right-of-Way (RoW) and temporary work areas. Next, the RoW and temporary work areas are cleared of brush and trees (typically during winter, under frozen ground conditions). Safety fence is installed at the edge of the construction RoW where public safety considerations are required, and aspects of the Traffic Management Plan are implemented (i.e., signs, vehicle access). Silt fence is installed at required locations.
- 2. Grading and Stripping: Next, the grading crew prepares the construction footprint for access by construction equipment. At this stage, the topsoil (on agricultural lands) or the duff layer (on natural lands) is stripped by bulldozers and graders then segregated so it will not be mixed with the subsoil later removed from the trench. Existing landscaping is also removed, and dewatering undertaken, where necessary.
- 3. Stringing: The stringing crew lays pipe on rollers adjacent to the proposed trench location.

Following site preparation and clearing, the pipeline may be installed by any one of three methods:

i. HDD: This trenchless pipeline installation method involves creating entry and exist pits on either side of a feature (such as watercourses), drilling a pilot hole with the aid of drilling fluid, and then pulling the pipeline back through the hole.

- Trenching: This pipeline installation method involves excavation of a trench, ii. lowering the pipeline into place, and then backfilling the trench. During backfilling the originally excavated subsoil is placed over the pipe in the trench. In stony areas, the pipe may be sand padded to protect the coating. In shallow water table areas, the pipeline may be weighted to provide negative buoyancy.
- Ploughing: This pipeline installation method involves the use of a machine that iii. creates a furrow in the ground, places the pipe in the newly created opening, and then closes back up the opening.
 - 4. Backfilling: The backfilling crew backfills the originally excavated subsoil over the pipe in the trench. In shallow water table areas, the pipeline may be weighted to provide negative buoyancy. Surplus backfill material will be removed from the road allowance. The trench line will be crowned to allow for soil settlement.
 - 5. Hydrostatic/Pressure Testing: The pipeline is pressure tested by filling the pipe with water or nitrogen and holding it at a high pressure for a set period of time, per the requirements of CSA Z662-19 Clause 8 and applicable Enbridge Gas specifications for pressure testing. Water is typically drawn by permit from nearby water sources such as watercourses or lakes, if available. Municipal water may also be used for hydrostatic testing. Upon completion of the hydrostatic testing, the pipeline is drained and dried then put into service with natural gas.
 - 6. Clean-Up and Restoration: Clean-up is the restoration of the RoW and other work areas. In natural areas, clean-up restores the environment including reseeding of the RoW, and restoring ditch banks and watercourse crossings. Any erosion and sediment controls (ESC) installed during construction are also removed. Clean-up will also restore landscaping, laneways, and driveways.

5.1.2 **Distribution Station Construction Process**

Similar to the installation of the pipeline, construction of the station will be undertaken in accordance with the Enbridge Construction and Maintenance Manual (October 27, 2021) and will include the following list of activities:

- 1. Site Preparation: The first crew to enter the construction site is typically the survey and staking crew who delineate the boundaries of the road allowance. Safety fence may be installed as required.
- 2. Clearing: A pre-construction crew typically prepares the site by removing trees and shrubs as required from construction areas prior to the breeding bird nesting period (April 1 - August 31) with the intent of limiting the clearing as much as feasible. Tree and shrub removal typically occurs during the winter of the year of construction to avoid the breeding bird nesting period.

- 3. Grading and Stripping: Next, the grading crew prepares the construction footprint for access by construction equipment. At this stage, the topsoil (on agricultural lands) or the duff layer (on natural lands) is stripped by bulldozers and graders then segregated so it will not be mixed with the subsoil later removed from the trench. Existing landscaping is also removed, and dewatering undertaken, where necessary.
- 4. Following site preparation, the station will be built. A 30 m by 30 m pad will be laid and transmission valves will be installed. The pad may be either gravel or a poured foundation. The station inlet pipe, comprised of steel, is bent as required and is welded. The pipe welds are x-rayed and coated then inspected.
- 5. Restoration: Once built, the surrounding area will be restored and re-vegetated according to the surrounding land-use.

5.1.3 **Operation and Maintenance**

Pipeline operation consists of pressurized natural gas flowing through the pipeline. Mainline valves located at the valve sites will serve to shut off and isolate the pipeline for maintenance and security purposes. Additional above-ground facilities along the pipeline include post-mounted signs identifying the pipeline, aerial patrol signs for aircraft patrols, fence stiles, foot bridges for ditch crossings (if applicable).

Once the Project is operational, the following maintenance activities will be undertaken:

- Completing a 'line walk' of the entire pipeline by Enbridge Gas personnel on a 4-year cycle to check for exposed pipelines, evidence of damage to aboveground equipment and piping, evidence of damage to underground piping and gas leaks, and identify any unassociated construction activity near the pipeline RoW
- Completing regular checks and maintenance at pipeline facilities such as valve sites
- Completing depth of cover surveys, so that the amount of soil cover over the pipeline is maintained
- Performing periodic inspection by running electronic tools through the interior of the pipeline to assess for the presence of corrosion or dents and the need for repairs
- Completing class location surveys

5.2 Summary Table

Table 5.1:	Potential Impacts and Recommended Mitigation and Protective Measures
------------	----------------------------------------------------------------------

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		Physical Features
Bedrock Geology and Drift Thickness Section 4.3.1	The planned excavation depth for the Project is approximately 1.2 m BGS with the potential to exceed this depth for watercourse, road crossings, and other sensitive features. Based on the depth of the excavations and the average depth to bedrock being 5.49 m BGS across the Study Area (according to MECP WWR's), bedrock is not likely to be encountered. However, should bedrock be encountered during HDD, there is a potential to also encounter cobbles and boulders in the overburden soils along the entire alignment.	 If HDD is used, pressure relief pits can be considered for implementation in the design on either side of water crossings to dissipate high fluid pressures that may develop during drilling. Potential presence of weathered zones, soil seams and/or shale interbeds in the bedrock should be considered in the design to address impacts to bedrock. The over-drill typically used for HDD installation should be sufficient to address any rock squeeze that may occur. The HDD crossings will be designed and approved by a professional engineer and carried out by a specialty crew. The installation procedures must conform to all relevant Ontario Provincial Standard Specifications. Other mitigation measures specifically related to Open Cut and HDD
Physiography and Surficial Geology Section 4.3.2	Due to the undulating topography and presence of coarser textured soils, there are potential erosion impacts to surficial deposits that may result in surface soil erosion, trench slumping and/or watercourse sedimentation during construction and post construction.	 are outlined under the row "Aquatic Species and Habitat Section 4.4.1". Mitigation measures outlined in the Enbridge Construction and Maintenance Manual (October 27, 2021) should be followed, along with the following standard erosion and sediment control measures: Surface soil erosion can occur in the absence of vegetative cover. Where there is potential for soil erosion, the need for and location of ESC measures should be determined by an inspector with appropriate qualifications and installed prior to the commencement of work in the area. When land is exposed, the exposure should be kept to the shortest practical period. Natural features should be preserved to the extent practical. Temporary vegetation and mulching should be used to protect areas as appropriate. Where required, natural vegetation should be re-established as soon as practical.

Net Impacts

With the implementation of the mitigation and protective measures, no significant adverse residual impacts as a result of bedrock removal are anticipated.

With the implementation of the mitigation and protective measures, no significant adverse residual impacts as a result of physiography/surficial geology are anticipated.

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		 The contractor should obtain adequate quantities of materials to control erosion. Additional supplies should be maintained in a readily accessible location for maintenance and contingency purposes. ESC structures should be monitored to maintain their effectiveness through the life of construction and post- construction rehabilitation.
		 Even with ESC measures, extreme precipitation events could result in collapse of silt fencing, overflow or bypass of barriers, and other situations which could lead to erosion. When site conditions permit, permanent protection measures should be installed on erosion susceptible surfaces. If the erosion is resulting from a construction-related activity, the activity should be halted immediately until the situation is rectified.
		Permits obtained under O. Reg. 319/09 from Quinte Conservation may contain conditions pertaining to ESC.
Groundwater	Hydrostatic Testing and Dewatering	Hydrostatic Testing and Dewatering
Section 4.3.3	The pipeline will be hydrostatically tested before commissioning. Select sections of pipe may also be pre-tested. Water required for the testing may be obtained from a municipal or natural source, such as the Bay of Quinte or East Lake. Prince Edward County should be contacted to confirm if water from a municipal source is available. Where trenches encounter shallow groundwater conditions or following a large precipitation event, removing water from the trench (known as dewatering) may be necessary. During trench dewatering, discharge water will be released to the environment. An uncontrolled discharge of water could cause downstream flooding, erosion, sedimentation, or contamination. Other potential effects of uncontrolled discharge may include introduction of hazardous materials or pollutants to soils or bodies of water. Private Water Wells In the Study Area, most the of residences rely on private wells for domestic water supply uses. According to MECP WWRs, there are 434 water wells in the Study Area, 268 of which are designed as domestic supply. Depending on the proximity to	 For groundwater dewatering, the MECP allows registration under the EASR for construction dewatering projects where groundwater takings will be greater than 50,000 L/day and less than 400,000 L/day; however, should groundwater takings exceed 400,000 L/day, a PTTW may be required from the MECP. If surface water is used as the source water for the hydrostatic test, a PTTW application would be required and would include an assessment of the capacity of the source to provide the required water without impacting the ecosystem, and recommendations for mitigation measures such as screened water intakes to limit intake of debris and organisms and energy dissipation/erosion control measures during discharge to limit erosion and sedimentation. To reduce the potential for erosion and scouring at discharge locations during construction dewatering and/or hydrostatic testing, energy dissipation techniques should be used. Discharge piping should be free of leaks and should be properly anchored to prevent bouncing or snaking during surging. Protective measures may include dewatering at low velocities, dissipating water energy by discharging into a filter bag or diffuser and utilizing protective riprap or equivalent. If energy dissipation measures are found to be inadequate, the rate of dewatering should be reduced or dewatering discontinued until satisfactory mitigation measures are

Net Impacts

With the implementation of the mitigation and protective measures, no significant adverse residual impacts on groundwater are anticipated.

 \bigcirc

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
	 wells, the depth of the well installation and the groundwater levels encountered during excavation, trench dewatering may impact water well quality or quantity at some of the overburden supply wells. Municipal Water Supply No IPZ's, municipal drinking water wells or municipal drinking water intakes, or Source Protection Plan Policy Areas are located within the Study Area (Quinte Region Source Protection Plan, 2019). 	 in place. Discharge should be monitored to make sure that no erosion or flooding occurs. To assess the potential for introduction of contaminated water to soils or bodies of water, testing of hydrostatic and trench dewatering discharge water should be considered. Testing requirements can be influenced by the nature and quality of the source water used, any additives to the test water, the nature of the pipeline, and pipeline contents. An environmental consultant should be consulted to determine what testing is necessary for the discharge water.
		Private Water Wells
		• Given the dependence on private water wells for domestic water supply, a private well survey should be conducted to assess domestic groundwater use near the Project and a private well monitoring program may be recommended for residents who rely on overburden groundwater supply for domestic use. This monitoring program may include pre—construction water quality monitoring as well as water level monitoring, if available. Should a private water well be affected by Project construction, a potable water supply should be provided, and the water well should be repaired or restored as required.
		During construction, the primary concern to surface water quality is the potential for a contaminant spill during a large storm event. To address this concern, the following mitigation measures are proposed:
		• Refueling of equipment should be undertaken 100 m from wetlands and watercourses to reduce potential impacts to surface water and groundwater quality if an accidental spill occurs. If a 100 m refueling distance is not possible, under approval from onsite environmental personnel, special refueling procedures for sensitive areas should be undertaken that include, at a minimum, using a two-person refueling system with one worker at each end of the hose. Spill containment devices and absorbent material shall be on hand and readily available.
		• To reduce the impact of potential contaminant spills, the contractor should implement spill management protocols such as secondary containment of any temporary fuel storage and preparation of a spill response plan.

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		• Work should be limited or stopped during and immediately following significant precipitation events (i.e., 100-year storm event), at the discretion of on-site environmental personnel.
Aggregates and Petroleum Resources Section 4.3.4	There is an aggregate area located in the southern portion of the Study Area off County Road 10 and a designated Selected Bedrock Area in the portion of the Study Area from Nawautin Drive eastward to the boundary of the Study Area. As the proposed pipeline is located in existing road allowances, potential impacts to identified aggregate resources are not anticipated.	 As no impacts are anticipated, no mitigation or protective measures are recommended.
Soil and Soil Capability Section 4.3.5	The detailed design of the pipe is planned to include construction mostly in road allowances. Previously disturbed soils, as found in many road allowances, can be found in a range of conditions. Some areas in the road allowances are anticipated to have been stripped and regraded with a graveled or paved surface. Some areas are anticipated to have been stripped and regraded and rehabilitated to a vegetated surface. As well, it is anticipated that some areas of the PR will have natural undisturbed soils. During construction, soils with no vegetative cover are more prone to erode. This can result in soil erosion from water and wind. Soil susceptibility to water erosion depends on many variables, including: intensity and duration of rainfall events, antecedent soil moisture, surface soil cover, slope, soil texture, soil structure and organic matter content. Similarly, the susceptibility of soils to wind erosion depends on wind speed, surface soil cover, soil texture, soil structure and organic matter content. Similarly, the susceptibility of soils to wind erosion depends on wind speed, surface soil cover, soil texture, soil structure and organic matter content. Similarly to soils to wind erosion depends on wind speed, surface soil cover, soil texture, soil structure and organic matter levels. Water and wind erosion both can result in a significant loss of topsoil. Excess soil may be generated on-site from construction activities that will require off-site management. Construction activities have the potential to affect soil quality.	 In addition to the soil erosion mitigation measures outlined in the Enbridge Construction and Maintenance Manual (October 27, 2021), the following measures are recommended. As an initial stage of construction, standard ESC measures should be implemented on all active areas. ESC features should be regularly inspected and maintained. Additionally, ESC features should be improved or added to in areas requiring more protection. To the extent feasible, construction activities should occur during drier times of the year. Lands affected by heavy rainfall events and wet soil conditions should be monitored, to avoid the potential for topsoil and subsoil mixing. Construction activities should be temporarily halted on lands where excessively wet soil conditions are encountered. Enbridge's on-site inspection team should determine when construction activities may be resumed. If a situation develops that necessitates construction during wet soil conditions, soil protection measures should be implemented, such as: confining construction activity to the narrowest area practical, and installing surface protection measures. During construction activities, weather should be monitored to identify the potential onset of high wind conditions which can cause wind erosion. In the event that high winds occur, dust suppressants should be applied. In conjunction with the above measures, all required materials and equipment should be readily accessible and available for use

Net Impacts

As no impacts are anticipated, no net impacts will occur.

With the implementation of the mitigation and protective measures, no significant adverse residual impacts on soil or soil capability are anticipated.

 \bigcirc

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		• If clean-up is not practical during the construction year, it should be undertaken in the year following construction, starting in May or June once the soils have sufficiently dried. Interim soil protection measures should be undertaken in sensitive areas to stabilize the area for over-wintering.
		• It is noted that the MECP has new regulations for the movement of excess soils in the province of Ontario. Though the Project is not expected to generate excess soil, as required Enbridge Gas should retain or consult with a qualified person who is knowledgeable in the current excess soils guidelines, in order to make recommendations for the management of excess soils.
Agricultural Tile Drainage Section 4.3.6	Construction activities, including trenching and the movement of heavy machinery, have the potential to crush and/or sever agricultural tile drains. During the environmental study a small area of systematic tile drainage located along County Road 24 between County Road 18 and Brummell Road. While the detailed design of the pipe is planned to include construction mostly in road allowances, the temporary workspace required for construction may	 Inspection personnel should undertake consultation with landowners of agricultural fields that may be impacted by temporary workspace to confirm where systematic tile drainage is present. If present, on-site inspectors should observe excavation activities and if tile drains are encountered, mitigation measures should be implemented by the construction contractor as follows: Excavate the pipeline trench to a depth that would allow clearance between the top of the pipeline and the bottom of existing drainage systems.
	be located on lands adjacent to the road allowance where there is the potential for impacts to agricultural tile drains.	 Record and flag severed or crushed tile drains. Temporarily repair main drains, header drains, or large diameter drains, if severed, to maintain field drainage and prevent flooding of the work area and adjacent lands.
		• Cap the downstream side of severed drains that cross the trench to prevent the entry of soil, debris and rodents.
		Repair damaged and severed drains following construction.
		• Before backfilling, invite the landowner to inspect and approve the repair(s).

Net Impacts

With the implementation of the mitigation and protective measures, no significant adverse residual impacts on agricultural tile drainage are anticipated.

July 11, 2023

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
Natural Hazards Section 4.3.7	The probability of significant seismic activity in the Study Area is low; therefore, no potential impacts are anticipated. The likelihood of a flooding event interfering with Project construction is reduced by construction occurring outside of the spring freshet. A flooding event during construction could result in construction delays, soil erosion, sedimentation of a watercourse, trench slumping, and damage or loss of construction equipment and contamination of a watercourse as a result of equipment entering a watercourse. The nature of these impacts would depend on the spatial extent, duration, and magnitude of the flooding event.	 If flooding necessitates a change in the construction schedule, affected landowners and regulatory agencies should be notified and construction should continue at non-affected locations. Temporary workspaces should be located above the floodplain to the extent practical, unless necessary for watercourse crossings. All work in the floodplain will be subject to a permit under O. Reg. 319/09 from Quinte Conservation.
		Biophysical Features
Aquatic Features Section 4.4.1	Watercourse crossings are proposed to be completed by HDD; however, there is a potential to affect fish directly through impacts on water quality (erosion, sedimentation, and accidental spills), disruption and harassment (vibration and noise), and loss of habitat. Indirect impacts include restrictions to habitat use and fish passage. Long- term impacts can include changes to habitat such as substrate, increased erosion potential, loss of in- stream cover, and riparian shading. If trenched crossings are required at locations that support direct fish habitat, potential impacts could include temporary restrictions to habitat use and fish passage, changes to habitat such as altered substrate composition, increased erosion potential, loss of in-stream cover, and loss of riparian shading. Excessive sediment introduced into a watercourse can adversely impact fish through clogging of fish gills and promoting avoidance behavior and can impact habitat through sedimentation of spawning beds and alteration of habitat structure.	 The 10 watercourses (12 watercourse crossings) along the PR that are regulated by Quinte Conservation will be crossed using the HDD method. Some of the following general measures may not be applicable to HDD crossing methods but are included in the event a trenched crossing is required. Additionally, activity-specific measures related to the crossing methods are provided following the general mitigation measures. All measures presented are intended to be consistent with DFO's Measures to Protect Fish and Fish Habitat (DFO 2022b) and the document titled "DFO and Enbridge Gas Inc. Agreement related to Watercourse Crossings for Pipeline Construction and Maintenance in Ontario (the Agreement) (DFO 2022c), which should be consulted prior to construction to confirm that the construction plan is consistent with the most up-to-date list of DFO avoidance measures. General Mitigation Measures ESC measures (i.e., sediment fence or Silt SoxxTM) should be established around entrance and exit drill pits for construction within 100 m of Quinte Conservation regulated areas. No fording of watercourses should occur. Limits of the temporary workspace should be clearly marked to reduce the potential for encroachment into adjacent wetlands and watercourses and avoid unnecessary encroachment. In-water work for warmwater habitats is typically permitted from July 16 to March 14 (no work from March 15 to July 15) (MNRF, 2013).

Net Impacts

With the implementation of the mitigation and protective measures, no significant adverse residual impacts from natural hazards are anticipated.

With the implementation of the HDD construction method and the mitigation and protective measures, no adverse residual impacts on aquatic features are anticipated.

 \bigcirc

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		Watercourses should not be obstructed in a way that impedes the free movement of water and fish.
		• Prior to removal of the vegetation cover, effective ESC measures should be in place to protect water quality. Disturbance to the area during construction should be limited and grubbing activities should be delayed until immediately prior to grading operations.
		• Soil exposure should be reduced prior to commencing construction, and the period that soil remains exposed for grading should be limited to the extent possible.
		• Temporary ESC measures should be maintained and kept in place until work within or near a watercourse has been completed and stabilized.
		• Additional supplies should be kept on-site, in a readily accessible location, for maintenance and contingency purposes. Prior to construction, adequate quantities of the materials listed below, or comparable substitutions, should be on site to control erosion and sediment deposition:
		– Spill kit
		 Sediment control fencing
		 Sediment control logs (i.e., SiltSoxx™)
		- Straw bales
		- Wooden stakes
		– Sandbags
		- Water energy dissipater
		- Filter cloth
		 Water pumps (including stand-by pumps, sufficient lengths of hose and fish cages)
		 Construction material, excess material, construction debris and empty containers should be stored a minimum of 30 m from watercourses and watercourse banks, where feasible.
		 Refueling of equipment should be undertaken 30 m from wetland areas and watercourses identified during field surveys to reduce potential impacts to surface water in the event that an accidental spill occurs. If a 30 m refueling distance is not possible, and under approval from on-site environmental personnel and if approved by permit conditions, special refueling procedures for sensitive areas should be undertaken that include, at a minimum, using a two-person refueling system with one worker at each end of the hose and secondary containment, as needed.

 \bigcirc

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		 Deleterious substances (fuel, oil, spoil) should be stored >30 m from a watercourse or wetland. Any such material that inadvertently enters a watercourse should be removed in a manner satisfactory to the environmental inspector. If a 30 m distance is not possible, conditions noted under relevant permits should be followed so that a minimum required distance is implemented.
		• In the unlikely event of a spill, spills containment and clean-up procedures should be implemented immediately. Enbridge Gas will contact the MECP Spills Action Centre, local and/or regional municipality and/or local Conservation Authority (if required). The MECP Spills Action Centre is the first point of contact for spills at the provincial and federal level.
		Exposed soils surrounding watercourses should be seeded immediately following construction.
		• Conditions of water crossing permit(s) from Quinte Conservation, if applicable, are to be adhered to.
		HDD Mitigation Measures
		The proposed method for pipeline water crossings (i.e., horizontal directional drilling) will not require DFO review or a <i>Fisheries Act</i> authorization, provided that the Project can follow the construction standards outlined in the DFO and Enbridge Gas Inc. Agreement related to Watercourse Crossings for Pipeline Construction and Maintenance in Ontario (DFO 2022a). If these standards are followed, a project of this nature is low risk to fish and fish habitat and can proceed without DFO review.
		Mitigation measures as they relate to employing the HDD method can include:
		• Standard ESC measures should be implemented around drill and pipe staging areas.
		• Drilling equipment should be set up a minimum of 15 m from the edge of watercourses without aquatic SAR and 30 m from watercourses with aquatic SAR and 15 m from wetlands.
		• Clearing of vegetation or grading of watercourse banks should not occur within 30 m from the edge of watercourses, if possible.
		• A drilling mud release contingency plan should be prepared and kept on-site.
		• Bentonite-based drilling mud should be used without the use of additives (unless approval from appropriate regulatory authorities is obtained).

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		Suitable drilling mud tanks or sumps should be installed to prevent contamination of watercourses.
		• The excavation of relief pits may be required to prevent a drilling mud release into sensitive features. Relief pits should be set back 10 m from sensitive features where possible and be contained using appropriate ESC measures (i.e., wire-backed sediment fence).
		 Berms or check dams should be installed downslope from drill entry and anticipated exit points to contain the release of any drilling mud.
		 Drilling mud should be disposed in accordance with the appropriate regulatory authority requirements.
		Bore Path Collapse Mitigation Measures
		The following mitigation measures should be applied to prevent HDD borehole collapse from occurring in susceptible soils:
		 Fluid volumes, annular pressure and cutting returns should be strictly monitored to ensure bore hole plugging and fluid losses are detected and addressed immediately.
		• If challenging soil materials are anticipated, alternative drill paths should be evaluated to limit exposure to these types of materials.
		 Drilling mud should be maintained in the borehole until the pipeline is installed. This can be facilitated by positioning the entry and exit points in areas with cohesion-less soils (e.g., silt-sand zones).
		Drilling Mud Release (Inadvertent Returns) Mitigation Measures
		The following mitigation measures should be employed to reduce the risk of lost drilling mud circulation:
		 Install appropriate berms, silt fencing and secondary containment measures (i.e., plastic tarp) around drilling and drilling mud management equipment at both bore entry and bore exit locations to contain operational spills.
		 Clean up operational releases daily to prevent mobilization of drilling mud off site during rain events.
		 Design the directional drill so that drilling slurry pressure is reduced and the drilling rate is lowered in porous materials to reduce the chance of loss of circulation of the drilling slurry.
		 Maintain smooth operation of the drilling string and slurry pumping systems to avoid pressure surges.

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		• Reduce slurry viscosity through appropriate filtering of drilled material to reduce the pressure gradient along the drill path due to frictional effects.
		 Continually monitor slurry volumes to enable a quick response to any indications of lost circulation.
		 Immediately contain any drilling mud that escapes onto land and transfer it into an on-site containment system.
		 In addition to the items mentioned in the General Mitigation Measures above, the following materials should be on hand during drilling operations and prepared to employ them in the event of a drilling mud spill or inadvertent return:
		– sandbags
		 hydrovac truck
		 T-bar posts and post pounders
		– 5 gallon pails
		– Squeegees
		- Shovels
		 Polyethylene sheeting
		– Culvert
		Trenched Crossing Mitigation Measures
		The contingency method for HDD crossings is a trenched crossing. Should in-water work be required, consultation and permit revisions with Quinte Conservation and/or DFO may be required. In-water work would only be permissible as outlined in the permit. If in-water works are required, the following measures are applicable to trenched
		crossings.
		Flow Diversion/Dewatering
		If in-water works are required, the work area will be isolated from the remainder of the surface water feature. Downstream flows will be maintained using dam and pump or dam and flume techniques. When dewatering the work area, dewatering operations will be managed to prevent erosion and/or release of sediment laden or contaminated water to the waterbody (e.g., settling basin, filter bag,
		energy dispersion measures). An isolation/containment plan will be designed and implemented to isolate temporary in-water work zones
		and maintain flow around the work zone. Maintenance of downstream flow will avoid potential upstream flooding and desiccation of downstream aquatic habitat and organisms. To further
		reduce the potential for flooding during construction, the weather

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		forecast will be monitored prior to the start of construction to ensure that in-water works occur during a dry period. Fish Rescue Plan Prior to dewatering the work zone, fish trapped in the construction area will be collected and moved using capture, handling, and release techniques to reduce harm and stress. Fish rescue plans will be developed on a site-specific basis and implemented by qualified professionals with the appropriate permitting in place (i.e., a License to Collect Fish for Scientific Purposes). Site Restoration and Riparian Planting Following construction, the bed and banks of the crossing locations will be restored to pre-construction conditions to the extent possible in accordance with environmental permits. Exposed banks will be re- vegetated with native plants to provide riparian cover and aid in erosion and sediment control. Stream beds will be restored to maintain slopes and tie in with existing grades. Bed material will be replaced to match pre-construction conditions.
Terrestrial Resources Section 4.4.2	Forest and Vegetation Communities Vegetative cover in the road allowance generally consists of common, hardy plant species that are adaptable to disturbed environments. The Study Area is dominated by agricultural forage crops, some wooded areas, rural residential properties, parkland, meadows, mature hedgerows, and wetlands. Without appropriate mitigation measures, construction activities can adversely impact trees and other vegetation through soil compaction, removal of topsoil and equipment encroachment, causing irreversible damage to roots or trunks and destroying the structural integrity of vegetation or soils. Any filling, excavation, grading or trenching (if required) in the root area of a tree has the potential to cause irreversible damage. Where there is natural vegetation within or adjacent to the Project components, potential impacts include the removal of native vegetation, introduction or spread of invasive species, and indirect effects such as dust, erosion, and accidental spills.	 The following mitigation measures, or equivalent, should be implemented to reduce impacts on forest and vegetation communities: Tree clearing should be scheduled to occur outside of the breeding bird window (i.e., not occur between April 1 and August 31) to comply with the MBCA and the active season for bats (April 1 to September 30). Where limited tree clearing is required during this window, a breeding bird survey can be completed to identify evidence of nesting and areas to be avoided. Construction traffic should be restricted to the existing road allowance where possible to avoid potential compression damage to the root zones of trees located adjacent to the road allowance. Limits of the temporary workspace should be clearly marked to reduce encroachment into adjacent wooded areas and avoid unnecessary tree removal. Erosion-prone areas of the road allowance should be revegetated with suitable protective cover during and post-construction. Clearing should be reduced to the extent possible in sensitive areas such as woodlands and wetlands. Clearing should be done during dry soil conditions to the extent practical to limit disturbance to vegetation and terrain.

Net Impacts

With the implementation of the mitigation and protective measures, no significant adverse residual impacts on forest and vegetation communities are anticipated.

 \bigcirc

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		• Construction traffic should be restricted to the existing road allowance where possible to avoid potential compression damage to the root zones of trees located adjacent to the road allowance.
		 Native topsoil should be preserved through topsoil salvage and separation.
		• High-traffic or erosion-prone areas of the road allowance should be revegetated with suitable protective cover during and post-construction.
		 Should significant <i>Phragmites australis</i> stands be identified during field investigations, a <i>Phragmites australis</i> management plan should be developed.
		• A re-vegetation program should be developed and implemented for all vegetated temporary work areas. Enbridge Gas should consult with landowners and Quinte Conservation to confirm replanting plans.
		• Seeding of the disturbed temporary work areas and the permanent easement should be done with a native seed mix approved by Quinte Conservation. Replaced soils should contain native seed bank, facilitating successful revegetation.
		 Reclamation in residential/commercial land areas traversed by the road allowance should involve seeding (or sodding) the disturbed areas and replacement of ornamental trees and shrubs.
		 One year following construction, planted vegetation should be inspected for survival; in areas of severe dieback, dead and diseased planted vegetation should be replaced.
		 The following criteria are recommended to be taken into consideration when selecting a seed mix for use in natural vegetation areas:
		 Site specific conditions such as climate, soil types and terrain should be considered.
		 Only local native species should be included.
		 A fast-growing seed mixture requiring little or no maintenance should be selected.
		 Seed mixture should be consistent with the land use of the area.

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		 If there is no suitable local native seed mix available but seeding is deemed desirable to promote rapid revegetation of an area, a non-invasive annual nurse crop such as annual ryegrass should be used instead.
		 Purchased seed should be certified free of weeds.
		 Invasive Species To prevent the spread of invasive species, equipment shall be inspected and cleaned of soils and plants prior to leaving the depot, moving within, or leaving any work site to prevent the spread of invasive species.
		• Cleaning equipment of soils and plants must involve the following (whether cleaning at a depot or on a work site):
		 When possible, clean equipment on nearby hard surfaces such as gravel, concrete, or asphalt.
		 Choose an area with a gentle slope to direct water and material away from the equipment.
		 Do not clean equipment within 30 m of a watercourse, storm sewer, or other drains.
		 Use shovels, compressed air, pressure washers, etc. to remove dirt, debris, and plants.
		 Ensure you clean hard-to-reach places including the underside of a vehicle, mud flaps, bumpers, and foot wells.
	Clean inside a vehicle by sweeping or using compressed air.	
	Wetlands The potential impacts on wetlands during construction include accidental contaminant	Wetlands encroaching the road RoW may be crossed by HDD. In addition to HDD mitigation measures, the following are recommended to be employed:
	release, sedimentation and turbidity from surface runoff, introduction of invasive species and temporary lowering of the water table during trench dewatering. Clean-up and restoration activities to contain or remove contaminant and sediment releases can cause more damage to sensitive wetland ecology than the initial impact of the release. Therefore, it is important to institute	• A screening field program of wetlands and riparian areas should be undertaken prior to construction, to determine where precautionary measures (e.g., equipment washing before site access) may be necessary to mitigate for the spread of non-native species.
		• Work within a wetland, including the potential location of the pipeline, may require permitting discussions with Quinte Conservation under O. Reg. 319/09.
	appropriate mitigation measures to reduce interactions with adjacent wetlands.	• Construction material, excess material, construction debris and empty containers should be stored away from adjacent wetlands.

Net Impacts

With the implementation of HDD construction and the mitigation and protective measures, no significant adverse residual impacts on wetlands are anticipated.

Environmental Feature(s)	Potential Impact(s)		Mitigation and Protective Measures
	As construction is planned in the previously disturbed road allowance, no adverse interactions	•	Temporary workspace width should be reduced when working within 30 m of wetlands, where practical.
	are expected to occur with wetlands along the PR. However, to protect these features, construction	•	Staging areas should be located at least 30 m away from the edge of wetlands.
	activities undertaken in proximity should include the following mitigation measures.	•	Equipment should be free and clear of debris prior to moving between locations to prevent the spread of non-native species through the use of pneumatic devices, equipment washing, washing stations, etc.
		•	Construction dewatering should be discharged to sediment removal basins if discharge to a well-vegetated dry area is not feasible. The sediment removal basin should be located to maximize the distance to the nearest surface water feature and reduce the slope of the surrounding buffer area. The basin should consist of a temporary enclosure constructed with hay bales, silt fence or both.
		•	All activities, including equipment maintenance and refueling, should be controlled to prevent entry of petroleum products or other deleterious substances, including any debris, waste, rubble or concrete material, into a wetland, unless otherwise specified in the contract.
		•	Recommended erosion control measures specific to wetlands should include the following:
			 surface runoff should be directed as overland flow with sufficient drainage structures to dissipate hydraulic energy
			 soil transport should be prevented by diversion of site runoff through shallow vegetated channels, placement of straw bales or sediment control fencing
			 sediment barriers should be installed along the edge of the road allowance to contain spoil within the road allowance, where required
			- natural drainage spacing should be provided around spoil piles
			 topsoil and subsurface soil should be stockpiled in separate piles with adequate spacing between the piles
			 temporary erosion/silt control structures (i.e., straw bales, sediment fencing should be used down gradient of spoil stockpiles, as necessary
			 temporary sediment barriers should be maintained until soils have been stabilized

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		 vegetation clearing should not be conducted within 30 m of a wetland unless required for site construction activity (i.e., within the road allowance)
		 if vegetation regeneration is unlikely immediately following construction (i.e., outside the growing season), all slopes adjacent to wetlands should be stabilized using geogrids or weed-free mulch for a minimum of 30 m from the wetland
		 Erosion control measures in both active and non-active construction areas should be regularly inspected until the site ha been adequately stabilized to prevent erosion.
	Wildlife and Wildlife Habitat	SOCC and ESA 2007 Protected Species
	Construction impacts on wildlife populations are associated with vibration and compaction of the shoulder as well as direct mortality from animal- vehicle collisions as a result of increased	• Locations of habitats of END, THR, SC, rare species, and SWH along the PR will be confirmed during supporting surveys in spring/summer 2023. Additional mitigation measures will be developed as appropriate following these studies.
	construction traffic, temporary avoidance behavior due to the presence of humans and equipment, and direct loss of habitat (e.g., destruction of nests or alteration of pesting habitat). No new lands or	• If SAR and/or their habitat are found in the Study Area, Enbridge Gas will undertake consultation with the MECP to identify species specific mitigation and/or permitting requirements under the ESA
	alteration of nesting habitat). No new lands or natural areas are anticipated to be assumed for this Project. Because the Project will be working in a road allowance, mitigation will be primarily targeted at SOCC and ESA 2007 protected species that are known to occur in the area such as turtles, bats, and birds. The preferred habitat for SOCC and ESA 2007 protected species is generally not present in the road allowance; however, mitigation measures are detailed below with regulatory requirements (if any) for SAR to be determined by the MECP.	 Detailed design of the preferred pipeline location within the road allowance will be reviewed after field surveys in spring/summer 2023 are completed to avoid and reduce the likelihood of impact upon wildlife and wildlife habitat to the extent possible. This includes habitats of endangered, threatened, special concern, rare species and SWH.
		• Trench operations should be followed as closely as practical with backfill operations, to facilitate the movement of wildlife across the trench.
		 Gaps in stockpiles should be created, in consultation with a biologist, to allow for the potential movement of wildlife across th RoW.
		• Fencing should be erected around deep excavations to prevent wildlife entrapment.
		• Prior to construction activities, a worker awareness program should be implemented that includes SAR and SAR habitat identification as well as wildlife encounters and reporting protocols.
		Equipment and vehicles should yield to wildlife.

Net Impacts

With the implementation of the mitigation and protective measures, no significant adverse residual impacts on wildlife habitat, wildlife, SAR, or SWH are anticipated.

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		The contractor should inform their personnel to not threaten, harass or injure wildlife.
		• If wildlife is encountered during construction, personnel are required to move away from the animal and wait for the animal to move off the construction site.
		 A Wildlife Scientific Collector's Permit (MNRF authorization) will be required to handle wildlife (e.g., turtles).
		• ESA 2007 protected species cannot be handled unless authorized by MECP and MNRF.
		 Any SAR individual that is incidentally encountered in the Study Area must be allowed to leave of its own accord.
		 Should on-site personnel be unable to allow an incidentally encountered SAR individual to disperse from the active construction area under its own ability, measures developed in consultation with MECP will be implemented.
		• SAR individuals that are encountered in the work zone should be reported to the MECP staff in 48 hours of the observation or the next working day, whichever comes first. SAR observations will also be reported to the NHIC after construction has been completed.
		• If an injured or deceased SAR is found, the specimen must be placed in a non-airtight container that is maintained at an appropriate temperature and a registered wildlife rehabilitation facility will be contacted.
		Amphibians
		 Where practical, avoid construction in the vicinity of areas that may provide habitat for amphibians during the amphibian breeding season (March 1 – June 30). Amphibian habitat will be identified during 2023 field investigations.
		Bats
		• Areas of potential bat maternity roosting habitat will be identified during 2023 field investigations. Tree removal in identified areas should be limited to the extent possible and will avoid the active season for bats (April 1 to September 30).
		 If tree removal is required, mitigation recommendations for SAR bats will be prepared upon consultation with MECP.

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		Birds
		• Construction activities with the potential to remove migratory bird habitat, such as vegetation clearing, should be avoided during the breeding season which is generally from April 1- August 31 in southern Ontario (Environment Canada 2020). Should vegetation clearing activities be unavoidable during this window, a mitigation program should be developed, which includes measures to reduce and avoid impacts to migratory birds and their nests. This program should include preventative and mitigation measures but may also include avoidance of clearing during key sensitive periods and in key locations.
		 Bobolink and Eastern Meadowlark are expected to occur in meadows, pastures, and hayfields that may overlap with the Project location. Avoidance of work within these areas between May 1 and July 31 are recommended to avoid impacts to these species. Consultation with MECP is recommended or exemptions under O. Reg. 830/21 may be applicable.
		Turtles
		• Shallow marshes, ponds, lakes, or watercourses identified in the Study Area may have the potential to provide habitat for Blanding's Turtle or other turtle SOCC. Regulatory requirements for Blanding's Turtle are at the discretion of the MECP, with recommended mitigation measures outlined below.
		• Implement ESC measures as outlined in this table to protect turtle habitat (wetlands).
		 Exclusion fencing (e.g., silt fence) should be erected prior to activities occurring during the active season (e.g., April 1 – September 30) in areas identified as having turtles (plus a buffer of 30 m for SOCC species, 250 m for Blanding's turtle) or as being high potential, such as stream/river crossings, lake shores, ponds, wetlands, dips or valleys between rock outcrops, and wetted ditches connected to natural water features.
		• No heavy machinery should be permitted on the shoulder of the road past the exclusion fencing to prevent compaction and prevent destruction of nests and habitat.
		• Where possible, restrict construction activities within 30 m of a nesting site.

 \bigcirc

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
	• • • • •	Plants
		 Confirm if Butternut and Black Ash trees are located within 25 m of temporary workspace and potential excavation. Conduct Butternut Health Assessments, if applicable and consult with the MECP for potential disturbances to butternut and black ash trees. HDD may be an option to bypass ground disturbance work within 25 m of SAR trees if amicable to MECP. Otherwise, exemptions may be provided under O. Reg. 830/21 Part V with the submission of mitigation plan or a fee may be submitted under O. Reg. 829/21, if required.
		Other Wildlife
		 Nuisance and large wildlife encounters or incidents involving wildlife should be reported to the MNRF.
		• Food waste and other debris should be properly contained and should be collected and removed from the site on a daily basis to an approved disposal facility.
		• During construction, motorized construction equipment should be equipped with mufflers and silencers.
		 Company and construction personnel should avoid idling of vehicles; vehicles or equipment should be turned off when not in use, unless required.
		• The contractor should implement site practices during construction that are in line with the Environment Canada document 'Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities' (Environment Canada, 2005), to reduce indirect impacts to wildlife which may include:
		 maintaining equipment in compliance with regulatory requirements
		 protecting stockpiles of friable material with a barrier or windscreen in the event of dry conditions and dust
		 dust suppression of source areas
		 covering loads of friable materials during transport.
		 Construction should be conducted as expeditiously as possible, to reduce duration of activities.

 \bigcirc

Environmental Feature(s)	Potential Impact(s)		Mitigation and Protective Measures
		S	ocio-Economic Environment
Residents and Businesses Section 4.5.1	During pipeline construction residents and cottagers in the Study Area may experience a general nuisance, and temporary disruption in the use and enjoyment of their property and in the use of local roads from associated vehicular traffic, dust, and	•	Additional correspondence with residents adjacent to the Project should be held in advance of construction commencement. Contact information for a designated representative should be available prior to and during construction to address questions and concerns.
	equipment exhaust. Residents and business owners may experience temporary access disturbance. Construction activities also have the potential to	•	Motorized construction equipment should be equipped with mufflers and silencers as available.
	disturb the perceived aesthetic value that residents place on their property and the area in general. Potential safety concerns for residents also exist at	•	Company and construction personnel should avoid idling of vehicles; vehicles or equipment should be turned off when not in use unless required for operation of the vehicle or equipment.
	locations where properties, residents, and vehicles come in proximity to construction activities.	•	Construction activities should adhere to the Prince Edward County Noise By-Law 900-2002, which states that no person shall cause, or permit noise airing out of or created by construction or construction equipment before 7:00 am and after 7:00 pm.
		•	Watering for dust control should not result in the formation of puddles, rutting by equipment or vehicles, the tracking of mud onto roads, or the siltation of watercourses.
		•	Where pipeline construction activities and machinery have the potential to temporarily affect the local landscape, restoration of the construction area will leave little evidence that a pipeline exists. Construction should be conducted as expeditiously as possible, to reduce duration of activities. Tree removal should be reduced to the extent possible. Where tree removal is necessary, re-vegetation should occur in consultation with the landowner. Vegetative buffers at watercourse and road crossings should be restored where feasible.
		•	Access to driveways and roads should be maintained as practical during the construction period. The pipeline, once constructed, will not restrict access.
		•	The Constructor should protect lawns against damage by spoil, using tarpaulins, and/or plywood sheets. Wherever necessary, the Constructor must provide crossings to permit the landowner or tenant to have access to their property.
		•	Safety fence should be installed at the edge of the construction area where public safety considerations are required.

Net Impacts

With the implementation of the mitigation and protective measures, no significant adverse residual impacts on residents and businesses are anticipated.

5 Potential Impacts, Mitigation and Protective Measures and Net Impacts July 11, 2023

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		 The contractor should implement a Traffic Management Plan for all roads affected by construction, which at a minimum outlines measures to: control the movement of materials and personnel to and from the construction site post signs to warn oncoming motorists of construction activity control traffic at road crossings reduce on-road disturbance and land closures store equipment as far from the edge of the road as practical install construction barricades at road crossings
Demographics Section 4.5.3; Economy and Employment Section 4.5.3	 Project demands for labour and goods and services can result in both beneficial and adverse effects. Positive effects may not be evenly distributed among populations, with some residents in a better position to receive economic benefits than others. Similarly, adverse effects may affect some residents more than others. Residual effects on employment are related to the project's labour demand compared to the labour supply. Three types of employment are considered: Direct employment: labour that is hired directly for the project Indirect employment: labour hired by companies in order to produce and provide goods and services needed for the project Induced employment: labour hired by industries that produce and provide consumer items and services purchased by people who are directly or indirectly employed by the project Labour conditions will be affected by direct, indirect, and induced employment during all project phases. The Project could affect business through purchases of labour, goods, and services from local businesses, including businesses owned by Indigenous peoples, and will result in increased local employment income and municipal government revenue. Local businesses will likely benefit from supplying the Project with goods and services. 	 It is expected that the Project will generally result in positive effects on employment by employing local and Indigenous people. These positive effects do not require mitigation, but Enbridge Gas should identify and implement various mechanisms to enhance project benefits: Enbridge Gas has and will continue to work with local and Indigenous businesses to enhance their potential for successfully bidding on project contracts regarding the supply of goods and services, particularly for the operation phase. One initiative to help encourage further local and Indigenous content on the Project is to post Project purchasing requirements in advance, so that businesses can position themselves to effectively bid to supply goods and services needed for construction and operation. Increased participation of local and Indigenous businesses, the following mitigation and protective measures should be followed: Enbridge Gas should engage with landowners, businesses, and the County to address access to the Study Area and any portion of land that will be altered as part of site preparation, and long-term changes.

Net Impacts

With the initiatives to encourage local and Indigenous participation on the Project, it is anticipated that the effects from the Project on employment and business will be positive, including creating positive economic activity through new direct, indirect, and induced employment. Project expenditures on local businesses and suppliers also have the potential to positively affect the local economies.

Consultation with residents and businesses should be conducted to address any concerns to their operations.

With the implementation of the mitigation and protective measures, no significant adverse residual impacts on employment and business are anticipated.

July 11, 2023

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
Community Services & Municipal Infrastructure Section 4.5.4	The presence of temporary workers in the local communities during the construction period has the potential to increase the demand for housing and local community services and infrastructure. Non-local Project workers are expected to stay in temporary accommodations, including hotels, motels, and campgrounds. As there are limited temporary accommodations available in or adjacent to the Study Area, it is anticipated that non-local project workers will stay in accommodations closer to larger towns and cities, such as the Community of Picton and the City of Belleville. Non-local Project workers may also choose to rent cottages or apartments. The vacancy rate for temporary rentals will likely be able to accommodate the temporary increase. The short duration of the Project, as well as the structure of the work shifts, will limit the need for workers to use the services and infrastructure in local communities. The transportation infrastructure. Also, increased traffic volumes along local road networks could increase travel times and reduce road safety, which might lead to increased use of local emergency services due to potential vehicle accidents and workplace accidents. In addition, the production of Project-related waste could place additional stress on the capacity of local landfills. During operation, the workforce will remain the same as current operations with no planned changes. Potential impacts on institutional services along the PR are an increased use of emergency and medical services is expected to be able to respond to minor safety incidents which may arise.	 Project employees might require medical attention while staying in the area. The contractor and Enbridge Gas should have emergency response equipment and trained personnel on-site during construction. In addition, an Emergency Response Plan will be developed and implemented, which will address field health services, emergency call-out procedures and fire response plans. Safety fencing will be used where necessary to separate the work area. Environmental mitigation should be in place to reduce the likelihood of emergency events on site. If an emergency incident were to occur, it is anticipated that the comprehensive mitigation, contingency plans, and safety strategies will result in a localized and low-intensity response. The capacity of waste disposal sites will be considered and if Project needs are not easily accommodated, alternative disposal locations will be considered. Enbridge Gas should provide Project information to local communities and service providers so that they are prepared for any possible demand on community services and infrastructure related to a temporary population increase. Additional correspondence with residents and businesses adjacent to the PR will be held in advance of construction commencement to discuss potential specific impacts to the property or business. Contact information for a designated Enbridge Gas representative should be available to address questions and concerns during construction. Consultation has been initiated and should continue with municipal personnel. Contact information for a designated Enbridge Gas representative will be available to address questions and concerns during construction. Consultation has been initiated and will continue with County personnel.

Net Impacts

Community services and infrastructure appear to have additional capacity to absorb potential increased temporary demands that may result from the Project.

Given the available capacity of the local community services and infrastructure, along with the implementation of the mitigation and protective measures, no significant adverse residual impacts on community services and municipal infrastructure are anticipated.

 \bigcirc

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
	The construction of the Project may temporarily interfere with institutional facilities. Potential impacts include noise, dust and equipment exhaust associated with construction activity. Construction activities will temporarily affect the aesthetic landscape of the construction area. Potential safety concerns exist due to the proximity of construction activities to the facilities.	
Infrastructure Section 4.5.6	The potential to damage, cause service interruptions, and compromise the safety of workers	 Approval should be sought from Prince Edward County for the pipeline crossing of County roads.
	and surrounding residents may result from interactions with roads and utilities (both buried and overhead).	 The contractor should adhere to Enbridge's requirements for roac crossings by HDD or open cut as outlined in the Enbridge Construction and Maintenance Manual (October 27, 2021).
		• Prior to the commencement of construction Enbridge Gas should continue to consult with other third-party utility owners/operators in the Study Area.
		• Prior to the commencement of construction Enbridge Gas should obtain subsurface utility engineering data for the route. The contractor should be responsible for locating and exposing existing pipelines and utilities on lands which will be affected by trench excavation.
		 Machine operators will be informed where electrical transmission lines are present overhead. Lines that may interfere with the operation of construction equipment will be identified with warning poles strung together with rope and suspended red flags.
		• Measures to mitigate induced voltage effects should be followed and are outlined in the Enbridge Construction and Maintenance Manual (October 27, 2021).
		 All necessary third-party utility permits and conditions should be met.

Net	Impacts
-----	---------

With the implementation of the mitigation and protective measures, no significant adverse residual impacts on infrastructure are anticipated.

July 11, 2023

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures		
Culture, Tourism and Recreational Facilities Section 4.5.7	Residential, cottage, and business properties may experience noise, dust and equipment exhaust associated with construction activity. Construction activities will temporarily affect the aesthetic landscape of the construction area and could impede property access. Potential safety concerns also exist at locations, where residents, visitors, and cottagers may be in close to construction activities.	 Construction of the Project may temporarily interfere with the use of the cultural and recreational facilities. Potential impacts include noise, dust and equipment exhaust associated with construction activity. Construction activities will temporarily affect the aesthetic landscape of the construction area. Potential safety concerns exist due to the proximity of construction activities to the facilities and known hiking trails. Signage and fencing should be considered in areas adjacent to residential trails and sidewalks to alert trail and sidewalk users of construction. Other mitigation and protective measures for noise, dust and equipment exhaust, aesthetics and safety are outlined in section 4.5.7 'Air Quality and Noise' 		
Air Quality and Noise Section 4.5.8	Residential and business properties may experience noise, dust and equipment exhaust associated with construction activity. During operation of the Project no substantial air or noise emissions are anticipated to occur.	See section 4.5.1 'Residents & Businesses' for mitigation measures relating to air quality and noise.		
Indigenous Interests, Land Use and Traditional Knowledge Section 4.5.8	Enbridge Gas has sought initial input from the identified Indigenous communities and will continue engaging with Indigenous communities as the Project moves forward. Based both on the initial input provided from communities and the experience of Stantec in providing environmental services for natural gas pipelines, there is a potential that the Project may impact traditional territories of Indigenous communities, and during construction, harvesting and hunting in the construction RoW could be impeded. Archaeological surveys could also result in the finding of Indigenous artifacts. There is a potential that additional impacts on Indigenous interests, land use, and Traditional Knowledge (not identified above) may exist that have not yet been identified.	 To continue to build an understanding of potential impacts and appropriate mitigation and protective measures, Enbridge Gas will continue engaging with Indigenous communities as the Project moves forward. Indigenous communities will be invited to participate in the Project's archeological work and Enbridge Gas will continue to work with their respective Economic Development departments and Enbridge Gas' contractors to find opportunities for their participation in providing goods and services during construction. Indigenous communities will also be invited to review a copy the ER and upon review, Enbridge Gas will request that any comments or concerns regarding the report or the findings identified within be brought to the attention of Enbridge Gas representatives. Through ongoing consultation with communities during review of the ER and archaeological work, Enbridge Gas and Stantec aim to achieve a meaningful integration of indigenous knowledge and values into Project level decision-making and reporting 		
		Information on the current state of Indigenous engagement will be provided in the application to the OEB.		

Net Impacts

With the implementation of the mitigation and protective measures, no significant adverse residual impacts on culture, tourism, and recreational facilities are anticipated.

With the implementation of the mitigation and protective measures, no significant adverse residual impacts from air quality and noise are anticipated.

With the implementation of the mitigation and protective measures and on-going engagement with communities, at the time of writing this ER, no significant adverse impacts on indigenous interests, land use or traditional knowledge are anticipated.

July 11, 2023

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	
Land Use Section 4.5.9	Natural gas pipelines and their associated facilities/structures are permitted land uses, and therefore no impacts are anticipated.	 As no impacts to land use designations are anticipated, no mitigation or protective measures are recommended. 	
Landfills and Contaminated Sites Section 4.5.9	Improper disposal of waste material generated during construction may result in contamination to soil, groundwater, and/or surface water resources on and off the construction site. Litter generated during construction may also become a nuisance to adjacent properties if not contained.	All construction wastes should be disposed of in accordance with Enbridge Construction and Maintenance Manual (October 27, 2021). Additionally, Enbridge Gas should undertake responsible management of excess fill. When details on excess fill volumes are known, disposal locations should be determined, and appropriate permitting obtained.	
	The PR is not expected to cross or be in the vicinity of lands that may have contaminants of concern, however the application of road salt for de-icing activities along the roadways in the Study Area represent a potential source of contamination.	 Suggested mitigation and protective measures include the following: Waste materials, sanitary waste, and recycling transported off-site by private waste contractors licensed by the MECP. Contractors required to remove their excess materials from the site. Labelling and storage of hazardous and liquid wastes in a secure 	
		 area that would contain material in the event of a spill. Implementation of a waste management program consisting of reduction, reuse, and recycling of materials. 	
		 Should contaminated soils be encountered during construction, Enbridge Gas should implement their Suspect Soils Program (see Enbridge Construction and Maintenance Manual (October 27, 2021) for further details). 	
		• Should excess soil be generated on-site during construction activities that will require off-site management, or if contaminated soils are suspected (e.g., if observed material contains anthropogenic substances, petroleum hydrocarbons odours/staining, and debris/waste), representative soil samples should be collected in accordance with O. Reg. 406 /19 and submitted for chemical analysis to determine management options and-appropriate handling and health and safety guidelines.	
		 Soils that cannot be reused on site may be reused off-site in accordance with O. Reg. 406/19. 	

Net Impacts

As no impacts are anticipated, no net impacts will occur.

With the implementation of the mitigation and protective measures, no significant adverse residual impacts from landfills or contaminated sites are anticipated.

July 11, 2023

 \bigcirc

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	
Archaeological Resources Section 4.5.10	 Two portions of the Study Area, approximately 7.2 ha or 2.7% of the Study Area, were identified to have been subject to previous archaeological assessments and were determined to not require any further archaeological work. Approximately 29.4 ha, or 11.1% of the Study Areas retains low to no potential for archaeological resources. The remaining portion of the Study Area, totaling 227.4 ha or approximately 86.2% of the Study Area, is comprised of manicured lawn, agricultural field, pasture, woodlot and scrubland or areas which were not specifically examined as part of the Stage 1 property inspection. This portion of the Study Area retains potential for the identification of archaeological resources. 	 The results of the Stage 2 AA will provide recommendations for further assessment, protection, and mitigation of archaeological resources. Where feasible for the project, archaeological sites that are determined to retain further cultural heritage value and interest should be mitigated in whole or in part by avoidance and preservation. If it should evolve that avoidance and preservation. If it should evolve that avoidance and preservation of Stage 4 salvage excavations. For any sensitive archaeological sites that could be subject to impact by the Project, the Stage 3 and 4 options will be evaluated in discussions with the appropriate Indigenous communities. Should previously undocumented archaeological site and therefore subject to Section 48(1) of the Ontario Heritage Act (Government of Ontario 1990). The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licenced consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the Ontario Services Act, 2002, S.O. 2002 c.33 (Government of Ontario 2002) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Government and Consumer Services (1-800-889-9768). 	
Built Heritage Resources and Cultural Heritage Landscapes Section 4.5.11	The MHSTCI <i>Criteria for Evaluating Potential for</i> <i>Built Heritage Resources and Cultural Heritage</i> <i>Landscapes</i> (the Checklist) checklist completed for the Project identified three indicators of cultural heritage value or interest in the Study Area.	Prior to construction, a Cultural Heritage Assessment Report will be undertaken and submitted to the MCM for their review and comment. The Cultural Heritage Assessment Report will contain mitigation measures for potential impacts, if required.	

Net Impacts

With the implementation of the AA and mitigation measures, including avoidance and protection/preservation (where feasible) and excavation, no significant adverse residual impacts on archaeological resources are anticipated.

With the implementation of the mitigation and protective measures, no significant adverse residual impacts on built heritage resources or cultural heritage landscapes are anticipated.

Cumulative Effects Assessment 6

The recognition of cumulative effects assessment as a best practice is reflected in many regulatory and guidance documents. Regarding the development of hydrocarbon pipelines in Ontario, the OEB Environmental Guidelines (2023) notes that cumulative effects should be identified and discussed in the ER.

Building upon the intent of the OEB Environmental Guidelines (2023), the OEB has specified that only those effects that are additive or interact with the effects that have already been identified as resulting from the project are to be considered under cumulative effects. In such cases, it will be necessary to determine whether these effects warrant mitigation measures. The cumulative effects assessment has been prepared with consideration of this direction from the OEB.

Methodology 6.1

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

Cumulative effects include the temporal and spatial accumulations of change that occur within an area or system due to past, present, and future activities. Change can accumulate in systems by either an additive (i.e., cumulative) or interactive (i.e., synergistic) manner. Positive residual effects have not been assessed in the cumulative effects assessment.

By applying the principles of avoidance, minimization, and compensation to limit projectspecific effects, potential adverse residual effects on environmental and socio-economic features have been greatly limited before accounting for the effects of other unrelated projects.

The cumulative effects assessment methodology is designed to evaluate and manage the additive and interactive effects from the following sources:

- Existing infrastructure, facilities, and activities as determined from available data sets
- The proposed Project
- Future activities where the undertaking will proceed, or has a high probability of proceeding



Although rare in occurrence, it is plausible that accidents or emergency events may arise due to an unforeseen chain of events during the Project's construction or operational life. Due to the rarity and magnitude of such events, they have not been assessed here, as they are extreme in nature when compared to the effects of normal construction and operation activities and require separate response plans.

6.2 Study Boundaries

Spatial

To make assumptions about the magnitude and probability of effects, an approximate 100 m boundary around the PR was used for the cumulative effects assessment. The 100 m boundary has been found, through previous experience with pipeline construction, to be appropriate for the most commonly encountered net effects.

Temporal

The temporal boundaries for the cumulative effects assessment reflect the nature and timing of Project activities, and the availability of information surrounding future projects with a high probability of proceeding. The Project schedule identifies three key milestone activities:

- 1. ER and technical design 2023
- 2. Construction Q4 of 2023 to Q3 2025
- 3. Operation and Maintenance 2026 to 2076*

*Fifty years of operation is used as an assumption, although the Project may be operational beyond fifty years.

Based upon these milestone activities, two time periods were selected for evaluation: Q4 of 2023 to 2025 and 2030. The years 2023 and 2025 were selected to represent the construction period, and the year 2030 was selected to represent the operation and maintenance period. Forecasting beyond 2030 increases the uncertainty in predicting whether projects will proceed, and the effects associated with these projects.

6.3 **Project Inclusion List**

As part of the study of cumulative effects, projects that are either currently existing, and those that have been approved and are scheduled (or are likely to be scheduled) during the construction period and early operation and maintenance of the Project, were reviewed and added to the project inclusion list. The list was developed by reviewing publicly available information for projects and activities with the potential for effects to interact with the identified effects of the proposed Project in the spatial and temporal study boundaries. The following resources were reviewed:

- Impact Assessment Agency of Canada, Canadian Impact Assessment Registry (IAAC 2022)
- Government of Ontario, Environmental Assessment Projects by Category (Government of Ontario 2022)
- Government of Ontario, Renewable Energy Approval Projects (2022b)
- MTO, Ontario's Highway Programs Interactive Map (MTO 2022)
- Infrastructure Ontario, Instructure Ontario Projects Interactive Map (Government of Ontario n.d.)
- Canada Energy Regulator, Major Applications and Projects before the CER (CER 2021)
- OEB Applications Currently Before the Board (OEB 2022)
- TC Energy, Natural Gas Operations Project Overview webpage (2021)
- Prince Edward County, Prince Edward County Transportation Master Plan (Prince Edward County 2021b)
- Prince Edward County, Prince Edward County Cycling Master Plan (Prince Edward County 2021c)
- Prince Edward County, Prince Edward County Development Services Applications Dashboard (Prince Edward County 2020b)
- Prince Edward County Official Plan (Prince Edward County 2021a)
- Prince Edward County, Picton Urban Centre Secondary Plan (Prince Edward County 2015)
- Prince Edward County, Comprehensive Zoning By-Law No. 1816-2006 (Prince Edward County 2019)
- Prince Edward County, 13-T-21-503, OPA-05-21 & Z21-21 (Loyalist Heights) (Prince Edward County 2022)

Cherry Valley Community Expansion Project: Environmental Report 6 Cumulative Effects Assessment

July 11, 2023

- Greer Galloway Consulting Engineers, Environmental Impact Study Report Loyalist Heights Development Sandy Hook Road, Picton, Prince Edward County (Greer Galloway Consulting Engineers 2020)
- Paradigm Transportation Solutions Limited, Loyalist Heights (Picton) Transportation Impact Study (Paradigm Transportation Solutions Limited 2020)

Based on the review of publicly available resources, the project inclusion list in Table 6.1 outlines the two projects for consideration of cumulative effects*:

Project Name	Project Location	Owner	Project Description	Interaction with the Proposed Pipeline
Loyalist Heights Developm ent	Southeast of Highway 33 and Sandy Hook Road (County Road 1)	Mr. Narisu Huhe	The proposed development includes 392 housing units: 201 single family semi-detached and townhomes units, 156 apartment units, and 35 senior units. The development also includes trails, cycling areas, and a parquette (Greer Galloway Consulting Engineers 2020).	The build-out of the Loyalist Heights Development is anticipated to be complete by 2027 (Paradigm Transportation Solutions Limited, 2020). Construction of the Project will overlap with the construction of the Development.
Proposed Spine Route	In the Project footprint, construction is to occur at the County Roads1 and 10.	Prince Edward County	A Spine Route is proposed to be built along County Road 1 (Sandy Hook Road) and 10. According to the Prince Edward County Cycling Master Plan (2021b), Spine Routes are dedicated cycling infrastructure such as Paved Shoulders, Bike Lanes, Multiuse Paths and Trails. These routes serve to complete gaps in the existing network and to improve opportunities for cycling in Prince Edward County.	Construction, and early operation and maintenance, of the Project may overlap with the construction of the Spine Route (paved shoulder) planned for County Road 1 (Sandy Hook) and 10.

 Table 6.1:
 Project Inclusion List for Cumulative Effects

Cherry Valley Community Expansion Project: Environmental Report 6 Cumulative Effects Assessment

July 11, 2023

In addition to the above, it is assumed that on-going improvements, upgrades, and maintenance to County Road 1 (Sandy Hook Road), 10, and 11, may occur in the spatial and temporal study boundaries.

6.4 Analysis of Cumulative Effects

The ER considers the potential impacts of the project on specific features and conditions and proposes mitigation and protective measures to eliminate or reduce the potential impacts. The cumulative effects assessment evaluates the significance of residual impacts (after mitigation) of the project along with the effects of other unrelated projects.

6.4.1 Construction – October 2023 to July 2025 (not continuous)

The County aims to construct the Spine Route (which are essentially paved shoulders) in the Project Area from 2021 to 2041 (Prince Edward County, 2021b). It is likely that the construction of this project may overlap with construction of the Enbridge Project. Ideally, Project construction should occur prior to construction of the County's projects to avoid the need for repaying of the shoulder that may be excavated for installation of the pipeline. It is recommended that Enbridge Gas continue engagement with municipal officials to better understand construction timing and coordinate the build-out of these projects.

The construction of the Loyalty Heights Development may likely overlap with construction the Project (Paradigm Transportation Solutions Limited, 2020). Cumulative nuisance construction impacts (noise and air pollutants and increase in dust from the operation of vehicles and equipment and traffic) may be felt for residences on and users of County Road 1 (Sandy Hooks Road) where these two developments will occur. Enbridge Gas should coordinate with developers on a Traffic Management Plan and construction schedules to lessen cumulative nuisance impacts.

Residual project impacts which may occur during Project construction are outlined in Sections 4.3-4.5. To consider the additive and interactive effects at their maximum intensity, the cumulative effects assessment assumes that operation of other unrelated facilities and Project construction will occur concurrently. Potential cumulative effects resulting from the Project construction and the concurrent nearby activities are additive effects on wildlife, air quality, the acoustic environment, and traffic.

The construction of the Project will result in an increase in noise and air pollutants and increase in dust from the operation of vehicles and equipment. These potential effects on air quality and the acoustic environment may be felt by nearby wildlife, residents, and businesses, and may be compounded by work being undertaken by the County along the municipal RoW, the development of Loyalty Heights Development, and potential construction occurring in the Heights Development Area. Provided that Enbridge Gas

Cherry Valley Community Expansion Project: Environmental Report 6 Cumulative Effects Assessment

July 11, 2023

continues to engage with the community, county officials, and developers, and provided construction of the Project is undertaken in compliance with Prince Edward County's Noise Bylaw and the mitigation and protective measures outlined in this ER, adverse residual cumulative effects are not anticipated to be significant.

6.4.2 Operation and Maintenance – Year 2026 to 2076

Development and maintenance activities which have a probability of proceeding during operation and maintenance of the Project include:

- Road works: Future road rehabilitation, resurfacing, and construction of the Proposed Spine Route in County Road 1 (Sandy Hooks Road), County Road 10, and County Road 18.
- Development works: construction of the Loyalty Heights Development (Paradigm Transportation Solutions Limited 2020) and potential construction in the Heights Development Area (Prince Edward County 2021c).

It is also assumed that on-going improvements, upgrades, and maintenance to municipal infrastructure such as bridges, culverts, drains, or roads may occur within the spatial and temporal study boundaries.

Potential cumulative effects resulting from the proposed Project operation and maintenance as well as the concurrent projects are additive effects on wildlife, air quality, the acoustic environment, and traffic. Operation and maintenance of the proposed Project will have relatively little impact on the environment. On a day-to-day basis there is no operational noise that is anticipated to occur following pipeline construction. Should an integrity dig be necessitated, this is the only anticipated instance when the Project will have potential temporary impacts (such as noise) during its operation.

During the operation phase of the Project, Enbridge Gas will conduct regular internal inspections on the pipeline system to determine if anomalies such as cracks, corrosion, or dents may be present. If an anomaly is dedicated, subsequent excavation along a section of the pipe will be required to confirm and field verify if maintenance work is required. This is known as an integrity dig. If necessitated, it can be assumed that during an integrity dig, the operation of construction vehicles and daylighting of the pipe may have potential impacts on the surrounding environment. These impacts, however, would be temporary and easily mitigated or reduced by following standard mitigation measures. Although dependent on the nature of the works, integrity digs are typically two to three weeks in duration.



Any operation and maintenance activities undertaken by Enbridge Gas, such as an integrity dig, will be completed in co-ordination with the Enbridge Gas Environmental Planning Team and will consider potential impacts on natural heritage and the socio-economic environment. Appropriate mitigation measures will be developed and implemented based on the proposed maintenance work and necessary agency permits and approvals will be secured, as required. Given the limited scale of impact of any potential operation and maintenance activities, it is anticipated that residual impacts will be minimal and that should any interaction occur with other projects, adverse residual cumulative effects are not anticipated to be significant.

6.5 Summary of Cumulative Effects

The potential cumulative effects of the Project were assessed by considering development that has a high probability of proceeding just prior to or concurrent with construction and operation of the Project. A 100 m boundary around the Project site was used to assess the potential for additive and interactive effects of the Project and other developments on environmental and socio-economic features.

The cumulative effects assessment determined that, provided the mitigation and protective measures outlined in this report are implemented and that concurrent projects implement similar mitigation and protective measures, potential cumulative effects are not anticipated to occur, or if they do occur are not anticipated to be significant.

7 **Monitoring and Contingency Plans**

7.1 Monitoring

The primary objective of compliance and effects monitoring is to check that mitigation and protective measures are effectively implemented and to measure the impacts of activities associated with construction on environmental and socio-economic features. Ultimately, the knowledge gained from monitoring is used to avoid or reduce issues which may arise during construction of subsequent pipeline projects.

Previous pipeline construction experience, and a review of post-construction monitoring reports from other projects, indicates that impacts from pipeline construction are for the most part temporary. The mitigation and protective measures to eliminate or reduce impacts are well known and have been shown to be effective. Enbridge Gas should adhere to the following general monitoring practices:

- Trained personnel should be on-site to monitor construction and should be responsible for checking that the mitigation and protective measures and monitoring requirements in the ER are executed. Enbridge Gas should implement an orientation program for inspectors and contractor personnel to provide information regarding Enbridge Gas' environmental program and commitments, as well as safety measures.
- Recommendations and commitments made in this ER and other applicable permits and reports should be incorporated into an Environmental Protection Plan (EPP) detailing construction activity. The EPP should also include site and feature specific mitigation. The EPP should become part of the contract specification with the contractor selected to construct the project, as noted in section Chapter 7 Mitigation Implementation and Monitoring of the OEB Environmental Guidelines (2023).
- A walking inspection of the entire PR should be completed three (3) months and 15 months after the in-service date to determine whether areas require further rehabilitation or as required by OEB conditions of approval.

The following sections list specific environmental monitoring activities recommended for the Project.

7.1.1 Exposed Soils

Where soils are exposed for construction activities, potential effects may include surface soil erosion and sedimentation of watercourses. Improper water discharge can lead to erosion and sedimentation. Monitoring of potential effects on exposed soils should occur by Enbridge Gas's on-site inspection team.

7.1.2 Water Wells

Before construction, a private well survey should take place to assess domestic groundwater use near the Project and determine the need for a well monitoring program, as outlined in Table 5.1.

7.1.3 Watercourse and Wetland Crossings

An Environmental Inspector should be on-site during sensitive watercourse and wetland crossings to monitor adherence to specifications and site plans. In particular, the Environmental Inspector should monitor that pre-construction preparation is complete prior to commencement of any work and that the floodplain conditions are restored to as close to preconstruction conditions as possible. The Environmental Inspector should be responsible for monitoring weather forecasts prior to the crossing to ensure conditions are appropriate for the crossing technique.

Follow-up inspections, three (3) months and 15 months after construction following spring runoff, should be completed to review effectiveness of the fill regulated area re-vegetation program, to check bank and slope stability, and to ensure floodplain drainage has been maintained. Appropriate remediation measures should be completed as necessary, and additional follow-up monitoring should be conducted.

7.1.4 Vegetation

During pre-construction clearing and construction, the Environmental Inspector should monitor the limits of clearing so as not to damage adjacent vegetation. The Environmental Inspector should identify any trees that pose a potential hazard and may require removal. If clearing is to be completed during the bird nesting season, nest sweeps should be completed no later than seven days prior to clearing activities. In addition, prior to any tree removals during the active season for bats it is recommended that a bat maternity roosting survey be completed to confirm the presence or absence of this species in the work area.

Establishment of vegetative cover should be monitored. Sediment control fencing and other protective measures should be retained in place until cover is fully established.



Cherry Valley Community Expansion Project: Environmental Report 7 Monitoring and Contingency Plans

July 11, 2023

7.1.5 Residents, Recreational Facilities and Businesses

Construction activities may impact directly affected landowners and surrounding residents and businesses. During construction, a designated Enbridge Gas representative should be available to monitor and respond to requests and concerns voiced by residents and business owners. Landowners affected by construction should be notified in advance of construction activities in their area, as feasible. The notification should provide the contact information for a designated Enbridge Gas representative.

Enbridge Gas's on-site inspection team should also monitor the contractors' implementation of the Traffic Management Plan to see that site access to residences and businesses has been maintained and that traffic is not being unnecessarily interrupted.

While efforts will be undertaken to reduce impacts, a comment tracking system should also be implemented. An Enbridge Gas representative should record the time and date of calls, the nature of the concern, the corrective action taken, and the time and date of follow-up contact.

Following completion of construction, Enbridge Gas should contact residents and businesses along the easement to continue ongoing communications where necessary. During the first 15 months particular attention should be paid to monitoring and documenting impacts associated with construction of the proposed pipeline.

7.1.6 Municipal Roads

Roads affected by pipeline construction should be restored to their pre-construction conditions to the satisfaction of the appropriate authorities' engineers. Road Superintendents should be given an opportunity to inspect any repairs or modifications. Once re-established, the crossing location of roads should be monitored following heavy rain events, and a year after construction following spring runoff, to ensure no road subsidence or major rutting has occurred and that the drainage system is functioning properly.

7.1.7 Built Cultural Heritage Resources and Cultural Heritage Landscapes

A Cultural Heritage Report will identify site plan controls and specific site-specific measures that are needed for the Project.



7.2 Contingency

Contingency planning is necessary to prevent a delayed or ineffective response to unexpected events or conditions that may occur during construction of the proposed pipeline. An essential element of contingency planning is the preparation of plans and procedures that can be activated if unexpected events occur. The absence of contingency plans may result in short- or long-term environmental impacts and possibly threaten public safety.

The following unexpected events require contingency planning during construction: private water well compliant, contaminated sites, watercourse sedimentation, inadvertent returns during HDD, accidental spills, and unexpected finds. Although unexpected problems are not anticipated to occur during construction, Enbridge and the contractor should be prepared to act. Construction personnel should be made aware of and know how to implement contingency measures.

7.2.1 Private Water Well Complaint

Enbridge Gas's Private Water Well Complaint contingency plan should be implemented in the unlikely event that residential well complaints arise during or after construction. The depth and existing condition of a given well is a significant factor in whether the well may be adversely impacted by nearby construction activities. The objective of any investigation related to interference of private water supply is to respond to the resident expediently and courteously and ultimately arrive at a resolution that is agreeable to both Enbridge Gas and the well owner.

In the event a resident registers a complaint with Enbridge Gas regarding a reduction of well water quality and/or quantity, Enbridge Gas will offer to arrange immediate provision of temporary potable or non-potable water, depending on the resident's needs, until the matter is resolved. Enbridge Gas will also offer to have a qualified hydrogeologist complete a well inspection, subject to the well owner granting permission. The hydrogeologist will visit the site to discuss the complaint with the resident and inspect the well and related complaint to the extent possible. The hydrogeologist will then provide advice to Enbridge Gas on further assessment if required, or advice on possible remedial options should they determine that the complaint may be related to the construction works.

7.2.2 Contaminated Sites (Suspect Soils Program)

Efforts have been made to identify potentially contaminated sites in the vicinity of the PR through a review of readily available information. Through circulation of the ER, the MECP will have an opportunity to review the PR in the event that other unknown areas of potential contamination may exist.

Regardless, the potential exists for unknown material to be encountered during construction. If evidence of potential contamination is found, such as buried tanks, drums, oil residue or gaseous odour, construction should cease, and Enbridge Suspect Soil Program should be implemented. In the event that potentially contaminated sites are encountered, the on-site contractor supervisor and owner representative should be notified immediately, as well as the following contact: Enbridge Gas Inc., Environment Department, 1-855-336-2056.

7.2.3 Watercourse Sedimentation

Properly installed ESC measures are designed to reduce the risk of sediment laden runoff being transported towards watercourses and other natural heritage features. Extreme runoff events could result in collapse of silt fencing, overflow or bypass of barriers, and other problems which could lead to sedimentation of watercourses.

If sedimentation occurs, immediate action should be taken to repair dysfunctional ESC features or install temporary measures that will contain the erosion as quickly as practical. When site conditions permit, permanent protection measures should be installed on erosion-susceptible surfaces. The source of sedimentation and degree of impact should be examined when conditions permit. If erosion and sedimentation results from a construction-related activity, the activity should be halted immediately until the situation is rectified.

7.2.4 Inadvertent Returns During HDD

The best way to avoid inadvertent returns is to monitor drilling operations continuously with experienced personnel trained in all aspects of the HDD process. Drilling fluid is used during the advancement of the drill string to erode the formation, aid in stabilizing the bore hole, and carry drill cuttings to the bore entry or exit. The viscosity and pressure of the drilling fluid is adjusted throughout the procedure to manage the HDD process. Jetting pressures will be limited to avoid a drilling fluid release (i.e., inadvertent return) during drilling. However, should a release of drilling fluid occur in the Project area an inadvertent return contingency plan should be implemented. Specifics of the contingency plan will be detailed in the project specific EPP.

7.2.5 Accidental Spills

During construction, an accidental spill may occur. The impact of the spill will depend upon the magnitude and extent of the spill, and the environmental and socio-economic conditions in which it takes place. Upon release of a hydrocarbon-based construction fluid, Enbridge Gas should immediately determine the magnitude and extent of the spill and rapidly take measures to contain it. Release of sediment should also be treated as a potential spill depending on the magnitude and extent. Spills should be immediately reported to Enbridge Gas's on-site inspection team and Environment Department. If necessary, the MECP Spills Action Centre should be notified at 1-800-268-6060. If requested through consultation, Indigenous communities identified on the Project Contact List should be notified of reportable spills.

A Spills Response Plan should be developed, reviewed with personnel, and posted in site trailers. Spill containment equipment should be readily available, especially near watercourses. Personnel should be trained in the use of spill containment equipment.

Should a spill occur in the Project area the spill response contingency plan should be implemented. Specifics of the contingency plan will be detailed in the EPP.

7.2.6 Unexpected Finds: Archaeological Resources

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the OHA. 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. A site-specific response plan should then be employed following further investigation of the specific find. The response plan would indicate under which conditions the ground disturbance activity in the find location may resume.

The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (Government of Ontario 2002) requires that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Government and Consumer Services (1-800-889-9768).

Enbridge Gas is committed to keeping interested Indigenous communities engaged on any unearthed artifacts and/or human remains discovered in relation to their projects.

8 Conclusion

The environmental study investigated data on the physical, biophysical, and socio-economic environment along the PR. In the opinion of Stantec, the recommended program of supplemental studies, mitigation and protective measures, and contingency measures are considered appropriate to protect the features encountered. Monitoring will assess whether mitigation and protective measures were effective in both the short and long term.

With the implementation of the recommendations in this Report, on-going communication and consultation, and adherence to permit, regulatory and legislative requirements, potential adverse residual environmental and socio-economic impacts of the Project are not anticipated to be significant.

9 References

- AAFC [Agriculture and Agri-Food Canada]. 2005. CLI Classes Definitions. Available at: <u>http://sis.agr.gc.ca/cansis/nsdb/cliclass.html</u>.
- Cadman, M.D., D.A. Sutherland, G.G. Beck, D. Lepage, A.R. Couturier. 2007. Atlas of the Breeding Birds of Ontario, 2001-2005. (eds) Bird Studies Canada, Environment Canada, Ontario Field Ornithologists, Ontario Ministry of natural resources, and Ontario Nature, Toronto, xxii +706pp. Data available online: <u>http://www.birdsontario.org/atlas/squareinfo.jsp?lang=en</u>.
- Carson., D.M. 1981. Paleozoic Geology of the Belleville-Wellington Area, Southern Ontario: Ontario Geological Survey Preliminary Map P.2412, Geological Series. Scale 1:50,000. Geology 1980.
- CER [Canada Energy Regulator]. 2021. Major Applications and Projects before the CER. Available at: <u>https://www.cer-rec.gc.ca/en/applications-hearings/view-applications-projects/</u>. Accessed November 2022.
- Chapman and Putnam. 1984. The Physiography of Southern Ontario. 3rd Edition. Published by the Government of Ontario, Ministry of Natural Resources.
- Cheminfo Services Inc. 2005. Best Practices for the Reduction of Air Emissions From Construction and Demolition Activities. Prepared by Cheminfo Services for Environment Canada. Available online: <u>http://www.bieapfremp.org/Toolbox%20pdfs/EC%20-</u> <u>%20Final%20Code%20of%20Practice%20-</u> %20Construction%20%20Demolition.pdf.
- Clarke Andrew. May 2022. Major announcement at former Camp Picton site. Quinte News. Available at: <u>https://www.quintenews.com/2022/05/20/286037/</u>.
- Crins, W.J., Gray, C.P., Uhlig, P.W.C. 2009. Science & Information Branch: Inventory, Monitoring and Assessment Section. The Ecosystems of Ontario, Part 1: Ecozones and Ecoregions. Available online at: <u>https://fgca.net/wp-</u> <u>content/uploads/2014/11/EcoZones_stdprod-101587.pdf</u>
- DFO [Fisheries and Oceans Canada]. 2022a. DFO and Enbridge Gas Inc. Agreement related to Watercourse Crossings for Pipeline Construction and Maintenance in Ontario. March, 2022.

- DFO [Fisheries and Oceans Canada]. 2022b. Aquatic Species at Risk Map. Available at: <u>https://www.dfo-mpo.gc.ca/species-especes/sara-lep/map-carte/index-eng.html</u>
- DFO [Fisheries and Oceans Canada]. 2022c. Measures to Protect Fish and Fish Habitat. Available at: Measures to protect fish and fish habitat (dfo-mpo.gc.ca)

Dobbyn, J., 1994. Atlas of the Mammals of Ontario. Federation of Ontario Naturalists.

- eBird Canada. 2022. eBird: An online database of bird distribution and abundance [web application]. eBird, Cornell Lab of Ornithology, Ithaca, New York. Available at: <u>http://www.ebird.org</u>. Accessed November, 2022.
- Environment Canada. 2020. General nesting periods of migratory birds. <u>https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods.html</u>.
- Freeman., E.B. 1979. Ontario Geological Survey [OGS]: Geological Highway Map, Southern Ontario. Map M2441, scale 1:800,000.
- Government of Canada. 1985. Fisheries Act. R.S.C. 1985, c. F-14. Last amendment 2017. Electronic document. <u>http://laws-lois.justice.gc.ca/eng/acts/F-14/</u>
- Government of Canada. 1994. Migratory Birds Convention Act, S.C. 1994, c. 22. Last amendment 2017. Electronic document. <u>http://laws-lois.justice.gc.ca/eng/acts/m-7.01/</u>
- Government of Canada. 2022. Migratory Birds Regulations. 2022. SOR/2022-105. Electronic document. <u>https://laws-lois.justice.gc.ca/eng/regulations/SOR-2022-105/index.html</u>
- Government of Canada. 2002. Species at Risk Act. S.C. 2002, c. 29. Last amendment 2017. Electronic document. <u>http://laws.justice.gc.ca/eng/acts/S-15.3/</u>
- Government of Ontario. No Date. Water Well Records. Available online: <u>https://www.ontario.ca/page/map-well-records. Accessed March 2023</u>.
- Government of Ontario. 1948. Soil Survey of Prince Edward County, Report No. 10 of the Ontario Soil Survey. Available online at: https://sis.agr.gc.ca/cansis/publications/surveys/on/on10/on10_report.pdf
- Government of Ontario. 1990a. Conservation Authorities Act, R.S. O. 1990, c. C.27. O. Reg. 319/09: Quinte Conservation Authority: Regulation of Development, Interference with Wetlands, and Alteration to Shorelines and Watercourses.



- Government of Ontario. 1990b. Ontario Water Resources Act, R.S.O. 1990, c. O.40. Last amendment: 2017, c. 2, Sched. 11, s. 4. Electronic document: <u>https://www.ontario.ca/laws/statute/90o40#top</u>.
- Government of Ontario. 1990c. Ontario Heritage Act, R.S.O. 1990. c. O.18. Last amendment: 2022, c. 21, Sched. 6. Electronic document: <u>https://www.ontario.ca/laws/statute/90o18</u>
- Government of Ontario. 2007. Endangered Species Act. S.O. 2007, c.6. Electronic document: <u>https://www.ontario.ca/laws/statute/07e06</u>.
- Government of Ontario. 2011. Standards and Guidelines of Consultant Archaeologists. Toronto: Ministry of Tourism, Culture and Sport.
- Government of Ontario. 2022a. Environmental Assessment Projects by Category. Available online: <u>https://www.ontario.ca/page/environmental-assessments</u>. Accessed November 2022.
- Government of Ontario. 2022b. Renewable Energy Approvals. Available at: <u>Renewable</u> <u>Energy Approvals | ontario.ca</u>. Accessed November 2022.
- IAAC [Impact Assessment Agency of Canada]. 2022. Canadian Impact Assessment Registry. Available online: <u>https://iaac-aeic.gc.ca/050/evaluations</u>. Accessed November 2022.
- iNaturalist. 2022. Search Directory. Available online: https://www.inaturalist.org/places/canada.
- IO [Infrastructure Ontario] [Government of Ontario]. No date. Instructure Ontario Projects – Interactive Map. Available at: <u>https://www.infrastructureontario.ca/projects/map/</u>. Accessed November 2022.
- MECP [Ministry of Environment, Conservation and Parks]. 1994. D-4 Land Use on or Near Landfills and Dumps. Available online: <u>https://www.ontario.ca/page/d-4-land-use-or-near-landfills-and-dumps</u>. Accessed March 2023.
- MECP [Ministry of Environment, Conservation and Parks]. 2018a. Records of Site Condition and Transition Notices. Available at: <u>https://www.lrcsde.lrc.gov.on.ca/besrWebPublic/generalSearch</u>
- MECP [Ministry of Environment, Conservation and Parks]. 2018b. Records of Site Condition. Available at: <u>https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/searchFiledRsc_search?re</u> <u>quest_locale=en</u>



- MECP [Ministry of Environment, Conservation and Parks]. 2021a. Species at Risk in Ontario. Available online: <u>https://www.ontario.ca/page/species-risk-ontario</u>. Accessed September 2, 2021.
- MECP [Ministry of Environment, Conservation and Parks]. 2022a. Landfills Sites Map. Available online: <u>https://www.ontario.ca/page/landfill-sites-map</u>. Accessed March 2023.
- MECP [Ministry of Environment, Conservation and Parks]. 2022b. Records of Site Condition. Available at: <u>https://www.lioapplications.lrc.gov.on.ca/Access_Environment/index.html?viewer</u> =Access_Environment.AE&locale=en-CA
- MHSTCI. [Ministry of Heritage, Sport, Tourism, and Culture Industries]. 2021. Tourism Regions: Region 9 – Southeastern Ontario. Available at: https://www.ontario.ca/document/tourism-regions/region-9-southeastern-ontario. Accessed March 2023.
- MOECC [Ministry of the Environment and Climate Change]. 2013. Environmental Noise Guideline - Stationary and Transportation Sources, Approval and Planning (NPC-300). Available at: <u>https://www.ontario.ca/page/environmental-noise-guidelinestationary-and-transportation-sources-approval-and-planning#section-18</u>. Accessed November 2022.
- [MNR] Ontario Ministry of Natural Resources. 2010. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005. Second Edition. Toronto: Queen's Printer for Ontario. 248 pp.
- [MNR] Ontario Ministry of Natural Resources. 2000. Significant wildlife habitat technical guide. 151p.
- MNRF [Ontario Ministry of Natural Resources and Forestry]. 2014. Emerald ash borer. Available at: <u>https://www.ontario.ca/page/emerald-ash-</u> <u>borer#:~:text=The%20emerald%20ash%20borer%20is,in%20wood%20packagin</u> <u>g%20or%20pallets</u>. Accessed: January 16, 2023.
- [MNRF] Ontario Ministry of Natural Resources and Forestry. 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E. January, 2015. Ontario Ministry of Natural Resources and Forestry Regional Operations Division, Peterborough, Ontario. 40 pp.
- MNRF [Ontario Ministry of Natural Resources and Forestry]. 2022a. GeoHub, Land Information Ontario (LIO). Available online: Ontario GeoHub (gov.on.ca). Accessed November 2022.

- MNRF [Ontario Ministry of Natural Resources and Forestry]. 2022b. Natural Heritage Information Centre (NHIC) Database. Available at: <u>https://www.ontario.ca/page/natural-heritage-information-centre</u>. Accessed November 2022.
- MNRF [Ontario Ministry of Natural Resources and Forestry]. 2022c. Species at Risk in Ontario List. October 1, 2015. [Online database accessed November 2022]. <u>https://www.ontario.ca/environment-and-energy/species-risk-ontario-list</u>
- MNRF [Ontario Ministry of Natural Resources and Forestry]. 2022d. Tree Atlas. October 1, 2015. [Online database accessed November 2022]. <u>https://www.ontario.ca/page/tree-atlas</u>
- MTCS. [Ministry of Tourism, Culture and Sport]. 2022. Region 9: Southeastern Ontario. Regional Tourism Profile. Excel. Available online: <u>https://www.ontario.ca/document/tourism-regions/region-9-southeastern-ontario.</u> <u>Accessed October 2022</u>.
- MTO [Ontario Ministry of Transportation]. 2022. Ontario's Highway Programs Interactive Map. Available at: <u>https://www.ontario.ca/page/ontarios-highway-programs.</u> <u>Accessed November 2022</u>.
- Natural Resources Canada. 2019. Earthquake zones in Eastern Canada. Available at: <u>http://www.earthquakescanada.nrcan.gc.ca/zones/eastcan-en.php#SGLSZ</u>. Last accessed: October 2022.
- Ontario Energy Board [OEB]. 2022. Applications before the OEB. Available at: <u>https://www.oeb.ca/applications/applications-oeb</u>. Accessed November 2022.
- OEB [Ontario Energy Board]. 2023. Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines in Ontario, 8th Edition.
- OGS [Ontario Geological Survey], 1991. Aggregate Resources Inventory of Prince Edward County, Ontario Geological Survey, ARIM 172-2, scale 1:50,000.
- OGS [Ontario Geological Survey]. 1991. Bedrock geology of Ontario, Ontario Geological Survey, scale 1:250,000. Miscellaneous Release---Data 126-Revision 1.
- OGS [Ontario Geological Survey], 2011. Bedrock geology of Ontario, Southern Sheet; Ontario Geological Survey, Map 2544, scale 1:1,000,000.
- OPP. No date. Prince Edward Detachment. Available online: <u>https://www.opp.ca/index.php?id=115&Ing=en&entryid=569e9a668f94accf35758</u> <u>765</u>. Accessed October 2022.

- Ontario Nature. 2019. Reptiles and Amphibians of Ontario. Ontario Reptile and Amphibian Atlas [Online database accessed November 28, 2022]. <u>http://www.ontarionature.org/protect/species/reptiles_and_amphibians/index.php.</u>
- Paradigm Transportation Solutions Limited. 2020. Loyalist Heights (Picton) Transportation Impact Study. Available online at: <u>https://www.thecounty.ca/wp-content/uploads/2021/07/FINAL-TRANSPORTATION-Loyalist-Heights-TIS-1.0.0-2020.08.24.pdf</u>.
- PEC Community Partners. 2022. Loch Sloy Revitalization. Introduction to the Partners & Project. Available at: <u>https://princeedwardcounty.civicweb.net/FileStorage/B4533A65066B4F9385CE2</u> <u>8B91B789D01-Loch%20Sloy%20Deputation%20Feb%2022%202022.pdf</u>
- Prince Edward County. 2020. Short-term accommodation map. Available online: <u>https://www.thecounty.ca/residents/services/short-term-accommodations/</u>. Accessed October 2022.
- Prince Edward County. No date. A. Roads. Available online: <u>https://www.thecounty.ca/residents/services/roads/</u>. Accessed October 2022.
- Prince Edward County. No date. B. Fire and Rescue Contact Us. Available online: <u>https://www.thecounty.ca/residents/services/emergency-services/fire-and-rescue/contact-us-2/</u>. Accessed October 2022.
- Prince Edward County. No date. C. Ambulance Services. Available online: <u>https://www.thecounty.ca/residents/services/emergency-services/ambulance-services/</u>. Accessed October 2022.
- Prince Edward County, By-law No. 1977-2007, By-law to Prohibit the Littering on Private or Municipal Property. Available online at: <u>https://www.thecounty.ca/wp-content/uploads/2020/08/14_Amending_By-law_1977-2007_-_Littering.pdf</u>
- Prince Edward County, By-law No. 900-2002, By-law to Restrain Certain Nuisances and to Prohibit Certain Noises Within the County of Prince Edward. Available online at: <u>https://www.thecounty.ca/wp-content/uploads/2020/08/By-law-900-2002-</u><u>Noise-Nuisance-Office-Consolidation-December-2016.pdf</u>
- Prince Edward County. 2013. Map Landfill & Transfer Sites. Available online: <u>https://www.thecounty.ca/wp-</u> <u>content/uploads/2020/08/LandfillAndTransferStationMap_002-2.pdf</u>. Accessed March 2023.



Cherry Valley Community Expansion Project: Environmental Report 9 References

- Prince Edward County. 2015. Picton Urban Centre Secondary Plan. Available online at: <u>https://www.thecounty.ca/wp-</u> <u>content/uploads/2020/08/PTR_PictonHallowellPlan_2015-07-15-Updated-</u> 2019.pdf.
- Prince Edward County. 2019. County of Prince Edward Comprehensive Zoning By-Law NO. 1816-2006. Available online at: <u>https://www.thecounty.ca/wp-content/uploads/2020/10/Comprehensive-Zoning-By-Law-Updated-October-2019.pdf</u>.
- Prince Edward County. 2020a. Tree Management and Preservation Policy. Available online at: <u>https://www.thecounty.ca/wp-content/uploads/2021/10/Att-1-Tree-Policy.pdf</u>
- Prince Edward County. 2020a. 13-T-21-503, OPA-05-21 & Z21-21 (Loyalist Heights). Available at: <u>https://www.thecounty.ca/13-t-21-503-opa-05-21-z21-21-loyalist-heights/</u>. Accessed November 2022.
- Prince Edward County. 2020b. Prince Edward County Development Services Applications Dashboard. Available at: <u>https://www.thecounty.ca/residents/services/planning/active-planning-applications/</u>.
- Prince Edward County. 2021a. Official Plan. Available online: <u>https://www.thecounty.ca/residents/services/planning/official-plan/</u>. Accessed March 2023.
- Prince Edward County. 2021b. Prince Edward County Cycling Master Plan. Available online at: <u>https://haveyoursay.thecounty.ca/12892/widgets/58728/documents/58217</u>
- Prince Edward County. 2021c. Prince Edward County Transportation Plan. Available online at: <u>https://www.thecounty.ca/wp-content/uploads/2022/09/PEC_TMP_Nov2021_Final.pdf</u>. Accessed November 2022.
- Rowe, J.S., 1972. Forest Regions of Canada. Canadian Forestry Service Publication. No. 1300: 172pp.
- Smith Amanda. February 2022. Loch Sloy revitalization project still in beginning stages. Quinte News. Available at: <u>https://columbiacollege-</u> <u>ca.libguides.com/apa/newspapers</u>.



Statistics Canada. 2015. Glossary. Available online: <u>https://www150.statcan.gc.ca/n1/pub/71-222-x/2008001/sectiona/a-participation-activite-eng.htm</u>

Statistics Canada. 2017. Prince Edward County, CY [Census subdivision], Ontario and Ontario [Province] (table). Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. <u>https://www12.statcan.gc.ca/census-recensement/2016/dp-</u> pd/prof/index.cfm?Lang=E (accessed October 11, 2022).

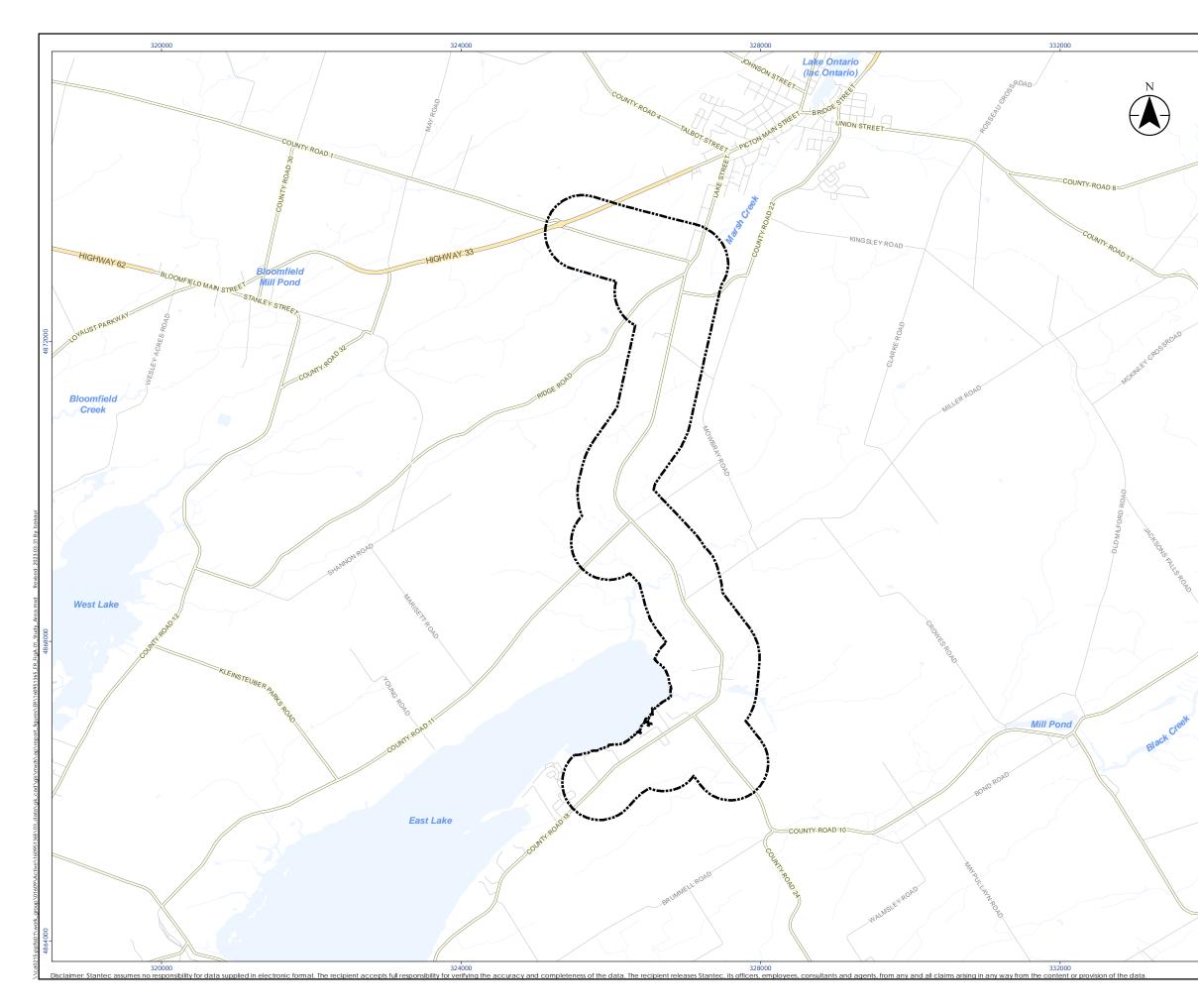
Statistics Canada. 2022. (table). Census Profile. 2021 Census of Population. Statistics Canada Catalogue no. 98-316-X2021001. Ottawa. Released September 21, 2022. <u>https://www12.statcan.gc.ca/census-recensement/2021/dp-</u> pd/prof/index.cfm?Lang=E (accessed October 11, 2022).

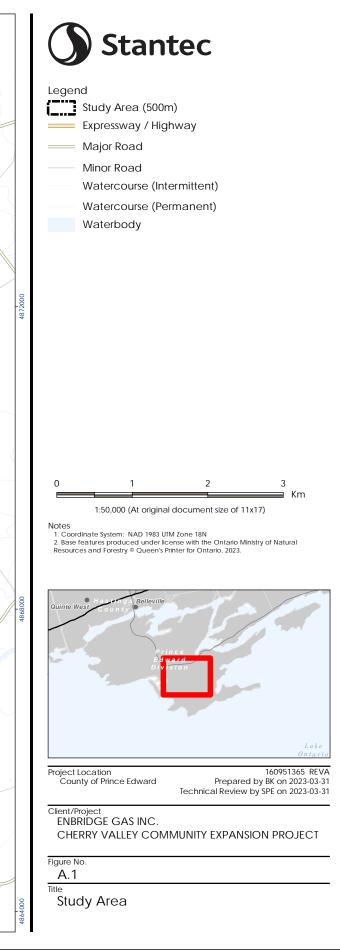
- TC Energy. 2021. Natural Gas Operations. Available at: <u>https://www.tcenergy.com/operations/natural-gas/</u>. Accessed November 2022.
- TEA [Toronto Entomologists' Association]. 2022. Ontario Butterfly Atlas. Available online: <u>https://www.ontarioinsects.org/atlas/</u>. Accessed November, 2022.
- Treasury Board [Government of Canada]. 2011. DFRP/FCSI- Map Navigator. Available online: <u>https://map-carte.tbs-sct.gc.ca/map-carte/fcsi-rscf/map-carte.aspx?Language=EN</u>. Accessed October 2022.
- Quinte Conservation. No Date. A. Flood Information. Available online: <u>https://www.quinteconservation.ca/en/watershed-management/flood-information.aspx</u>. Accessed October 2022.
- Quinte Conservation. No Date. B. Quinte Conservation Watershed High Risk Flooding Areas (Map). Available online: <u>https://www.quinteconservation.ca/en/watershed-</u> <u>management/resources/Documents/high_risk_map.pdf</u>. Accessed October 2022.
- Quinte Region Source Protection Committee. 2019. Approved Quinte Region Source Protection Plan. Available online at: <u>https://www.quinteconservation.ca/en/watershed-</u> <u>management/resources/Documents/SPP_Version1.1_Complete.pdf</u>

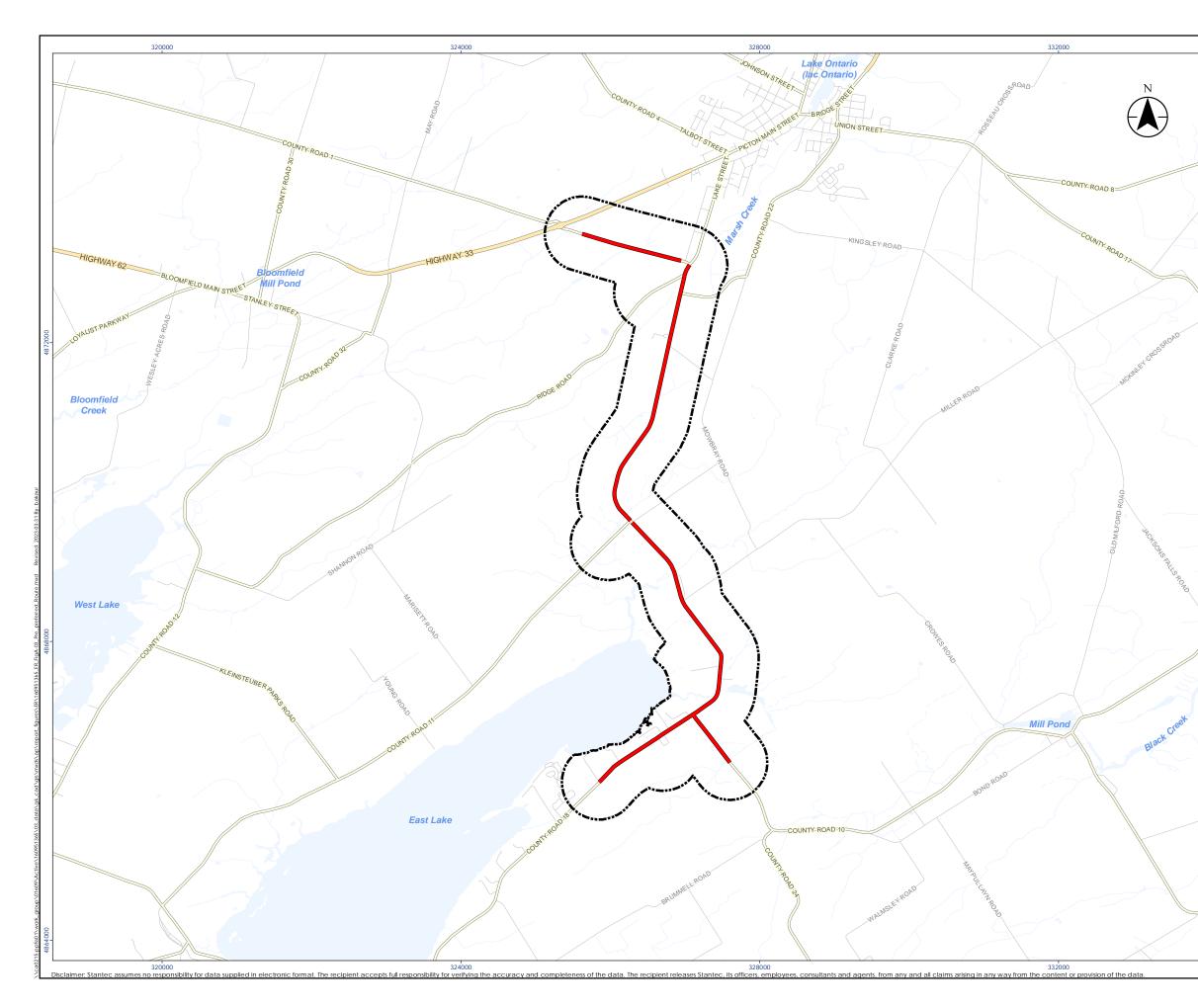
Appendix A Figures

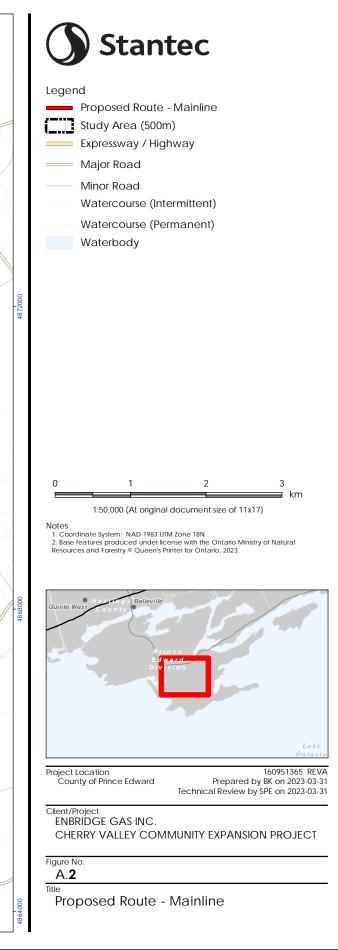
Figure A.1: Study Area

Figure A.2: Preliminary Preferred Route









Appendix B Consultation

B.1 Letter of Delegation

Ministry of Energy

Ministère de l'Énergie

et des Politiques Autochtones

77 Rue Grenville, 6e Étage

Toronto, ON M7A 67C

Tel: (416) 315-8641

Politique Énergétique Autochtones

Direction Générale des Réseaux Énergétiques

Energy Networks and Indigenous Policy Branch

Indigenous Energy Policy

77 Grenville Street, 6th Floor Toronto, ON M7A 67C Tel: (416) 315-8641

December 29, 2022

Eric VanRuymbeke Enbridge Gas Inc. 500 Consumers Road North York, Ontario M2J 1P8

Re: Cherry Valley Community Expansion Project

Dear Eric VanRuymbeke:

VIA EMAIL

Thank you for your email dated September 20, 2022, notifying the Ministry of Energy (Energy) of Enbridge Gas Inc. (Enbridge)'s proposed Cherry Valley Community Expansion Project (the Project) and requesting information on any related Crown duty to consult requirements.

Enbridge will be applying to the Ontario Energy Board (OEB) for Leave to Construct for the Project. I understand that Enridge is planning to construct approximately 14 km of new natural gas pipelines consisting of approximately 6 km of Nominal Pipe Size ("NPS"), 2 polyethylene ("PE") and 8 km of NPS 4 PE natural gas distribution pipeline. Additionally, the Project proposes to tie-in a new distribution system into the existing NPS 2 steel ("ST") 1724 kPa system, through installing a distribution station along Sandy Hook Rd (County Rd 1). Furthermore, I understand that where possible, the Project will be located within existing road allowances and that Enbridge will work with municipalities and landowners to identify and secure appropriate working space and easements as required.

On behalf of the Government of Ontario (the Crown), Energy 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* in the area. In doing so, Energy has determined that the Project may have the potential to affect such Indigenous communities.

The Crown has a constitutional duty to consult and, where appropriate, accommodate Indigenous communities when the Crown contemplates conduct that might adversely impact established or asserted Aboriginal or Treaty rights. These consultations are in addition to consultation imposed by statute.

While the legal responsibility to meet the duty to consult lies with the Crown, the Crown may delegate the day-to-day, procedural aspects of consultation to Project proponents. Such a delegation by the Crown to Proponents is routine practice for Energy.



I am writing to advise you that on behalf of the Crown, Energy is delegating the procedural aspects of consultation in respect of the Project to Enbridge (Proponent) through this letter. Energy expects that the Proponent will undertake the procedural aspects of consultation with respect to any regulated requirements for the proposed Project. The Crown and/or its agents will fulfill the substantive aspects of consultation and retain oversight over all aspects of the process for fulfilling the Crown's duty.

Please see the appendix for information on the roles and responsibilities of both the Crown and the Proponent.

Based on the Crown's assessment of First Nation and Métis community rights and potential Project impacts, the following Indigenous communities should be consulted on the basis that they have or may have constitutionally protected Aboriginal or Treaty rights that may be adversely affected by the Project.

Community	Mailing Address
	P.O Box 46
	Roseneath ON K0K 2X0
Alderville First Nation*	T: (905) 352-2011
	F: (905) 352-3242
	consultation@alderville.ca
	General Delivery
	Cedar Point ON L0K 1C0
Beausoleil First Nation*	T: (705) 247-2051
	F: (705) 247-2239
	info@chimnissing.ca
	General Delivery
	Curve Lake ON K0L 1R0
Curve Lake First Nation*	T: (705) 657-8045, ext. 209
	F: (705) 657-8708
	juliek@curvelake.ca
	R.R. #2, P.O. Box N-13
	Sutton West ON LOE 1R0
Chippewas of Georgina Island*	T: (705) 437-1337
	F: (705) 437-4597
	Natasha.charles@georginaisland.com
	200-5884 Rama Road
	Rama ON L3V 6H6
Chippewas of Rama First Nation*	T: (705) 325-3611
	F: (705) 325-0879
	shardayj@ramafirstnation.ca
	123 Paudash Street, R.R. #2 Keene ON K0L 2G0
Hiawatha First Nation*	
	T: (705) 295-4421 F: N/A
	tcowie@hiawathafn.ca

-
255, place Chef Michel Laveau
Wendake QC G0A 4V0
T: (418) 843-3767
F: (418) 842-1108
maxime.picard@cnhw.qc.ca
No mailing address, telephone or fax information
available.
Nodin.webb@hotmail.com;
samgharvey@live.com;
giiwednang@ghotmail.com;
kawarthanishnawbecouncil@outlook.com
Administration Building
22521 Island Road
Port Perry, ON L9L 1B6
T: (905) 985-3337
F: N/A
ckennedy@scugogfirstnation.com
R.R #1, 13 Old York Rd.
Deseronto, ON K0K 1X0
T: (613) – 396- 3424
F: (613) 396-3627
consultation@mbq-tmt.org

Notes:

* It is standard practice to copy Karry Sandy McKenzie, Williams Treaties First Nations Process Coordinator, on correspondence to the identified Williams Treaties First Nations identified above (<u>inquries@williamstreatiesfirstnnations.ca</u>)

** Interests are specific to archeological resources. If, as the project progresses, it is determined that there will be no impacts to archaeological resources, Enbridge should contact the Manager of Indigenous Energy Policy at the Ministry of Energy, as further consultation with these communities may not be required.

Based on currently available information about the Project's anticipated impacts, Energy's preliminary assessment has determined that consultation is owed at the low level of the consultation spectrum for Mohawks of the Bay of Quinte First Nation, Kawartha Nishnawbe First Nation and the Heron-Wendat Nation. As such, Energy requires Enbridge to, at a minimum, notify the community of the Project; share information about the Project and provide an opportunity for the community to comment. Any issues raised by the community should be discussed and considered in light of the potential to impact rights, with mitigation or other forms of accommodation identified where appropriate. Enbridge's initial notice of the Project to the community 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.

For Alderville First Nation, Beausoleil First Nation, Curve Lake First Nation, Chippewas of Georgina Island First Nation, Chippewas of Rama First Nation, Hiawatha First Nation and the Mississaugas of Scugog Island First Nation, Energy requires the proponent to undertake a deeper level of consultation, i.e. in the moderate range. In additional to the requirements listed above, Enbridge should provide opportunities for the communities to share evidence or submissions about potential impacts should the communities so choose; and offer capacity funding to support meaningful participation by the communities in the consultation process, as appropriate. Enbridge should also be able to demonstrate how any concerns were considered and responded to, and what impact they had on project decisions moving forward. More detailed information on the roles and responsibilities delegated to Enbridge is available in the appendix.

This rights-based consultation list is based on information that is subject to change. Consultation is ongoing throughout the duration of the Project, including Project development and design, consultation, approvals, construction, operation and decommissioning. Indigenous communities may make new rights assertions at any time, and further Project related developments can occur that may require additional communities to be notified and/or consulted.

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

Acknowledgement

By accepting this letter, the Proponent acknowledges this Crown delegation and the procedural consultation responsibilities enumerated in the appendix. If you have any questions about this request, you can contact Bree-Anna Gaboury, Indigenous Energy Policy (bree-anna.gaboury@Ontario.ca)

I trust that this information provides clarity and direction regarding the respective roles of the Crown and Enbridge. If you have any questions about this letter or require any additional information, please contact me directly.

Sincerely,

Samir Adkar Digitally signed by Samir Adkar Date: 2022.12.29 17:04:29 -05'00'

Samir Adkar, Director Energy Networks and Indigenous Policy Branch

c: Ontario Pipeline Coordinating Committee (OPCC)

APPENDIX: PROCEDURAL CONSULTATION

Roles and Responsibilities Delegated to the Proponent

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

- providing notice and information about the Project to Indigenous communities, with sufficient detail and at a stage 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. This can include:
 - accurate, complete and plain language information including a detailed description of the nature and scope of the Project and translations into Aboriginal languages where appropriate;
 - maps of the Project location and any other affected area(s);
 - 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 or the habitat of species at risk and habitat corridors;
 - a description of other provincial or federal approvals that may be required for the Project to proceed;
 - whether the Project is on privately owned or Crown controlled land;
 - any information the Proponent may have on the potential effects of the Project, including particularly any likely adverse impacts on established or asserted Aboriginal or treaty rights;
 - a written request asking the Indigenous community 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 information the community may have about any potential adverse impacts on their Aboriginal or treaty rights; and
 - any suggested measures for avoiding, minimizing or mitigating potential adverse impacts;
 - information about how information provided by the Indigenous community as part of the consultation process will be collected, stored, used, and shared for their approval;
 - identification of any mechanisms that will be applied to avoid, minimize or mitigate potential adverse impacts;
 - identification of a requested timeline for response from the community and the anticipated timeline for meeting Project milestones following each notification;
 - 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 asserted rights;
- gathering information about how the Project may adversely affect Aboriginal or treaty rights;
- bearing the reasonable costs associated with the procedural aspects of consultation (paying for meeting costs, making technical support available, etc.) and considering reasonable requests by communities for capacity funding to assist in participating in the consultation process;
- considering and responding to comments and concerns raised by Indigenous communities and answering questions about the Project and its potential impacts on Aboriginal or treaty 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 an Aboriginal or treaty 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 a best practice to provide the Indigenous community with a copy of the consultation record as part of this step for verification.

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, and we request that you make all reasonable efforts to build positive relationships with all Indigenous communities potentially affected by the Project. If a community is unresponsive to efforts to notify and consult, you should nonetheless make attempts to update the community on the progress of the Project, the environmental assessment (if applicable) and other regulatory approvals.

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 that 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 of its delegated procedural consultation responsibilities to the satisfaction of the Crown.

If the Crown considers that there are outstanding issues related to consultation, the Crown may directly undertake additional consultation with Indigenous communities, which could result in delays to the Project. The Crown reserves the right to provide further instructions or add communities throughout the consultation process.

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 for the Proponent, and updating as appropriate, the Indigenous communities to consult for the purposes of fulfillment of the Crown duty;
- 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;
- determining in the course of Project approvals whether accommodation of Indigenous communities, if required, is appropriate and sufficient.

Consultation Record

It is important to ensure that all consultation activities undertaken with Indigenous communities are fully documented. This includes all attempts to notify or consult the community, all interactions with and feedback from the community, and all efforts to respond to community concerns. Crown regulators require a complete consultation record in order to assess whether Aboriginal consultation and any necessary accommodation is 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;
- evidence that notices and Project information were distributed to, and received by, the Indigenous communities (via courier slips, follow up phone calls, etc.). 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);
- 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 Aboriginal or treaty rights or on sites of cultural significance (e.g. burial grounds, archaeological sites), identified by Indigenous communities; how comments or concerns were considered or addressed; and any changes to the Project as a result of consultation, such as:
 - changing the Project scope or design;
 - o changing the timing of proposed activities;
 - o minimizing or altering the site footprint or location of the proposed activity;
 - o avoiding impacts to the Aboriginal interest;
 - environmental monitoring; and
 - o other mitigation strategies.

The Crown may, at any time during the consultation and approvals stage of the Project, 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, 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.

The contents of what will make up the consultation record should be shared at the onset with the Indigenous communities consulted with and their permission should be obtained. It is considered a best practice to share the record with the Indigenous community prior to finalizing it to ensure it is a robust and accurate record of the consultation process.

Cherry Valley Community Expansion Project: Environmental Report July 11, 2023

B.2 Project Contact List

Appendix B2 Contact List – Agencies Contact List

GROUPS	FIRST NAME	SURNAME	CATEGORY	ORGANIZATION	DEPARTMENT	POSITION	ADDRESS	CITY/ TOWN	PROVINCE	POSTAL CODE	TELEPHONE	E-Mail
ELECTED	Ryan	Williams	ELECTED OFFICIALS	Government of Canada	Bay of Quinte	Minister of Parliament	250 Sidney Street	Belleville	ON	K8P 3Z3	613-969-3300	ryan.williams@parl.gc.ca
OFFICIALS	Todd	Smith	ELECTED OFFICIALS	Province of Ontario	Bay of Quinte	Minister of Provincial Parliament	Unite D, 5503 Hwy. 62 Street, P.O. Box 6-2	Belleville	ON	K8N 0L5	613-962-1144	Todd.Smithco@pc.ola.org
FEDERAL AGENCIES	Sandro	Leonardelli	FEDERAL AGENCIES	Environment and Climate Change Canada	Environmental Protection Operations - Ontario	Manager, Environmental Assessment Section	4905 Dufferin Street, 2nd Floor	Toronto	ON	M3H 5T4	416-749-5858	sandro.leonardelli@ec.gc.ca
	Donna	Dafoe	Environment and Climate Change Canada	Environmental Assessment Section		Senior Environmental Assessment Officer	351 boul. Saint- Joseph, 17th Floor, Office 17065	Gatineau	QC	K1A 0Hs		donna.dafoe@ec.gc.ca
	To Whom it May Concern		FEDERAL AGENCIES	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		FEDERAL AGENCIES	Transport Canada					ON			enviroOnt@tc.gc.ca
PROVINCIAL AGENCIES	To Whom it May Concern		PROVINCIAL AGENCIES	Ontario Ministry of Agriculture and Food								omafra.eanotices@ontario.ca
	Heather	Malcolmson	PROVINCIAL AGENCIES	Ministry of Environment, Conservation and Parks	Environmental Assessment and Permissions Branch	Director (Acting)	135 St. Clair Ave. W, 1st Floor	Toronto	ON	M4V 1P5	416-314-0934	heather.malcolmson@ontario.ca
	David	Bradley	PROVINCIAL AGENCIES	Ministry of Environment, Conservation and Parks	Peterborough District	District Manager	300 Water Street, Robinson Place, S. Tower, 2nd Floor	Peterborough	ON	K9J 3C7		david.bradley@ontario.ca
	Jon	Orpana	PROVINCIAL AGENCIES	Ministry of Environment, Conservation and Parks	Environmental Assessment Branch	Regional Environmental Planner			ON			Jon.Orpana@ontario.ca
	Khalid	Khan	PROVINCIAL AGENCIES	Ministry of Environment, Conservation and Parks			5776 Young St, 9th Flr	Toronto	ON	M2M 4J1		khalid.khan@ontario.ca
	Peter	Brown	PROVINCIAL AGENCIES	Ministry of Environment, Conservation and Parks	Environmental Assessment Branch - Indigenous Consultation	Senior Aboriginal Consultation Advisor	135 St Clair Ave W, 1st Floor	Toronto	ON	M4V 1P5	416-314-0149	peter.brown@ontario.ca
	To whom it may concern		PROVINCIAL AGENCIES	Ministry of Environment, Conservation and Parks	Species at Risk Branch		40 St. Clair Ave. W., 14th Floor	Toronto	ON	M4V 1M2		SAROntario@ontario.ca
	To whom it may concern		PROVINCIAL AGENCIES	Ministry of Environment, Conservation and Parks	Environmental Assessment Branch, Eastern Region				ON			eanotification.eregion@ontario.ca
	Angela	Adkinson	PROVINCIAL AGENCIES	Ministry of Environment, Conservation and Parks	Ontario Parks - Southeast Zone	Senior Park Planner			ON		705-313-3619	Angela.Adkinson@ontario.ca
	Peter	Makula	PROVINCIAL AGENCIES	Ministry of Transportation	Engineering Office - Eastern Region	Manager	1355 John Counter Blvd, Postal Bag Box 4000	Kingston	ON	K7L 5A3	613-545-4754 / 613-540-5103	peter.makula@ontario.ca
	Michael	Elms	PROVINCIAL AGENCIES	Ministry of Municipal Affairs and Housing	Community Planning and Development	Manager (Acting)	8 Estate Lane	Kingston	ON	KM 9A8	613-545-2132	michael.elms@ontario.ca
	Hal	Leadlay	PROVINCIAL AGENCIES	Ministry of Natural Resources and Forestry	Peterborough District	District Manager	1st Flr. S, 300 Water Street	Peterborough	ON	K9J 3C7	705-755-3363	hal.leadlay@ontario.ca
	Alan	Sawyer	PROVINCIAL AGENCIES	Infrastructure Ontario	Environmental Projects	Manager	1 Stone Road W, 4th Floor	Guelph	ON	N1G 4Y2	519-837-6379	alan.sawyer@infrastructure.ca

Appendix B2 Contact List – Agencies Contact List

GROUPS	FIRST NAME	SURNAME	CATEGORY	ORGANIZATION	DEPARTMENT	POSITION	ADDRESS	CITY/ TOWN	PROVINCE	POSTAL CODE	TELEPHONE	E-Mail
	Michele	Doncaster	PROVINCIAL AGENCIES	Ministry of Agriculture, Food and Rural Affairs	Land Use Policy & Stewardship	Manager	1 Stone Road W, Ontario Government Building 3rd Floor	Guelph	ON	N1G 4Y2	519-766-5990	michele.doncaster@ontario.ca
	John	O'Neill	PROVINCIAL AGENCIES	Ministry of Agriculture, Food and Rural Affairs	Land Use Policy & Stewardship	Rural Planner, Eastern and Northeastern Ontario	1st Fl59 Ministry Rd., Box 2004	Kemptville	ON	K0G 1J0	613-258-8341	john.o'neill@ontario.ca
	Robert	Greene	PROVINCIAL AGENCIES	Ministry of Community Safety and Correctional Services		Director	George Drew Building, 25 Grosvenor Street, 13th Floor	Toronto	ON	M7A 1Y6	416-314-6683	robert.greene@ontario.ca
	Alexandre	Gitknow	PROVINCIAL AGENCIES	Ministry of Transportation	Corridor Management Section - Eastern Region				ON			Alexandre.Gitkow@ontario.ca
	Joanna	Brown	PROVINCIAL AGENCIES	Infrastructure Ontario		Environmental Specialist	14 Gable Lane	Kingston	ON	K7M 9A7	343-302-7392	joanna.brown@infrastructureontal io.ca
	Joseph	Harvey	PROVINCIAL AGENCIES	Ministry of Tourism, Culture and Sport	Heritage Planning Unit Programs and Services Branch	Heritage Planner	402 Bay Street, Suite 1700	Toronto	ON	M7A 0A7		Joseph.Harvey@ontario.ca
	Jennifer	Davey	PROVINCIAL AGENCIES	Ontario Provincial Police	Research and Program Evaluation Unit	Administrative Assistant	777 Memorial Avenue, 1st Floor	Orillia	ON	L3V 7V3		jennifer.davey@opp.ca
GOVERNMENT REVIEW TEAM FOR ABORIGINAL	Lise	Chabot	GOVERNMENT REVIEW TEAM FOR ABORIGINAL INFORMATION	Ontario Ministry of Indigenous Affairs	Ministry Partnerships Unit	Manager	160 Bloor Street East, Suite 400	Toronto	ON	M7A 2E6	416-325-4044	lise.chabot@ontario.ca
INFORMATION	Caroline	Vachon	GOVERNMENT REVIEW TEAM FOR ABORIGINAL INFORMATION	Crown-Indigenous Relations and Northern Affairs Canada	Treaties and Aboriginal Government	Correspondence Coordinator	10 Wellington Street	Gatineau	QC	K1A 0H4	819-360-2503	caroline.vachon2@canada.ca
CONSERVATION AUTHORITY	Paul	МсСоу	CONSERVATION AUTHORITY	Quinte Conservation	Planning and Regulations	Planing and Regulations Manager	2061 Old Highway 2, RR #2	Belleville	ON	K8N 4Z2	613-968-3434	PmcCoy@quinteconservation.ca
	Samantha	Carney	CONSERVATION AUTHORITY	Quinte Conservation	Planning and Regulations	Planning Technician	2061 Old Highway 2, RR #2	Belleville	ON	K8N 4Z2	613-968-3434	scarney@quinteconservation.ca
INTEREST GROUPS/	Richard	Copple	INTEREST GROUPS/OTHER	Point to Point PEC		President						richard@pointtopointpec.ca
OTHER	Amy	Bodman	INTEREST GROUPS/OTHER	Prince Edward County Field Naturalists	Executive	President						https://pecfieldnaturalists.org/cont act/
	Patrick	Maloney	INTEREST GROUPS/OTHER	Prince Edward County Trails / Friends of the Millennium Trail	Trails Executive	Chair						info@pectrails.ca
	Darlene	Johnston	INTEREST GROUPS/OTHER	Prince Edward County Horticulture Society	Executive	Co-Chairperson						http://pechorticultural.org/contact- us/
	John	Thompson	INTEREST GROUPS/OTHER	Prince Edward Federation of Agriculture		President					613-921-1116	johnthompson1838@gmail.com
	Brain	Hamilton	INTEREST GROUPS/OTHER	Ontario Federation of Agriculture	Eastern & Nothern Regions	Manager	100 Stone Road West, Suite 206	Guelph	ON	N1G 5L3	613-292-7151	brian.hamilton@ofa.on.ca
	To Whom it May Concern		INTEREST GROUPS/OTHER	Prince Edward Point Bird Observatory			PO Box 6043	Picton	ON	K0K 2P0		info@peptbo.ca

Appendix B2 Contact List – Agencies Contact List

GR	OUPS	FIRST NAME	SURNAME	CATEGORY	ORGANIZATION	DEPARTMENT	POSITION	ADDRESS	CITY/ TOWN	PROVINCE	POSTAL CODE	TELEPHONE	E-Mail
		To Whom it May Concern		INTEREST GROUPS/OTHER	Hydro One Networks Inc.								SecondaryLandUse@HydroOne.c om
		To Whom it May Concern		INTEREST GROUPS/OTHER	Warings Creek Improvement Association			PO Box 2230	Picton	ON	K0K 2T0		mjives@post.kosone.com

Appendix B2 Contact List – OPCC Contact List

GROUPS	FIRST NAME	SURNAME	CATEGORY	ORGANIZATIO N	DEPARTMENT	POSITION	ADDRESS	CITY/TOWN	PROVINCE	POSTAL CODE	TELEPHONE	E-Mail	Cc List
ONTARIO PIPELINE COORDINATIN	Zora	Crnojacki	ONTARIO PIPELINE COORDINATING COMMITTEE	Ontario Pipeline Coordinating Committee	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	
G COMMITTEE	Helma	Geerts	ONTARIO PIPELINE COORDINATING COMMITTEE	Ontario Pipeline Coordinating Committee	Ministry of Agriculture, Food and Rural Affairs	Land Use Policy & Stewardship	1 Stone Road West, 3rd Floor SE	Guelph	ON	N1G 4Y2	519-546-7423	helma.geerts@ontario.ca	omafra.eanotices@ontario.ca
	Karla	Barboza	ONTARIO PIPELINE COORDINATING COMMITTEE	Ontario Pipeline Coordinating Committee	Ministry of Citizenship and Multiculturalism	Team Lead, Heritage	400 University Avenue, 5th floor	Toronto	ON	M7A 2R9	416-660-1027	karla.barboza@ontario.ca	heritage@ontario.ca james.hamilton@ontario.ca
	Amy	Gibson	ONTARIO PIPELINE COORDINATING COMMITTEE	Ontario Pipeline Coordinating Committee	Ministry of Energy	Manager, Indigenous Energy Policy	77 Grenville Street, 6th floor	Toronto	ON	M7A 2C1	416-315-8641	Amy.Gibson@ontario.ca	
	Andrew	Evers	ONTARIO PIPELINE COORDINATING COMMITTEE	Ontario Pipeline Coordinating Committee	Ministry of Environment, Conservation and Parks	Manager, Environmental Assessment Services	135 St. Clair Avenue West, 1st floor	Toronto	ON	M4V 1P5	647-961-4850	andrew.evers@ontario.ca	sourceprotectionscreening@o ntario.ca eanotification.eregion@ontario .ca
	Cory	Ostrowka	ONTARIO PIPELINE COORDINATING COMMITTEE	Ontario Pipeline Coordinating Committee	Infrastructure Ontario	Environmnetal Manager	2000 - 1 Dundas Street West	Toronto	ON	M5G 2L5	647-264-3221	cory.ostrowka@infrastructureo ntario.ca	
	Michael	Elms	ONTARIO PIPELINE COORDINATING COMMITTEE	Ontario Pipeline Coordinating Committee	Ministry of Municipal Affairs and Housing, Eastern Municipal Services Office	Manager, Community Planning and Development	Rockwood House, 8 Estate Lane	Kingston	ON	K7M 9A8	613-545-2132	michael.elms@ontario.ca	
	Keith	Johnston	ONTARIO PIPELINE COORDINATING COMMITTEE	Ontario Pipeline Coordinating Committee	Ministry of Natural Resources and Forestry	Environmental Planning Team Lead	300 Water Street, 3rd Floor	Peterborough	ON	K9J 8M5	705-313-6960	keith.johnston@ontario.ca	environmental.planning.team @ontario.ca
	Gary	Highfield	ONTARIO PIPELINE COORDINATING COMMITTEE	Ontario Pipeline Coordinating Committee	Technical Standards and Safety Authority	Engineering Manager	345 Carlingview Drive	Toronto	ON	M9W 6N9		ghighfield@tssa.org	ryu@tssa.org
	Tony	Di Fabio	ONTARIO PIPELINE COORDINATING COMMITTEE	Ontario Pipeline Coordinating Committee	Ministry of Transportation		301 St. Paul Street, 2nd Floor	St. Catharines	ON	L2R 7R4	905-704-2656	tony.difabio@ontario.ca	

Appendix B2 Contact List – PEC (Municipal) Contact List

GROUPS	FIRST NAME	SURNAME	TITLE	AGENCY	DEPARTMENT	ADDRESS	CITY/ TOWN	PROVINCE	POSTAL CODE	TELEPHONE	E-Mail
CORPORATION OF THE COUNTY OF PRINCE EDWARD	Steve	Ferguson	Mayor	County of Prince Edward	Major's Office	Shire Hall, 332 Picton Main Street	Picton	ON	K0K 2T0	613-827-7174	sferguson@pecounty.on.ca
	Joy	McLeod	Executive Assistant to Mayor Ferguson		Major's Office	Shire Hall, 332 Picton Main Street	Picton	ON	K0K 2T0	613-476-2148, ext 1002	jmcleod@pecounty.on.ca
	Marcia	Wallace	САО	County of Prince Edward	Chief Administrative Office	Edward Building, Suite 103 – 280 Main Street	Picton	ON	K0K 2T0	613-476-2148 ext. 1003	mwallace@pecounty.on.ca
	Anne	Kantharajah	Deputy Clerk	County of Prince Edward	Clerk's Office	Edward Building, Suite 103 – 280 Main Street	Picton	ON	K0K 2T0	613-476-2148 ext. 1026	akantharajah@pecounty.on.ca
	Catalina	Blumenberg	Municipal Clerk	County of Prince Edward	Clerk's Office	Edward Building, Suite 103 – 280 Main Street	Picton	ON	K0K 2T0	613-476-2148 ext. 1021	cblumenberg@pecounty.on.ca
	Kate	MacNaughton	Councillor Ward 1 - Picton	County of Prince Edward	City Council	Shire Hall, 332 Picton Main Street	Picton	ON	K0K 2T0		kmacnaughton@pecounty.on.ca
	Phil	St-Jean	Councillor Ward 1 - Picton	County of Prince Edward	City Council	Shire Hall, 332 Picton Main Street	Picton	ON	K0K 2T0		pst-jean@pecounty.on.ca
	Brad	Nieman	Councillor Ward 2 – Bloomfield/Hallowell	County of Prince Edward	City Council	Shire Hall, 332 Picton Main Street	Picton	ON	K0K 2T0		bnieman@pecounty.on.ca
	Phil	Prinzen	Councillor Ward 2 – Bloomfield/Hallowell	County of Prince Edward	City Council	Shire Hall, 332 Picton Main Street	Picton	ON	K0K 2T0		pprinzen@pecounty.on.ca
	Corey	Engelsdorfer	Councillor Ward 3 – Wellington	County of Prince Edward	City Council	Shire Hall, 332 Picton Main Street	Picton	ON	K0K 2T0		cengelsdorfer@pecounty.on.ca
	Sam	Grosso	Councillor Ward 4 – Ameliasburgh	County of Prince Edward	City Council	Shire Hall, 332 Picton Main Street	Picton	ON	K0K 2T0		sgrosso@pecounty.on.ca
	Janice	Maynard	Councillor Ward 4 – Ameliasburgh	County of Prince Edward	City Council	Shire Hall, 332 Picton Main Street	Picton	ON	K0K 2T0		jmaynard@pecounty.on.ca
	Roy	Pennell	Councillor Ward 4 – Ameliasburgh	County of Prince Edward	City Council	Shire Hall, 332 Picton Main Street	Picton	ON	K0K 2T0		rpennell@pecounty.on.ca
	Sam	Branderhorst	Councillor Ward 5 – Athol	County of Prince Edward	City Council	Shire Hall, 332 Picton Main Street	Picton	ON	K0K 2T0		jsbranderhorst@pecounty.on.ca
	Bill	Roberts	Councillor Ward 6 – Sophiasburgh	County of Prince Edward	City Council	Shire Hall, 332 Picton Main Street	Picton	ON	K0K 2T0		broberts@pecounty.on.ca
	Chris	Braney	Councillor Ward 7 – Hillier	County of Prince Edward	City Council	Shire Hall, 332 Picton Main Street	Picton	ON	K0K 2T0		cbraney@pecounty.on.ca
	David	Harrison	Councillor Ward 8 – North Marysburgh	County of Prince Edward	City Council	Shire Hall, 332 Picton Main Street	Picton	ON	K0K 2T0		dharrison@pecounty.on.ca
	David	Hirsch	Councillor Ward 9 – South Marysburgh	County of Prince Edward	City Council	Shire Hall, 332 Picton Main Street	Picton	ON	K0K 2T0		jhirsch@pecounty.on.ca
	Michael	Michaud	Manager of Planning	County of Prince Edward	Manager of Planning	Shire Hall, 332 Picton Main Street	Picton	ON	K0K 2T0	613-476-2148 ext. 2025	mmichaud@pecounty.on.ca
	Jeff	Bryans	Manager of Infrastructure	County of Prince Edward	Infrastructure Services	Shire Hall, 332 Picton Main Street	Picton	ON	K0K 2T0	613-476-2148 ext. 4012	jbryans@pecounty.on.ca
	Albert	Paschkowiak	Environmental Services & Sustainability Supervisor	County of Prince Edward	Environmental Services & Sustainability	Shire Hall, 332 Picton Main Street	Picton	ON	K0K 2T0	613-476-2148 ext. 4004	apaschkowiak@pecounty.on.ca
	Tanya	Redden	Construction & Technical Services Supervisor	County of Prince Edward	Construction & Technical Services	Shire Hall, 332 Picton Main Street	Picton	ON	K0K 2T0	613-476-2148 ext. 4014	tredden@pecounty.on.ca

Appendix B2 Contact List – Indigenous Contact List

GROUPS	FIRST NAME	SURNAM E	ORGANIZATION	POSITION	PHONE NUMBER	ADDRESS	CITY	PROVI NCE	POSTAL CODE	E-MAIL	CC List
INDIGENOUS COMMUNITIES	Dave	Mowat	Alderville First Nation		905-352-2011	PO Box 46	Roseneath	ON	K0K 2X0	consultation@alderville.ca	
	Joanne	Sandy	Beausoleil First Nation	Grand Chief	705-247-2051		Cedar Point	ON	L0K 1C0	bfnchief@chimnissing.ca	inquries@williamstreatiesfirstnnations.ca
	Keith	Knott	Curve Lake First Nation	Chief	705-657-8045 ext. 209	22 Winookeedaa Road	Curve Lake	ON	K0L 1R0	keithk@curvelake.ca	inquries@williamstreatiesfirstnnations.ca
	Donna	Big Canoe	Chippewas of Georgina Island	Chief	705-437-1337	PO Box N-13, R.R.#2	Sutton West	ON	L0E 1R0	donna.bigcanoe@georginaisland.com	inquries@williamstreatiesfirstnnations.ca
	Ted	Williams	Chippewas of Rama First Nation	Chief	705-325-3611	200-5884 Rama Road	Rama	ON	L3V 6H6	consultation@ramafirstnation.ca	inquries@williamstreatiesfirstnnations.ca
	Laurie	Carr	Hiawatha First Nation	Chief	705-295-4421	123 Paudash Street, R.R.#2	Hiawatha	ON	K9J 0E6	tcowie@hiawathafn.ca	mmcgonigle@hiawathafn.ca inquries@williamstreatiesfirstnnations.ca sdavison@hiawathafn.ca
	Remy	Vincent	Huron-Wendat Nation	Grand Chief	418-843-3767	255 place Chef Michel Laveau	Wendake	QC	G0A 4V0		Dominic.Sainte-Marie@wendake.ca Lori-Jeanne.Bolduc@wendake.ca Marie-Sophie.Gendron@wendake.ca Mario.GrosLouis@wendake.ca Thiefaine.Terrier@wendake.ca
	Kris	Nahrhang	Kawartha Nishnawbe First Nation	Chief		257 Big Cedar Lake Road	Big Cedar	ON	KOL 2H0	Keithk@curvelake.ca	Nodin.webb@hotmail.com samgharvey@live.com giiwednang@hotmail.com
	Kelly	LaRocca	Missisaugas of Scugog Island First Nation	Chief	905-985-3337	22521 Island Road	Port Perry	ON	L9L 1B6	ckennedy@scugogfirstnation.com	consultation@scugogfirstnation.com don@ibabraiding.com kbent@scugogfirstnation.com msanford@scugogfirstnation.com ngarrod@scugogfirstnation.com sshrubsole@scugogfirstnation.com tturoczi@scugogfirstnation.com
	Donald	Maracle	Mohwaks of the Bay of Quinte	Chief	613-396-3424	24 Meadow Drive	Tyendinaga Mohawk Territory	ON	КОК 1ХО	rdonm@mbq-tmt.org	lisam@mbq-tmt.org

Appendix B2 Contact List – Landowner - VOH Contact List

STAKEHOLDER CATEGORY	NAME	E-MAIL	ADDRESS	CITY	PROVINCE	POSTAL CODE
VOH		@gmail.com				
VOH		@ocadu.ca				
VOH		@gmail.com		Picton	ON	
VOH		@laferla.ca				
VOH		@yahoo.ca				
VOH		@thebronskillgroup.com		Plcton	ON	K0K 2T0
STAKEHOLDER		@yahoo.ca				

Cherry Valley Community Expansion Project: Environmental Report July 11, 2023

B.3 Newspaper Notice Tear Sheets

Enbridge Gas Inc. Notice of Study Commencement and Virtual Information Session

Cherry Valley Community Expansion Project

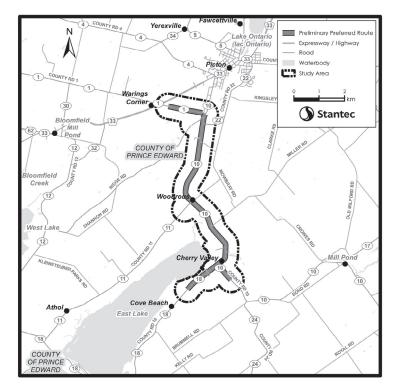
Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Cherry Valley Community Expansion Project to supply the community of Cherry Valley in Prince Edward County with affordable natural gas (the "Project"). The Project will involve the construction of up to approximately 14 kilometers of a combination of 2- and 4-inch Nominal Pipe Size polyethylene natural gas pipeline.

The proposed pipeline will tie into an existing Enbridge Gas system south of Warings Corner, along Sandy Hook Road (County Road 1). From the commencing point, the pipeline will travel southeast along County Road 1, then south along County Road 10 to the County Road 10 and County Road 18 intersection. At this intersection, a portion of the pipeline will continue south down County Road 10 for approximately

1 km, and a portion of the pipeline will continue west along Country Road 18 to the terminating point, located near the Curry Lane and County Road 18 intersection. The proposed route, as described, has been developed for the purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final Project scope / design that will provide access to natural gas to end-use customers. To accommodate the increased supply of natural gas, the Project may also involve the building of a new distribution station, the location of which is still to be determined.

Consultation with Indigenous communities and engagement with landowners, government agencies, the general public, and other interested persons is an integral component of the planning process. As such, a Virtual Information Session will be held.

The Virtual Information Session will be available for two weeks starting on February 21, 2023, and finishing on March 7, 2023, at https://solutions.ca/ CherryValleyEA. If you are unable to log onto the Virtual Information Session between February 21st and March 7th, please dial (226)979-4457 and leave a detailed message with your contact information and a Project representative will respond as soon as possible.



A copy of the Virtual Information Session story boards will be available for viewing on the Enbridge Gas project website provided below. A questionnaire will be available as part of the Virtual Information Session, and you will have the opportunity to provide comments and/or questions about the proposed Project. Input received during the Virtual Information Session will be used to inform the selection of the Preferred Route and to develop site-specific environmental protection and mitigation measures for the Project.

As part of the planning process, Enbridge Gas has retained Stantec Consulting Ltd. (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 Pipelines and Facilities in Ontario, 7th Edition (2016)". It is anticipated that an Environmental Report for the study will be completed March 2023, after which Enbridge Gas will file an application to request an OEB leave to construct (LLTTC) for the Project. Should the OEB find the Project to be in the public's interest, construction is anticipated to commence Q1 2024.

For any questions or comments regarding the Environmental Study or the proposed Cherry Valley Community Expansion Project, please reach out to:

Emily Hartwig, Environmental Consultant Stantec Consulting Ltd. Telephone: (226) 979 4457 Email: CherryValleyEA@stantec.com Or visit the project website at: https://www.enbridgegas.com/CherryValley.



News to Report? Email jasonparks.pictongazette@gmail.com

Jupiter and Venus to put on 'Spooky Eyes" celestial show March 1



GARY BOYLE BACKYARD ASTRONOMER

The night sky is a fantastic collection of tiny dots. Most of these light sources are faint while a few are noticeably brighter.

In addition to seeing hundreds or even thousands of distant suns residing at extreme distances, we can see the planets of our solar system.

Referred by the Greeks as the "wanderers", five planets can be seen with the unaided eye against the starry background unless they are too close to the sun such as Mercury and Saturn. For the next few weeks, you can still see three in the western half of the sky.

We start overhead with orangy-coloured Mars to the top right of Orion the Hunter. This planet was closest to earth a couple of months ago and now appears a bit fainter as our distance increases. The red planet sets around 3:30 a.m. local time. Moving farther west we see the giant planet Jupiter (Pictured). Any telescope will reveal its cloud bands and four Galilean moons and sets around 9:30 p.m. locally.

Our third world is the brightest of the trio. Venus sets about two hours after sunset and is now moving higher in the sky each night as it escapes the solar glare. This planet is completely shrouded in clouds making it so bright that it casts a faint shadow as seen from dark country locations, away from any light. Step outside on a moonless night and let your eyes "dark adapt". After about fifteen minutes, hold up a sheet of white paper facing the planet. Place your hand about six omy.com

inches away from the paper while moving it slowly left and right. You should see a faint shadow on the paper. If you are still uncertain where the planets are, check any astronomy app on your smartphone or tablet.

Here is where the magic comes into play. With Jupiter moving closer to the horizon each night and Venus marching up the sky, both will appear closest together on March 1st. With the two brightest planets of the solar system meeting in a small area of sky the width of the full moon, they will appear as "spooky eyes". This is also called a conjunction as two celestial bodies appear close together. The pair's close approach is by line of sight only, they will not physically get close to each other. Venus will be 204 million km from us while Jupiter will be 864 million km away.

It is believed the Star of the Magi was the great conjunction in which Venus and Jupiter appeared so close, they looked like one object. This occurred on the night of June 17, 2 BC.

Clear skies.

Known as "The Backyard Astronomer", Gary Boyle is an astronomy educator, guest speaker, monthly columnist for the Royal Astronomical Society of Canada as well as a STEM educator. He has been interviewed on more than 55 Canadian radio stations as well as television across Canada and the U.S. In recognition of his public outreach in astronomy, the International Astronomical Union has honoured him with the naming of Asteroid (22406) Garyboyle. Follow him on Twitter: @astroeducator. Facebook and his website: www.wondersofastron-

The Picton Gazette _____

Antonymous donor to fund \$20,000 Trades scholarship for PECI Grads

A new scholarship fund to benefit Koutroulides, lead of the Guid-Prince Edward Collegiate Institute (PECI) students pursuing education in the trades

The County Trades Scholarship will be the largest annual scholarship currently administered by The County Foundation. Each year The County Trades Scholarship will award \$10,000 for a two year period (total scholarship amount of \$20,000) to a grad-uating student from PECI pursuing post-secondary studies at a Canadian post-secondary institution for the Trades.

Preference will be given to programs eligible for red seal status and to those with the greatest financial need. New to the scholarship application will be an option to send in a video essay through The Foundation's social media accounts rather than a written document if preferred. A total of two scholarships will be awarded annually, one selected through the County Foundation application process and one through an internal PECI process guided by teacher and faculty nomination.

"We are excited for this amazing opportunity for our students interested in the trades," Greer

ance, Student Success and Co-operative Education Department at PECI said. "We have seen an increasing number of students exploring trades through co-operative education placements and OYAP experiences. We are very grateful Prince Edward County always supports our Panthers in reaching their goals."

The scholarship is funded by an anonymous donor who is passionate about advancing education in the trades and removing barriers to post-secondary education in this sector.

"The County Foundation is thrilled to be supporting this opportunity to PECI students pursuing continued education in the trades," stated Dominique Jones, Executive Director of The County Foundation. "We know there is huge demand in skilled trades, as skilled trades workers are retiring faster than they are getting replaced."

PECI students interesting in applying to this scholarship are encouraged to make an appointment with the guidance department at PECI and visit www.thecountyfoundation.ca to

REQUEST FOR TENDER #PEC-OPS-0001-2023 Wellington Channel Dredging

The County of Prince Edward is accepting bids to secure qualified vendor to conduct dredging of the Wellington Channel.

Bid documents may be obtained through the Bids&Tenders link on The County of Prince Edward website at www.thecounty.ca/ residents/ services/purchasing/ or directly on thecounty.bidsandtenders.ca/Module/Tenders/en/Home/ BidsHomepage

Bids must be submitted electronically through The County's Bids&Tenders platform until:

2 pm local time on Tuesday February 21, 2023

All projects out for competition are posted online at www.bidsandtenders.com



Matthew Nestorovski, Procurement Coordinator The County of Prince Edward 280 Picton Main Street, 1st Floor, Suite 103 Picton, ON, K0K 2T0 P: 613.476.2148 / F: 613.476.7622 purchasing@pecounty.on.ca www.thecounty.ca

This advertisement is available in alternate ormats upon request.

May 30th each year and the recip- more information and how to dation.ca/grants-funds/scholar-

learn more. Applications are due ient is awarded at graduation. For apply, please visit thecountyfoun- ships/county-trades-scholarship/

Enbridge Gas Inc. **Notice of Study Commencement and Virtual Information Session**

Cherry Valley Community Expansion Project

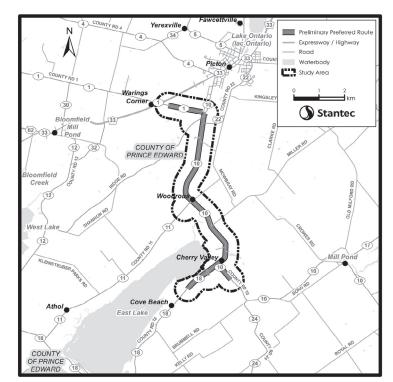
Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Cherry Valley Community Expansion Project to supply the community of Cherry Valley in Prince Edward County with affordable natural gas (the "Project"). The Project will involve the construction of up to approximately 14 kilometers of a combination of 2- and 4-inch Nominal Pipe Size polyethylene natural gas pipeline.

The proposed pipeline will tie into an existing Enbridge Gas system south of Warings Corner, along Sandy Hook Road (County Road 1). From the commencing point, the pipeline will travel southeast along County Road 1, then south along County Road 10 to the County Road 10 and County Road 18 intersection. At this intersection, a portion of the pipeline will continue south

down County Road 10 for approximately 1 km, and a portion of the pipeline will continue west along Country Road 18 to the terminating point, located near the Curry Lane and County Road 18 intersection. The proposed route, as described, has been developed for the purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final Project scope / design that will provide access to natural gas to end-use customers. To accommodate the increased supply of natural gas, the Project may also involve the building of a new distribution station, the location of which is still to be determined.

Consultation with Indigenous communities and engagement with landowners, government agencies, the general public, and other interested persons is an integral component of the planning process. As such, a Virtual Information Session will be held.

The Virtual Information Session will be available for two weeks starting on February 21, 2023, and finishing on March 7, 2023, at https://solutions.ca/ CherryValleyEA. If you are unable to log onto the Virtual Information Session between February 21st and March 7th, please dial (226)979-4457 and leave a detailed message with your contact information and a Project representative will respond as soon as possible.



A copy of the Virtual Information Session story boards will be available for viewing on the Enbridge Gas project website provided below. A questionnaire will be available as part of the Virtual Information Session, and you will have the opportunity to provide comments and/or questions about the proposed Project. Input received during the Virtual Information Session will be used to inform the selection of the Preferred Route and to develop site-specific environmental protection and mitigation measures for the Project.

As part of the planning process, Enbridge Gas has retained Stantec Consulting Ltd. (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 Pipelines and Facilities in Ontario, 7th Edition (2016)". It is anticipated that an Environmental Report for the study will be completed March 2023, after which Enbridge Gas will file an application to request an OEB leave to construct (LLTTC) for the Project. Should the OEB find the Project to be in the public's interest, construction is anticipated to commence O1 2024.

For any questions or comments regarding the Environmental Study or the proposed Cherry Valley Community Expansion Project, please reach out to:

Emily Hartwig, Environmental Consultant Stantec Consulting Ltd. Telephone: (226) 979 4457 Email: CherryValleyEA@stantec.com Or visit the project website at: https://www.enbridgegas.com/CherryValley.



SPORT SLICES

JAMES HURST



Honouring the Indigenous community

Despite the effects of the dreaded Arctic hockey game at the CAA Arena last Saturday night in Belleville. The Senators faced the Rochester Americans in the final game before the All-Star break for the American Hockey League.

Before the puck drop, a trio of Indigenous singers graced us with a traditional song. Chief Mara-



cle supervised the face-off, and then they rolled up the mats. Less than a minute later. Jiri Kulich fired the puck into the Belleville goal on a power play to open the

scoring. Jake Lucchini replied for the Senators, also on a power play.

Isak Rosen closed out the scoring in the first period for the Americans, also on a power play. You read that correctly. Three goals, three power plays. A chippy affair, from both teams. But in the final analysis, the Senators served 22 minutes in minor penalties, whereas the Americans had 14 minutes. Several of those penalties could be described, quite accurately, as foolish. Retaliation, at the wrong place, at the wrong time.

ΞK 15 B

SUNDAY. MAY 14. 2023



Leaving Picton (Old Fire Hall) 8:30am **Wellington Arena 9am** Wooler Car Lot 9:30am

FOR INFORMATION, CALL BOB AT 343.600.2966

FUTURE GAMES JUNE 11 VS MINNESOTA JULY 16 VS ARIZONA AUGUST 13 VS CHICAGO CUBS SEPTEMBER 17 VS BOSTON

Just enough to keep Belleville's interim coach David Bell adjusting lines throughout the game.

John Quenneville notched his first goal as a Senator to open the scoring in the second period, followed by an Angus Crookshank tally. Michael Mersch tallied his first of two straight goals to give the Americans the lead. At 8:49 in the third period, Scott Sabourin tied the game for the Senators. It stayed that way until the end of the third period.

In the overtime, Belleville's Egor Sokolov had Vortex, almost 3,000 fans attended the a decent scoring opportunity. As is often the case, the Americans raced in the opposite direction, and Jeremy Davies scored with less than a minute gone in OT.

> Sokolov headed off to the All-Star game in Montreal after the game. He leads the team in scoring with 12 goals, and 39 points. He contributed three assists to his team in the Three- **SPORTSLICES.BLOGSPOT.COM**

On-Three game at the All-Star Break.

There were ten vendors at the game, with a variety of products from the Tyendinaga Mohawk Territory. There was fine artwork, beaded designs, "Mohawkisins", semi-sweet treats, and reading materials.

The LVII SuperBowl game takes place this Sunday in Arizona. It seems forever that the playoffs for this game began late last year. It will be an exciting game with the Philadelphia Eagles and the Kansas City Chiefs looking to raise the Lombardi Trophy. Jalen Hurts is at the helm for the Eagles, and Patrick Mahomes quarterbacks the Chiefs. I suspect the game will be decided by the men in the trenches, the linemen who are designed to protect the quarterbacks on offence, or to race into the backfield to sack the opponent on defence.

Enjoy the warming trend.

Enbridge Gas Inc. **Notice of Study Commencement and Virtual Information Session**

Cherry Valley Community Expansion Project

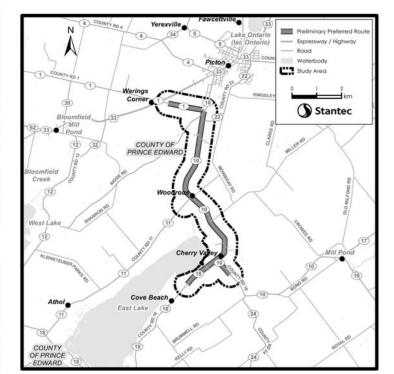
Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Cherry Valley Community Expansion Project to supply the community of Cherry Valley in Prince Edward County with affordable natural gas (the "Project"). The Project will involve the construction of up to approximately 14 kilometers of a combination of 2- and 4-inch Nominal Pipe Size polyethylene natural gas pipeline.

The proposed pipeline will tie into an existing Enbridge Gas system south of Warings Corner, along Sandy Hook Road (County Road 1). From the commencing point, the pipeline will travel southeast along County Road 1, then south along County Road 10 to the County Road 10 and County Road 18 intersection. At this intersection, a portion of the pipeline will continue south

down County Road 10 for approximately 1 km, and a portion of the pipeline will continue west along Country Road 18 to the terminating point, located near the Curry Lane and County Road 18 intersection. The proposed route, as described, has been developed for the purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final Project scope / design that will provide access to natural gas to end-use customers. To accommodate the increased supply of natural gas, the Project may also involve the building of a new distribution station, the location of which is still to be determined.

Consultation with Indigenous communities and engagement with landowners, government agencies, the general public, and other interested persons is an integral component of the planning process. As such, a Virtual Information Session will be held.

Virtual Information Session will be available for two weeks starting on February 21, 2023, and finishing on March 7, 2023, at https://solutions.ca/ CherryValleyEA. If you are unable to log onto the Virtual Information Session between February 21st and March 7th, please dial (226) 979-4457 and leave a detailed message with your contact information and a Project representative will respond as soon as possible.



A copy of the Virtual Information Session story boards will be available for viewing on the Enbridge Gas project website provided below. A questionnaire will be available as part of the Virtual Information Session, and you will have the opportunity to provide comments and/or questions about the proposed Project. Input received during the Virtual Information Session will be used to inform the selection of the Preferred Route and to develop site-specific environmental protection and mitigation measures for the Project.

As part of the planning process, Enbridge Gas has retained Stantec Consulting Ltd. (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 Pipelines and Facilities in Ontario, 7th Edition (2016)". It is anticipated that an Environmental Report for the study will be completed March 2023, after which Enbridge Gas will file an application to request an OEB leave to construct (LTC) for the Project. Should the OEB find the Project to be in the public's interest, construction is anticipated to commence Q1 2024

For any questions or comments regarding the Environmental Study or the proposed Cherry Valley Community Expansion Project, please reach out to:

Emily Hartwig, Environmental Consultant Stantec Consulting Ltd. Telephone: (226) 979 4457 Email: CherryValleyEA@stantec.com Or visit the project website at: https://www.enbridgegas.com/CherryValley.



Flashback February

FROM PAGE 10

The funds will be used to commission artworks and stories for the exhibit. The Macaulay Church will also be the site of an Evensong Service to celebrate the 200th anniversary of the Anglican parish in the County. The Macaulay Church building was the original site for the Anglican church

Who's my ginger peachy?

FROM PAGE 5

A devastating loss of life happened in the earthquakes which shook Turkey and Syria, leaving thousands of people are without homes, food and medical care. The country's

until St. Mary Magdalene Church was built in 1913. The order of service will hearken back to the time of Reverend Macaulay.

The Macaulay family also features in an event at Macaulay House, where members of Shatterbox Theatre, in period dress, will read letters that were written by various members of the Macaulay family. "There were hundreds of letters between William Macaulay and family members since he was a student at Oxford, and we will get an inside look into the family. The letters are so

record profits, yet continue to blame outrageous

hilarious and so moving, and performers playing the parts of the family will be reading the letters," said Chase. Returning after a two-year absence is the very popular Trivia Night, led by Steve Campbell. This will take place at the Waring House and is open to teams and individuals. "Trivia kind of goes hand-in-hand with County history," said Chase. "Steve is so great and so funny, and he's a natural MC for this, plus he knows his stuff as well." For more information about Flashback February events, please visit visitthecounty.com/flashback-february.

by this point discrimination would be a thing of the past, yet here we are.

By the time this column is published it will be one day after Valentine's Day. I sorta, kinda miss sitting around the kitchen table with my brothers and sisters making cards for our classmates. We helped each other with the drawing, the cutting out, the colouring and addressing the envelopes. When we were finished, and our pile of

greetings had been packed into a decorated brown paper lunch bag, Mom always served us a treat for a job well done.

I may bake a batch of heart cookies then clear the kitchen table, haul out the markers, the card stock, the glue sticks, the glitter and whip up a batch of Valentine cards. I may even share with my Ginger Peachy. I don't think I'll have a glass of milk to wash those cookies down, though!

THERESA@WELLINGTONTIMES.CA

A vanishing legacy

FROM PAGE 2

Many of the people she interviewed for the documentary were then in their eighties, and are no longer alive. In addition, most of the buildings used by the fishing families at Long Point have been demolished or are in a state of decay and are slated for removal by the federal government, which owns the property. Pasternak's archival footage-which contains the full interviews—is the last remaining link to the vibrant maritime history of the County. To register for the Zoom event, please visit *ssji.ca* and click on the Events tab.



food prices on the supply chain. Thousands of hardworking Canadians work full-time hours, but are barely able to keep a roof over their heads and food on their tables. While I love music, my ear worm has been It's Good News Week (look that one up) but we really haven't had a "good news week" biggest grocery corporations are posting for months and months. Like a lot of you, I thought

Enbridge Gas Inc. **Notice of Study Commencement and Virtual Information Session**

Cherry Valley Community Expansion Project

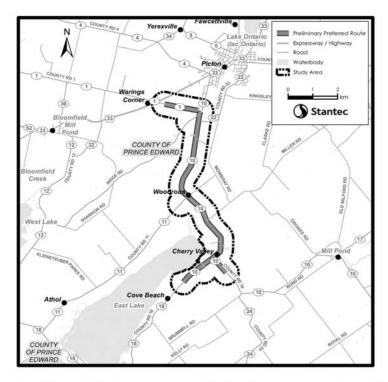
Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Cherry Valley Community Expansion Project to supply the community of Cherry Valley in Prince Edward County with affordable natural gas (the "Project"). The Project will involve the construction of up to approximately 14 kilometers of a combination of 2- and 4-inch Nominal Pipe Size polyethylene natural gas pipeline

The proposed pipeline will tie into an existing Enbridge Gas system south of Warings Corner, along Sandy Hook Road (County Road 1). From the commencing point, the pipeline will travel southeast along County Road 1, then south along County Road 10 to the County Road 10 and County Road 18 intersection. At this intersection, a portion of the pipeline will continue south

down County Road 10 for approximately 1 km, and a portion of the pipeline will continue west along Country Road 18 to the terminating point, located near the Curry Lane and County Road 18 intersection. The proposed route, as described, has been developed for the purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final Project scope / design that will provide access to natural gas to end-use customers. To accommodate the increased supply of natural gas, the Project may also involve the building of a new distribution station, the location of which is still to be determined.

Consultation with Indigenous communities and engagement with landowners, government agencies, the general public, and other interested persons is an integral component of the planning process. As such, a Virtual Information Session will be held.

The Virtual Information Session will be available for two weeks starting on February 21, 2023, and finishing on March 7, 2023, at https://solutions.ca/ CherryValleyEA. If you are unable to log onto the Virtual Information Session between February 21st and March 7th, please dial (226) 979-4457 and leave a detailed message with your contact information and a Project representative will respond as soon as possible.



A copy of the Virtual Information Session story boards will be available for viewing on the Enbridge Gas project website provided below. A questionnaire will be available as part of the Virtual Information Session, and you will have the opportunity to provide comments and/or questions about the proposed Project. Input received during the Virtual Information Session will be used to inform the selection of the Preferred Route and to develop site-specific environmental protection and mitigation measures for the

As part of the planning process, Enbridge Gas has retained Stantec Consulting Ltd. (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 Pipelines and Facilities in Ontario, 7th Edition (2016)". It is anticipated that an Environmental Report for the study will be completed March 2023, after which Enbridge Gas will file an application to request an OEB leave to construct (LTC) for the Project. Should the OEB find the Project to be in the public's interest, construction is anticipated to commence Q1 2024

For any questions or comments regarding the Environmental Study or the proposed Cherry Valley Community Expansion Project, please reach out to:

Emily Hartwig, Environmental Consultant Stantec Consulting Ltd. Telephone: (226) 979 4457 Email: CherryValleyEA@stantec.com Or visit the project website at: https://www.enbridgegas.com/CherryValley.



B.4 Notification Letters



Stantec Consulting Ltd. 300W-675 Cochrane Drive, Markham ON L3R 0B8



February 7, 2023

«FIRST_NAME» «SURNAME» «POSITION» «ORGANIZATION» «ADDRESS» «CITYTOWN» «POSTAL_CODE»

Dear «FIRST_NAME» «SURNAME»,

Reference: Enbridge Gas Inc. – Cherry Valley Community Expansion Project, Notice of Study Commencement and Virtual Information Session

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Cherry Valley Community Expansion Project to supply the community of Cherry Valley in Prince Edward County with affordable natural gas (the "Project"). The Project will involve the construction of up to approximately 14 kilometers of a combination of 2- and 4-inch Nominal Pipe Size polyethylene natural gas pipeline.

The proposed pipeline will tie into an existing Enbridge Gas system south of Warings Corner, along Sandy Hook Road (County Road 1). From the commencing point, the pipeline will travel southeast along County Road 1, then south along County Road 10 to the County Road 10 and County Road 18 intersection. At this intersection, a portion of the pipeline will continue south down County Road 10 for approximately 1 km, and a portion of the pipeline will continue west along Country Road 18 to the terminating point, located near the Curry Lane and County Road 18 intersection. The proposed route, as described and as shown on the attached Figure 1, has been developed for the purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final Project scope / design that will provide access to natural gas to end-use customers.

To accommodate the increased supply of natural gas, the Project may also involve the building of a new distribution station.¹

As part of the planning process, Enbridge Gas has retained Stantec Consulting Ltd. (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 Pipelines and Facilities in Ontario, 7th Edition (2016)"*.

An Environmental Report, summarizing the results of the Environmental Study, will accompany Enbridge Gas' application to the OEB as part of the application requesting a leave to construct (LTC) for the Project. It is anticipated that the Environmental Report will be completed March 2023, after which Enbridge Gas will file the LTC application. Should the OEB find the Project to be in the public's interest, construction is anticipated to commence Q1 2024.

¹ As the location of the distribution station is still to be determined, its location is not shown on the attached Figure 1; however, it can be assumed that the station will occur somewhere within the defined Project Study Area.

February 7, 2023 «FIRST_NAME» «SURNAME» Page 2 of 2

Reference: Enbridge Gas Inc. – Cherry Valley Community Expansion Project, Notice of Study Commencement and Virtual Information Session

As an agency with jurisdiction or a potential interest in developments in the Study Area defined on the attached Figure 1, 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 routing, construction, and/or operation of the proposed Project. Stantec is also seeking collection of primary and secondary data to help compile an environmental and socio-economic inventory in the Study Area. These sources of data will include a Stage 1 and 2 Archaeological Assessment, a Cultural Heritage Assessment, and a windshield survey.

To support the assessment process, we also request you share information regarding other proposed developments in the Study Area. This information will be incorporated into the Environmental Study and related report as a component of the cumulative effects assessment. **Please contact us to discuss the most efficient way to obtain this information.**

Consultation with Indigenous communities and engagement with landowners, government agencies, the general public, and other interested persons is an integral component of the planning process. As such, a Virtual Information Session will be held.

Input received during the Virtual Information Session will be used to inform the selection of the Preferred Route and to develop site specific environmental protection or mitigation measures for the Project.

The Virtual Information Session will be available from **February 21, 2023**, to **March 7, 2023**, at <u>https://solutions.ca/CherryValleyEA</u>.

A questionnaire will be available as part of the Virtual Information Session, and you will have the ability to submit comments and/or questions about the Project. In addition, a copy of the Virtual Information Session story boards will be available on the Enbridge Gas project website at: <u>https://www.enbridgegas.com/CherryValley</u>.

We kindly request that input and comments regarding the Project are provided by March 10, 2023.

If you have questions or comments regarding the Cherry Valley Community Expansion Project, please do not hesitate to contact the undersigned.

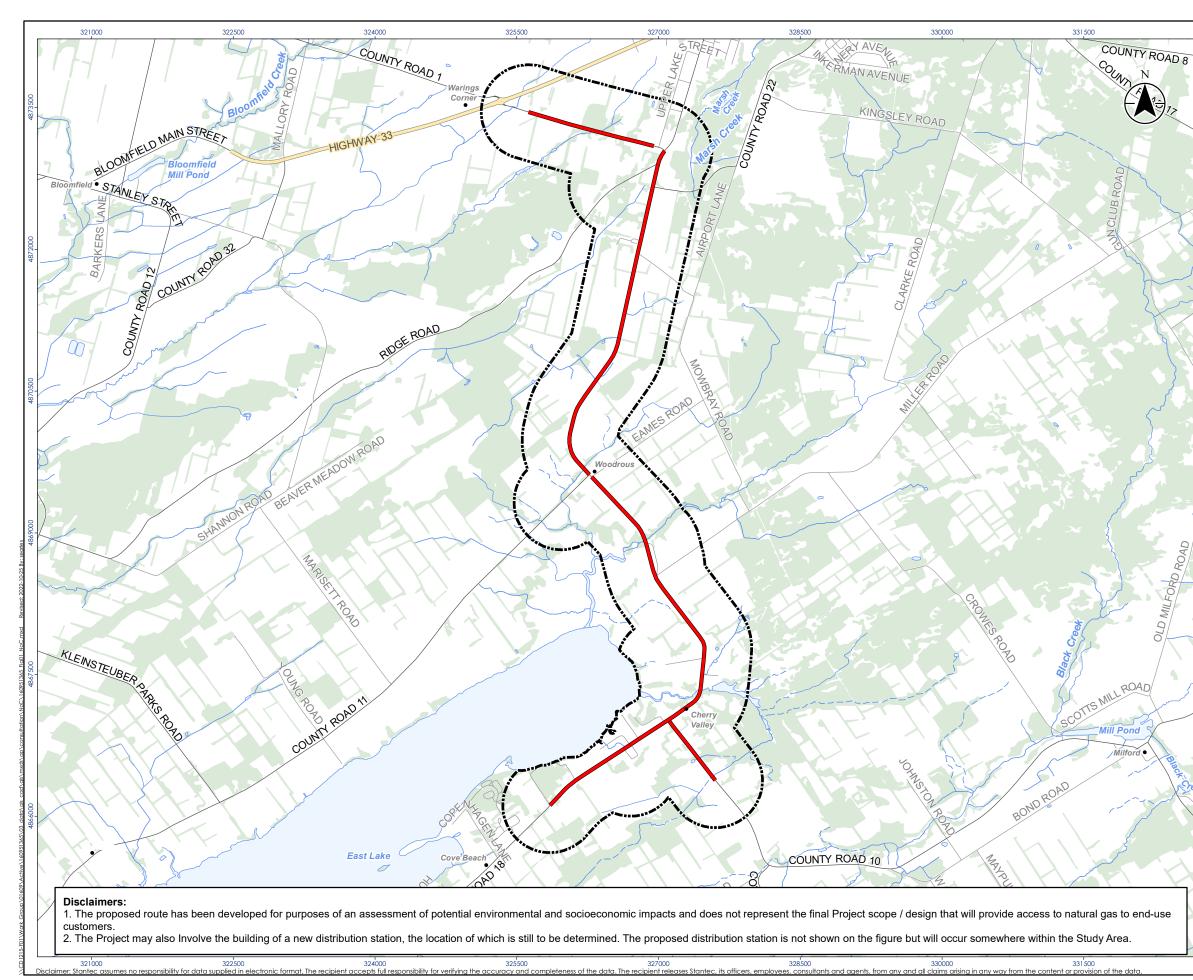
Regards,

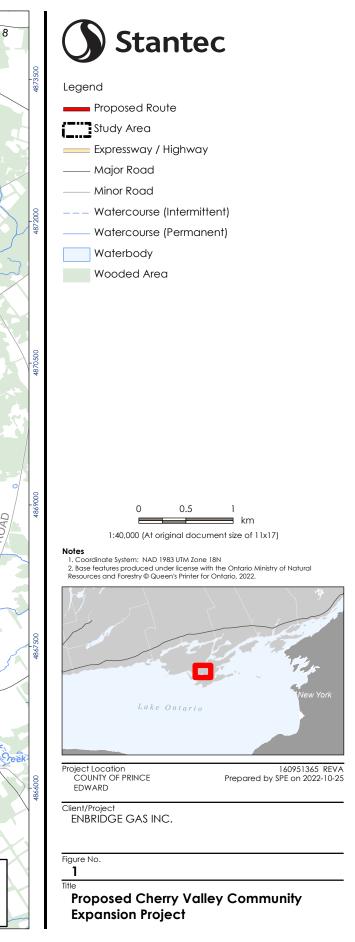
Emily Hartwig B.Sc., EP. Stantec Consulting Ltd. Environmental Consultant Assessment and Permitting Direct: (519) 585-3849 Emily.Hartwig@stantec.com

Attachment: Figure 1 – Study Area

c. Kelsey Mills, Enbridge Gas Inc. Sonia Fazari, Enbridge Gas Inc.

Design with community in mind







Stantec Consulting Ltd. 300W-675 Cochrane Drive, Markham ON L3R 0B8



February 7, 2023

Attention: «TITLE» «FIRST_NAME» «SURNAME», «POSITION» «ORGANIZATION» «ADDRESS» «CITYTOWN» «POSTAL_CODE» «EMAIL»

Dear «FIRST_NAME» «SURNAME»,

Reference: Enbridge Gas Inc. – Cherry Valley Community Expansion Project, Notice of Study Commencement and Virtual Information Session

I am writing to advise you of an upcoming proposed natural gas pipeline project in Prince Edward County, in the Williams Treaties Traditional Territory.

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Cherry Valley Community Expansion Project to supply the community of Cherry Valley with affordable natural gas (the "Project"). The Project will involve the construction of up to approximately 14 kilometers of a combination of 2- and 4-inch Nominal Pipe Size polyethylene natural gas pipeline.

The proposed pipeline will tie into an existing Enbridge Gas system near south of Warings Corner, along Sandy Hook Road (County Road 1). From the commencing point, the pipeline will travel southeast along County Road 1, then south along County Road 10 to the County Road 10 and County Road 18 intersection. At this intersection, a portion of the pipeline will continue south down County Road 10 for approximately 1 km, and a portion of the pipeline will continue west along Country Road 18 to the terminating point, located near the Curry Lane and County Road 18 intersection. The proposed route, as described and as shown on the attached Figure 1, has been developed for the purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final Project scope / design that will provide access to natural gas to end-use customers.

To accommodate the increased supply of natural gas, the Project may also involve the building of a new distribution station.¹

As part of the planning process, Enbridge Gas has retained Stantec Consulting Ltd. (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 Pipelines and Facilities in Ontario, 7th Edition (2016)*".

¹ As the location of the distribution station is still to be determined, its location is not shown on the attached Figure 1; however, it can be assumed that the station will occur somewhere within the defined Project Study Area.

February 7, 2023 «FIRST_NAME» «SURNAME» Page 2 of 3

Reference: Enbridge Gas Inc. – Cherry Valley Community Expansion Project, Notice of Study Commencement and Virtual Information Session

An Environmental Report, summarizing the results of the Environmental Study, will accompany Enbridge Gas' application to the OEB as part of the application requesting a leave to construct (LTC) for the Project. It is anticipated that the Environmental Report will be completed March 2023, after which Enbridge Gas will file the LTC application. Should the OEB find the Project to be in the public's interest, construction is anticipated to commence Q1 2024.

Stantec is presently compiling an environmental, socio-economic, and archaeological / cultural heritage inventory of the Study Area, defined on the attached Figure 1. As an Indigenous community with a potential interest in Study Area, we are inviting «ORGANIZATION» to provide comments and feedback regarding the proposed Project. Specifically, we are seeking information about areas that may be culturally significant to your community in the established Study Area and information about potential impacts that the Project may have on asserted or established Aboriginal and treaty rights, and any measures for mitigating those adverse impacts. We invite «ORGANIZATION» to participate in the Project's upcoming Virtual Information Session.

As part of the Environmental Study, Enbridge Gas is also in the process of contacting the following agencies:

- Indigenous and Northern Affairs Canada; and
- Ministry of Indigenous Affairs.

The Virtual Information Session will be available from **February 21, 2023**, to **March 7, 2023**, at <u>https://solutions.ca/CherryValleyEA</u>.

A questionnaire will be available as part of the Virtual Information Session, and you will have the ability to submit comments and/or questions about the Project. In addition, a copy of the Virtual Information Session story boards will be available on the Enbridge Gas project website at: <u>https://www.enbridgegas.com/CherryValley</u>.

Enbridge Gas is committed to meaningful engagement with Indigenous communities. As such, we would be interested in holding a conference call with the «ORGANIZATION» to share Project related information, should you wish. If you have any questions, would like to provide feedback, share knowledge, or would be interested in setting up a briefing on this Project please feel free to contact me directly. We look forward to engaging with the «ORGANIZATION» to ensure your interests are being considered and represented.

We kindly request that initial input and comments regarding the Project are provided by your community by March 10, 2023. 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.

February 7, 2023 «FIRST_NAME» «SURNAME» Page 3 of 3

Reference: Enbridge Gas Inc. – Cherry Valley Community Expansion Project, Notice of Study Commencement and Virtual Information Session

If you have questions or concerns regarding the Project, please do not hesitate to contact me directly.

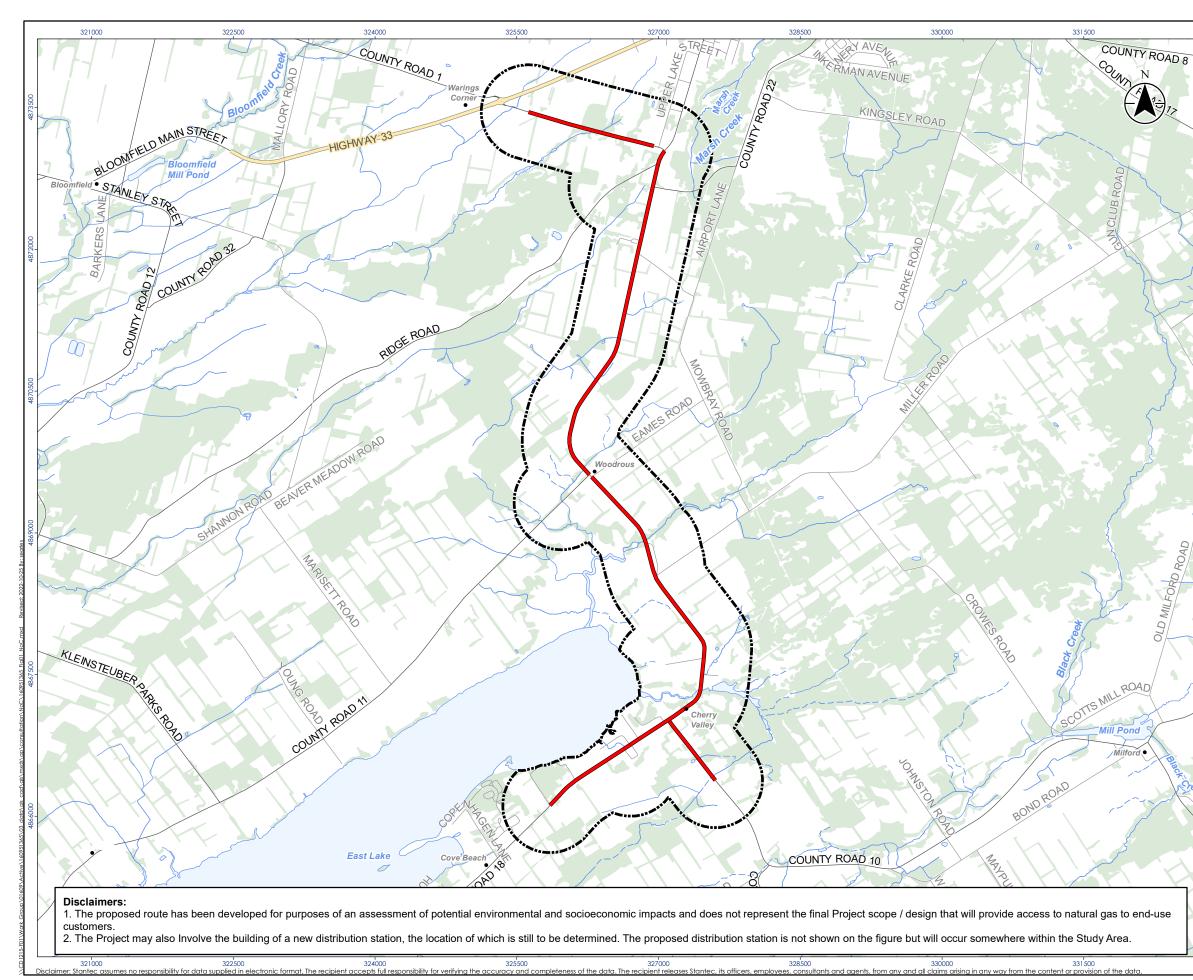
Yours truly,

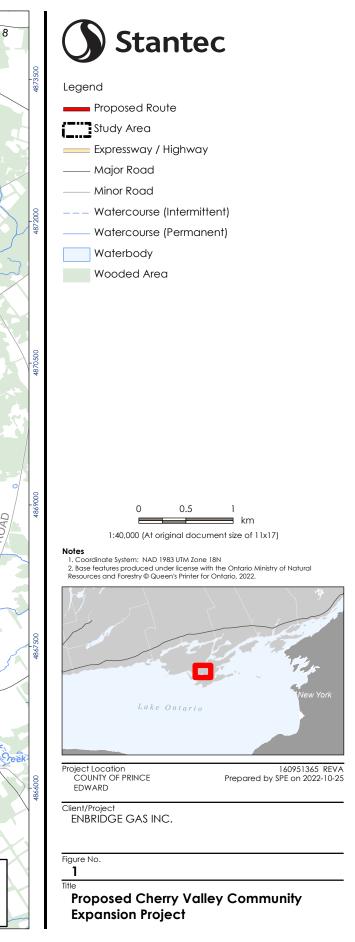
ENBRIDGE GAS INC.

Melanie Green Senior Advisor, Community & Indigenous Engagement, Eastern Region Enbridge Gas Inc. Phone: 613-297-4365 melaine.green@enbridge.com

Attachment: Figure 1 – Study Area

c. Kelsey Mills, Enbridge Gas Inc.







Stantec Consulting Ltd. 300W-675 Cochrane Drive, Markham ON L3R 0B8



February 7, 2023

Dear Landowner / Resident

Reference: Enbridge Gas Inc. – Cherry Valley Community Expansion Project, Notice of Study Commencement and Virtual Information Session

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Cherry Valley Community Expansion Project to supply the community of Cherry Valley in Prince Edward County with affordable natural gas (the "Project"). The Project will involve the construction of up to approximately 14 kilometers (km) of a combination of 2- and 4-inch Nominal Pipe Size polyethylene natural gas pipeline.

The proposed pipeline will tie into an existing Enbridge Gas system south of Warings Corner, along Sandy Hook Road (County Road 1). From the commencing point, the pipeline will travel southeast along County Road 1, then south along County Road 10 to the County Road 10 and County Road 18 intersection. At this intersection, a portion of the pipeline will continue south down County Road 10 for approximately 1 km, and a portion of the pipeline will continue west along Country Road 18 to the terminating point, located near the Curry Lane and County Road 18 intersection. The proposed route, as described and as shown on the attached Figure 1, has been developed for the purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final Project scope / design that will provide access to natural gas to end-use customers.

To accommodate the increased supply of natural gas, the Project may also involve the building of a new distribution station.¹

You are receiving this letter because the proposed pipeline is in proximity to your property.

As part of the planning process, Enbridge Gas has retained Stantec Consulting Ltd. (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 Pipelines and Facilities in Ontario, 7th Edition (2016)"*.

An Environmental Report, summarizing the results of the Environmental Study, will accompany Enbridge Gas' application to the OEB as part of the application requesting a leave to construct (LTC) for the Project. It is anticipated that the Environmental Report will be completed March 2023, after which Enbridge Gas will file the LTC application. Should the OEB find the Project to be in the public's interest, construction is anticipated to commence Q1 2024.

¹ As the location of the distribution station is still to be determined, its location is not shown on the attached Figure 1; however, it can be assumed that the station will occur somewhere within the defined Project Study Area.

February 7, 2023 Page 2 of 2

Reference: Enbridge Gas Inc. – Cherry Valley Community Expansion Project, Notice of Study Commencement and Virtual Information Session

Consultation with Indigenous communities; and engagement with landowners, government agencies, the general public, and other interested persons is an integral component of the planning process. As such, a Virtual Information Session will be held.

Input received during the Virtual Information Session will be used to inform the selection of the Preferred Route and distribution station and to develop site specific environmental protection or mitigation measures for the Project.

The Virtual Information Session will be available from **February 21, 2023**, to **March 7, 2023**, at <u>https://solutions.ca/CherryValleyEA</u>.

A questionnaire will be available as part of the Virtual Information Session, and you will have the ability to submit comments and/or questions about the Project. In addition, a copy of the Virtual Information Session story boards will be available on the Enbridge Gas project website at: <u>https://www.enbridgegas.com/CherryValley</u>.

We kindly request that input and comments regarding the Project are provided by **March 10, 2023**. If you have questions or comments regarding the Cherry Valley Community Expansion Project, please do not hesitate to contact the undersigned.

Please feel free to share this letter with your neighbours. If you are a landowner, it would also be appreciated if this letter could be shared with your tenants.

Regards,

Stantec Consulting Ltd.

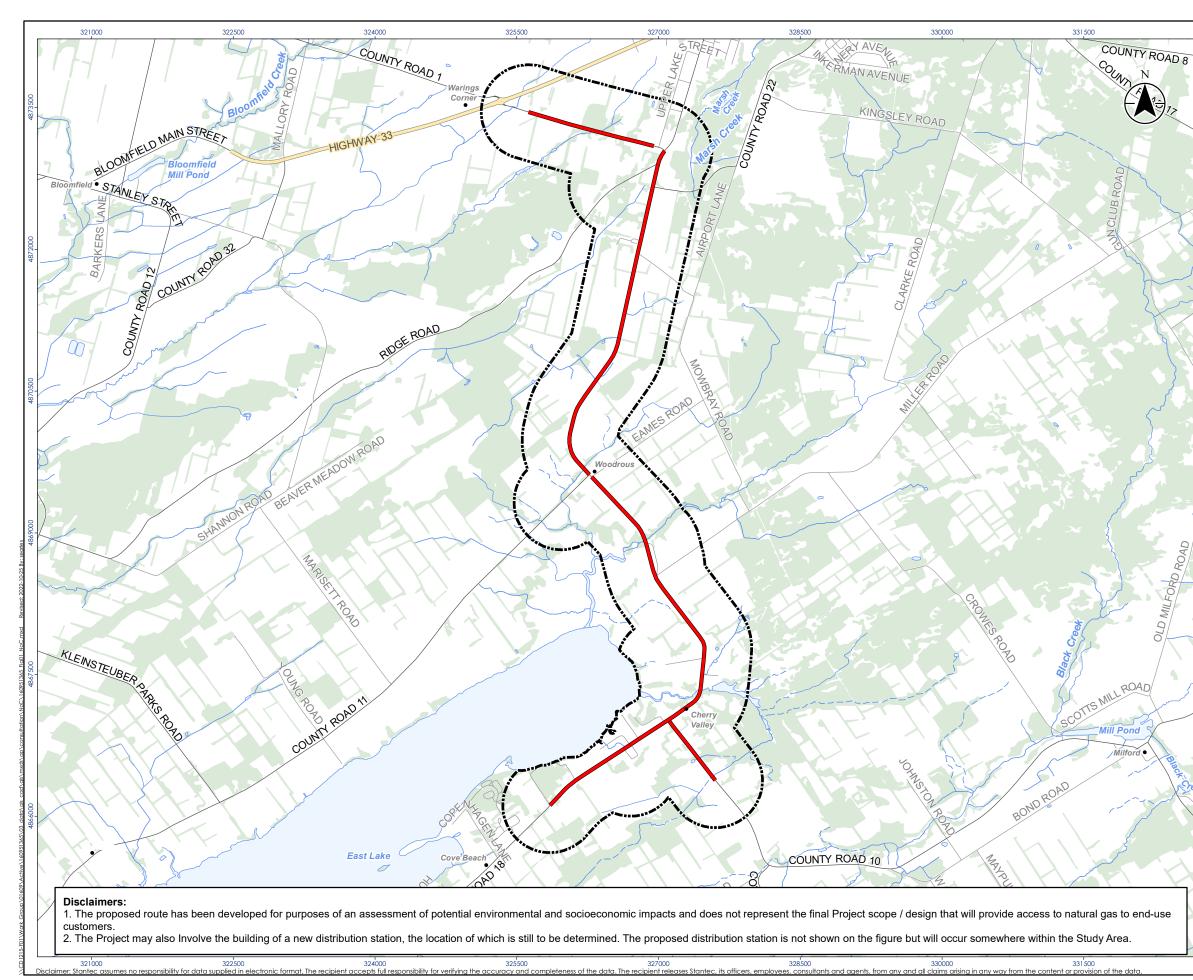
Emily Hauting

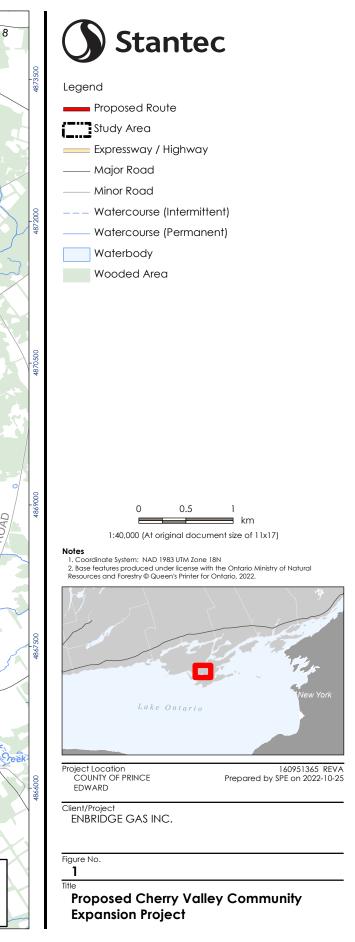
Emily Hartwig B.Sc., EP. Environmental Consultant Assessment and Permitting Direct: (519) 585-3849 Emily.Hartwig@stantec.com

Attachment: Figure 1 – Study Area

c. Kelsey Mills, Enbridge Gas Inc.

Design with community in mind





Cherry Valley Community Expansion Project: Environmental Report July 11, 2023

B.5 Virtual Open House Materials





Presented on behalf of Enbridge Gas





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.
- The presentation slides as well as the audio script are 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.

Our commitment

- Enbridge Gas is committed to involving Indigenous communities, agencies, interest groups, and community members.
- We will provide up-to-date information in an open, honest, and respectful manner, and will carefully consider your input.
- Enbridge Gas provides safe and reliable delivery of natural gas to more than 3.8 million residential, commercial, and industrial customers across Ontario.
- Enbridge Gas is committed to environmental stewardship and conducts its operations in an environmentally responsible manner.





Purpose of the Virtual Information Session

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





Indigenous Peoples Policy

Enbridge Gas recognizes the diversity of Indigenous peoples who live where we work and operate. We understand from history the destructive impacts on the social and economic wellbeing of Indigenous Peoples. Enbridge Gas recognizes and realizes the importance of reconciliation between Indigenous communities and the broader society. Positive relationships with Indigenous peoples, based on mutual respect and focused on achieving common goals, will create positive outcomes for Indigenous communities. Enbridge Gas commits to pursue sustainable relationships with Indigenous Nations and groups in proximity to where Enbridge Gas conducts business. To achieve this, Enbridge Gas will govern itself by the following principles:

- We recognize the legal and constitutional rights possessed by Indigenous peoples, and the importance of the relationship between Indigenous Peoples and their traditional lands and resources. We commit to working with Indigenous communities in a manner that recognizes and respects those legal and constitutional rights and the traditional lands and resources to which they apply. We commit to ensuring that our projects and operations are carried out in an environmentally responsible manner.
- We understand the importance of the United Nations Declaration on the Rights of Indigenous Peoples in the context of existing Canadian law and the commitments that the government has made to protecting the rights of Indigenous Peoples.
- We engage in forthright and sincere consultation with Indigenous Peoples about Enbridge Gas projects and operations through processes that seek to achieve early and meaningful engagement. Indigenous engagement help define our projects that may occur on lands traditionally occupied by Indigenous Peoples.
- We commit to working with Indigenous Peoples to achieve benefits for them resulting from Enbridge's projects and operations, including opportunities in training and education, employment, procurement, business development, and community development.
- We foster understanding of the history and culture of Indigenous Peoples among Enbridge's employees and contractors, in order to create better relationships between Enbridge Gas and Indigenous communities.

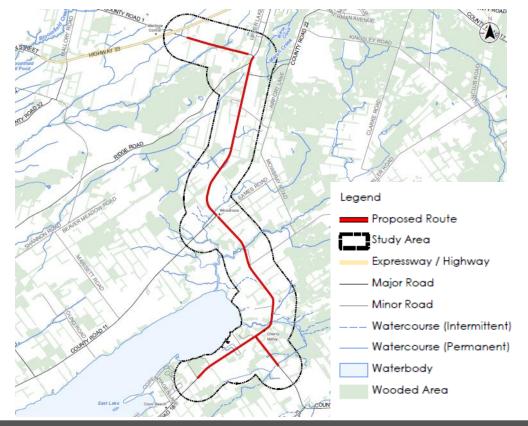
This commitment is a shared responsibility involving Enbridge Gas and its affiliates, employees and contractors. We will conduct business in a manner that reflects the above principles. Enbridge will provide ongoing leadership and resources to effectively implement the above principles, including the development of implementation strategies and specific action plans. Enbridge Gas commits to periodically review this policy so that it remains relevant and respects Indigenous culture and varied traditions.





Project Overview

- The Project will involve the construction of up to approximately 14 kilometers of a combination of 2- and 4-inch Nominal Pipe Size polyethylene natural gas pipeline.
- The pipeline will occur in the road allowance of County Road 1, County Road 10, and County Road 18.
- To accommodate the increased supply of natural gas, the Project may also involve the building of a new distribution station







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 Pipelines and Facilities in Ontario, 7th Edition (2016)".

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 followup program.







Ontario Energy Board (OEB) Review and Approval Process

It is anticipated that the Environmental Report for the study will be completed in March 2023, after which Enbridge Gas may file a Leave-to-Construct (LTC) application. The application to the OEB will include the following information on the Project:

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

The OEB will then hold a public hearing to review the Project. If the OEB determines that the Project is in the public interest, it will approve construction of the Project.

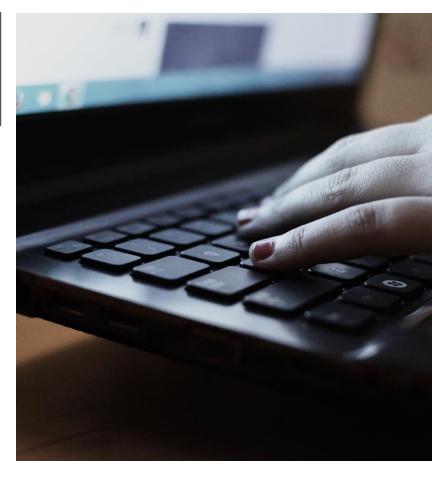
Additional information about the OEB process can be found at: <u>www.ontarioenergyboard.ca</u>





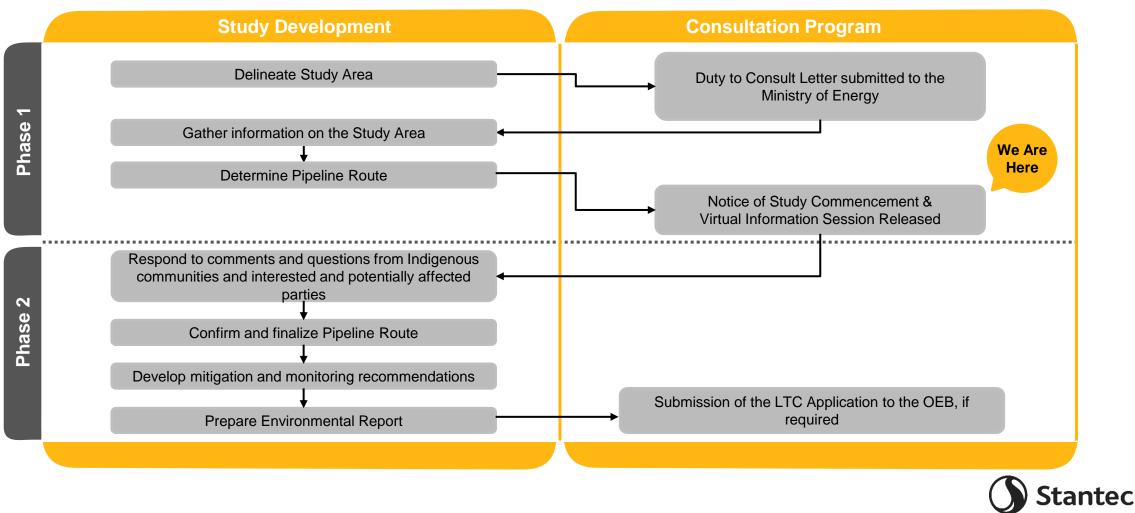
Engagement and Consultation

- Engagement and consultation are key components of the Environmental Report.
- At the outset of the Project, Enbridge Gas submits a Project Description to the Ministry of Energy; upon review, the Ministry of Energy determines potential impacts on Aboriginal or treaty rights and identifies Indigenous communities that Enbridge Gas will consult with during the entirety of the Project.
- The engagement and consultation program helps identify and address Indigenous community and stakeholder concerns and issues, provides information about the Project to the stakeholders, and allow for participation in the Project review and development process.
- Input will be used to help finalize the pipeline route 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.





Environmental Study Process









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.
- Our goal is to have no incidents and mitigate impacts on the environment by working with our stakeholders, peers, and others to promote responsible environmental practices and continuous improvement.

- Enbridge Gas is committed to environmental protection and stewardship, and we recognize 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.







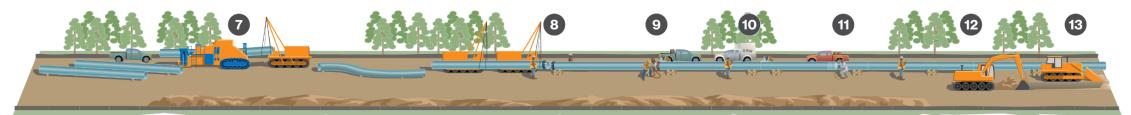
Access and Land Requirements

- While the majority of the pipeline route will be constructed within municipal road allowances, some circumstances
 requiring access agreements, permanent easement or temporary working space during construction could result in the
 need for additional land outside of road allowances.
- Enbridge Gas has a comprehensive Landowner Relations Program that uses a dedicated Lands Advisor who would:
 - Provide direct contact & liaison between landowners and Enbridge Gas.
 - Be available to the landowner during the length of the Project and throughout construction activities.
 - Address the concerns and questions of the landowner.
 - Act as a singular point of contact for all landowners.
 - Address any landowner questions and any legal matters relating to temporary use of property, access agreements, permanent easements, and impacts or remedy to property.











- **1.** Pre-construction tiling
- 2. Surveying and staking
- 3. Clearing

- 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





Constructing an Enbridge Pipeline (Continued)

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

- **Photo 1:** Shows a typical Enbridge pipeline. The Cherry Valley Community Expansion Project will involve the installation of a combination of 2- and 4-inch pipeline and will be much smaller than the pipeline shown in Photo 1.
- **Photo 2:** Represents a typical trench that is created during the installation process.
- Photo 3: Represents the process of backfilling a trench.
- **Photo 4:** Represents final clean-up and restoration. Once the pipeline has been installed, clean-up will involve the restoration of the RoW and other work areas. In natural areas, clean-up will involve restoring the environment (i.e., re-seeding of the RoW), and restoring ditch banks and watercourse crossings.





ENBRIDGE

Cherry Valley Community Expansion Project Virtual Information Session



Socio-Economic Features

The Project will mainly be constructed in existing municipal road allowances. As a result of construction, private businesses, agricultural operations, and residential land as well as Quinte Conservation land along the pipeline may be impacted.

Potential Effects

- Temporary increases in noise, dust, and air emissions.
- · Increased construction traffic volumes.
- Temporary impairment of the use and enjoyment of residential and/or cottage property.
- Vegetation clearing along the pipeline easement.

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.
- Implement a water well monitoring program.
- Making contact information for a designated Enbridge Gas representative available prior to and throughout construction.
- Dust control measures.
- Re-vegetation of cleared areas (seeding/planting).





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 Effects

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

Example Mitigation Measures

- Install erosion and sediment control measures.
- Obtain all agency permits and approvals.
- · Conform to fish timing window guidelines.
- Horizontal Directional Drill and/or trenchless drill within or near environmentally sensitive features (i.e., watercourses, wetlands etc.).
- 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, if necessary; and
- Replant vegetation along waterways.





Stage 1: Pilot Hole Directional Drilling Horizontal Drilling Rig Exit Point Entry Pi Exit Pit Drill Designed Drill Path General Direction of Pilot Hole Drilling Stage 2: Reaming and Pulling Back Onling Fluid Returns Horizontal Drilling Rig Entry Pa Ext Pit with Begm Pull Back Reamer Reamer General Direction of Progress Reaming **Dritting Fluid** Horizontal Drilling Rig Returns Prefabricated Pull Section Entry Pit Exit Pit with Bern General Direction of Pulling Back Profile Adapted from CAPP et al. (2005) (Not to Scale)

Horizontal Directional Drilling (HDD) Procedures







Cultural Heritage Resources

During construction, cultural heritage features such as archaeological finds, buildings, fences, and landscapes may be encountered. Detailed field surveys will be conducted by independent, third-party archaeologists and cultural heritage professionals, if required.

Potential Effects

• Damage or destruction of archaeological or historical resources.

Example Mitigation Measures

- Archaeological assessment of the construction footprint, with review and comment from the Ministry of Tourism, Culture and Sport (MTCS).
- Cultural heritage assessment (for built heritage features and cultural heritage landscapes) of the construction right-of-way, with review and comment from MTCS.
- Reporting of any previously unknown archaeological or historical resources uncovered, or suspected of being uncovered, during excavation.







Terrestrial Resources

During construction, natural environmental features such as wildlife habitat and vegetated/wooded areas will need to be crossed.

Potential Effects

- 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 removal outside of migratory bird windows (typically from April 1 – August 31), to the extent possible.
- Clearly mark the construction area to avoid accidental damage.
- Restore and seed disturbed areas to establish habitat and reduce erosion, if required.
- Secure any necessary permits and follow any conditions of approval.







Pipeline Design

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

Pipeline Safety and Integrity

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

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

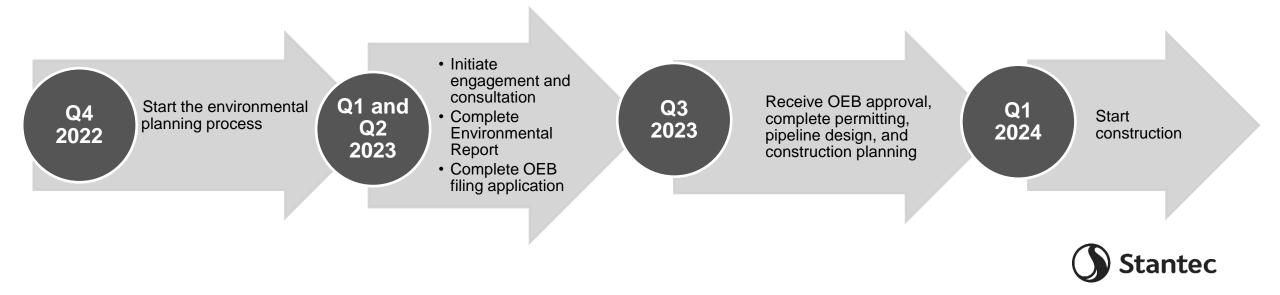






Next Steps

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







Thank-you!

On behalf of the Project team, thank-you for listening to the Virtual Information Session presentation. Please complete the Questionnaire, located in the Resources Tab. Please complete the Questionnaire by **March 10, 2023**, for your comments to be considered as part of the Environmental Report.

Emily Hartwig	Kelsey Mills
Project Coordinator	Advisor, Environment
Stantec Consulting Ltd.	Enbridge Gas Inc.
100-300 Hagey Blvd.	101 Honda Boulevard
Waterloo ON N2L 0A4	Markham ON L6C 0M6
Phone: (226) 979-4457	Cell: (416) 768-1040
Email: CherryValleyEA@Stantec.com	Email: CherryValleyEA @Stantec.com

For more information about the proposed project, please visit our Project website at: https://www.enbridgegas.com/CherryValley







Slide #	Slide Theme	Script
1	Title Page	Thank-you for viewing the Virtual Information Session for the Cherry Valley Community Expansion Project. This presentation has been prepared by Stantec Consulting Ltd. (Stantec) on behalf of Enbridge Gas.
2	Welcome/ Our Commitment	Welcome Welcome to the viewing the Virtual Information Session. You may pause the presentation at any time to read over the presentation slides. A copy of the presentation slides is available for download from the "Resources" Tab. Questions and comments can be submitted using the questionnaire, also found on the "Resources" tab, and an Enbridge Gas or Stantec representative will respond.
		If you would like to receive future Project updates, please complete the "Contact Information" section of the questionnaire.
		Our Commitment Enbridge Gas is committed to involving indigenous communities, agencies, interest groups, and community members in this proposed project by providing you with up-to- date information in an open, honest, and respectful manner, and will carefully consider your input.
		Enbridge Gas provides safe and reliable delivery of natural gas to more than 3.8 million residential, commercial, and industrial customers across Ontario. Enbridge Gas is committed to environmental stewardship and conducts all operations in an environmentally responsible manner.
3	Purpose of the Virtual Information Session	Enbridge Gas is committed to the health and safety of the public and its workers. As such, a Virtual Information Session is being held.
		The purpose of the Virtual Information Session is to consult with Indigenous communities and engage with members of the public and regulatory authorities regarding the proposed route, potential impacts, and mitigation measures. The Virtual Information





		Session also provides an opportunity for individuals to ask any questions and provide comments to representatives from Enbridge Gas and Stantec.
4	Indigenous Peoples Policy	Enbridge Gas recognizes the diversity of Indigenous peoples who live where we work and operate. We understand from history the destructive impacts on the social and economic wellbeing of Indigenous Peoples. Enbridge Gas recognizes and realizes the importance of reconciliation between Indigenous communities and the broader society. Positive relationships with Indigenous peoples, based on mutual respect and focused on achieving common goals, will create positive outcomes for Indigenous communities. Enbridge Gas commits to pursue sustainable relationships with Indigenous Nations in proximity to where Enbridge Gas conducts business. To achieve this, Enbridge Gas will govern itself by the following principles as seen on this slide.
5	Project Overview	 The Project will involve the construction of up to approximately 14 kilometers of a combination of 2- and 4-inch Nominal Pipe Size polyethylene natural gas pipeline. The proposed pipeline will tie into an existing Enbridge Gas system south of Warings Corner, along Sandy Hook Road (County Road 1). From the commencing point, the pipeline will travel southeast along County Road 1, then south along County Road 10 to the County Road 10 and County Road 18 intersection. At this intersection, a portion of the pipeline will continue south down County Road 10 for approximately 1 km, and a portion of the pipeline will continue west along Country Road 18 to the terminating point, located near the Curry Lane and County Road 18 intersection. The proposed route, as described and as shown on the various figures within this presentation, has been developed for the purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final Project scope / design that will provide access to natural gas to end-use customers. To accommodate the increased supply of natural gas, the Project may also involve the building of a new distribution station
6	Environmental Study Process	The environmental study and Environmental Report will be completed according to the Ontario Energy Board's <i>Environmental Guidelines</i> (2016).





		 The study will: Undertake engagement to understand the views of interested and potentially affected parties. Consult with Indigenous communities and key stakeholders 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; and, Develop an appropriate environmental inspection, monitoring, and follow-up program.
7	OEB Review and Approval Process	It is anticipated that the Environmental Report for the study will be completed in March 2023, after which Enbridge Gas may file a Leave-to-Construct application. The application to the Ontario Energy Board will include the following information on the Project: • The need for the Project • Environmental Report and mitigation measures • Project costs and economics • Pipeline design and construction • Land requirements • Consultation with Indigenous Communities The Ontario Energy Board will then hold a public hearing to review the Project. If the Ontario Energy Board determines that the Project is in the public interest, it will approve construction of the Project. Additional information about the Ontario Energy Board process can be found on their website.
8	Engagement and Consultation	Engagement and consultation with Indigenous communities and stakeholders is a key component of the Environmental Report being completed as part of the Leave-to-Construct Application.





		One of the objectives of the engagement and consultation program for the Project is identifying interested and potentially affected parties early in the process. At the outset of the Project, Enbridge Gas submits a Project Description to the Ministry of Energy; upon review, the Ministry of Energy determines potential impacts on Aboriginal or treaty rights and identifies the Indigenous communities that Enbridge Gas will consult with during the entirety of the Project. Input from this Virtual Information Session will be used to help finalize the pipeline route and to create mitigation plans to be implemented in the final design and construction. Once the Leave-to-Construct application is submitted to the Ontario Energy Board, any party with an interest in the Project can participate in their review process.
9	Environmental Study Process	This slide shows the environmental study process that Enbridge Gas follows as part of the Ontario Energy Board's <i>Environmental Guidelines</i> (2016). Enbridge Gas is currently nearing the end of Phase 1.
10	Environment, Health and Safety Policy	 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. Our goal is to have no incidents and mitigate impacts on the environment by working with our stakeholders, peers, and others to promote responsible environmental practices and continuous improvement. Enbridge Gas is committed to environmental protection and stewardship, and we recognize 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.		
11	Access and Land Requirements	While the majority of the pipeline route will be constructed within municipal road allowances, some circumstances requiring access agreements, permanent easement or temporary working space during construction could result in the need for additional land outside of road allowances.		
		 Enbridge Gas has a comprehensive Landowner Relations Program that uses a dedicated Lands Advisor who would: Provide direct contact & liaison between landowners and Enbridge Gas. Be available to the landowner during the length of the Project and throughout construction activities. Address the concerns and questions of the landowner. Act as a singular point of contact for all landowners. Address any landowner questions and any legal matters relating to temporary use of property, access agreements, permanent easements, and impacts or remedy to property. 		
12	Constructing an Enbridge Gas Pipeline	This slide shows an infographic of typical pipeline construction procedures. Please press "pause" to review these procedures. When you are ready to move onto the next slide, please press "next".		
13	Constructing an Enbridge Gas Pipeline Con'd	The pipeline construction process includes various procedures, as described in the previous slide. Photos 1 through 4 shows a typical Enbridge pipeline, pipeline trench, and the procedures of backfilling and clean-up and restoration.		
14	Socio-economic Features	The Project will mainly be constructed in municipal road allowances. As a result of construction, private businesses, agricultural operations, and residential land along the pipeline route as well as lands regulated by Quinte Conservation may be impacted.		





		Potential socio-economic effects of construction include temporary increases in noise, dust and air emissions, increased construction traffic, temporary impairment of residential property use, and vegetation clearing. Some of the mitigation measures that could be implemented during construction include providing access across construction areas, restricting construction to daylight hours, adhering to applicable noise by-laws, implementing a water well monitoring program, and re-vegetating cleared areas. Additional examples are provided on this slide for your review.
15	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 effects to aquatic environments include disruption and alteration to aquatic species and habitat, increased erosion, sedimentation, and turbidity resulting from removal of vegetation. The following are examples of mitigation measures that may be implemented to reduce the potential effects of construction: Install erosion and sediment control measures. Obtaining all agency permits and approvals. Conform to fish timing window guidelines. Horizontal Directional Drill and/or trenchless drill within or near environmentally sensitive features. For in-channel construction, protect aquatic species through methods such as flow diversion and/or dewatering, fish rescue planning etc., and manage sedimentation and turbidity. Restore and seed disturbed areas to establish habitat and reduce erosion, if necessary; and Replant vegetation along waterways.





16	Horizontal Directional Drilling (HDD) Procedures	This slide shows an infographic of typical horizontal directional drilling (HDD) procedures. Please press "pause" to review these procedures. When you are ready to move onto the next slide, please press "next".
17	Cultural Heritage Resources	During construction, cultural heritage features such as archaeological finds, buildings, fences, and landscapes may be encountered. Detailed field surveys will be conducted by independent, third-party archaeologists and cultural heritage professionals prior to construction, if required.
		As outlined on this slide, there are several mitigation measures that will be employed to reduce the potential effects construction could have on cultural heritage, as approved by the Ministry of Tourism, Culture and Sport.
18	Terrestrial Resources	During construction, natural environmental features such as wildlife habitat and vegetated or wooded areas will need to be crossed. Potential effects include damage of vegetation and wildlife in the construction area.
		Prior to construction, surveys (including Species at Risk surveys) will be conducted to determine opportunities for wildlife habitat to exist. Tree removals will be conducted outside of migratory bird windows (typically from April 1 – August 31), to the extent possible. Construction areas will be clearly marked to avoid accidental damage and affected areas will be restored or seeded to establish habitat and reduce erosion. Permits from conservation authorities, municipalities, and agencies will be secured as required, and conditions outlined will be followed to reduce damage and disturbance to vegetation and wildlife.
19	Pipeline Design	The high-grade plastic and steel pipeline is designed to meet or exceed the regulations of the Canadian Standards Association and the applicable regulations of the Technical Standards & Safety Association.
		Enbridge Gas takes many steps to ensure safe, reliable operation of the network of natural gas pipelines, such as designing, constructing, and testing pipelines to meet or exceed requirements set by industry standards and regulatory authorities, continuously





		monitoring the entire network, and perform regular field surveys to detect leaks and confirm corrosion prevention methods are working as intended.
20	Next Steps	Serving hundreds of communities in Ontario, we at Enbridge Gas consider ourselves strong community partners who believe in and are committed to engagement and consultation
		During the planning stages for this Project, we have consulted and will continue to consult with Indigenous Communities and engage with local landowners, government agencies and other interested parties that could be impacted by the Project. After this Virtual Information Session is complete, we plan to complete our Environmental Report. When complete, we may submit it to the Ontario Energy Board along with other Leave-to-Construct documents. If a Leave-to-Construct is required, we anticipate we'll receive a response from the Ontario Energy Board by Q3 of 2023. Permitting, pipeline design, and construction planning will then take place. Pending approval by the Ontario Energy Board, construction of the pipeline is planned to commence Q1 2024.
21	Thank-you	On behalf of the Project team, thank-you for listening to the Virtual Information Session presentation for the Cherry Valley Community Expansion Project.
		If you have any questions or comments, or you would like to be kept up to date on the Project please complete the Questionnaire located in the Resources Tab. Please complete the Questionnaire by March 10, 2023 , to be considered as part of the Environmental Report that will be submitted to the Ontario Energy Board. Please note that comments will still be received after this date and will be reviewed and considered during the planning and design phase, as applicable.
		To return to a specific slide, please press the "Menu" button and select the slide you wish to review. To close the presentation, please press the "Save and Exit" button.
		For more information about the proposed project, please visit our Project website at the website link shown on this slide.





Thank you for attending the Cherry Valley Community Expansion Project Virtual 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 CherryValleyEA@stantec.com or call (226) 979-4457 and leave a detailed message. 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 **March 10, 2023**, 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
- □ Business owner
- □ Surrounding landowner
- □ Resident interested in natural gas conversion
- □ 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.

5. Were you provided with an adequate understanding of the Project and the Environmental Assessment OEB review and approval process?



6. Do you require additional information about the Project and/or the OEB Environmental Assessment process? Please note below:

7. Did the content provided in the Virtual Information Session meet your needs?

8. How did you hear about the Virtual Information Session? Check all that apply:



Newspaper advertisement



Project notification letter



Word of mouth





9. 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: CherryValleyEA@stantec.com or call (226) 979-4457 and leave a detailed message.

	Contact Information	
Name:		
Address:		
	()	

Information will be collected and used in accordance with the Freedom of Information and Protection of Privacy Act. This information will be used to assist Enbridge Gas Inc. in meeting applicable approval requirements. This material will be maintained on file for use during the study and may be included in Project documentation. Unless indicated otherwise, personal information and all comments will become part of the public record and may be publicly released as part of Project documentation.

Cherry Valley Community Expansion Project: Environmental Report July 11, 2023

B.6 Project Correspondence

Appendix B6Correspondence Log – Federal and Provincial Agencies

Comment Number	Stakeholder Group	Name	Method of Communication	Date of Correspondence	Summary of Comment	Date Response Provided	ſ
1	Ministry of Energy	Samir Adkar	Letter via Email	September 20, 2022	Enbridge Gas provided the MOE, formerly the Ministry of Energy, Northern Development and Mines (MENDM), with a letter detailing an updated Project Description, noting that a Leave to Construct application will be filed with the Ontario Energy Board (OEB), and inquired as to if the Project triggers the Duty to Consult process.	December 29, 2022	
See Appendix B2	All agencies (Elected Officials, Provincial and Federal Agencies, Municipal officials) on the Project's Contact List	N/A	Email	February 6, 2023	Notice of Study Commencement and Virtual Open House (NoCVOH)	N/A	
2	Ministry of Environment, Conservation and Parks (MECP)	Jon Orpana	Email	February 7, 2023	MECP responded to the NoCVOH and requested shapefiles for the Project mapping.	February 16, 2022	
3	MECP Environmental Assessment Branch	Heather Malcolmson	Email	February 7, 2023	MECP replied to the NoCVOH and stated that the notice was circulated to Kathleen O'Neil and Andrew Evers in the Environmental Assessment Branch	N/A	
4	Ministry of Transportation (MTO)	Alexandre Gitkow	Letter via Email	February 8, 2023	MTO confirmed they had no concerns with the Preferred Route (PR) as it follows the municipal road system and is well beyond the provincial highway system. MTO did note that if Enbridge continues with the connection to the existing line south of Warings Corner, along Sandy Hook Road, or if a Traffic Management Plan will affect Highway 33, MTO will need to be consulted as this will be in the MTO control area and may require a permit.	N/A	
5	Technical Standards and Safety Authority (TSSA)	Robin Yu	Email	February 8, 2023	The TSSA replied to the Notice of Study Commencement noting an application will need to be filled and submitted for review by the TSSA.	N/A	
6	Prince Edward County	Catalina Blumberg	Email	February 13, 2023	The Clerk for Prince Edward County responded to the NoCVOH and stated the notice will be circulated to applicable staff and council	N/A	
7	Impact Assessmeny Agency of Canada (IAAC)	Anjala Puvananathan	Letter via Email	February 15, 2023	IAAC replied to the NoCVOH with a letter noting that the Project is not subject to the Impact Assessment Act.	N/A	
8	Prince Edward County	John Hirsch (Councillor Ward 9)	Email	February 21, 2023	The Councillor for Ward 9 for Prince Edward County responded to the NoCVOH and noted that a number of residents have raised a concern about the proposed pipeline expansion as it crosses Waring Creek and the Waring Creek watershed. The Councillor asked if there would be an opportunity to provide comments on the Project.	February 21, 2023	

Table B.1 Correspondence Log for the Cherry Valley Community Expansion Project - Federal and Provincial Agencies

Summary of Response
The MOE responded with a Letter of Delegation noting that the Project may have the potential to affect Indigenous communities and provided a list of these potentially affected communities to consult with.
N/A
Enbridge provided MECP with the shapefiles for the Project and noted they may not represent the final design.
N/A
Stantec responded and provided information about the Virtual Open House and noted that comments and questions about the Project could be submitted via the questionnaire. Stantec directed the Councillor to the Enbridge Gas Project website for additional information.

Appendix B6Correspondence Log – Federal and Provincial Agencies

Comment Number	Stakeholder Group	Name	Method of Communication	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
9	MECP Species at Risk Ontario	Monique Charette	Email	March 15, 2023	MECP confirmed receipt of the NoCVOH and noted they will provide guidance on potential EA requirements when the Species at Risk (SAR) reports are available for review.	N/A	N/A
10	Transport Canada (TC) Environmental Assessment Program, Ontario Region	N/A	Email	March 20, 2023	TC advised that they do not require receipt of all individual or class EA related notifications. Project proponents are required to self-assess if their project: (1) will interact with a federal property and/or waterway by reviewing the Directory of Federal Real Property and (2) will require approval and/or authorization under any Acts administered by TC.	N/A	N/A

Appendix B6 Correspondence Log – Landowners and Residents

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
1	Landowner / Resident	Bill Peel 166 Scotts Mill Road	Email	billpeelepec@yahoo.ca	N/A	22/02/2023	Contacted the Project team regarding community engagement and the project approval process. Inquired as to whether Stantec and/or Enbridge are required to have Prince Edward County Municipal Council approve a motion to be a willing host for the project before Ontario Energy Board (OEB) approval, and if so, at what point in the project timeline is this required.	28/02/2023	Enbridge responded that consultation with appropriate federal, provincial, and municipal agencies and affected Indigenous communities, directly and indirectly affected landowners and residents, and the general public is an integral component of the OEB's Environmental Guidelines.
									Enbridge noted that while an approval from the County is not required as part of the OEB process, Enbridge has initiated consultation with Prince Edward County and will continue to engage with the County and interested stakeholders as the Project progresses.
						01/03/2023	The correspondent replied and thanked Enbridge for their response and noted that they believe the Project will be heard by the PEC Municipal Council from either Enbridge, Stantec or PEC Staff, even if it is not part of the OEB process.	01/03/2023	Enbridge replied noting that the Project has been presented to the County on two separate occasions and that Enbridge participated in a deputation to council on February 28 th . Enbridge noted they are committed to working closely with the County regarding the Project.
							The correspondent asked for clarification on whether or not Enbridge or Stantec will be presenting to the PEC Council on the Project.		Enbridge noted that in February 2020, a letter was sent to every municipality in Ontario following the lead of the Ontario government, who issued letters to municipalities in December 2019.
									Enbridge submitted project proposals for system expansion in all municipalities that expressed interest and provided a letter of support. Specific to Prince Edward County, Enbridge submitted five system expansion projects on behalf of the County - (Cherry Valley, Ameliasburgh and Rossmore; as well as Consecon and Carrying Place). The OEB reviewed the project submissions and provided recommendations to the Ministry of Energy. The Ministry of Energy subsequently selected the projects that received Phase Two

Table B6.2 Correspondence Log for the Cherry Valley Community Expansion Project – Landowners and Residents

Appendix B6 Correspondence Log – Landowners and Residents

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
2	Landowner / Resident	Sandro Zaccolo	Email	szaccolo@ocadu.ca	416-997-4548	27/02/2023	Inquired as to whether or not the Project plan includes the Lake on the Mountain Area. Noted many residents in the area use propane year-round. Noted new developments in the Lake on the Mountain Area, including converting older buildings into new residential and commercial operations.	28/02/2023	Enbridge responded thanking the correspondent for the information and noted that the project footprint for the Cherry Valley Expansion Project does not include the Lake on the Mountain Area. Enbridge provided a link to the Virtual Open House and noted any other input on the Project is welcome.
3	Landowner / Resident	Jacqueline Tasca	Email	jacquelinetasca@gmail. com	N/A	27/02/2023	Noted residence is located along a stretch of the proposed natural gas pipeline extension. Thanked Project team for providing the notification and indicated they would like to transition off propane. Noted they have questions regarding road construction (what would be entailed in the project of this nature., what needs to be dug up, both on road/ditches and private property) and the potential need to build a new distribution system. Asked if this is determined to be required, what would this look like, would the location be consulted on. Noted prime agriculture adjacent to or near their property.	28/02/2023	input on the Project is welcome. Enbridge responded thanking the correspondent for their email. Noted that the Virtual Open House is live until March 7 ^{th.} Enbridge noted that a follow-up message will be sent in regard to what a potential station may entail and that the exact location of where a potential station may be needed is not known at this stage of the Project.
						28/02/2023	The correspondent replied, thanking Enbridge for their response, and noted that they view the Virtual Open House materials and that their questions are ultimately more about the specifics. The correspondent asked Enbridge if they could provide photos or information about what distribution centre look like in other areas, or any other relevant information.	14/03/2023	Enbridge provided a follow-up email and noted that the Project is in the early stages of planning and design and the station design and location are subject to change. General station size specifications were provided. Enbridge noted that based on the location provided (County Road 10, south of East Lake Road/County Road 11) it is unlikely that the station would be located on the correspondent's property as the tie-in point is currently planned on Sandy Hook Road.
						14/03/2023	The correspondent thanked Enbridge for their response.	N/A	N/A

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community Engagement Activity	Issue
Alderville Firs	t Nation ("AFN")				
1.0	January 23, 2023	Email	An Enbridge Gas representative emailed an AFN representative providing a Cherry Valley Community Expansion Project ("Project") notification letter ("Notification Letter"). The letter provided an overview of the proposed Project, a list of potential authorizations required, and contact information for the Ministry of Environment ("MOE"). The letter advised an Environmental Study of construction and operation activities would be undertaken. The letter requested community feedback on the proposed Project to avoid, minimize or mitigate potential adverse impacts on Aboriginal or Treaty rights, and indicated capacity support was available. The letter requested a meeting and provided the Enbridge Gas representative's contact information.	N/A	N/A
1.1	February 13, 2023	Email	An Enbridge Gas representative emailed an AFN representative providing notice that Enbridge Gas was starting the Environmental Study. The letter provided an overview of the Project and its purpose, a map, and an overview of Environmental Study requirements and activities. The letter noted construction was planned to occur in the first quarter of 2024. The letter advised a virtual open house would be held from February 21 to March 7, 2023, and provided website links to the open house and questionnaire. The letter requested community feedback by March 10, 2023.	N/A	N/A
1.2	March 27, 2023	Email	An Enbridge Gas representative emailed an AFN representative inquiring if they had comments regarding the Project material provided through the virtual open house and via email on January 23, 2023.	N/A	N/A
Beausoleil Fir	st Nation (Christian	Island) (BFN)			
2.0	January 23, 2023	Email	An Enbridge Gas representative emailed BFN representatives providing the Notification Letter. The letter requested community feedback on the proposed Project to avoid, minimize or mitigate potential adverse impacts on Aboriginal or Treaty rights, and indicated capacity support was available. The letter requested a meeting and provided the Enbridge Gas representative's contact information.	N/A	N/A
2.1	February 13, 2023	Email	An Enbridge Gas representative emailed BFN representatives providing notice o that Enbridge Gas was starting the Environmental Study. The letter provided an overview of the Project and its purpose, a map, and an overview of Environmental Study requirements and activities. The letter noted construction was planned to occur in the first quarter of 2024. The letter advised a virtual open house would be held from February 21 to March 7, 2023, and provided website links to the open house and questionnaire. The letter requested community feedback by March 10, 2023.	N/A	N/A
2.2	March 27, 2023	Email	An Enbridge Gas representative emailed BFN representatives inquiring if they had comments regarding the Project material provided through the virtual open house and via email on January 23, 2023.	N/A	N/A

Table B.3 Correspondence Log for the Cherry Valley Community Expansion Project – Indigenous Communities

ues or Concerns Raised and Enbridge Gas Responses

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community Engagement Activity	Issu
Chippewas of	Georgina Island (Co	GIFN)			•
3.0	January 23, 2023	Email	An Enbridge Gas representative emailed CGIFN representatives providing the Notification Letter. The letter requested community feedback on the proposed Project to avoid, minimize or mitigate potential adverse impacts on Aboriginal or Treaty rights, and indicated capacity support was available. The letter requested a meeting and provided the Enbridge Gas representative's contact information.	N/A	N/A
3.1	February 13, 2023	Email	An Enbridge Gas representative emailed CGIFN representatives providing notice that Enbridge Gas was starting the Environmental Study. The letter provided an overview of the Project and its purpose, a map, and an overview of Environmental Study requirements and activities. The letter noted construction was planned to occur in the first quarter of 2024. The letter advised a virtual open house would be held from February 21 to March 7, 2023, and provided website links to the open house and questionnaire. The letter requested community feedback by March 10, 2023.	N/A	N/A
3.2	March 27, 2023	Email	An Enbridge Gas representative emailed CGIFN representatives inquiring if they had comments regarding the Project material provided through the virtual open house and via email on January 23, 2023.	N/A	N/A
Chippewas of	Rama First Nation ((CRFN)			-
4.0	January 23, 2023	Email	An Enbridge Gas representative emailed a CRFN representative providing the Notification Letter. The letter requested community feedback on the proposed Project to avoid, minimize or mitigate potential adverse impacts on Aboriginal or Treaty rights, and indicated capacity support was available. The letter requested a meeting and provided the Enbridge Gas representative's contact information.	N/A	N/A
4.1	January 25, 2023	Email		A CRFN representative emailed an Enbridge Gas representative inquiring about the location of the Project and if it would require a shoreline protection plan.	
4.2	January 30, 2023	Email	An Enbridge Gas representative emailed a CRFN representative confirming receipt of their January 25, 2023, email and advising they would follow up.	N/A	N/A
4.3	February 2, 2023	Email	An Enbridge Gas representative emailed a CRFN representative providing information regarding the location of the project and advised there would be no anticipated impacts to the shoreline.	N/A	N/A
4.4	February 13, 2023	Email	An Enbridge Gas representative emailed a CRFN representative providing notice that Enbridge Gas was starting the Environmental Study. The letter provided an overview of the Project and its purpose, a map, and an overview of Environmental Study requirements and activities. The letter noted construction was planned to occur in the first quarter of 2024. The letter advised a virtual open house would be held from February 21 to March 7, 2023, and provided website links to the open house and questionnaire. The letter requested community feedback by March 10, 2023.	N/A	N/A

Issues or Concerns Raised and Enbridge Gas Responses
N/A
J/A
N/A
N/A
J/A
J/A
I/A
N/A

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community Engagement Activity	Issues
4.5	March 27, 2023	Email	An Enbridge Gas representative emailed a CRFN representative inquiring if they had comments regarding the Project material provided through the virtual open house and via email on January 23, 2023.	N/A	N/A
Curve Lake Fi	rst Nation (CLFN)				
5.0	January 23, 2023	Email	An Enbridge Gas representative emailed CLFN representatives providing the Notification Letter. The letter requested community feedback on the proposed Project to avoid, minimize or mitigate potential adverse impacts on Aboriginal or Treaty rights, and indicated capacity support was available. The letter requested a meeting and provided the Enbridge Gas representative's contact information.	N/A	N/A
5.1	January 23, 2023			A CLFN representative emailed the Enbridge Gas representative and provided their availability for a meeting.	
5.2	January 23, 2023		An Enbridge Gas representative emailed the CLFN representatives and made arrangements for a recurring monthly meeting.	N/A	N/A
5.3	February 13, 2023	Email	An Enbridge Gas representative emailed CLFN representatives providing notice that Enbridge Gas was starting the Environmental Study. The letter provided an overview of the Project and its purpose, a map, and an overview of Environmental Study requirements and activities. The letter noted construction was planned to occur in the first quarter of 2024. The letter advised a virtual open house would be held from February 21 to March 7, 2023, and provided website links to the open house and questionnaire. The letter requested community feedback by March 10, 2023.	N/A	N/A
5.4	March 27, 2023	Email	An Enbridge Gas representative emailed CLFN representatives inquiring if they had comments regarding the Project material provided through the virtual open house and via email on January 23, 2023.	N/A	N/A
Hiawatha Firs	t Nation (HFN)			l	1
6.0	January 23, 2023	Email	An Enbridge Gas representative emailed HFN representatives providing the Notification Letter. The letter requested community feedback on the proposed Project to avoid, minimize or mitigate potential adverse impacts on Aboriginal or Treaty rights, and indicated capacity support was available. The letter requested a meeting and provided the Enbridge Gas representative's contact information.	N/A	N/A
6.1	February 13, 2023	Email	An Enbridge Gas representative emailed HFN representatives providing notice that Enbridge Gas was starting the Environmental Study. The letter provided an overview of the Project and its purpose, a map, and an overview of Environmental Study requirements and activities. The letter noted construction was planned to occur in the first quarter of 2024. The letter advised a virtual open house would be held from February 21 to March 7, 2023, and provided website links to the open house and questionnaire. The letter requested community feedback by March 10, 2023.	N/A	N/A
6.2	March 27, 2023	Email	An Enbridge Gas representative emailed HFN representatives inquiring if they had comments regarding the Project material provided through the virtual open house and via email on January 23, 2023.	N/A	N/A

Issues or Concerns Raised and Enbridge Gas Responses
N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community Engagement Activity	lssu
6.3	March 28, 2023	Email		An HFN representative emailed an Enbridge Gas representative advising them they did not have concerns regarding the Project, providing the appropriate assessments were completed and provided to HFN for review.	
6.4	March 28, 2023	Email	An Enbridge Gas representative emailed the HFN representative to confirm receipt of the email and noted the Stage 1 Archaeological Assessment ("AA") would be in the Environmental Report that would be provided when its available.	N/A	N/A
Huron-Wenda	t Nation (HWN)			•	
7.0	January 23, 2023	Email	An Enbridge Gas representative emailed HWN representatives providing the Notification Letter. The letter requested community feedback on the proposed Project to avoid, minimize or mitigate potential adverse impacts on Aboriginal or Treaty rights, and indicated capacity support was available. The letter requested a meeting and provided the Enbridge Gas representative's contact information.	N/A	N/A
7.1	February 13, 2023	Email	An Enbridge Gas representative emailed HWN representatives providing notice that Enbridge Gas was starting the Environmental Study. The letter provided an overview of the Project and its purpose, a map, and an overview of Environmental Study requirements and activities. The letter noted construction was planned to occur in the first quarter of 2024. The letter advised a virtual open house would be held from February 21 to March 7, 2023, and provided website links to the open house and questionnaire. The letter requested community feedback by March 10, 2023.	N/A	N/A
7.2	March 27, 2023	Email	An Enbridge Gas representative emailed HWN representatives inquiring if they had comments regarding the Project material provided through the virtual open house and via email on January 23, 2023.	N/A	N/A
7.3	March 28, 2023	Email		An HWN representative emailed an Enbridge Gas representative requesting further information regarding AA.	
7.4	March 31, 2023	Email	An Enbridge Gas representative emailed an HWN representative advising they would provide information regarding AA when it became available and noted that AA were not planned to commence for a few months.	N/A	N/A
Kawartha Nis	hnawbe First Nation	(KNFN)			-
8.0	January 23, 2023	Email	An Enbridge Gas representative emailed KNFN representatives providing the Notification Letter. The letter requested community feedback on the proposed Project to avoid, minimize or mitigate potential adverse impacts on Aboriginal or Treaty rights, and indicated capacity support was available. The letter requested a meeting and provided the Enbridge Gas representative's contact information.	N/A	N/A

ues or Concerns Raised and Enbridge Gas Responses

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community Engagement Activity	lssu
8.1	February 13, 2023	Email	An Enbridge Gas representative emailed KNFN representatives providing notice that Enbridge Gas was starting the Environmental Study. The letter provided an overview of the Project and its purpose, a map, and an overview of Environmental Study requirements and activities. The letter noted construction was planned to occur in the first quarter of 2024. The letter advised a virtual open house would be held from February 21 to March 7, 2023, and provided website links to the open house and questionnaire. The letter requested community feedback by March 10, 2023.	N/A	N/A
8.2	March 27, 2023	Email	An Enbridge Gas representative emailed KNFN representatives inquiring if they had comments regarding the Project material provided through the virtual open house and via email on January 23, 2023.	N/A	N/A
Mississaugas	of Scugog Island Fi	irst Nation ("M	SIFN")		
9.0	January 23, 2023	Email	An Enbridge Gas representative emailed MSIFN representatives providing the Notification Letter. The letter requested community feedback on the proposed Project to avoid, minimize or mitigate potential adverse impacts on Aboriginal or Treaty rights, and indicated capacity support was available. The letter requested a meeting and provided the Enbridge Gas representative's contact information.	N/A	N/A
9.2	January 23, 2023	Email	An Enbridge Gas representative emailed the MSIFN representatives providing a Project update and inquired if the meeting scheduled for February 7, 2023, could be in person.	N/A	N/A
9.3	January 24, 2023	Email		An MSIFN representative emailed Enbridge Gas representatives providing a meeting invitation to an update meeting for February 7, 2023.	
9.4	February 3, 2023	Email		An MSIFN representative emailed an Enbridge Gas representative requesting confirmation that capacity funding was available to support their February 7, 2023, meeting.	
9.5	February 7, 2023	Meeting - Group	Enbridge Gas representatives met with MSIFN regarding the Project. Topics of discussion included the capacity funding agreement template, a potential Stage 3 AA, the draft Stage 1 AA, the Environmental Report, pipeline dimensions, Project initiation and a virtual open house.	An MSIFN representative inquired who would be contracted for AA work. The Enbridge Gas representative provided potential contractor names.	
9.6	February 9, 2023	Email	An Enbridge Gas representative emailed MSIFN representatives confirming capacity funding was available.	N/A	N/A
9.7	February 10, 2023	Email	An Enbridge Gas representative emailed MSIFN representatives providing the minutes and presentation from the February 7, 2023, meeting. The Enbridge Gas representative advised they would provide a capacity funding agreement template. The Enbridge Gas representative advised they could arrange a Project briefing if needed to determine MSIFN's costs.	N/A	N/A

Issues or Concerns Raised and Enbridge Gas Responses
N/A
N/A
N/A
N/A
N/A
N/A

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community Engagement Activity	lssu
9.8	February 13, 2023	Email	An Enbridge Gas representative emailed MSIFN representatives providing notice that Enbridge Gas was starting the Environmental Study. The letter provided an overview of the Project and its purpose, a map, and an overview of Environmental Study requirements and activities. The letter noted construction was planned to occur in the first quarter of 2024. The letter advised a virtual open house would be held from February 21 to March 7, 2023, and provided website links to the open house and questionnaire. The letter requested community feedback by March 10, 2023.	N/A	N/A
9.9	February 13, 2023	Email		An MSIFN representative emailed an Enbridge Gas representative confirming receipt of the February 7, 2023, meeting minutes and presentation. MSIFN representative requested clarification regarding the funding. MSIFN representative inquired if new projects would be announced as they were initiated or if there was a known timeline for project announcements.	
9.10	February 14, 2023	Email	An Enbridge Gas representative emailed MSIFN representatives to better understand their costs. The Enbridge Gas representative advised that the new projects were listed in the presentation provided in the monthly meeting and that they would update MSIFN of new project announcements when they occur.	N/A	N/A
9.11	March 27, 2023	Email	An Enbridge Gas representative emailed MSIFN representatives inquiring if they had comments regarding the Project material provided through the virtual open house and via email on January 23, 2023.	N/A	N/A
Mohawks of t	he Bay of Quinte (MI	BQ)			•
10.0	January 23, 2023	Email	An Enbridge Gas representative emailed MBQ representatives providing the Notification Letter. The letter requested community feedback on the proposed Project to avoid, minimize or mitigate potential adverse impacts on Aboriginal or Treaty rights, and indicated capacity support was available. The letter requested a meeting and provided the Enbridge Gas representative's contact information.	N/A	N/A
10.1	January 26, 2023	Email		An MBQ representative emailed an Enbridge Gas representative inquiring requesting a meeting to discuss the Project.	
10.2	January 30, 2023	Email	An Enbridge Gas representative emailed an MBQ representative providing their availability for a meeting. The Enbridge Gas representative and MBQ representative made meeting arrangements for February 1, 2023.	N/A	N/A
10.3	February 1, 2023	Meeting - 1:1	Enbridge Gas met with MBQ regarding the Project. Topics of discussion included a Project overview, the virtual open house, and draft Stage 1 and 2 AA reports.	N/A	N/A
10.4	February 2, 2023	Email	An Enbridge Gas representative emailed an MBQ representative confirming next steps including forthcoming virtual house information, draft Stage 1 and 2 AA reports.	N/A	N/A

Issues or Concerns Raised and Enbridge Gas Responses
N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community Engagement Activity	lssu
10.5	February 13, 2023	Email	An Enbridge Gas representative emailed MBQ representatives providing notice that Enbridge Gas was starting the Environmental Study. The letter provided an overview of the Project and its purpose, a map, and an overview of Environmental Study requirements and activities. The letter noted construction was planned to occur in the first quarter of 2024. The letter advised a virtual open house would be held from February 21 to March 7, 2023, and provided website links to the open house and questionnaire. The letter requested community feedback by March 10, 2023.	N/A	N/A
10.6	March 27, 2023	Email	An Enbridge Gas representative emailed MBQ representatives inquiring if they had comments regarding the Project material provided through the virtual open house and via email on January 23, 2023.	N/A	N/A

sues or Concerns Raised and Enbridge Gas Responses

Appendix B6Correspondence Log – Virtual Open House

Comment Number	Stakeholder Group	Correspondent	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
1	Virtual Open House Attendee	@gmail.com	Completed Questionnaire	February 28, 2023	Noted concern with the distribution centre being situated close to their property and would like assurances that a distribution centre won't be built near/across from their property/house.	February 28, 2023 March 14, 2023	See App-B6.2, Comment Number 3
					Requested that construction does not occur during peak summer months because the area is very busy from June to August with tourists.		
2	Virtual Open House Attendee	Picton, ON K0K 2T0 @thebronskill.group.com	Completed Questionnaire	March 6, 2023	Interested in understanding what the impact the construction phase will have on the trees located in the Study Area.	May 3, 2023	Stantec replied to the VOH attendee and noted that Enbridge does not anticipate tree removals will be required during the construction phase of the Project unless there is a tree present in the road right-of- way.
3	Virtual Open House Attendee	Picton, Ontario @yahoo.ca	Completed Questionnaire	March 14, 2023	Noted that they live on the corner of County Road 10 and County Road 1. Noticed that on the mapping, the proposed pipeline ends and then begins again near property. Asked if Enbridge intends to construct around their property or through it.	March 21, 2023	Stantec replied to the VOH questionnaire and email follow-up and noted that Enbridge does not anticipate there will be a need for the pipeline to cross their property as the proposed pipeline will be installed in the road right-of-way.
					Follow-up email sent on March 21, 2023.		Stantec noted that the other project components, such as a new distribution station, are still in the early stages of project planning and design and are subject to change.

Table B.4	Correspondence Log for the Cherry	y Valley Community Ex	xpansion Project – Virtual C	pen House
-----------	-----------------------------------	-----------------------	------------------------------	-----------

CHERRY VALLEY COMMUNITY EXPANSION PROJECT

Table B.5: Summary of Project Correspondence – Ontario Pipeline Coordinating Committee (OPCC)

Record	Correspondent	Туре	Date	Subject Matter	Responder/Date
A link to	the Environmental Re	port was sent	via email on May	v 10, 2023, to all members of the OPCC, Conservation Authority contacts a	and Prince Edward County representative
A remine June 21,		on June 2, 202	23, to the membe	rs of the OPCC, Conservation Authority contacts and Prince Edward Cou	nty representatives, that the comments c
1	Catherine Warren Ministry of Natural Resources and Forestry (MNRF)	Email	June 19, 2023	 The OPCC representative for the MNRF provided comments on the ER: Noted that there are active aggregate sites in the area of County Road 1 and County Road 10. Recommend that Enbridge contact the license holders (licensed site # 2899 (licensee: Miller Paving Limited, Geographic twp. Hallowell, PEC) and # 2984 (licensee: The Corporation of the County of Prince Edward, Hallowell Twp., PEC) and follow all relevant rules and guidelines to ensure health and safety of the operators of these two licensees including incorporating any appropriate buffers between the aggregate operations and gas line. The southern license border appears to be located away from the road, having 30 m inside the extraction boundary with berm in the setback area. The northern boundary of the licensed site #2894 touches the roadside with an entry gate for the pit but the extraction area seems to be in the south-west direction which is away from the roadside. 	Enbridge will comn MNRF.
2	Joseph Harvey Ministry of Citizenship and Multiculturalism (MCM)	Letter via Email	June 21, 2023	 The OPCC representative for the MCM provided comments on the ER: Note that the term 'cultural heritage resources' includes built heritage resources, cultural heritage landscapes and archaeological resources; however, the term should only be applied when referring to all three. MCM suggests edits to text in Sections 7.1.7 and 7.2.6 to reflect this. Note that Stage 1 AA is under review by MCM. MCM recommends any further recommended archaeological assessments (Stage 2, 3, 4) be undertaken as early as possible and prior to any ground disturbance. A Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment should be undertaken for the entire study area. A commitment in the ER is required to complete the preliminary impact assessment as part of the final CH report (once the project design is finalized and prior to construction). Community input should be sought to identify locally recognized and potential cultural heritage resources. The CH report will be prepared by qualified person(s) and submitted for review and comment by MCM, indigenous communities and other interest groups and organizations. 	Stantec will update recommended cha Enbridge will comm • Completing recommen • Completing and submit Enbridge Gas enga parties throughout encourages cultura engagement so we development, inclu provides the enviro communities and in Cultural Heritage F request.
3	Bree-Anna Gaboury Ministry of Energy (MOE)	Email	June 21, 2023	The OPCC representative for MOE confirmed a review of the ER was completed, and there were no comments.	Enbridge thanks th

ives, as noted on the agency contact list.

on the Environmental Report are due

mmit to engaging the license holders identified by the

ate the text in Sections 7.1.7 and 7.2.6 to reflect the hange from the MCM.

nmit to:

ting further archaeological assessments as ended by qualified archaeologists.

ting a Cultural Heritage Report by a qualified person(s) mit for review and comment to MCM.

ngages with Indigenous communities and interested ut the proposed project development process and ural heritage information to be provided early in our

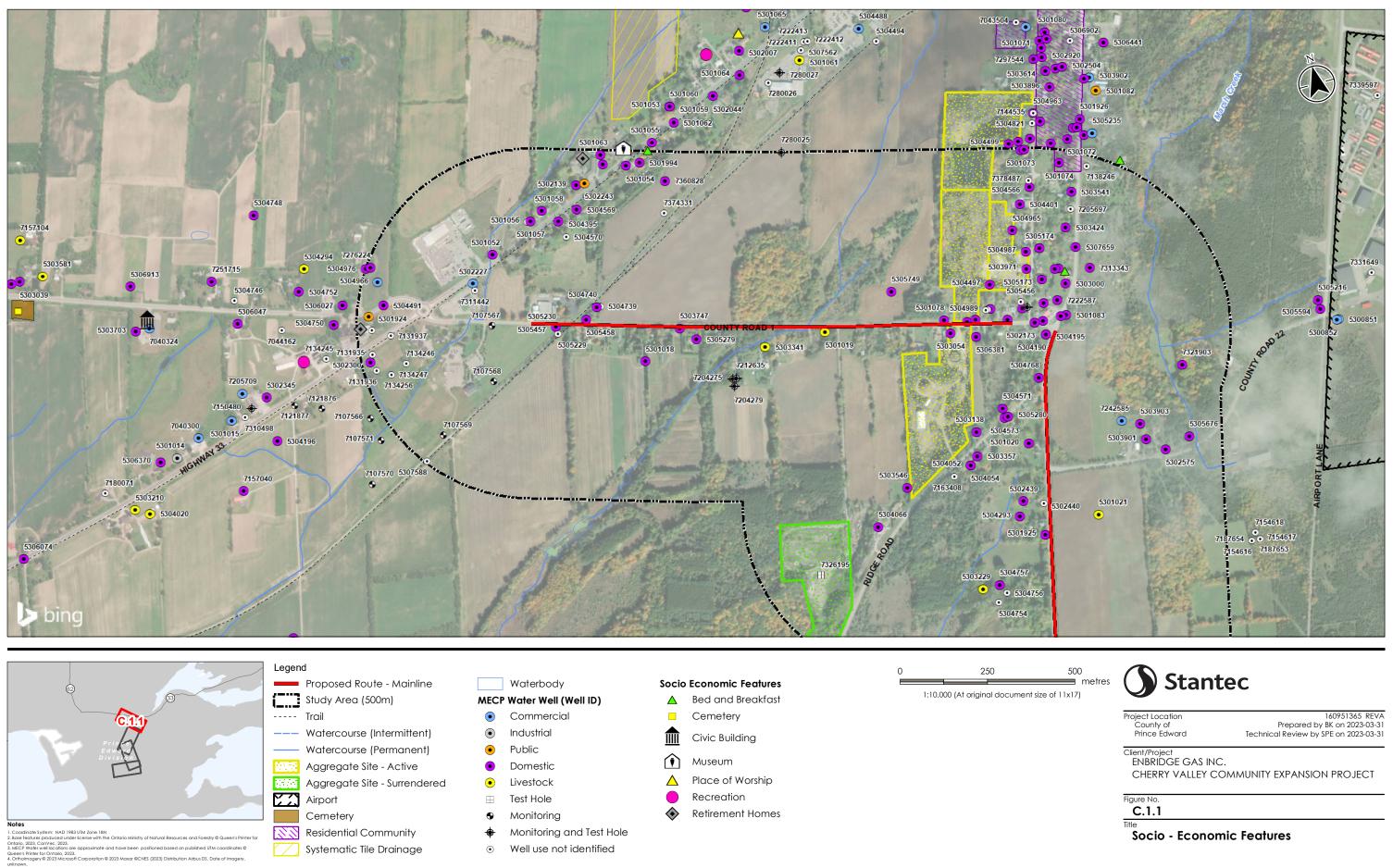
we can consider it in the course of the project

cluding the environmental assessment. Enbridge Gas vironmental report to potentially impacted Indigenous d interested parties for review and comment and the Report is provided to Indigenous communities upon

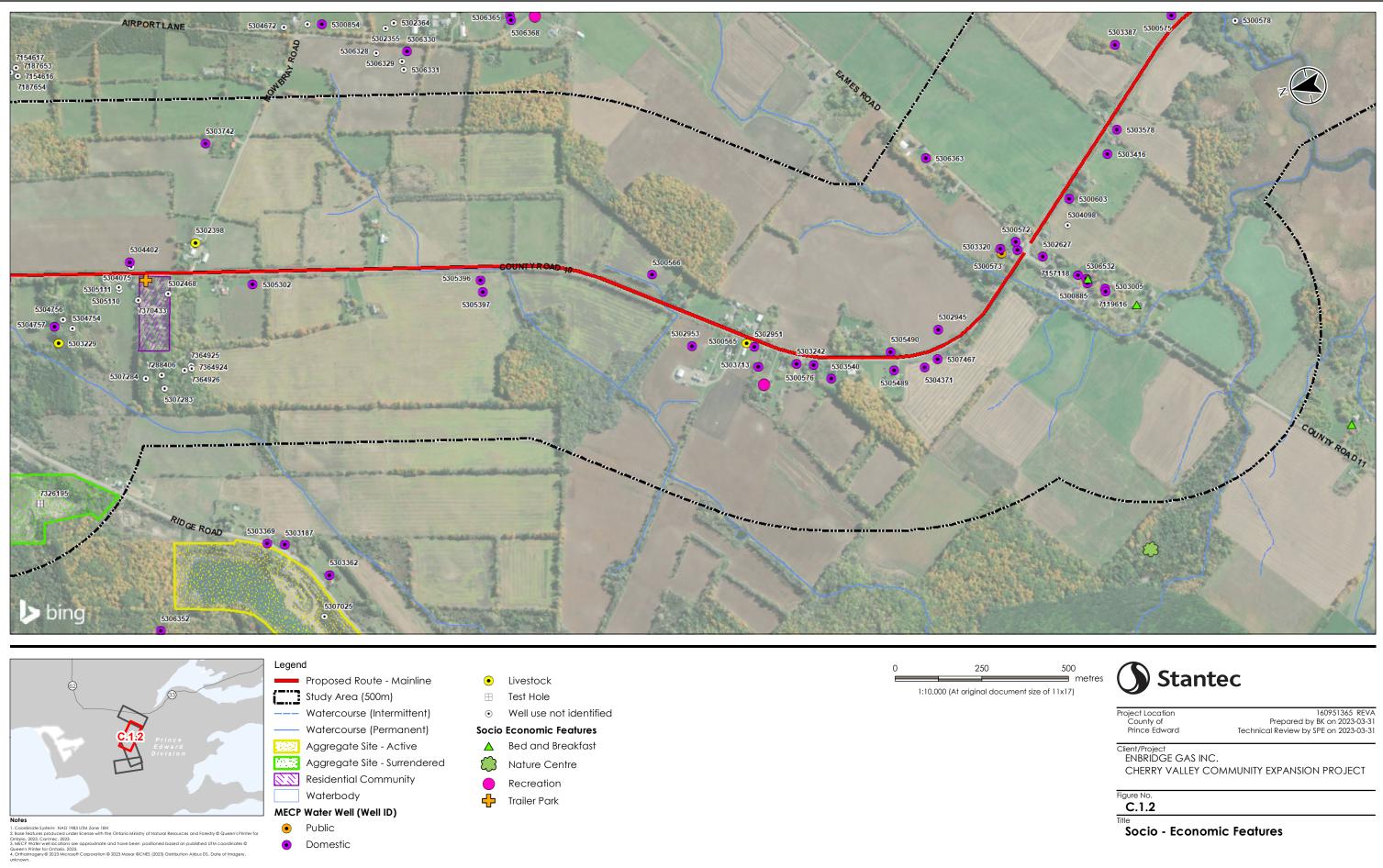
Report is provided to Indigenous communities upon

the MOE for their review of the ER.

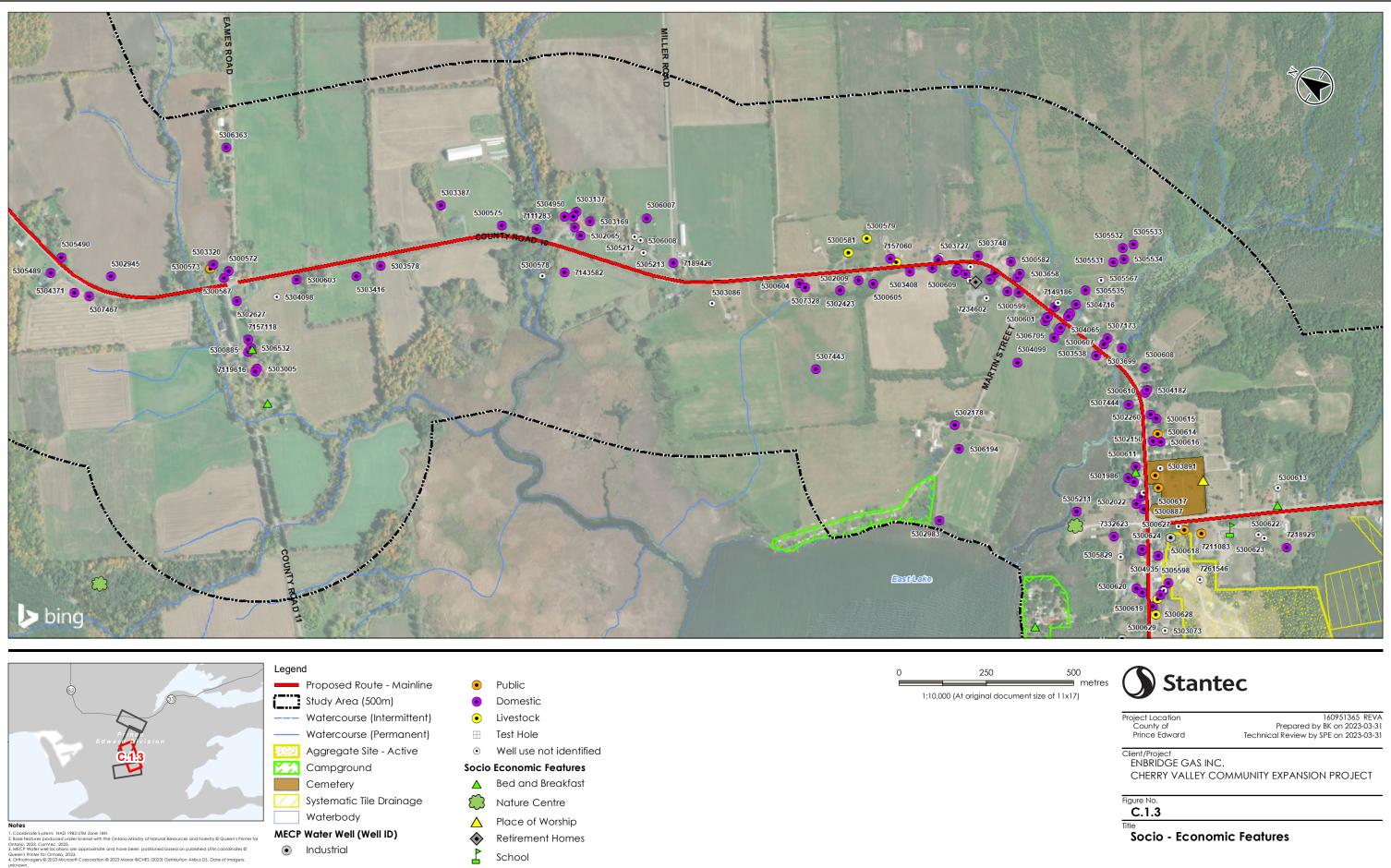
Appendix C Existing Conditions Figures



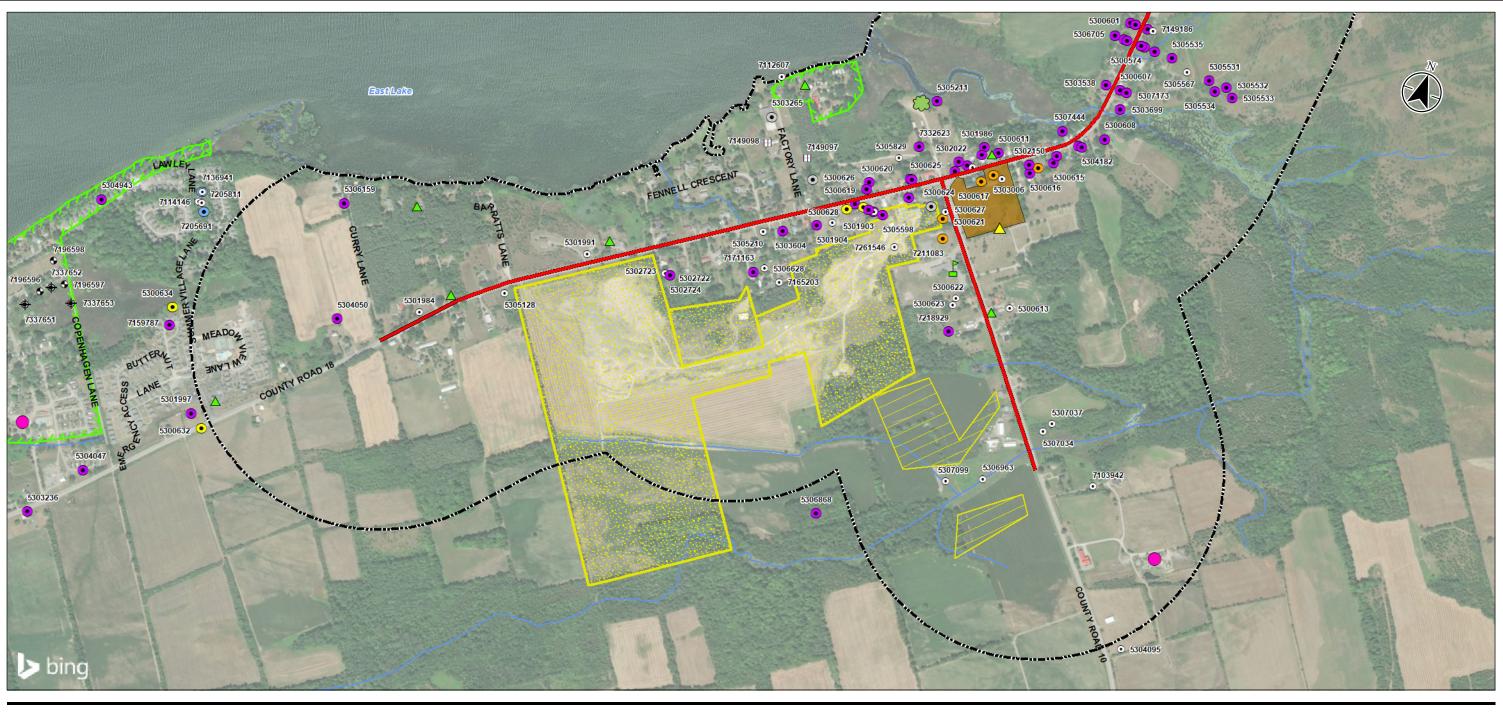
bility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



upplied in elect mat. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data



	Eogena		0	250	
62	Proposed Route - Mainline	• Public			<u></u>
3	Study Area (500m)	Domestic	1:10,000	0 (At original document	t size of 11x
	Watercourse (Intermittent)	Livestock			
Participa -	Watercourse (Permanent)	⊞ Test Hole			
C:113	Aggregate Site - Active	• Well use not identified			
	Campground	Socio Economic Features			
	Cemetery	Bed and Breakfast			
	Systematic Tile Drainage	Nature Centre			
Notes	Waterbody	Place of Worship			
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for	MECP Water Well (Well ID)	Retirement Homes			
Ontaria, 2023, CanVec. 2023. MECP Waler well locations are approximate and have been positioned based on published UTM coordinates @ Jueen's Finiter for Ontaria, 2023. 4. Ortholmogery @ 2023 Microsoft Corporation @ 2023 Maxar @CNES (2023) Distribution Aibus DS. Date of Imagery, minown.	 Industrial 	School			
Disclaimer: Stantes, assumes no responsibility for data supplied in electronic format. The	e recipient accepts full responsibility for verifying the accuracy	and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in a	www.wav.from.the.cont	ent or provision of the data	



Legend



- Cemetery
 - Systematic Tile Drainage
- Waterbody
- MECP Water Well (Well ID) Commercial \bullet

• Domestic

 $\mathbf{\bullet}$

- Livestock
- ⊟ Test Hole
- Monitoring

Industrial

Public

- Monitoring and Test Hole ۰
- Well use not identified

Socio Economic Features

▲ Bed and Breakfast Nature Centre

1 School

Recreation

 \triangle

Place of Worship

250

0

1:10,000 (At original document size of 11x17)

Notes

2. Base features pr Ontario, 2023, CanVec, 2023 3. MECP Water well locations

te System: NAD 1983 UTM 7one 1

C.1.4

- CONES (2022) D

mat. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data pplied in elect

ക

500 **m**etres



Project Location County of Prince Edward

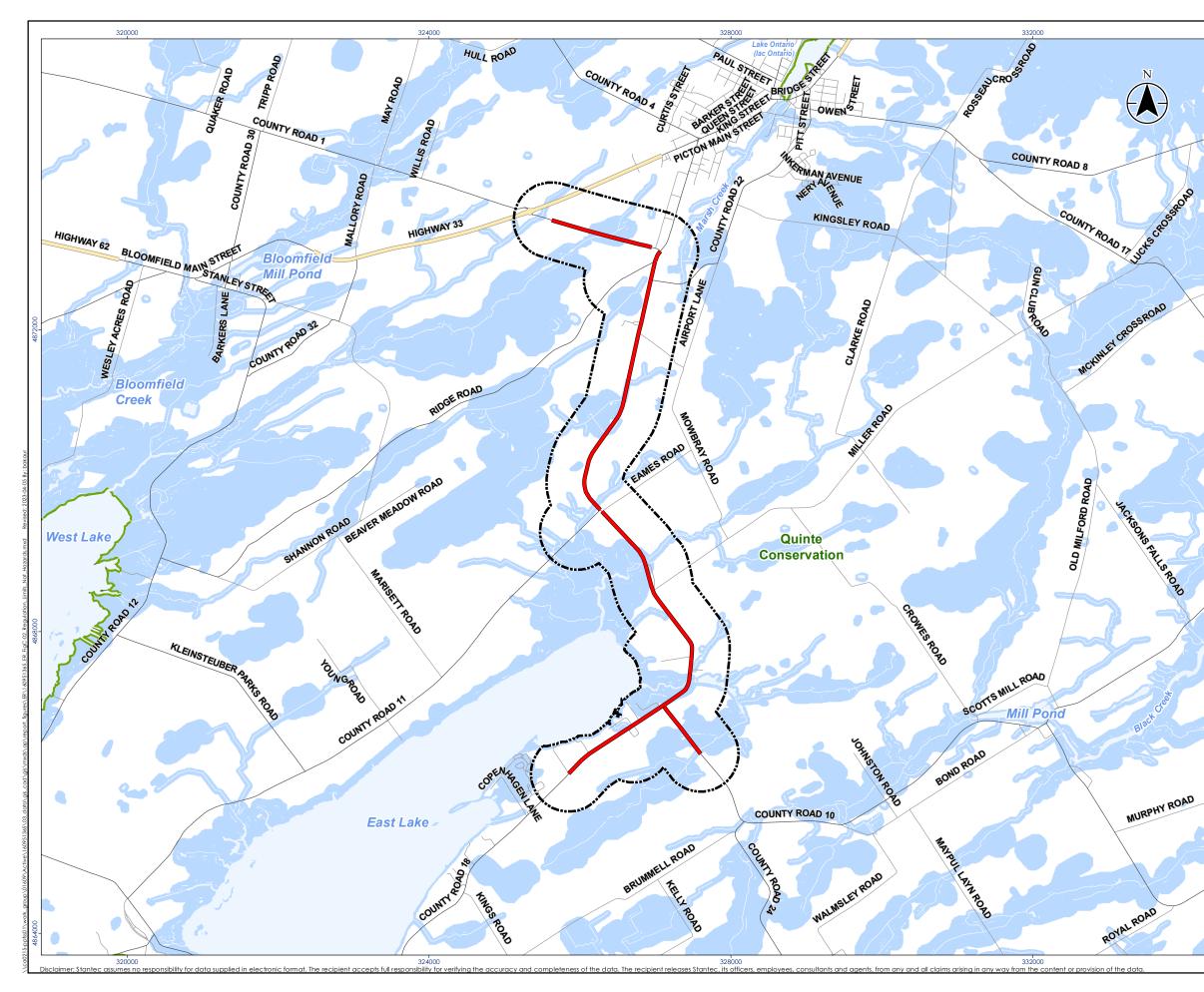
160951365 REVA Prepared by BK on 2023-03-31 Technical Review by SPE on 2023-03-31

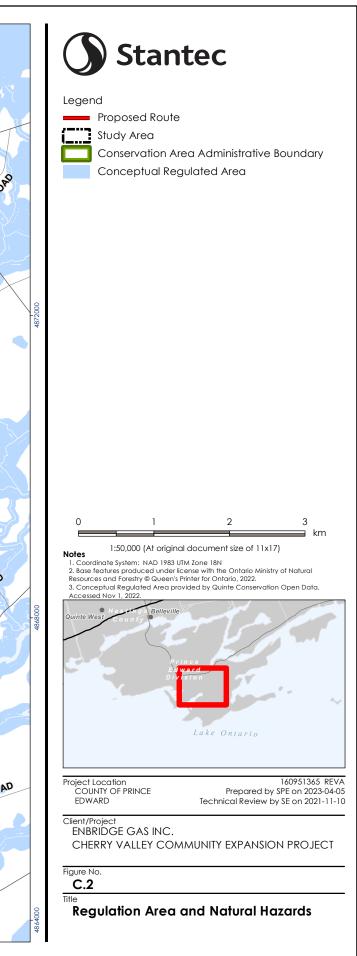
Client/Project ENBRIDGE GAS INC.

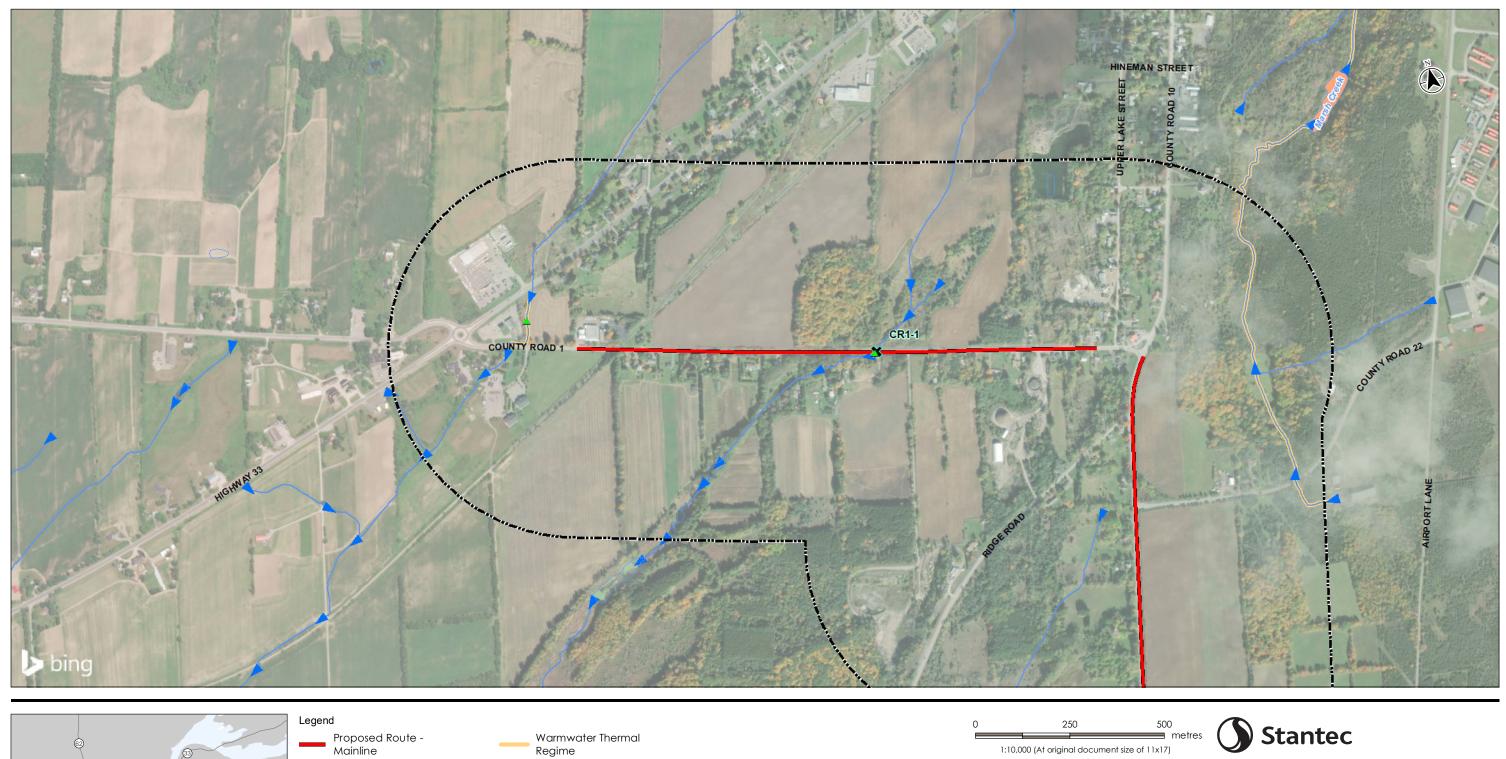
CHERRY VALLEY COMMUNITY EXPANSION PROJECT

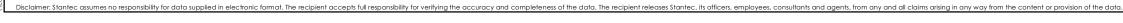
Figure No. C.1.4

Title Socio - Economic Features









Regime

Regime

Waterbody

Warmwater Thermal

Study Area (500m)

Flow Direction

Watercourse (Intermittent)

Watercourse

(Permanent)

(ARA)

Crossing

×

MNRF Fish Survey Point

Proposed Watercourse

500 **m**etres

Stantec

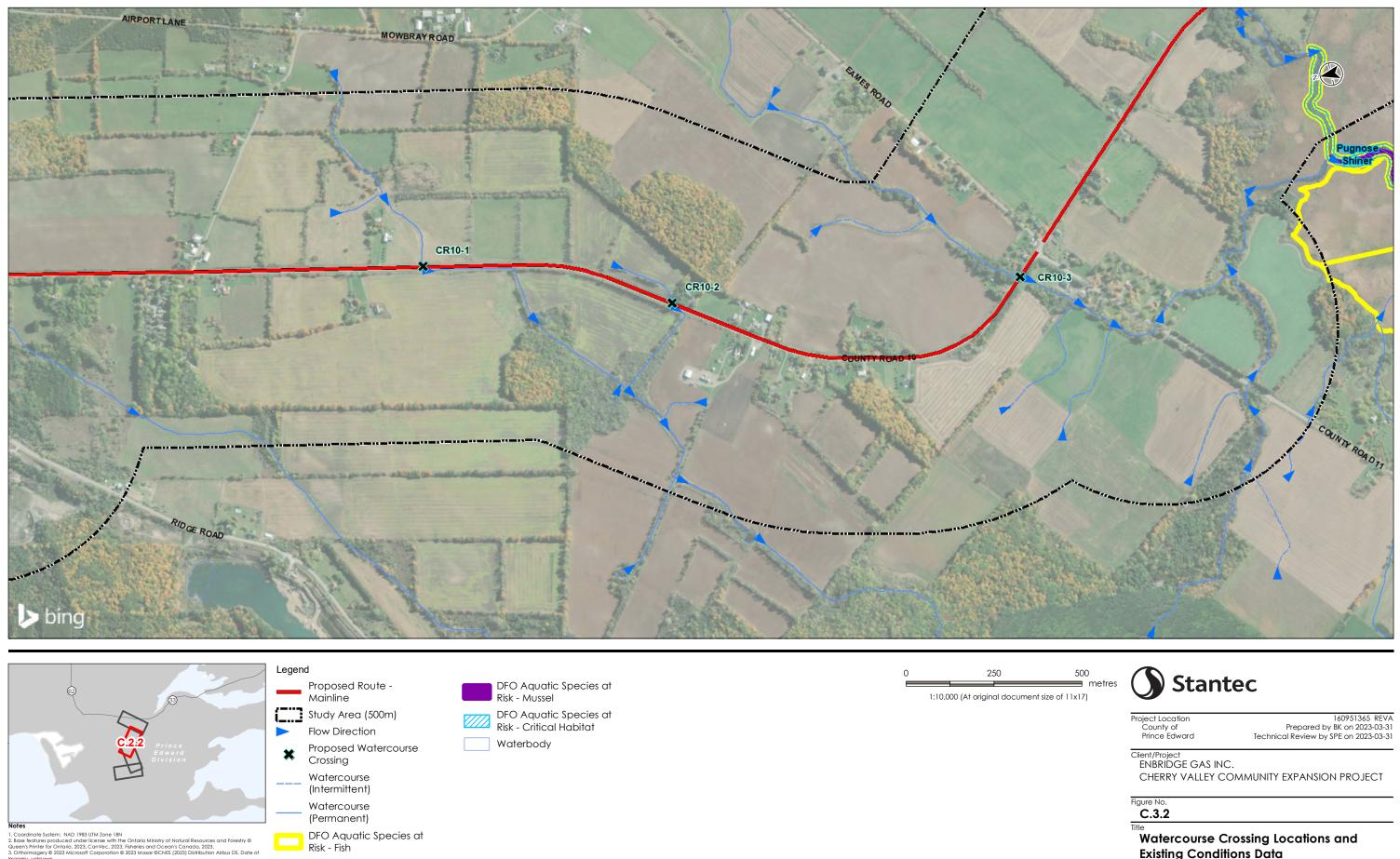
Project Location County of Prince Edward

160951365 REVA Prepared by BK on 2023-03-31 Technical Review by SPE on 2023-03-31

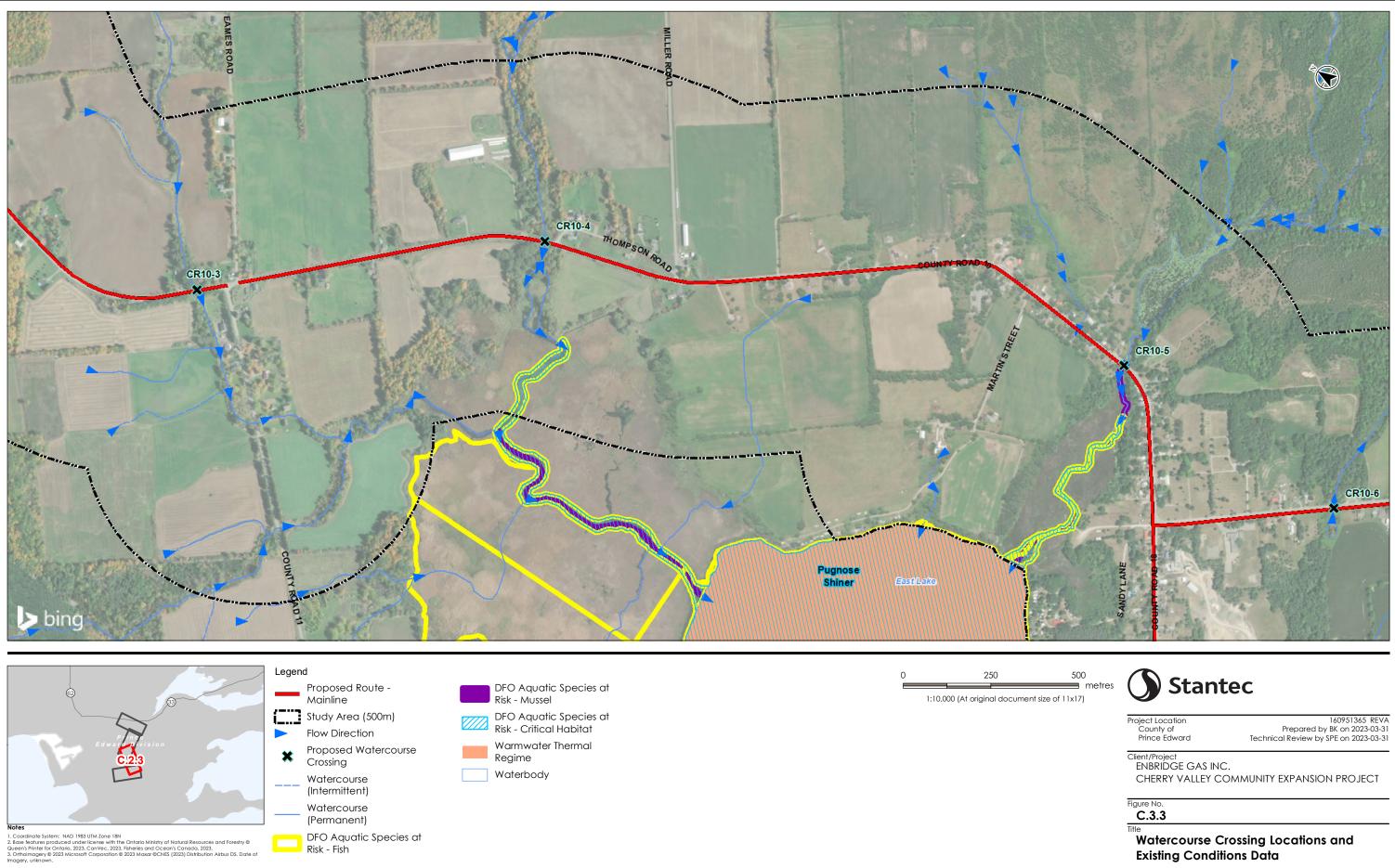
Client/Project ENBRIDGE GAS INC. CHERRY VALLEY COMMUNITY EXPANSION PROJECT

Figure No. **C.3.1**

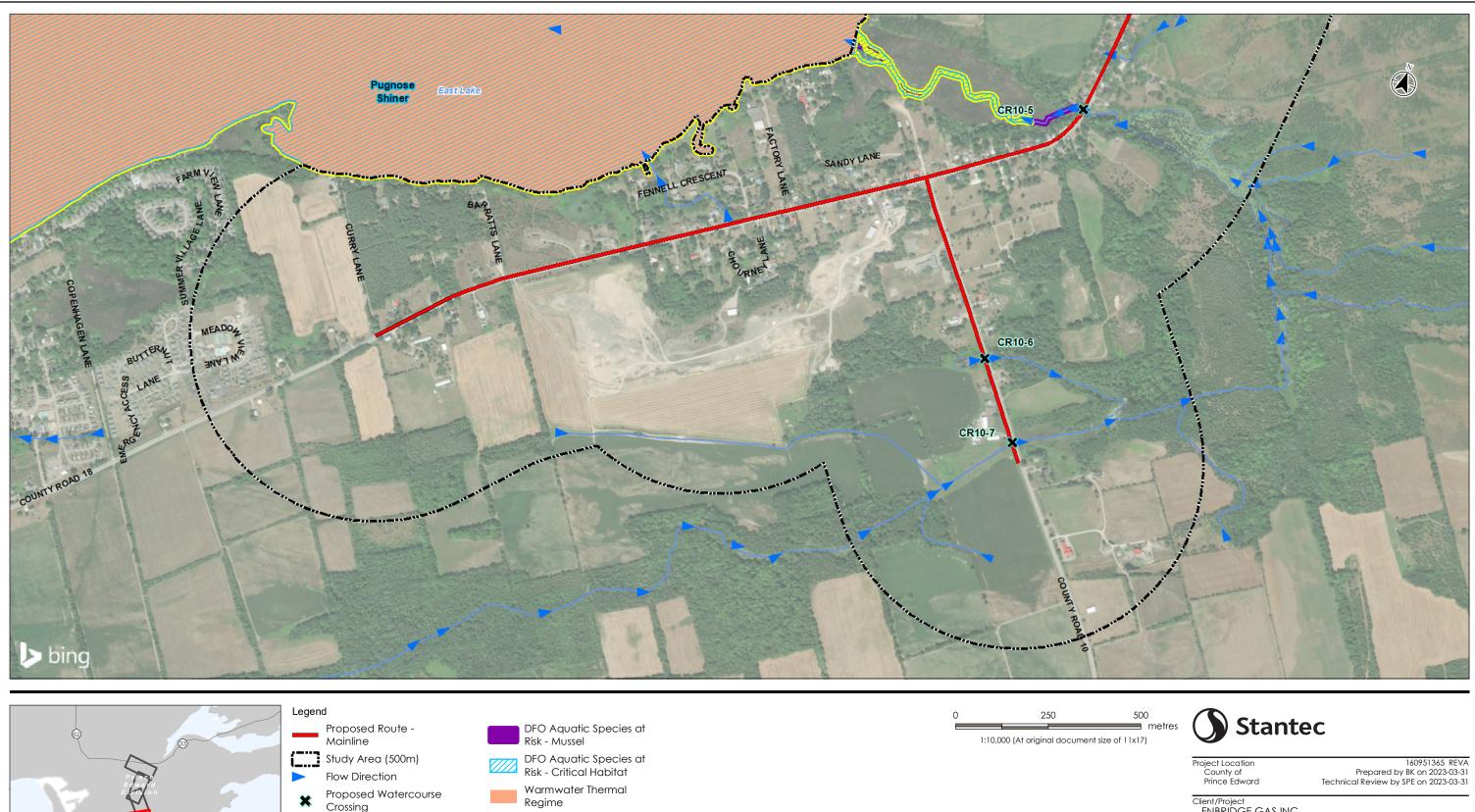
Title Watercourse Crossing Locations and **Existing Conditions Data**



Existing Conditions Data



mes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data



Waterbody

Watercourse (Intermittent)

Watercourse

(Permanent)

Risk - Fish

DFO Aquatic Species at

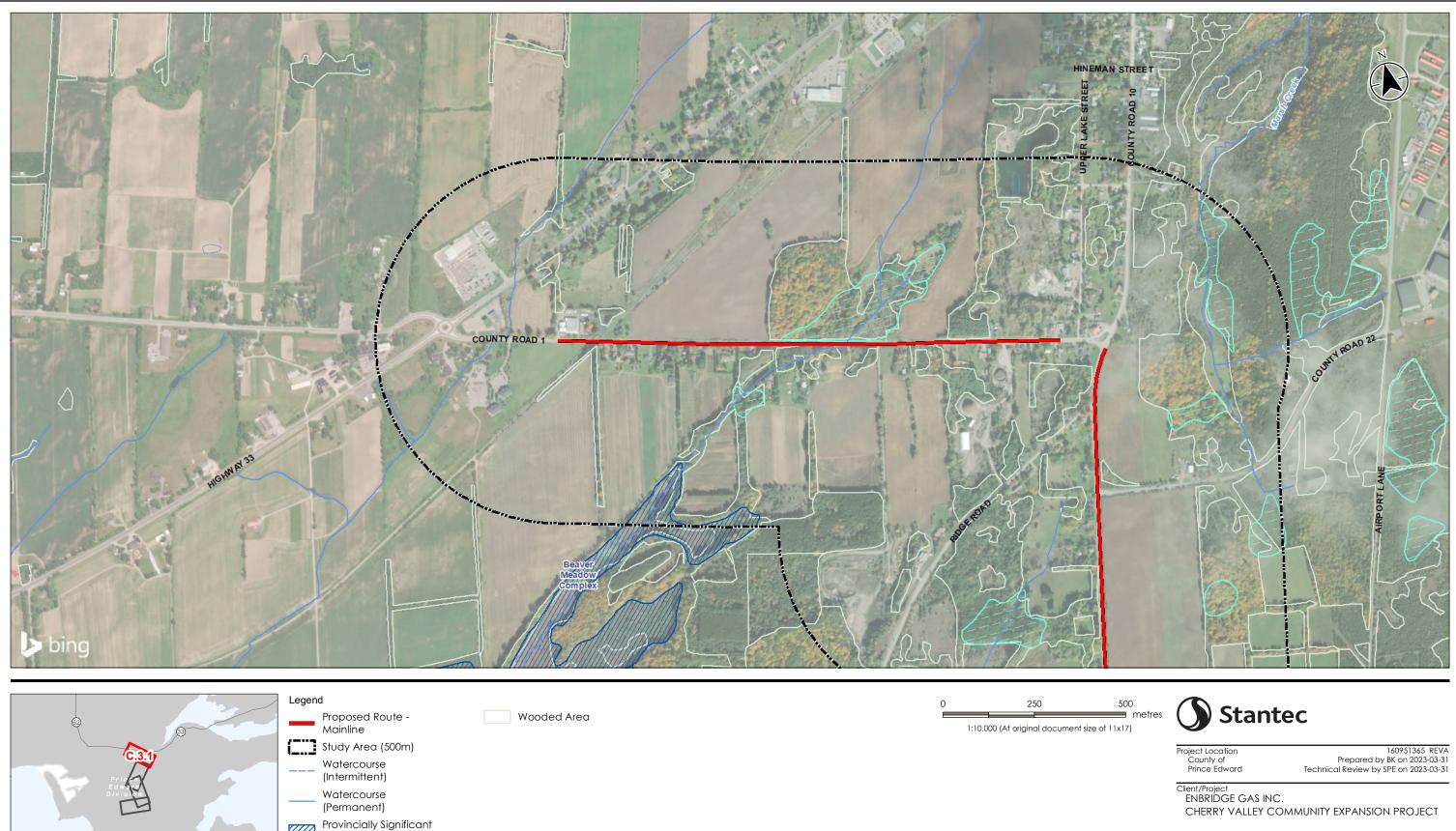
Coordinate System: NAD 1983 UTM Zone 18N
 Z. Base features produced under licence with the Ontario Ministry of Natural Resources and Forestry @
 Queen's Printer for Ontario, 2023, Canvec, 2023, Fibereles and Ocean's Canada, 2023.
 3. Otholmagery @ 2023 Microsoft Carporation @ 2023 Maxar @CNES (2023) Distribution Airbus DS. Date of
 Program: university and the second s

Client/Project ENBRIDGE GAS INC.

CHERRY VALLEY COMMUNITY EXPANSION PROJECT

Figure No. C.3.4

Title Watercourse Crossing Locations and **Existing Conditions Data**



Notes

Wetland

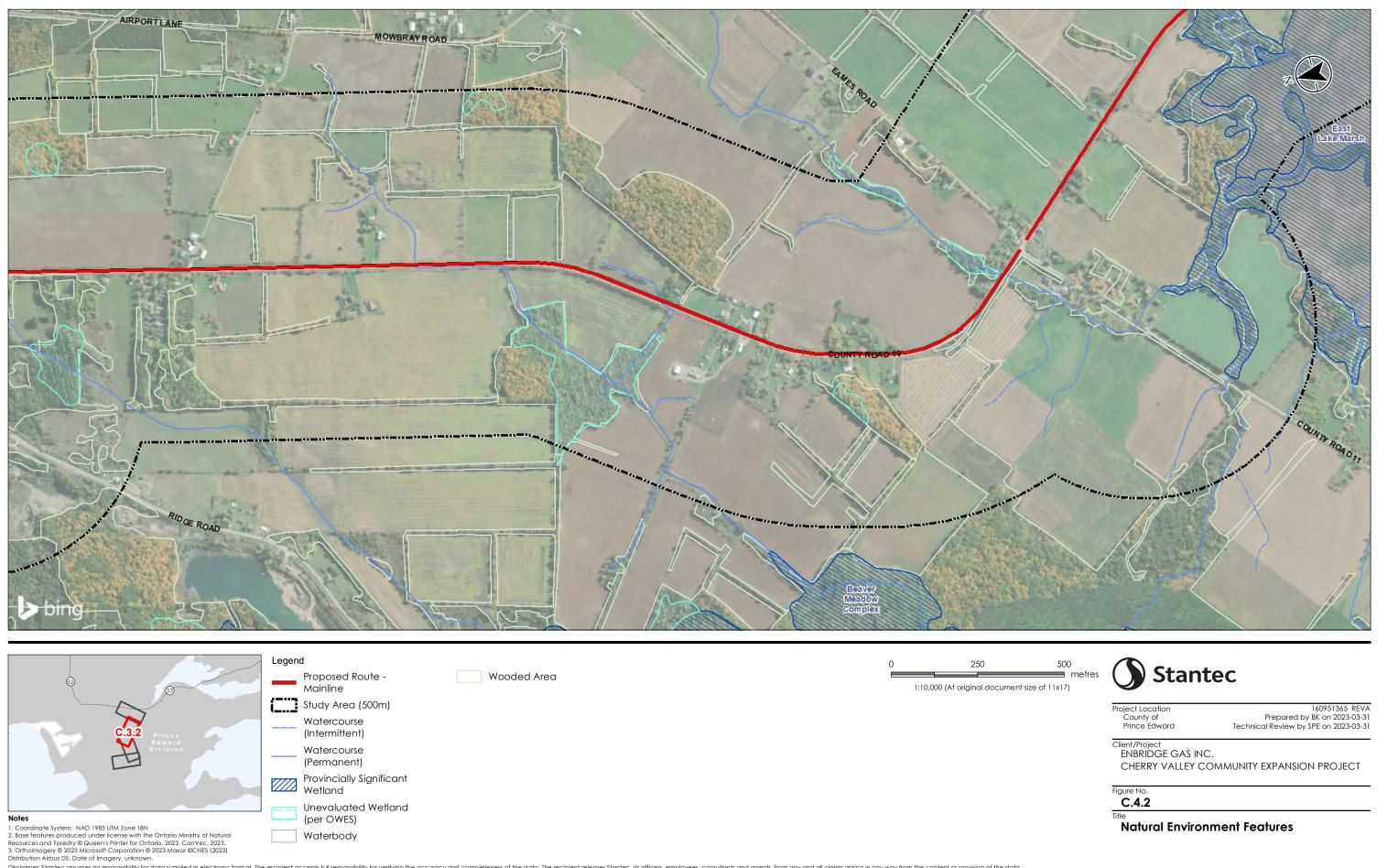
(per OWES)

Unevaluated Wetland

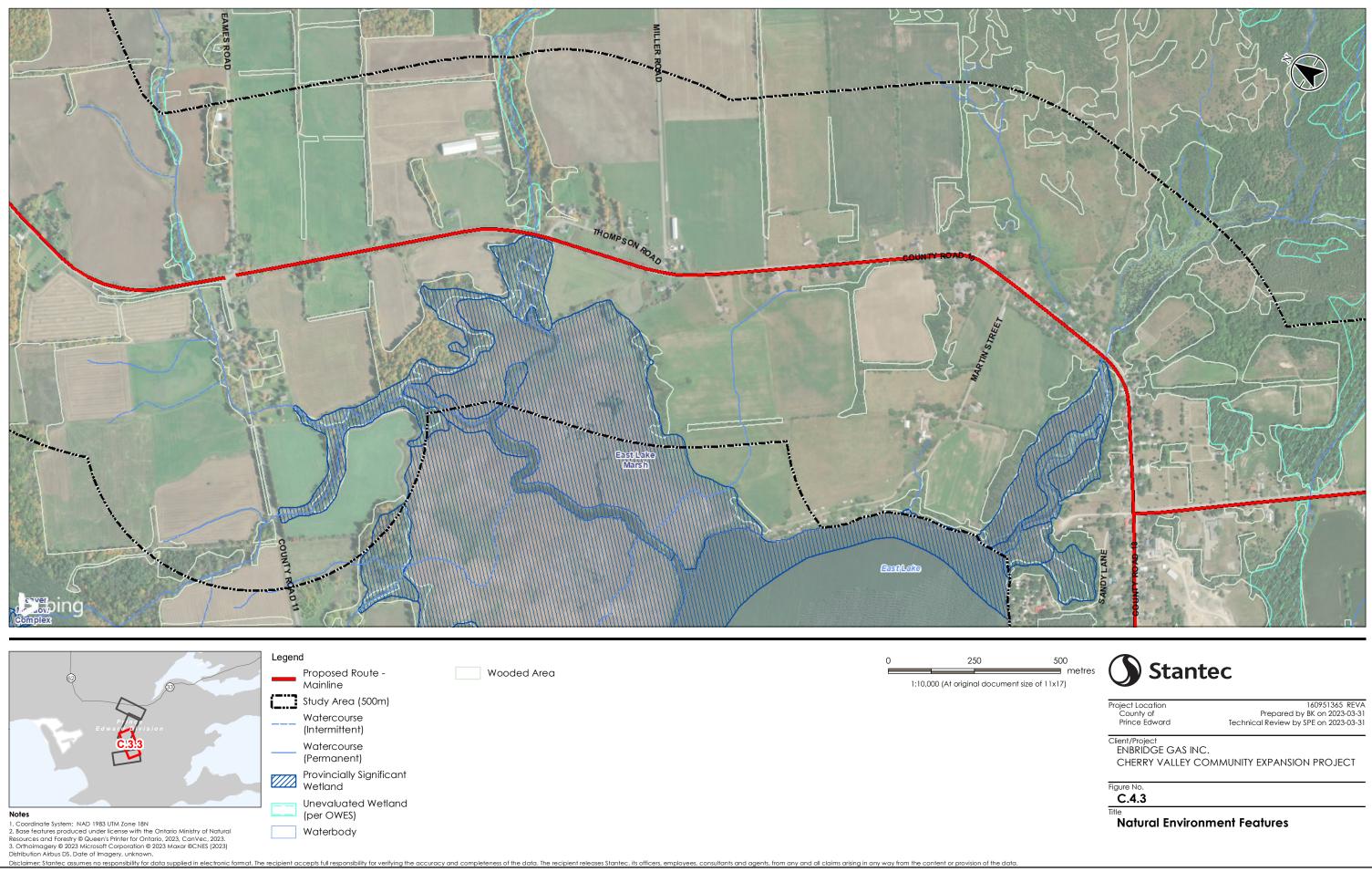
Notes (per OVES) 1. Coordinate System: NAD 1983 UTM Zone 18N 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023. CanVec, 2023. 3. Orthoniomagery © 2023 Microsoft Corporation © 2023 Maxar ©CNES (2023) Distribution Airbus DS. Date of Imagery, unknown. Discloimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

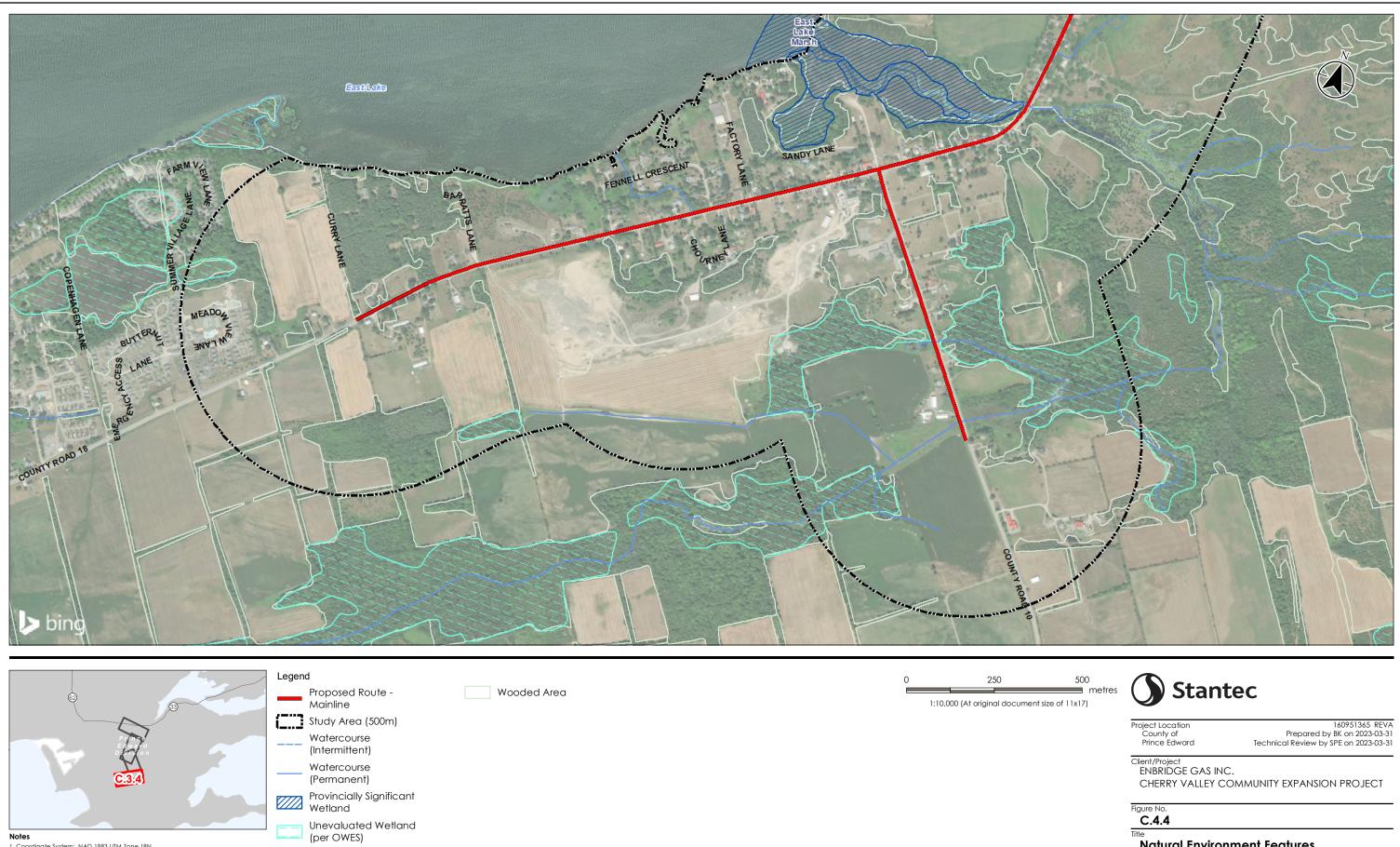
Figure No. C.4.1

Title Natural Environment Features



is claimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.





Notes 1. Coordinate System: NAD 1983 UTM Zone 18N 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023, CanVec, 2023. 3. Orthoimagery © 2023 Microsoft Corporation © 2023 Maxar ©CNES (2023) Distribution Airbus DS. Date of Imagery, unknown. Dischimers Stanter, assumes no resonability for data supplied in electronic for

Waterbody

Natural Environment Features

Appendix D Wildlife Habitat Assessment

Wildlife Habitat Type	Criteria	Results of Desktop and Field Habitat Assessment		
SEASONAL CONCENTRATION AREAS				
Waterfowl Stopover and Staging Area (Terrestrial and Aquatic)	Fields with evidence of annual spring flooding from meltwater or runoff; aquatic habitats such as ponds, marshes, lakes, bays, and watercourses used during migration, including large marshy wetlands.	Candidate SWH present in ponds, marshes and lakes present in the Study Area.		
Shorebird Migratory Stopover Area	Beaches and un-vegetated shorelines of lakes, rivers, and wetlands.	Candidate SWH potentially present on East Lake.		
Raptor Wintering Area	Combination of fields and woodland (>20 ha).	Candidate SWH potentially present . Large forests interspersed with meadows present in the Study Area.		
Bat Hibernacula	Hibernacula may be found in caves, mine shafts, underground foundations and karsts.	Absent. Caves, mine shafts, and karsts absent.		
Bat Maternity Colonies	Maternity colonies considered significant wildlife habitat are found in forested ecosites.	Candidate SWH potentially present in forested areas.		
Turtle Wintering Areas	Over-wintering sites are permanent water bodies, large wetlands, and bogs or fens with adequate dissolved oxygen. Water has to be deep enough not to freeze and have soft mud substrate.	Candidate SWH potentially present in various waterbodies throughout the Study Area.		
Reptile Hibernaculum	Rock piles or slopes, stone fences, crumbling foundations.	Candidate SWH potentially present within the Study Area.		
Colonial-Nesting Bird Breeding Habitat (Bank and Cliff)	Eroding banks, sandy hills, steep slopes, rock faces or piles.	Candidate SWH potentially present within the Study Area.		
Colonial-Nesting Bird Breeding Habitat (Tree/Shrubs)	Dead trees in large marshes and lakes, flooded timber, and shrubs, with nests of colonially nesting heron species.	Candidate SWH potentially present on East Lake Marsh, East Lake Beaver Meadow Complex PSW, shallow marsh, creeks		
Colonial-Nesting Bird Breeding Habitat (Ground)	Rock islands and peninsulas in a lake or large river.	Confirmed SWH at Beaver Meadow Complex PSW within broader Study Area. Candidate SWH potentially present at East Lake Marsh, and East Lake,		
Migratory Butterfly Stopover Areas	Meadows and forests that are a minimum of 10 ha and are located within 5 km of Lake Ontario.	Absent. Study Area is not within 5 km of Lake Ontario.		

Table D-1:	Significant Wildlife Habitat Assessment
------------	-----------------------------------------

Wildlife Habitat Type	Criteria	Results of Desktop and Field Habitat Assessment
Landbird Migratory Stopover Areas	Woodlands of a minimum size located within 5 km of Lake Ontario.	Absent. Study Area is not within 5 km of Lake Ontario.
Deer Yarding or Winter Congregation Areas	Deer winter congregation's areas are mapped by MNRF and species use surveys are not required.	Absent. Congregation areas absent on LIO for the Study Area.
RARE VEGETATION COMM	UNITIES	
Sand Barren, Alvar, Cliffs and Talus Slopes	Sand barren, Alvar, Cliff and Talus ELC Community Classes, and other areas of exposed bed rock and patchy soil development, near vertical exposed bedrock and slopes of rock rubble.	Candidate . Not documented in Study Area y based on the preliminary field work conducted in October 2022. However detailed botanical investigations will be undertaken to determine presence as they are known to occur in the area.
Old-growth Forest	Relatively undisturbed, structurally complex; dominant trees >100 years' old.	Absent. Not documented in Study Area based on the preliminary field work conducted in October 2022.
Tallgrass Prairie and Savannah	Open canopy habitats (tree cover < 60%) dominated by prairie species.	Absent. Not documented in Study Area based on the preliminary field work conducted in October 2022.
Other Rare Vegetation Communities	Provincially Rare S1, S2 and S3 vegetation communities listed by the NHIC.	Absent. Not documented in Study Area based on the preliminary field work conducted in October 2022.
SPECIALIZED HABITAT FO	RWILDLIFE	
Waterfowl Nesting Area	Upland habitats adjacent to wetlands (within 120 m).	Candidate SWH potentially present within wetlands throughout the Study Area and adjacent upland areas.
Bald Eagle and Osprey nesting, Foraging, and Perching Habitat	Treed communities adjacent to rivers, lakes, ponds, and other wetlands with stick nests of Bald Eagle or Osprey.	Candidate SWH potentially present in Study Area.
Woodland Raptor Nesting Habitat	Forested ELC communities >30 ha with 10 ha of interior habitat.	Absent. Not documented in Study Area y based on the preliminary field work conducted in October 2022.
Turtle Nesting Areas	Exposed soil, including sand and gravel in open sunny areas near wetlands.	Candidate SWH potentially present adjacent to watercourses and waterbodies within the Study Area; East Lake Marsh, East Lake, and Beaver Meadow Complex PSW.
Seeps and Springs	Any forested area with groundwater at surface within the headwaters of a stream or river system.	Candidate SWH potentially present . Forested areas adjacent to East Lake Marsh, East Lake, and Beaver Meadow Complex PSW may contain seeps and springs
Amphibian Breeding Habitat (Woodland and Wetland)	Treed uplands with vernal pools, and wetland ecosites.	Candidate SWH present in wetlands and/or woodlands.

 Table D-1:
 Significant Wildlife Habitat Assessment

Wildlife Habitat Type	Criteria	Results of Desktop and Field Habitat Assessment	
Woodland Area-sensitive Bird Breeding Habitat	Large mature forest stands, woodlots >30 ha and >200 m from the forest edge.	Absent. Not documented in Study Area y based on the preliminary field work conducted in October 2022.	
HABITAT FOR SPECIES OF	CONSERVATION CONCERN		
Marsh Bird Breeding Habitat	Wetlands with shallow water and emergent aquatic vegetation.	Candidate SWH potentially present in wetlands.	
Open Country Bird Breeding Habitat	Large grasslands and fields (>30 ha).	Candidate SWH present in large pastures, meadows, fields.	
Shrub/Early Successional Bird Breeding Habitat	Large shrub and thicket habitats (>10 ha).	Candidate SWH present in large thickets.	
Terrestrial Crayfish	Wet meadows and edges of shallow marshes.	Candidate SWH potentially present adjacent to wetlands.	
SPECIES OF CONSERVATION CONCERN ¹			
ANIMAL MOVEMENT CORR	IDORS		
Amphibian Movement Corridor	Corridors may be found in all ecosites associated with water. Determined based on identifying significant amphibian breeding habitat (wetland).	Candidate SWH present due to the likely presence of amphibian habitat in the Study Area. Associated with watercourses and wetlands.	
Deer Movement Corridors	Corridors may be found in all forested ecosites.	Absent. Deer movement corridors absent on LIO for the Study Area.	

Table D-1:	Significant Wildlife Habitat Assessment
------------	-----------------------------------------

¹ See Table 3.3 in the body of the report for details on candidate SOCC

Appendix E Stage 1 Archaeological Assessment



STAGE 1 ARCHAEOLOGICAL ASSESSMENT: CHERRY VALLEY COMMUNITY EXPANSION PROJECT Various Lots and Concessions in the Geographic Townships of Athol and Hallowell, Prince Edward County, now the City of Prince Edward County, Ontario

April 25, 2023

Prepared for: Enbridge Gas Inc. 10 Honda Boulevard Markham, Ontario L6C 0M6 Tel: 416-454-9539 Email: Kelsey.Mills@enbridge.com

Prepared by: Stantec Consulting Ltd. 400 - 1331 Clyde Avenue Ottawa, Ontario K2C 3G4

Project Number: 160951365

Licensee: Patrick Hoskins, MA License Number: P415 Project Information Form Number: P415-0428-2023

ORIGINAL REPORT

Table of Contents

EXEC	UTIVE SUMMARY	III
ABBR	REVIATIONS	v
PROJ	IECT PERSONNEL	VI
ACKN	NOWLEDGEMENTS	VI
1	PROJECT DEVELOPMENT	1
1.1	Project Context	1
1.1.1	Objectives	
1.2	Historical Context	
1.2.1	Pre-Contact Indigenous Resources	
1.2.2 1.2.3	Post-Contact Indigenous Resources Euro-Canadian Resources	
1.2.3	20th Century Development	
1.2.4	Archaeological Context	
1.3.1	Natural Environment	
1.3.2	Registered Archaeological Sites and Surveys	
1.3.3	Heritage Designations	
1.4	Existing Conditions	
2	FIELD METHODS	28
3	ANALYSIS AND CONCLUSIONS	
3.1	Archaeological Potential	
3.2	Cherry Valley United Church Cemetery	
3.3	Registered Archaeological Sites	
4	RECOMMENDATIONS	33
4.1	General Recommendations	
4.2	Cherry Valley United Church Cemetery Recommendations	
4.3	Registered Archaeological Sites Recommendations	
5	ADVICE ON COMPLIANCE WITH LEGISLATION	36
6	BIBLIOGRAPHY AND SOURCES	37
7	PHOTOS	43
8	MAPS	65
9	CLOSURE	86

LIST OF TABLES

Table 1.1:	Generalized Cultural Chronology for Eastern Ontario	3
Table 1.2:	Lot and Concession Information for the Study Area	13
Table 1.3:	Landowner Information for the Study Area from 1790s Historical Mapping	14
Table 1.4:	Landowner Information for the Study Area from 1863 Historical Mapping	15
Table 1.5:	Landowner Information for the Study Area from 1878 Historical Mapping	19
Table 1.6:	Soils within the Study Area	24
Table 1.7:	Registered Archaeological Sites within One Kilometre of the Study Area	26
Table 1.8:	Archaeological Assessments within 50 Metres of the Study Area	27

LIST OF FIGURES

 \bigcirc

Figure 1: Location of Study Area	66
Figure 2.1: Detailed Location of the Study Area	
Figure 2.2: Detailed Location of the Study Area	
Figure 2.3: Detailed Location of the Study Area	69
Figure 2.4: Detailed Location of the Study Area	70
Figure 2.5: Detailed Location of the Study Area	71
Figure 3: Treaties and Purchases (Adapted from Morris 1943)	72
Figure 4: Part of 1790s Map of Hallowell Township	73
Figure 5: Part of 1812 Map of Hallowell Township	74
Figure 6: Part of 1833 Map of Hallowell Township	75
Figure 7: Part of 1863 Map of Prince Edward County	76
Figure 8: Part of 1878 Map of Hallowell Township	77
Figure 9: Part of 1878 Map of Athol Township	78
Figure 10: Part of 1878 Map of the Hamlet of Cherry Village	79
Figure 11: Part of the 1932 Topographic Map for Prince Edward County	80
Figure 12.1: Stage 1 Results and Recommendations	81
Figure 12.2: Stage 1 Results and Recommendations	82
Figure 12.3: Stage 1 Results and Recommendations	83
Figure 12.4: Stage 1 Results and Recommendations	84
Figure 12.5: Stage 1 Results and Recommendations	85

Executive Summary

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Cherry Valley Community Expansion Project (the Project) to provide affordable natural gas service to the community of Cherry Valley. The Project will include the construction of new natural gas pipelines to transport natural gas supply from Sandy Hook Road/County Road 1 and Highway 10 south along Highway 10 to the terminating point near the Curry Lane and Highway 10 intersection to supply the community of Cherry Valley, in Prince Edward County with natural gas.

This Stage 1 archaeological assessment was conducted 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 study area for the Stage 1 assessment of the proposed Project includes approximately 264 hectares of part of various Lots and Concessions in the Geographic Townships of Hallowell and Athol, Prince Edward County, now the City of Prince Edward County, Ontario.

Initial background research compiled information concerning registered and/or potential archaeological resources within the study area. A property inspection was conducted on February 17, 2023, as a part of the Stage 1 archaeological assessment completed under Project Information Form number P415-0428-2023 issued to Patrick Hoskins, MA by the Ministry of Citizenship and Multiculturalism (MCM).

The Stage 1 archaeological assessment of the study area for the Project determined that portions of the study area retain potential for the identification and documentation of archaeological resources. In accordance with Section 1.3.1 and Section 7.7.4 of the MCM's 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 impact area that retains archaeological potential.**

The Stage 1 archaeological assessment also determined that a portion of the study area retains low to no archaeological potential for the identification or recovery of archaeological resources due to intersecting and overlapping areas of previous archaeological assessment, disturbance, steep slope, and low and permanently wet areas. In accordance with Section 1.3.2 and Section 7.7.4 of the MCM's 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), **Stage 2 archaeological assessment is not required for any portion of the Project's anticipated construction which impacts an area of low to no archaeological potential.**

The Stage 1 archaeological assessment identified one cemetery within the study area which retains archaeological potential, the Cherry Valley United Church Cemetery. Stantec completed additional background research as part of this Stage 1 archaeological assessment but could not confirm the original historical boundaries of this cemetery or the complete layout of burial plots within the cemetery property. Given that the boundaries of the cemetery are proven to be unclear based on the additional research, if construction impacts are planned within a 20 metre buffer of the currently defined cemetery boundaries, after the completion of any necessary Stage 2 archaeological assessment, it is recommended that a Stage 3 cemetery investigation be carried out to determine if burials associated with the cemetery extend beyond the currently defined boundaries into areas proposed to be impacted by the Project.

In addition to the above, background research identified three registered archaeological sites within the study area: the Cherry Valley Site (AlGg-4), the Crawford Site (AlGg-27), and the Herrington Site (AlGg-28). If construction impacts are planned within a 20 metre buffer of each of the currently defined archaeological site locations, after the completion of any necessary Stage 2 archaeological assessment, it is recommended that a Stage 3 archaeological investigation be carried out as previous archaeological assessments of each of the Cherry Valley Site (AlGg-4), the Crawford Site (AlGg-27), and the Herrington Site (AlGg-28) have determined that they retain cultural value or interest.

Detailed recommendations for further archaeological work are included in the full report.

The MCM is asked to review the results presented and to accept this report into the *Ontario Public Register of Archaeological Reports*.

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

Abbreviations

 \bigcirc

BCE	Before Common Era
CE	Common Era
CHRM	Commonwealth Historic Resource Management
CSP	Controlled Surface Pickup
Ground Truth	Ground Truth Archaeology
EEEL	East End of East Lake
GIS	Geographic Information Systems
MA	Master of Arts
МСМ	Ministry of Citizenship and Multiculturalism
M.Sc.	Master of Sciences
MT	Military Tract
NPS	Normal Pipeline Size
NSEL	North Side of East Lake
OEB	Ontario Energy Board
RPA	Registered Professional Archaeologist
ROW	Right of Way
SSEL	South Side of East Lake
TWS	Temporary Work Space

Project Personnel

Licensed Archaeologist:	Patrick Hoskins, MA (P415)		
Project Manager:	Rooly Georgopoulos		
Task Manager:	Patrick Hoskins, MA (P415)		
Field Supervisor:	Caitlin Simmons, M.Sc. (P1060)		
Report Writer:	Caitlin Simmons, M.Sc. (P1060)		
Mapping:	Brandon Fonseca, Junior GIS Specialist		
Quality Review:	Colin Varley, MA, RPA		
Independent Review:	Parker Dickson, MA (P256)		

Acknowledgements

 \bigcirc

Enbridge Gas Inc.:	Kelsey Mills – Environmental Permitting Advisor
Ministry of Citizenship and Multiculturalism:	Robert von Bitter – Archaeological Data Coordinator

1 **Project Development**

1.1 Project Context

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Cherry Valley Community Expansion Project (the Project) to provide affordable natural gas service to the community of Cherry Valley, Ontario. The Project will include the construction of new natural gas pipelines to transport natural gas supply from Sandy Hook Road/County Road 1 and Highway 10 south along Highway 10 to the terminating point near the Curry Lane and Highway 10 intersection to supply the community of Cherry Valley, in Prince Edward County with natural gas (Figure 1).

The Project involves the installation of approximately 14 kilometres of new 2-inch and 4inch Normal Pipeline Size (NPS) polyethylene natural gas pipeline. The preliminary preferred route for the supply lateral is proposed to travel from Warings Corner eastward along Sandy Hook Road/County Road 1 to Highway 10, and then south on Highway 10 with off-branches on Ridge Road, County Road 11, Thompson Road, Martin Street, and then along County Road 18 through Cherry Valley. The supply line continues south along Highway 10 and along four small roads off County Road 18 in Cherry Valley (Sandy Lane, Factory Lane, Fennell Crescent, and Chourney Lane). Other roads included in the study area are Upper Lake Road, County Road 22, Mowbray Road, Eames Road, Miller Road, the Memorial Park laneway, Barratts Lane and Curry Lane (Figures 2.1 to 2.5).

Overall, the study area comprises approximately 264 hectares within various lots and concessions in the Geographic Townships of Athol and Hallowell, Prince Edward County, now the City of Prince Edward County, Ontario. The proposed pipeline is anticipated to be within existing disturbed municipal road Rights-of-Way and ditches. Permanent easement and temporary working space (TWS) and laydown areas may be required. Outside of the municipal road Right-of-Way (ROW), the study area includes disturbed gravel and asphalt laneways, manicured lawns associated with residential, commercial, and institutional areas, woodlot and scrubland, wetland, and agricultural field.

This Stage 1 archaeological assessment was conducted 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 study area for the Stage 1 assessment of the proposed Project is approximately 264 hectares of part of various lots and concessions, in the Geographic Townships of Hallowell and Athol, Prince Edward County, now the City of Prince Edward County Ontario (Figures 2.1 to 2.5).

1.1.1 Objectives

In compliance with the provincial standards and guidelines set out in the Ministry of Citizenship and Multiculturalism's (MCM) 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the objectives of the Stage 1 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 property.
- To recommend appropriate strategies for Stage 2 survey.

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

- A review of relevant archaeological, historical, and environmental literature pertaining to the study area.
- A review of the land use history, including pertinent historical maps.
- An examination of the *Ontario Archaeological Sites Database* to determine the presence of registered archaeological sites in and around the study area.
- A query of the *Ontario Public Register of Archaeological Reports* to identify previous archaeological work completed within, or within 50 metres of, the study area.
- A property inspection of the study area by a licensed archaeologist.

Permission to enter private lands associated with the study area was not obtained by Enbridge Gas to facilitate a full property inspection. As a result, the property inspection was limited to municipal road ROW and public property.

1.2 Historical Context

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

1.2.1 Pre-Contact Indigenous Resources

It has been demonstrated that Indigenous people began occupying Ontario as the Laurentide glacier receded, as early as 11,000 years ago (Ferris 2013:13). Much of what is understood about the lifeways of pre-Contact 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 in formal lithic tools, and separated into the Early

Paleo, Late Paleo, Early Archaic, Middle Archaic and Late 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 tool for understanding changes in Indigenous culture through time. The current understanding of Indigenous archaeological culture is summarized in Table 1.1 (Ellis and Ferris 1990). The following summary of the pre-contact occupation of southern Ontario is based on syntheses in Archaeologix Inc. (2008), Damjkar (1990), Ellis and Ferris (1990), Jacques Whitford (2008), and Sutton (1990). The provided time periods are based on the "Common Era" calendar notation system: Before Common Era (BCE) and Common Era (CE).

Cultural Period	Characteristics	Time Period	Comments
Early Paleo	Fluted Projectiles	9000 – 8400 BCE	Spruce parkland / caribou hunters
Late Paleo	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
	Lamoka (narrow points)	2500 – 1800 BCE	Increasing site size
Late Archaic	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 – CE 550	Increased sedentism
vvoodiand	Princess Point	CE 550 – 900	Introduction of corn
	Early Late Woodland Pottery	CE 900 – 1300	Emergence of agricultural villages
Late Woodland	Middle Late Woodland Pottery	CE 1300 – 1400	Long longhouses (i.e., 100+ metres)
	Late Late Woodland Pottery	CE 1400 – 1650	Tribal warfare and displacement

 Table 1.1:
 Generalized Cultural Chronology for Eastern Ontario

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 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 groundstone 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: Figure 1.1.C). It is presumed that most 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 like the present day. Evidence exists at this time for an increase in population and the contraction of group territories. By approximately 4500 BCE, evidence exists from southern Ontario for the utilization of native copper, i.e., naturally occurring pure copper metal (Ellis 2013:42). The recorded 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). There is some evidence to suggest that fishing weirs had been constructed much earlier. A radiocarbon sample from a weir site in Lovesick Lake along the Trent-Severn Waterway provided a date of 4600 BCE (Stevens 2004). 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 the ceramic technology is correlated, however, with the intensive exploitation of seed foods such as goosefoot and knotweed as well as mast such as nuts. 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 emerges for the introduction of maize into southern Ontario. This crop would have initially only supplemented Indigenous peoples' 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. This period, known as the Late Woodland in southern Ontario, is often divided into three temporal components: early, middle, and late. Early Late Woodland peoples continued to practice similar subsistence and settlement patterns as the Middle Woodland. Villages tended to be small, with small longhouse dwellings that housed either nuclear or, with increasingly, extended families. Smaller camps and hamlets associated with villages served as temporary bases from which wild plant and game resources were acquired. Horticulture appears to have been for the most part a supplement to wild foods, rather than a staple.

The Middle Late Woodland period marks the point at which a fully developed horticultural system emerged, and at which point cultivars became the staple food source. By approximately 1250 CE, evidence exists for the common cultivation of historic Indigenous cultigens, including maize, beans, squash, sunflower, and tobacco. In this period villages become much larger than in the early Late Woodland period, and longhouses also become much larger, housing multiple, though related, nuclear families. Food production through horticulture resulted in the abandonment of seasonal mobility that had characterized Indigenous life for millennia. Hunting, fishing, and gathering of wild food activities continued to occur at satellite camps. However, for the most part, most Late Woodland people inhabited large, sometimes fortified villages throughout southern Ontario.

During the Late Late Woodland period longhouses became smaller again, although villages became even larger. Several Huron village sites have been discovered in the region that contain material culture associated with both Huron and St. Lawrence lroquoians, suggesting that St. Lawrence lroquoians who had abandoned their home territory along the north shore of the St. Lawrence River and found refuge in the Trent

Valley and Kawartha Lakes area. The villages were abandoned in the sixteenth century and the region was used as a buffer between the Huron and the Five Nations Iroquois.

The Late Woodland period along the north shore of Lake Ontario is marked by the emergence of the Huron-Wendat people, one of several discrete groups that emerge out of the Middle Late Woodland period. Pre-contact Huron villages have been documented in clusters along the north shore of Lake Ontario from just west of Toronto to Bellville, and north up through the Kawartha Lakes region. The Huron were similar to other Iroquoian societies in many ways, including material culture, semi-permanent settlement practices, and a tendency toward agricultural mixed with hunting and gathering subsistence strategy (Ramsden 1990). Huron settlements include large villages of several longhouses and camps for specialized extractive activities such as hunting and fishing, although it is possible that these camps may actually be ancestral Mississauga sites (J. Kapyrka, personal communication, 2019). Both Huron and Anishnaabeg traditional history indicate that the Huron-Wendat and Anishnaabeg cohabited the region (Kapyrka 2018). During the Late Late Woodland period, Huron settlements along the north shore of Lake Ontario begin to move through the Humber River, Don River, Duffins Creek/Rouge River and Trent River systems and eventually coalesce into what is now Simcoe County and the area traditionally identified as "Huronia" (Birch 2015).

Several Late Late Woodland period sites have been identified within Prince Edward County, such as the Graham site (AlGi-3), the Sandbanks site (AlGh-4), the Hillier site (AlGi-1), the Payne site (AlGh-2), and the Waupoos site (BaGg-1) (Government of Ontario 2023a). There are two historical Carrying Places across the Prince Edward County peninsula (Ward 1863): one is across the isthmus at the north end of the peninsula, at the modern place of Carrying Place, Ontario; the other is between modern day Picton, Ontario and West Lake, crossing the north end of the study area. A 'Carrying Place' is another term for what would today be described as a portage. They were important transportation routes from the pre-Contact period into the 19th century.

1.2.2 Post-Contact Indigenous Resources

During the early post-Contact period, the north shore of Lake Ontario was occupied by two distinct peoples with different cultural traditions: the Michi Saagiig Nishnaabeg (Mississauga Anishinaabeg) and the Huron-Wendat. It has long been the understanding of archaeologists that prior to the 16th century the north shore of Lake Ontario was occupied by Iroquoian-speaking populations (Birch and Williamson 2013; Birch 2015; Dermarker et al. 2016). Traditionally, the Huron-Wendat were farmers and fishermen-hunter-gatherers with a population of several thousand individuals (M. Picard, Huron-Wendat Nation, personal communication). The Huron-Wendat traveled widely across a territory stretching from the Gaspé Peninsula in the Gulf of St. Lawrence, along both sides of the St. Lawrence River, and throughout the Great Lakes. According to their traditions and customs, the Huron-Wendat are intimately linked to the St. Lawrence

River and its estuary, which is the main route of its activities and way of life. The Huron-Wendat formed alliances and traded goods with other Indigenous partners among the networks that stretched across the continent, and later incorporated the French into that trading network.

Recently, the direct correlation in Ontario between archaeology and ethnicity, and especially regional identity, has been questioned (cf. Fox 2015:23; Gaudreau and Lesage 2016:9-12; Ramsden 2016:124). Recent considerations of Indigenous sources on cultural history have led to the understanding that prior to the 16th century the north shore of Lake Ontario was co-habited by Iroquoian and more mobile Anishnaabeg populations (Kapyrka 2018), the latter of whom have not been represented in previous analyses of the archaeological record and most likely left a more ephemeral archaeological record than that of more densely populated agricultural settlements. The apparent void of semi-permanent village settlement along the north shore of Lake Ontario continued through the first half of the 17th century; however, this does not preclude the occupation of the region by mobile Anishnaabeg peoples. Both Huron and Mississauga traditional history indicate that the Huron-Wendat and Mississauga cohabited the region (Kapyrka 2018).

The Mississauga traditional homeland stretched along the north shore of Lake Ontario and its tributary rivers from present-day Gananoque in the east to Long Point on Lake Erie in the west. In the winter the communities dispersed into smaller groups and travelled in-land to the north, to the area around present-day Bancroft and the Haliburton Highlands. Mississauga oral history relates that their ancestors occupied this part of southern Ontario from the time of the last deglaciation and continued to occupy it up to the start of the Contact period (Migizi 2018:29).

The Mississauga traditional territory was located between two powerful confederacies, the Three Fires Confederacy (consisting of the Odawa, Ojibwa, and Pottawatomi) located to the north and west, and the Haudenosaunee (Five Nations Iroquois) Confederacy on the south shore of Lake Ontario in present-day New York State. In this geo-political context, the Mississauga acted as peacekeepers among the various Indigenous nations, acting as negotiators and emissaries (Kapyrka 2018).

By the turn of the 16th century, much of the north shore of Lake Ontario was abandoned of permanent settlement; prior to this, it was situated within the extended political geography of the ancestral Huron-Wendat (the Huron) (Heidenreich 1990; Ramsden 1990). Pre-Contact Huron villages have been documented in clusters along the north shore of Lake Ontario from just west of Toronto to Bellville, and north up to the Trent River. The Huron were similar to other Iroquoian societies in many ways, including material culture, semi-permanent settlement practices, and a tendency toward agricultural mixed with hunting and gathering subsistence strategy (Heidenreich 1990; Migizi 2018:122-123; Ramsden 1990).

The ancestors of Alderville Anishnaabeg First Nation traditionally lived around the Bay of Quinte (Alderville First Nation 2016). A mid-17th century map, i.e., Bourdon's 1641 map of "Nouvelle France", indicates two Anishnaabeg groups near the mouth of Lake Ontario, the "Chonkande" and the "Tovhiaronon" (Fox 2015: Figure 1). The former group is equatable with the "Conkhandeerhonons" or "people who are joined" and may represent a cohabitation of the Huron and Anishinaabeg people in the region; such cohabitation is frequently described in historical sources (Steckley 1990:20). The latter group is difficult to identify as no good parallel is known with a group historically described elsewhere (Steckley 1990:22).

During the 17th century, war campaigns by southern Iroquoian groups began to push the Huron out of the area, leaving the north shore of Lake Ontario void of permanent settlement (Birch and Williamson 2013:40). In 1649, the Seneca and the Mohawk, led a campaign into the north shore of Lake Ontario and dispersed the Huron, Tionontate (Petun), and Attiwandaron (Neutral), and the Seneca established dominance over the region (Heidenreich 1978). Around 1650, a series of Iroquoian villages were established along the north shore of Lake Ontario, including the Cayuga village of Quinté (Keint-he), located near the mouth of the Trent River at Trenton, and the Oneida village of Ganneious, located on the Bay of Quinte near the mouth of the Napanee River (Konrad 1981). Travel along the north shore of Lake Ontario and the connecting rivers occurred frequently. The historical portage route known as the Carrying Place was located south of Quinté where Prince Edward County abuts Northumberland County. These villages were settled to gain access to the fur trade north of Lake Ontario and acted as stopovers for traders.

In 1667, surviving Huron warriors joined alliance with the French-allied Ojibwa and Mississaugas to counterattack the Iroquois who had settled along the north shore of Lake Ontario and by the start of the 18th century the Iroquoian villages along the north shore had been abandoned due to hostilities and a decline in the fur trade (Konrad 1981). By 1690, Ojibwa (Anishinaabe) speaking people had begun moving south into the lower Great Lakes basin (Konrad 1981; Rogers 1978). Mississauga oral traditions, as told by Chief Robert Paudash and recorded in 1905, indicate that after the Mississauga defeat of the Mohawk, the Mohawk retreated to their homeland south of Lake Ontario and a peace treaty was negotiated between those groups around 1695 (Paudash 1905). Upon the Mississaugas' return they decided to settle permanently in southern Ontario and began to reestablish their role as peacekeepers in the region, extending that to include the incoming Euro-Canadian settlers (Curve Lake First Nation no date [n.d.]; Migizi and Kapyrka 2015). The Huron permanently left the region, moving to the east in Quebec and to the southwest in the present-day United States.

Since contact with European explorers and immigrants, and, later, with the establishment of provincial and federal governments (the Crown), the lands within Ontario have been included in various treaties, land claims, and land cessions. 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 (1943) is provided in Figure 3. Based on Morris (1943), the study area is situated within lands governed by the 1784 Crawford's Purchase from the Mississauga. The treaties known as the Crawford's Purchases consists of three purchases between Captain Crawford and the Iroquois and Mississaugas in 1783-1784 and 1787 (although the third was part of negotiations in 1783-1784 it was only signed in 1787). The study area is located within the lands of the second treaty, identified as "B1" on Figure 3, made between the Crown and the Mississaugas. It included lands "from the mouth of the Gananoque River to the mouth of the Trent River…includes the southern portions of the Counties of Hastings, Lennox and Addington, and Frontenac" (Morris 1943:16-17).

In 2018, a settlement was reached between the seven Williams Treaty First Nations (comprising the Mississaugas of Alderville First Nation, Curve Lake First Nation, Hiawatha First Nation, Scugog Island First Nation, the Chippewas of Beausoleil First Nation, Georgina Island First Nation, and the Rama First Nation) and the provincial and federal governments that provided financial compensation to the nations and formally recognized pre-existing harvesting rights to areas covered by Treaties 5, 16, 18, 20 and 27-27^{1/4}, the Crawford Purchases (including the "Gunshot Treaty"), and around Lake Simcoe.

From the later 18th century through the so-called historical period (and up to the present-day), Indigenous people continued to follow their traditional practices of hunting, fishing, and gathering across the landscape despite the increasing presence of Euro-Canadian settlers. Some of these activities represent a continuation of practices that may have their origins in the Archaic period, demonstrating a long and continual relationship with the land even through the movement of Indigenous communities from their traditional territories and harvesting areas onto reserves in the colonial and post-colonial periods. The change of the environment from its natural state into a widespread agricultural landscape reduced the resource areas available and disrupted traditional Indigenous land use and resource extraction patterns. Nonetheless, Indigenous peoples continued these practices and passed this knowledge on to later generations.

1.2.3 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 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, Simcoe was tasked with governing the new province, directing its settlement, and establishing a constitutional government modelled after that of Britain (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). 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.

1.2.3.1 Prince Edward County

In 1783, Colonel Henry Young, the very first United Empire Loyalist, settled in the peninsula of land that would become the County of Prince Edward (Cruickshank and Stokes 1984). Initially in 1783, three townships, Ameliasburgh, Sophiasburgh and Marysburgh, were surveyed in what would be Prince Edward County and placed in the Midland District of Upper Canada. The first wave of Loyalist settlers was allocated lands in these townships and others to the east along the St. Lawrence River; however, it was soon found that additional territory was required to fulfill the larger land grants promised to the more wealthy or prominent Loyalists, as well as for additional refugees arriving later, and for Americans willing to swear allegiance to the Crown. Marysburgh Township was expanded to East Lake by 1785, with land around West Lake to the north laid out as Sophiasburgh Township from 1785 to 1787 and the remainder of the peninsula as Ameliasburgh Township (Commonwealth Historic Resource Management Limited [CHRM] 1991:11-12; Cruickshank and Stokes 1984). The county itself was created in 1792 as part of the new province of Upper Canada. After several petitions from local inhabitants regarding the large size of the townships and the difficulty in administering them, a new township, Hallowell Township, was created from parts of the existing three in 1797, at the time including both East Lake and West Lake. The large size of Hallowell Township and geographic obstacles within it began to cause administrative problems again, and the southern part of Hallowell Township, including all of East Lake, was reorganized as Athol Township in 1848 (Belden 1878:xxi).

1.2.3.2 Township of Hallowell

Early settlement in the township focussed at Hallowell Bridge (modern Picton, Ontario), which had developed into a shipping and distribution hub in the county. Picton, located at the head of the Bay of Quinte, is the largest town in Prince Edward County. Being one of the oldest towns in the province, it has enjoyed an interesting and varied history, and from the earliest days of settlement, has served as an important marketing and community centre (Richard and Morwick 1948:10). The north end of the study area approaches the south edge of present-day Picton. Euro-Canadian settlement in Hallowell Township included a significant population of Methodists, as well as Quakers, who settled mainly around Bloomfield (Mika and Mika 1981:215). The first school opened in the township in 1834 (Mika and Mika 1981:215). A cheese factory was built in

Bloomfield in 1867 (Mika and Mika 1981:215). The township also had the first fruit and vegetable canning factory, which opened in 1881 in Picton (Mika and Mika 1981:215). In addition to dairying and fruit and vegetable farming being important agricultural industries, by the turn of the 20th century the township also had a burgeoning industry in hops production (Mika and Mika 1981:215).

The township was connected to the railway network in 1879 when the station was constructed in Picton (Mika and Mika 1981:215). The Prince Edward County Railway company built a rail line between Picton and Trenton, heading straight west from Picton and crossing the western end of the current study area. The Prince Edward County Railway was purchased by the Central Ontario Railway in 1882, which continued to build the line northwards to Marmora. In 1909, the Central Ontario Railway was acquired by the Canadian Northern Railway, which completed the line into Bancroft. With the depletion of mining resources, which had been the initial factor for extending the railway, the Canadian National Railway began to abandon the line in the 1960s and the section within Hallowell Township was abandoned in 1984 and the rails removed. Prince Edward County purchased the original Prince Edward County Railway line in 1997 and began transforming it into the multi-purpose Millennium Trail it is today (PEC Trails n.d.) The Millennium Trail crosses the study area at the northwest end across Sandy Hook Road/County Road 1.

1.2.3.3 Township of Athol

Athol Township separated from Hallowell in 1848. Originally, much of the land around East Lake and West Lake had been allotted to members of the King's Royal Regiment of New York and the King's (or Roger's) Rangers at the end of the 16th century. More of these individuals appear to have relocated to Athol Township, as the volume of original grants in Fredericksburgh Township, their original location, had led to overcrowding (CHRM 1991:12-14). By 1800, East Lake was settled by 34 families: 19 on the south side of the lake and 15 on the north side. One of the prominent settler families were the Rogers, comprising Major James Rogers, later promoted to Lieutenant-Colonel, his wife Margaret McGregor and their six children. During the Seven Years' War, James Rogers served in the Queen's Rangers (Rogers' Rangers), a provincial corps raised by his brother Robert, and was present at the capture of Louisbourg and of Quebec. During the American Revolutionary War he commanded the 2nd Battalion, King's Rangers as a Major, thereby forfeiting some 50,000 acres in New Hampshire. In 1784, he led a party of about 300 disbanded King's Rangers and their families to Prince Edward County where they were granted land (Ontario Heritage Trust 2023; Gorman 2011). In 1851, Athol Township was described as containing a mixture of sand and good farmland, with the village of Cherry Valley on East Lake containing a sawmill and a post office.

Hamlet of Cherry Valley

In 1812, the hamlet of Cherry Valley was given its name by Alva Stephens, who came from a village of the same name in New York State. This village is well named, being situated in a valley at the head of East Lake, in the Township of Athol, approximately eight kilometres southeast from the City of Picton and there were a large number of wild cherry trees in the vicinity of East Lake at that time (Quinte Conservation 2013). In the early 19th century, Cherry Valley contained several churches, a school, stores, carriage, paint, and blacksmith shops. One of the blacksmith shops belonged to Fred Smith. It was advertised as a place to get horseshoes, logging chains, and tools repaired as well as buggies, wagons, and sleighs repaired (Dodds 1979). In addition, the Athol Township Hall was built in *circa* 1870 in Chery Valley within the study area on the south side of Highway 10 (Ontario Heritage Trust 2023).

Today, Cherry Valley and the surrounding area is driven by tourism and agriculture. There are many beef and dairy farms surrounding the hamlet and several wineries. Tourist establishments such as campgrounds, cabins, trailer parks, and rental cottages have developed along the south and west shores of East Lake (Quinte Conservation 2013).

Cherry Valley United Church and Cemetery

The Cherry Valley United Church and Cemetery is located at the southeast corner of Highway 10, where it turns southeast at County Road 18, on part of Lot 2, Concession 1 South Side of East Lake, Athol Township. The Cherry Valley United Church was originally founded by the local Weslevan Methodist congregation and opened for worship in 1862. In 1925, the Methodist Church of Canada, including Wesleyan Methodists, and a large portion of the Presbyterian Church of Canada joined to form the United Church of Canada with other congregations joining in later years (United Church of Canada 2023). At this time, the Cherry Valley church was renamed and continued to hold worship until it was disbanded in 2018. Currently, the church building is in use as a community rental hall (Cyndi DeWitt, Cemetery Manager, personal communication). The associated cemetery was established in 1826 and, as of February 2023, contains 6,133 burials, including 538 burials pre-dating 1900. This includes seven burials where the owner's date of death pre-dates 1826 and it is not conclusive whether they were originally interred at the cemetery location or transferred to the cemetery at a later date (Cyndi Dewitt, Cemetery Manager, personal communication). Many of the interred individuals share names with the 19th century landowners from Athol and Hallowell townships. The cemetery is nearly 200 years old and one of the oldest active cemeteries in the entire region, with cremation interments still being conducted as of 2020 (Meeks 2020).

1.2.3.4 Historical Map Review

Historical mapping illustrates the development of the townships of Athol and Hallowell and their relationship to the study area over time. The study area covers parts of many lots in different concessions within the township, as summarized in Table 1.2. Seven historical maps were reviewed as part of this Stage 1 archaeological assessment (Aitken 1790-1799, Conger 1812, Elmore 1833, Ward 1863, H. Belden & Co. 1878) (Figures 4 to 11). The content of these maps relative to the study area is reviewed in further detail below.

Lot	Concession	Geographic Township
1 to 7	1, South Side of East Lake (SSEE)	Athol
1 to 6, and AA	1, East End of East Lake (EEEL	Athol
20	1, North Side of East Lake (NSEL)	Athol
19 to 24	2, Military Tract (MT)	Hallowell
18 to 22	3, Military Tract (MT)	Hallowell

Table 1.2: Lot and Concession Information for the Study Area

Review of historical mapping has inherent accuracy difficulties due to potential error in georeferencing. Georeferencing 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, road alignments, water courses, etc.), errors/difficulties of scale and the relative idealism of the historical cartography, historical maps may not translate accurately into real space points. This may provide obvious inconsistencies during historical map review.

Further, in discussing 18th and 19th century historical mapping it must be remembered that many 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, structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984).

Aitken's (1790-1799) map of Hallowell Township (Figure 4), dating to the 1790s, shows the location of the study area over multiple lots and concessions in Hallowell Township (which included the later Athol Township). This map shows the 1790s land tenure of all the lots within the study area as described in Table 1.3. No historical building features are shown on this map. Major James Rogers is listed on many lots in this area as he was granted a sizeable portion of land following his relocation to Prince Edward County after the American Revolutionary War. Other military personnel are identified by rank and name in Aitken's map (Quinte Conservation 2013; Aitken 1790-1799).

ConcessionLotLandowners1 SSEL1Major James Rogers1 SSEL2Major James Rogers1 SSEL3(Illegible) Vandercan1 SSEL4(Illegible) John Miller1 SSEL5Sergeant George1 SSEL6Peter (Illegible) (east half) John Foster (west half1 SSEL7Hugh McConnell (east half) Sergeant Arch. Chisholm (west half)1 EEEL1Major James Rogers1 EEEL2Major James Rogers1 EEEL3Major James Rogers1 EEEL5Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEEL5Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEEL20Major James Rogers1 EEEL20Major James Rogers1 EEEL20Major James Rogers1 EEEL20Major James Rogers1 EXEL20Capt. Wm Redford Crawford2 MT21Lieut. John Howard2 MT22Ensign Timothy (Illegible) (north half) Capt. Wm Redford Crawford (south	
1 SSEL2Major James Rogers1 SSEL3(Illegible) Vandercan1 SSEL4(Illegible) John Miller1 SSEL5Sergeant George1 SSEL6Peter (Illegible) (east half) John Foster (west half1 SSEL7Hugh McConnell (east half) Sergeant Arch. Chisholm (west half)1 EEEL1Major James Rogers1 EEEL2Major James Rogers1 EEEL3Major James Rogers1 EEEL4Heir of Major James Rogers1 EEEL5Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEELA/BDavid (illegible), James Rogers1 EEELA/BDavid (illegible), James Rogers2 MT19Lieut. John Howard2 MT20Capt. Wm Redford Crawford2 MT21Lieut. John Howard2 MT22Ensign Timothy (Illegible) (north half) Capt. Wm Redford Crawford (south half)	
1 SSEL3(Illegible) Vandercan1 SSEL4(Illegible) John Miller1 SSEL5Sergeant George1 SSEL6Peter (Illegible) (east half) John Foster (west half1 SSEL7Hugh McConnell (east half) Sergeant Arch. Chisholm (west half)1 EEEL1Major James Rogers1 EEEL2Major James Rogers1 EEEL3Major James Rogers1 EEEL4Heir of Major James Rogers1 EEEL5Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEELA/BDavid (illegible), James Rogers1 EEELA/BDavid (illegible), James Rogers2 MT19Lieut. John Howard2 MT20Capt. Wm Redford Crawford2 MT22Ensign Timothy (Illegible) (north half) Capt. Wm Redford Crawford (south h	
1 SSEL4(Illegible) John Miller1 SSEL5Sergeant George1 SSEL6Peter (Illegible) (east half) John Foster (west half1 SSEL7Hugh McConnell (east half) Sergeant Arch. Chisholm (west half)1 EEEL1Major James Rogers1 EEEL2Major James Rogers1 EEEL3Major James Rogers1 EEEL4Heir of Major James Rogers1 EEEL5Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEELA/BDavid (illegible), James Rogers1 EEELA/BDavid (illegible), James Rogers2 MT19Lieut. John Howard2 MT20Capt. Wm Redford Crawford2 MT22Ensign Timothy (Illegible) (north half) Capt. Wm Redford Crawford (south h	
1 SSEL5Sergeant George1 SSEL6Peter (Illegible) (east half) John Foster (west half1 SSEL7Hugh McConnell (east half) Sergeant Arch. Chisholm (west half)1 EEEL1Major James Rogers1 EEEL2Major James Rogers1 EEEL3Major James Rogers1 EEEL4Heir of Major James Rogers1 EEEL5Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEEL20Major James Rogers1 EEEL20Major James Rogers2 MT19Lieut. John Howard2 MT21Lieut. John Howard2 MT22Ensign Timothy (Illegible) (north half) Capt. Wm Redford Crawford (south h	
1 SSEL6Peter (Illegible) (east half) John Foster (west half1 SSEL7Hugh McConnell (east half) Sergeant Arch. Chisholm (west half)1 EEEL1Major James Rogers1 EEEL2Major James Rogers1 EEEL3Major James Rogers1 EEEL4Heir of Major James Rogers1 EEEL5Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEELA/BDavid (illegible), James Rogers1 EEELA/BDavid (illegible), James Rogers1 EEEL20Major James Rogers2 MT19Lieut. John Howard2 MT21Lieut. John Howard2 MT22Ensign Timothy (Illegible) (north half) Capt. Wm Redford Crawford (south half)	
John Foster (west half1 SSEL7Hugh McConnell (east half) Sergeant Arch. Chisholm (west half)1 EEEL1Major James Rogers1 EEEL2Major James Rogers1 EEEL31 EEEL31 EEEL4Heir of Major James Rogers1 EEEL51 EEEL6Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEEL20Major James Rogers2 MT202 MT202 MT212 MT22Ensign Timothy (Illegible) (north half) Capt. Wm Redford Crawford (south h	
Sergeant Arch. Chisholm (west half)1 EEEL1Major James Rogers1 EEEL2Major James Rogers1 EEEL31 EEEL4Heir of Major James Rogers1 EEEL51 EEEL61 EEEL61 EEELA/B1 EEEL20Major James Rogers1 NSEL202 MT192 MT212 MT22Ensign Timothy (Illegible) (north half) Capt. Wm Redford Crawford (south h	
1 EEEL2Major James Rogers1 EEEL3Major James Rogers1 EEEL4Heir of Major James Rogers1 EEEL5Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEELA/BDavid (illegible), James Rogers1 NSEL20Major James Rogers2 MT19Lieut. John Howard2 MT20Capt. Wm Redford Crawford2 MT21Lieut. John Howard2 MT22Ensign Timothy (Illegible) (north half) Capt. Wm Redford Crawford (south h	
1 EEEL3Major James Rogers1 EEEL4Heir of Major James Rogers1 EEEL5Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEELA/BDavid (illegible), James Rogers1 NSEL20Major James Rogers2 MT19Lieut. John Howard2 MT20Capt. Wm Redford Crawford2 MT21Lieut. John Howard2 MT20Capt. Wm Redford Crawford (south howard)	
1 EEEL4Heir of Major James Rogers1 EEEL5Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEELA/BDavid (illegible), James Rogers1 NSEL20Major James Rogers2 MT19Lieut. John Howard2 MT20Capt. Wm Redford Crawford2 MT21Lieut. John Howard2 MT22Ensign Timothy (Illegible) (north half) Capt. Wm Redford Crawford (south here)	
1 EEEL5Heir of Major James Rogers1 EEEL6Heir of Major James Rogers1 EEELA/BDavid (illegible), James Rogers1 NSEL20Major James Rogers2 MT19Lieut. John Howard2 MT20Capt. Wm Redford Crawford2 MT21Lieut. John Howard2 MT22Ensign Timothy (Illegible) (north half) Capt. Wm Redford Crawford (south height)	
1 EEEL6Heir of Major James Rogers1 EEELA/BDavid (illegible), James Rogers1 NSEL20Major James Rogers2 MT19Lieut. John Howard2 MT20Capt. Wm Redford Crawford2 MT21Lieut. John Howard2 MT22Ensign Timothy (Illegible) (north half) Capt. Wm Redford Crawford (south here)	
1 EEELA/BDavid (illegible), James Rogers1 NSEL20Major James Rogers2 MT19Lieut. John Howard2 MT20Capt. Wm Redford Crawford2 MT21Lieut. John Howard2 MT22Ensign Timothy (Illegible) (north half) Capt. Wm Redford Crawford (south h	
1 NSEL20Major James Rogers2 MT19Lieut. John Howard2 MT20Capt. Wm Redford Crawford2 MT21Lieut. John Howard2 MT22Ensign Timothy (Illegible) (north half) Capt. Wm Redford Crawford (south h	
2 MT19Lieut. John Howard2 MT20Capt. Wm Redford Crawford2 MT21Lieut. John Howard2 MT22Ensign Timothy (Illegible) (north half) Capt. Wm Redford Crawford (south half)	
2 MT20Capt. Wm Redford Crawford2 MT21Lieut. John Howard2 MT22Ensign Timothy (Illegible) (north half) Capt. Wm Redford Crawford (south half)	
2 MT 21 Lieut. John Howard 2 MT 22 Ensign Timothy (Illegible) (north half) Capt. Wm Redford Crawford (south half)	
2 MT 22 Ensign Timothy (Illegible) (north half) Capt. Wm Redford Crawford (south h	
Capt. Wm Redford Crawford (south h	
2 MT 23 Lieut. Hazelton Spencer	
3 MT 18 Lieut. John Peters	
3 MT 19 Lieut. Hazelton Spencer	
3 MT 20 Major James Rogers	
3 MT 21 Capt. Wm R. Crawford	
3 MT 22 Major James Rogers	

Table 1.3:Landowner Information for the Study Area from 1790s Historical
Mapping

Conger's (1812) map of Hallowell Townships (Figure 5) shows the location of the study area over multiple lots and concessions in Hallowell Township. This map does not provide any land tenure detail for the lots in Hallowell Township. No historical building features are shown on this map.

Elmore's (1833) map of Hallowell Township (Figure 6) shows the location of the study area over multiple lots and concessions in Hallowell Township. No land tenure information is presented on this map. No historical building features are shown on this map.

Ward's (1863) map of Prince Edward County, including both Athol Township and Hallowell Township, was reviewed (Figure 7). This map shows the mid-19th century development of the study area was located in proximity to historical features (i.e., farmsteads, grist mills, blacksmith shops, and schools) and historical transportation routes (i.e., modern day Prince Edward County Road 11 and 18 and Highway 10 among others). Land tenure details, as illustrated on the 1863 map, are summarized in Table 1.4.

Concession (Township)	Lot	Landowners	Notes
1 SSEL (Athol)	1	Jonathon Fralick S. Spafford T. Scott Wm. Philp A. Werden James Gooden P. Carr	Two structures illustrated in S. Spafford's parcel; Hamlet of Cherry Valley; East Lake at north end of lot and tributary crossing midway at Cherry Valley; Roadways illustrated along modern-day Highway 10 and Beckwith Street
1 SSEL (Athol)	2	John Moore S. Clapp Johnathon Fralick David Leavitt W. Ogden	One structure illustrated in each of John Moore's, Jonathon Fralick' and David Lewitt's parcel; Hamlet of Cherry Valley; East Lake at north end of lot; Roadways illustrated along modern-day Highway 10 and County Road 18
1 SSEL (Athol)	3	Guy Johnston Samuel Clapp Jas. H. Knox Henry Lambert	One structure illustrated in Jas. H. Knox's parcel School No. 3 illustrated in Jas. H. Know's parcel East Lake at north end of lot, unnamed tributary at south end of lot; Roadway illustrated along modern-day County Road 18
1 SSEL (Athol)	4	Geo. Weeks	One structure illustrated in Geo Weeks' parcel; East Lake at north end of lot; Roadway illustrated along modern-day County Road 18

Table 1.4:Landowner Information for the Study Area from 1863 Historical
Mapping

 \bigcirc

Concession (Township)	Lot	Landowners	Notes
1 SSEL	5	Alva and Richard	One structure illustrated in the Stevens' parcel;
(Athol)		Stevens	East Lake at north end of lot;
			Roadway illustrated along modern-day County Road 18
1 SSEL (Athol)	6	Calvin Spafford Lawrence Lyons	One structure illustrated in each of Calvin Spafford's and Lawrence Lyon's parcels;
		,	East Lake at north end of lot;
			Roadway illustrated along modern-day County Road 18
1 SSEL (Athol)	7	Stephen Harris W.B. Blakely	One structure illustrated in each of Stephen Harris's and the W.B. Blakey's parcels;
(741101)		W.D. Diakery	East Lake at north end of lot;
			Roadway illustrated along modern-day County Road 18
1 EEEL (Athol)	1	John Woodrow Isaac Maybee	One structure illustrated in each John Woodrow's and Isaac Maybee's parcel's;
(******)			Roadways illustrated along modern-day Highway 10 and Eames Road
1 EEEL	2	James Woodrow	Two structures illustrated in James Woodrow's parcel;
(Athol)			East Lake at west end of lot;
			Roadway illustrated along modern-day Highway 10
1 EEEL (Athol)	3	Arthur Yeomans	One structure and one grist mill illustrated in Arthur Yeomans' parcel;
(East Lake at west end of lot with tributary flowing from east through the entire lot;
			Roadways illustrated along modern-day Highway 10 and Miller Road
1 EEEL (Athol)	4	Peter Carr Asa Werden	Two structures illustrated in Peter Carr's parcel; Roadways illustrated along modern-day Highway
		Asa werden	10 and Miller Road
1 EEEL (Athol)	5	Asa Werden Stephen Carman	One structure illustrated in each of Asa Werden's and Stephen Carman's parcels;
		Harvy Spafford	Roadway illustrated along modern-day Highway 10
1 EEEL (Athol)	6	Harvy Spafford Peter Ketchison Parker Ketchum	Two structures and a blacksmith shop illustrated in Harvey Spafford's parcel, and one structure illustrated in each of Peter Ketchison's and Parker Ketchum' parcels;
			Roadways illustrated along modern-day Highway 10 and Miller Road

Concession (Township)	Lot	Landowners	Notes
1 EEEL (Athol)	Gore B	Jacob Platt James A. Platt Robert. Werden E. Werden S.P. Werden	One structure illustrated in each of Jacob Platt's and James A. Platt's parcels and one blacksmith shop illustrated in Robert Werden's parcel; Two East Lake tributaries illustrated crossing the lot to smaller lakes; Roadways illustrated along modern-day Highway 10, Eames Road, and County Road 11
1 NSEL (Athol)	20	S.P. Werden	Five structures illustrated is separated parcels within S.P. Werden's parcel; Tributary lakes flowing into East Lake illustrated within the lot; Roadway illustrated along modern-day County Road 11
2 MT (Hallowell)	19	Thomas WaringOne structure illustrated in the Dingman's parcMrs. M. DingmanRoadway illustrated along modern-day Sandyand AlbertHook Road/County Road 1DingmanNote the test of the test of te	
2 MT (Hallowell)	20	Mrs. M. Dingman William Cunningham D. Bradshaw J. Matthews	One structure in each of D. Bradshaw's and J. Matthew's parcels; Roadway illustrated along modern-day Sandy Hook Road/County Road 1
2 MT (Hallowell)	21	Francis Waring Roger B. CongerThree structures illustrated in a cluster w Francis Waring's parcel; Roadways illustrated along modern-day Road and Sandy Hook Road/County Ro	
2 MT (Hallowell)	22	Daniel Young John GreenfieldTwo structures illustrated in each of J.B. Vin and J.S. Butts' parcels, one structure illustra each of Daniel Young's, John Greenfield's, F Mitchell's, and J.L.'s parcels'R. Mitchell J.L.East Lake tributary crossing the south end o lot;J.B. Vincent J.S. ButtsRoadways illustrated along modern-day High 10, Ridge Road, and Sandy Hook Road/Cou Road 1	
2 MT (Hallowell)	23	Elias G. Werden Robert. B. Werden	One structure illustrated in Elias G. Werden's parcel and two structures illustrated in Robert B. Werden's parcel; East Lake tributary crossing the south end of the lot, Picton Bay tributary and beach ridges illustrated at the north end of the lot Roadways illustrated along modern-day Highway 10, Mowbray Road, and Airport Lane

Concession (Township)	Lot	Landowners	Notes
3 MT (Hallowell)	18	Aaron D. Dougall	One structure illustrated in Aaron D. Dougall's parcel;
			Roadways illustrated along modern-day Sandy Hook Road/County Road 1 and Loyalist Parkway
3 MT (Hallowell)	19	William Cunningham	No structures illustrated in the vicinity of the study area;
		John Richards	Roadways illustrated along modern-day Sandy Hook Road/County Road 1 and Loyalist Parkway
3 MT (Hallowell)	20	John Thompson	No structures illustrated in the vicinity of the study area;
(Roadway illustrated along modern-day Sandy Hook Road/County Road 1
3 MT (Hallowell)	21	Mrs. Herrington	No structures illustrated in the vicinity of the study area;
			Roadway illustrated along modern-day Sandy Hook Road/County Road 1
3 MT (Hallowell)	22	Dyer Platt	Four structures illustrated in unlabeled parcels in the vicinity of the study area;
(, , , , , , , , , , , , , , , , , , ,			Town of Picton in the north portion of the lot;
			Roadways illustrated along modern-day Sandy Hook Road/County Road 1, Highway 10, and Upper Lake Street

The 1878 *Illustrated Historical Atlas of the Counties of Hastings and Prince Edward, Ont.* (H. Belden & Co. 1878) was reviewed for Hallowell Township, Athol Township, and the Hamlet of Cherry Valley (Figures 8 to 10). This map shows the mid-to-late 19th century development of the study area was located in proximity to historical features (i.e., farmsteads, blacksmith shops, various mills, schools, and churches and graveyards) and historical transportation routes (i.e., modern-day Prince Edward County Road 18 and Highway 10). The church and graveyards illustrated in Figure 10 are the Cherry Valley United Church and cemetery previously discussed in Section 1.2.3.3. Land tenure details and features, as illustrated on the 1878 map, are summarized below in Table 1.5.

Concession (Township)	Lot	Landowners	Notes
1 SSEL (Athol)	1	W. Rutton A. Spafford J. Collier C. Werden W.W. McCaw A. Scott A.B. Ketchum, A. Wood T.C. Scott William Philip J.A. Werden J. Goodwin J. Carr	One structure illustrated in each of C. Werden's and J. Goodwin's parcels; Hamlet of Cherry Valley with 14 lots laid in on the east side of Highway 10, 12 lots laid in on the west side of Highway 10 north of the East Lake crossing, and two lots laid in on the west side of Highway 10 south of the East Lake crossing; East Lake at north end of lot and crossing midway at Cherry Valley; Roadways illustrated along modern-day Highway 10, Beckwith Street, and Martin Street
1 SSEL (Athol)	2	J. Moore H. Hargrave G. Sayres C. Ketchum J.M. Bently H.C. Scott Richard Hare J. Collier M. Stevens J.H. McGibbon A.B. Ketchum, A. Wood	One structure illustrated in each of J. Moore's, H. Hargrave's, C. Ketchum's, J. Collier's and H.C. Scott's parcel; Hamlet of Cherry Valley with eight lots laid in on the west side of Highway 10 south of the East Lake crossing; Church and two associated graveyard plots illustrated at southeast corner of Highway 10 and County Road 18 intersection (see Section 1.2.3.3), Township Hall illustrated along south side of Highway 10; East Lake at north end of lot; Roadways illustrated along modern-day Highway 10 and County Road 18
1 SSEL (Athol)	3	G. Sayres M. Stevens S.G. B.S. Weeks J.H. McGibbon W.A. Palen J.T.	One structure illustrated in each of the landowner's parcels; School No. 3 illustrated in H. Stevens' parcel East Lake at north end of lot, unnamed tributary at south end of lot; Roadways illustrated along modern-day County Road 18, Highway 10, and Brummel Road
1 SSEL (Athol)	4	G. Weeks	One structure illustrated in G. Weeks' parcel; East Lake at north end of lot; Roadway illustrated along modern-day County Road 18

Table 1.5:Landowner Information for the Study Area from 1878 Historical
Mapping

Concession (Township)	Lot	Landowners	Notes	
1 SSEL (Athol)	5	Richard Stevens	One structure illustrated in Richard Stevens' parcel;	
(East Lake at north end of lot;	
			Roadway illustrated along modern-day County Road 18	
1 SSEL (Athol)	6	C. Spafford L. Lyons	One structure illustrated in each of C. Spafford's and L. Lyon's parcels; East Lake at north end of lot; Roadways illustrated along modern-day County Road 18	
1 SSEL (Athol)	7	A.A. Curry W.B. Blakely	One structure illustrated in each of A.A. Curry's and W.B. Blakey's parcels; East Lake and an unnamed smaller marshy lake at north end of lot;	
			Roadways illustrated along modern-day County Road 18	
1 EEEL (Athol)	1	J. & S. Woodrow I. Maybee	One structure illustrated in each J. & S. Woodrow's and I. Maybee's parcel's;	
		-	Roadways illustrated along modern-day Highway 10 and Eames Road	
1 EEEL (Athol)	2	Mrs. Woodrow	One structure and one blacksmith shop illustrated in Mrs. Woodrow's parcel;	
			East Lake at west end of lot;	
			Roadway illustrated along modern-day Highway 10	
1 EEEL	3	J. Vancleaf	Grist mill illustrated in J. Vancleaf's parcel;	
(Athol)		J. Bowerman J. Carr	East Lake at west end of lot with tributary flowing from east through the entire lot;	
			Roadways illustrated along modern-day Highway 10 and Miller Road	
1 EEEL	4	J. Carr	Two structures illustrated in J. Car's parcels;	
(Athol)		J. Goodwin	Roadways illustrated along modern-day Highway 10 and Miller Road	
1 EEEL	5	J.A. Werden	One structure illustrated in each of J.A.	
(Athol)		H.M. Spafford H. Spafford	Werden's, and H.M. Spafford's parcels; Roadway illustrated along modern-day Highway 10	
1 EEEL (Athol)	6	H. Spafford E. Thibault Mrs. Hartwell William Phliip	Two structures illustrated in each of William Philip's and E. Thibault's parcels, and one structure illustrated in each of H. Spafford's and Mrs. Hartwell's parcels; Hamlet of Cherry Valley;	

Concession (Township)	Lot	Landowners	Notes	
			Roadways illustrated along modern-day Highway 10 and Miller Road	
1 EEEL (Athol)	Gore AA/BB	R. WerdenTwo structures illustrated in each of M.B.M.B. WerdenWerden's, Bella Johnson's, and G. Clapp's parcels, and a school, blacksmith shop, and mill illustrated in M.B. Werden's parcel;Bella JohnsonTwo East Lake tributaries illustrated crossin lot to smaller lake or marsh areas;I. MaybeeRoadways illustrated along modern-day Hig		
1 NSEL (Athol)	20	P. Werden	 10, Eames Road, and County Road 11 Five structures illustrated is separated parcels within P. Werden's parcel labeled "Werden's Mills"; Tributary lake flowing into East Lake illustrated within the lot; Roadway illustrated along modern-day County Road 11 	
2 MT (Hallowell)	19	T. Waring W. Woodrow	One structure illustrated in the W. Woodrow's parcel; Roadway illustrated along modern-day Sandy Hook Road/County Road 1	
2 MT (Hallowell)	20	W. Woodrow G.W. Christy Mrs. Dingman J. Matthews	One structure in each of Mrs. Dingman's and J. Matthew's parcels; Roadway illustrated along modern-day Sandy Hook Road/County Road 1	
2 MT (Hallowell)	21	J. Gilmore D. Gilmore N.B & W.N. Conger H. Markland T.G.	One structure illustrated in each of J. Gilmore's, D. Gilmore's, H. Markland's, and T.G.'s parcels; Roadways illustrated along modern-day Ridge Road and Sandy Hook Road/County Road 1	
2 MT (Hallowell)	22	J. Eckhard H.F. Young J. Greenfield D.H. Curry H.W. (Illegible) J.A.S J.S. Butts	Three structures illustrated in D.H. Curry's parcel, two structures illustrated in J.S. Butts' parcels and one structure illustrated in each of J. Eckhart's, H.F. Young's, J. Greenfield's, H.W's, and two illegible landowners parcels' East Lake tributary crossing the south end of the lot; Roadways illustrated along modern-day Highway 10, Ridge Road, and Sandy Hook Road/ County Road 1	

Concession (Township)	Lot	Landowners	Notes
2 MT (Hallowell)	23	E. G. Werden A. Southward	Two structures illustrated in E. G. Werden's parcel and one structures illustrated in A. Southward's parcel;
			East Lake tributary crossing the south end of the lot;
			Roadways illustrated along modern-day Highway 10, Mowbray Road, and Airport Lane
3 MT (Hallowell)	18	T. Waring	Two structures illustrated in T. Waring's parcel; Marsh illustrated at the north end of the lot:
			Roadways illustrated along modern-day Sandy Hook Road/County Road 1 and Loyalist Parkway
3 MT (Hallowell)	19	G. Christy J.R. Spencer	One structure illustrated in G. Christy's parcel and two structures illustrated in each of J.R. Spencer's and the illegible landowner's parcel;
		(Illegible)	Roadway illustrated along modern-day Sandy Hook Road/County Road 1
3 MT (Hallowell)	20	J. Thompson D.A. Thompson	One structure illustrated in D.A. Thompson's parcel;
			Roadway illustrated along modern-day Sandy Hook Road/County Road 1
3 MT (Hallowell)	21	Mrs. Herrington	One structure illustrated in Mrs. Herrington's parcel;
(ridiretreily)			Roadway illustrated along modern-day Sandy Hook Road/County Road 1
3 MT (Hallowell)	22	D. Platt	Many structures illustrated, unlabeled parcels extending from the Town of Picton;
(Town of Picton in the north portion of the lot;
			Roadways illustrated along modern-day Sandy Hook Road/County Road 1, Highway 10 and Upper Lake Street

1.2.4 20th Century Development

Several modern developments occurred throughout the 20th century in Hallowell and Athol townships, although much of this rural area has been left undisturbed. Roadways continued to follow the routes established during the 19th century and illustrated on historical mapping, with Highway 10 and County Road 11 being the only paved roads as of 1932 (Figure 11; Department of National Defence 1932). As discussed in Section 1.2.3.2, a railway line was originally built in the 1870s crossing Prince Edward County from Picton, but it saw three different owners through the 20th century. The 1932 topographic map of the area shows the then named Canadian National Railway crossing the north end of the study area (Figure 11). Prince Edward County purchased

the original Prince Edward County Railway line in 1997 and began transforming it into the multi-purpose Millennium Trail it is today with a crushed gravel base layer following the original rail bed (PEC Trails n.d.). The community of Cherry Valley shows limited development in terms of residential areas, with additional residential structures depicted along the length of all the major roadways but no major subdivisions. Of note, in the 1932 topographic map one quarry is indicated immediately east of Cherry Valley, and one area of gravel on the southwest side of the hamlet. The Cherry Valley United Church, previously discussed in Section 1.2.3.3, is also noted on the 1932 topographic map (Figure 11). The presence of naturally occurring gravel in the area allowed viable mining operations and currently there are two aggregate pits within the study area and two additional aggregate pits within 100 metres of the study area.

1.3 Archaeological Context

1.3.1 Natural Environment

The study area is located within the Prince Edward Peninsula physiographic region within limestone plain landform (Chapman and Putnam 1984). The Prince Edward Peninsula region consists of a low plateau of limestone protruding Lake Ontario near the eastern end (Chapman and Putnam 1984:188-189). The peninsula is mainly separated from the rest of the north shore of Lake Ontario by the Bay of Quinte, connected only by a narrow isthmus just over one kilometre wide located east of Brighton, Ontario, separated mainly by the Bay of Quinte. Limestone plains consists of areas from which glaciers stripped most of the overburden and are now overlain with shallow soils. The exception being an area of greater soil depth associated with the Picton Esker, extending through Cherry Valley along the south shore of East Lake (Chapman and Putnam 1984:10). This esker has been a prime source of aggregate materials and the 1932 topographical map illustrates the rising elevations of the esker with a guarry and gravel pit marked on either side of Cherry Valley (Figure 11; Department of National Defence 1932). The Prince Edward Peninsula has a microclimate compared to the region on the north side of the Bay of Quinte. experiencing warmer summer temperatures, a week's fewer frost-free days in the winter, and lower annual precipitation (Chapman and Putnam 1984:188).

Because of the nature of the limestone plain, the study area crosses several different soil types. Soils range from well drained sand, loam, or sandy loam to imperfectly drained clay, as well as marshland and bottom land. Most of the well-drained soils would have been suitable for early small scale agriculture. Table 1.6 summarizes the soils with the study area and their associated qualities, based on Richard and Morwick (1948).

Soil Name	Texture	Inclusions	Topography	Drainage	Suitability
Pontypool	Sand	Stony	Strongly rolling to hilly	Good	Tendency for drought and erosion, suitable for canning crops, potatoes or pasture
Ameliasburg	Loam	Stone	Undulating to rolling	Good	Suitable for pasture or orchard use with nutrient supplements
Darlington	Loam	Stony	Undulating to rolling	Good	Tendency for erosion, suitable for dairying or specialty farming
Farmington	Loam	Stony	Level to undulating	Good	Suitable for pasture
Elmbrook	Clay	Stonefree	Level to undulating	Imperfect	Suitable for general farming with drainage improvements
South Bay	Clay loam	Stonefree	Undulating to rolling	Good	Suitable for fruit trees, tomatoes, corn, or dairying
Brighton	Sandy Ioam	Few stones	Level to undulating	Good	Tendency for erosion and low nutrient levels, needs improvement for general farming
Bottom land	Not applicable	Not applicable	In stream beds or areas of seasonal flooding	Variable	Suitable for pasture or woodland
Marsh land	Not applicable	Not applicable	Shallow water underlain by organic material	Poor	Suitable for recreational purposes

Table 1.6: Soils within the Study Area

The closest potable water source is East Lake, which the study area covers slightly at the southern end. The study area crosses several tributaries of East Lake. The wetland area north of East Lake also crosses the study area twice in its central portion, and Marsh Creek, which drains towards the northeast through Picton, approaches the northern end of the study area. East Lake and its associated marshes host extensive beds of submerged aquatic plants in both the eastern and western ends of the lake. Wild rice is reported to exist on the western end of the East Lake and the lake is noted to support both warm water and cool water fish species (Quinte Conservation 2013). The 1932 topographical map illustrates the extent of the East Lake marshes and tributary streams in relation to the study area (Figure 11).

1.3.2 Registered 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 MCM who maintain the *Ontario Archaeological Sites Database*. The study area is located within Borden blocks AlGg and AlGh.

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 media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The MCM 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 15 archaeological sites are registered within a one-kilometre radius of the project area, summarized in Table 1.7 (Government of Ontario 2023a). Three sites, the Cherry Valley Site (AIGg-4), the Crawford Site (AIGg-27), and the Herrington Site (AIGg-28), have been registered within the study area. Registered archaeological sites within a one-kilometre radius are listed in Table 1.7; sites within the study area are bolded. No other sites are located within 50 metres of the study area. The location of the registered archaeological sites within the study area are illustrated in Tiles 1 and 2 in the Supplementary Documentation to this report. Further details regarding these sites are provided below.

Table 1.7:	Registered Archaeological Sites within One Kilometre of the Study
	Area

Borden	Site Name	Cultural Affinity and/or Time Period	Site Type	
AlGg-4	Cherry Valley	Middle Woodland Indigenous	Camp/campsite	
AlGg-16	Lake Street Burial	Woodland Indigenous	Burial	
AlGg-27	Crawford	Euro-Canadian	Agricultural	
AlGg-28	Herrington	Euro-Canadian	Agricultural	
AlGg-29	Parthana	Euro-Canadian	Agricultural	
AlGg-30	Warings Creek	Early Archaic (Kirk-Nettling) Indigenous	Findspot	
AlGh-5	Blakely	Late Woodland Indigenous	Camp/campsite	
AlGh-7	Attersley	Middle Woodland, Late Woodland Indigenous	Camp/campsite	
AlGh-48	Warings Corners	Euro-Canadian	House, midden	
AlGh-51	Hagerman	Euro-Canadian	Homestead	
AlGh-70	East Lake 1	Middle Woodland (Point Peninsula) Indigenous, Euro-Canadian	Indigenous camp / campsite; Euro- Canadian recreational site	
AlGh-71	Maple View Site	Euro-Canadian	Findspot	
AlGh-72	East Lake 2 Site	Middle Woodland (Point Peninsula) Indigenous	Camp / campsite	
AlGh-73	Blakely Farm Site	Euro-Canadian	Agricultural	
AlGh-74	East Lake-3	Pre-Contact Indigenous	Findspot	

The Cherry Valley Site (AlGg-4) was first identified in 1967 and then included in Swayze's 1976 *Inventory of Prince Edward County*. It comprises an assemblage of Middle Woodland artifacts collected from a small residential area adjacent to East Lake and it was suggested that further material may be discovered on adjacent properties (Swayze 1976). The study area includes the entire reported area for the Cherry Valley Site (AlGg-4) and since no formal archaeological assessment has been completed the site retains cultural heritage value and interest and further archaeological assessment is required (Swayze 1976; Government of Ontario 2023a).

The Crawford Site (AlGg-27) and the Herrington Site (AlGg-28) were identified during a Stage 1-2 archaeological assessment in 2022 by New Era Archaeology in Lot 21, Concession 3 Military Tract, Hallowell Township, Ontario. The Stage 1-2 archaeological

report documenting these sites is currently under review by the MCM and available information on these two sites is limited. Both sites have Euro-Canadian cultural affiliations and are currently recommended for further archaeological assessment (Government of Ontario 2023a).

A query of the *Ontario Public Register of Archaeological Reports* found three previous archaeological assessments have been completed within 50 metres of the study area (Government of Ontario 2023b). Table 1.8 provides a summary of these assessments.

Company	Title	Date	Project Information Form (PIF) Number
Ground Truth Archaeology (Ground Truth)	Stage 1/2 Archaeological Assessment of Part of 1370 County Road 10, Athol Township, Ontario	2012	P206-063-2012
Ground Truth	Stage 1/2 Archaeological Assessment of Part of Lots 19 and 20, Concession 3, Military Tract, Hallowell Township, Municipality of the County of Prince Edward, Ontario	2019	P191-0162-2018
New Era Archaeology	Stage 1 - 2 Archaeological Assessment Report. Part of Lot 21, Concession 3 Military Tract, Township of Hallowell (Geographic County of Prince Edward), City of Prince Edward County	Under Review by the MCM	P1024-0272-2022

 Table 1.8:
 Archaeological Assessments within 50 Metres of the Study Area

In 2012, Ground Truth completed a Stage 1-2 archaeological assessment of a study area at 1370 County Road 10 that overlaps with the current study area (Figure 12.4). The background research determined that the study area retained archaeological potential and a pedestrian survey was completed. No archaeological material was recovered, and no further archaeological work was recommended for the that study area (Ground Truth 2012).

In 2019, Ground Truth completed a Stage 1-2 archaeological assessment of a study area on part of Lots 19 and 20, Concession 3 Military Tract, Hallowell Township along the north side of Sandy Hook Road/County Road 1 that overlaps with the current study area (Figure 12.1). The background research identified archaeological potential for the study area and both pedestrian survey and test pit survey was conducted. No archaeological material was recovered, and no further archaeological work was recommended for the that study area (Ground Truth 2019).

In 2022, New Era Archaeology completed a Stage 1-2 archaeological assessment in Lot 21, Concession 3 Military Tract, Hallowell Township that overlaps with the current study area. The Stage 1-2 archaeological report, which documents four archaeological sites,

is currently under review by the MCM and the available information on these sites and the recommendations of the Stage 1-2 archaeological assessment is limited. Further work has been recommended for each of the Crawford Site (AlGg-27), the Herrington Site (AlGg-28), the Parthana Site (AlGg-29), and the Warings Creek Site (AlGg-30) (Government of Ontario 2023a).

1.3.3 Heritage Designations

The Athol Township Hall, located within the study area along the south side of Highway 10 in Cherry Valley, is a designated property recognized for its heritage design and features and for its importance in the development of Cherry Valley. No other designated or listed properties are located within the study area, however, there are six within the City of Picton located immediately north of the study area (Ontario Heritage Trust 2023).

1.4 Existing Conditions

The Stage 1 archaeological assessment was completed under PIF number P415-0428-2022 issued to Patrick Hoskins, MA by the MCM. Overall, the study area comprises approximately 264 hectares within various lots and concessions in the Geographic Townships of Athol and Hallowell, Prince Edward County, now the City of Prince Edward County, Ontario. The proposed pipeline is anticipated to be within existing, disturbed municipal road ROWs and ditches. Outside of these ROWs, the study area includes disturbed gravel and asphalt laneways, manicured lawns associated with residential, commercial, and institutional areas, woodlot and scrubland, wetland, and agricultural field.

2 Field Methods

The Stage 1 archaeological assessment compiled information concerning registered and/or potential archaeological and heritage resources within the study area. A property inspection was conducted on February 17, 2023, under PIF P415-0428-2023 issued to Patrick Hoskins, MA, by the MCM. The property inspection involved spot checks of the study area to identify the presence or absence of features of archaeological potential, in accordance with Section 1.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

The study area was accessed by publicly accessible roadways. During the property inspection on February 17, 2023, the weather was variable, ranging from clear and sunny to overcast. Some light snow had fallen in the early morning hours. Even with the light snow, land features were visible throughout the study area for the duration of the property inspection. Lighting and weather conditions were not detrimental to the identification of features of archaeological potential. The photography from the property

inspection (see Section 7.1) confirms that the requirements for a Stage 1 property inspection were met, as per Section 1.2 and Section 7.7.2 Standard 1 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

The study area is approximately 14 kilometres in length with a corridor width of approximately 200 metres, with variations existing around planned intersections. The study area follows Sandy Hook Road/County Road 1 eastward to Highway 10, and then south on Highway 10, with off-branches on Ridge Road, County Road 11, Thompson Road, Martin Street, and then along County Road 18 through Cherry Valley. The supply line also continues south along Highway 10 and along four small roads off County Road 18 in Cherry Valley (Sandy Lane, Factory Lane, Fennell Crescent, and Chourney Lane). Other roads included in the study area are Upper Lake Road, County Road 22, Mowbray Road, Eames Road, Miller Road, the Memorial Park laneway, Barratts Lane and Curry Lane (Figure 12.1 to Figure 12.5).

The Stage 1 property inspection included spot checks at all road intersections where Highway 10 or County Road 18 crossed other public roads, all aggregate pit access points, and areas indicated on wetland mapping as being low and permanently wet, as well as spot checks to cover approximately every one kilometre of the study area or where different conditions were observed. The Stage 1 property inspection was concerned with identifying areas of low potential, i.e., previous disturbance, low and wet areas, or steep slopes.

Photographs were taken along the length of the study area, including portions of the study area not owned by Enbridge Gas to acquire a more complete understanding of the ground conditions. Photograph locations are illustrated on Figures 12.1 to 12.5. Note that the illustrated photo icons may have been adjusted to not obscure other data on the figures. The portion of the study area that is composed of roadways, as well as the associated graded ditches, is considered disturbed for the entirety of the study area and has been identified as having low to no potential for intact archaeological resources. Photographs documenting the study area, including areas of previous disturbance, are numbered 1 to 85 in Section 7. Several low and permanently wet areas were documented where tributaries to East Lake cross the study area (Photos 6, 30, 31, 33, 34, 43, 44, 76, and 77) as illustrated in Figures 12.1 to 12.5. Three areas of naturally occurring steep slope were also identified (Photos 16, 39, and 81) and are indicated as such on Figures 12.1 to 12.5. The portion of the study area comprising East Lake was not accessible via the municipal ROW for photo-documentation and may retain potential for marine archaeological resources as illustrated on Figure 12.5.

3 Analysis and Conclusions

3.1 Archaeological Potential

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 MCM (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 southern 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 location in Ontario. 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.

As discussed above, distance to water is an essential factor in archaeological potential modeling. 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 locations and types to varying degrees. The MCM 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.
- Accessible or inaccessible shorelines: high bluffs, swamp or marshy lake edges, sandbars stretching into marsh.

As stated in Section 1.3.1, the study area crosses and overlaps with East Lake and its tributaries and associated marshes and is within the Prince Edward Region Watershed (Quinte Conservation 2023). The portion of the study area that overlaps with East Lake retains potential for the identification of marine archaeological resources which can be further evaluated using the MCM's *Criteria for Evaluating Marine Archaeological*

Potential Checklist. Further examination of the study area's natural environment identified pockets of soil suitable for early agriculture and areas of elevated topography including an esker terminating at the north end of the study area. An examination of the *Ontario Archaeological Sites Database* has shown that there are seven registered Indigenous archaeological sites, seven Euro-Canadian archaeological site, and one multi-component archaeological site within one kilometre of the study area (Government of Ontario 2023a). Three of these sites are within the study area, including the Cherry Valley Site (AlGg-4), the Crawford Site (AlGg-27), and the Herrington Site (AlGg-28): to the best of Stantec's knowledge all three sites retain further cultural heritage value or interest (see Section 1.3.2) (Government of Ontario 2023a).

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 when Euro-Canadians arrived to settle Prince Edward County, the study area was settled by primarily British Lovalist soldiers and a large proportion of lots was assigned to Major James Rogers or his heirs. The study area also follows the early township road structure of Hallowell and Athol townships as seen in the 1863 and 1878 historical mapping (Ward 1863; H. Belden & Co. 1878). Much of the established road network and settlement areas from the early 19th century is still visible today. The Athol Township Hall, located within the study area (Photo 48) was built circa 1870 and is a designated property recognized for its heritage design and features and for its importance in the development of Cherry Valley. No other designated or listed properties are located within the study area, however, there are six within the City of Picton located immediately north of the study area (Ontario Heritage Trust 2023). The Cherry Valley United Church and Cemetery, located within the study area (Photos 49 to 54) at the southeast corner of Highway 10, where it turns southeast at County Road 18, on part of Lot 2, Concession 1 SSEL was established in 19th century and was illustrated as early as the 1863 historical mapping and detailed on the 1878 historical mapping (Figures 7 and 8, Ward 1863, Belden & Co. 1878).

When the above listed criteria are applied, the study area is considered to retain potential for archaeological resources. However, as noted above, extensive and deep land alteration can eradicate archaeological potential. The Stage 1 property inspection confirmed that a portion of the study area, totaling 21.7 hectares, approximately 8.2% of the study area, has been subject to extensive land disturbance. The extensive land disturbance noted within the study area includes the municipal road ROWs of Highway 10, County Road 11, County Road 18, County Road 22, Sandy Hook Road/County Road 1, Upper Lake Street, Ridge Road, Mowbray Road, Eames Road, Thompson Road, Miller Road, Martin Street, Sandy Lane, Factory Lane, Fennel Crescent, Chourney Lane, Barratts Lane, and the Memorial Park laneway, which have all been subject to modern disturbance such as the existing paved and gravel roads, paved and gravel shoulders, engineered foreslope and backslope for existing roads, ditching, gravel and paved driveways/laneways, residential, commercial and institutional structures, and buried utilities and municipal infrastructure (e.g., sewers, pipelines, etc.). Additionally, the Stage 1 property inspection, aided by wetland mapping, confirmed that a portion of the study area totaling 6.1 hectares, approximately 2.3%, is low and permanently wet. Lastly, three areas totaling 1.6 hectares, approximately 0.6% of the study area, were identified as having steep slope. Collectively, these portions of the study area, approximately 29.4 hectares, or 11.1% of the study area, retain low to no potential for archaeological resources.

Additionally, two portions of the study area were identified during background research as having been subject to previous archaeological assessments and were determined to not require any further archaeological work (discussed in Section 1.3.2). These two areas total 7.2 hectares, approximately 2.7% of the study area.

The remaining portion of the study area totaling 227.4 hectares, approximately 86.2% of the study area, comprises manicured lawn, agricultural field, pasture, woodlot, and scrubland or areas which were not specifically examined as part of the Stage 1 property inspection. This portion of the study area retains potential for the identification of archaeological resources.

3.2 Cherry Valley United Church Cemetery

The Cherry Valley United Church Cemetery, discussed in Section 1.2.3.3, was established in 1826 although the current property limits as identified from aerial imagery have expanded from the extents noted on historical maps (Figures 7 and 8, Ward 1863, Belden & Co. 1878). Given the age of the cemetery and original settler families buried there, the cemetery property retains archaeological potential.

3.3 Registered Archaeological Sites

As discussed in Section 1.3.3, the Cherry Valley Site (AlGg-4) was registered and described in 1976, however no formal archaeological assessment has been completed (Swayze 1976). To the best of Stantec's knowledge, the Cherry Valley Site (AlGg-4) retains further archaeological potential.

In addition, New Era Archaeology undertook Stage 1-2 archaeological assessment in part of Lot 21, Concession 3 Military Tract, Hallowell Township, Ontario (Government of Ontario 2023a). A portion of the New Era Archaeology study area overlaps with the current study area. During the Stage 1-2 assessment, New Era Archaeology identified the Crawford Site (AlGg-27) and the Herrington Site (AlGg-28) in an area that overlaps with the current study area. New Era Archaeology determined that the Crawford Site (AlGg-27) and the Herrington Site (AlGg-28) retained further cultural heritage value and interest, and recommended Stage 3 archaeological assessment of the sites

(Government of Ontario 2023a). The report documenting this Stage 1-2 archaeological assessment is currently under review by the MCM, has not been accepted into the Ontario Register of Archaeological Reports, and has not been made available to Stantec for review (Government of Ontario 2023b). To the best of Stantec's knowledge, Stage 3 assessment of these sites has not been completed.

4 **Recommendations**

4.1 General Recommendations

The Stage 1 archaeological assessment of the study area for the Project, involving background research and property inspection, determined that portions of the study area retain potential for the identification and documentation of archaeological resources. In accordance with Section 1.3.1 and Section 7.7.4 of the MCM's 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 impact area that retains archaeological potential (Figure 12.1 to 12.5).**

The objective of Stage 2 archaeological assessment is to document archaeological resources within the portions of the study area still retaining archaeological potential and to determine whether these archaeological resources require further assessment. For portions of the study area accessible for ploughing, the Stage 2 archaeological assessment will involve pedestrian survey as outlined in Section 2.1.1 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The MCM standards require that 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.

For portions of the study area retaining archaeological potential that are inaccessible for ploughing, the Stage 2 archaeological assessment will involve test pit survey as outlined in Section 2.1.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The MCM standards require that each test pit be at least 30 centimetres in diameter, excavated to at least five centimetres into subsoil, and have excavated 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.

The Stage 1 archaeological assessment also determined that a portion of the study area retains low to no archaeological potential for the identification or recovery of archaeological resources due to intersecting and overlapping areas of previous archaeological assessment, disturbance, steep slope, and low and permanently wet areas. In accordance with Section 1.3.2 and Section 7.7.4 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is not required for any portion of the Project's anticipated construction which impacts an area of low to no archaeological potential (Figure 12.1 to 12.5).**

It is further recommended that Stage 2 archaeological assessment of the study area for the Project include engagement with interested Indigenous communities. Indigenous engagement practices conducted by an archaeological consultant during the Stage 2 archaeological assessment will be completed in accordance with the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* Government of Ontario 2011) and the MCM's draft technical bulletin on *Engaging Aboriginal Communities in Archaeology*.

4.2 Cherry Valley United Church Cemetery Recommendations

The Stage 1 archaeological assessment identified one cemetery within the study area which retains archaeological potential, the Cherry Valley United Church Cemetery (Figure 12.1 to 12.5). Stantec completed additional background research as part of this Stage 1 archaeological assessment but could not confirm the original historical boundaries of this cemetery or the complete layout of burial plots within the cemetery property. Given that the boundaries of the cemetery are proven to be unclear based on the additional research, if construction impacts are planned within a 20 metre buffer of the currently defined cemetery boundaries, after the completion of any necessary Stage 2 archaeological assessment, it is recommended that a Stage 3 cemetery investigation, in consultation with the Bereavement Authority of Ontario (as required/requested), be carried out to determine if burials associated with the cemetery extend beyond the currently defined boundaries into areas proposed to be impacted by the Project.

4.3 Registered Archaeological Sites Recommendations

In addition, three registered archaeological sites are located within the study area: the Cherry Valley Site (AlGg-4), the Crawford Site (AlGg-27), and the Herrington Site (AlGg-28) (Tile 1 and 2 in the Supplementary Documentation). If construction impacts are planned within a 20 metre buffer of each of the currently defined archaeological site locations, after the completion of any necessary Stage 2 archaeological assessment, it is recommended that a Stage 3 archaeological investigation be carried out at each of the Cherry Valley Site (AlGg-4), the Crawford Site (AlGg-27), and the Herrington Site (AlGg-28) as previous archaeological assessments have determined that they retain cultural value or interest (Government of Ontario 2023a).



The Cherry Valley Site (AlGg-4) was first identified in 1967 and then included in Swayze's 1976 *Inventory of Prince Edward County*. Due to the presence of Middle Woodland Indigenous artifacts, there is a high level of cultural heritage value or interest of the Cherry Valley Site (AlGg-4) that will likely result in a recommendation to proceed to Stage 4. Therefore, the Stage 3 archaeological assessment of the Cherry Valley Site (AlGg-4) will consist of hand excavation of test units every 10 metres in systematic levels and into the first five centimetres of subsoil. Grid unit excavation will be followed by excavation of additional test units, amounting to 40% of the grid unit total, focusing on areas of interest within the site extent (such as distinct areas of higher concentrations of artifacts or adjacent to high-yielding units). Excavated soil will be screened through six-millimetre (mm) mesh; any artifacts recovered will be recorded and catalogued by the corresponding grid unit designation. If a subsurface cultural feature is encountered, the plan of the exposed feature will be recorded, and geotextile fabric will be placed over the unit before backfilling the unit.

It is further recommended that Stage 3 archaeological assessment of the Cherry Valley Site (AlGg-4) within the study area for the Project include engagement with interested Indigenous communities. Indigenous engagement practices conducted by an archaeological consultant during the Stage 3 archaeological assessment will be completed in accordance with the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* Government of Ontario 2011) and the MCM's draft technical bulletin on *Engaging Aboriginal Communities in Archaeology*.

The Crawford Site (AlGg-27) and the Herrington Site (AlGg-28) were registered during a Stage 1-2 archaeological assessment in 2022 by New Era Archaeology and no documentation is yet available on that assessment (Government of Ontario 2023a). Stage 3 archaeological assessments of the Crawford Site (AlGg-27) and the Herrington Site (AlGg-28) will each be conducted according to the procedures outlined in the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011a). The Stage 3 archaeological assessments of Crawford Site (AlGg-27) and the Herrington Site (AlGg-28) may require a Controlled Surface Pickup (CSP) since it is not yet evident if the Stage 2 surface collection was conducted according to Stage 3 CSP standards, as allowed by the *Fieldwork: Stage 2 – Frequently Asked Questions* document issued by the MCM (Government of Ontario 2016).

Since it is also not yet evident that the level of cultural heritage value or interest of the Crawford Site (AlGg-27) and the Herrington Site (AlGg-28) will result in a recommendation to proceed to Stage 4, the Stage 3 archaeological assessments of Crawford Site (AlGg-27) and the Herrington Site (AlGg-28) will each consist of hand excavation of test units every five metres in systematic levels and into the first five centimetres of subsoil. Grid unit excavation will be followed by excavation of additional test units, amounting to 20% of the grid unit total, focusing on areas of interest within the site extents (such as distinct areas of higher concentrations of artifacts or adjacent to high-yielding units). Excavated soil will be screened through six-mm mesh; any

artifacts recovered will be recorded and catalogued by the corresponding grid unit designation. If a subsurface cultural feature is encountered, the plan of the exposed feature will be recorded, and geotextile fabric will be placed over the unit before backfilling the unit. The Stage 3 archaeological assessments of the Crawford Site (AlGg-27) and the Herrington Site (AlGg-28) will also include additional site-specific archival research, in order to supplement previous background information concerning land use and occupation history. This additional archival research will include, but not be limited to, land registry documents, census records, and historical settlement maps.

The MCM is asked to review the results presented and to accept this report into the *Ontario Public Register of Archaeological Reports*.

5 Advice on Compliance with Legislation

In accordance with Section 7.5.9 of the MCM's 2011 <u>Standards and Guidelines for</u> <u>Consultant Archaeologists</u> (Government of Ontario 2011), the following standard statements are a required component of archaeological reporting and are provided from the MCM's 2011 <u>Standards and Guidelines for Consultant Archaeologists</u> (Government of Ontario 2011).

This report is submitted to the Minister of Citizenship and Multiculturalism 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 MCM, 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 Public and Business Service Delivery 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.

6 Bibliography and Sources

- Aitken, Alex. 1790-1799. *Hallowell.* Map on file with Ministry of Natural Resources and Forestry, Peterborough, Ontario.
- Alderville First Nation. 2016. *History.* Electronic document: <u>http://alderville.ca/alderville-first-nation/history/</u>. Last accessed January 25, 2023.
- Archaeologix Inc. 2008. Archaeological Assessment (Stage 1) Shell Proposed Refinery Project, St. Clair Township, Lambton County, Ontario. Report prepared for Jacques Whitford Limited, Markham, Ontario. PIF # P084-109-2007.
- Belden, H. & C. 1878. Illustrated Historical Atlas of the Counties of Hastings and Prince Edward, Ontario. Reprint edition. Belleville: Mika Publishing Co.
- Birch, Jennifer. 2015. Current Research on the Historical Development of Northern Iroquoian Societies. *Journal of Archaeological Research*. 23(3):263-323.
- Birch, Jennifer, and Ronald F. Williamson. 2013. *The Mantle Site: An Archaeological History of an Ancestral Huron Wendat Community*. Lanham: Altamira Press.
- Borden, Charles E. 1952. A Uniform Site Designation Scheme for Canada. *Anthropology in British Columbia*, No. 3, 44-48.
- Caston, Wayne A. 1997. Evolution in the Mapping of Southern Ontario and Wellington County. *Wellington County History* 10:91-106.
- Chapman, Lyman John, and Donald F. Putnam. 1984. *The Physiography of Southern Ontario*. 3rd ed. Ontario Geological Survey Special Volume 2. Toronto: Ontario Ministry of Natural Resources.

- Commonwealth Historic Resource Management Limited (CHRM). 1991. Sandbanks Provincial Park Cultural Resources Study. Report on file, Ministry of Natural Resources and Forestry, Peterborough.
- Conger, Willson. 1812. A Plan of part of Sophiasburgh and part of Hallowell. Map on file with Ministry of Natural Resources and Forestry, Peterborough, Ontario
- Conger, Wilson. 1823. *Hallowell.* Map on file with Ministry of Natural Resources and Forestry, Peterborough, Ontario.
- Coyne, J.H. 1895. *The County of the Neutrals (As Far as Comprised in the County of Elgin): From Champlain to Talbot.* St. Thomas: Times Print.
- Craig, Gerald. 1963. *Upper Canada: The Formative Years.* Don Mills: Oxford University Press.
- Cruickshank, Tom and Peter John Stokes. 1984. *The Settler's Dream: A Pictorial History of the Older Buildings of Prince Edward County.* Picton: Corporation of the County of Prince Edward.
- Curve Lake First Nations. No date. *History.* Electronic Document: <u>https://www.curvelakefirstnation.ca/about-us/history/</u>. Last accessed January 25, 2023.
- Damjkar, Eric. 1990. *The Coulter Site and Late Iroquoian Coalescence in the Upper Trent Valley.* Occasional Papers in Northeastern Archaeology No. 2. Dundas: Copetown Press.
- Department of National Defence. 1932. *Wellington, Ontario. 1:63,360. Map Sheet 030N14, [ed. 1], 1932.* Electronic source: http://geo.scholarsportal.info. Last accessed February 15, 2023.
- Dermarker, Susan, Jennifer Birch, Termeh Shafie, John P. Hart, and Ronald F. Williamson. 2016. St. Lawrence Iroquoians and Pan-Iroquoian Social Network Analysis. *Ontario Archaeology*, 96: 87-103.
- Dodds, Philip F. 1979. *Athol: Stories of a Township and its people during the last 132 years.* Athol Township.
- Elmore, P.V. 1833. *Plan of the Township of Hallowell.* Map on file with Ministry of Natural Resources and Forestry, Peterborough, Ontario
- Ellis, Christopher J. 2013. Before Pottery: Paleoindian and Archaic Hunter-Gatherers. In *Before Ontario: The Archaeology of a Province.* Edited by Marit K. Munson and Susan M. Jamieson, pp. 35-47. Montreal and Kingston: McGill-Queen's University Press.

- Ellis, Chris J., and Neal Ferris (editors). 1990. *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5.
- Ellis, Chris J., Ian T Kenyon and Michael W. Spence. 1990. The Archaic. In Ellis and Ferris 1990, pp. 65-124.
- Ferris, Neal. 2013. Introduction: Seeing Ontario's Past Archaeologically. In *Before* Ontario: The Archaeology of a Province. Edited by Marit K. Munson and Susan M. Jamieson, pp. 3-23. Montreal and Kingston: McGill-Queen's University Press.
- Fox, William. 2015. Ethnogenesis in the Lower Great Lakes and St Lawrence Region. *Ontario Archaeology*, 95:21-32.
- Gaudreau, Mariane, and Louis Lesage. 2016. Understanding Ethnicity and Cultural Affiliation: Huron-Wendat and Anthropological Perspectives. *Ontario Archaeology*. Volume 96: 6-16.
- Gentilcore, R. Louis, and C. Grant Head. 1984. *Ontario's History in Maps*. Toronto: University of Toronto Press.
- Ground Truth Archaeology (Ground Truth). 2012. *Stage 1/2 Archaeological Assessment of Part of 1370 County Road 10, Athol Township, Ontario*. Project Information Form number P206-063-2012. Report on file with the Ministry of Citizenship and Multiculturalism.
- Ground Truth Archaeology (Ground Truth). 2019. *Stage 1/2 Archaeological Assessment* of Part of Lots 19 and 20, Concession 3, Military Tract, Hallowell Township, Municipality of the County of Prince Edward, Ontario. Project Information Form number P191-0162-2018. Report on file with the Ministry of Citizenship and Multiculturalism; Toronto.
- Gorman, William. 2011. *Descendants of James Rogers: Father of the Rangers.* Electronic Source: <u>http://www.montalona.com/</u>. Last Accessed February 10, 2023
- Government of Ontario. 1990a. *Ontario Heritage Act, R.S.O. 1990, CHAPTER O.18*. Electronic document: <u>http://www.e-</u> <u>laws.gov.on.ca/html/statutes/english/elaws_statutes_90o18_e.htm</u>. Last accessed January 25, 2023.
- Government of Ontario. 1990b. *Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c. F.31*. Electronic document: <u>https://www.ontario.ca/laws/statute/90f31</u>. Last accessed January 25, 2023.

- Government of Ontario. 2002. *Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33.* Electronic document: <u>https://www.ontario.ca/laws/statute/02f33</u>. Last accessed January 25, 2023.
- Government of Ontario. 2011. *Standards and Guidelines for Consultant Archaeologists*. Toronto: Ministry of Citizenship and Multiculturalism.
- Government of Ontario. 2023a. Sites within a one Kilometre Radius of the Study Area provided from the *Ontario Archaeological Sites Database*. Electronic Resource: PastPortal, Ministry of Citizenship and Multiculturalism.
- Government of Ontario. 2023b. Archaeological Assessments Completed with the Study Area or within 50 Metres of the Study Area Provided from the *Ontario Public Register of Archaeological Reports*. Electronic Resource: PastPortal, Ministry of Citizenship and Multiculturalism.
- Heidenreich, Conrad E. 1978. Huron. In *Handbook of North American Indians*. Volume 15, Northeast. Edited by Bruce G. Trigger, pp. 368-388. Washington: Smithsonian Institution Press.
- Heidenreich, Conrad E. 1990. History of the St. Lawrence-Great Lakes Area to A.D. 1650. In Ellis and Ferris 1990, pp. 475-492.
- Jacques Whitford, 2008. Stage 1 Archaeological Impact Assessment Interconnecting and Third Party Pipelines. Report prepared for Shell Canada Products, Sarnia, ON. PIF # P002-128-2007.
- Kapyrka, Julie. 2018. Remembering Original Relationships: Mississauga and Wendat. *Arch Notes*, 23(1): 5-7.
- Konrad, Victor. 1981. An Iroquois Frontier: the North Shore of Lake Ontario during the Late Seventeenth Century. *Journal of Historical Geography* 7(2).
- Loewen, Brad, and Claude Chapdelaine (editors). 2016. *Contact in the 16th Century: Networks among Fishers, Foragers and Farmers.* Mercury Series Archaeology Paper 176. Ottawa: University of Ottawa Press.
- Migizi, Gitiga. 2018. *Michi Saagiig Nishnaabeg: This Is Our Territory.* Winnipeg: ARP Books.
- Migizi, Gitiga and Julie Kapyrka. 2015. Before, During, and After: Mississauga Presence in the Kawarthas. In *Peterborough Archaeology*, Dirk Verhulst, editor, pp.127-136. Peterborough, Ontario: Peterborough Chapter of the Ontario Archaeological Society.
- Mika, Nick, and Helma Mika. 1981. *Places in Ontario. Part II.* Belleville: Mika Publishing Company.

- Meeks, Tim. 2020. *Cherry Valley Cemetery's face lift is impressive*. Belleville Intelligencer, issued online May 4, 2020: <u>https://www.intelligencer.ca/news/local-news/cherry-valley-cemeterys-face-lift-is-impressive</u>. Last accessed February 10, 2023.
- Morris, J.L. 1943. *Indians of Ontario*. 1964 reprint. Toronto: Department of Lands and Forests.
- Ontario Energy Board (OEB). 2016. Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario. 7th Edition. Electronic document: <u>https://www.oeb.ca/oeb/ Documents/Regulatory/Enviro Guidelines Hydrocarbo</u> <u>nPipelines 2016.pdf.</u> Last accessed February 10, 2023.
- Ontario Heritage Trust. 2023. *An inventory of provincial plaques across Ontario*. Electronic document: <u>https://www.heritagetrust.on.ca/user_assets/documents/2023-Open-data-plaques-ENG.pdf</u>. Last Accessed February 10, 2023.
- Paudash, Robert. 1905. The Coming of the Mississaugas. *Ontario Historical Society, Papers and Records.* Volume VI: 7-11. Toronto: Ontario Historical Society.
- PEC Trails. N.d. *Prince Edward County Millennium Trail.* Electronic source: <u>http://pectrails.ca/trail-info/history/</u>. Last accessed February 10, 2023.
- Quinte Conservation. 2013. *East Lake: State of the Lake.* Electronic document: <u>https://www.quinteconservation.ca/en/watershed-</u> <u>management/resources/Documents/Reports%20and%20Studies/East%20Lake%</u> <u>20Stewardship%20Plan/East%20Lake%20Stewardship%20Report%202013.pdf.</u> Last Accessed February 10, 2023
- Quinte Conservation. 2023. *Watershed Report Card 2023*, Electronic document: <u>https://www.quinteconservation.ca/en/watershed-</u> <u>management/resources/Documents/2023%20QC%20WRC.pdf</u>. Last accessed April 4, 2023.
- Ramsden, Peter G. 1990. The Hurons: Archaeology and Culture History. In Ellis and Ferris 1990, pp. 361-384.
- Ramsden, Peter. 2016. Becoming Wendat: Negotiating a New Identity around Balsam Lake in the Late Sixteenth Century. *Ontario Archaeology*. Volume 96: 121-132.
- Richards, N.R., and F.F. Morwick. 1948. *Soil Survey of Prince Edward County.* Report No. 10 of the Ontario Soil Survey. Ontario Agricultural College.

- Rogers, Edward S. 1978. Southeastern Ojibwa. In *Handbook of North American Indians, Vol. 15 Northeast*, pp. 760-771. B.G. Trigger, ed. Washington: Smithsonian Institution.
- Smith, W.H. 1851. *Canada: Past, Present and Future. Vol. 2.* 1974, reprint. Belleville: Mika Publishing Co.
- Steckley, J.L. 1990. The Early Map "Nouvelle France": A Linguistic Analysis. *Ontario Archaeology*, 51:17-29.
- Stewart, Andrew M. 2013. Water and Land. In *Before Ontario: The Archaeology of a Province.* Edited by: Marit K. Munson and Susan M. Jamieson, pp. 24-34. Montreal and Kingston: McGill-Queen's University Press.
- Stevens, E. W. 2004. First Nations underwater archaeology of the Trent-Severn Waterway. Copy on file at Parks Canada, Ottawa.
- Sutton, Richard E. 1990. Hidden Amidst the Hills: Middle and Late Iroquoian Occupations in the Middle Trent Valley. *Occasional Papers in Northeastern Archaeology No. 3.* Copetown, ON.: Copetown Press.
- Swayze, K. 1976. *Archaeological Inventory of Prince Edward County, 1976.* Report on file with the Ministry of Citizenship and Multiculturalism, Toronto, Ontario.
- United Church of Canada. 2023. History of the United Church of Canada. Electronic source: <u>https://united-church.ca/community-and-faith/welcome-united-church-canada/history-united-church-canada</u>. Last accessed February 10, 2023.
- Ward, John Ferris. 1863. *Tremaine's Map of the County of Prince Edward, Upper Canada.* Toronto: Geo. C. Tremaine.
- Williamson, Ronald F. 2013. The Woodland Period, 900 BCE to 1700 CE. In *Before* Ontario: The Archaeology of a Province. Edited by Marit K. Munson and Susan M. Jamieson, pp. 48-61. Montreal and Kingston: McGill-Queen's University Press.

7 Photos

Photo 1: Commercial structures indicating previous disturbance, facing north



Photo 3: Sandy Hook Road/County Road 1 indicating previous disturbance, facing east

Photo 2: Sandy Hook Road/County Road 1 with associated grading indicating previous disturbance, facing west



Photo 4: Millenium Trail along old railbed indicating previous disturbance, facing southwest





Photo 5: Millenium Trail along old railbed indicating previous disturbance, facing northeast





Photo 7: Access road to aggregate pit, facing south



Photo 8: Agricultural land use within the study area, facing north





Photo 9: Sandy Hook Road/County Road 1 with associated buried utilities and grading indicating previous disturbance, facing east



Photo 11: Upper Lake Street showing existing conditions, facing south

Photo 10: Access road to aggregate pit area with associated paving and utility infrastructure indicating previous disturbance, facing south



Photo 12: Intersection of Sandy Hook Road/County Road 1 and Highway 10 with associated grading indicating previous disturbance, facing south





Photo 13: Highway 10 with paving and associated grading indicating previous disturbance, facing northeast

Photo 14: Commercial structure indicating previous disturbance, facing west



Photo 15: Ridge Road with associated paving and grading indicating previous disturbance, facing northeast







Photo 17: Access road to aggregate pit indicating previous disturbance, facing north



Photo 19: County Road 22 with associated paving and grading indicating previous disturbance, facing west

Photo 18: Ridge Road with associated paving and grading indicating previous disturbance, facing southwest



Photo 20: Highway 10 with associated paving and grading indicating previous disturbance, facing north





Photo 21: Highway 10 with associated paving and grading indicating previous disturbance, facing south



Photo 23: Agricultural field past deep ditch and grading associated with Highway 10, facing northwest

Photo 22: Mowbray Road with agricultural structures indicating previous disturbance, facing northwest



Photo 24: Highway 10 facing south with associated paving, grading down to deep ditch indicating previous disturbance, facing south





Photo 25: Highway 10 with associated paving and grading indicating previous disturbance, facing southwest



Photo 27: Municipal infrastructure structures and associated grading indicating previous disturbance, facing east

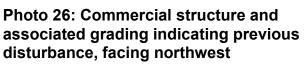




Photo 28: Eames Road with associated paving and grading to deep ditch indicating previous disturbance, facing northeast





Photo 29: Commercial structures indicating previous disturbance, facing north



Photo 31: East lake tributary – low and permanently wet area, facing southeast

Photo 30: East Lake tributary - low and permanently wet area, facing northwest



Photo 32: Eames Road with associated paving and grading indicating previous disturbance, facing northeast





Photo 33: East Lake tributary – low and permanently wet area, facing northeast



Photo 35: Thompson Road with associated grading indicating previous disturbance, facing south

Photo 34: East Lake tributary – low and permanently wet area, facing southwest



Photo 36: Buried utilities along Highway 10 indicating previous disturbance, facing northwest





Photo 37: Miller Road with agricultural structures indicating previous disturbance, facing northeast

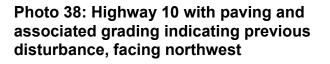




Photo 39: Steeply sloped area southwest of Highway 10, facing west



Photo 40: Commercial structure indicating previous disturbance, facing southeast





Photo 41: Martin Street between agricultural fields, facing east

Photo 42: Highway 10 at Martin Street with associated paving indicating previous disturbance, facing north





Photo 43: East Lake tributary – low and permanently wet area, facing east

Photo 44: East Lake tributary – low and permanently wet area, facing west



Photo 45: Highway 10 with associated paving and grading indicating previous disturbance, facing north



Photo 47: Municipal playground and structure with associated buried utilities indicating previous disturbance, facing southeast Photo 46: Highway 10 with associated paving and grading indicating previous disturbance, facing southwest



Photo 48: Athol Township Town Hall, facing east





Photo 49: Cherry Valley United Church Cemetery along Highway 10, facing northeast Photo 50: Cherry Valley United Church and Cemetery, facing east



Photo 51: Highway 10 at County Road 18 with associated paving and grading indicating previous disturbance, facing southeast



Photo 52: Cherry Valley United Church Cemetery along Highway 10, facing northwest





Photo 53: Cemetery vault along Highway 10, facing northeast

Photo 54: Cherry Valley United Church Cemetery along Highway 10, facing northwest





Photo 55: Athol-South Marysburgh Public School, facing west

Photo 56: Highway 10 with associated paving and grading indicating previous disturbance, facing northwest





Photo 57: Highway 10 with associated paving and grading indicating previous disturbance, facing northeast

Photo 58: Memorial park laneway, facing northwest



Photo 59: County Road 18 with associated paving, grading, and buried infrastructure indicating previous disturbance, facing southwest



Photo 60: Memorial park laneway, facing southeast





Photo 61: Sandy Lane with slope down towards East Lake, facing northwest



Photo 63: Commercial structures and infrastructure indicating previous disturbance, facing north

Photo 62: Residential manicured lawns off Sandy Lane, facing northeast



Photo 64: Access road and storage facilities for aggregate pit indicating previous disturbance, facing south





Photo 65: Factory Lane with East Lake at end, facing northwest

Photo 66: Commercial structures indicating previous disturbance, facing south



Photo 67: Factory Lane with residential structures and East Lake, facing northwest



Photo 68: Chourney Lane with residential structures, facing southeast





Photo 69: Chourney Lane with residential structures, facing northeast







Photo 71: Access road and aggregate pit indicating previous disturbance, facing southeast

Photo 72: County Road 18 with associated paving and grading indicating previous disturbance, facing northeast



Photo 73: County Road 18 with associated paving and grading indicating previous disturbance, facing southwest Photo 74: Fennel Crescent with associated paving indicating previous disturbance, facing northwest



Photo 75: Buried utilities along Fennel Crescent indicating previous disturbance, facing southwest

 \bigcirc



Photo 76: Low and permanently wet area adjacent to East Lake near residential structures, facing northwest



Photo 77: Low and permanently wet area adjacent to East Lake near residential structures, facing southeast



Photo 79: Access to Fennel Crescent, facing northwest

Photo 78: Fennel Crescent with associated paving indicating previous disturbance, facing northeast



Photo 80: Residential manicured lawn sloping gently down to East Lake, facing northwest





Photo 81: County Road 18 with associated paving and grading indicating previous disturbance and a steep slope on the northwest side of the road, facing northwest Photo 82: Agricultural field adjacent to aggregate pit that indicates previous disturbance, facing east





Photo 83: Barratts Lane sloping down to East Lake, facing northwest

Photo 84: Curry Lane, facing northwest



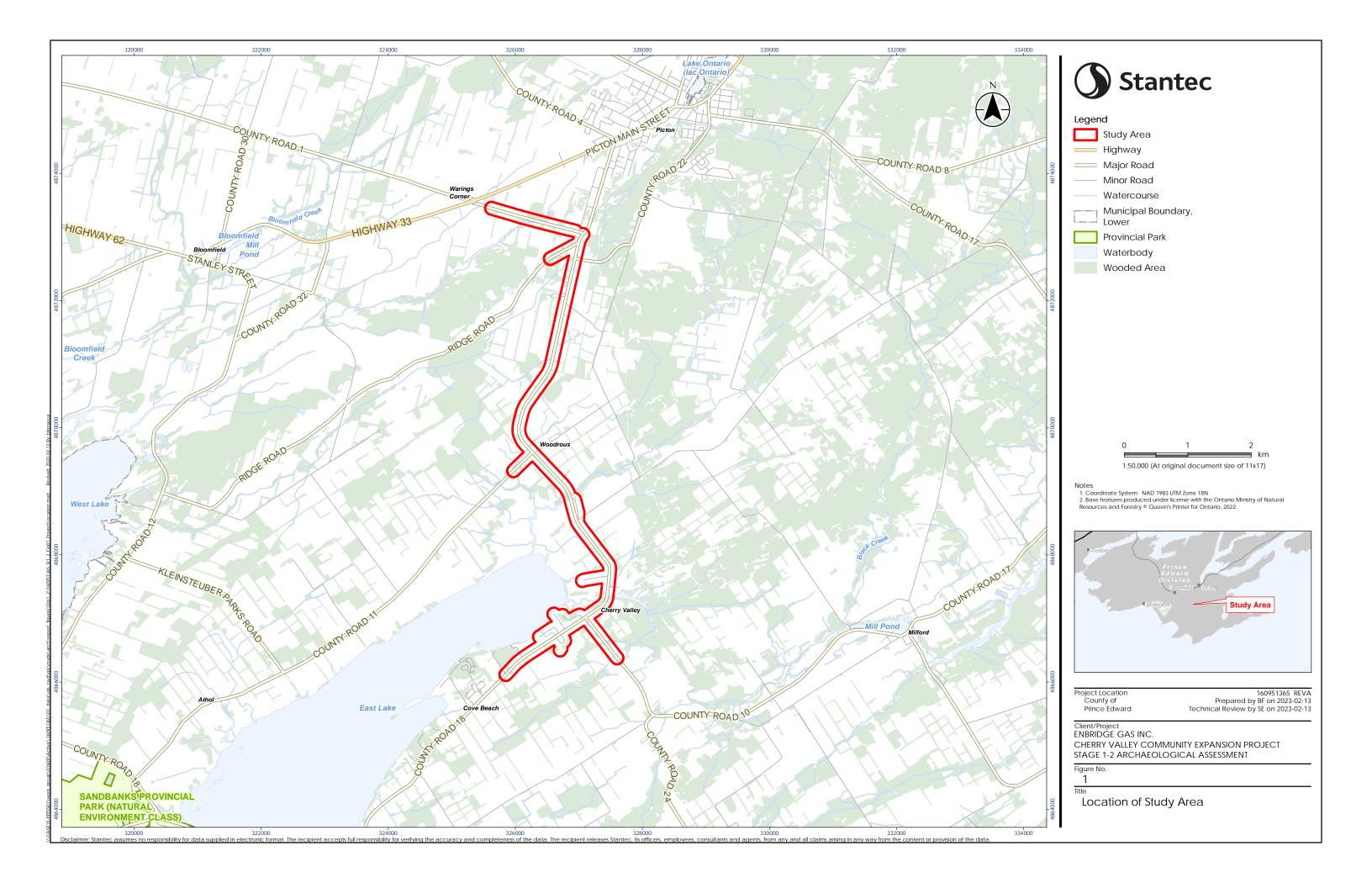


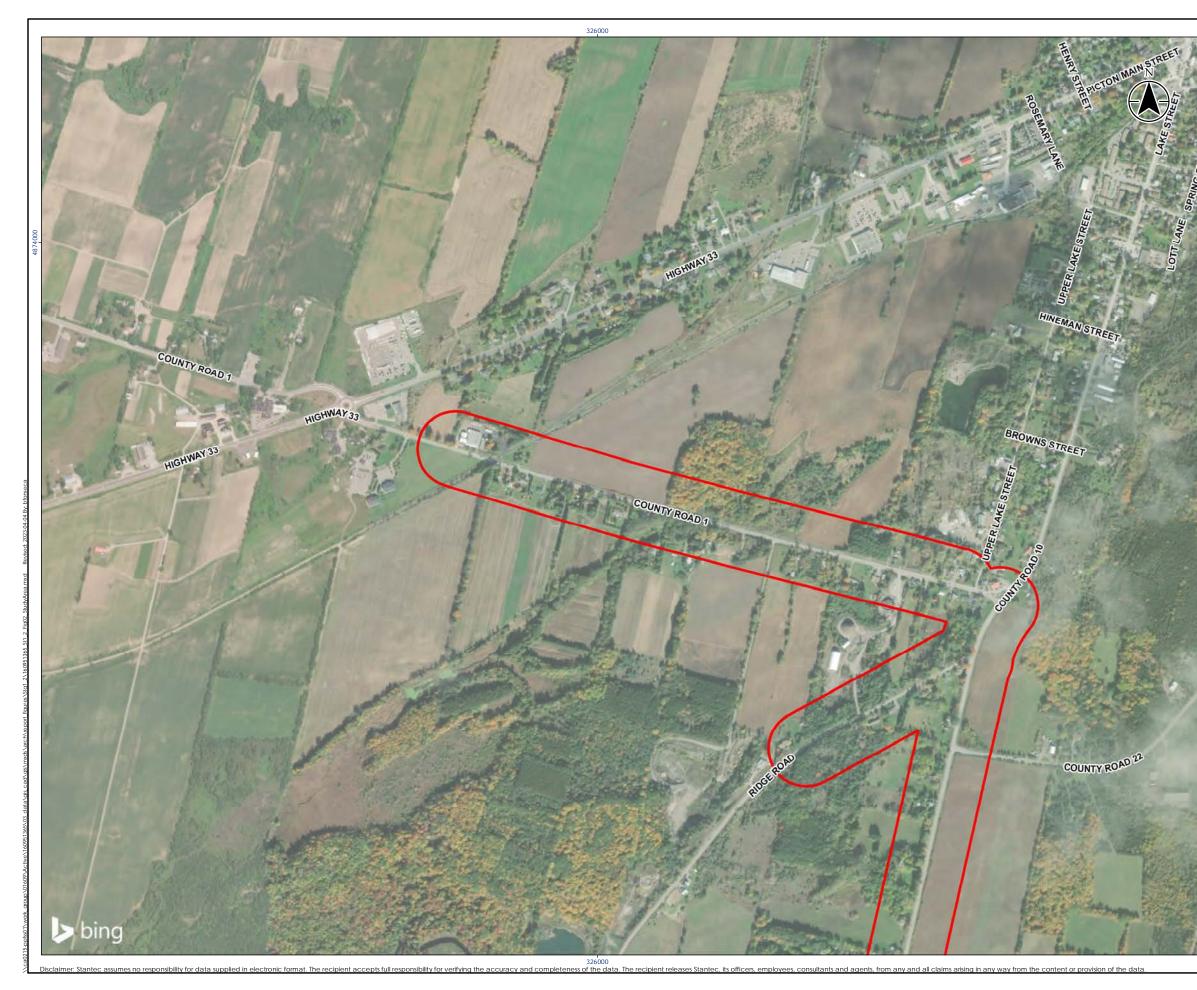
Photo 85: County Road 18 with associated paving and grading indicating previous disturbance, facing northeast

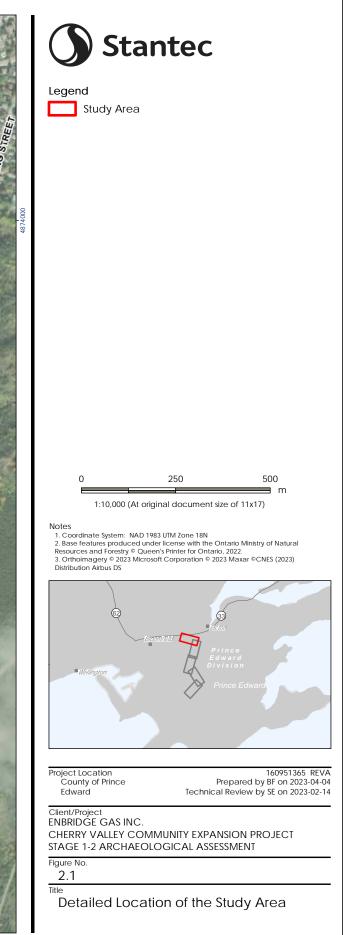


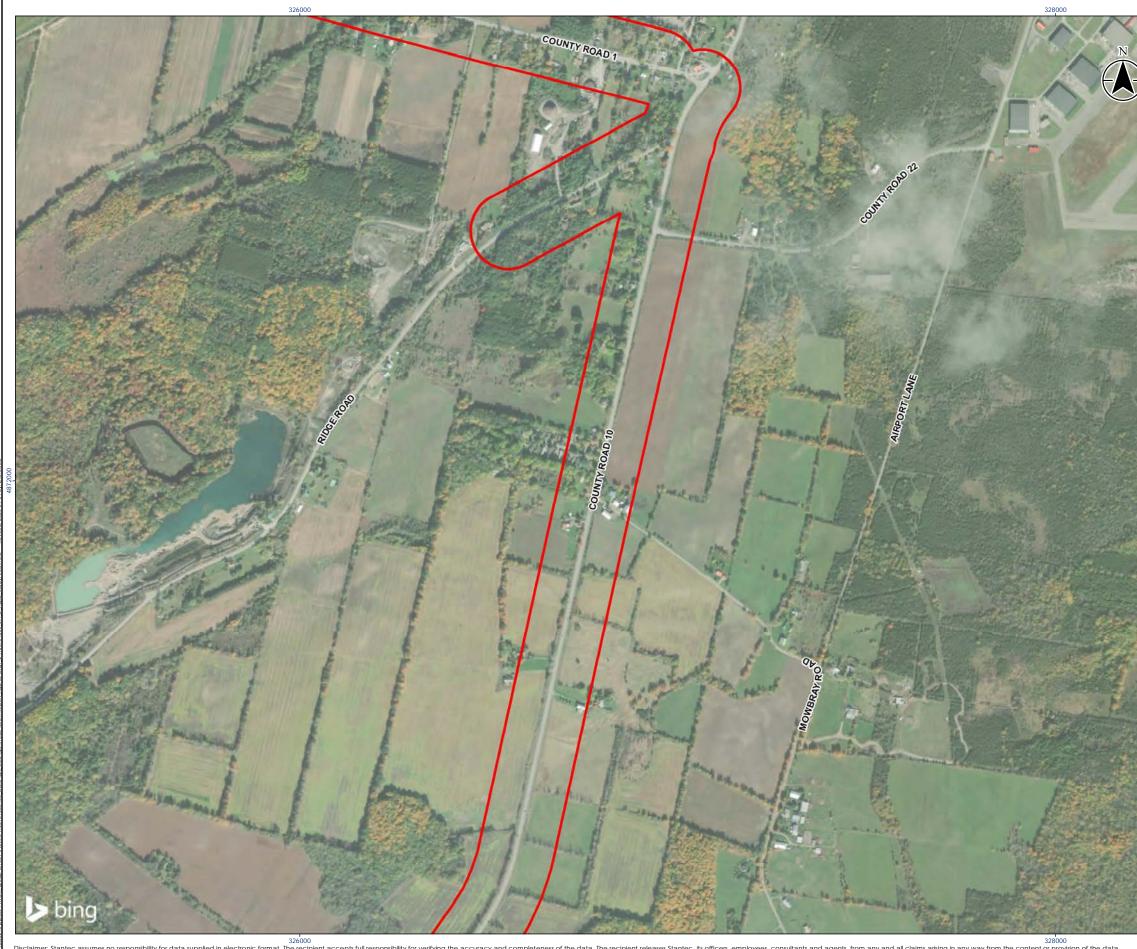
8 Maps

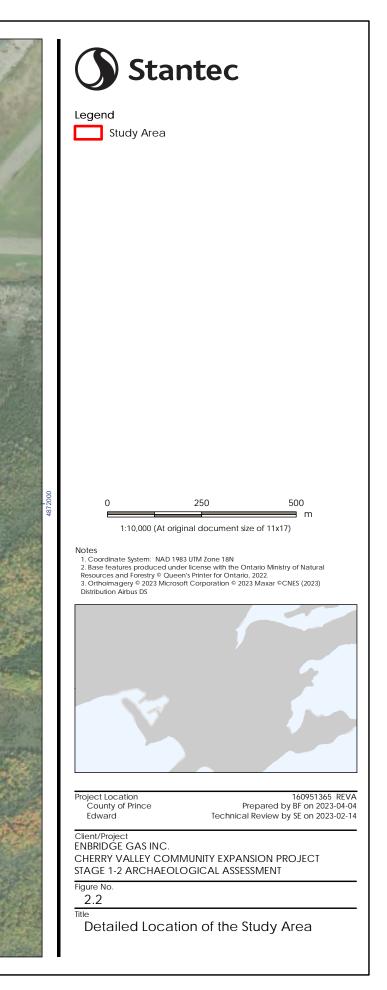
The following pages provide various maps of the study area.







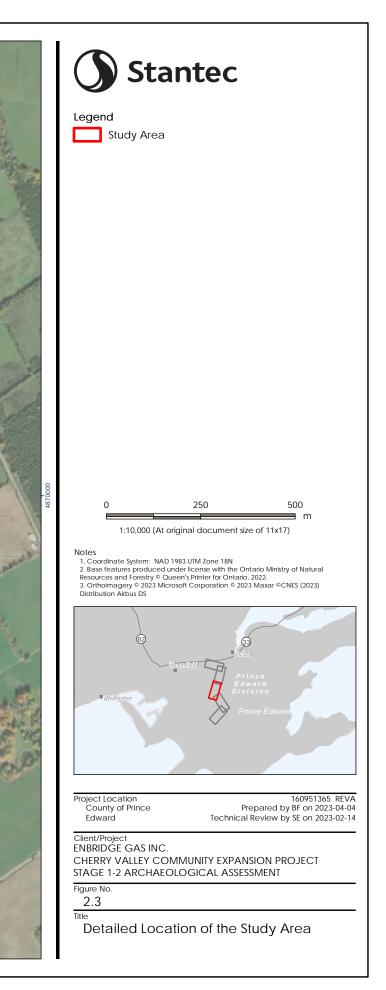






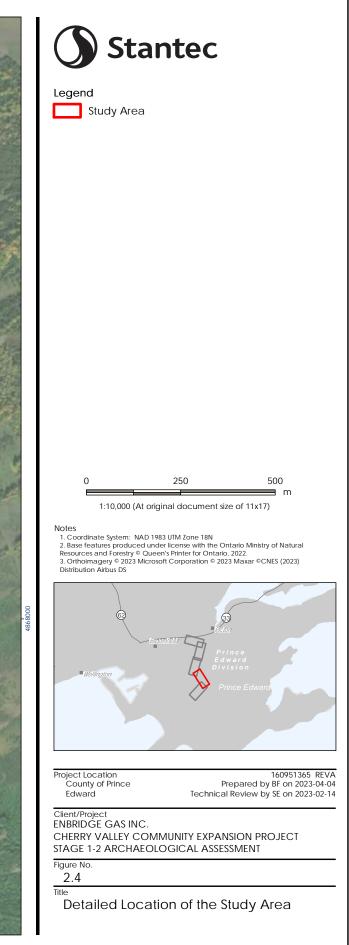
04 By: bfonseci

1: 2023-04-04

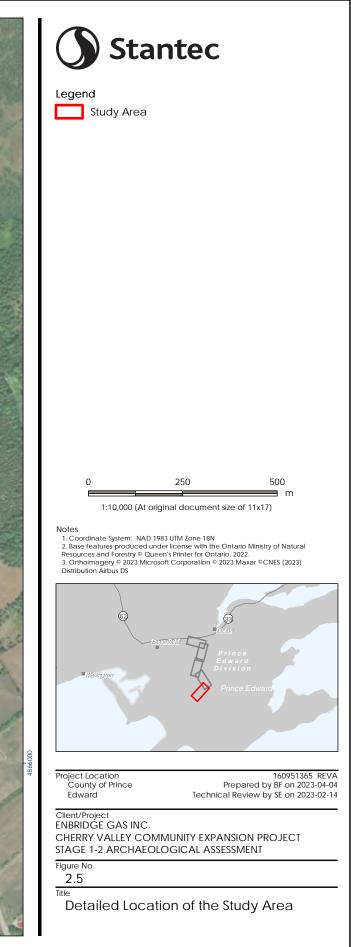


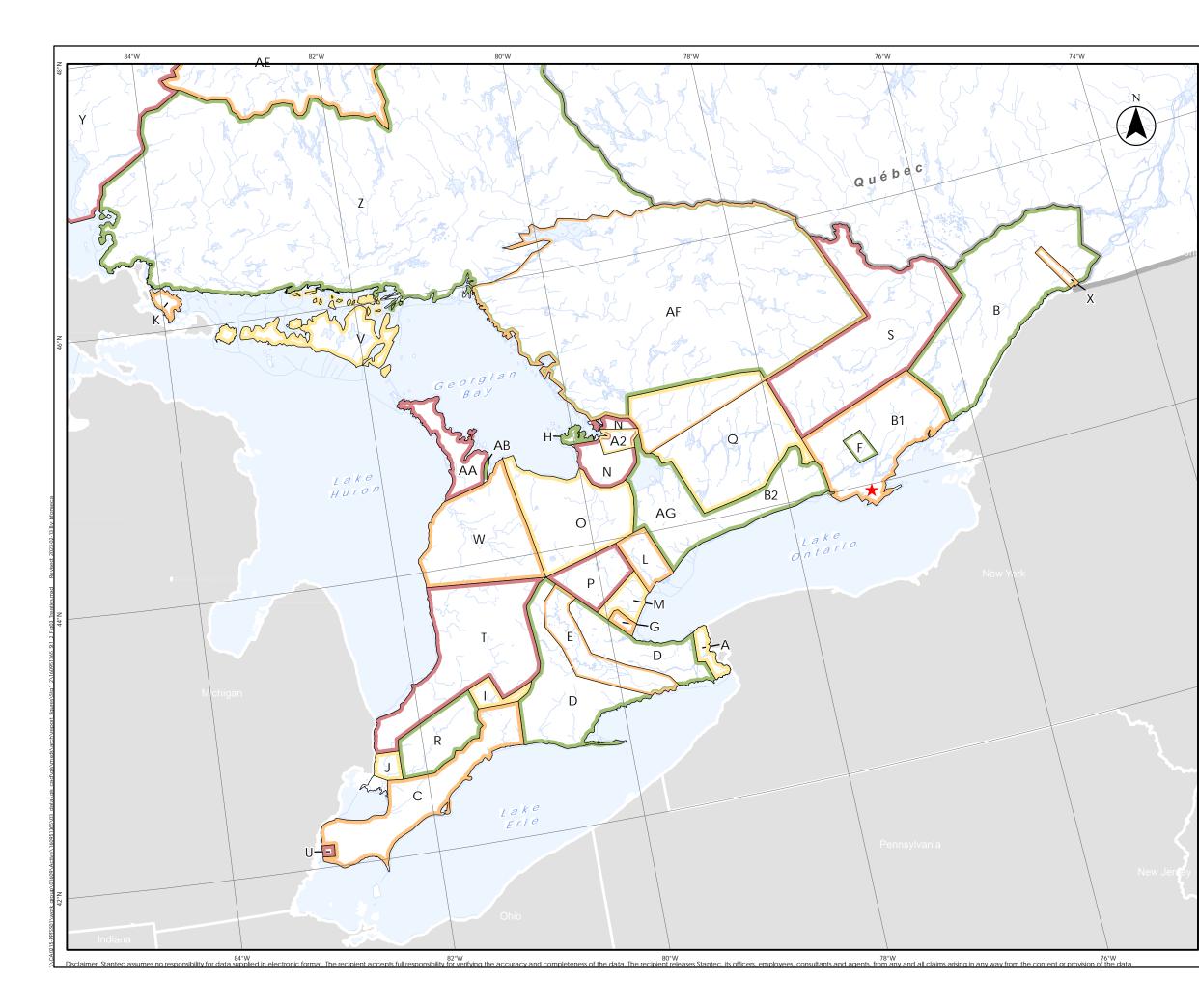
way from the content or provision of the data

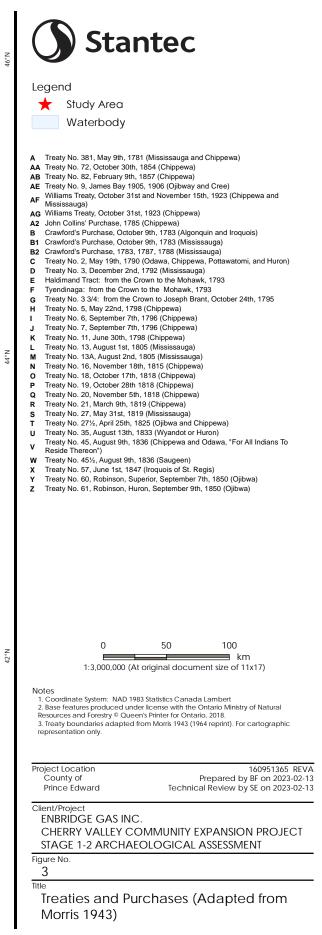










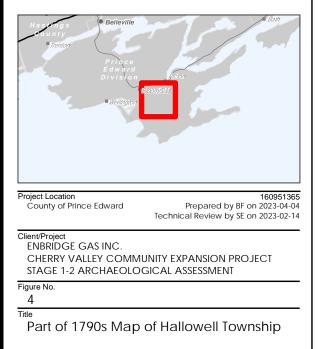


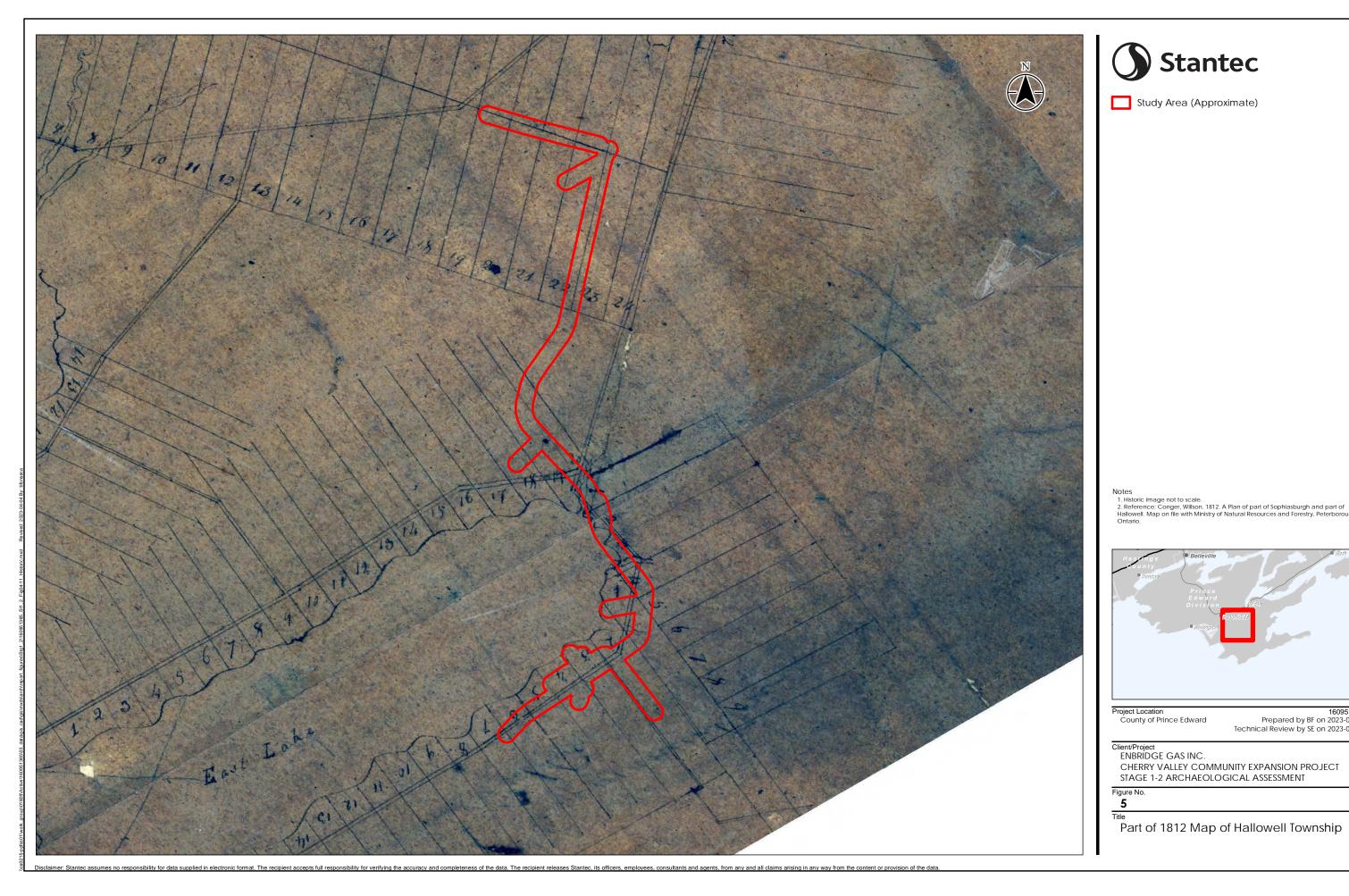






Notes 1. Historic image not to scale. 2. Reference: Aitken, Alex. 1790-1799. Hallowell. Map on file with Ministry of Natural Resources and Forestry, Peterborough, Ontario.

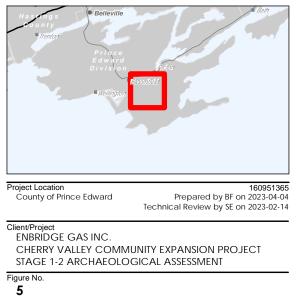


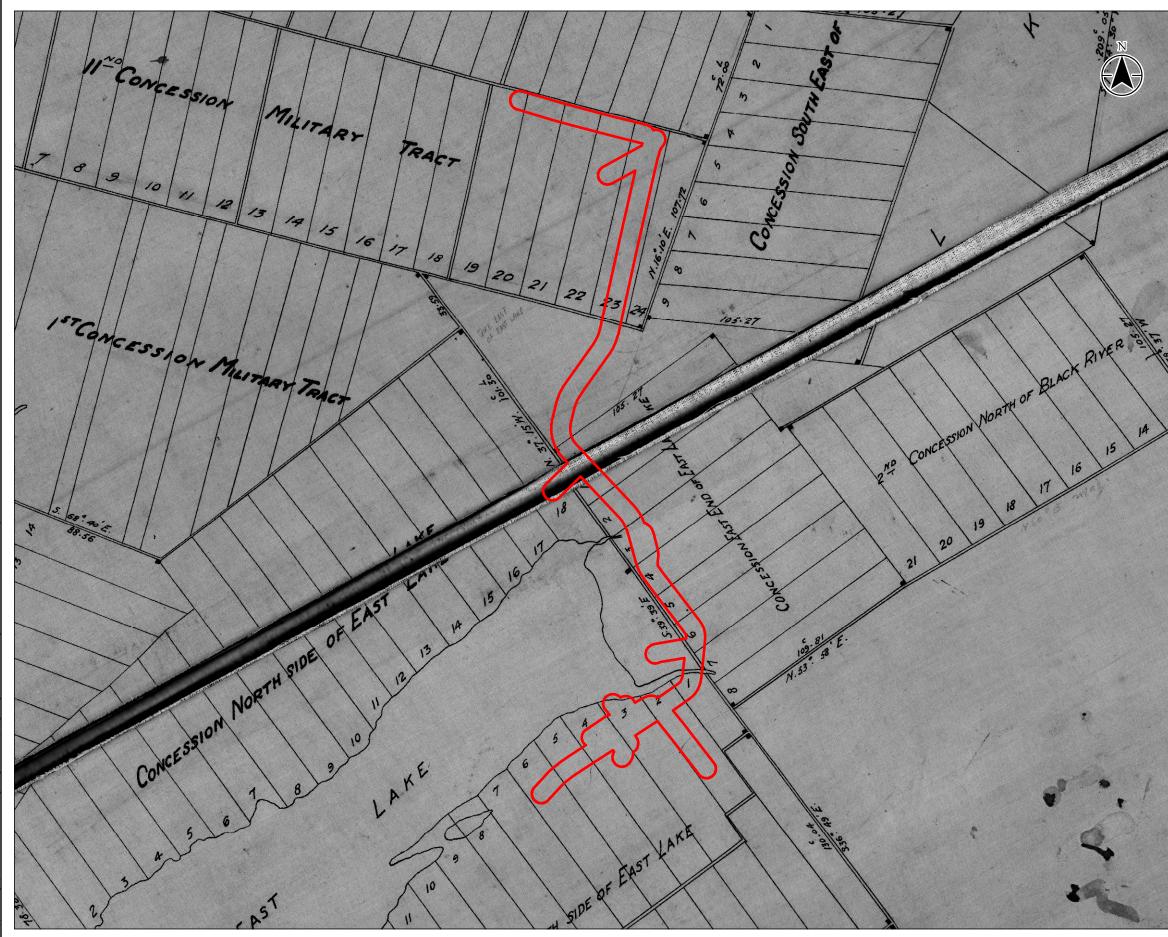




Notes

 Historic image not to scale.
 Reference: Conger, Willson. 1812. A Plan of part of Sophiasburgh and part of Hallowell. Map on file with Ministry of Natural Resources and Forestry, Peterborough, Control Ontario





ss of the data. The re consultants and agents, from any and all claims arising in any way from the content or provision of the data rifving the a

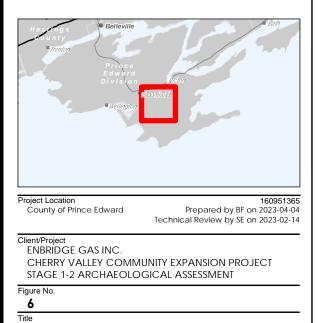




Study Area (Approximate)

Notes

Historic image not to scale.
 Reference: Elmore, P.V. 1833. Plan of the Township of Hallowell. Map on file with Ministry of Natural Resources and Forestry, Peterborough, Ontario.



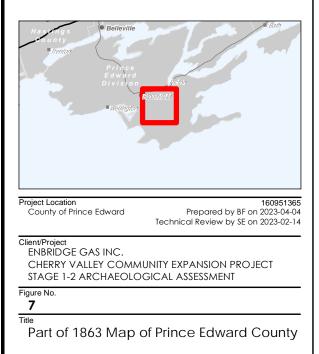
Part of 1833 Map of Hallowell Township

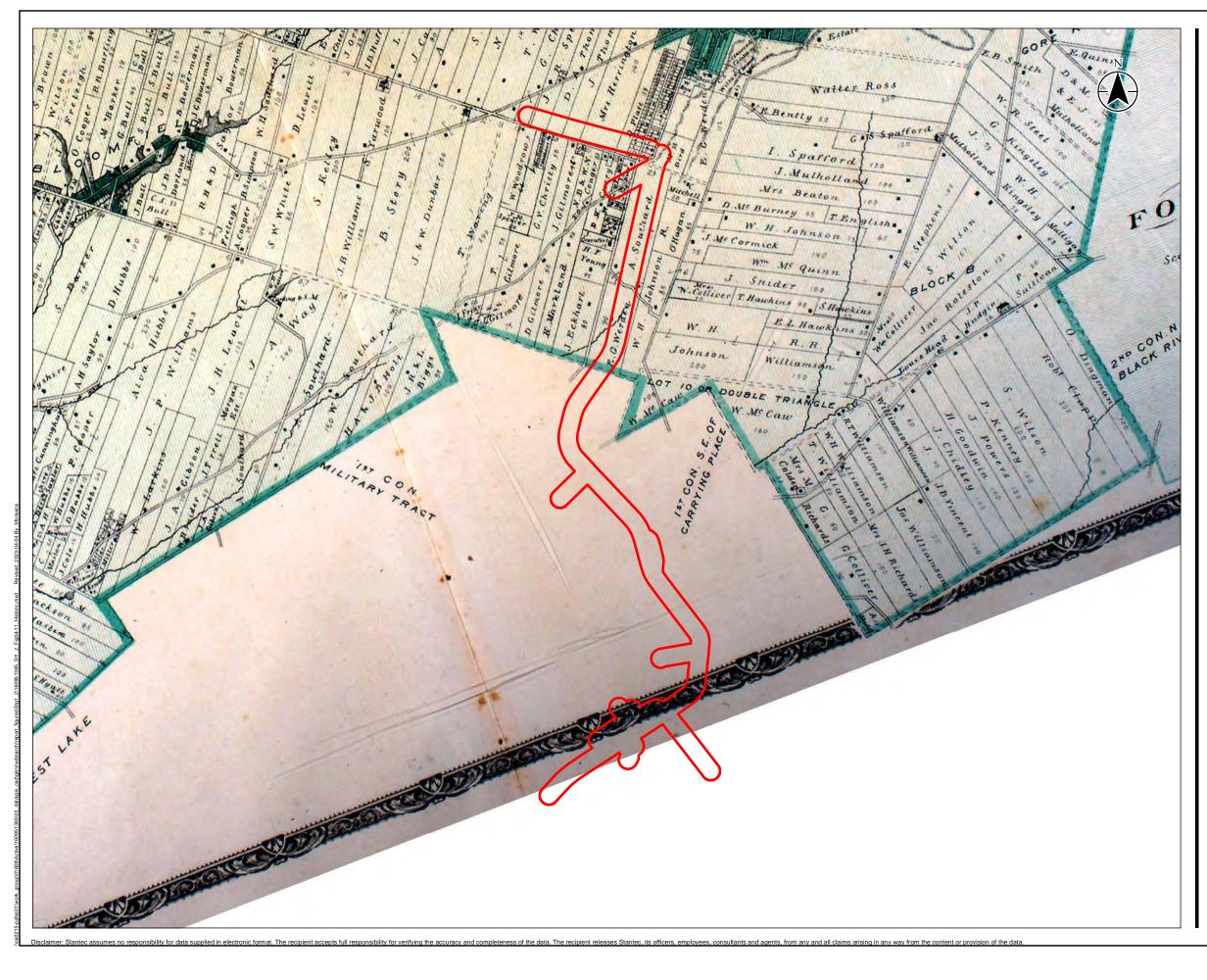




Notes

Historic image not to scale.
 Reference: Ward, John Ferris. 1863. Tremaine's Map of the County of Prince Edward, Upper Canada. Toronto: Geo. C. Tremaine.



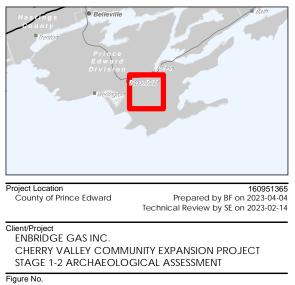




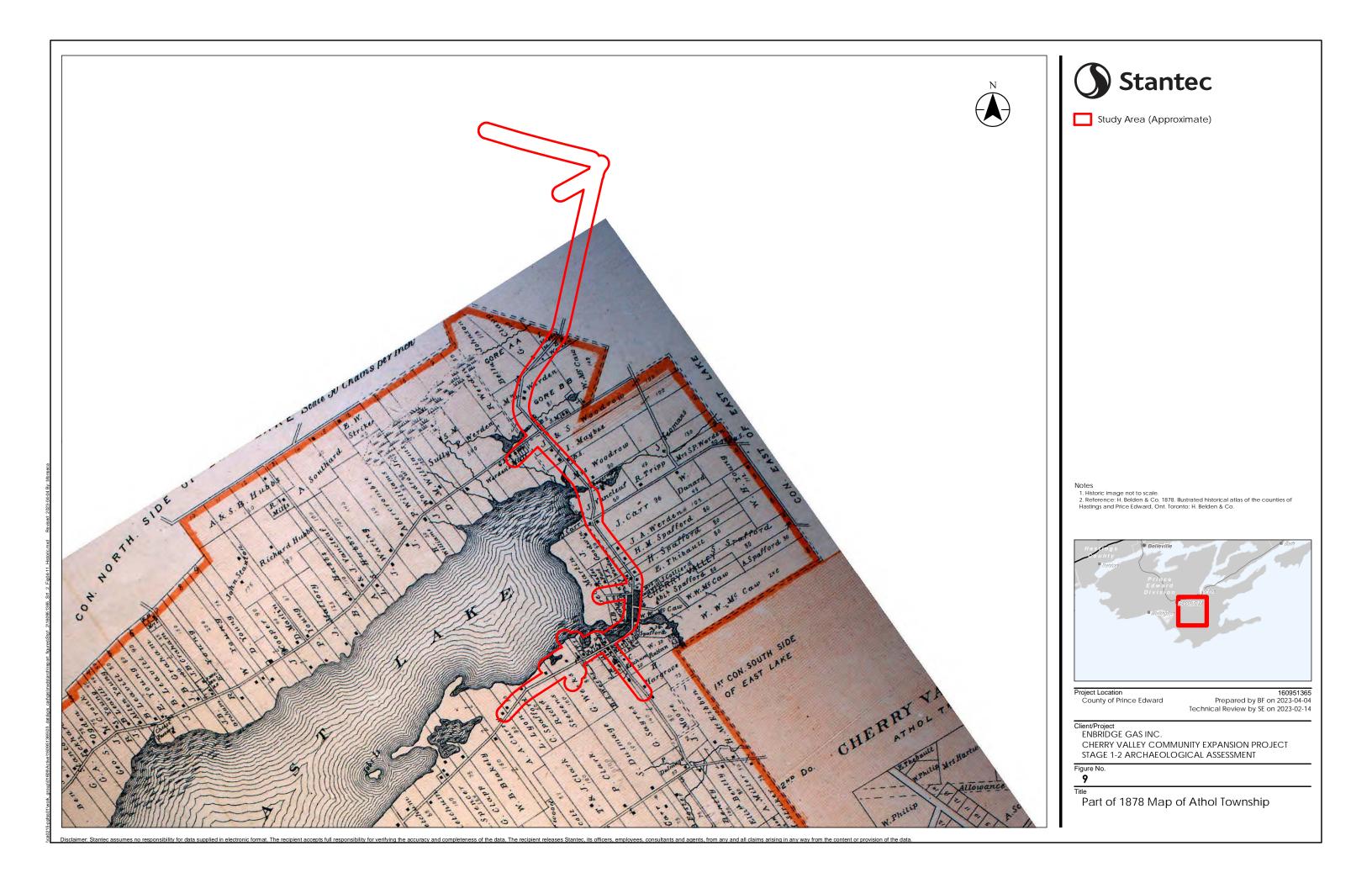
Notes

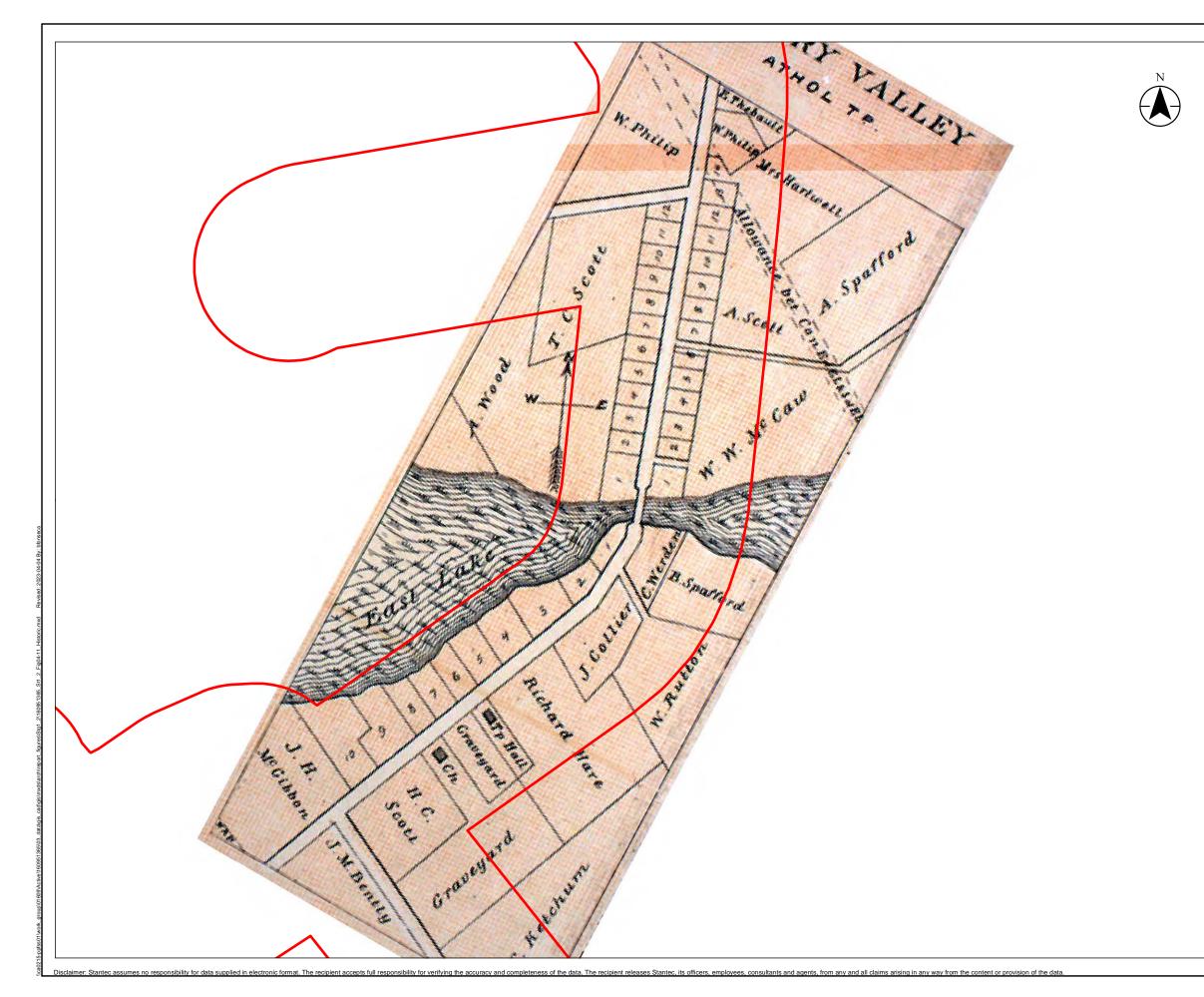
8

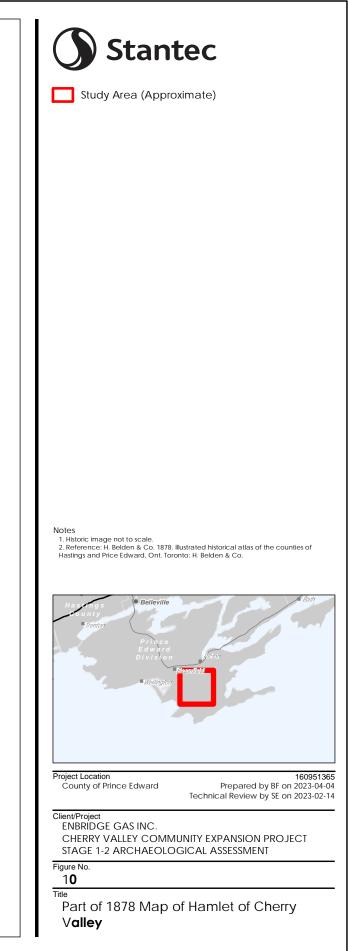
Historic image not to scale.
 Reference: H. Belden & Co. 1878. Illustrated historical atlas of the counties of Hastings and Price Edward, Ont. Toronto: H. Belden & Co.

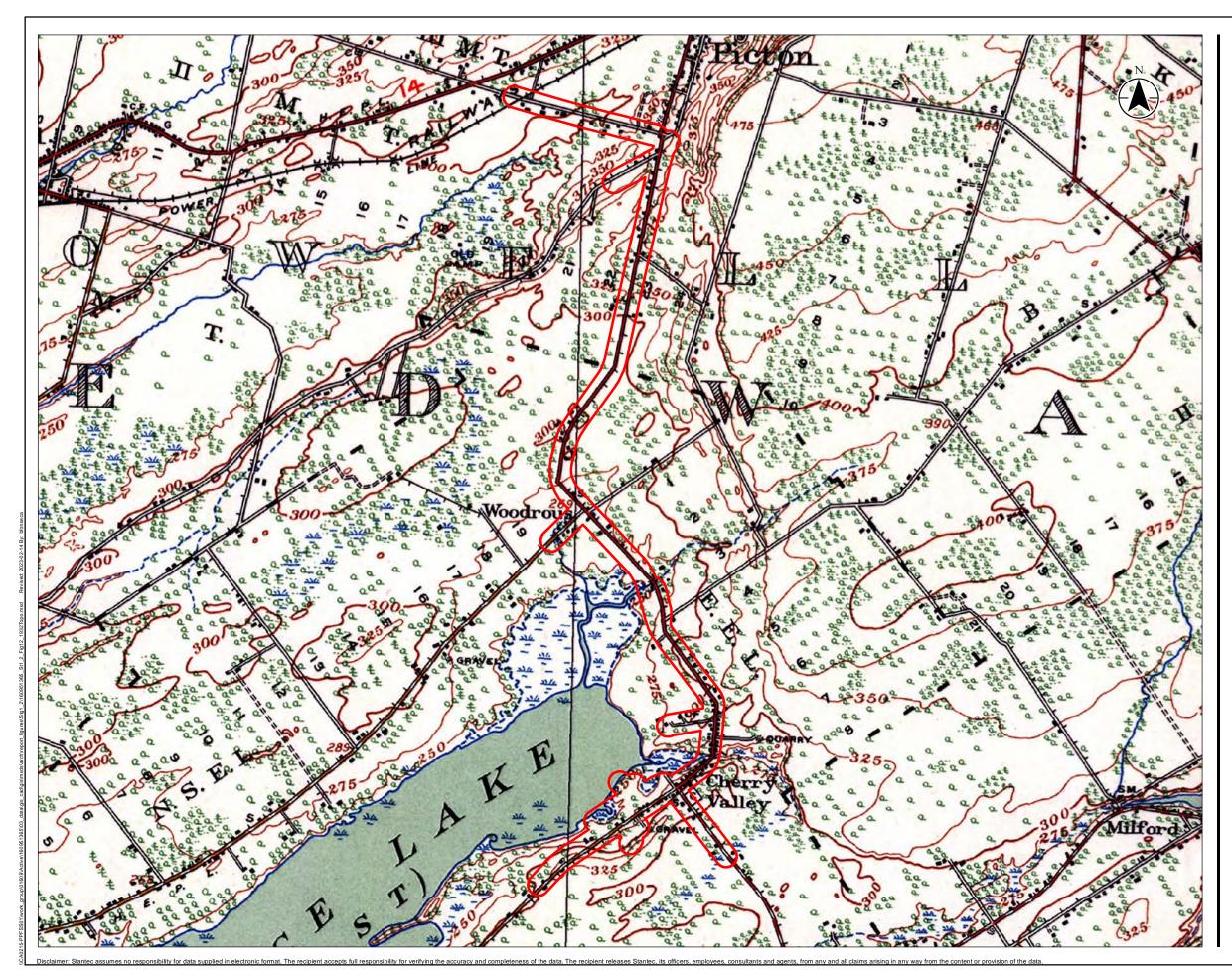


Title Part of 1878 Map of Hallowell Township





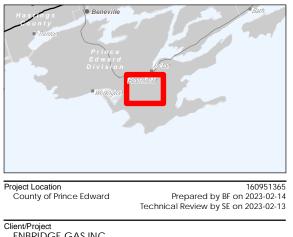






Notes

Historic image not to scale.
 Reference: Geographical Section, General Staff, Department of National Defence Ottawa Ontario, Canada

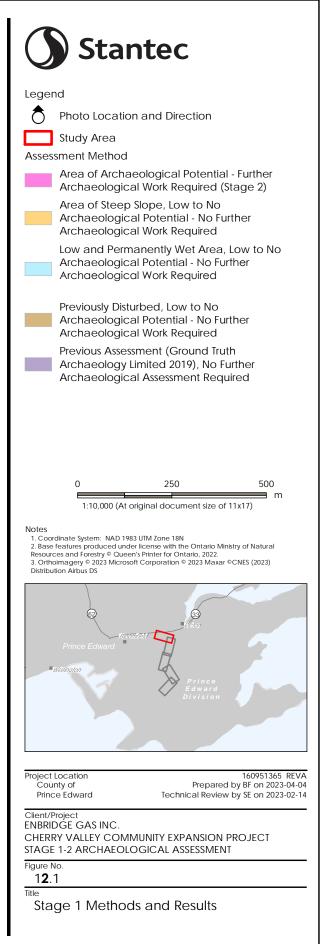


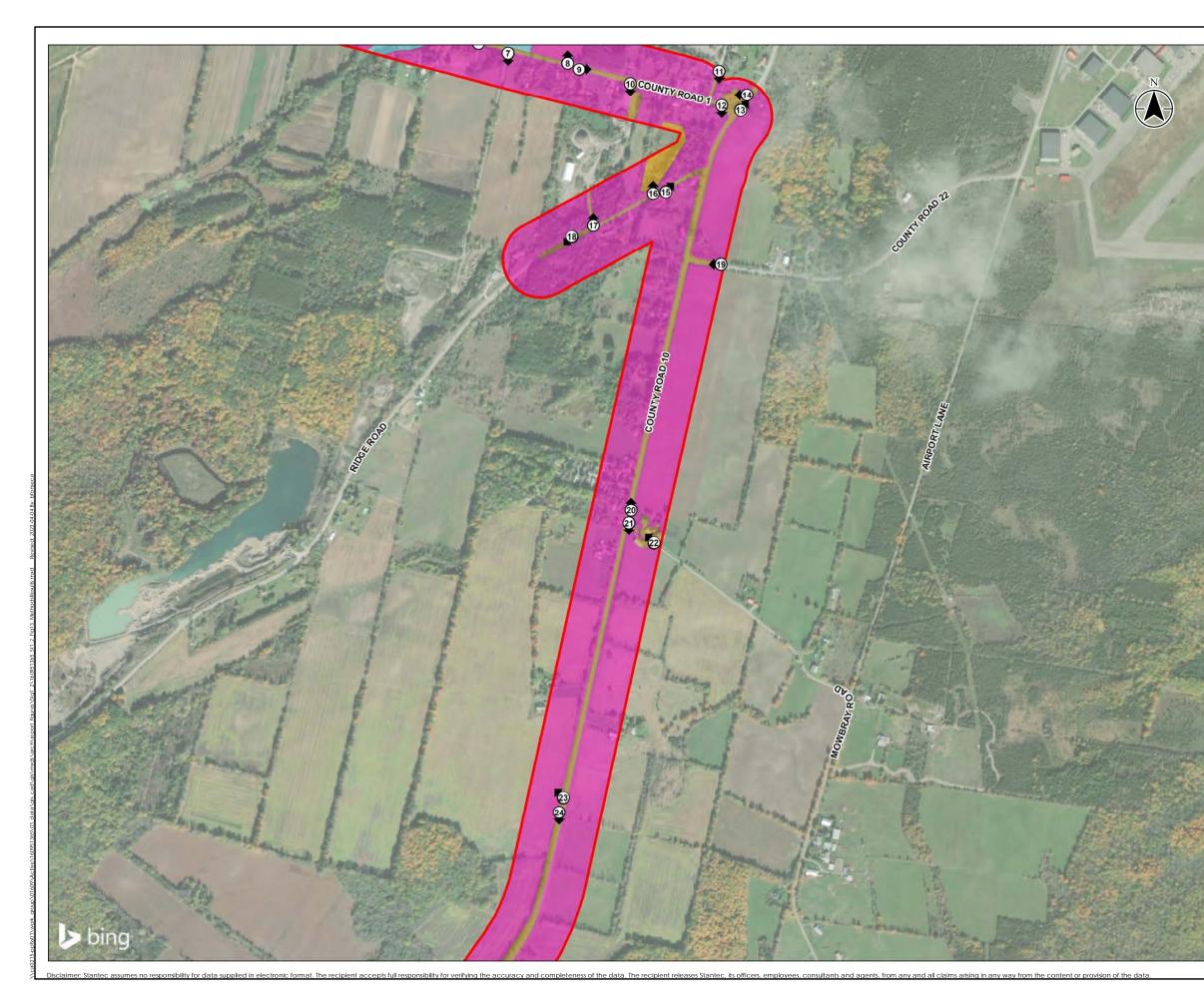
Client/Project ENBRIDGE GAS INC. CHERRY VALLEY COMMUNITY EXPANSION PROJECT STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT Figure No.

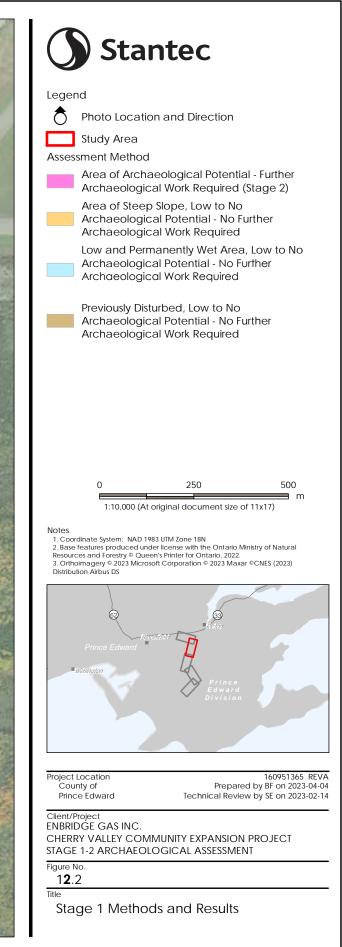
11

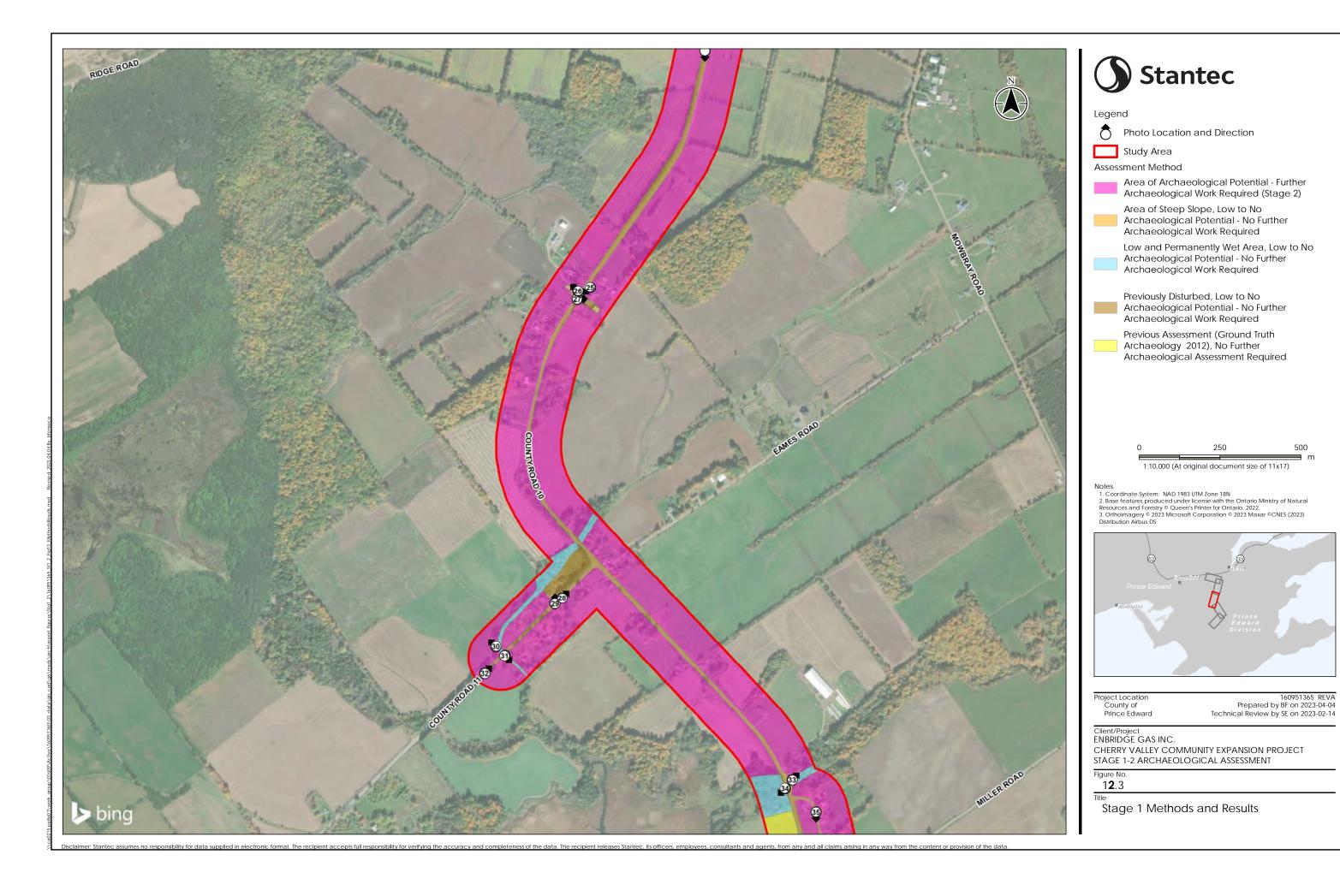
Title Part of the 1932 Topographic Map for Prince Edward County

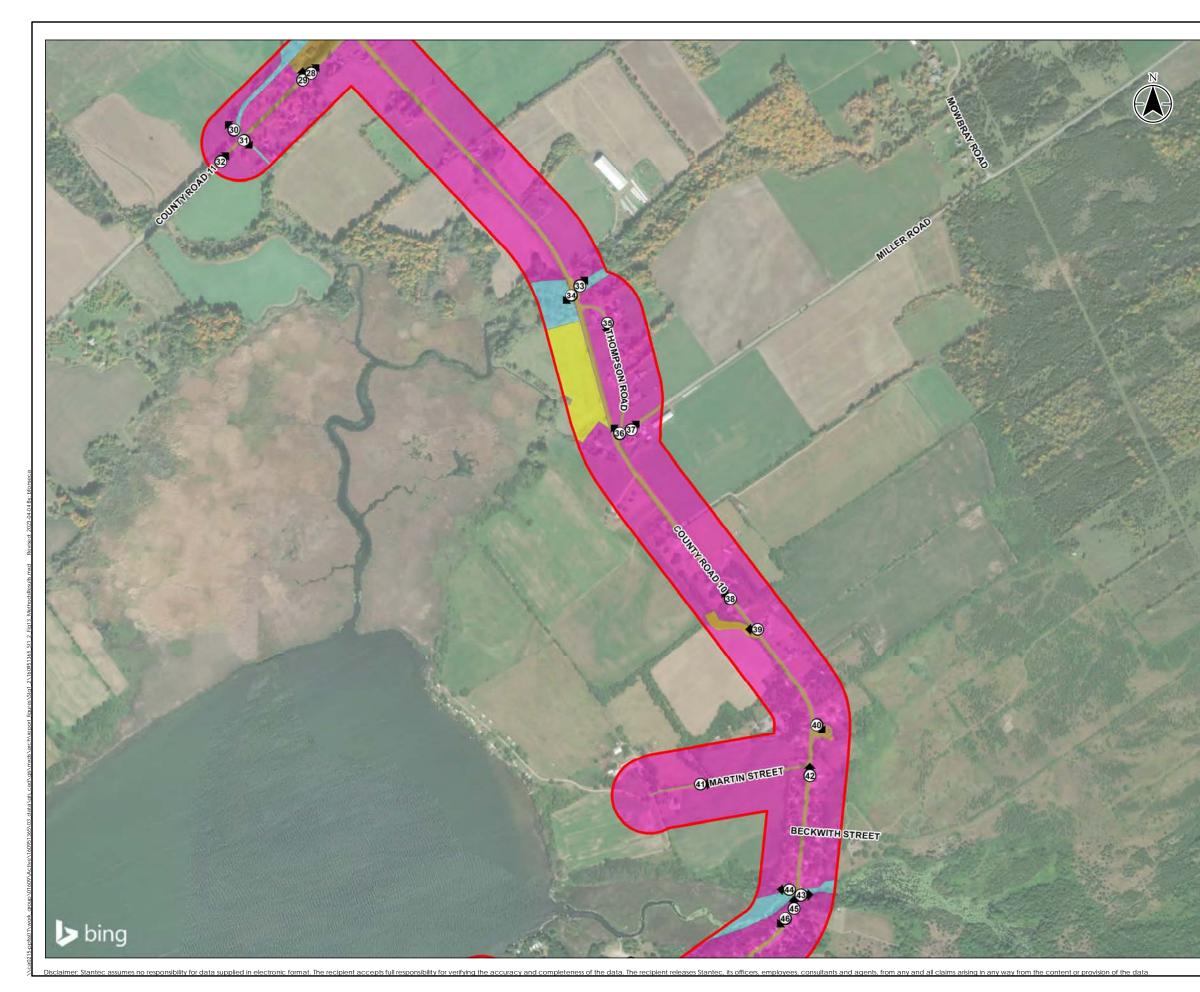


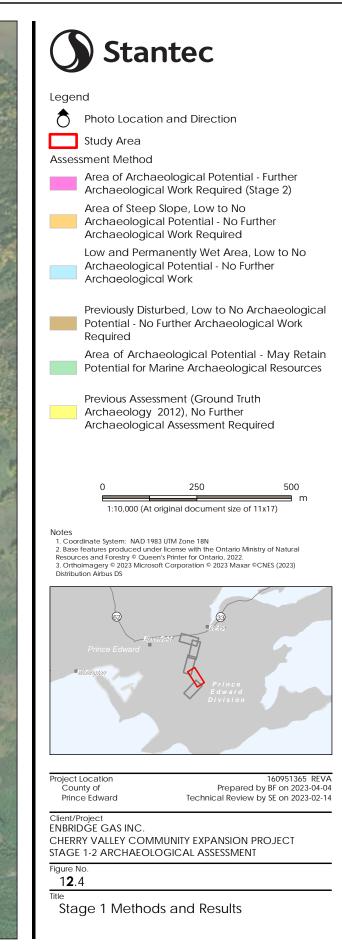


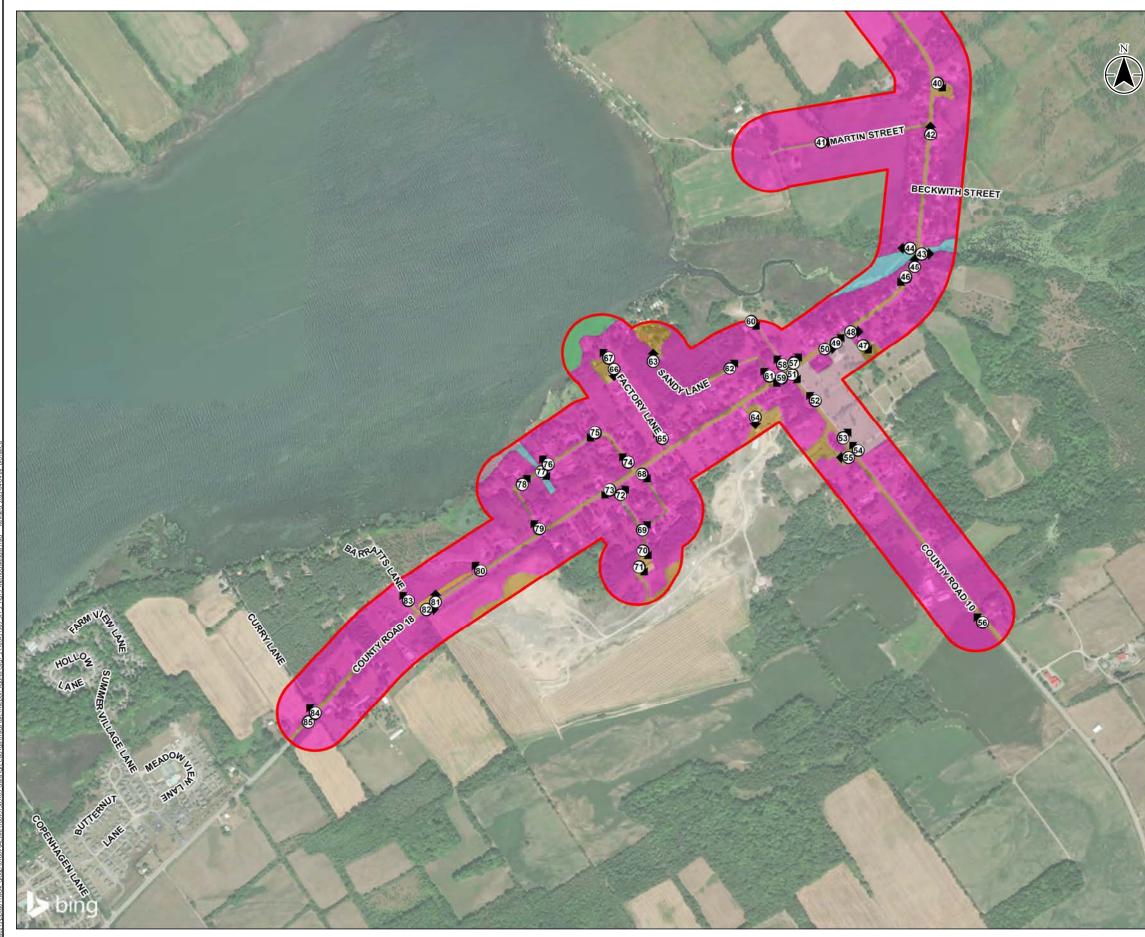


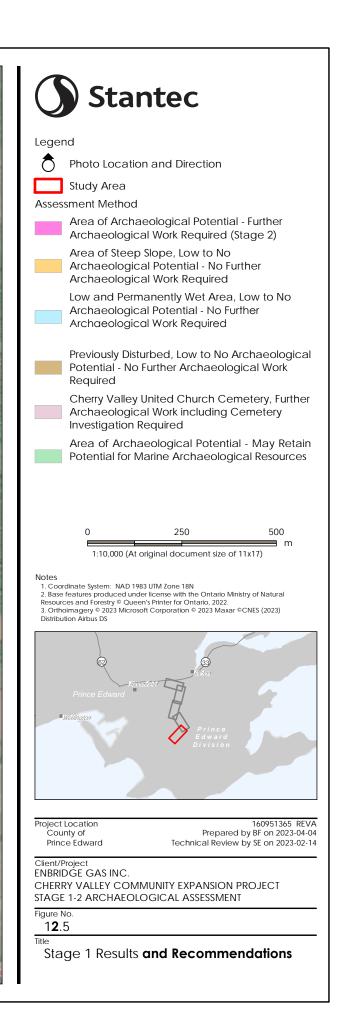












9 Closure

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.

Digitally signed by Colin Varley Date: 2023.04.25 10:34:01 -04'00'

Quality Review

(signature)

Colin Varley – Senior Archaeologist, Senior Associate

Dickson, Parker 2023.04.25 09:27:40 -04'00'

Independent Review

(signature)

Parker Dickson – Senior Archaeologist, Senior Associate



STAGE 1 ARCHAEOLOGICAL ASSESSMENT: CHERRY VALLEY COMMUNITY EXPANSION PROJECT Various Lots and Concessions in the Geographic Townships of Athol and Hallowell, Prince Edward County, Now the City of Prince Edward County, Ontario

April 24, 2023

Prepared for: Enbridge Gas Inc. 10 Honda Boulevard Markham, Ontario L6C 0M6 Tel: 416-454-9539 Email: Kelsey.Mills@enbridge.com

Prepared by: Stantec Consulting Ltd. 400 - 1331 Clyde Avenue Ottawa, Ontario K2C 3G4

Project Number: 160951365

Licensee: Patrick Hoskins, MA License Number: P415 Project Information Form Number: P415-0428-2023

ORIGINAL SUPPLEMENTARY DOCUMENTATION

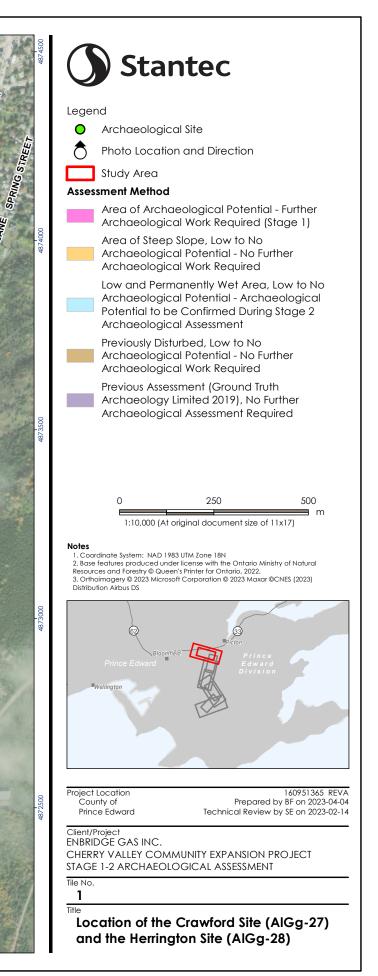
Table of Contents

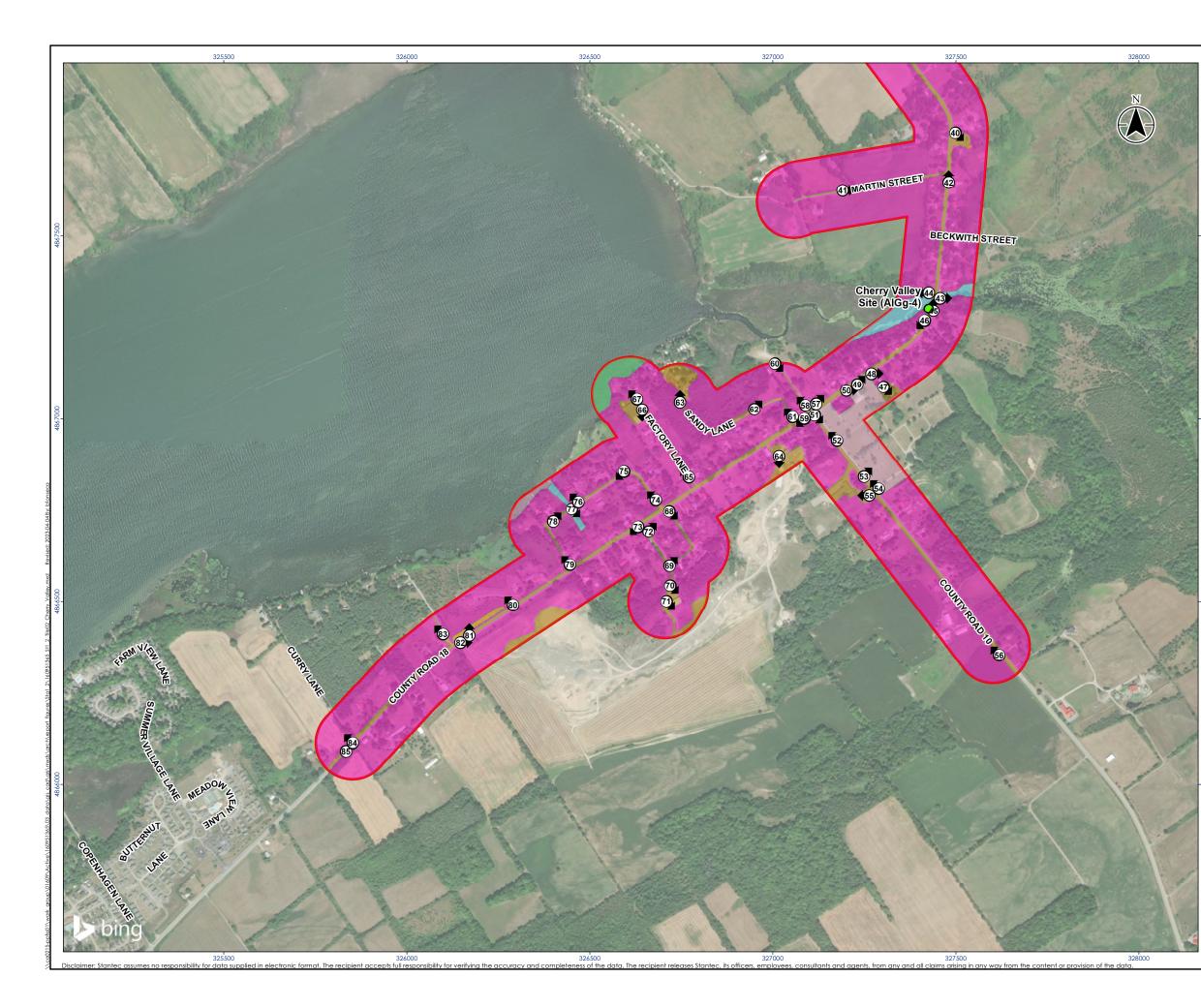
1	MAPPING	1
LIST OF TILES		
	ocation of the Crawford Site (AlGg-27) and the Herrington Site (AlGg-28)	

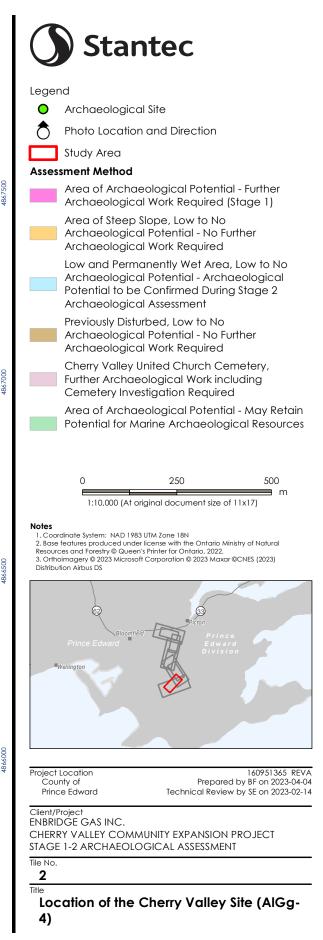
1 Mapping

Mapping on the following pages shows the exact locations of registered archaeological sites within the study area as indicated by the *Ontario Archaeological Sites Database* (Government of Ontario 2023a).









Appendix F Cultural Heritage Checklist



Ministry of Tourism, Culture and Sport

Programs & Services Branch 401 Bay Street, Suite 1700 Toronto ON M7A 0A7

Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes A Checklist for the Non-Specialist

The purpose of the checklist is to determine:

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

Processes covered under this checklist, such as:

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

Cultural Heritage Evaluation Report (CHER)

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

The CHER will help you:

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

Other checklists

Please use a separate checklist for your project, if:

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

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

-	-	roperty Name Gas Cherry Valley Community Expansion Project		
		roperty Location (upper and lower or single tier municipality) ward County		
-	ponent N bridge	lame Gas Inc.		
Pro	ponent (Contact Information		
1.	Is there	e a pre-approved screening checklist, methodology or process in place?	Yes	No ✓
2.	Has th	e property (or project area) been evaluated before and found not to be of cultural heritage value?	Yes	No ✓
۷.	1105 (11			V
_			Yes	No
3.		property (or project area):		
	a.	identified, designated or otherwise protected under the <i>Ontario Heritage Act</i> as being of cultural heritage value?	✓	
	b.	a National Historic Site (or part of)?		✓
	C.	designated under the Heritage Railway Stations Protection Act?		\checkmark
	d.	designated under the Heritage Lighthouse Protection Act?		\checkmark
	e.	identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)?		\checkmark
	f.	located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?		 Image: A start of the start of

Ра	rt B: Sc	reening for Potential Cultural Heritage Value		
			Yes	No
4.	Does t	he property (or project area) contain a parcel of land that:		
	a.	is the subject of a municipal, provincial or federal commemorative or interpretive plaque?		\checkmark
	b.	has or is adjacent to a known burial site and/or cemetery?	\checkmark	
	C.	is in a Canadian Heritage River watershed?		\checkmark
	d.	contains buildings or structures that are 40 or more years old?	\checkmark	
			Yes	No
5.	Is ther	e local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area)):	
	a.	is considered a landmark in the local community or contains any structures or sites that are important in defining the character of the area?	\checkmark	
	b.	has a special association with a community, person or historical event?		\checkmark
	0	contains or is part of a cultural heritage landscape?		\checkmark
	С.			
	υ.			
	U.			

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

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

For more information, see the Ministry of Tourism, Culture and Sport's <u>Ontario Heritage Toolkit</u> or <u>Standards and Guidelines for</u> <u>Conservation of Provincial Heritage Properties</u>.

In this context, the following definitions apply:

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

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

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

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

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

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

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

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

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

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

- the approval authority
- the proponent
- the Ministry of Tourism, Culture and Sport
- i. designated under the Ontario Heritage Act
 - individual designation (Part IV)
 - part of a heritage conservation district (Part V)

Individual Designation – Part IV

A property that is designated:

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

Heritage Conservation District – Part V

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

For more information on Parts IV and V, contact:

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

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

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

The primary purpose of the agreement is to:

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

For more information, contact:

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

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

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

Registers include:

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

For more information, contact:

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

iv. subject to a notice of:

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

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

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

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

For more information, contact:

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

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

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

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

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

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

For more information, see the National Historic Sites website.

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

For more information, see the Directory of Designated Heritage Railway Stations.

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

For more information, see the <u>Heritage Lighthouses of Canada</u> website.

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

For more information, contact the Federal Heritage Buildings Review Office.

See a directory of all federal heritage designations.

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

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

For more information, see Parks Canada – World Heritage Site website.

Heritage resources are often recognized with formal plaques or markers.

Plaques are prepared by:

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

For more information, contact:

- <u>municipal heritage committees</u> or local heritage organizations for information on the location of plaques in their community
- Ontario Historical Society's Heritage directory for a list of historical societies and heritage organizations
- Ontario Heritage Trust for a list of plaques commemorating Ontario's history
- Historic Sites and Monuments Board of Canada for a list of plaques commemorating Canada's history

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

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

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

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

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

For more information, contact the Canadian Heritage River System.

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

- your conservation authority
- municipal staff

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

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

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

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

A building or structure can include:

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

For more information on researching the age of buildings or properties, see the Ontario Heritage Tool Kit Guide <u>Heritage</u> <u>Property Evaluation</u>.

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

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

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

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

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

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

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

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

An internet search may find helpful resources, including:

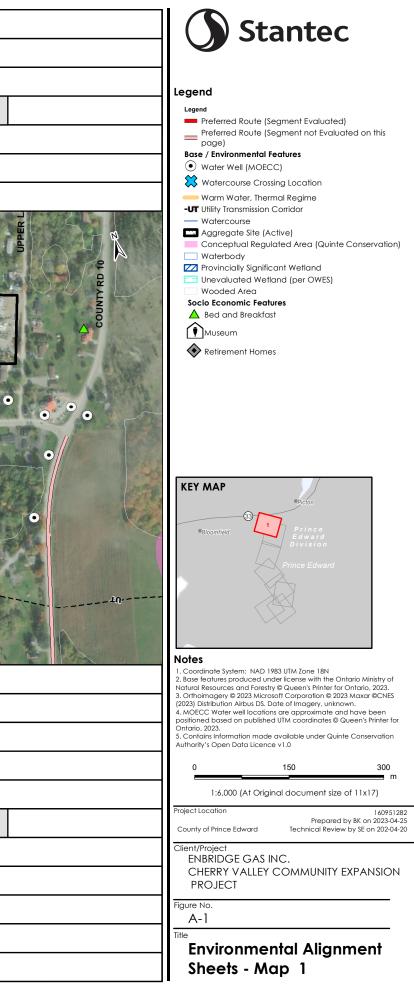
- historical maps
- historical walking tours
- municipal heritage management plans
- cultural heritage landscape studies
- municipal cultural plans

Information specific to trails may be obtained through Ontario Trails.

Appendix G Alignment Sheets

	CONSERVATION AUTHORITY REGULATED AREA / ANSI				Conceptual Regulated Area (QC	;)			
	WETLAND WATERCOURSE ANSI				Wetland Wat	ercourse	·		
Irces	VEGETATION	W <mark>bodla</mark> hd			Woodland		Woodland		
Resources	WATER WELL WITHIN 50 m	Wells Prese		Water WellWater Well		Water Well			Wells Present
	LINEAR FEATURES		Driveways & Roads			Road		riveways & Roads	
	ENVIRONMENTALLY SENSITIVE AREA						Corridor		
	SPECIES AT RISK (SAR) HABITAT				Pot SAR Habitat				
Note Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer Refer R	2: No clearing activities during the migratory ing bird restricted activity periol (April 1 – August thout preconstruction nesting surveys. Refer to 5.2 (Row 4.4.2) of the ER and Section 8.2 of the 12022. 3: Tree removal to avoid the active season for mid-April to mid-September). Refer to Table 5.2 (4.2.) of the ER and Section 8.2 of the ECMM 4: Groundwater wells present – Refer to Section and Table 5.2 (Row 4.3.3) of the ER, and Section of the ECMM 2022. 5: Water well monitoring program recommended. to Section 7.1.2 and Table 5.2 (Row 4.3.3) of the 6: Permit from Quinte Conservation is required. to Section 7.1.2 and Table 5.2 (Row 4.3.3) of the 6: Permit from Quinte Conservation is required. to Section 7.1.2 and Table 5.2 (Row 4.3.3) of the 5.2 (Row 4.5.2) of the ER and Section 7.5 7. Linear facility – Refer to Section 4.5.5 and 5.2 (Row 4.5.1) of the ER and Section 7.5 8: Maintain emergency egress. Refer to Sections and 4.5.4) of the ECM 2022. 8: Maintain emergency egress. Refer to Sections and 3.5 of the ECM 2022. 9: Implement Suspect Soils Program. Refer to m 4.5.10 and Table 5.2 (Rows 4.4.1 and Table 5.2 (Row 4.3.1) of the ECM 2022. 9: Implement Suspect Soils Program. Refer to m 4.5.10 and Table 5.2 (Rows 4.4.1 and Table 6.2 (Row 4.4.1 and Table 5.2 (Row 4.4.1 and Table 6.2 (Row 4.4.1 and Table 5.2 (Row 4.4.1 and Table 6.2 (Row 4.4.1 and Table 5.2 (Row 4.4.1 and Table 6.1 be 10.1) to 1.5 (Row 15.4.1 b) of the ECM 7.1 (Varrunder waterocurse crossing - In-water permited from July 16 to March 14 (no work from 15 to July 15). Taker to Section 5.2.0 for the 2.2007 from the NINRF may be required if eese, or protected habitat, are impacted by 1 activities. Refer to Section 4.4.2 and Table 5.2 (4.2.1) of the ECM				COUNTY RD 1				
MINKI	: ministry of Natural Resources and Porestry		AR				T		
	CONSTRUCTION REQUIREMENTS		Nofe 8			Note 6	Note 7	Note 8	
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)								
	PIPELINE CROSSING METHODS				Note 1				
ition	VEGETATION RESTRICTIONS	No <mark>les 2</mark> & 3			Notes 2 & 3		Notes 2 & 3		
Mitiga	PERMITTING REQUIREMENTS				Note 6				
stion /	MONITORING	Note 4 4	&5 Note 4	Note 4 & 5		Note 4 & 5			Note 4 & 5
Construction Mitigation	SPECIES AT RISK (SAR)				Note 11				
Ů	POTENTIALLY CONTAMINATED SITES								

\\ca021 5.ppfiss01\work_group\01 609\Active\1 60951365\03_data\gis_cad\gis_mxds\ap\report_figures\ER\160951365 Revied: 2023-04-25 By: bakaur



	CONSERVATION AUTHORITY REGULATED AREA / ANSI												
	WETLAND WATERCOURSE ANSI												
rces	VEGETATION			Woodland		Woodland			Woodland				Woodland
Resources	WATER WELL WITHIN 50 m			Vells resent			Water Well	Water Well		We			Water Well
	LINEAR FEATURES			Road	Driveways & Roads	Jtility Transmission Corrid	Driveways & Roads		Drivew & Roa	ays	Dri	veways Road	i
	ENVIRONMENTALLY SENSITIVE AREA												
	SPECIES AT RISK (SAR) HABITAT												
Note Reference of the second s	 No clearing activities during the migratory ding bird restricted activity period (April 1 – August vithout preconstruction nesting surveys. Refer to 5 2 (Row 4.2.) of the ER and Section 2.2 of the M 2022. Tree removal to avoid the active season for (mid-April to mid-September). Refer to Table 5.2 (4.4.2) of the ER and Section 8.2 of the ECMM 2.4.4 Groundwater wells present – Refer to Section and Table 5.2 (Row 4.3.3) of the ER, and Section 1 of the ECMM 2022. Twee rwell monitoring program recommended. r to Section 7.1.2 and Table 5.2 (Row 4.3.3) of the 6. Permit from Quinte Conservation is required. r to Section 7.4.4.1 and Table 5.2 (Row 4.3.3) of the 5.2 (Row 4.5.5) of the ER and Section 7.5 e ECMM 2022. Heart ractility – Refer to Section 1.5.5 and 5.2 (Row 4.5.5) of the ER and Sections 7.1 Linear facility – Refer to Sections 12.0 and of the ECMM 2022. Imaintain emergency egress. Refer to Section 7.6 and 5.4 and Table 5.2 (Rows 4.5.10) of the ER section 8.1.5 of the ECMM 2022. Imaintain emergency active 3.5.10) of the ER section 3.1.5 und 15.0 of the ECMM 2022. Imaintain emergency active 3.5.10) of the ER section 3.1.5 und Table 5.2 (Rows 4.5.10) of the ER section 3.1.5 und Table 5.2 (Rows 4.5.10) of the ER section 3.1.5 und Table 5.2 (Rows 4.5.10) of the ER section 3.1.5 und Table 5.2 (Rows 4.5.10) of the ER section 3.1.5 und Table 5.2 (Rows 4.5.10) of the ER section 3.1.5 und Table 5.2 (Rows 4.5.10) of the ER section 3.1.5 und Table 5.2 (Rows 4.5.10) of the ER section 3.1.5 und Table 5.2 (Rows 4.5.10) of the ER section 3.1.5 und Table 5.2 (Rows 4.5.10) of the ER section 3.1.5 und Table 5.2 (Rows 4.5.10) of the ER section 3.1.5 und Table 5.2 (Rows 4.5.10) of the ER section 3.1.5 und Table 5.2 (Rows 4.5.10) of the ER section 3.1.5 und Table 5.2 (Rows 4.5.10) of the ER section 3.1.5 und Table 5.2 (Rows 4.5.10) of the ER section 3.1.5 und Table 5.2 (Rows 4.5.10) of the ER section 3.1.5 und Table 5.2 (Rows 4.5.10) of the E	UPPER LAKE ST	COUNTY RD 1						COUNTY OF PRINCE EDWARD			Sunon New York	•
Spec the s proje (Row 2022 Note Healt Secti and s ECR ECR Man HDD	12: Prior to working in this area a Butternut th Assessment should be completed. Refer to on 4.4 2 and Table 5.2 (Rows 4.5.2) of the ER Section 8.2 of the ECMM 2022. nyms List: Environmental Report (Slanlec 2023) Mic Enbridge Construction and Maintenance ual, September 25, 2022 (ECMM 2022) : Horizontal Directional Drilling XF: Ministry of Natural Resources and Forestry		3) 0										
	CONSTRUCTION REQUIREMENTS			Note 6		Note 7	Note 6 8		Note 8			Note 6	
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)												
	PIPELINE CROSSING METHODS												
ation	VEGETATION RESTRICTIONS			Notes 2 & 3		Notes 2 & 3			Notes 2 & 3				Notes 2 & 3
Mitigo	PERMITTING REQUIREMENTS												· ·
Construction Mitigation	MONITORING		Not	ie 4 & 5			Note 4 & 5	Note 4 & 5		Not &	e 4 5		Note 4 & 5
onstru	SPECIES AT RISK (SAR)												
Ŭ	POTENTIALLY CONTAMINATED SITES												



CONSERVATION AUTHORITY REGULATED AREA / ANSI				Conceptual Regulated Area (QC)						Stantec
WETLAND WATERCOURSE ANSI		Watercourse			Water	ourse				
			Woodland	Voodland		Woodland				Legend
WATER WELL WITHIN 50 m			Water Well				Wells Present		Wells Present	Legend Preferred Route (Segment Evaluated)
LINEAR FEATURES	Driveways & Roads				۲ri	reways Roads		eways oads		Preferred Route (Segment not Evaluated on this page)
ENVIRONMENTALLY SENSITIVE AREA										Base / Environmental Features Water Well (MOECC) Watercourse Crossing Location
SPECIES AT RISK (SAR) HABITAT		Pot SAR Habitat			Pot SAR Habitat					Watercourse Crossing Location Watercourse Aggregate Site (Active)
Construction Mitigation Notes: Note 1: HDD construction method recommended. Refer to Section 4.4.1 and Table 5.2 (Row 4.4.1) of the ER, and Sections 12.1, 12.4 and 15.0 of the ECMM 2022. Note 2: No clearing activities during the migratory breeding bird restricted activity period (April 1 – August 31) without preconstruction nesting surveys. Refer to Table 5.2 (Row 4.4.2) of the ER and Section 8.2 of the ECMM 2022. Note 3: Thee removal to avoid the active season for bats (mid-April to mid-September). Refer to Table 5.2 (Row 4.4.2) of the ER and Section 8.2 of the ECMM 2022. Note 4: Groundwater wells present – Refer to Section 4.3.3 and Table 5.2 (Row 4.3.3) of the ER, and Section 8.5.2 of the ECMM 2022. Note 4: Groundwater wells present – Refer to Section 4.3.3, and Table 5.2 (Row 4.3.3) of the ER, Note 6: Permit from Quinte Conservation is required. Refer to Section 4.3.7 and 4.4.1 and Table 5.2 (Row 4.3.2, 4.3.7, 4.4.1 and 4.4.2) of the ER and Section 7.5 of the ECMM 2022. Note 3: Unear facility – Refer to Section 4.5.5 and Table 5.2 (Row 4.5.5) of the ER and Section 7.5 of the ECMM 2022. Note 3: Implement Suspect Soils Program. Refer to Section 4.5.1 and Table 5.2 (Rows 4.5.1 and 4.5.4.) of the ER and Section 18.0 of the ECMM 2022. Note 3: Implement Suspect Soils Program. Refer to Section 4.5.1 and Table 5.2 (Rows 4.5.1 and 4.5.4.) of the ER and Section 18.0 of the ECMM 2022. Note 10: Warmweter waterocurse crossing - In-water work permitted from July 16 to March 14 (no work from March 15 to July 15). Refer to Section 4.4.1 and Table 5.2 (Row 4.4.1) of the ER and Section 7.5 of the ECMM 2022. Note 12: Prior to working in this area a Butternut Health Assessment Should be completed. Refer to Section 4.4.2 of the ER and Section 7.5 of the ECMM 2022. Note 12: Prior to working in this area a Butternut Health Assessment Should be completed. Refer to Section 4.4.2 of the ER and Section 7.5 of the ER and Section 8.2 of the ECMM 2022. Note 12: Prior to working in this area a Butternut Health Assessment Should be comple					COUNTY RD 10 CP	0-2			See Page A-4	Conceptual Regulated Area (Quinte Conservation) Waterbody Provincially Significant Wetland Unevaluated Wetland (per OWES) Wooded Area Socio Economic Features Recreation Recreation
						12	- 64			Notes 1. Coordinate System: NAD 1983 UTM Zone 18N
CONSTRUCTION REQUIREMENTS	Note 8					Note 8		8		 Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023. Orthoimagery © 2023 Microsoft Corporation © 2023 Maxar @CNES
FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)										 (2023) Distribution Airbus DS. Date of Imagery, unknown. 4. MOECC Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2023.
PIPELINE CROSSING METHODS		Note 1			Note 1					5. Contains Information made available under Quinte Conservation Authority's Open Data Licence v1.0
			Notes 2 & 3	Notes 2 & 3		Notes 2 & 3				0 150 300 m
				Note 6						1:6,000 (At Original document size of 11x17) Project Location 16095128
			Note 4 & 5				Note 4 & 5		Note 4 & 5	Prepared by BK on 2023-04-2 County of Prince Edward Technical Review by SE on 202-04-2
SPECIES AT RISK (SAR)		Note 11			Note 11					Client/Project ENBRIDGE GAS INC. CHERRY VALLEY COMMUNITY EXPANSION PROJECT
										Figure No. A-3
Revised 2023-0-1-25 By: Down and the second strategy by both and the second strategy by by the second strategy by										Environmental Alignment Sheets - Map 3

	CONSERVATION AUTHORITY REGULATED AREA / ANSI WETLAND	Conceptual Regulated Area (QC)	Conceptual Regulated Area (QC) Wetland Watercourse	Stantec
es	WATERCOURSE ANSI VEGETATION	Wettand Watercourse	Wedald Watercourse	
esourc	WATER WELL	Wells Wells Water Well Water Well	Water Well Water Well	Legend
Ľ.	WITHIN 50 m LINEAR FEATURES	Driveways Dend Present Driveways Driveways	Drivsways Poar	 Preferred Route (Segment Evaluated) Preferred Route (Segment not Evaluated on this page)
	ENVIRONMENTALLY SENSITIVE AREA	& Roads & Roads & Roads	& Roads	Base / Environmental Features Water Well (MOECC)
	SPECIES AT RISK (SAR) HABITAT	Pot SAR Habitat	Pot SAR Habitat	Watercourse Crossing Location Watercourse
Note Reference ER, e 2022 Note ECM Note Saturn Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference Reference	 No clearing activities during the migratory ing bird restricted activity period (April 1 – August thout preconstruction nesting surveys. Refer to 5.2 (Row 4.4.2) of the ER and Section 8.2 of the A2022. Tere removal to avoid the active season for mid-April to mid-September). Refer to Table 5.2 4.4.2) of the ER and Section 8.2 of the ECMM Groundwater wells present – Refer to Section and Table 5.2 (Row 4.3.3) of the ER, and Section 6.2 of the ECMM 2022. Water well monitoring program recommended. to Section 7.1.2 and Table 5.2 (Row 4.3.3) of the 6: Permit from Quinte Conservation is required. to Section 7.3 rand 4.4 i and Table 5.2 (Rows 4.3.7, 4.4.1 and 4.4.2) of the ER and Section 7.5 ECMM 2022. Linear facility – Refer to Section 4.5.5 and 5.2 (Row 4.5.5) of the ER and Section 5.2.0 and the ECMM 2022. 	See Page A-3		 Conceptual Regulated Area (Quinte Conservation) Waterbody Provincially Significant Wetland Unevaluated Wetland (per OWES) Wooded Area Socio Economic Features Bed and Breakfast Nature Centre
THE E THE E Section 2010 A section 2	8: Maintain emergency egress. Refer to Sections and 4.5.4 and Table 5.2 (Rows 4.5.1 and 4.5.4) of And Section 18.0 of the ECMM 2022. 9: Implement Suspect Solis Program. Refer to n 4.5.10 and Table 5.2 (Rows 4.5.10) of the ER ection 8.13 of the ECMM 2022. 10: Warnwater watercourse crossing - In-water parmitted from July 16 to March 14 (no work from 15 to July 15). Refer to Section 4.4.1 and Table ow 4.4.1) of the ER and Section 15.2 of the 2022. 11: Overall Benefit Permit under the Endangered es Act, 2007 from the MNRF may be required if decise, or protected habitat, are impacted by 4.4.20 of the ER and Section 7.5 of the ECMM 12. Prior to working in this area a Butternut Assessment should be completed. Refer to n 4.4.2 and Table 5.2 (Rows 4.5.2) of the ER ection 8.2 of the ECMM 2022. yms List: Invironmental Report (Stantec 2023) A: Enbridge Construction and Maintenance al, September 25, 2022 (ECMM 2022) Horizontal Directional Drilling * Ministry of Natural Resport systems	Control of the second of the s	CR10-4 ¹ Howeson ho See Page A-5	KEY MAP Bloomfield Prince Edward Division Prince Edward
ort_tigure				Notes
s/ap/rep	CONSTRUCTION REQUIREMENTS	Note 8Note 6Note 8Note 8	Note 6	1. Coordinate System: NAD 1983 UTM Zane 18N 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023, 3. Orthoimagery © 2023 Microsoft Corporation © 2023 Maxar ©CNES
\gis/mxd	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN) PIPELINE CROSSING			 (2023) Distribution Airbus DS. Date of Imagery, unknown. 4. MOECC Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2023.
a/gis_cac	METHODS VEGETATION RESTRICTIONS	Note 1	Note 1	5. Contains Information made available under Quinte Conservation Authority's Open Data Licence v1.0
gation		Notes 2 & 3	Notes 2 & 3	0 150 300 m 1:6,000 (At Original document size of 11x17)
n Mitiç	PERMITTING REQUIREMENTS	6 Note 4	6 Note 4 & 5 Note 4 & 5	Project Location 16095126 Prepared by BK on 2023-04-2
tructio	SPECIES AT RISK (SAR)	Note Note 11	Note	County of Prince Edward Technical Review by SE on 202-04-2 Client/Project
	POTENTIALLY CONTAMINATED		11	ENBRIDGE GAS INC. CHERRY VALLEY COMMUNITY EXPANSION PROJECT
.work_gro	SITES			Figure No.
vca0215-pptss017work_g evised: 2023-04-25 By: ba				
Nca0215 Revised: 2				Environmental Alignment Sheets - Map 4

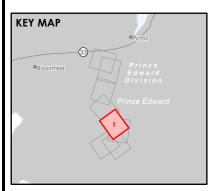
		CONSERVATION AUTHORITY REGULATED AREA / ANSI		Conceptual Regulated Area (QC)						
	- I	WETLAND WATERCOURSE ANSI								
sec	- H	VEGETATION						Woodland		
Resources		WATER WELL WITHIN 50 m			Water Well Water Well		Water Well		Wells Present	
	- F	LINEAR FEATURES			DringswaysRoad & Roads	Driveways 8 Roads	Driveways & Roads		Driveways & Roads	
	ŀ	ENVIRONMENTALLY SENSITIVE AREA								
	ł	SPECIES AT RISK (SAR) HABITAT								
ERV160951365_EREF_EnviroAlignmentSheetMapbook.mxd 프로 2010 프로 2010 프로 2010 프로 2010	sefer to b R, and 222. ote 2: ceeding 1) withe bile 5.2 CMM 2 22. CMM 2 22. ote 3: ats (mik tow 4.4. 22. ote 3: ats (mik tow 4.2. 22. ote 3: ats (mik tow 4.4. 3.2, 4.4. ats (mik tow 4.4. 22. ats (mik tow 4.4. 22. ats (mik tow 4.4. 22. ats (mik tow 4.4. 22. ats (mik tow 4.4. 22. ats (mik tow 4.4. 22. ats (mik tow 4.4. 22. and 12. and 13. and 13. and 14. and 1	Licion Mitigation Notes: HDD construction method recommended. Section 4.4.1 and Table 52 (Row 4.4.1) of the Section 52.1, 12.4 and 15.0 of the ECMM No clearing activities during the migratory g bird restricted activity period (April 1 – August out preconstruction nesting surveys. Refer to 2 (Row 4.2.2) of the ER and Section 8.2 of the 2022. There removal to avoid the active season for d'April to mid-September). Refer to Table 5.2 4.2) of the ER and Section 8.2 of the ECMM Groundwater wells present – Refer to Section d' Table 5.2 (Row 4.3.3) of the ER, and Section 4.2 of the ER and Section 8.2 of the ECMM Groundwater wells present – Refer to Section d' Table 5.2 (Row 4.3.3) of the ER, and Section 7.4 Section 7.1.2 and Table 5.2 (Row 4.3.3) of the Permit from Quinte Conservation is required. Section 7.1.2 and Table 5.2 (Row 4.3.3) of the Permit from Quinte Conservation is required. Section 7.3.7 and 4.4.1 and Table 5.2 (Row 4.5.3 and 4.4.2) of the ER and Section 7.5 CMM 2022. Linear facility – Refer to Section 4.5.5 and 2 (Row 4.5.5) of the ER and Section 7.5 cMM 2022. Linear facility – Refer to Section 4.5.5 and 4.5.4 and Table 5.2 (Rows 4.5.1 and 4.5.4) of and Section 18.0 of the ECMM 2022. Linear facility – Refer to Section 4.5.4 and 4.5.10 and Table 5.2 (Rows 4.5.1 and 4.5.4) of and Section 18.0 of the ECMM 2022. Linear facility 15). Refer to Section 4.2.1 and Table 4.4.1 (16 recMM 2022. Linear facility 15). Refer to Section 4.2.1 and Table 4.4.2007 from the MNRF may be required if 2.8. (2007 from the MNRF may be required if 2.9. Original Benefit Permit under the Endangened A.2. (2007 from the MNRF may be required if 2.9. (2007 from the MNRF may be required if	CR10-4 Sêe Pa	nge A-4 Trio,	MILER MILER		COUNTYOU			
ap\report		CONSTRUCTION REQUIREMENTS			Note 6 Note 8	Note 8	Note 8		Note 8	
jis/mxds'		FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)								
gis_cad\{		PIPELINE CROSSING METHODS								
3_data\{		VEGETATION RESTRICTIONS						Notes 2 & 3		
951365\03_date	האווואר	PERMITTING REQUIREMENTS		Note 6	ļ					
tive/1605		MONITORING			Note 4 & 5 Note 4 & 5		Note 4 & 5		Note 4 & 5	
p\01609\Active\160 Jr Construction		SPECIES AT RISK (SAR)								
	ا ز	POTENTIALLY CONTAMINATED SITES								
s01\work)4-25 By: I										
0215-ppfs >d: 2023-C										
\\car Revise										



Legend



Legend
Preferred Route (Segment Evaluated)
Preferred Route (Segment not Evaluated on this page)
Base / Environmental Features
Water Well (MOECC)
Watercourse Crossing Location
- Watercourse
Aggregate Site (Active)
Conceptual Regulated Area (Quinte Conservation)
Waterbody
Provincially Significant Wetland
Unevaluated Wetland (per OWES)
Wooded Area
Socio Economic Features
Bed and Breakfast
Nature Centre
Retirement Homes



Notes

Coordinate System: NAD 1983 UTM Zone 18N
 Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023.
 Orthoimagery © 2023 Microsoft Carporation © 2023 Maxar ©CNES (2023) Distribution Airbus DS. Date of Imagery, unknown.
 MOECC Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2023.
 Contains Information made available under Quinte Conservation Authority's Open Data Licence v1.0

0	150	300
		m

1:6,000 (At Original document size of 11x17)

Project Location

County of Prince Edward

160951282 Prepared by BK on 2023-04-25 Technical Review by SE on 202-04-20

Client/Project ENBRIDGE GAS INC.

CHERRY VALLEY COMMUNITY EXPANSION PROJECT

Figure No.

A-5 ïtle

Environmental Alignment Sheets - Map 5

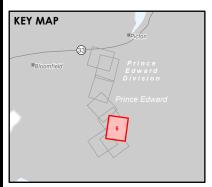
	CONSERVATION AUTHORITY REGULATED AREA / ANSI		Reg	Conceptual julated Area (QC)				
	WETLAND WATERCOURSE ANSI			Wetland Wate	ercourse			
rces	VEGETATION		Woodland	d			Woo	dland
Resources	WATER WELL WITHIN 50 m		Wells Present			Wells Present		
	LINEAR FEATURES		Driveways & Roads			Driveways & Roads		
	ENVIRONMENTALLY SENSITIVE AREA	I						
	SPECIES AT RISK (SAR) HABITAT				Pot SAR Habitat			
Note Texperimental and the sector of the sec	2: No clearing activities during the migratory ing bird restricted activity period (April 1 – August thout preconstruction nesting surveys. Refer to 5.2 (Row 4.4.2) of the ER and Section 8.2 of the 4.022. 3: There emoval to avoid the active season for mid-April to mid-September). Refer to Table 5.2 (A.4.2) of the ER and Section 8.2 of the ECMM 4: Groundwater wells present – Refer to Section and Table 5.2 (Row 4.3.3) of the ER, and Section 4: Groundwater wells present – Refer to Section and Table 5.2 (Row 4.3.3) of the ER and Table 5.2 (Row 4.3.3) of the ER and Table 5.2 (Row 4.3.3) of the SE Water well monitoring program recommended. to Section 7.1.2 and Table 5.2 (Row 4.3.3) of the 6: Permit from Quinte Conservation is required. to Section 4.3.7 and 4.4.1 and Table 5.2 (Row 4.3.3) of the 5.2 (Row 4.5.5) of the ER and Section 7.5 FCIM 2022. 7: Linear facility – Refer to Section 4.5.5 and 5.2 (Row 4.5.5) of the ER and Section 7.5 and 4.5.4 and Table 5.2 (Row 4.3.1 of the ECMM 2022. 8: Maintain emergency egress. Refer to Sections and 4.5.4) of The ECMM 2022. 9: Implement Suspect Soils Program. Refer to n.4.5.10 and Table 5.2 (Row 4.4.1 and Table 5.2 (Row 4.4.1) of the ECMM 2022. 9: Implement Suspect Soils Program. Refer to n.4.5.10 and Table 5.2 (Row 4.4.1 and Table 5.2 (Row 4.4.1) of the ECMM 2022. 9: Implement Suspect Soils Program. Refer to and 4.1.1 of the ECMM 2022. 9: Warmwater waterocurse crossing – In-water permitted from July 16 to March 14 (no work from 1.16 July 15). Defer to Section 4.4.1 and Table 5.2 (2007) from the MNRF may be required if projecies, por protected habits, are impacted by a tactivities. Refer to Section 4.4.1 and Table 5.2 (A.4.2) of the ECMM 2022.	See Page A-8	See Page A-7	CR	etto-5 couNT	Note		
	REQUIREMENTS FISHERIES TIMING RESTRICTIONS		8			8		
	(CONSTRUCT BETWEEN) PIPELINE CROSSING			Note 1				
	METHODS VEGETATION RESTRICTIONS		Notes 2 &	Note 1			Note	s 2 & 3
Mitigation	PERMITTING REQUIREMENTS		ivules 2 &	Note 6			NOLE	
			Note 1 8 E	6		Note / & 5		
Construction	MONITORING SPECIES AT RISK (SAR)		Note 4 & 5		Note	Note 4 & 5		
Constr	POTENTIALLY CONTAMINATED				11			
Const	SITES							
2								



Legend

A VOID
DZ
and the second se
the second se
A COMPANY
the second se
and the second se
the second second
and the second sec
A card
The LOND STRUCT OF SHIPS AND A
NO.
A CONTRACTOR OF
The second se
the second se
The second se
and the second
and the second se

Legend
Preferred Route (Segment Evaluated)
Preferred Route (Segment not Evaluated on this page)
Base / Environmental Features
 Water Well (MOECC)
🗱 Watercourse Crossing Location
-UT Utility Transmission Corridor
Watercourse
Aggregate Site (Active)
Conceptual Regulated Area (Quinte Conservation)
Waterbody
🔽 Provincially Significant Wetland
Unevaluated Wetland (per OWES)
Wooded Area
Socio Economic Features
🛆 Bed and Breakfast
Cemetery
Nature Centre
Retirement Homes
School



Notes

Notes
1. Coordinate System: NAD 1983 UTM Zone 18N
2. Base features produced under license with the Ontario Ministry of
Natural Resources and Forestry © Queen's Printer for Ontario, 2023.
3. Orthoimagery © 2023 Microsoft Corporation © 2023 Maxar ©CNES
(2023) Distribution Aribus DS. Date of Imagery, unknown.
4. MOECC Water well locations are approximate and have been
positioned based on published UTM coordinates © Queen's Printer for
Ontario, 2023.
5. Contains Information made available under Quinte Conservation
Authority's Open Data Licence v1.0

0	150	300
		m

1:6,000 (At Original document size of 11x17)

Project Location

County of Prince Edward

160951282 Prepared by BK on 2023-04-25 Technical Review by SE on 202-04-20

Client/Project ENBRIDGE GAS INC.

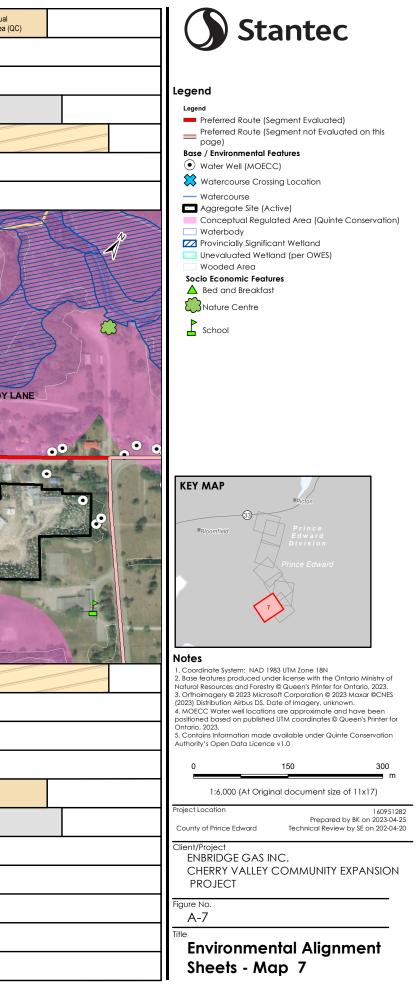
CHERRY VALLEY COMMUNITY EXPANSION PROJECT

Figure No.

A-6 ïtle

Environmental Alignment Sheets - Map 6

Г		CONSERVATION AUTHORITY REGULATED AREA / ANSI						Conceptual Regulated		Concept Regulated An
		WETLAND WATERCOURSE						Area (QC)		Negulated Al
1	- H	ANSI VEGETATION		Woodland			Wood	land		
	Resources	WATER WELL		Water Well	Water Well	l Water Well				/ells
	×	WITHIN 50 m		Valer Wei	Driveways	Dr <mark>vewa</mark> ys	D <mark>riveway</mark> s		Drimon	esent
	┝	ENVIRONMENTALLY			& Roads	& <mark>Roa</mark> ds	& Roads		Road Diffeeways & Roads	
	┝	SPECIES AT RISK (SAR)						Det SAD		
F		HABITAT					T. Mathalit	Pot SAR Habitar		F
ER/160951365_EREF_EnviroAlignmentSheetMapbook.mxd 프로찌매 > 말 여 프로 앉혀 탁 와 여 프 매 약 로 히 보 락 여 호 카 호 라뷰 제 2 오 카 회 전 ল 최 2 양 카 제 장 유명 전 ল 최 6 명 전 않 ল 최	Refer to breeding 2022. Note 2: breeding 31) with Table 5.2 ECMM 2: Note 3: bats (mix 4) 2022. Note 4: 2022. Note 4: 2022. Note 4: 2022. Note 4: 2022. Note 4: 2022. Note 4: 2022. Note 5: Refer to 4: 2022. Note 5: Refer to 4: 2022. Note 5: Refer to 4: 2022. Note 5: 2022. Note 5: 2022. Note 5: 2022. Note 5: 2022. Note 5: 2022. Note 1: 2022. Note 1: 2023. Note 1: 202	Tree renoval to avoid the active season for id-April to mid-September). Refer to Table 5.2 4.2) of the ER and Section 8.2 of the ECMM is Groundwater wells present – Refer to Sate 5.2 (Marking 1997) and the ER, and Section in Table 5.2 (Row 4.3.3) of the ER, and Section the ECMM 2022. Water well monitoring program recommended. Section 7.1.2 and Table 5.2 (Row 4.3.3) of the Permit from Quinte Conservation is required. Sections 4.3.7 and 4.4.1 and Table 5.2 (Row 3.7, 4.4.1 and 4.4.2) of the ER and Section 7.5 CMM 2022. Linear facility - Refer to Section 4.5.5 and 2. (Row 4.5.5) of the ER and Sections 12.0 and the ECMM 2022. Implement Suspect Soils Program. Refer to 4.5.10 and Table 5.2 (Rows 4.5.1 and 4.5.4) of and Section 18.0 of the ECMM 2022. Implement Suspect Soils Program. Refer to 4.5.10 and Table 5.2 (Rows 4.5.10) of the ER cion 8.13 of the ECMM 2022. Browmater watercourse crossing - In-water mitted from July 16 to March 14 (no work from 15 to July 15). Refer to Section 4.4.1 and Table 4.4.10 of the ER and Section 15.2 of the	CURRYLAN				A COUNTY RD COUNTY YOF PRINCE EDWARD	ENNELL CRES	FACTORY LANE	
	⊢	CONSTRUCTION REQUIREMENTS			Note 8	Note 8	Note 8		Note 6 Note 8	
cad\gis\mxds\	┝	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)								
Gi.		PIPELINE CROSSING METHODS			1					
	ation	VEGETATION RESTRICTIONS		Notes 2 & 3			Notes			
160951365\0		PERMITTING REQUIREMENTS						Note 6		Note 6
ö I	Mitig	T EKMITTING REGUIREMENTS			ĺ					
	ction Mitigation	MONITORING		Note 4 & 5	Note 4 & 5	Note 4 & 5			Note	e 4 & 5
	Instruction Mitig			Note 4 & 5	Note 4 & 5	Note 4 & 5		Note 11	Note	e 4 & 5
	Construction	MONITORING		Note 4 & 5	Note 4 & 5	Note 4 & 5		Note 11	Note	94&5
	Construction	MONITORING SPECIES AT RISK (SAR) POTENTIALLY CONTAMINATED		Note 4 & 5	Note 4 & 5	Note 4 & 5		Note 11	Note	94&5
\\\ca0215-pptsol\work_group\01609\Active\16 Revised: 2023-04-25 By: bakaur	Construction	MONITORING SPECIES AT RISK (SAR) POTENTIALLY CONTAMINATED		Note 4 & 5	Note 4 & 5	Note 4 & 5		Note 11	Note	94&5



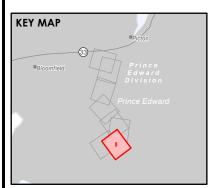
	_			 		
		CONSERVATION AUTHORITY REGULATED AREA / ANSI		C Regula	Conceptual ated Area (QC)	
		WETLAND WATERCOURSE ANSI		Wetland Watercon	urse Watercou	IISE
Sec	-	VEGETATION	Woodland Woodland	Woodland	· · · · ·	
Resources		WATER WELL WITHIN 50 m	Wells Presen		Water Well	
	- H	LINEAR FEATURES	Driveways & Roads		Driveways & Roads	
		ENVIRONMENTALLY SENSITIVE AREA				
	┢	SPECIES AT RISK (SAR) HABITAT		Pot SAR Habitat	Pot SAR Habitat	
vov 365_EREF_Enviro.AlignmentSheetMapbook.rmxd e us se arkov (0 2)) 11 14 14 14 14 14 14 14 14 14 14 14 14	tote 1:1 ote 2:1 ote 3: ote 3: ote 3: ote 3: ote 4:1 ote 3: ote 4:1 ote 4:1 ote 5:2 ote 4:1 ote 5:2 ote 4:1 ote 5:2 ote 4:1 ote 5:2 ote 6:1 ote 5:1 ote 5:1 ot	Tree removal to avoid the active season for 14 spril to mid-September). Refer to Table 5.2 12) of the ER and Section 8.2 of the ECMM Groundwater wells present – Refer to Section 17 Table 5.2 (Row 4.3.3) of the ER, and Section the ECMM 2022. Water well monitoring program recommended. Section 7.1.2 and Table 5.2 (Row 4.3.3) of the Permit from Quinte Conservation is required. Sections 4.3.7 and 4.4.1 and Table 5.2 (Rows 3.7, 4.4.1 and 4.4.2) of the ER and Section 7.5 SMM 2022. Linear facility - Refer to Sections 1.2.0 and the ECMM 2022. Maintain emergency egress. Refer to Sections 4.5.4 and Table 5.2 (Rows 4.5.1 and 4.5.4) of nd Section 18.0 of the ECMM 2022. Implement Suspect Soils Program. Refer to 4.5.10 and Table 5.2 (Rows 4.5.1 and 4.5.4) of nd Section 18.0 of the ECMM 2022. Warmwater watercourse crossing - In-water mitted from July 16 to Macri H (no work from 5 to July 15). Refer to Section 4.1. and Table 14.4.1) of the ER and Section 14.2 of the RE	East Lake Marsin University () () () () () () () () () () () () ()	/// PR		
port_figu		CONSTRUCTION			Not	
ds/ap/re	┟	REQUIREMENTS	Note 8		Note 8	
a'\gis\mxi	F	(CONSTRUCT BETWEEN)				
a∖gis_cac	╞	METHODS		Note 1	Note 1	
951365\03_data		VEGETATION RESTRICTIONS	Notes 2 & 3 Notes 2 & 3	Notes 2 & 3	Note	
Miticu		PERMITTING REQUIREMENTS			Note 6	
iction		MONITORING	Note 4 & 5		Note 4 & 5	
p\01609\Active\16(Jr Construction		SPECIES AT RISK (SAR)		Note 11	Note 11	
		POTENTIALLY CONTAMINATED SITES				
fss01\wor -04-25 By:						
a0215-ppi sed: 2023-	╞					
\\cc Revis						



Legend



Legend				
Preferred Route (Segment Evaluated)				
Preferred Route (Segment not Evaluated on this page)				
Base / Environmental Features				
Water Well (MOECC)				
🗱 Watercourse Crossing Location				
Watercourse				
Aggregate Site (Active)				
Conceptual Regulated Area (Quinte Conservation)				
Waterbody				
Provincially Significant Wetland				
Unevaluated Wetland (per OWES)				
Wooded Area				
Socio Economic Features				
Bed and Breakfast				
Nature Centre				
School				



Notes

Notes
1. Coordinate System: NAD 1983 UTM Zone 18N
2. Base features produced under license with the Ontario Ministry of
Natural Resources and Forestry © Queen's Printer for Ontario, 2023.
3. Orthoimagery © 2023 Microsoft Corporation © 2023 Maxar ©CNES
(2023) Distribution Aribus DS. Date of Imagery, unknown.
4. MOECC Water well locations are approximate and have been
positioned based on published UTM coordinates © Queen's Printer for
Ontario, 2023.
5. Contains Information made available under Quinte Conservation
Authority's Open Data Licence v1.0

0	150	300
		m

1:6,000 (At Original document size of 11x17)

Project Location

County of Prince Edward

160951282 Prepared by BK on 2023-04-25 Technical Review by SE on 202-04-20

Client/Project ENBRIDGE GAS INC.

CHERRY VALLEY COMMUNITY EXPANSION PROJECT

Figure No.

A-8 ïtle

Environmental Alignment Sheets - Map 8