Simcoe-Townsend Water Supply Municipal Class Environmental Assessment

Project File Report



Prepared for:
Norfolk County

Prepared by:
Stantec Consulting Ltd.

April 2023

Sign-off Sheet

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Executive Summary

Introduction

Norfolk County (County) has undertaken a Municipal Class Environmental Assessment (EA) study to implement an approximately 20 km long transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. These improvements are required to meet long-term Inter-Urban Water Supply (IUWS) capacity and quality demands within the County, as identified and recommended in the County-wide Integrated Sustainable Master Plan dated September 2016.

The study area is located within the County of Norfolk, with the proposed watermain connecting the Townsend Water Supply System to Simcoe along Concession 13 Townsend and bringing the connection west of Simcoe along 14th Street West. The project will include a new booster pumping station along Concession 13 Townsend, nearby Cockshutt Road, and an elevated water tank in the west end of the study area, along 14th Street West, adjacent to Windham E Quarter Line Rd.

In accordance with the Municipal Class Environmental Assessment (MCEA) (Municipal Engineers Association, 2000, as amended in 2007, 2011, and 2015), this study is being planned as a Schedule B undertaking, which includes the completion of Phases 1 and 2 of the MCEA study process.

Consultation

A contact list was developed at the outset of the study, which includes relevant government and regulatory agencies, utilities, community organizations, interested members of the public, and Indigenous and First Nations communities. Project notices, including the Notice of Study Commencement, Notice of Public Information Centres (PICs), and the Notice of Completion have been mailed to residents, emailed to Indigenous and First Nations communities, and published in *The Norfolk and Tillsonburg News, Port Dover Maple Leaf, Haldimand Press* newspapers.

Two PICs were held throughout the study to ensure stakeholders had an understanding of the project, and to provide opportunities to provide input into the alternative solutions, evaluation criteria, and preferred solutions. These PICs were held in-person, at the Norfolk County Administration Building. The PIC materials were also provided on Norfolk County project website.

All input from the public, review agencies, committees, and other stakeholders has been documented. All consultation with Indigenous communities has also been documented in a Consultation Log.

Problem and Opportunity

Planning and policy documents, related studies and reports were reviewed to understand the existing and planned conditions and objectives within the study area, and to provide the framework for identifying improvements.

Norfolk County is managing long-term growth. To meet future water supply demands, infrastructure improvements are necessary. Municipal water systems exist in the Urban Areas of the County. Remaining areas receive water supply through private communal systems and private wells.

The County is identifying cost-effective and adequate water supply system solutions to deliver high quality water services. The Inter-Urban Water Supply (IUWS) will ensure fire flow is available to all Urban Areas for improved access to water supply during fire events. The system will support, enhance and sustain peak water demands for existing and future residents and businesses in the County.

As a result, the following improvements within Norfolk County are required:

- Construct a transmission watermain connecting Simcoe to the Townsend Water Supply System
- Build a booster pumping station along transmission watermain alignment
- Build an elevated water tank along transmission watermain alignment

The water feed from the Nanticoke Water Treatment Plant will provide redundancy to the County's water supply system.

Alternative Solutions and Recommended Solution

As part of the EA process, reasonable and feasible alternative solutions to the Problem and Opportunity Statement are identified and assessed. The framework and criteria for assessing the alternatives are also identified to determine the advantages and disadvantages with respect to the natural, social, technical and financial environments.

The transmission watermain will be built within the municipal right-of-way, therefore, the alignment was pre-determined based on previous studies completed to determine the best fit. The elevated tank will be built within municipally owned lands at the west end of the study area.

Alternative site locations were developed to determine the placement of the booster pumping station location. Four alternative site locations were considered on lands east of Cockshutt Road, nearby an existing electrical supply.

Two locations were recommended for the proposed booster pumping station location. The County will proceed to detailed design, where property acquisition discussions will be completed.

Potential Impacts and Proposed Mitigation

Many of the environmental concerns related to this project have been mitigated through the process by which the recommended solution was selected. The anticipated impacts and proposed mitigation measures have been described in Section 9 of the Project File Report. The County will work with Long Point Region Conservation Authority, Indigenous communities and First Nations, and the Ministry of Environment, Conservation and Parks during detailed design and prior to the start of construction to ensure that the proposed works are acceptable and to obtain required permits as discussed in Section 10 of the Project File Report.

Closing

The filing of this Project File Report represents the conclusion of Phase 1 and Phase 2 of the Municipal Class EA planning process as outlined in the MCEA document. Provided that no requests for orders under Section 16 of the *Environmental Assessment Act* (formerly known as Part II Orders) are received, and provided all appropriate permitting is obtained, the County may proceed with detailed design and implementation 30 days following the completion of the public review period.

Abbreviations

ANSI	Area of Natural and Scientific Interest Earth Science
BPS	Booster Pumping Station
CHAR	Cultural Heritage Assessment Report
CWA	Clean Water Act 2006
DFO	Department of Fisheries and Oceans Canada
EA	Environmental Assessment
EASR	Environmental Activity and Sector Registry
ECA	Environmental Compliance Approval
ESA	Endangered Species Act
ISMP	Integrated Sustainable Master Plan
IUWS	Inter-Urban Water Supply
MCEA	Municipal Class Environmental Assessment
MEA	Municipal Engineers Association
MECP	Ministry of the Environment, Conservation and Parks
MCM	Ministry of Citizenship and Multiculturalism
MOECC	Ministry of the Environment and Climate Change
MNRF	Ministry of Natural Resources and Forestry
PIC	Public Information Centre
PPS	Provincial Policy Statement, 2020

PSW	Provincially Significant Wetland
PTTW	Permit to Take Water
SAR	Species at Risk
SARA	Species at Risk Act
SARO	Species at Risk in Ontario
SOCC	Species of Conservation Concern
SPP	Source Protection Plan

1.0 Introduction

Norfolk County (County) has undertaken a Municipal Class Environmental Assessment (EA) study to implement an approximately 20 km long transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. These improvements are required to meet long-term Inter-Urban Water Supply (IUWS) capacity and quality demands within the County.

1.1 Study Area

The study area is located within the County of Norfolk, with the proposed watermain connecting the Townsend Water Supply System to Simcoe along Concession 13 Townsend and bringing the connection west of Simcoe along 14th Street West. The project will include a new booster pumping station along Concession 13 Townsend, nearby Cockshutt Road, and an elevated water tank in the west end of the study area, along 14th Street West, adjacent to Windham E Quarter Line Rd. The study area is displayed in Figure 1.



Figure 1: Study Area

1.2 Background

1.2.1 Inter-Urban Water Supply

Norfolk County is mainly a rural single-tier municipality on the north shore of Lake Erie with a population of approximately 70,000 people. Within the County, there are several

more urban areas. Norfolk County provides municipal drinking water to these urban areas, specifically the following communities:

- Port Dover
- Simcoe
- Waterford
- Delhi and Courtland
- Port Rowan and St. Williams

These communities all have independent water supply systems, except for Courtland and St. Williams which are supplied via transmission mains from Delhi and Port Rowan, respectively. Simcoe, Delhi, and Waterford have groundwater supply sources, whereas Port Dover and Port Rowan have Lake Erie surface water intakes, which require more complex water treatment plants within the two communities. These plants were originally built over 60 years ago and require continuous repairs and upgrades, as they are unable to perform at full capacity, and are operating beyond their service life. As a result, these communities experience water adversities, such as peak water demand shortages, watering bans and development freezes.

A well water system is used to supply water to Simcoe, and is currently operating with limited capacity. The existing system is aging, and poses risk of contamination due to extreme weather events, which impacts the quality of drinking water. In addition, the existing system does not sustain sufficient fire flow supply within the community.

The IUWS Program was identified through the County's Integrated Sustainable Master Plan. The IUWS was developed to provide a centralized system to connect the existing individual water supply systems in the County. The system will connect to the Nanticoke Water Treatment Plant to provide a secure water supply, and the IUWS will deliver higher-quality drinking water services for long-term growth. The system will have many benefits including:

- Reliable and safe drinking water quality from a better raw water intake source. This will address regulatory compliance issues
- Capacity for growth beyond the year 2041
- Opportunity to provide capacity to meet provincial housing mandates in all urban areas, and ability for development to take place
- Centralized system that is more resilient and affordable to maintain
- Provides fire flows to all urban centres
- Increased operational efficiency and flexibility during high seasonal peak demands and facilitate a thriving tourist industry
- Meeting the regulatory requirements for emergency backup water supply capacity
- Less environmental impact by using sustainable materials and trenchless technologies. This will provide a reliable system with 75 to 100 years of service life

- Less long-term costs compared to upgrading, operating and maintaining separate water supply systems. The current systems are prone to regulatory compliance issues. They also need frequent upgrades, and present increasing costs to run and maintain
- Opportunity to reduce impacts on the natural and built environment. The new system will use municipal land and existing utility corridors where possible
- Opportunity to provide safe drinking water services year-round to the residential areas. The system will provide to areas not currently serviced by existing municipal systems
- Opportunity to maximize the intake capacity at the Nanticoke Water Treatment Plant. This will reduce the initial capital cost and long-term operation and maintenance cost
- Opportunity to reduce the impact on farming land by using the existing Nanticoke Water Treatment Plant.

The IUWS program study area map is on Figure 2. The Simcoe-Townsend Water Supply Study Area (Figure 3) will complete the first phase of the IUWS program.

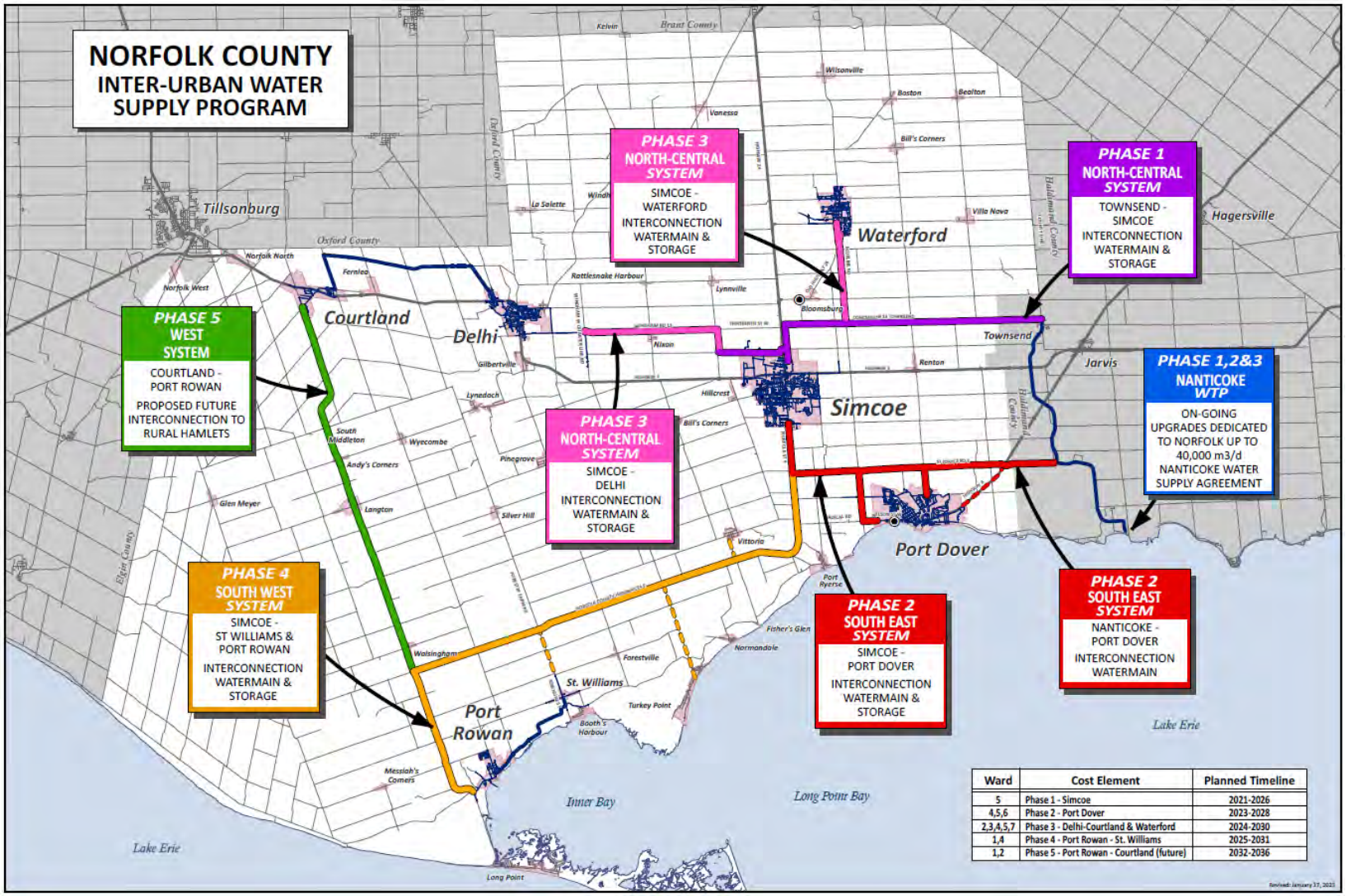


Figure 2: Inter-Urban Water Supply Program Study Area

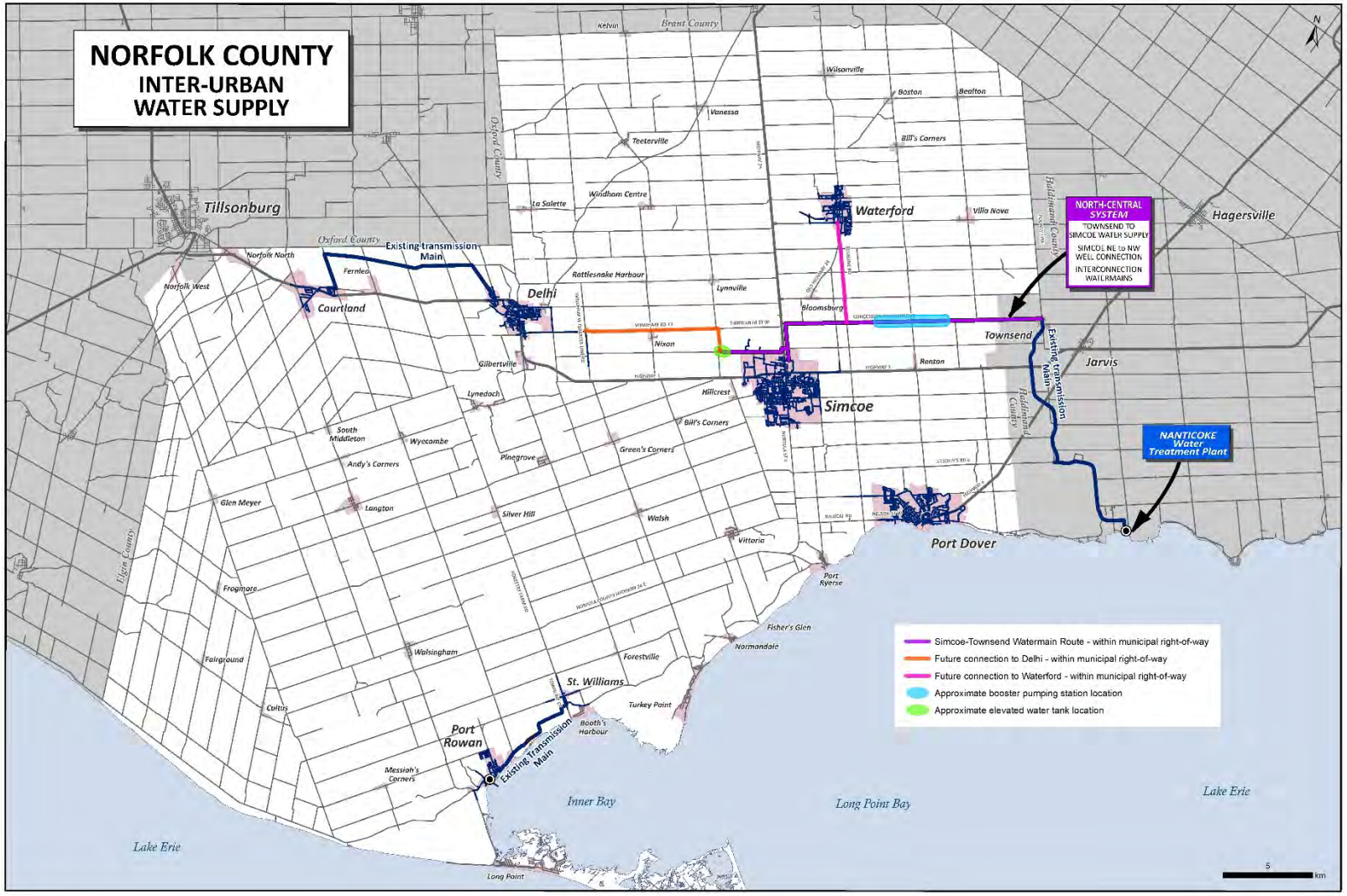


Figure 3: Simcoe-Townsend Water Supply Study Area

2.0 Municipal Class EA Process

The *Environmental Assessment Act of Ontario* (EAA) provides for the protection, conservation, and management of the environment in Ontario. The EAA mandates the completion of a Municipal Class EA study before constructing municipal infrastructure projects. The Ministry of the Environment, Conservation and Parks (MECP) is responsible for administration of the EAA.

The Municipal Engineers Association (MEA) *Municipal Class Environmental Assessment* document (October 2000, as amended in 2007, 2011, & 2015) applies to municipal infrastructure projects including roads, transit, water and wastewater. Key components of the Class EA planning process include:

- Consultation with potentially affected parties early and throughout the process.
- Consideration of a reasonable range of alternative solutions.
- Systematic evaluation of alternatives.
- Clear and transparent documentation.
- Traceable decision-making.

The MEA Class EA document provides a framework by which projects are classified as Schedule A, A+, B, or C based on a variety of factors including the general complexity of the project, level of investigation required, and the potential impacts on the natural, social, cultural, and economic environments that may occur. Each schedule classification requires a different level of documentation and review to be compliant with the EAA and satisfy the requirements of the Class EA. The proponent is responsible for identifying the appropriate schedule for any given project and reviewing the applicability of the schedule at multiple stages throughout the project.

Schedule A projects are limited in scale with minimal anticipated environmental impacts. They are pre-approved and may be implemented without undertaking public consultation or following the planning process as outlined in the Class EA. Examples of Schedule A projects include construction or removal of sidewalks, and multiuse pathways or cycling facilities within protected rights-of-way (ROWs).

Schedule A+ projects are similarly pre-approved but require that proponents notify potentially affected parties prior to implementation. An example of a Schedule A+ project includes streetscaping within protected ROWs.

Schedule B projects have the potential for some adverse environmental and social impacts. Schedule B projects require the completion of Phases 1 and 2 of the Class EA planning process, which is documented in a Project File and submitted for a mandatory

30-day review period. If concerns are raised that cannot be resolved, the Section 16 Order process may be invoked.

Schedule C projects have the potential for significant environmental impacts and must follow the full planning process specified in the Class EA document, including Phases 1 through 4. The project is documented in an Environmental Study Report (ESR), which is then filed for review by the public, review agencies, and Indigenous communities. If concerns are raised that cannot be resolved, the Section 16 Order process may be invoked. Projects generally include the construction of new facilities, and major expansions to existing facilities.

Based on a review of the scope of work for this project and the associated MCEA project descriptions and classifications provided in Appendix 1 of the MCEA document, the Simcoe-Townsend EA is following the process requirements for a Schedule 'B' project. A summary of this review is provided below:

Project Scope of Work	**MCEA Document Appendix 1 Project Description**
Booster Pumping Station	Schedule B Increase pumping station capacity by adding or replacing equipment and appurtenances where new equipment is located in a new building or structure.
Elevated Tank	Schedule B Establish new or expand/replace existing water storage facilities.
Watermain Transmission	Schedule A+ Establish, extend or enlarge a water distribution system and all works necessary to connect the system to an existing system or water source, provided all such facilities are in either an existing road allowance or an existing utility corridor, including the use of Trenchless Technology for water crossings.

2.1 Planning Process

Figure 4 illustrates the five-phase Class EA planning process and identifies the steps considered mandatory for compliance with the requirements of the EAA. Schedule B EA studies require the completion of Phase 1 (Problem or Opportunity) and Phase 2 (Alternative Solutions) of the EA process. Figure 4 follows the process of the MCEA amended in 2015.

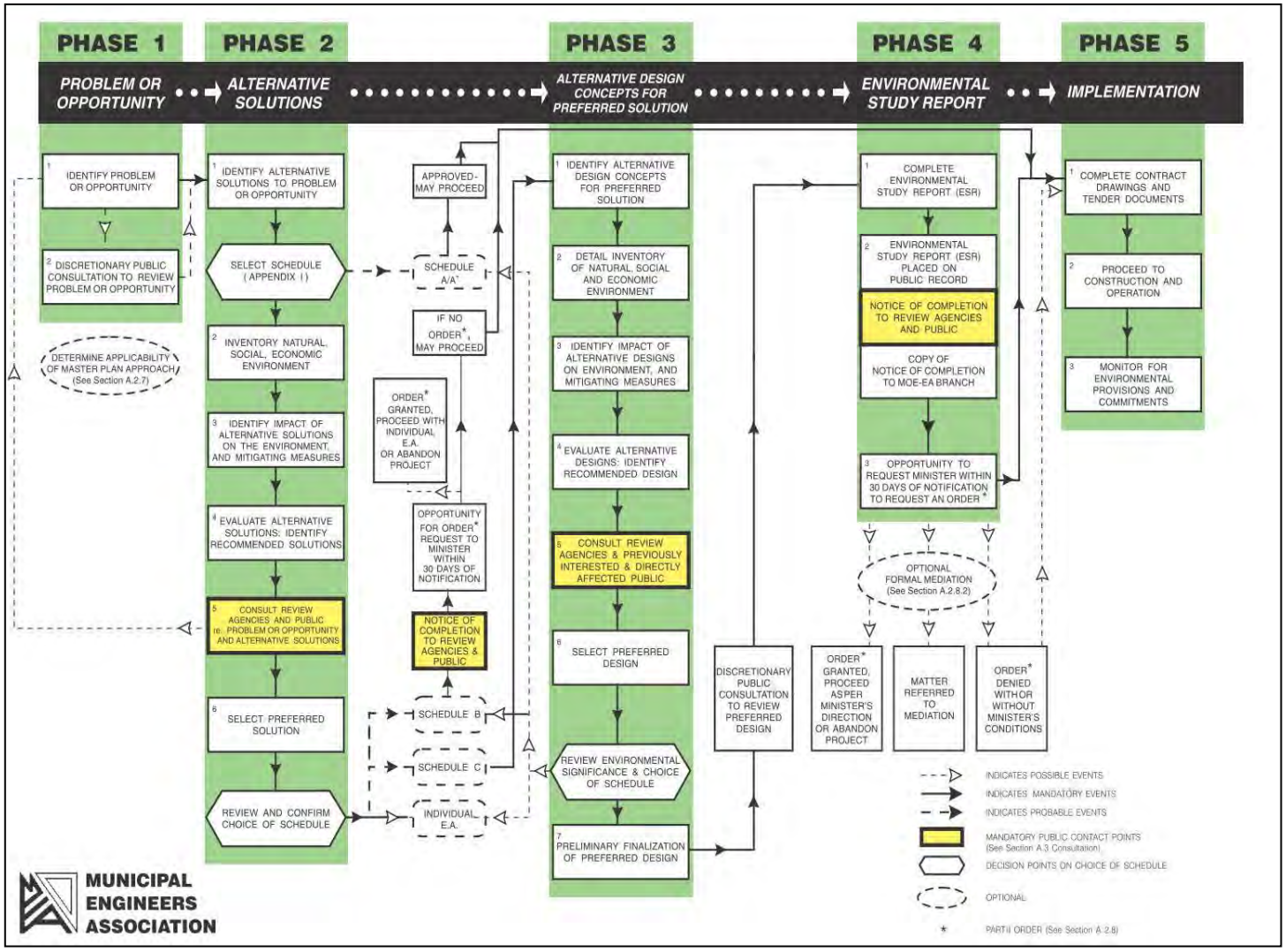


Figure 4: MCEA Flow Chart

2.2 Section 16 Order Process

Interested persons may provide written comments to Norfolk County for a response using the following contact information:

Mariana Balaban, P.Eng., Ph.D.
Project Director
Norfolk County
185 Robinson Street
Simcoe, ON N3Y 5L6
Tel: 519-426-5870 ext. 8158
Email: mariana.balaban@norfolkcounty.ca

In addition, a request may be made to the Minister of the Environment, Conservation and Parks under Section 16 of the EAA requiring a higher level of study (i.e., requiring an individual/comprehensive EA approval before being able to proceed), or that conditions be imposed (e.g., require further studies), only on the grounds that the requested order may prevent, mitigate, or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests on other grounds will not be considered. Requests should include the requester contact information and full name for the ministry.

Requests should specify what kind of order is being requested (request for additional conditions or a request for an individual/comprehensive environmental assessment), how an order may prevent, mitigate, or remedy those potential adverse impacts, and any information in support of the statements in the request. This will ensure that the ministry is able to efficiently begin reviewing the request.

Minister of the Environment, Conservation and Parks
Ministry of Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto ON M7A 2J3
minister.mecp@ontario.ca

and

Director, Environmental Assessment Branch
Ministry of Environment, Conservation and Parks
135 St. Clair Ave. W, 1st Floor
Toronto ON, M4V 1P5
EABDirector@ontario.ca

Requests should also be sent to Norfolk County by mail or by email.

3.0 Consultation

Consultation is a vital part of the Class EA process. Active engagement with all potentially affected parties including government agencies, community members, special interest groups, and Indigenous communities ensures a transparent and responsible planning process.

At the initiation of the project, a mailing list was created which includes relevant federal and provincial government agencies, local government officials, Indigenous communities, special interest groups, landowners and developers. Those who expressed interest were also included on the mailing list. Project notifications were emailed to the study contact list, mailed to local residents adjacent to the proposed booster pumping station location, and posted on Norfolk County's website (https://engagenorfolk.ca/simcoe-townsend-water-supply).

3.1 Consultation and Project Notifications

Project notices were issued throughout the duration of the study. A copy of the notices is provided in Appendix A.

3.1.1 Notice of Study Commencement

The Notice of Study Commencement was issued on July 8, 2022. The notice was published on the County's website (https://engagenorfolk.ca/simcoe-townsend-water-supply) and on the County's social media platforms (i.e., Facebook, Twitter, etc.) and emailed to the study contact list. The notice was also published in three local newspapers including the *Norfolk and Tilsonburg News, Port Dover Maple Leaf, and Haldimand Pres*s, on July 12, July 13, and July 14, 2022, respectively.

Four comments were received from agencies noting interest in the study. One comment was received from a member of the public, noting the existing natural environment features surrounding the trail. The project team responded to this comment explaining that the construction will occur within the municipal right-of-way, and will minimize the impacts to the natural environment (i.e., removal of trees, etc.).

3.1.2 Public Information Centre 1

Public Information Centres (PICs) serve as forums for two-way communication between the project team and members of the public.

The first PIC was held online on the County's website (https://engagenorfolk.ca/simcoe-townsend-water-supply) and in-person from 5:00pm to 7:00pm on August 4, 2022, at

the Norfolk County Administration Building Council Chambers (50 Colborne Street S, Simcoe, ON). The following was presented at PIC 1:

- Introduction of the project and why it was undertaken
- Overview of the process that the study would follow for the project
- Summary of the problems and opportunities to address

Existing conditions within the study area. The Notice of PIC #1 was issued on July 25, 2022. The notice was published on the County's website and on the County's social media platforms and emailed to the study contact list. The notice was also published in three local newspapers including the *Norfolk and Tilsonburg News, Port Dover Maple Leaf, and Haldimand Pres*s, on July 26, July 27, and July 28, 2022, respectively.

A pre-recorded presentation was posted on the County's website on August 4, 2022. The project team accepted comments on PIC 1 until September 1, 2022. A total of 15 people attended the in-person PIC, and a total of five comments were received throughout the duration of PIC #1.

Three of the comments noted interest in the study and requested to be added to the mailing list. One comment was inquiring if the County owns the trail lands north of Simcoe, and the County responded that acquisition is currently underway. Another comment was interested in obtaining more information about the Inter-Urban Water Supply study, and how it led to this EA study.

3.1.3 Public Information Centre 2

PIC 2 was held online on the County's website (https://engagenorfolk.ca/simcoe-townsend-water-supply) and in-person from 5:00pm to 7:00pm on November 8, 2022, at the Norfolk County Administration Building Council Chambers. The following was presented at PIC 2:

- An update on the study since PIC 1
- Evaluation of alternative site locations for the booster pumping station
- The preferred alternative site location for the booster pumping station and elevated tower
- Potentially affected residents and businesses within the project area

The Notice of PIC #2 was issued on October 26, 2022. The notice was published on the County's website and on the County's social media platforms, mailed to residents nearby the proposed booster pumping station, and emailed to the study contact list. The notice was also published in three local newspapers, the *Norfolk and Tilsonburg News, Port Dover Maple Leaf, and Haldimand Pres*s, on October 26 and October 27, 2022.

A pre-recorded presentation was posted on the County's website on November 8, 2022. The project team accepted comments on PIC #2 until December 6, 2022. A total of 28 people attended the in-person PIC, and a total of 3 comments were received throughout the duration of PIC 2.

One comment was to further discuss information related to the Inter-Urban Water Supply study and the existing well water systems in the County. This comment was discussed in-person at the PIC. One comment was to provide insight into existing utilities below the trail line, also discussed in-person at the PIC. The last comment received was from a resident curious about the proposed water quality, pressure, and location of the proposed watermain alignment.

3.1.4 Notice of Study Completion

The Notice of Study Completion was issued on April 26, 2023. The notice was published on the County's website (https://engagenorfolk.ca/simcoe-townsend-water-supply), published on the County's social media platforms, and emailed to the study contact list. The notice was also published in three local newspapers, the *Norfolk and Tillsonburg News, Port Dover Maple Leaf, and Haldimand Pres*s.

A copy of the Project File Report was made available on the County's website and in person at ServiceNorfolk (185 Robinson St., Simcoe) for a 30-day public review period.

3.2 Agency and Stakeholder Consultation

The project notices were sent to relevant agencies and stakeholders to solicit feedback on the project. A list of the agencies and stakeholders is provided below.

Provincial/Federal

- Ministry of Natural Resources and Forestry
- Ministry of Environment, Conservation and Parks
- Ministry of Citizenship and Multiculturalism
- Ministry of Transportation
- Ministry of Agriculture, Food, and Rural Affairs
- Ministry of Indigenous Affairs
- Department of Fisheries and Oceans Canada

Municipal

- Norfolk County
- Haldimand County
- Ontario Provincial Police
- Norfolk County Fire Department
- Norfolk County Paramedic Service
- Health and Social Services Haldimand-Norfolk

Agencies

- Long Point Region Conservation Authority
- Hydro One
- Enbridge
- Bell Canada
- Rogers
- Synergy
- Eastlink
- Nor-Del Cable Vision Limited
- KWIC Internet
- Brant Haldimand Norfolk Catholic District School Board - Catholic Education Centre
- Grand Erie District School Board
- Conseil Scolaire Catholique Mon Avenir
- Student Transportation Services Brant Haldimand Norfolk
- Canadian Pacific Railway
- Norfolk Field Naturalists
- Waterford Heritage Trail Association
- Lynn Valley Trail Association
- Ride Norfolk
- The Expositor/Reformer

Several agencies requested to be added to the project mailing list and kept updated throughout the study. The project team received correspondence from utilities organizations, who provided insight into existing infrastructure within the study area. these organizations will continue to be consulted in detail design.

3.3 Indigenous Community and First Nations Engagement

Notices were sent to the following Indigenous communities:

- Six Nations of the Grand River
- Mississaugas of the Credit First Nation
- Haudenosaunee Confederacy Chiefs Council

The Mississaugas of the Credit First Nation (MCFN) and Six Nations of the Grand River (SNGR) requested to meet with the project team to discuss the study in greater detail.

The meeting with MCFN was held on November 10, 2022, via Microsoft Teams. MCFN noted their interest in reviewing the Stage 1 Archaeological Assessment draft report prior to submission to the Ministry of Citizenship and Multiculturalism (MCM). The draft Stage 1 report was provided to MCFN on December 14, 2022. They did not have any

comments or concerns related to the report. MCFN also requested to send Field Liaison Representative's (FLR's) to participate in the Stage 2 Archaeological Assessment fieldwork.

The meeting with SNGR was held on December 13, 2022, via Microsoft Teams. SNGR noted their interest in reviewing the Stage 1 Archaeological Assessment draft report, prior to submission to MCM. The draft Stage 1 report was provided to SNGR on December 14, 2022. SNGR also requested to send FLR's to participate in the Stage 2 Archaeological Assessment fieldwork.

A copy of the correspondence completed with Indigenous Communities and First Nations is provided in Appendix A.

4.0 Planning & Policy Context

4.1 Relevant Policies

4.1.1 Canadian Environmental Assessment Act

The *Canadian Environmental Assessment Act* (2012) focuses federal environmental review on projects which have the potential to cause significant adverse environmental effects in areas of federal jurisdiction. For the *Act* to apply, the proposed project must be designated under the “Regulations Designating Physical Activities” and specifically be listed in the “Schedule for Physical Activities”. Review of the Schedule for Physical Activities shows there is no physical activity that matches the work proposed for the construction of pumping stations and sewers. Therefore, meeting the requirements of the *Canadian Environmental Assessment Act* will not be necessary for this project.

4.1.2 Species at Risk Act

The *Species at Risk Act* (SARA) identifies wildlife species considered to be at risk in Canada and designates them as threatened, endangered, extirpated or of special concern. Species at Risk (SAR) are identified and assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), which is an independent committee of wildlife experts and scientists that makes recommendations to the federal government regarding the status of wildlife species in Canada.

The purpose of SARA is to prevent wildlife species from being extirpated or becoming extinct, to provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity and to manage species of special concern to prevent them from becoming endangered or threatened.

The protection and conservation measures afforded by SARA apply to those species identified on Schedule 1 of the *Act.* Other species identified by COSEWIC as SAR that required further assessment in accordance with current assessment criteria are identified on Schedule 2 (Endangered and Threatened) and Schedule 3 (Special Concern) of the *Act*. All listed (Schedule 1) aquatic species and migratory birds in Canada are protected by SARA. Remaining listed species (plants, mammals, reptiles, amphibians) are only protected where they occur on federal lands (i.e., National Parks, First Nations Reserves).

Any activity affecting a listed species, or its critical habitat requires the prior issuance of a permit from the applicable agency, either Environment and Climate Change Canada or Fisheries and Oceans Canada (DFO). Permits may only be issued for scientific

research relating to the conservation of the species, where activities are required to benefit a species or to enhance its chances of survival or for incidental impacts. Efforts to avoid, reduce, or minimize impacts must first be employed and activities will not be permitted if they would jeopardize the survival or recovery of the species.

4.1.3 The Planning Act

The *Planning Act, R.S.O. 1990, c.P13* sets the framework for land use planning in Ontario. According to the provisions within the Act, the Province of Ontario is the primary authority for planning matters in Ontario, and the *Act* enables the Province to delegate some of its planning authority to the upper-tier municipalities (i.e., counties and regional/district municipalities, and planning boards) while retaining control through the approval process. Municipalities must conform to approved policies of the Provincial government and its agencies. Provincial ministries, municipal councils, planners, and other stakeholders implement the *Act* when they undertake certain actions, including:

- Preparing Official Plans and planning policies that guide future development considering provincial interests, such as protecting and managing natural resources;
- Regulating and controlling land uses through zoning by-laws and minor variances; and
- Dividing land into separate lots for sale or development through Plans of Subdivision or a Land Severance.

This study considers development applications approved under the *Planning Act* and associated conditions of approval along with lands designated for future development within the County of Norfolk.

4.1.4 Provincial Policy Statement

The *Provincial Policy Statement* (PPS) (2020), issued under Section 3 of the *Planning Act*, sets a policy foundation for regulating the development and use of land. It provides direction on matters of provincial interest and supports the enhancement of the quality of life for all citizens of Ontario, while still maintaining environmental integrity. In accordance with Section 3 of the *Planning Act*, decisions affecting planning matters shall have regard for the PPS. The PPS establishes a framework to build strong communities while ensuring development patterns are efficient and optimize the use of land, resources, and public investment in infrastructure.

Policies relevant to water infrastructure include the requirement for infrastructure to be provided in a coordinated, efficient, and cost-effective manner that considers impacts from climate change while accommodating projected needs (Policy 1.6.1). The service shall promote the efficient use and optimization of existing services, ensure the systems are reliable, promote efficiency, and integrate land use considerations throughout the process. The preferred alternatives and supporting recommendations will meet the

objectives of the PPS by providing for infrastructure that is appropriate to address projected needs, protects the natural environment and protects public health and safety.

4.1.5 Endangered Species Act

The *Endangered Species Act* (ESA) (2007) identifies wildlife species considered to be at risk in Ontario and designates them as threatened, endangered, extirpated or of special concern. Provincial species at risk are identified and assessed by the Committee on the Status of Species at Risk in Ontario (COSSARO) which is a committee of wildlife experts and scientists, as well as those who provide Indigenous traditional knowledge, that classify species according to their degree of risk based on the best available scientific information, community knowledge and Indigenous traditional knowledge. When COSSARO classifies a species at risk, that classification applies throughout Ontario, unless otherwise noted.

The ESA protects species at risk and their habitats by prohibiting anyone from killing, harming, harassing or possessing protected species, as well as prohibiting any damage or destruction to the habitat of species identified on the Species at Risk in Ontario (SARO) list. Species listed as threatened or endangered on the SARO list are provided with general habitat protections under the *ESA*, which protect areas that species depend on to carry out their life processes, such as reproduction, rearing, hibernation, migration, or feeding.

Activity that may impact a protected species or its habitat requires the prior issuance of a permit from the MECP. Such permits may only be issued under certain circumstances, which are limited to activities required to protect human health and safety, activities that will assist in the protection or recovery of the species, activities that will result in an overall benefit to the species or activities that may provide significant social or economic benefit without jeopardizing the survival or recovery of the species in Ontario.

A permit may be issued under Section 17(2) of the ESA or eligible activities can be registered under Ontario Regulation 242/08 to authorize work that is otherwise prohibited. Consultation with the ministry is recommended early in detailed design and prior to the works starting to ensure compliance with the ESA.

4.1.6 Climate Change

The MECP's guide, *Consideration of Climate Change in the Environmental Assessment Process*, outlines two approaches for considering and addressing climate change in project planning, including:

- Reducing a project's impact on climate change (climate change mitigation measures).

- Increasing the project's and local ecosystem's resilience to climate change (climate change adaptation).

As part of this study, the objectives of the climate change document have been considered and incorporated into the generation and evaluation of alternatives and mitigation measures.

4.1.7 Clean Water Act

The *Clean Water Act* (2006) was developed to ensure communities protect their municipal drinking water supplies through local Source Protection Committees. The Act empowers communities to implement action to reduce or eliminate threats to municipal sources of drinking water. An important goal of source water protection is to both prevent contamination, as well as prevent depletion.

The Inter Urban Water Supply System will interconnect all the communities within the County to secure a reliable and consistent water supply. The strategic priorities will deliver high quality water services, and build reliable infrastructure to the communities throughout the County. Additional details on the local Source Protection Plan are in Section 7.3.

4.1.8 Safe Drinking Water Act

The *Safe Drinking Water Act* (2002) was developed to protect human health through the control and regulation of drinking water systems and drinking water testing. The Act recognizes that people are entitled to expect their drinking water to be safe, and therefore developed regulations of drinking water systems and testing. The Inter-Urban Water Supply system will adhere to the requirements of the Act, to provide residents of Norfolk County with safe drinking water.

4.1.9 Long Point Region Conservation Authority, 1990

The *Conservation Authorities Act, 1990* (CAA), was created to provide for the organization and delivery of programs and services that further the conservation, restoration, development, and management of natural resources in watersheds in Ontario.

The study area is located within the Long Point Region Conservation Authority (LRPCA) jurisdiction. The LPRCA has the responsibility to regulate activities in wetlands, watercourses and hazard lands (e.g., areas in and near rivers, streams, floodplains, wetlands, slopes and shorelines) through the Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses (O. Reg.178/06). The LPRCA implements the regulation by issuing permits for works in or near watercourses, valleys, wetlands, or shorelines when required.

Under the CAA of Ontario, the Authority has certain regulations whose objectives are:

- To prevent the loss of life and property due to flooding and erosion,
- To prevent pollution, and
- To conserve and enhance natural resources.

These policies apply to fill placement and removal or site grading in flood prone areas, erosion prone areas, dynamic beach areas, as well as alteration of watercourses, and interference with wetlands.

4.2 Background Studies

Several background studies were referenced as part of this study:

- Norfolk County Official Plan (2022)
    - https://www.norfolkcounty.ca/wp-content/uploads/2022/04/Norfolk-County-Official-Plan-January-2022.pdf
- Integrated Sustainable Master Plan (2016)
    - https://www.norfolkcounty.ca/download/government/public_works/The-ISMP.pdf
- Water Supply Operational Strategy – Inter Urban Water Supply (2021)
    - https://www.norfolkcounty.ca/wp-content/uploads/2021/02/Norfolk-IUWS-Report-Final-Jan-2021.pdf

4.2.1 Norfolk County Official Plan

The Norfolk County Official Plan is used to manage growth and development within the County to the year 2036. The purpose of the Plan is to provide a policy framework to guide economic, environmental and social decisions for use of the land. The Plan provides guidance for the maintenance, rehabilitation, growth and development to ensure a sustainable living environment that meets the needs of the community for over a 20-year planning environment.

The Plan notes that while municipal water systems exist in the Urban Areas, the County intends to improve and extend municipal water services throughout the County.

As part of the Plan, the County is committed to upgrading and expanding infrastructure, including the improvement and expansion of water infrastructure to better serve existing and future County residents, businesses and visitors. This commitment will provide adequate and efficient water supply and distribution. As Norfolk is growing, more

demands are being placed on water resources; the effects of which contribute to degraded aquatic communities, the loss of well water supply, aquifer contamination, and deteriorating water quality.

The Plan highlights that when planning for growth and approving development, the County shall ensure that these decisions consider the long-term sustainability of municipal drinking water. The County will ensure development is consistent with the Integrated Sustainable Master Plan water allocation thresholds.

The County will ensure that the water systems will support, enhance and sustain existing and future residents and businesses.

4.2.2 Integrated Sustainable Master Plan

Norfolk County developed an Integrated Sustainable Master Plan (ISMP) in 2016 to address long-term planning and visioning for water, wastewater, transportation and active transportation infrastructure improvements, and opportunities within the County. A Water and Wastewater strategy was developed to assess the capacity of existing systems to fulfill the current and future (2041) water supply, storage and servicing needs of the County, and identify gaps for improvement opportunities.

The ISMP highlights that the existing fire flow storage and distribution system (fire hydrants) has smaller than recommended diameter of pipes for the distribution of water, and improvements to increase the capacity are recommended. In addition, the ISMP identified issues within the existing water supply system, noting the existing capacity was lower than anticipated, limitations with water treatment plants, and much of the infrastructure was aging/nearing the end of its service life. In addition, the ISMP identified water supply requirements through to the year 2041 within the Urban Areas (Simcoe, Port Dover, Delhi, Courtland, Port Rowan, Waterford), and identified the need for water supply availability and security within the County to supply for future generations. Many of the Urban Areas currently rely on groundwater supplies which can be at serious risk of aquifer contamination, can limit growth as approvals for groundwater wells become difficult to obtain, and require frequent maintenance.

The ISMP recommends a centralized water supply that would consist of new water intake, a new water treatment plant, and a system of transmission mains that convey treated water throughout the County. There is opportunity for the system to purchase water from an adjacent community and convey the water through transmission mains. The ISMP identifies the possibility of connecting to the Nanticoke Water Treatment Plant and building a booster pumping station to convey water at a sufficient water flow and pressure

4.2.3 Water Supply Operational Strategy – Inter Urban Water Supply

The purpose of the Water Supply Operational Strategy (2021) was to identify a secure water servicing strategy for Norfolk County. The report identified deficiencies within the existing water supply system, and determined the County's water supply system is at high risk of reaching supply capacity and requires improvements. The report identified the need to implement the IUWS within the County. Details about the IUWS are provided in Section 1.2.1.

5.0 Problem and Opportunity

The first step in the Class EA process is to identify the problem or opportunity that has led to the undertaking of the Class EA. The problems identified with the existing infrastructure include the following:

- Insufficient capacity for long-term growth
- Lack of quality compliance
- Insufficient fire flow services
- Individual well systems, which require more maintenance
- High peak water demands (seasonal)
- Aging infrastructure
- Low water system pressure
- Concerns with existing backup of water system

Potential opportunities for the infrastructure include:

- Opportunity to provide capacity for growth to 2041 and beyond
- High quality water services
- Provide fire flow supply for growth to 2041 and beyond
- Provide opportunity for residents to connect to centralized municipal services
- Accommodate high peak water demands year-round
- Build and renew infrastructure for 50+ years
- Provide reliable and consistent water pressure
- Provide backup capacity to water system
- Allow for future development and economic growth

Norfolk County is managing long-term growth. To meet future water supply demands, infrastructure improvements are necessary. Municipal water systems exist in the Urban Areas of the County. Remaining areas receive water supply through private communal systems and private wells.

The County is identifying cost-effective and adequate water supply system solutions to deliver high quality water services. The IUWS will ensure fire flow is available to all Urban Areas for improved access to water supply during fire events. The system will support, enhance and sustain peak water demands for existing and future residents and businesses in the County.

A new watermain connecting Simcoe to the Townsend Water Supply System will be built along with a booster pumping station and elevated water tank. The water feed from the Nanticoke Water Treatment Plant will replace the current groundwater supply to

provide current and future water demand and back-up capacity to the County's water supply system.

6.0 Development of Alternative Solutions

As part of Phase 2 of the Class EA process, reasonable and feasible alternative solutions to the Problem and Opportunity Statement are identified and assessed. The framework and criteria for assessing the alternatives are also identified to determine the advantages and disadvantages with respect to the natural, social, technical and financial environments. Based on this evaluation, recommendations are identified and confirmed based on public, agency, and Indigenous community and First Nations consultation. Mitigation measures are identified to offset any potential environmental impacts of the recommendations.

6.1 Alternative Solutions

6.1.1 Watermain Alignment

The alignment of the transmission watermain will be constructed within the municipal right-of-way, which pre-determined the overall alignment of the watermain throughout the study area. The alignment was determined through the IUWS and Water Supply Operational Strategy and was selected due to the proximity to future connections to Waterford and Delhi. The Municipal Class EA requirements, as described in Section 2.0, do not require Schedule A+ projects to follow procedures set out in the EA Document; therefore, do not require the development or evaluation of alternative solutions for the watermain alignment. The selection of the alignment within the municipal right-of-way will minimize impacts to private properties, street trees, natural environment, etc. The exact placement of the watermain within the right-of-way will be determined during detail design. The watermain alignment can generally be grouped into four sections, outlined below.

- Fourteenth Street West - Beginning at the East ¼ Line and continuing east to Glendale Crescent,
- Glendale Crescent / Fourteenth Street East – A developed residential neighborhood area,
- Norfolk Sunrise Rail Trail – The Norfolk Sunrise l Trail from Davis Street to Concession 13.
- Concession 13 Road: From the Norfolk Sunrise Trail to Townsend (known as Stone Quarry Road in Townsend)

Additional details about the installation of the watermain is provided in Section 9.1.

6.1.2 Booster Pumping Station

Alternative locations were identified for the proposed Booster Pumping Station (BPS). The location for the BPS was to be situated along Concession 13 Townsend, the determined watermain alignment route, and nearby an existing electrical supply transmission. The purpose of the BPS is to maintain consistent water pressure along the watermain transmission and to provide adequate water flow to convey water supply through the transmission main.

The project team considered the area at Concession 13 Townsend and Blueline Road for the BPS location, due to its proximity to Waterford and to existing electrical supply transmission. This area contains significant woodlands, a watercourse, and hazard lands, and was therefore screened out from further consideration due to the environmental constraints.

Another area considered was at Concession 13 Townsend and Cockshutt Road, as Cockshutt Road has an existing electrical supply transmission. The lands to the west of Cockshutt Road, along Concession 13 Townsend are designated hazard lands, and were determined to be unsuitable for the BPS location. The project team proceeded with identifying four alternative locations for the area east of Cockshutt Road. The approximate locations for Alternative Locations 1, 2, 3 and 4 are displayed in Figure 5.



Figure 5: Alternative Locations for the Booster Pumping Station

The alternatives are evaluated in Section 7.1.2.

6.1.3 Elevated Tank

The elevated tank will be located within municipally owned lands, in the west end of the study area, at the southeast of Windham East Quarter Line Road and Fourteenth Street

West. No alternative locations were developed, as the elevated tank will be placed within this segment of land in which the design best fits. The elevated tank will be constructed to act as a buffer during period of peak demand/water consumption. It will enable efficient operations and provide redundancy to the water supply system. The approximate location of the elevated tank is in shown in Figure 6.



Figure 6: Elevated Tank Location

6.2 Evaluation of Alternative Solutions

A qualitative evaluation process is used to determine the relative suitability of each alternative in accordance with a specific set of evaluation criteria. The criteria were developed to identify the impacts of the alternatives to the natural, socio-economic, cultural, technical and financial environments to satisfy requirements under the EA Act.

6.2.1 Evaluation Criteria

Based on the review of background information and characterization of the study area, the criteria in Table 1 was identified for this study.

Table 1: Evaluation Criteria

Factors	Evaluation Criteria & Description
Socio-Economic Environment	• Potential to impact existing land uses (e.g., construction impacts, aesthetics, noise during operation, water pressure, safety) • Potential to impact agricultural land uses • Potential to support growth within Urban Areas

Natural Environment	• Potential to impact fish and fish habitat • Potential to impact water resources including surface water (i.e., rivers, creeks, etc.), groundwater recharge areas and wellhead protection areas • Potential to impact significant natural heritage features • Potential to impact significant wildlife habitat and species at risk
Cultural Environment	• Potential to impact archaeological resources • Potential to impact cultural heritage resources
Technical Considerations	• Potential land requirements including acquisition or easements (temporary/permanent) • Potential to impact existing utilities and infrastructure • Proximity to existing electrical supply • Constructability (e.g., open cut, non-destructive technologies, etc.)
Financial	• Estimated capital and operational cost

6.3 Evaluation Methodology

The framework and criteria for assessing alternative solutions are identified to determine the advantages and disadvantages with respect to the environmental, social, cultural, technical and financial components of this project. A detailed assessment of each alternative was completed based on the criteria outlined in Table 1. A comparative evaluation matrix was prepared and used to present the evaluation of alternative locations, and was given an evaluation of *Least Preferred, Moderately Preferred,* or *Most Preferred.*

6.4 Evaluation of Alternative Solutions

A detailed evaluation of the alternative locations for the BPS was completed as part of the study and is available in Table 2 below.

Table 2: Evaluation of Alternative Locations for the BPS

Factors and Criteria	Do Nothing	Alternative Location 1	Alternative Location 2	Alternative Location 3	Alternative Location 4
Socio-Economic Environment					
• Potential to impact existing land uses (e.g., construction impacts, aesthetics, noise during operation, water pressure, safety)	• This is not considered a feasible option as it does not address the identified problems and opportunities (i.e., insufficient fire flow services, water demands, low water system pressure, etc.).	• Potential to impact 3 existing residential properties (west and east), and church (southwest) due to proximity to booster pumping station, although mitigation measures exist to reduce impacts: o Noise – mitigation measures are available by designing the building and equipment to minimize sound transmission o Aesthetics – mitigation measures to reduce impacts are available through landscape and architectural design compatible to the surrounding area o Short-term construction impacts – noise, vibration, air (dust), traffic • Safety concerns for rechlorination of water supply through chemical delivery (within booster pumping station) – mitigation measures to reduce impacts are available using sodium hypochloride rather than chlorine gas	• Potential to impact 2 existing residential properties (northwest and east) due to proximity to booster pumping station, although mitigation measures exist to reduce impacts: o Noise – mitigation measures are available by designing the building and equipment to minimize sound transmission o Aesthetics – mitigation measures to reduce impacts are available through landscape and architectural design compatible to the surrounding area o Short-term construction impacts – noise, vibration, air (dust), traffic • Safety concerns for rechlorination of water supply through chemical delivery (within booster pumping station) – mitigation measures to reduce impacts are available using sodium hypochloride rather than chlorine gas	• Potential to impact 2 existing residential properties (west and southeast) due to proximity to booster pumping station, although mitigation measures exist to reduce impacts: o Noise – mitigation measures are available by designing the building and equipment to minimize sound transmission o Aesthetics – mitigation measures to reduce impacts are available through landscape and architectural design compatible to the surrounding area o Short-term construction impacts – noise, vibration, air (dust), traffic • Safety concerns for rechlorination of water supply through chemical delivery (within booster pumping station) – mitigation measures to reduce impacts are available using sodium hypochloride rather than chlorine gas	• Potential to impact 3 existing residential properties (west, east, and northeast) due to proximity to booster pumping station, although mitigation measures exist to reduce impacts: o Noise – mitigation measures are available by designing the building and equipment to minimize sound transmission o Aesthetics – mitigation measures to reduce impacts are available through landscape and architectural design compatible to the surrounding area o Short-term construction impacts – noise, vibration, air (dust), traffic • Safety concerns for rechlorination of water supply through chemical delivery (within booster pumping station) – mitigation measures to reduce impacts are available using sodium hypochloride rather than chlorine gas

Factors and Criteria	Do Nothing	Alternative Location 1	Alternative Location 2	Alternative Location 3	Alternative Location 4
			• Potential to sever property parcel in half due to location proposed and footprint required		
• Potential to impact agricultural land uses	• No change.	• Land is designated Agricultural. A portion of the property would change as a result of the booster pumping station.	• Land is designated Agricultural. A portion of the property would change as a result of the booster pumping station.	• Land is designated Agricultural. A portion of the property would change as a result of the booster pumping station.	• Land is designated Agricultural. A portion of the property would change as a result of the booster pumping station.
• Potential to support growth within Urban Areas	• Would not support growth within Urban Areas.	• The booster station will boost the pressure of the water to allow it to be delivered at the required pressures to serve the Communities of Simcoe, Waterford and Delhi/Courtland.	• The booster station will boost the pressure of the water to allow it to be delivered at the required pressures to serve the Communities of Simcoe, Waterford and Delhi/Courtland.	• The booster station will boost the pressure of the water to allow it to be delivered at the required pressures to serve the Communities of Simcoe, Waterford and Delhi/Courtland.	• The booster station will boost the pressure of the water to allow it to be delivered at the required pressures to serve the Communities of Simcoe, Waterford and Delhi/Courtland.
Socio-Economic Environment Summary	**Not Preferred**	**Moderately Preferred**	**Least Preferred**	**Most Preferred**	**Most Preferred**
Natural Environment					
• Potential to impact fish and fish habitat	• No impact to fish or fish habitat.	• No potential to impact fish or fish habitat.	• High potential to impact fish or fish habitat.	• No potential to impact fish or fish habitat.	• No potential to impact fish or fish habitat.
• Potential to impact water resources including surface water (i.e., rivers, creeks, etc.), groundwater recharge areas and wellhead protection areas	• No impact to water resources.	• No potential to impact water resources, groundwater recharge areas or wellhead protection areas.	• High potential to impact a minor watercourse that is present. • No potential to impact water resources, groundwater recharge areas or wellhead protection areas.	• No potential to impact water resources, groundwater recharge areas or wellhead protection areas.	• No potential to impact water resources, groundwater recharge areas or wellhead protection areas.
• Potential to impact significant natural heritage features	• No impact to significant natural heritage features.	• No potential to impact significant natural heritage features as site is within agricultural lands.	• Moderate potential to impact adjacent Significant Woodlands. Some tree removal would be required.	• No potential to impact significant natural heritage features as site is within agricultural lands.	• No potential to impact significant natural heritage features as site is within agricultural lands.

Factors and Criteria	Do Nothing	Alternative Location 1	Alternative Location 2	Alternative Location 3	Alternative Location 4
• Potential to impact significant wildlife habitat and species at risk	• No impact to significant wildlife habitat and species at risk.	• No potential to impact significant natural heritage features as site is within agricultural/already disturbed lands.	• Moderate potential to impact significant wildlife habitat and species at risk.	• No potential to impact significant natural heritage features as site is within agricultural/already disturbed lands.	• No potential to impact significant natural heritage features as site is within agricultural/already disturbed lands.
Natural Environment Summary	**Most Preferred**	**Most Preferred**	**Least Preferred**	**Most Preferred**	**Most Preferred**
Cultural Environment					
• Potential to impact archaeological resources	• No impact to archaeological resources.	• Stage 2 Archaeological Assessment required	• Stage 2 Archaeological Assessment required	• Stage 2 Archaeological Assessment required	• Stage 2 Archaeological Assessment
• Potential to impact cultural heritage resources	• No impact to cultural heritage resources.	• Potential for indirect impacts to cultural heritage resource property at 962 Concession 13 Townsend (church) – mitigation measures are available to avoid impacts.	• Low potential for impacts to cultural heritage resource property at 962 Concession 13 Townsend (church).	• Low potential for impacts to cultural heritage resource property at 962 Concession 13 Townsend (church).	• Low potential for impacts to cultural heritage resource property at 962 Concession 13 Townsend (church).
Cultural Environment Summary	**Most Preferred**	**No Significant Difference**	**No Significant Difference**	**No Significant Difference**	**No Significant Difference**
Technical Considerations					
• Potential land requirements including acquisition or easements (temporary/ permanent)	• No land required.	• All sites require land acquisition to build station.	• All sites require land acquisition to build station.	• All sites require land acquisition to build station.	• All sites require land acquisition to build station.
• Potential to impact existing utilities and infrastructure	• No impact to existing utilities and infrastructure.	• No anticipated impacts to existing utilities or infrastructure.	• No anticipated impacts to existing utilities or infrastructure.	• No anticipated impacts to existing utilities or infrastructure.	• No anticipated impacts to existing utilities or infrastructure.
• Proximity to existing electrical supply	• No connection required.	• Shortest distance to extend the electrical supply from Cockshutt Road to the new pumping station	• Moderate distance to extend the electrical supply from Cockshutt Road to the new pumping station.	• Moderate distance to extend the electrical supply from Cockshut Road to the new pumping station.	• Longest distance to extend the electrical supply from Cockshut Road to the new pumping station.
• Constructability (e.g., open cut, non-destructive technologies, etc.)	• No construction required.	• Existing topography would require most significant grading to level the surface to accommodate booster station.	• Existing topography would require significant grading to level the surface to accommodate booster station.	• Existing topography would require minor grading to level the surface to accommodate booster station.	• Existing topography would require minor grading to level the surface to accommodate booster station.
Summary of Technical Considerations	**Most Preferred**	**Most Preferred**	**Moderately Preferred**	**Moderately Preferred**	**Least Preferred**

Factors and Criteria	Do Nothing	Alternative Location 1	Alternative Location 2	Alternative Location 3	Alternative Location 4
Financial					
• Estimated capital and operational cost	• No capital costs associated with this alternative.	• Higher estimated capital costs due to grading requirements of property.	• Higher estimated capital costs to remediate impacts to watercourse and remove some existing trees.	• Lowest estimated capital costs.	• Higher estimated capital costs due to longer length of electrical power line extension required to reach site.
Summary of Financial Considerations	**Most Preferred**	**Least Preferred**	**Least Preferred**	**Most Preferred**	**Least Preferred**
OVERALL SUMMARY	**Moderately Preferred – Not Carried Forward** Do Nothing is not considered a reasonable alternative as it does not address the problems identified. More specifically, it does not allow for the successful implementation of the watermain to transmit water across the County. 'Do Nothing' provides a baseline comparison for the other alternative locations.	**Moderately Preferred** Alternative 1 is considered moderately preferred, due to its potential impacts to adjacent residences, as well as potential indirect impacts to cultural heritage features. This alternative would also present high capital costs due to grading requirements of the property to allow for building a booster pumping station.	**Least Preferred** Alternative 2 is considered least preferred, due to its impacts to adjacent residences, and requirement to sever a residential property. In addition, this alternative presents the highest potential to impact the existing natural environment, requiring tree removal and remediation of impacts to the watercourse within the area. This alternative requires significant grading to accommodate a booster pumping station.	**Most Preferred** Alternative 3 is considered the most preferred location, as the building would be situated furthest from adjacent residences. This alternative would anticipate no environmental impacts as the lands are currently used for agricultural operations. The existing topography would require minor grading to accommodate a booster pumping station.	**Moderately Preferred** Alternative 4 is considered moderately preferred, due to its distance from the existing hydro infrastructure along Cockshutt Road. This distance makes this location the most expensive. This alternative would also have the potential to impact more residences, when compared to Alternative 3.

6.5 Recommended Solution

The recommended location for the BPS was determined to be Alternative Location 3. Property acquisition is required from one landowner at this location to accommodate the 4800m^2 (approximately 60m x 80m) BPS. The existing topography would require minor grading and has no anticipated impacts to fish or fish habitat, water resources, or significant natural heritage areas. This location has no anticipated impacts to existing utilities or infrastructure.

6.5.1 Alternate Recommended Solution

The evaluation of alternative locations determined Alternative Location 1 is moderately preferred compared to Alternative Location 3. When compared to Location 3, Location 1 presents greater grading requirements, but is located closer to the existing electrical supply at Cockshutt Road. Building the BPS at Alternative Location 1 would reduce the costs for extending the electrical supply, compared to Alternative Location 3. The main concerns with Alternative Location 1 are due to the proximity of the building to adjacent residents. If the BPS is situated with Alternative Location 1, the building will be designed to mitigate noise impacts (i.e., placing outdoor equipment away from homes, tree buffers, etc.).

Alternative Location 3 is situated within the same property as Alternative Location 1. During property acquisition discussions with the property owner, Norfolk County may choose to present this location to the landowner.

7.0 Existing Conditions

A review of the existing conditions for the booster pumping station and elevated tank locations was completed to gather an understanding of the study area. This review gathered information regarding the existing socio-economic environment, natural environment, cultural environment, municipal infrastructure, and geotechnical conditions.

7.1 Socio-Economic Environment

7.1.1.1 Proposed Watermain Alignment Study Area

The proposed alignment of the new watermain falls within the Town of Simcoe and rural lands. The west end of the study area, in the Town of Simcoe will be built within the municipal right-of-way. The lands adjacent to the right-of-way are designated Protected Industrial, Urban Residential, Agricultural, and Significant Woodlands. Majority of the lands within the study area, adjacent to the alignment, are designated as Agricultural. Significant Woodlands have been identified along Concession 13, with areas on both the north and south sides of the road.

7.1.1.2 Proposed Booster Station Study Area

The proposed study area for the booster pumping station is designated as Agricultural. Adjacent to the study area, the lands are designated as Significant Woodlands, Hazard Lands, and Agricultural. There are also a few residential properties within this section of the study area.

7.1.1.3 Elevated Tank Study Area

The proposed lands for the elevated tank are municipally owned. The section of land is an undeveloped, open area.

7.2 Natural Environment

Stantec completed a background review of natural environment features for the booster pumping station and elevated tank locations, including designated natural areas, fish communities and fish habitat, and potential Species at Risk (SAR) and Species of Conservation Concern (SOCC).

A number of background documents and information sources were consulted to identify natural heritage features for the study area. Data was compiled in a GIS database to support mapping and data query requirements of the natural heritage assessment.

Background documents and information sources were consulted to identify natural heritage features for the study area, including the following data sources:

- Land Information Ontario (LIO) database (NDMNRF 2022)
- County of Norfolk Official Plan (2021)

Data was compiled in a GIS database to support mapping and data query requirements of the natural heritage assessment.

For the potential occurrence of Species at Risk (SAR) or Species of Conservation Concern (SOCC), the following sources were consulted for recent (1990-present) records in the vicinity of the study area:

- Natural Heritage Information Centre (NHIC) Biodiversity Explorer database (NDMNRF 2022)
- Atlas of the Mammals of Ontario (Dobbyn 1994)
- Ontario Reptile and Amphibian Atlas (Ontario Nature 2019)
- Ontario Breeding Bird Atlas (Cadman et al. 2007)
- Species at Risk in Ontario List (MECP 2022)
- eBird Online Database (eBird 2021)
- iNaturalist Online Database (iNaturalist 2021)
- Fisheries and Oceans Canada – Aquatic Species at Risk Map (DFO 2019)

The above sources are used as indicators of potential occurrence in the Study Area because they do not identify specific locations of species occurrences.

Species at Risk (SAR)

For the purpose of this assessment, SAR are species listed as Threatened (THR) or Endangered (END) on SARO or aquatic species and migratory birds classified as THR or END on Schedule 1 of the SARA. SAR records were obtained from the NHIC (NDMNRF), DFO (DFO 2019) and other online databases.

Species of Conservation Concern (SOCC)

Species of Conservation Concern (SOCC) may be designated at the global, national, provincial, or local level. For this report, SOCC includes species that are provincially rare (with a Provincial S-rank of S1 to S3), listed as Special Concern (SC) on the SARO list, or terrestrial species listed on Schedule 1 of SARA but not included on the SARO list.

Provincial ranks (S-ranks) are used by the NHIC to set protection priorities for rare species and vegetation communities. They are based on the number of factors such as abundance, distribution, population trends and threats in Ontario and are not legal designations. By comparing the global and provincial ranks, the status, rarity, and the

urgency of conservation needs can be determined. Species with provincial ranks of S1 to S3, and those tracked by the Ministry of Natural Resources and Forestry (MNRF), are considered SOCC. Provincial S-ranks are defined as follows:

S1: Critically imperiled; usually fewer than 5 occurrences
S2: Imperiled; usually fewer than 20 occurrences
S3: Vulnerable; usually fewer than 100 occurrences
S4: Apparently secure; uncommon but not rare, usually more than 100 occurrences
S5: Secure, common, widespread, and abundant
S-rank followed by a “?” indicates the rank is still uncertain

7.2.2 Physical Environment

The study area is located in Ecoregion 7E (Lake Erie-Lake Ontario). The Ecoregion is underlain by Silurain and Devonian limestone bedrock, with flat topography and deep undulating deposits of ground moraine. About 78% of the ecoregion has been converted to cropland and pasture, and developed land (e.g., urban areas and road networks) encompasses more than 7% of the ecoregion. Approximately 11.38% of the ecoregion remains as forests, including dense deciduous, sparse deciduous, and mixed deciduous.

7.2.3 Vegetation

The study area is within the Deciduous Forest Region (Rower, 1972). This area has remnants of Carolinian forests, and supports the largest remnants of tall-grass prairie in the province. Some of the species include tulip-trees, black gum, sycamore, Kentucky coffee-tree, pawpaw, various oaks and hickories, and common hackberry, in addition to more widespread sugar maple, American beech, white ash, eastern hemlock and eastern white pine.

Within the elevated tank area, the NHIC 1km x 1km database identified a S1 Rank plant community, Dry Tallgrass Prairie Type vegetation.

7.2.4 Fisheries and Fish Habitat

The entire study area is located within the Long Point Region Conservation Authority Watershed Boundary. The study area includes the following named watercourses:

- Patterson Creek
- Davis Creek
- Black Creek
- Catfish Creek
- Nanticoke Creek

There are additional unnamed watercourses in the study area including: permanent watercourses, intermittent watercourses and constructed drains. The named and unnamed watercourse, constructed drains and all connecting tributaries and headwater drainage features, including wetlands, provide either direct fish habitat or provide important functions to direct habitat and are protected under the Fisheries Act (2985).

Records of 22 species of fish are available for the study area. All the species recorded are common and classified as Not at Risk (NAR). Patterson Creek, Davis Creek and Black Creek provide a coldwater thermal regime, while Catfish Creek and Nanticoke Creek provide warmwater.

Looking specifically at the areas of the Booster Pumping Station and Elevated Tank, these locations are not in close proximity to any watercourses, and no impacts to fish or fish habitat are anticipated.

7.2.5 Designated Natural Heritage Features

The NDMNRF mapping identified the LR-13 Provincially Significant Wetland (PSW) Complex in the study area, within and to the east of the Town of Simcoe. Schedule B of the Norfolk County Official Plan designates the feature as a PSW with Significant Woodland areas identified adjacent to the wetland. The study area is located within LPRCA regulated features (O. Reg 178/06), including all watercourses and tributaries.

7.2.6 Recent Species Records

A search of NHIC indicated there were 35 terrestrial SAR and 12 SOCC that had record of overlap with the entire study area. Of these species, 2 terrestrial SAR and 1 SOCC overlap with the booster pumping station area, and 1 SOCC overlap with the elevated tank area.

The species within the booster pumping station area are as follows:

- SAR – American Badger (Southwestern Ontario population) (Endangered), and Eastern Meadowlark (Threatened)
- SOCC – Eastern Milksnake

The species within the elevated tank area are as follows:

- SOCC – Midland Painted Turtle

7.3 Drinking Water Source Protection

Uncontaminated surface and groundwater resources are essential to Norfolk County. The protection, conservation and careful management of surface and groundwater resources is necessary to meet both present and future needs of residents, businesses

and the natural environment. The study area is located within the Long Point Region Source Protection Plan Area, which contains policies for the protection of municipal drinking water sources within Norfolk County in accordance with the *Clean Water Act*.

The western portion of the study area falls within a Highly Vulnerable Aquifer (Figure 7), and Significant Groundwater Recharge Area (Figure 8). The proposed works intersects a Wellhead Protection Area (WHPA)-D (Figure 9) with a vulnerability score of 6, a WHPA-E with a vulnerability score of 6.3, a highly vulnerable aquifer (HVA) with a vulnerability score of 6, and a Significant Groundwater Recharge Area (SGRA). Given that the proposed works will not intersect any high-scoring vulnerable area, they are not a significant drinking water threat. .



Figure 7: Highly Vulnerable Aquifer

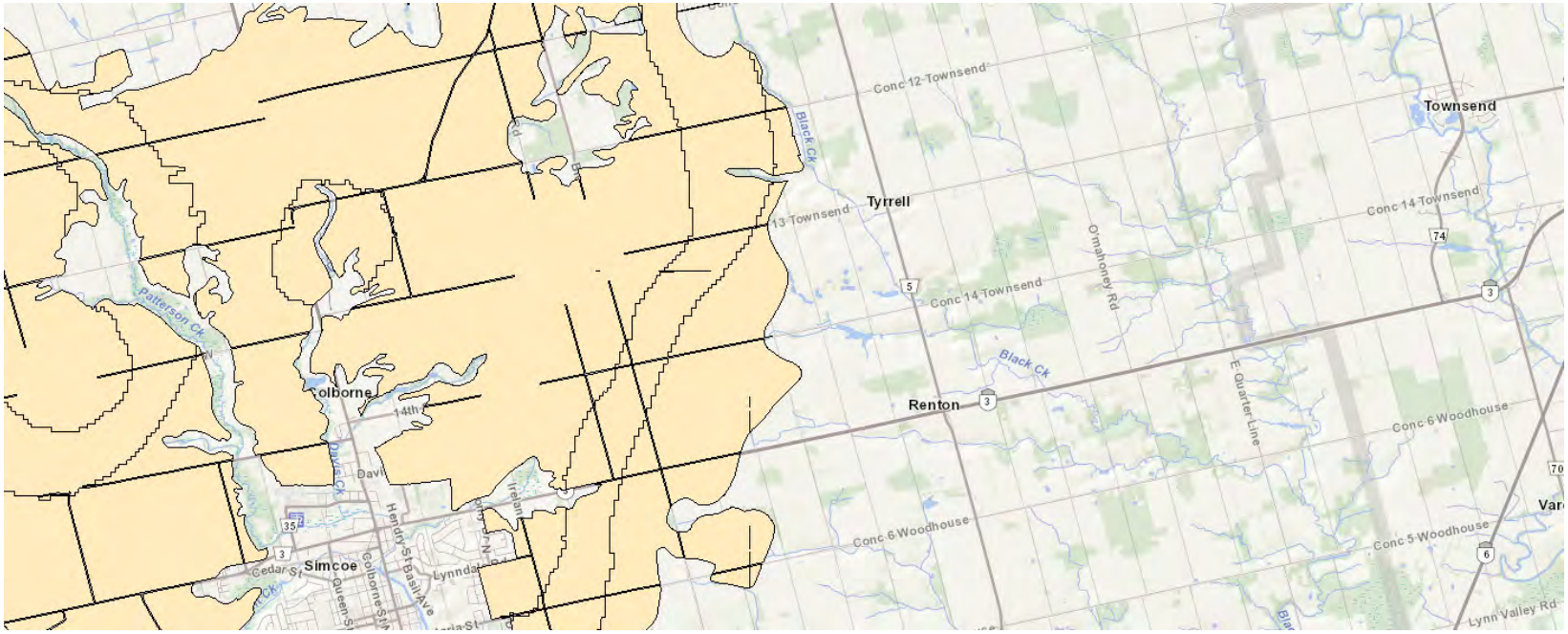


Figure 8: Significant Groundwater Recharge Area

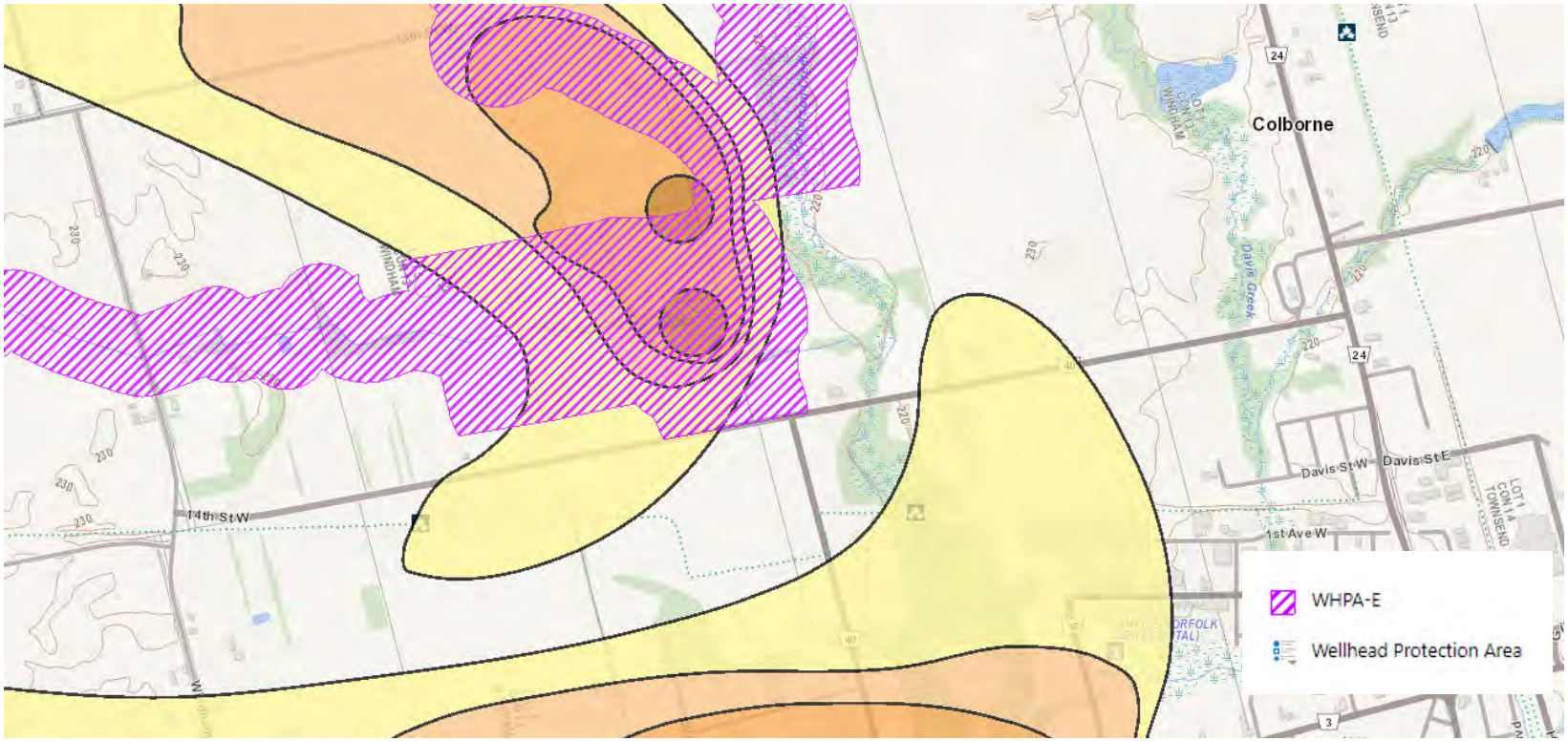


Figure 9: Source Water Protection

7.4 Cultural Environment

7.4.1 Archaeological Resources

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 Ministry of Citizenship and Multiculturalism (MCM) to determine areas of archaeological potential within the region under study. These variables include proximity to registered 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.

In compliance with the provincial standards and guidelines set out in the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the objectives of the Stage 1 archaeological assessment 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.

A Stage 1 archaeological assessment for the proposed locations for the elevated tank and booster pumping station was completed. The Stage 1 background research determined that portions of the study areas exhibit potential for the identification and recovery of archaeological resources. In accordance with Section 1.3.2 and Section 7.7.4 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists*, Stage 2 archaeological assessment is required for the booster pumping station and elevated water tank study area.

The objective of the Stage 2 archaeological assessment is to document archaeological resources within the study area retaining archaeological potential and to determine whether these archaeological resources require further assessment. The Stage 2 archaeological assessment will be conducted during detail design.

A copy of the Stage 1 Archaeological Assessment is provided in Appendix B.

7.4.2 Cultural Heritage Resources

The Norfolk County Heritage and Cultural Mapping was reviewed to identify any cultural heritage resources within the study area.

The following resources were identified nearby to the study area:

- Cemetery - St. Marys Cemetery, 234 14th Road West, Simcoe
- Designated Heritage Property – Mackay/Black Residence, 841 Norfolk Street North
- Farms and Orchards – Berlo's Best Sweet Potatoes, 325 Concession 13 Townsend, Simcoe
- Heritage Committee Identified Properties – Church, 962 Concession 13 Townsend
- Cemetery – Mount Hope/Tyrell Cemetery, Villa Nova Road, Simcoe

7.5 Municipal Infrastructure

The major communities in Norfolk County are Simcoe, Port Dover, Delhi & Courtland, Waterford, Port Rowan and St. Williams. The water supply sources are summarized in the table below:

Table 3: Overview of Existing System Infrastructure

Community	Source Type	Sources
Simcoe	Groundwater	8 Wells and 1 Infiltration Gallery
Port Dover	Surface Water (Lake Erie)	1 Surface WTP
Delhi & Courtland	Groundwater and Surface Water	1 Surface WTP (to be decommissioned) and 4 Wells (includes the two news ones) in Delhi. Courtland supplied by transmission main from Delhi Wells to Courtland.
Waterford	Groundwater	2 Wells
Port Rowan & St. Williams	Surface Water (Lake Erie)	1 Surface WTP with a transmission main from Port Rowan to St. Williams.

Most communities are self-supplying except for Courtland (supplied by Delhi via a single transmission main) and St. Williams (supplied by Port Rowan via a single transmission main). The communities do not provide backup supply to each other. Fluoride is added to the drinking water in Simcoe and Delhi (i.e., Courtland) drinking water also contains fluoride. Port Dover, Waterford, Port Rowan, and St. Williams do not practice fluoridation, and according to Norfolk County staff, these communities will not be adding fluoridation in the future.

The Norfolk County Information Memo - Servicing Monitoring Report – Water and Wastewater EIS-22-077 (September 20, 2022, Council Meeting) indicated the current system capacity, existing demands, committed and pending allocations and available capacity (m3/d). The water system capacity is displayed in the following table:

Table 4: Water System Capacity Per Community (2022)

System	Simcoe	Port Dover	Waterford	Delhi	Port Rowan
Capacity	10,612	4,200	5,875	6,894	1,700
Existing Demand	7,362	4,282	1,590	3,722	1,507
Committed Development	477	340	315	301	52
Capacity after Committed	2,773	-(422)	3,970	2,871	141
Pending Development	1,374	1,893	267	103	325
Capacity after Pending	1,399	-(2,315)	3,703	2,768	-(184)

The data displays the need for increased capacity within the County.

7.6 Geotechnical and Hydrogeological

Geotechnical and hydrogeological investigations will be completed during detail design. The investigations will include borehole drilling including soil sampling boreholes for environmental screening. Environmental Investigation and Reporting, in support of O.Reg. 406/19 will be included in the geotechnical investigation work and will include the following:

- Assessment of Past Land Uses and Sampling and Analysis Plan
- Excess Soil Field Investigation
- Soil Characterization Report
- Excess Soil Destination Assessment Report

8.0 Project Description

For the first phase of the IUWS, a connection to the Haldimand water distribution system in Townsend is proposed, along with a new Elevated Tank (ET) in Simcoe. To supply water from Townsend to Simcoe, a booster pumping station (BPS) is required along the watermain. A copy of the preliminary drawings for the transmission watermain, booster pumping station and elevated tank and provided in Appendix C.

8.1 Transmission Watermain

The IUWS will convey treated water from Townsend to Simcoe. This represents an approximate distance of 19.5 kilometers. An additional 0.7 km of pipe will connect the future IWUS transmission main along 14th Street East to Davis Street East, following the L.E. & N. rail trail.

The IUWS transmission watermains will be 600mm in diameter. Given the proximity to the existing Simcoe distribution network, the IUWS connection to Simcoe will be a 400mm diameter pipe along 14th Street West. Simcoe could benefit from a second connection to the IUWS, and a 400mm watermain connection along Queensway East is recommended for consideration. The minimum depth of the watermain will be 1.7m, with a minimum of 2.0m under watercourses/culvert structures. The pipe material will be determined during detail design.

Impacts to the environment and road disturbance will be mitigated during detail design.

The general alignment of the watermain is separated in four sections, and details are highlighted below.

Fourteenth Street West - Beginning at the East ¼ Line and continuing east to Glendale Crescent

Fourteenth Street West from East ¼ Line to Glendale Crescent consists of a two-lane rural cross-section with open ditches/swales. This section of watermain is approximately 3,380m long aligned along the south side of the roadway approximately 1m into the existing pavement. The proposed method of installation is open cut for the majority of this section, with horizontal directional drilling required at two large culvert crossings. Construction of the watermain will require the use of the entire road width, and localized road closures during construction or single lane alternating traffic control will be required.

Glendale Crescent / Fourteenth Street East – A developed residential neighborhood area

Glendale Crescent and Fourteenth Street East consists of a two-lane semi-rural cross-section with open ditches/swales and limited storm sewers. This section of watermain is approximately 540 m long and traverses Glendale Crescent and Fourteenth Street West, a residential area between Fourteenth Street West and the Norfolk Sunrise Trail. The proposed method of installation is open cut throughout this section, with potential for a short section of trenchless installation under Highway 24 to minimize impacts to traffic. Existing utilities will be investigated further to confirm potential conflicts and make adjustments to the watermain design. Construction of the watermain will require the use of the entire road width, and localized road closures during construction or single lane alternating traffic control will be required. Permitting for work on Highway 24 will be required from the Ministry of Transportation.

Norfolk Sunrise Rail Trail – The Norfolk Sunrise l Trail from Davis Street to Concession 13.

The Norfolk Sunrise Trail from Davis Street to 50m south of Fourteenth Street consists of 2.5m wide asphalt. The remaining portion of the trail to Concession 13 consists of gravel at a general width of 2.0m. The portion of the water main alignment along the Norfolk Sunrise Trail stretches from Davis Street at the southern end to Concession 13. at the norther end for approximately 2,065 m. Both open cut, or directional drilling may be feasible for construction at this area. Just off Davis Street the Norfolk Sunrise Rotary Club has planted a significant number of Redbud trees and daffodil buds. This must be considered during selection of installation method. Any natural environment features disturbed during construction will need to be replaced.

Concession 13 Road: From the Norfolk Sunrise Trail to Townsend (known as Stone Quarry Road in Townsend)

Concession 13 consists of a two-lane rural cross-section with open ditches/swales. The roadway pavement consists of a bitumen/aggregate surface treatment. The portion of the water main alignment along Concession 13 begins at the Norfolk Sunrise Trail and extends east for 14,250m to Townsend. The proposed watermain is aligned along the south side of the roadway approximately 1 m into the existing pavement from the Norfolk Sunrise trail to just east of Cockshutt Road where the alignment shifts to the north side of the roadway, continuing approximately 1.0m into the pavement to Townsend Pkwy. in Townsend. Both open cut or directional drilling may be feasible for this section, with directional drilling potentially required at four concrete box culverts and the Nanticoke Creek crossing. Traffic management will be required during construction and commissioning the watermain may be a challenge due to the overall length and

rural location of the infrastructure. Stantec will develop a commissioning strategy at the 90% design stage.

8.1.2 Property Requirements

The transmission watermain will be installed within the municipal right-of-way and will therefore avoid impacts to private property. No property acquisition is anticipated to accommodate the watermain.

8.2 Booster Pumping Station

The water supply from Townsend will need have the pressure increased using a Booster Pumping Station to provide adequate pressure to Simcoe. The proposed BPS will be located along Concession Road 13, east of Cockshutt Road, at Alternative Site Location 1. A Property Impact Plan (PIP) was developed for this site as shown in Figure 10 below. This site is located approximately 7 km west of the tie-in point to the Haldimand network.

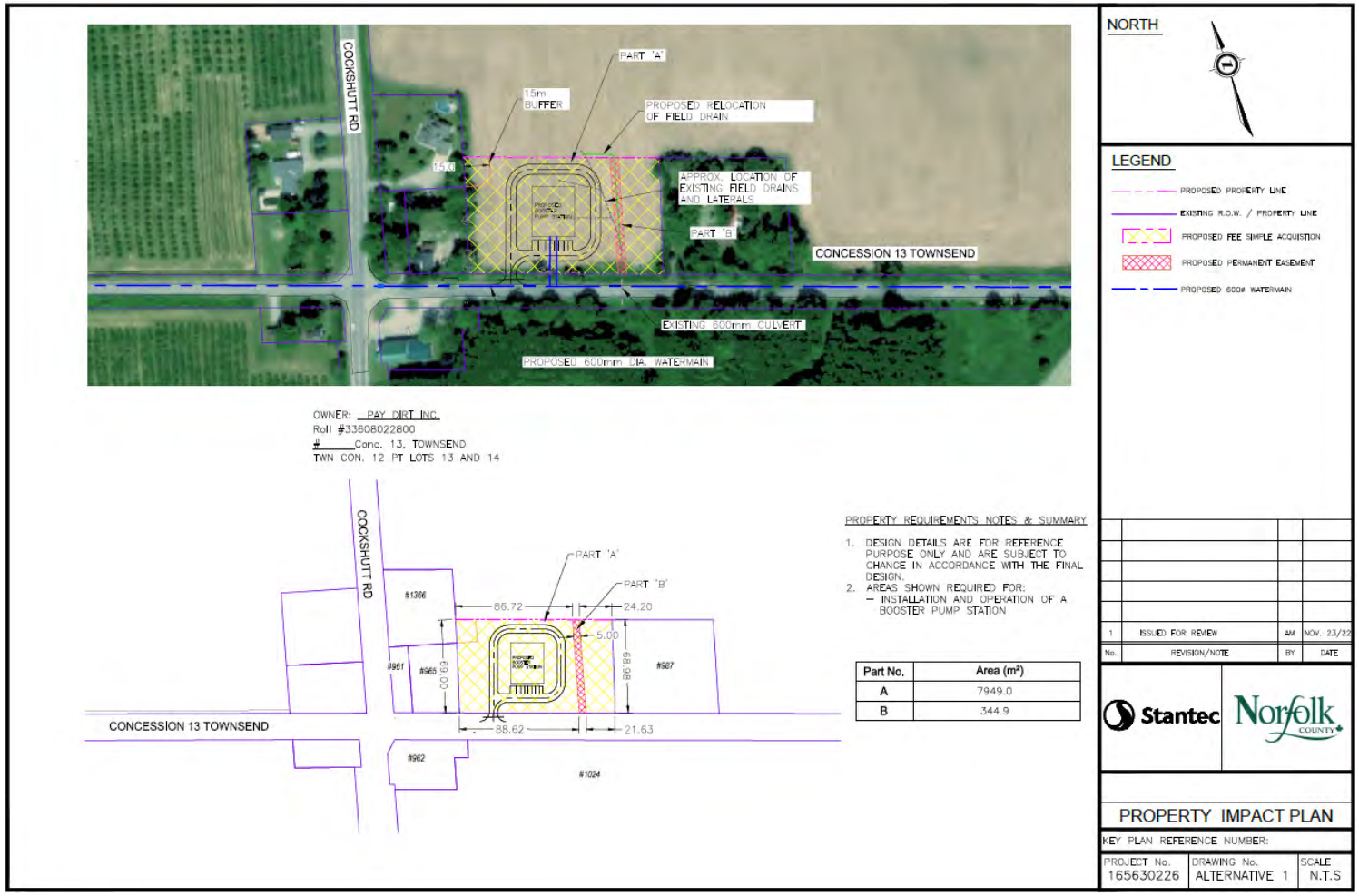


Figure 10: Property Impact Plan (PIP) for BPS Location

The booster pumping station will occupy a footprint of approximately 30 m x 19 m and will feature a pump room, generator room, an electrical room, sodium hypochlorite rechlorination, washroom facilities, storage facilities, operator desk and SCADA view node, process piping and space for four pumps. The BPS will be designed or an initial capacity of 5,000 m3/day and an ultimate capacity of 19,000 m3/day with an allowance for 25% future expansion. The BPS will pump to fill the new elevated water tower and the existing elevated tower will be used to balance instantaneous water demands for the Community. The types of pumps, number of pumps, type of generators, rechlorination system etc. will be determined during detail design. The site will be designed with a single driveway entrance and an internal driveway to allow access around the building, as well as space for onsite parking of County vehicles.

8.2.1 Property Requirements

Property acquisition is required for the lands displayed in Figure 10. The property is owned by one property owner, and discussions regarding acquisition will be completed during detail design.

8.3 Elevated Tank

A 5,500 m^3 Elevated Tower is proposed to be constructed at Windham East Quarter Line Road, on the site between the Simcoe Rail Trail and 14th Street West. The exact placement of the elevated tank within this property will be determined during detail design.

In Ontario there are two types of elevated tanks that are typically built:

- Composite Welded Steel Tank - welded steel bowl with a field applied coating and reinforced concrete pedestal, and
- Composite Glass Lined Bolted Steel Tank – Factory Glass lined bolted steel tank with reinforced concrete pedestal.

During the detailed design the type of tank will be refined through an aesthetic, maintenance and operation and life cycle cost analysis. The location of the elevated tank will include driveway access and parking for County vehicles.

8.3.1 Property Requirements

Property acquisition is not required as the elevated tank will be constructed on municipally owned lands.

8.4 Preliminary Cost Estimate

A preliminary cost estimate was prepared for the entirety of the project and is outlined in Table 1. The total estimated project cost totals approximately $62,100,000. These costs are subject to change.

Table 5: Preliminary Cost Estimate

DESCRIPTION	COST
Generic Contract Items. Approximated as 6% of Total Construction Cost	$2,600,000
Removals	$505,875
Supply and Install Watermain	$17,199,750
Culvert Crossings	$2,395,000
Mainline Valve, Drain and Air Relief Chambers	$7,675,000
Supply and Install Metering Chamber	$250,000
Watermain Connections (i.e., staged connections, booster pumping station, elevated tower, Townsend)	$290,000
Road and Trail Restoration	$4,692,000
Booster Pumping Station	**$5,180,000**
Elevated Tower	**$7,000,000**
Subtotal	$47,787,625
Contingency (15%)	$7,168,144
Taxes (13%)	$7,144,250
Opinion of Construction Cost	**$62,100,000**

9.0 Potential Environmental Impacts and Proposed Mitigation

As part of the EA process, measures should be identified to offset potential environmental impacts of the proposed undertaking. These measures have been identified based on the scope of work undertaken for this study in relation to the inventory of environmental conditions and should be consulted and updated during preliminary and detailed design based on updated, site specific information.

The study recommendations were developed to minimize negative impacts to the natural environment and significant features identified within the study area; however, during nearly any construction project the potential exists for some environmental impacts. Best Management Practices with respect to design and construction should be employed to minimize the potential for short-term and long-term impacts, as well as direct and indirect impacts of projects associated with the study recommendations. The measures identified below should be consulted and updated during detailed design and construction to reflect site-specific information.

9.1 Natural Environment

During the detailed design stage, targeted species surveys will be carried out within the alternative site locations to determine the potential for species to be present. Standard mitigation measures for the protection of wildlife and fish and fish habitat are outlined below.

9.1.1 Protection of Wildlife

The following mitigation measures are recommended to avoid impacts to wildlife during construction:

- Construction and tree protection fencing shall be installed prior to the start of construction, after layout, and shall be reviewed by an engineer;
- No tree removals shall be undertaken without approval from the County;
- A containment and spill management plan will be implemented to reduce the risk of deleterious substances from entering any watercourses;
- An emergency spill kit will be kept on site;
- Service equipment shall be washed, refueled and/or a minimum of 30 m from watercourses to reduce the risk of deleterious substances entering the watercourse;
- Construction machinery shall be cleaned prior to entering the site to reduce the potential for establishment of invasive species.

- A visual search of the work area will be conducted before work commences each day, particularly for the period when most wildlife is active (generally April 1 to October 31). Visual searches will include inspection of machinery and equipment left in the work area overnight prior to starting equipment.
- If wildlife is encountered, work at that location will stop, and the animal(s) will be permitted reasonable time to leave the work area on their own.
- Sediment and erosion control measures, such as fencing or blanket, utilized on the site during construction will avoid products with plastic mesh due to risk of entanglement of snakes or other wildlife.
- Observations of species at risk or species of conservation concern will be reported to MECP and MNRF within 48 hours. Species at risk will not be handled, harassed, or moved in any way, unless they are in immediate danger.

9.1.2 Protection of Migratory Birds

The *Migratory Birds Convention Act,* 1995 (MBCA) provides legal protection of migratory birds and their active nests in Canada. The loss of migratory bird nests, eggs and/or nestlings due to tree cutting or other vegetation clearing can be avoided by limiting clearing of vegetation to outside of the general nesting period for migratory birds in this region (C2) as identified by Environment and Climate Change Canada (ECCC) (i.e., between April 1 and August 31). If work must be performed within this window, a survey for active nests or breeding activity should be conducted by a qualified biologist before work commences and additional mitigation measures (e.g., implementation of avoidance distances during construction) implemented, if required.

9.2 Protection of Fish

Open drainage features are absent from the site alternatives, and in-water work is not anticipated as part of this project. As noted in Section 10.3, erosion and sediment controls will be implemented to protect drainage features from sediment and other contaminants that may be transported in runoff from disturbed work areas. Where applicable, dewatering discharge will be managed and treated to reduce the risk of erosion and/or release sediment-laden or contaminated water to drainage features.

9.3 Erosion and Sediment Control

An erosion and sediment control (ESC) plan will be developed and employed during construction to reduce the risk of erosion and the entry of sediment into drainage features within the study area. Mitigation included in the plan will include the following measures:

- Retain existing vegetation and stabilize exposed soils with vegetation where possible, erosion prevention is key in reducing sediment to downstream aquatic habitat
- Limit the duration of soil exposure and phase construction when possible
- Limit the size of disturbed areas by minimizing nonessential clearing and grading
- Minimize slope length and gradient of disturbed areas
- Maintain overland sheet flow and avoid concentrated flows
- Store/stockpile soil away (e.g., greater than 15m) from watercourses, drainage features and top of steep slopes
- Implement project-specific temporary ESC measures prior to starting work (e.g., silt fence and/or sediment logs)
- Keep additional ESC materials available on site to provide a contingency supply in the event of an emergency
- Monitor and maintain erosion and sediment controls, as required. Controls are to be removed only after the soils of the construction area have stabilized and vegetation cover has re-established
- Stabilize materials requiring stockpiling (fill, topsoil, etc.) and keep a safe distance (> 30 m) from drainage features

9.4 Disposal of Excess Material

The disposal of excess material will adhere to O.Reg. 406/19. Surplus excavated material shall be removed to locations arranged by the Contractor. Prior to the disposal of any surplus material, the Contractor shall provide the Engineer with a sketch of the dumping site(s), including site access points. A written statement from the property owner(s) agreeing to allow the disposal of fill on the property must be approved by a Contract Administrator (CA). Furthermore, the placement of fill within any area associated with valleys, wetlands, shorelines, and other hazardous lands that are regulated by Ontario Regulation 178/06 requires the written permission of LPRCA.

All approvals and permits will have to be obtained. Relevant MECP policy framework and best management practices should be referenced and applied where applicable.

Upon completion of the disposing, levelling, and grading of surplus excavated material on any property, a written statement shall be obtained from the property owner(s) releasing the Contractor and County from any claims and accepting the condition of the property as satisfactory.

9.5 Standard Mitigation Measures for Construction

Inadvertent encroachment of heavy equipment, siltation and/or spills of deleterious substances, noise, and dust migration into natural features were identified as potential indirect impacts from construction. These impacts may alter species composition by

compacting and smothering vegetation and introducing substances that could be harmful to vegetation and wildlife, such as fuel used by construction vehicles and introduction and spread of invasive species. Additional disturbance may be required to facilitate spill clean-up activities. Where they occur, these impacts are expected to be localized to the construction area and adjacent areas.

Best management practices to mitigate any air quality impacts caused by dust should be applied during construction. MECP recommends non-chloride dust suppressants be applied during construction, as necessary.

Potential indirect effects to natural heritage features include construction phase activities such as inadvertent encroachment of heavy equipment, siltation and/or spills of deleterious substances, noise, and dust migration. These impacts may alter species composition by compacting and smothering vegetation and introducing substances that could be harmful to vegetation and wildlife, such as fuel used by construction vehicles.

Additional disturbance may be required to facilitate spill clean-up activities. Where they occur, these impacts are expected to be localized to the construction area and adjacent areas.

These potential indirect effects are common to various types of construction and can be controlled using standard mitigation measures for erosion and sediment control as discussed previously.

Temporary construction staging areas may be utilized for the construction of the booster pumping station and the elevated tower areas. It is anticipated that these staging areas will be located within the booster pumping station and elevated tank parcels of land. The following general mitigation measures will apply to these areas:

- Prior to construction, the limits of vegetation clearing should be staked in the field so the disturbance does not occur outside of a pre-determined area required for construction.
- Design and implement an Erosion and Sediment Control (ESC) plan that identifies erosion control measures that should be installed, monitored and maintained throughout all phases of the Project until the site has been stabilized.
- Designated areas for equipment refueling should be located a minimum 30 m from watercourses, waterbodies or regulated areas.
- Construction dewatering, associated with excavation (if applicable), should be pumped through a filter system (i.e., filter bags and/or sediment filter tank) before being discharged to a watercourse.
- Machinery shall arrive on site in a clean condition and maintained free of fluid leaks, invasive species and noxious weeds.

- Develop and implement a containment and spill management plan (or equivalent) that reduces the risk of accidental spills or releases (including construction materials) from entering a watercourse.
- Wash, refuel and service machinery and store fuel and other materials for the machinery in such a way as to reduce the risk of the entry of deleterious substances to surface water features.
- Remove all construction materials from site upon project completion.
- If dewatering associated with excavation will be discharged to any watercourse, design and implement measures for managing water should be established such that sediment is filtered out prior to the water entering the river or other surface water features (i.e., use of filter bags and/or sediment filter tank).

9.6 Noise/Aesthetics

Mitigation measures for noise are available by designing the building and equipment to minimize sound transmission.

Acoustic impacts associated with the pump station(s) to be considered during design, notably issues related to pumps and standby generators, and the location of the equipment to direct noise away from adjacent residences.

Mitigation measures to reduce aesthetic impacts are available through landscape and architectural design compatible to the surrounding area.

9.7 Mud and Dust Control

All necessary measures should be taken during construction to prevent dust accumulation as a result of construction operations. The Contractor shall be responsible for all dirt and mud that it tracked onto the roadways from vehicles entering or leaving the job site. Upon request from the CA, the contractor shall immediately clean-up any mud or dirt resulting from construction activities. If the contractor is unable to sufficiently proceed with clean-up activities, the CA will perform the necessary clean-up. Erosion and sediment control measures outlined in earlier sections will aid in controlling mud and dust levels by keeping exposed soil at a minimum.

9.8 Archaeological Resources

A Stage 1 archaeological assessment for the proposed locations for the elevated tank and booster pumping station was completed. The Stage 1 background research determined that portions of the study areas exhibit potential for the identification and recovery of archaeological resources. In accordance with Section 1.3.2 and Section 7.7.4 of the MCM’s 2011 Standards and Guidelines for Consultant Archaeologists, Stage 2 archaeological assessment is required for the study area.

The objective of the Stage 2 archaeological assessment is to document archaeological resources within the study area 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 comprise pedestrian survey as outlined in Section 2.1.1. of the MCM's 2011 Standards and Guidelines for Consultant Archaeologists. 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 comprise text pit survey as outlined Section 2.1.2 of the MCM's 2011 Standards and Guidelines for Consultant Archaeologists. The MCM standards require that each test pit be at least 30 cm in diameter, excavated to at least 5 cm into subsoil, and have soil screened through 6 mm hardware cloth to facilitate the recovery of cultural material that may be present. Prior to backfilling, each test pit will be examined for stratigraphy, cultural features, or evidence of fill. Background documentation indicates that the study area for the elevated water tank has likely been subject to deep and significant previous disturbance that has removed archaeological potential. This previous disturbance will be confirmed during the Stage 2 archaeological assessment and photo documented as outlined in Section 2.1 of the MCM's 2011 Standards and Guidelines for Consultant Archaeologists. Should any additional areas of disturbance or features indicating that archaeological potential has been removed, including permanently wet areas, exposed bedrock, and steep slopes, not identified during the Stage 1 background research be encountered during the Stage 2 archaeological assessment, they will be photo documented as outlined in Section 2.1 of the MCM's 2011 Standards and Guidelines for Consultant Archaeologists.

The Stage 2 Archaeological Assessment will be completed during detail design.

9.9 Cultural Heritage Resources

The MCM Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes checklist and associated review of existing cultural heritage conditions in the area was completed to determine if any protected and/or properties having cultural heritage potential are present within the study area.

The background review determined that there is one property adjacent to the booster pumping station location which may be of cultural heritage significance; the Tyrrell Baptist Church located at 962 Concession 13 Townsend. The building structure is

situated approximately 73 m from the booster station property boundary. Construction activities are proposed more than 50 m from the building on the property. The properties noted in section 7.4.2 are outside of the municipal right-of-way and area of construction. Therefore, the property is not at risk of direct or indirect impacts and no mitigation measures or further cultural heritage evaluation are required.

A copy of the Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes checklist is provided in Appendix D.

9.10 Climate Change

The MECP's guide, *Consideration of Climate Change in the Environmental Assessment Process*, outlines two approaches for consideration and addressing climate change in project planning including:

- Reducing a projects impact on climate change (climate change mitigation).
- Increasing the projects and local ecosystems resilience to climate change (climate change adaptation).

The probability of a climate change event occurring is increasing, and infrastructure needs to be better adapted to build resilience to the impacts of climate change now, and into the future.

There are many climate change related parameters with the potential to impact water supply, such as drought-like weather conditions, which puts strain on the existing water supply system and private wells, especially in such an agricultural area. These improvements will provide increased water supply to areas within the County, which will also provide a secure fire flow service in case of emergencies. In addition, weather events involving large quantities of precipitation impact the water quality of groundwater wells, which make them prone to contamination. The water supply system will provide resiliency in response to climate change events.

10.0 Approvals and Permits

Any permits required should be identified during detailed design. Prior to commencing design implementation, the following permits/approvals may be required, and will be determined during detail design:

- MECP Drinking Water Works Permit Amendment for the Trunk Watermain, Booster Pumping Station and Elevated Tank,
- Long Point Region Conservation Authority,
- Norfolk County Building Permit for the Booster Pumping Station and Elevated Tank,
- Norfolk County Health Department for the septic system at the BPS
- Technical Standards and Safety Authority (TSSA) permit applied for by the Contractor for the Booster Pumping Station and Elevated Tank,
- Electrical Safety Authority (ESA) electrical permit applied for by the Contractor, and
- Environmental Sector Activity Registry (ESAR) – registration of the standby generator for the Booster Pumping Station (separate review or approval is not required).

10.1 Species at Risk Act

The federal *Species at Risk Act*, 2002 (SARA) protects wildlife species listed as extirpated, endangered, or threatened under Schedule 1 of the Act from harm, harassment, killing or capture or collection. SARA also prohibits the damage or destruction of the residence of listed species, and the destruction of their critical habitat. SARA protections also extend to migratory birds and some SAR on non-federal land and to aquatic SAR. Permits for prohibited activities may be issued under Section 73 of the SARA.

It is the responsibility of the proponent to ensure that Species at Risk are not killed, harmed, or harassed, and that their habitat is not damaged or destroyed through the proposed activities to be carried out on the site. If the proposed activities cannot avoid impacting protected species and their habitats, then the proponent will need to apply for an authorization under the Endangered Species Act (ESA).

10.2 Long Point Region Conservation Authority, 1990

The Conservation Authorities Act, 1990 (CAA), was created to provide for the organization and delivery of programs and services that further the conservation, restoration, development, and management of natural resources in watersheds in Ontario.

The Long Point Region Conservation Authority (LPRCA) has the responsibility to regulate activities in wetlands, watercourses and hazard lands (e.g., areas in and near rivers, streams, floodplains, wetlands, slopes and shorelines) through the Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses (O. Reg.178/06). The LPRCA implements the regulation by issuing permits for works in or near watercourses, valleys, wetlands, or shorelines when required.

Under the CAA of Ontario, the Authority has certain regulations whose objectives are:

- To prevent the loss of life and property due to flooding and erosion,
- To prevent pollution, and
- To conserve and enhance natural resources.

These policies apply to fill placement and removal or site grading in flood prone areas, erosion prone areas, dynamic beach areas, as well as alteration of watercourses, and interference with wetlands.

10.3 Environmental Protection Act / Ontario Water Resources Act

Any water extraction over 50,000 L/day will require MECP approval(s) under the *Environmental Protection Act* and *Ontario Water Resources Act*, such as a Permit to Take Water (PTTW). Certain water taking activities that have been prescribed by the Water Taking Regulation O. Reg 63/16 may require registration in the Environmental Activity and Sector Registry instead of a PTTW.

Detail design will determine if water taking or discharging activities are required based on the geotechnical and hydrogeological report findings and recommendations.

11.0 Closing

The filing of this report represents the conclusion of Phase 1 and Phase 2 of the Municipal Class EA planning process for the Schedule B project discussed, as outlined in the MCEA document. Provided that no Section 16 Order requests are received and provided all appropriate environmental and engineering permitting and approvals are obtained, the County may proceed with detailed design and implementation (Phase 5) 30 days following the completion of the public review period.

Appendix A Consultation

Contact List

Simcoe Townsend Water Supply System
Norfo k County
165630226

Agency	Title	F rst Name	Last Name	Department	Title	Address	City	Province	Postal	Phone	Email	Comments
Provincial												
Ministry of Natural Resources and Forestry		Karina	Cerniavskaja	Aylmer District	District Planner	615 John Street North	Aylmer	ON	N5H 2S8		_a l_a ce_ ia_s_a a@o_ta io.ca	
Ministry of the Environment, Conservation and Parks		Joan	Del Vi lar Cuicas	West Central Region	Regional Environmental Assessment Coordina	733 Exeter Road	London	ON	N6E 1L3		joan.delvillarcuicas@ontario.ca	
Ministry of the Environment Conservation and Parks				West Central Region							sanotif cat on wcregion@ontario.ca	**excel form**
Ministry of Tourism, Culture and Sport		Karla	Barboza	Culture Services Unit	Heritage Planner	401 Bay Street, Suite 1700	Toronto	ON	M7A 0A7		karla.barboza@ontar o.ca	
Ministry of Tourism Culture and Sport		Dan	Minkin								dan.minkin@ontar o.ca	
Ministry of Transportation		Michael	Nadeau	London Office	Manager of Operations (Acting)	659 Exeter Road 2nd floor	London	ON	N6E 1L3		michael.nadeau@ontario.ca	
Ministry of Transportation		Chris	Evans	London office	Head, Environmental	659 Exeter Road, 3rd floor	London	ON	N6E 1L3		chris.evans@ontario.ca	
Ministry of Agriculture Food and Rural Affairs		Rebecca	Shortt	Water Quantity Environmental	P.Eng		Simcoe				rebecca.shortt@ontario.ca	
Ministry of Agriculture Food and Rural Affairs		Nancy	Rutherford	Land Use Policy & Stewardship	Rural Planner						nancy.rutherford@ontario.ca	
Ministry of Indigenous Affairs		Molly	Mann	Reconciliation, Ministry Partnerships U	Manager, Indigenous Relations Unit	160 Bloor Street E, Su te 400	Toronto	ON	M7A 2E6		molly.mann@ontario.ca	
Infrastructure Ontario				Notice Review Ema l							noticereview@infrastructureontario.ca	
Federal Contacts												
Fisheries and Oceans Canada		Lisa	Wren		Senior Fisheries Protection Biologist	867 Lakeshore Drive	Burlington	ON	L7S 1A1		lisa.wren@dfo-mpo.gc.ca	
Municipal												
Long Point Region Conservation Authority		Leigh-Anne	Mauthe	Supervisor of Planning Services	Long Point Region Conservation Authority					519-842-4242 ext. 231	lmauthe@lprca on ca	
Long Point Region Conservation Authority											conservation@lprca.on.ca	
Ontario Provincial Police		Shawn	Johnson	Norfolk Detachment	Detachment Commander						shawn.johnson@opp.ca	
Norfo k County Fire Department		Gord	Stilwell		Fire Chief						norfolk_ire@norfolkcounty.ca	
Norfo k County		Steph	Davis								Steph.Davis@norfolkcounty.ca	
Norfo k County		Scott	Zerbes								Scott.Zerbes@norfolkcounty.ca	
Norfo k County		Chris	VanPaassen	Councillor	Councillor						Chr s.VanPaassen@nor olk.com	
Norfo k County		Tim	Dickhout	Project Manager, Development							im.dickhout@norfolkcounty.ca	
Norfo k County Paramedic Services		Sarah	Page		Chief						sarah.page@norfolkcounty.ca	
Haldimand County		Ph l	W lson								pw lson@haldimandcounty.on.ca	
Health and Social Services Haldimand-Norfolk		Heidy	VanDyk		Acting General Manager						Heidy.VanDyk@hnhss.ca	
Utilities												
Hydro One					Planning Department	125 Irwin Avenue	Essex	ON	N8M 2T3		secondarylanduse@hydroone.com	
Hydro One		Sean	Cart idge	Hydro One Simcoe			Simcoe	ON			sean.cart.idge@hydroone.com	
Enbridge		Adam	Collier	Enbridge	Construction & Project Management		Simcoe				adam.col ier@enbridge.com	
Bell Canada		Leeann	Clark	Bell Canada			Simcoe				lee-ann.clark@bell.ca	
Bell Canada		Christine	Telfer	Bell Canada			Simcoe				christine.te fer@bell.ca	
Rogers		Dan	Mazzoni	Rogers							Dan.Mozzoni@rci.rogers.com	
Rogers		Lakshmanan	Lakshmana								_akshamanan_ akshmana@rci.rogers.com	
Synergy (f bre install)		Rob	Liss	Rogers installer							rliss@synergyuu.com	
Eastlink		Al	Carnahan								Al.Carnahan@corp.east ink.ca	
Nor-Del Cable Vision Limited											nordel@nor-del.com	
KWIC Internet											communications@kwic.com	
Indigenous Community												
Six Nations of the Grand River		Robbin	Vanstone (Linn)	Consultation Supervisor							rvanstone@sixnations.ca	
Six Nations of the Grand River		Lonny	Bomberry	Lands and Resources Director							lonnybomberry@sixnations.ca	
Six Nations of the Grand River		Mark	Hill	Chief							markhil @sixnations.ca	
Six Nations of the Grand River		Lily-Anne	Mt. Pleasant								HFCO@sixnat ons.ca	
Six Nations of the Grand River		Dawn	LaForme								dlaforme@sixnat ons.ca	
Six Nations of the Grand River		Christopher	Mahon								poli icaladvisor@sixnations.ca	
Six Nations of the Grand River		Tammy	Martin								ammymartin@sixnat ons.ca	
Mississaugas of the Cred t First Nation		R. Stacey	LaForme	Chief							stacey.laforme@mncfn.ca	
Mississaugas of the Cred t First Nation		Abby	LaForme	Acting Consultation Coordinator							abby.laforme@mncfn.ca	
Mississaugas of the Cred t First Nation		Adam	LaForme	Archaeology							adam.laforme@mncfn.ca	
Mississaugas of the Cred t First Nation		Mark	LaForme	Director							mark.laforme@mncfn.ca	
Haudenosaunee Confederacy Chiefs Council											info@hdi.land	
Haudenosaunee Confederacy Chiefs Council		Leroy	Hill	Secretary							1749resource@gmail.com	
School Boards												
Education Centre		She ley	Armstrong		Superintendent of Business and Treasurer	451 Park Street West P.O. Box 210	Windsor	ON	N9A 6K1		she.ley.armstrong@publicboard.ca	
Grand Erie District School Board		Penny	King	Operations Services	Executive Superintendent of Business	1325 Ca ifornia Avenue	Windsor	ON	N9B 2Z5		penny_king@wecdsb.on.ca	
Conseil Scolaire Catholique Mon Avenir											plan fication@csc monavenir.ca	
Student Transportation Services Brant Haldimand Norfolk											transportation@stsbhn.ca	
Interested Stakeholders												
Canad an Pacif c Railway		Jack	Carello	Engineering Services	Manager of Utilities, SR/WA	1290 Central Parkway West, Suite 800	M ssissauga	ON	L5C 4R3		Jack_carello@cpr.ca	
Canadian National Railway											proximity@cn.ca	
Norfolk Field Naturalists											info@norfolkfieldnaturalists.org	
Public Stakeholders												
Waterford Heritage Trail association		Frank	Woodcock							519-428-4031	waterfordheritagetrail@yahoo.ca	
Lynn Valley Trail Association											lynnvalleytrai @gmail.com	
Ride Norfolk												
Branching Path Farm		Adam	Mohammed	Branching Path Farm								
The Expositor/Reformer		Vince	Ball		Writer/Journa ist							
		Dennis & Diane	Sovereign									
		Dustin	Wakeford									
		Mike & Cheryl	Bauslaugh									
		Gord	Pennington									
		Steven	Gerdisl									
RJ Burnside		Frank	Goulding									
		Franklyn	Smith									
RJ Burnside		Steven	Roorda									
Geranium		Cheryl	Shindruk	Vice President								
Geranium		Jennifer	Ormiston	Project Manager								
TY Lin		Mateusz	Lewandowski	Project Manager								

Address

Simcoe Townsend Water Supply System
Norfo k County
165630226

Agency	Title	F rst Name	Last Name	Department	Title	Address	City	Province	Postal	Phone	Email	Comments
Municipal												
Norfo k County		Larry	Conrad	Environmental Services	Director, Environmental Services	185 Robinson St. Su te 200	Simcoe	ON	N3Y 5L6	519-426-5870	arry conrad@norfolkcounty.ca	
Norfo k County		Stephanie	Davis	Environmental Services	Manager, Water and Wastewater Compliance	185 Robinson St. Su te 200	Simcoe	ON	N3Y 5L6	519-426-5870	stephanie.dav s@nor olkcounty.ca	
Norfo k County		Kyle	Dezort	Environmental Services	SCADA Coordinator	185 Rob nson St. Suite 200	Simcoe	ON	N3Y 5L6	519-426-5870	ky e.dezor @norfolkcounty.ca	
Norfo k County		Shaun	Earls	Environmental Services	Water and Wastewater Compliance Officer	185 Robinson St. Suite 200	Simcoe	ON	N3Y 5L6	519-426-5870	shaun.earls@norfolkcounty.ca	
Norfo k County		Emily	Jarvis	Environmental Services	Water and Wastewater Compliance Technologist	185 Rob nson St. Suite 200	Simcoe	ON	N3Y 5L6	519-426-5870	emily..arv s@norfolkcounty.ca	
Norfo k County		Terry	Hall	Environmental Services	Environmental Services Technologists	185 Robinson St. Su te 200	Simcoe	ON	N3Y 5L6	519-426-5870	erry.hal @norfolkcounty.ca	
Norfo k County		Theo	Karagias	Environmental Services	Environmental Services Technologists	185 Robinson St. Su te 200	Simcoe	ON	N3Y 5L6	519-426-5870	theo.karagias@nor olkcounty.ca	
Norfo k County		Julius	Vigh	Environmental Services	Environmental Services Technologists	185 Robinson St. Su te 200	Simcoe	ON	N3Y 5L6	519-426-5870	julius.vigh@norfolkcounty.ca	
Norfo k County		Deanna	Anderson	Environmental Services	Utility Clerk	185 Robinson St. Su te 200	Simcoe	ON	N3Y 5L6	519-426-5870	dea a.a de so @ o fol co t ca	
Norfo k County		Chris	Friedrich	Environmental Services	Acting Manager, Water and Wastewater Operations	185 Robinson St. Su te 200	Simcoe	ON	N3Y 5L6	519-426-5870	chris.friedrich@norfolkcounty.ca	
Norfo k County		Ed	Vezsenyi	Environmental Services	Water and Wastewater Facilities Foreperson	185 Robinson St. Su te 200	Simcoe	ON	N3Y 5L6	519-426-5870	ed.vezsenyi@norfolkcounty.ca	
Norfo k County		Dave	Graham	Environmental Services	Water and Wastewater Facilities Chief Operator	185 Robinson St. Su te 200	Simcoe	ON	N3Y 5L6	519-426-5870	da e.g a a @ o fol co t ca	
Norfo k County		Jason	McIntyre	Environmental Services	Water and Wastewater Facilities Operator	185 Robinson St. Su te 200	Simcoe	ON	N3Y 5L6	519-426-5870	.ason.mcintyre@norfolkcounty.ca	
Norfo k County		Ed	Vinnai	Environmental Services	Water and Wastewater Facilities Operator	185 Robinson St. Su te 200	Simcoe	ON	N3Y 5L6	519-426-5870	ed.vinnai@norfolkcounty.ca	

Notice of Study Commencement

Notice of Study Commencement
Simcoe-Townsend Water Supply System
Municipal Class Environmental Assessment

Norfolk County (County) has initiated a Municipal Class Environmental Assessment (EA) to implement an approximately 20 km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. These improvements are required to meet long-term Inter-Urban Water Supply capacity and quality demands within the County. The proposed watermain route is shown on the key map below.



This Study is being undertaken in accordance with the requirements for Schedule 'B' projects within the Municipal Class EA document (2000, as amended), under the Ontario Environmental Assessment Act.

How can I participate in this Study?

A key element of the EA process is gathering comments from the public, stakeholders, utilities, businesses and regulatory agencies. To share project details and progress with the public, two Public Information Centres (PICs) will be held throughout the duration of the study. The first PIC to present background information is being held in-person at the **Norfolk County Administration Building Council Chambers (50 Colborne St S, Simcoe, ON) on Thursday, August 4, 2022 from 5:00-7:00pm**. Details of the PIC will be published closer to the date and made available on the County's website: https://engagenorfolk.ca/.

If you would like more information about the study, or would like to be added to the contact list to receive future notices, please contact:

Mariana Balaban, P.Eng., PhD
Project Director
Norfolk County
Phone: 519-426-5870 ext. 8158
Email: mariana.balaban@norfolkcounty.ca

Jitin Kalra, P.Eng.
Project Manager
Stantec Consulting Ltd.
Phone: 416-598-7695 (Collect: +0 collect)
Email: jitin.kalra@stantec.com

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

This Notice was first issued on July 8, 2022.

From:	Lang, Sarah
Cc:	Mariana Balaban; Kalra, Jitin; Hohner, Paula
Bcc:	karina.cerniavskaja@ontario.ca; teresa.wagner@ontario.ca; karla.barboza@ontario.ca; joseph.harvey@ontario.ca; michael.nadeau@ontario.ca; chris.evans@ontario.ca; rebecca.shortt@ontario.ca; nancy.rutherford@ontario.ca; molly.mann@ontario.ca; tate.kelly@infrastructureontario.ca; lisa.wren@dfo-mpo.gc.ca; lmauthe@lprca.on.ca; bhodi@lprca.on.ca; shawn.johnson@opp.ca; norfolk.fire@norfolkcounty.ca; Scott.Zerbes@norfolkcounty.ca; sarah.page@norfolkcounty.ca; pwilson@haldimandcounty.on.ca; Heidy.VanDyk@hnhss.ca; secondarylanduse@hydroone.com; sean.cartlidge@hydroone.com; adam.collier@enbridge.com; lee-ann.clark@bell.ca; christine.telfer@bell.ca; Dan.Mozzoni@rci.rogers.com; rliss@synergyuu.com; shelley.armstrong@publicboard.ca; penny_king@wecdsb.on.ca; planning@cscmonavenir.ca; transportation@stsbhn.ca; Al.Carnahan@corp.eastlink.ca; nordel@nor-del.com; communications@kwic.com; rvanstone@sixnations.ca; lonnybomberry@sixnations.ca; stacey.laforme@mncfn.ca; abby.laforme@mncfn.ca; mark.laforme@mncfn.ca; markhill@sixnations.ca; info@hdi.land; ; Jack_carello@cpr.ca; ER-Public-Works@cn.ca; info@norfolkfieldnaturalists.org; Choi, Joon
Subject:	Notice of Study Commencement - Norfolk County, Simcoe-Townsend Water Supply System
Date:	Wednesday, July 13, 2022 4:55:00 PM
Attachments:	Notice of Study Commencement - Norfolk County, Simcoe-Townsend Water Supply System.pdf

Good Afternoon,

Please find the attached Notice of Study Commencement for the Norfolk County (County) Simcoe-Townsend Water Supply System, Municipal Class Environmental Assessment (EA). The County has initiated the EA to implement an approximately 20km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. This study is being undertaken in accordance with the requirements for Schedule 'B' projects within the Municipal Class EA document (2000, as amended), under the Ontario Environmental Assessment Act.

If you would like more information about the study, or would like to be added to the contact list to receive future notices, please contact a member of the project team.

Thank you,

Sarah Lang
Environmental Planner
sarah.lang@stantec.com

Stantec

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Please consider the environment before printing this email.

From:	Lang, Sarah
To:	eanotification.wcregion@ontario.ca
Cc:	Mariana Balaban; Kalra, Jitin; Hohner, Paula
Subject:	Norfolk County, MCEA, Simcoe-Townsend Water Supply System
Date:	Wednesday, July 13, 2022 5:03:00 PM
Attachments:	Project_Information_Form_Simcoe-Townsend.xlsx Notice of Study Commencement - Norfolk County, Simcoe-Townsend Water Supply System.pdf

Hello,

Please find the attached Notice of Study Commencement and Project Information Form for the Norfolk County, Simcoe-Townsend Water Supply System Study.

Please let me know if you have any questions or concerns.

Thank you,

Sarah Lang
Environmental Planner
sarah.lang@stantec.com

Stantec

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Please consider the environment before printing this email.



Simcoe-Townsend Water Supply System —Municipal Class Environmental Assessment

Update: The Second Public Information Centre will be held on November 8, 2022, from 5:00 to 7:00 p.m.

Norfolk County (County) has initiated a Municipal Class Environmental Assessment (EA) to implement an approximately 20 km length transmission water main that connects Simcoe to the Townsend Water Supply System, to secure water supply



from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. These improvements are required to meet long-term Inter-Urban Water Supply capacity and quality demands within the County. The proposed water main route is shown on the key map below.

This study is being Continue reading

News feed Questions

Notice of Study Commencement Simcoe-Townsend Water Supply System Municipal Class Environmental Assessment

11 Jul 2022



Norfolk County (County) has initiated a Municipal Class Environmental Assessment (EA) to implement an approximately 20 km length transmission water main that connects Simcoe to the Townsend Water Supply

System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station.

Public Information Centre # 2

CLOSED: This discussion has concluded.

NEW. Please see the presentation, below

Norfolk County (County) has initiated a Municipal Class Environmental Assessment (EA) to implement an approximately 20 km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. These improvements are required to meet long-term Inter-Urban Water Supply capacity and quality demands within the County. The proposed watermain route is shown on the key map below.

This Study is being undertaken in accordance with the requirements for Schedule 'B' projects within the Municipal Class EA document (2000, as amended), under the Ontario Environmental Assessment Act.

How can I participate in this Study?

The first Public Information Centre (PIC) was held on August 4, 2022, to present background information and introduce the project team. The second PIC is scheduled to provide a

study update and present the preferred site location for the booster pumping station and elevated tower. The PIC will be in-person at the

Norfolk County Administration Building Council Chambers

50 Colborne St S, Simcoe, ON

Tuesday, November 8, 2022

5:00 p.m. to 7 p.m.

If you would like more information about the study or would like to be added to the contact list to receive future notices, please contact the following by **Tuesday, December 6, 2022**:

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.



Public Information Centre # 1

22 Jul 2022



Notice of Public Information Centre 1 Simcoe-Townsend Water Supply System Municipal Class Environmental Assessment

NEW. Please see the presentation, below

Norfolk County (County) has initiated a Municipal Class Environmental Assessment (EA) to implement an approximately 20 km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. These improvements are required to meet long-term Inter-Urban Water Supply capacity and quality demands within the County. The proposed watermain route is shown on the key map below.

This Study is being undertaken in accordance with the requirements for Schedule 'B' projects within the Municipal Class EA document (2000, as amended), under the Ontario Environmental Assessment Act.

How can I participate in this Study?

A Public Information Centre (PIC) is being held to present background information on the study. The PIC will be in-person at:

Norfolk County Administration Building Council Chambers

50 Colborne St S, Simcoe, ON

Thursday, August 4, 2022

5:00 p.m. to 7:00 p.m.

If you would like more information about the study or would like to be added to the contact list to receive future notices, please contact the following by **Thursday, September 1, 2022.**



You need to be signed in to add your comment.

SIGN IN REGISTER

2 comments

Page last updated: 16 Nov 2022, 01:21 PM

Who's Listening

Mariana Balaban, P.Eng.

Project Director
Norfolk County

MB

Phone 519-426-5870

Email mariana.balaban@norfolkcounty.ca

Jitin Kalra, P.Eng.

Project Manager
Stantec Consulting Ltd

JK

Phone 416-598-7695

Email Jitin.Kalra@stantec.com

Project Timeline

Public Information Centre 1
August 04 2022

Public Information Centre 2

November 08 2022

Documents

Simcoe-Townsend Water Supply System presentation.pdf (19.8 MB) (pdf)

Simcoe-Townsend Water Supply System - PIC # 2.pdf (13.1 MB) (pdf)

Important Links

Norfolk County Inter-Urban Water Study



STAY INFORMED

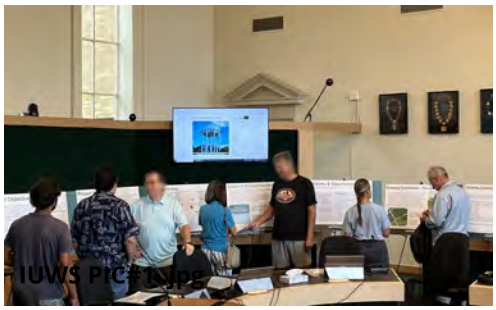
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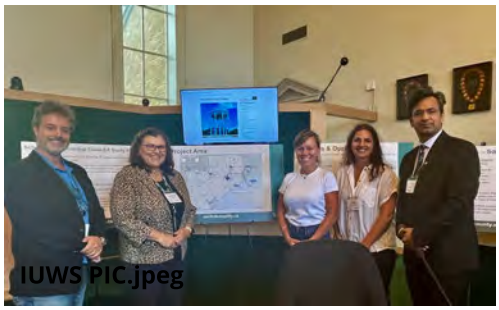
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Photos of the August 4 Public Information Centre

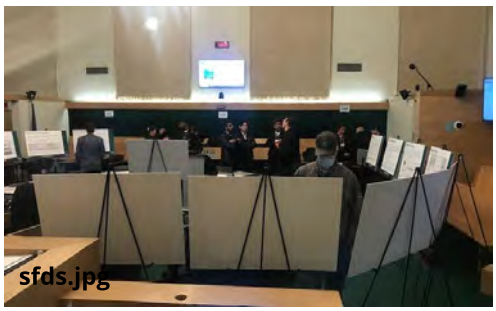




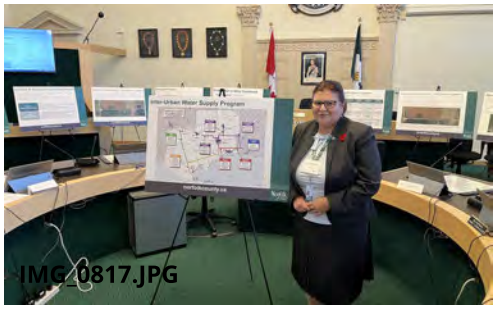
Photos of November 8 Public Information Centre











More..

Public Information Centre 1

Notice of Public Information Centre 1
Simcoe-Townsend Water Supply System
Municipal Class Environmental Assessment

Norfolk County (County) has initiated a Municipal Class Environmental Assessment (EA) to implement an approximately 20 km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. These improvements are required to meet long-term Inter-Urban Water Supply capacity and quality demands within the County. The proposed watermain route is shown on the key map below.



This Study is being undertaken in accordance with the requirements for Schedule 'B' projects within the Municipal Class EA document (2000, as amended), under the Ontario Environmental Assessment Act.

How can I participate in this Study?

A Public Information Centre (PIC) is being held to present background information on the study. The PIC will be in-person at the **Norfolk County Administration Building Council Chambers (50 Colborne St S, Simcoe, ON) on Thursday, August 4, 2022 from 5:00-7:00pm**. PIC materials will be available on the County's website for your review on August 4, 2022.

County Website: https://engagenorfolk.ca/.

If you would like more information about the study, or would like to be added to the contact list to receive future notices, please contact the following by **Thursday, September 1, 2022**:

Mariana Balaban, P.Eng., PhD
Project Director
Norfolk County
Phone: 519-426-5870 ext. 8158
Email: mariana.balaban@norfolkcounty.ca

Jitin Kalra, P.Eng.
Project Manager
Stantec Consulting Ltd.
Phone: 416-598-7695 (Collect: +0 collect)
Email: jitin.kalra@stantec.com

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

This Notice was first issued on July 25, 2022.

From:	Lang, Sarah
Cc:	Mariana Balaban; Kalra, Jitin
Bcc:	karina.cerniavskaja@ontario.ca; joan.delvillarcuicas@ontario.ca; eanotification.wcregion@ontario.ca; karla.barboza@ontario.ca; joseph.harvey@ontario.ca; michael.nadeau@ontario.ca; chris.evans@ontario.ca; rebecca.shortt@ontario.ca; nancy.rutherford@ontario.ca; molly.mann@ontario.ca; NoticeReview@infrastructureontario.ca; Choi, Joon; Hohner, Paula; lisa.wren@dfo-mpo.gc.ca; lmauthe@lprca.on.ca; conservation@lprca.on.ca; shawn.johnson@opp.ca; norfolk.fire@norfolkcounty.ca; Scott.Zerbes@norfolkcounty.ca; sarah.page@norfolkcounty.ca; pwilson@haldimandcounty.on.ca; Heidy.VanDyk@hnhss.ca; secondarylanduse@hydroone.com; sean.cartlidge@hydroone.com; adam.collier@enbridge.com; lee-ann.clark@bell.ca; christine.telfer@bell.ca; Dan.Mozzoni@rci.rogers.com; rliss@synergyuu.com; Al.Carnahan@corp.eastlink.ca; nordel@nor-del.com; communications@kwic.com; rvanstone@sixnations.ca; lonnybomberry@sixnations.ca; stacey.laforme@mncfn.ca; abby.laforme@mncfn.ca; mark.laforme@mncfn.ca; markhill@sixnations.ca; info@hdi.land; 1749resource@gmail.com; shelley.armstrong@publicboard.ca; penny_king@wecdsb.on.ca; planification@cscmonavenir.ca; transportation@stsbhn.ca; Jack_carello@cpr.ca; proximity@cn.ca; info@norfolkfieldnaturalists.org; waterfordheritagetrail@yahoo.ca; lynnvalleytrail@gmail.com; transit@norfolkcounty.ca;
Subject:	Notice of Public Information Centre 1 - Norfolk County, Simcoe-Townsend Water Supply System EA
Date:	Monday, July 25, 2022 4:29:00 PM
Attachments:	ad_PIC1_Simcoe-Townsend.pdf

Hello,

Please find the attached Notice of Public Information Centre (PIC) 1 for the Norfolk County (County), Simcoe-Townsend Water Supply System, Municipal Class Environmental Assessment (EA). The County has initiated the EA to implement an approximately 20km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station.

The first PIC will be held in-person at the **Norfolk County Administration Building Council Chambers (50 Colborne St S, Simcoe, ON) on Thursday, August 4, 2022 from 5:00pm to 7:00pm**. PIC materials will also be available on the County's website for your review on August 4, 2022.

County's Website: https://engagenorfolk.ca

Please contact a member of the project team identified on the attached Notice if you have any questions, comments or concerns.

Sarah Lang
Environmental Planner
sarah.lang@stantec.com

Stantec

The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the intended recipient, please delete all copies and notify us immediately.

Please consider the environment before printing this email.

Simcoe-Townsend Water Supply System

Municipal Class Environmental Assessment

Norfolk County

Public Information Centre #1

August 4, 2022 from 5:00pm to 7:00pm

Norfolk County Administration Building Council Chambers
50 Colborne St S, Simcoe, ON

Welcome!

The goals of this Public Information Centre (PIC) are to:



- Introduce the project and why it is being undertaken



- Provide an overview of the process that this study will follow for the project
- Provide a summary of the problems and opportunities to address



- Present existing conditions within the study area
- Identify potentially affected residents and businesses within the project area



- Answer any questions you may have and provide an opportunity to get involved in the project

Comments received during this study will be used to help identify the recommended approach for current and future improvements within Norfolk County.

Project Objectives

We are taking steps to meet the future needs of Norfolk County. We are completing the first phase of the Inter Urban Water Supply System (IUWS), which will interconnect all the communities within the County to secure a reliable and consistent water supply. More information about the IUWS is available online: https://www.norfolkcounty.ca/living/roads-water-wastewater/inter-urban-water-supply/

The strategic priorities of the project are to:

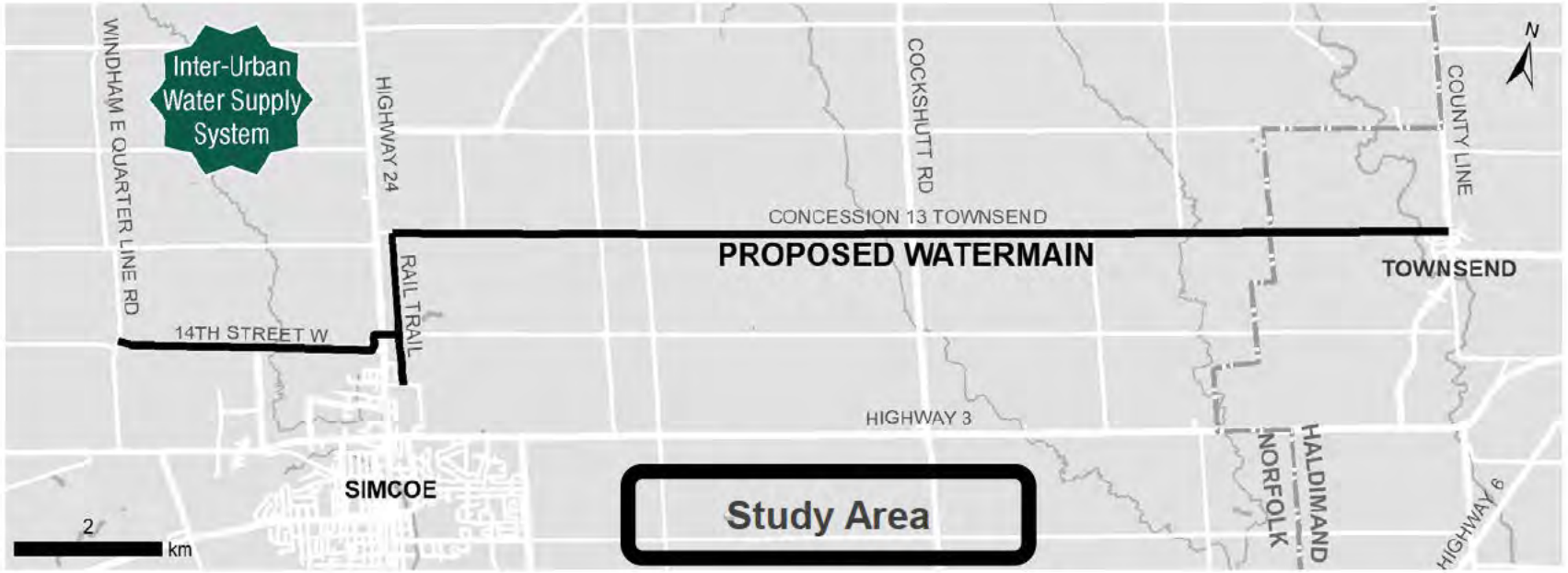
- Deliver high quality water services
- Ensure fire flow and water supply for growth to 2041 and beyond
- Build reliable infrastructure
- Provide future connections to Delhi and Waterford

The project will also focus on achieving the following sustainability goals within the County's water supply network.

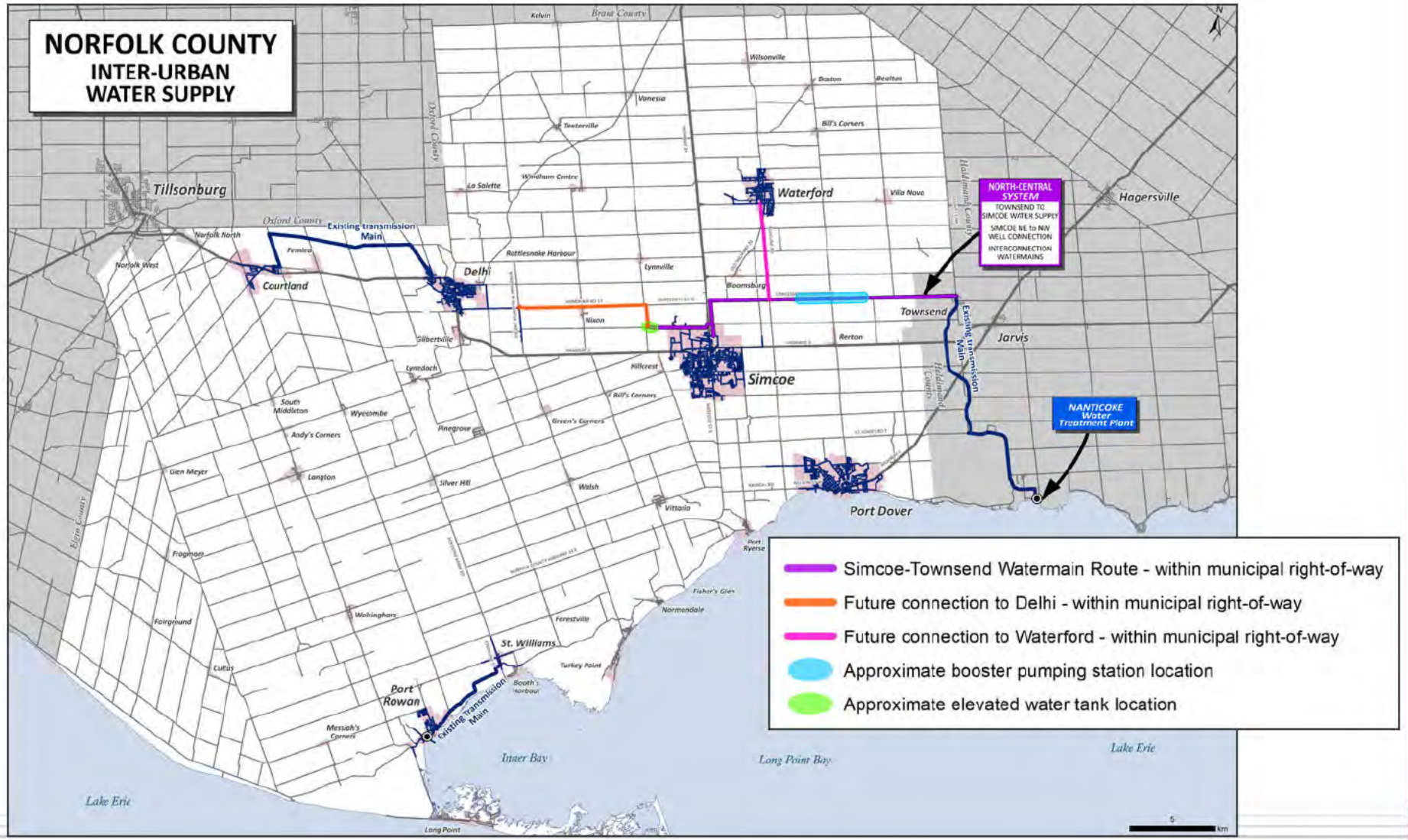
Alignment with Growth Demand	Flexibility Peak Demand	Operational Efficiency	Water Conservation	Increased Connectivity

Project Summary

Norfolk County is undertaking a Municipal Class Environmental Assessment (EA) study. The County is proposing to build a new watermain that connects Simcoe to the Townsend Water Supply System. The project will also include a new elevated water tank and booster station. The purpose of this new water infrastructure is to secure water supply from the Nanticoke Water Treatment Plant. The Simcoe-Townsend Water Supply System study will complete the first phase of the IUWS program.



Project Area



Schedule ‘B’ Municipal Class EA Study Process

This study will meet the requirements for Schedule ‘B’ projects and will satisfy the first two phases of the Class EA process.

Schedule ‘B’ projects have the potential for some adverse environmental effects. It is a requirement that the proponent contact affected members of the public and relevant review agencies. The County will ensure all are aware of the project and have the opportunity to provide input and feedback.

Phase 1: Problem and Opportunity	• Review background planning and policy documents (e.g., Official Plan) • Identify study area needs, problems and opportunities
Phase 2: Alternative Solutions	• Inventory the socio-economic, natural and cultural environments • Identify and evaluate feasible Alternative Solutions • Select the preferred Alternative Solution • Present to public, Indigenous communities and agencies for comment

Problems & Opportunities

The following problems and opportunities of the water supply system in Norfolk County were identified:

Problems

- Capacity for long-term growth
- Quality compliance
- Insufficient fire flow services
- Individual well systems
- High peak water demands (seasonal)
- Aging infrastructure
- Low water system pressure
- Concerns with existing backup of water system

Opportunities

- Provides capacity for growth to 2041 and beyond
- High quality water services
- Provides fire flow supply for growth to 2041 and beyond
- Provides opportunity for residents to connect to centralized municipal services
- Accommodates high peak water demands year-round
- Builds and renews infrastructure for 50+ years
- Provides reliable and consistent water pressure
- Provides backup capacity to water system
- Allows for future development and economic growth

Existing Conditions – Socio-Economic

The lands surrounding the Town of Simcoe present a unique combination of uses. Majority of the lands along the proposed watermain route, with the exception of the Town of Simcoe, are designated for agricultural use. Operations within these lands includes various types of uses, such as: orchards, sweet potatoes farms, watermelon farms, honey farms, solar farms, recycling lands and many more.





The Norfolk Sunrise Trail is a walking & cycling trail that follows the railway line from 13th Concession south through the Town of Simcoe.

It is important we understand the uses of the lands adjacent to the study area to minimize the overall impacts of the project.

Existing Conditions – Fish & Fish Habitat

The study area is located within the Long Point Region Conservation Authority Watershed Boundary.

The following watercourses provide either direct fish habitat or provide important functions to direct habitat and are protected under the Fisheries Act:

- Patterson Creek
- Davis Creek
- Black Creek
- Catfish Creek
- Nanticoke Creek
- Unnamed watercourses (permanent watercourses, intermittent watercourses and constructed drains)



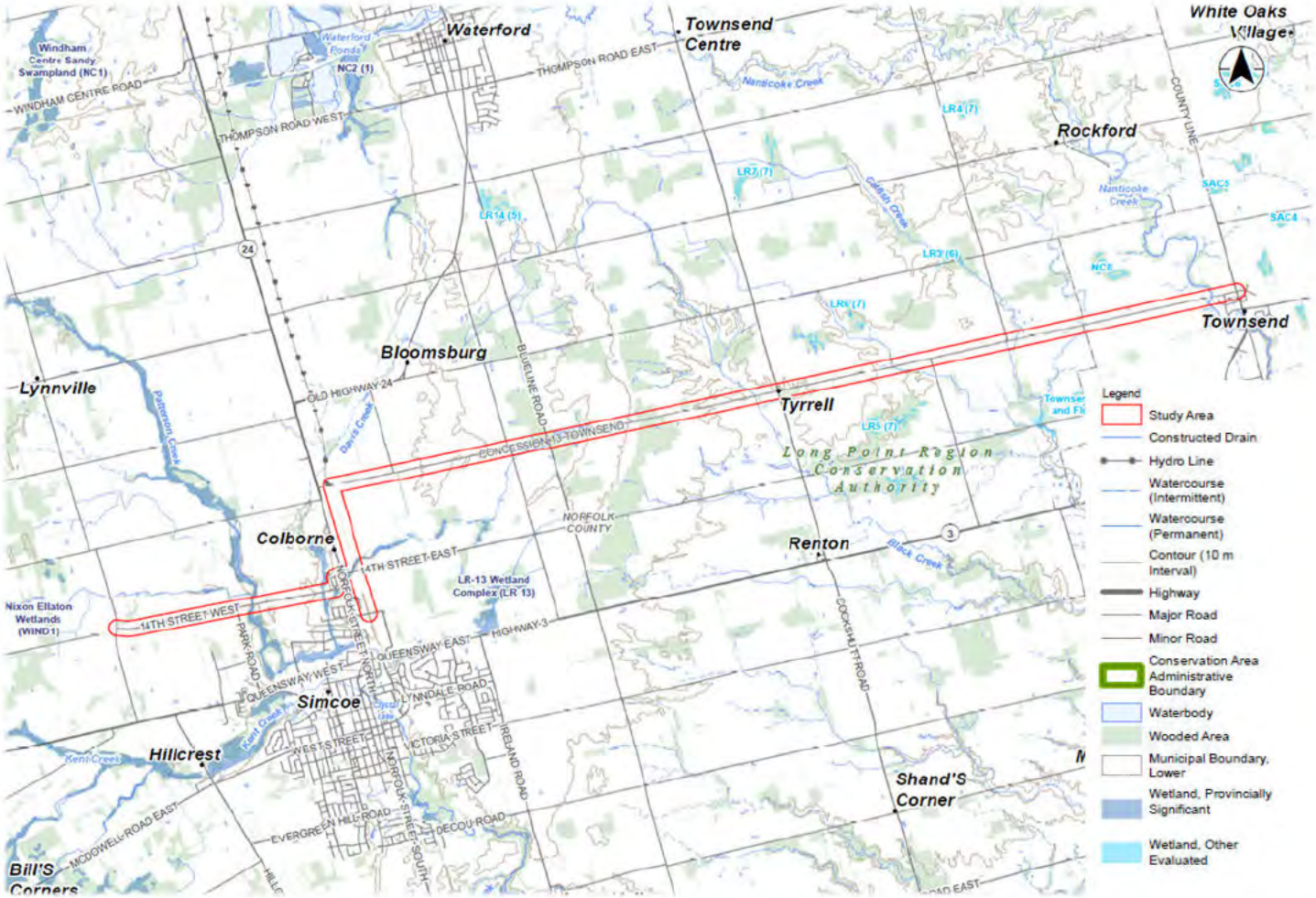
No species at risk fish have been identified in the study area.

Existing Conditions – Terrestrial Environment

The study area crosses the following designated natural heritage features:

- Provincially Significant Wetland (PSW) Complex
- Significant Woodlands
- Hazard Lands

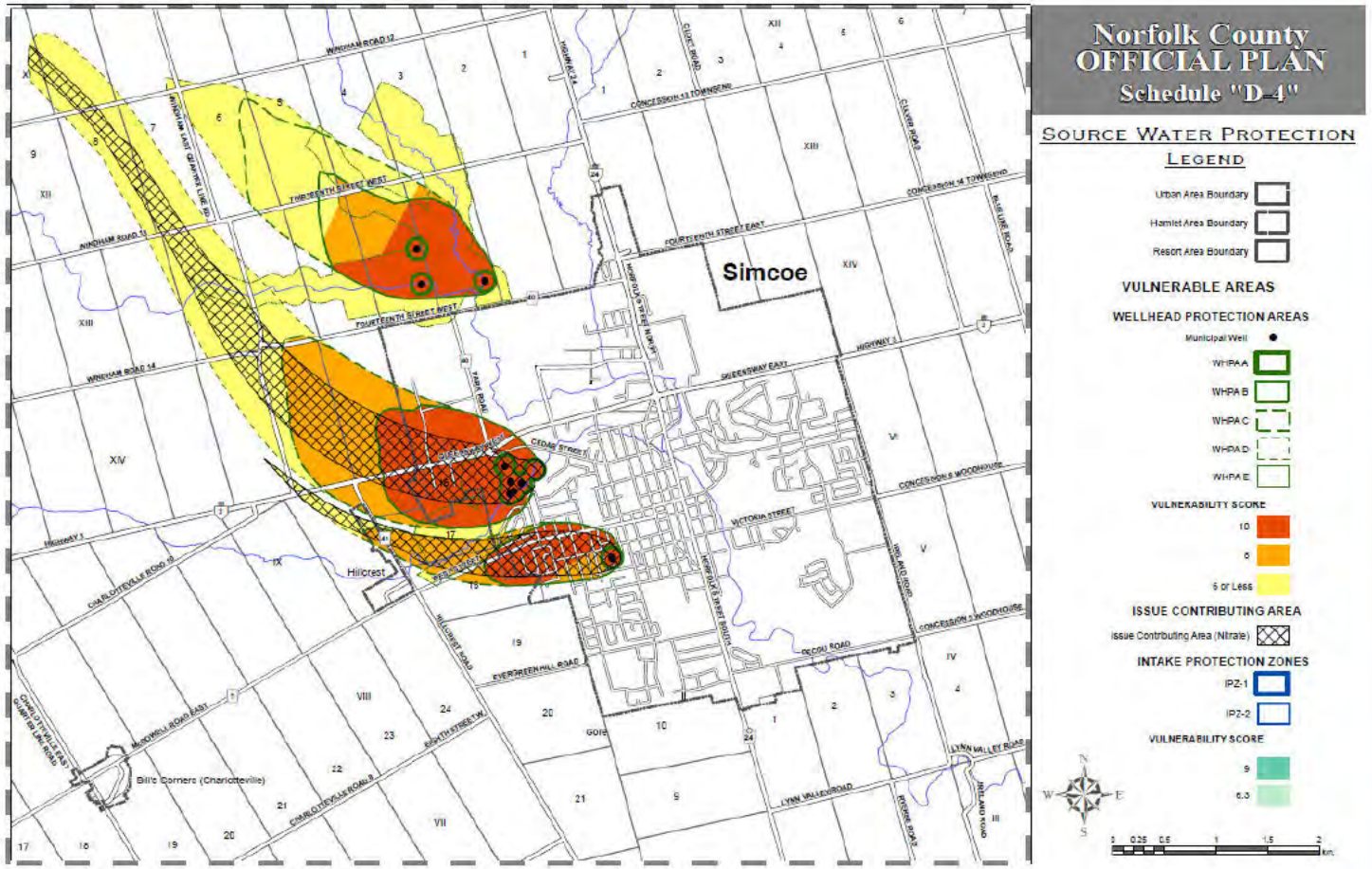
A review of background data sources identified 35 terrestrial species at risk that overlap with the study area. This will be reviewed further as the study progresses.



Source Water Protection

The study area is located within the Long Point Region Source Protection Plan Area, which contains policies for the protection of municipal drinking water sources within Norfolk County.

The western portion of the study area falls within a Highly Vulnerable Aquifer, and Significant Groundwater Recharge Area. Areas to the west of the Town of Simcoe, along Concession 14, fall within a Wellhead Protection Area (WHPA).



Existing Conditions – Cultural Environment

Norfolk County Heritage and Cultural Mapping was reviewed for cultural heritage resources within the study area. The following was identified within/adjacent to the proposed watermain alignment:

- Cemetery - St. Marys Cemetery, 234 14th Road West, Simcoe
- Designated Heritage Property – Mackay/Black Residence, 841 Norfolk Street North
- Farms and Orchards – Berlo's Best Sweet Potatoes, 325 Concession 13 Townsend, Simcoe
- Heritage Committee Identified Properties – Church, 962 Concession 13 Townsend
- Cemetery – Mount Hope/Tyrell Cemetery, Villa Nova Road, Simcoe

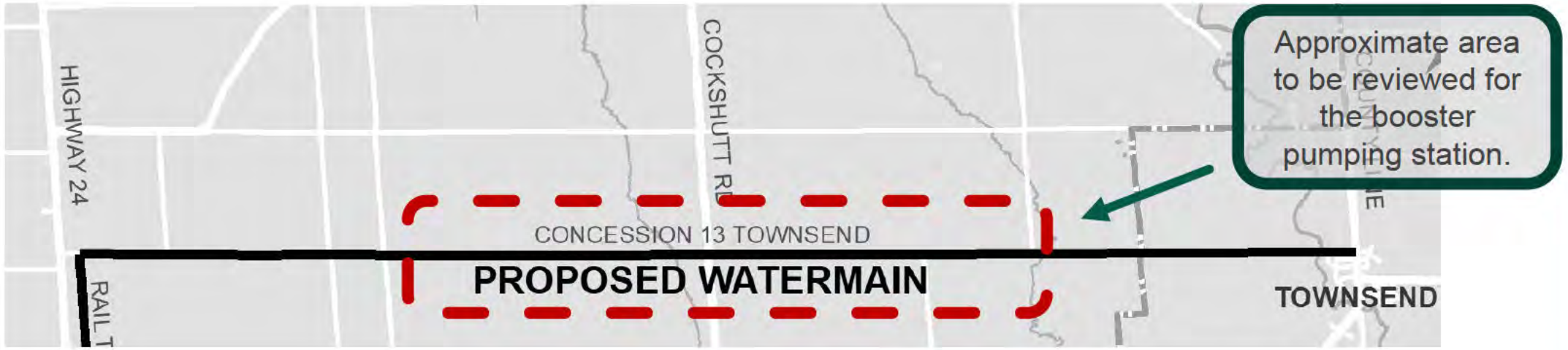




Booster Pumping Station

The transmission watermain is proposed to be approximately 20 km in length to connect Simcoe to the Townsend Water Supply System. Along the watermain, a pumping station will be constructed to boost the pressure of the flowing water, to keep it moving toward its destination.

During the next phase of the study, alternative locations for the booster pumping station will be evaluated. A site up to approximately 0.5 hectares (1.2 acres) will be required.

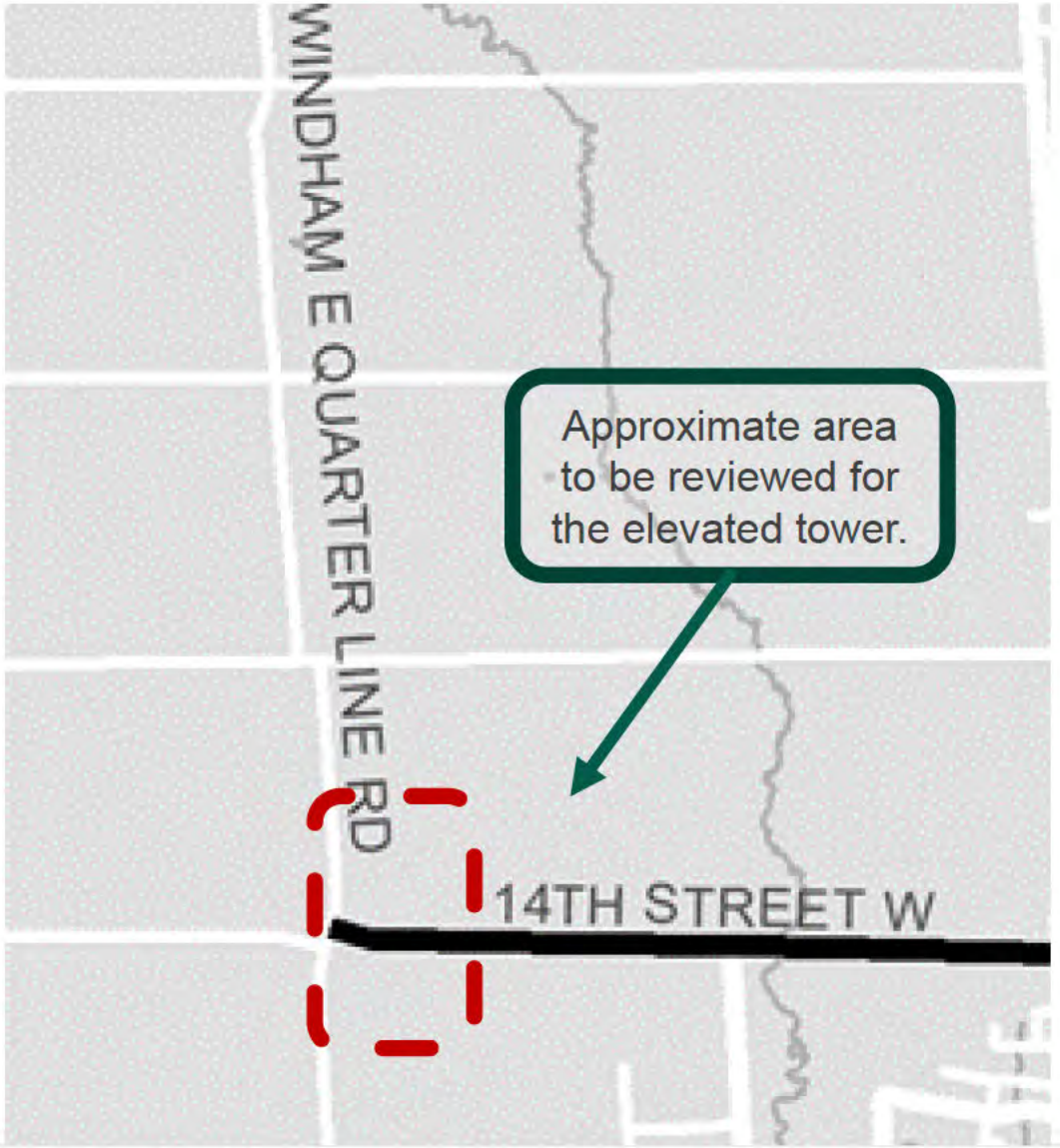


Elevated Water Tank

At the west end of the proposed transmission watermain (Simcoe), an elevated water tank will be constructed to act as a buffer during periods of peak demand (peak water consumption).

The tower will enable efficient operations and provide redundancy to the water supply system.

The elevated tower will be located on municipally-owned land.



Structure Design



Booster Pumping Station

- Building sized for ultimate capacity of 19,000 m^3/day.
- Pumps installed for initial capacity of 5,000 m^3/day
- Includes Standby Power and Re-chlorination facilities.



Elevated Water Tank

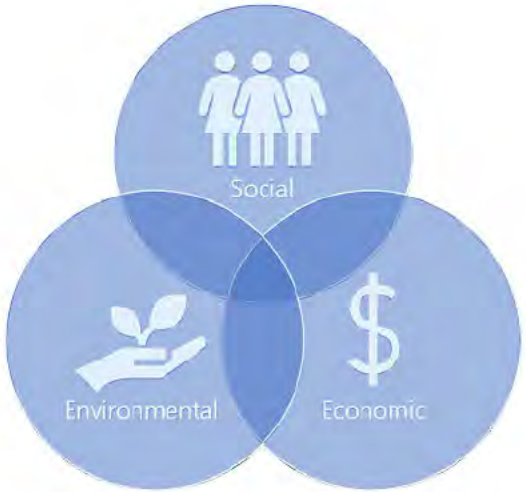
- Capacity 4,500 m^3 to be confirmed during Detail Design
- Diameter – 30 to 35 m
- Height – 50 m
- Includes future connections to Waterford and Delhi Systems

Evaluation Criteria

Alternative solutions will be assessed using the following factors and criteria. Depending on comments received from agencies, Indigenous communities, stakeholders and members of the public, criteria may be added or refined.

Socio-Economic Environment

- Potential to impact existing residences, businesses, agricultural operations, and community features
- Potential effect on approved/planned land uses
- Potential to support growth within Urban Areas



Natural Environment

- Potential to impact fish and fish habitat
- Potential to impact water resources including surface water (i.e., rivers, creeks, etc.), groundwater recharge areas and wellhead protection areas
- Potential to impact significant natural heritage features
- Potential to impact significant wildlife habitat and species at risk

Evaluation Criteria Continued

Cultural Environment

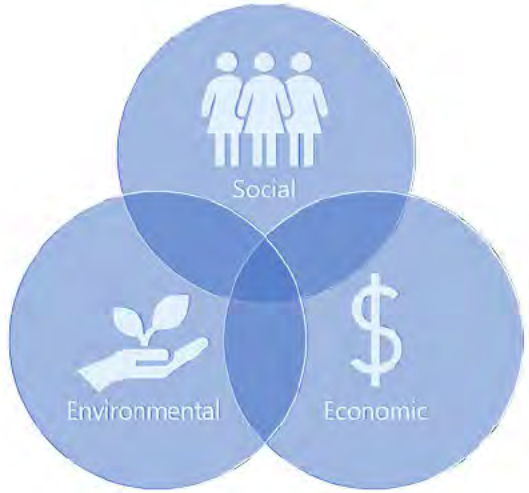
- Potential to impact archaeological resources
- Potential to impact cultural heritage resources

Technical Considerations

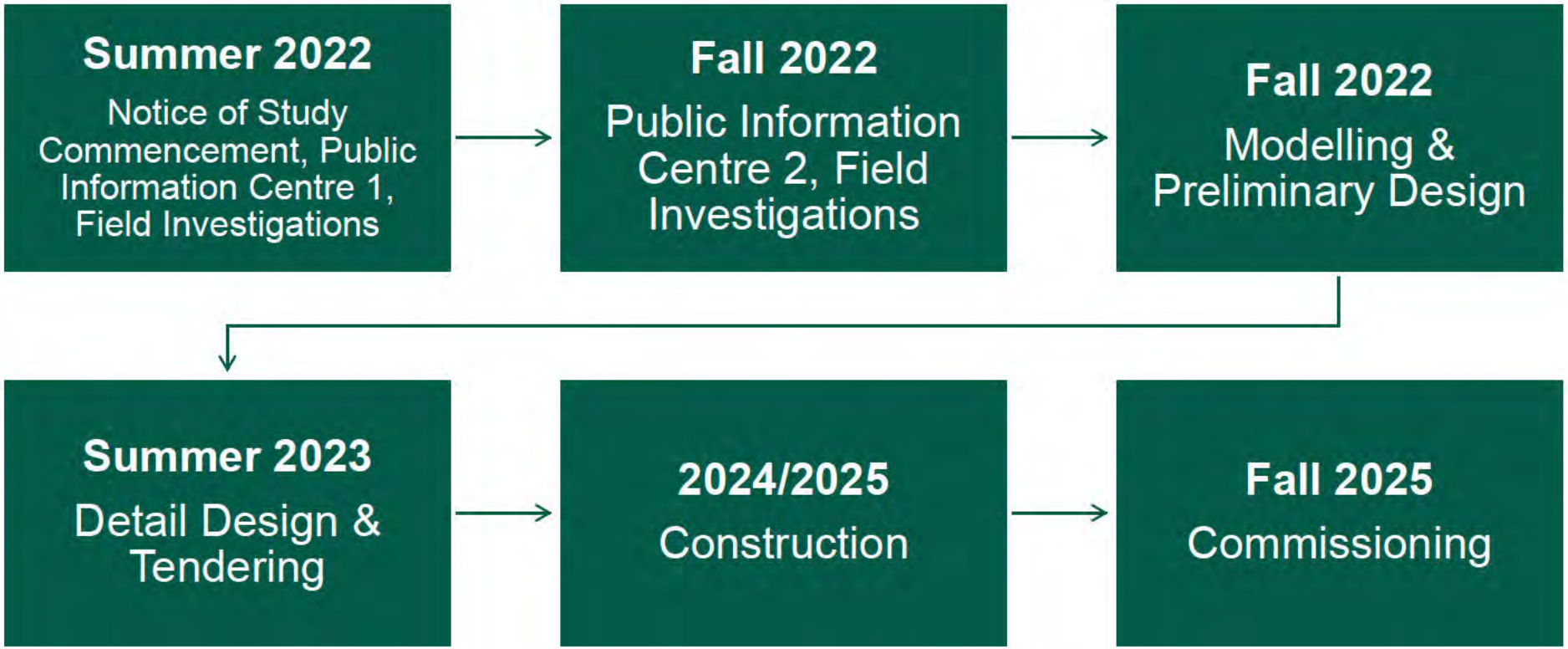
- Potential land requirements including acquisition or easements (temporary/permanent)
- Potential to impact existing utilities and infrastructure
- Constructability (e.g., open cut, non-destructive technologies, etc.)

Financial

- Estimated capital and operational costs



Anticipated Project Timelines



Timelines are contingent on project progress, approvals and available funding.

Next Steps

Following the PIC, the project team will complete the next steps identified below:

- Review and respond to comments received
- Continue to engage Indigenous communities, the public and agencies
- Develop and evaluate Alternative Solutions
- Present Recommended Alternative Solution(s) at PIC #2 (Fall 2022)
- Confirm solution and complete reporting for 30-day review

Thank you for participating!

Thank you for participating in the Public Information Centre for the Norfolk County Simcoe-Townsend Water Supply System Municipal Class EA Study. Your feedback is valuable and appreciated.

Please provide comments by filling out the comment form or by contacting a member of the project team below by **September 1, 2022**:

Mariana Balaban, P.Eng., PhD
Project Director
Norfolk County
Phone: 519-426-5870 ext. 8158
Email: mariana.balaban@norfolkcounty.ca

Jitin Kalra, P.Eng.
Project Manager
Stantec Consulting Ltd.
Phone: 416-598-7698 (Collect: +0 collect)
Email: jitin.kalra@stantec.com

All information is collected in accordance with the Freedom of Information and Privacy Act.

Simcoe-Townsend Water Supply System
Public Information Centre #1 Presentation Transcript
August 4, 2022

Slide 1 – Title Slide

Hello and thank you for joining us for the Norfolk County, Simcoe-Townsend Water Supply System Municipal Class Environmental Assessment, Public Information Centre (or PIC) number 1.

Slide 2 – Welcome!

The goals of this PIC are to:

- Introduce the project and why it is being undertaken
- Provide an overview of the process that this study will follow for the project
- Provide a summary of the problems and opportunities to address
- Present existing conditions within the study area
- Identify potentially affected residents and businesses within the project area
- Answer any questions you may have and provide an opportunity to get involved in the project

Comments received during this study will help identify the approach for current and future improvements within Norfolk County.

Slide 3 – Project Objectives

We are taking steps to meet the future needs of Norfolk County. We are completing the first phase of the Inter Urban Water Supply System (IUWS), which will interconnect all the communities within the County to secure a reliable and consistent water supply. More information about the IUWS is available online: https://www.norfolkcounty.ca/living/roads-water-wastewater/inter-urban-water-supply/
The strategic priorities of the project are to:

- Deliver high quality water services
- Ensure fire flow and water supply for growth to 2041 and beyond
- Build reliable infrastructure
- Provide future connections to Delhi and Waterford

The project will also focus on achieving the following sustainability goals within the County's water supply network.

1. Alignment with Growth Demand
2. Flexibility Peak Demand
3. Water Conservation
4. Operational Efficiency
5. Increased Connectivity

Simcoe-Townsend Water Supply System
Public Information Centre #1 Presentation Transcript
August 4, 2022

Slide 4 – Project Summary

Norfolk County is undertaking a Municipal Class Environmental Assessment (EA) study. The County is proposing to build a new watermain that connects Simcoe to the Townsend Water Supply System. The project will also include a new elevated water tank and booster station. The purpose of this new water infrastructure is to secure water supply from the Nanticoke Water Treatment Plant. The Simcoe-Townsend Water Supply System study will complete the first phase of the IUWS program.

Slide 5 – Project Area

This slide presents the location of the project within Norfolk County. The map displays the watermain route, which will be constructed within the municipal right-of-way as best as possible. It displays the future proposed transmission connections to Waterford and Delhi, and the approximate locations of the elevated water tank and booster station.

Slide 6 – Municipal Class EA Process

This study will meet the requirements for Schedule 'B' projects and will satisfy the first two phases of the Class EA process.

Schedule 'B' projects have the potential for some adverse environmental effects. It is a requirement that the proponent contact affected members of the public and relevant review agencies. The County will ensure all are aware of the project and have the opportunity to provide input and feedback.

Phase 1 and 2 of the MCEA process includes:

- reviewing background planning and policy documents
- identifying the problem or opportunity;
- developing and evaluating alternative solutions; and,
- identifying and presenting the preferred solution, potential environmental impacts and proposed mitigation measures.

Slide 7 – Problem & Opportunity Statement

The following problems and opportunities of the water supply system in Norfolk County were identified:

Problems

- Capacity for long-term growth
- Quality compliance
- Insufficient fire flow services

- Individual well systems
- High peak water demands (seasonal)
- Aging infrastructure
- Low water system pressure
- Concerns with existing backup of water system

Opportunities

- Provides capacity for growth to 2041 and beyond
- High quality water services
- Provides fire flow supply for growth to 2041 and beyond
- Provides opportunity for residents to connect to centralized municipal services
- Accommodates high peak water demands year-round
- Builds and renews infrastructure for 50+ years
- Provides reliable and consistent water pressure
- Provides backup capacity to water system
- Allows for future development and economic growth

Slide 8 – Existing Conditions – Socio-Economic

The lands surrounding the Town of Simcoe present a unique combination of uses. Majority of the lands along the proposed watermain route, with the exception of the Town of Simcoe, are designated for agricultural use. Operations within these lands includes various types of uses, such as: orchards, sweet potatoes farms, watermelon farms, honey farms, solar farms, recycling lands and many more.

The Norfolk Sunrise Trail is a walking & cycling trail that follows the railway line from 13th Concession south through the Town of Simcoe.

It is important we understand the uses of the lands adjacent to the study area to minimize the overall impacts of the project.

Slide 9 – Existing Conditions – Fish & Fish Habitat

The study area is within the Long Point Region Conservation Authority Watershed Boundary.

The following watercourses provide either direct fish habitat or provide important functions to direct habitat. The watercourses are protected under the Fisheries Act:

- Patterson Creek
- Davis Creek

- Black Creek
- Catfish Creek
- Nanticoke Creek
- Unnamed watercourses (permanent watercourses, intermittent watercourses and constructed drains)

No species at risk fish have been identified in the study area.

Slide 10 – Existing Conditions – Terrestrial Environment

The study area crosses the following designated natural heritage features:

- Provincially Significant Wetland (PSW) Complex
- Significant Woodlands
- Hazard Lands

A review of background data sources identified 35 terrestrial species at risk that overlap with the study area. This will be reviewed further as the study progresses.

Slide 11 – Source Water Protection

The study area is within the Long Point Region Source Protection Plan Area. The area contains policies for the protection of municipal drinking water sources within Norfolk County.

The western part of the study area falls within a Highly Vulnerable Aquifer, and Significant Groundwater Recharge Area. Areas to the west of the Town of Simcoe, along Concession 14, fall within a Wellhead Protection Area (WHPA).

Slide 12 – Existing Conditions- Cultural Heritage

Norfolk County Heritage and Cultural Mapping was reviewed for cultural heritage resources within the study area. The following was identified within/next to the proposed watermain alignment:

- Cemetery – St. Marys Cemetery, 234 14th Road West, Simcoe
- Designated Heritage Property – Mackay/Black Residence, 841 Norfolk Street North
- Farms and Orchards – Berlo’s Best Sweet Potatoes, 325 Concession 13 Townsend, Simcoe
- Heritage Committee Identified Properties – Church, 962 Concession 13 Townsend
- Cemetery – Mount Hope/Tyrell Cemetery, Villa Nova Road, Simcoe

Simcoe-Townsend Water Supply System
Public Information Centre #1 Presentation Transcript
August 4, 2022

Slide 13 – Booster Pumping Station

The transmission watermain will be approximately 20 km in length to connect Simcoe to the Townsend Water Supply System. Along the watermain, a pumping station will be constructed. The pumping station will boost the pressure of the flowing water, to keep it moving toward its destination.

During the next phase of the study, alternative locations for the booster pumping station will be evaluated. A site up to approximately 0.5 hectares (1.2 acres) will be required.

Slide 14 – Elevated Water Tank

At the west end of the proposed transmission watermain (Simcoe), an elevated water tank will be constructed. The elevated water tank will act as a buffer during periods of peak demand (peak water consumption).

The tower will enable efficient operations and provide redundancy to the water supply system.

During the next phase of the study, alternative locations for the elevated tower will be evaluated.

Slide 15 – Structure Design

This slide presents structure Design for the Booster Pumping Station and Elevated Water Tank.

The Booster Pumping Station design includes:

- Building sized for ultimate capacity of 19,000 m^3/day.
- Pumps installed for initial capacity of 5,000 m^3/day
- Standby Power and Re-chlorination facilities

The Elevated Water Tank design includes:

- Capacity 4,500 m^3 – to be confirmed during Detail Design
- Diameter - 30 to 35 m
- Height – 50 m
- Includes future connections to Waterford and Delhi Systems

Slide 16 – Evaluation Criteria

Alternative solutions will be assessed using the following factors and criteria. Depending on comments received from agencies, Indigenous communities, stakeholders and members of the public, criteria may be added or refined.

Simcoe-Townsend Water Supply System
Public Information Centre #1 Presentation Transcript
August 4, 2022

Socio-Economic Environment:

- Potential to impact existing residences, businesses, agricultural operations, and community features
- Potential effect on approved/planned land uses
- Potential to support growth within Urban Areas

Natural Environment:

- Potential to impact fish and fish habitat
- Potential to impact water resources including surface water (i.e., rivers, creeks, etc.), groundwater recharge areas and wellhead protection areas
- Potential to impact significant natural heritage features
- Potential to impact significant wildlife habitat and species at risk

Slide 17 – Evaluation Criteria

Cultural Environment:

- Potential to impact archaeological resources
- Potential to impact cultural heritage resources

Technical Considerations:

- Potential land requirements including acquisition or easements (temporary/permanent)
- Potential to impact existing utilities and infrastructure
- Constructability (e.g., open cut, non-destructive technologies)

Financial Considerations:

- Estimated capital cost and operational costs

Slide 18 – Anticipated Project Timelines

The overall project schedule will include the following milestones:

- Summer 2022 – Notice of Study Commencement, Public Information Centre 1, Field Investigations
- Fall 2022 – Public Information Centre 2, Field Investigations
- Fall 2022 – Modelling & Preliminary Design
- Summer 2023 – Detail Design & Tendering
- 2024/2025 – Construction

- Fall 2025 – Commissioning

Timelines are contingent on project progress, approvals and available funding.

Slide 19 – Next Steps

Following the PIC, the project team will complete the next steps identified below:

- Review and respond to comments received
- Continue to engage Indigenous communities, and consult with the public and agencies
- Develop and evaluate Alternative Solutions
- Present Recommended Alternative Solution(s) at PIC #2 (Fall 2022)
- Confirm solution and complete reporting for 30-day review

Slide 20– Thank you!

Thank you for participating in the Public Information Centre for the Norfolk County Simcoe-Townsend Water Supply System Municipal Class EA Study. Your feedback is valuable and appreciated.

Please provide comments by filling out the comment form or by contacting a member of the project team below by September 1, 2022.

Thank you again for taking the time to view this presentation, and for your interest in the study.

Public Information Centre 1 Sign-In
Norfolk County – Simcoe-Townsend Water Supply System
Municipal Class Environmental Assessment Study

Norfolk County Administration Building Council Chambers – Thursday, August 4, 2022

Name / Title	Address	Contact Information (Email/Phone)
Vincent Ball		
Dennis & Diane Sovereign		
Chris Van Paassen		
DUSTIN WAKEFORD		
Mike and Cheryl Bayslaugh		
Adam Mohammed		
Gord Pennington		
Steven Gardist		
FRANK GOULDING		
Franklyn Smith		

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. This information will be kept on file and may be included in study documentation, which will be made available for public review.

Norfolk COUNTY

Public Information Centre 1 Sign-In
Norfolk County – Simcoe-Townsend Water Supply System
Municipal Class Environmental Assessment Study

Norfolk County Administration Building Council Chambers – Thursday, August 4, 2022

Stantec

Name / Title	Address	Contact Information (Email/Phone)
Steven Rodrok		
Cheryl Shindruk		

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. This information will be kept on file and may be included in study documentation, which will be made available for public review.

Norfolk COUNTY

Public Information Centre 1 Sign-In
Norfolk County – Simcoe-Townsend Water Supply System
Municipal Class Environmental Assessment Study

Norfolk County Administration Building Council Chambers – Thursday, August 4, 2022

Stantec

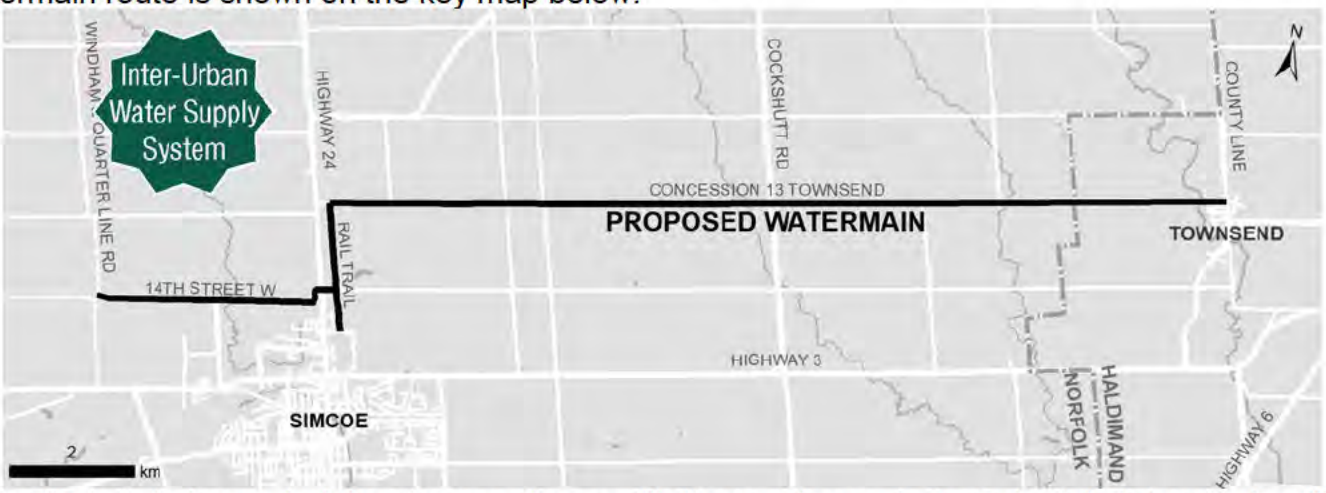
Name / Title	Address	Contact Information (Email/Phone)
Tim Dickhout Project Manager Development		
Mataiz Lewandowski Project Manager Tylin		
Jennifer Ormiston Project Manager Stantec		

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. This information will be kept on file and may be included in study documentation, which will be made available for public review.

Public Information Centre 2

Notice of Public Information Centre 2
Simcoe-Townsend Water Supply System
Municipal Class Environmental Assessment

Norfolk County (County) has initiated a Municipal Class Environmental Assessment (EA) to implement an approximately 20 km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. These improvements are required to meet long-term Inter-Urban Water Supply capacity and quality demands within the County. The proposed watermain route is shown on the key map below.



This Study is being undertaken in accordance with the requirements for Schedule 'B' projects within the Municipal Class EA document (2000, as amended), under the Ontario Environmental Assessment Act.

How can I participate in this Study?

The first Public Information Centre (PIC) was held on August 4, 2022, to present background information and introduce the project team. The second PIC is scheduled to provide a study update and present the preferred site location for the booster pumping station and elevated tower. The PIC will be in-person at the **Norfolk County Administration Building Council Chambers (50 Colborne St S, Simcoe, ON) on Tuesday, November 8, 2022 from 5:00-7:00pm**. PIC materials will be available on the County's website for your review on November 8, 2022: https://engagenorfolk.ca/.

If you would like more information about the study, or would like to be added to the contact list to receive future notices, please contact the following by **Tuesday, December 6, 2022**:

Mariana Balaban, P.Eng., PhD
Project Director
Norfolk County
Phone: 519-426-5870 ext. 8158
Email: mariana.balaban@norfolkcounty.ca

Jitin Kalra, P.Eng.
Project Manager
Stantec Consulting Ltd.
Phone: 416-598-7695 (Collect: +0 collect)
Email: jitin.kalra@stantec.com

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

This Notice was first issued on October 26, 2022.

From:	Lang, Sarah
Cc:	Mariana Balaban; Kalra, Jitin; Choi, Joon
Bcc:	"karina.cerniavskaja@ontario.ca"; "joan.delvillarcuicas@ontario.ca"; "eanotification.wcregion@ontario.ca"; "karla.barboza@ontario.ca"; "dan.minkin@ontario.ca"; "michael.nadeau@ontario.ca"; "chris.evans@ontario.ca"; "rebecca.shortt@ontario.ca"; "nancy.rutherford@ontario.ca"; "molly.mann@ontario.ca"; "noticereview@infrastructureontario.ca"; "lisa.wren@dfo-mpo.gc.ca"; "lmauthe@lprca.on.ca"; "conservation@lprca.on.ca"; "shawn.johnson@opp.ca"; "norfolk.fire@norfolkcounty.ca"; "Steph.David@norfolkcounty.ca"; "Scott.Zerbes@norfolkcounty.ca"; "Chris.VanPaassen@norfolk.com"; "tim.dickhout@norfolkcounty.ca"; "sarah.page@norfolkcounty.ca"; "pwilson@haldimandcounty.on.ca"; "Heidy.VanDyk@hnhss.ca"; "secondarylanduse@hydroone.com"; "sean.cartlidge@hydroone.com"; "larry.conrad@norfolkcounty.ca"; "stephanie.davis@norfolkcounty.ca"; "kyle.dezort@norfolkcounty.ca"; "shaun.earls@norfolkcounty.ca"; "emily.jarvis@norfolkcounty.ca"; "terry.hall@norfolkcounty.ca"; "theo.karagias@norfolkcounty.ca"; "julius.vigh@norfolkcounty.ca"; "deanna.anderson@norfolkcounty.ca"; "chris.friedrich@norfolkcounty.ca"; "ed.vezsenyi@norfolkcounty.ca"; "dave.graham@norfolkcounty.ca"; "jason.mcintyre@norfolkcounty.ca"; "ed.vinnai@norfolkcounty.ca"; "matt.brock@norfolkcounty.ca"; "ryan.harris@norfolkcounty.ca"; "brandon.ponting@norfolkcounty.ca"; "corey.radovanovic@norfolkcounty.ca"; "kirk.vallier@norfolkcounty.ca"; "mark.karges@norfolkcounty.ca"; "greg.considine@norfolkcounty.ca"; "matt.muldoon@norfolkcounty.ca"; "joe.hird@norfolkcounty.ca"; "mike.mccallium@norfolkcounty.ca"; "hugh.maxwell@norfolkcounty.ca"; "curtis.taylor@norfolkcounty.ca"; "jordan.mattice@norfolkcounty.ca"; "dale.cove@norfolkcounty.ca"; "daryll.clause@norfolkcounty.ca"; "samantha.schuyler@norfolkcounty.ca"; "adam.collier@enbridge.com"; "lee-ann.clark@bell.ca"; "christine.telfer@bell.ca"; "Dan.Mozzoni@rci.rogers.com"; "lakshamanan.lakshmana@rci.rogers.com"; "rliss@synergyuu.com"; "Al.Carnahan@corp.eastlink.ca"; "nordel@nor-del.com"; "communications@kwic.com"; "rvanstone@sixnations.ca"; "lonnybomberry@sixnations.ca"; "markhill@sixnations.ca"; "HFCO@sixnations.ca"; "dlaforme@sixnations.ca"; "stacey.laforme@mncfn.ca"; "abby.laforme@mncfn.ca"; "adam.laforme@mncfn.ca"; "mark.laforme@mncfn.ca"; "info@hdi.land"; "shelley.armstrong@publicboard.ca"; "penny_king@wecdsb.on.ca"; "planification@cscmonavenir.ca"; "transportation@stsbhn.ca"; "Jack_carello@cpr.ca"; "proximity@cn.ca"; "info@norfolkfieldnaturalists.org"; "waterfordheritagetrail@yahoo.ca"; "lynnvalleytrail@gmail.com"; "transit@norfolkcounty.ca";

Subject:	Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA
Date:	Thursday, October 27, 2022 9:28:00 AM
Attachments:	Notice of PIC2 - Simcoe-Townsend Water Supply EA.pdf

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Hello,

Please find the attached Notice of Public Information Centre (PIC) 2 for the Norfolk County (County), Simcoe-Townsend Water Supply System, Municipal Class Environmental Assessment (EA). The County has initiated the EA to implement an approximately 20km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station.

The PIC will be held in-person at the **Norfolk County Administration Building Council Chambers (50 Colborne St S, Simcoe, ON) on Tuesday, November 8, 2022 from 5:00pm to 7:00pm**. PIC materials will also be available on the County's website for your review on November 8, 2022.

County's Website: https://engagenorfolk.ca

Please contact a member of the project team identified on the attached Notice if you have any questions, comments or concerns

Thank you,

Sarah Lang
Environmental Planner
sarah.lang@stantec.com

Stantec

Simcoe, ON
N3Y 4K3

Simcoe, ON
N3Y 4K3

Townsend, ON
N0A 1S0

Townsend, Ontario
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Simcoe, ON
N3Y 4K3

Simcoe-Townsend Water Supply System

Municipal Class Environmental Assessment

Norfolk County

Public Information Centre #2

November 8, 2022 from 5 00pm to 7 00pm

Norfolk County Admin stration Building Council Chambers
50 Colborne St S, Simcoe, ON

Welcome!

The goals of this Publ c Information Centre (PIC) are to:



- Provide an update on the Study since P C #1
- Present the evaluation of alternative s te locations for the booster pumping stat on



- Present the preferred alternative site location for the booster pumping stat on and e evated tower



- Identify potent ally affec ed residents and businesses w thin the project area



- Answer any questions you may have and provide an opportun ty to get involved in the project

Comments received during this study will be used to help dentify the recommended approach for current and future improvements within Norfolk County

Project Objectives

We are taking steps to meet the future needs of Norfolk County. We are comp eting the first phase of the Inter Urban Water Supply System (IUWS), which w ll interconnect all the commun ties within the County to secure a rel able and consistent water supply. More information about the IUWS is avai able online: https://www.norfolkcounty ca/living/roads-water-wastewater/inter-urban-water-supply/

The strateg c priorit es of the project are to:

- Deliver high qual ty water serv ces
- Ensure fire f ow and water supply for growth to 20 1 and beyond
- Bu ld rel able infrastructure
- Provide future connections to Delhi and Waterford

The project wi l also focus on achieving the fo lowing sustainabil ty goa s w thin the County's water supply network.

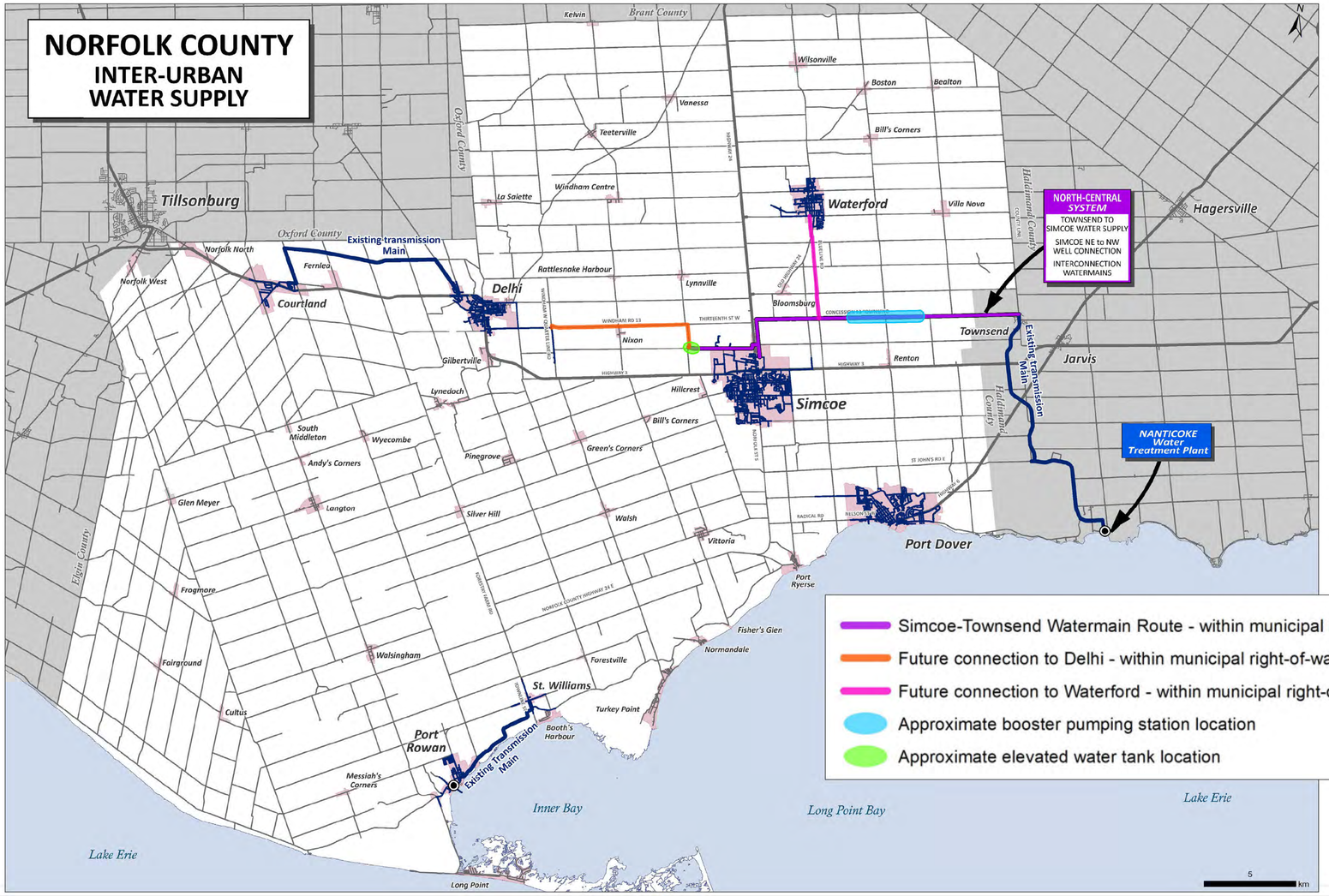
Al gnment with Growth Demand	F exibi ity Peak Demand	Opera ional E ficiency	Water Conservation	Increased Connec iv ty

Project Summary

Norfolk County is undertaking a Municipal Class Environmental Assessment (EA) study. The County s proposing to build a new watermain that connects Simcoe to the Townsend Water Supply System. The project w ll also include a new elevated water tank and booster station. The purpose of this new water infrastructure is to secure water supply from the Nanticoke Water Treatment Plant. The Simcoe-Townsend Water Supply System study wi l complete the first phase of the IUWS program.



Project Area



Schedule ‘B’ Municipal Class EA Study Process

This study will meet the requirements for Schedule B’ projects and will satisfy the irst two phases of the Class EA process.

We are currently in Phase 2 and presenting alternative ocations for the booster pumping stat on (or alterna ive solutions).

Phase 1: Prob em and Opportun ty	• Rev ew background planning and policy documen s (e.g., O ficial P an) • Identify study area needs, prob ems and opportun ties
Phase 2: Alternative Solut ons	• Inventory the socio economic, natural and cultural environments • Ident fy and evalua e easible A ternative Solut ons • Se ect the preferred Al ernative Solu ion • Present o public, Indigenous communit es and agenc es for comment

Booster Pumping Station – Alternative Locations

Several a ternative locations along Concession 13 Townsend were evaluated for the booster pumping station. It should be noted that the lands west of Cockshutt Road were not considered due to existing topography, and use, and proximity to hazard lands. The approximate locations were considered:

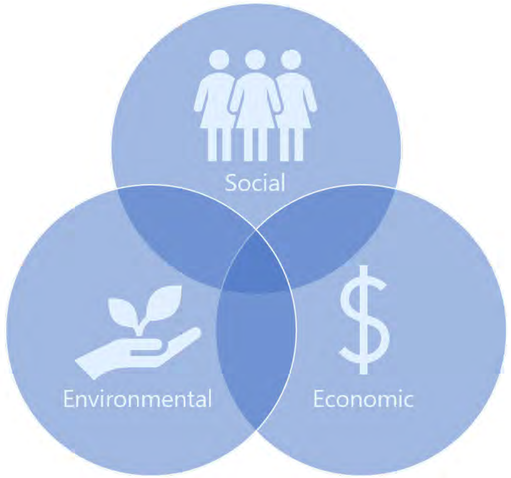


Evaluation Criteria

The alternative locations were assessed using the following factors and criter a:

Socio Economic Environment

- Potential to impact existing and uses (e.g., construction impacts, aesthet cs, noise during operat on, water pressure, safety)
- Potential to impact agricultural and uses
- Potential to support growth within Urban Areas



Natural Environment

- Potential to impact fish and fish habitat
- Potential to impact water resources including surface water (i.e., rivers, creeks, etc), groundwater recharge areas and wellhead protection areas
- Potential to impact significant natural heritage features
- Potential to impact significant w ldli e habitat and species at risk

Evaluation Criteria Continued

Cultural Environment

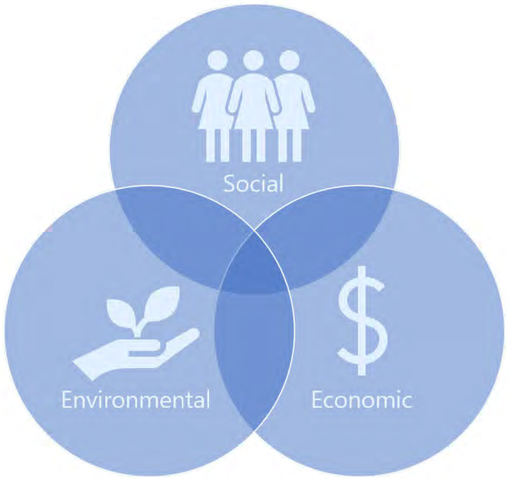
- Potential to impact archaeolog cal resources
- Potential to impact cu tural her tage resources

Technical Considerations

- Potential and requirements including acquisition or easements (temporary/permanent)
- Potential o impact ex sting utilit es and infrastructure
- Constructab lity (e.g., open cut, non-destructive techno ogies, etc.)

Financial

- Estimated capital and operational cos s



Evaluation of Alternative Locations

Alternative Location 3 was determined to be the recommended location for the booster pumping sta ion.

Factor	Do Noth ng	A ternative Location 1	Alternative Location 2	Al ernative Location 3	Alternative Location 4
Socio Economic Environment	Least Pre erred	Moderately Prefer ed	Least Pre erred	Most Preferred	Most Preferred
Natural Environment	Most Preferred	Most Pre erred	Least Pre erred	Most Preferred	Most Preferred
Cultural Environment	Most Preferred	No Signi icant D fference	No Sign ficant Di ference	No S gnif cant D fference	No Sign ficant Dif erence
echnical Cons derations	Most Preferred	Most Pre erred	Moderately Preferred	Moderately Preferred	Least Preferred
Financ al Cons derations	Most Preferred	Least Preferred	Least Pre erred	Most Preferred	Least Preferred
Summary	Moderately Preferred	Moderately Prefer ed	Least Pre erred	**Recommended**	Mode ately Preferred

Recommended Location – Alternative Location 3

- To accommoda e the 800m² (approximately 60m x 80m) boos er pumping station at this location, property acqu s tion is required from one andowner.
- The exis ing topography wou d require minor grading to accommodate a booster pumping stat on.
- No anticipated impacts to f sh or f sh habitat, water resources, groundwater recharge areas or wellhead protection areas, s gn ficant natural her tage features.
- No anticipated impacts to existing util ties or infrastructure.
- A Stage 1 Archaeological Assessment w ll be required (previously und sturbed agr cu tural land).



While Alternative Location 3 is the recommended ocation, both Al ernative Locat ons 1 and 3 wi l be presented to the property owner during and acqu s tion d scussions.

Elevated Water Tank

At the west end of the proposed transmission watermain (Simcoe), an elevated water tank will be constructed to act as a buffer during periods of peak demand (peak water consumption).

The tower wi l enab e efficient operations and prov de redundancy to the wa er supply system.

The elevated tower will be loca ed on municipally owned land.



Structure Design

Booster Pumping Station



- Road access wi l be construc ed around the outer limits of the building.
- Minimum space of 60m x 80m required for the bu lding.
- Building will be fenced.
- Lands surrounding bu lding wi l be landscaped/treed to mit gate po ential noise.
- Building s zed for u timate capacity of 19,000 m^3/day.
- Includes Standby Power and Re-chlorination acil ties.

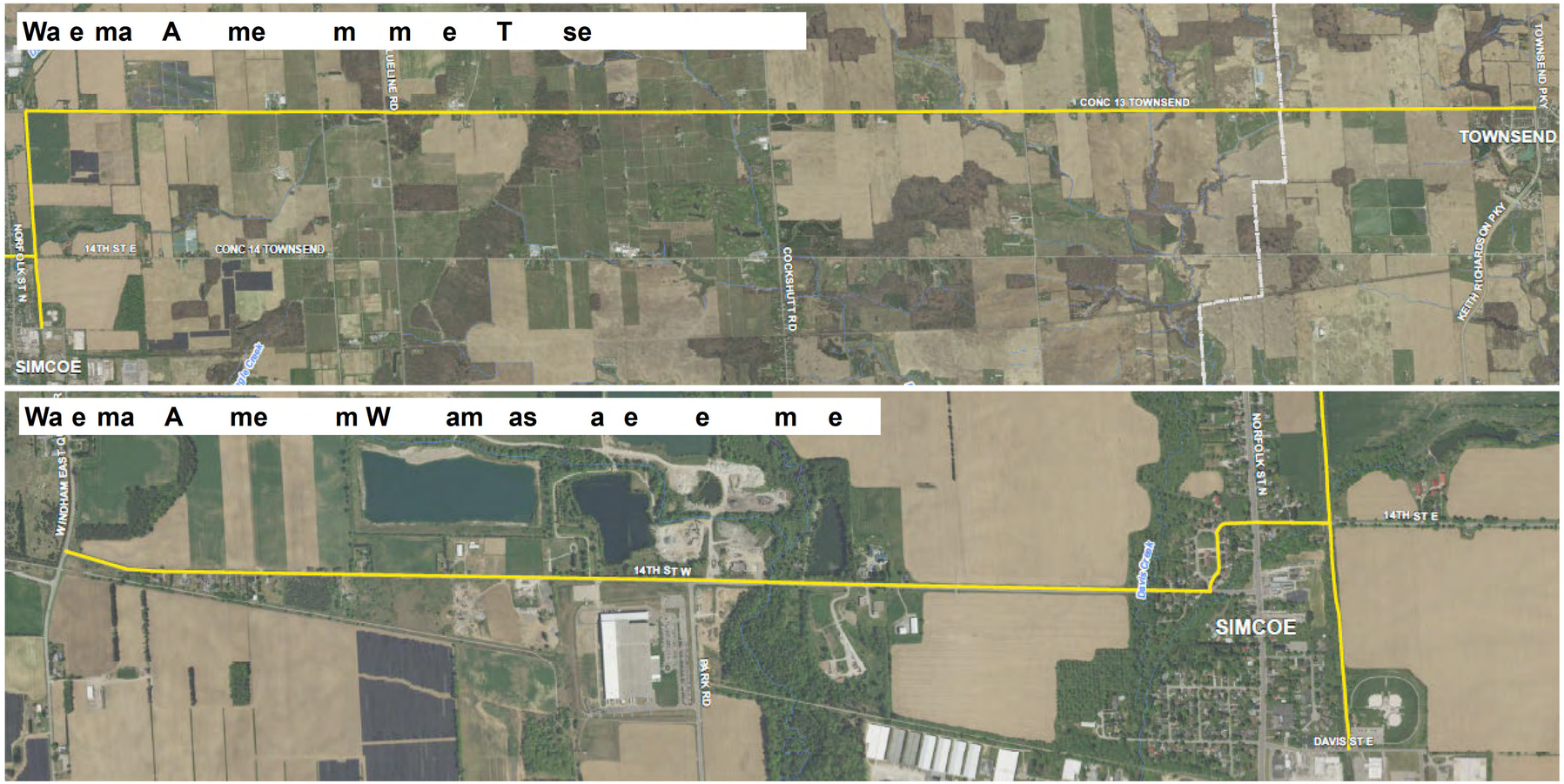
Elevated Water Tank



- Capac ty ,500 m^3 to be confirmed during Detai ed Design
- Diameter – 30 to 35 m
- Height – 50 m
- Includes future connections to Water ord and Delhi Sys ems

Transmission Watermain

The transmiss on watermain wi l be approximately 20km in ength and constructed within the municipal right-of-way, avoiding impac s to private property.



Potential Impacts and Proposed Mitigation

- Based on the ant cipated impacts, preliminary mit ga ion measures have been recommended.
- M tigation measures wi l be re ined during the future deta led design phase and then implemented during and fo lowing construction, w th appropriate mon toring programs in place.

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W e a a	a geted spec es su veys wi l be ca ied out o spec es that have the potent al o be p esent
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e	Impac s to p ivate p ope ty have been denti ed in assoc ation wi h the Recommended Al e nat ve Nego iat ons wi h impacted p ope ty owne a e unde way
se	Mi igation measu es a e ava lable by designing he bui ding and equipment to m n m ze sound t ansmiss on
Aes e s	Mi igation measu es to educe impacts a e avai ab e th ough landscape and a ch tectu al des gn compat b e to the su ound ng a ea
- e m s m a s	Noise v b at on ai (dus) t a ic impacts a e ant cipated but w ll be empo a y n natu e and a e la gely unavo dab e W th adequate cont ols impacts can be m nim zed Const uct on s ag ng and t a c management w ll be con i med du ng the des gn phase

Anticipated Project Timelines



Timelines are contingent on project progress, approvals and availab e funding.

Next Steps

Following the PIC, the project team will comp ete the next steps identified below:

- Review and respond to comments received.
- Continue to engage Indigenous communities, the public and agencies.
- Confirm preferred solution based on comments received.
- Prepare Project F le Report for 30-day review.









Thank you for participating!

Thank you for participating in the Pub ic Information Centre or the Norfolk County Simcoe-Townsend Water Supply System Municipal Class EA Study. Your feedback is valuab e and appreciated.

Please provide comments by fi ling out a comment form or by contacting a member of the project team be ow by **December 6 2022**:

Mariana Balaban P Eng PhD
Project Director
Norfolk County
Phone: 519 426 5870 ext 8158
Email:
mariana balaban@norfo kcounty ca

itin Kalra P Eng
Project Manager
Stantec Consulting Ltd
Phone: 416 598 7698 (Collect: 0 collect)
Ema l: jitin kalra@stantec com

All information is collected in accordance w th the Freedom of Information and Privacy Act.

Frequently Asked Questions

Where will the waterma n be placed?

The watermain wi l be loca ed w thin the municipal r ght-of-way to avoid encroachment on private propert es, and conf ic s with existing u il ties and infrastructure. The a ignment of the watermain is subject o further refinement during the detailed des gn stage.

How will the County restore the landscape and road infrastructure?

Landscaping and roadways w ll be restored o like or better condi ion where impacted (i.e., new topso l and/or sod, road resurfacing/rehab litation).

Will there be road closures? How long will construction take?

Construction is anticipated to occur over 202 /2025, subject to funding and approvals. The en ire corridor will not be impacted all at once, and the contractor wi l be required to restore the sur ace areas w thin a reasonable amount of time following insta lat on of the watermain. Nearby residents wi l be not fied of construc ion in advance. Driveway access and ocal traff c wi l be maintained, though short term, temporary closures to roads may be required.

Will the Waterford Heritage rail remain open during construction?

Safety s of the utmost importance to the County. The project eam is curren ly rev ewing the al gnment a ong to trail for the possibil ty to allow sa e access to pedestrians during construction. Short term, temporary c osures of the trail may be required. Construct on staging and detours w ll be further refined in the next stage of the project, detailed design.

Norfolk County

Stantec

Public Information Centre Sign-In
Norfolk County – Simcoe-Townsend Water Supply System
Municipal Class Environmental Assessment Study

Norfolk County Administration Building Council Chambers – November 8, 2022

Name / Title	Address	Contact Information (Email/Phone)
Chris Van Passen		
BRUCE BOLIN		
[illegible] Smith		
BOYD PENDLETON		
DENNIS BLAKE		
Cheryl Bauslaugh		
JEFF GREENFIELD		
Jim Johnson		

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. This information will be kept on file and may be included in study documentation, which will be made available for public review.

Norfolk County

Public Information Centre Sign-In
Norfolk County – Simcoe-Townsend Water Supply System
Municipal Class Environmental Assessment Study

Norfolk County Administration Building Council Chambers – November 8, 2022

Stantec

Name / Title	Address	Contact Information (Email/Phone)
David KERR		

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Norfolk County

Public Information Centre Sign-In
Norfolk County – Simcoe-Townsend Water Supply System Municipal Class Environmental Assessment Study

Norfolk County Administration Building Council Chambers – November 8, 2022

Stantec

Name / Title
Franklyn Smith
Mike Bauslaugh
HELEN URCAN
Stopler Grad. St
Bobby Wang
Jim Carroll
Dennis & Diane Sovereign
Jarran Francis
Paul Emerson
Bruce Hiefkamp Geokamp Limited

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. This information will be kept on file and may be included in study documentation, which will be made available for public review.

Norfolk County

Public Information Centre Sign-In
Norfolk County – Simcoe-Townsend Water Supply System
Municipal Class Environmental Assessment Study
Norfolk County Administration Building Council Chambers – November 8, 2022

Stantec

Name / Title	Address	Contact Information (Email/Phone)
Ed Hunter		
Kim Smith / Clay Dirt Inc		
Sean Absonyi		
John Dumanski		
Tom O'Hara		
Steve Patterson		
Dianne Jamieson		
Theynas Manoharan		
Mateusz Lewodaski		

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. This information will be kept on file and may be included in study documentation, which will be made available for public review.

Notice of Completion

NOTICE OF COMPLETION
Simcoe-Townsend Water Supply System
Municipal Class Environmental Assessment

Norfolk County (County) has completed the Municipal Class Environmental Assessment (EA) to implement an approximately 20km long transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. These improvements are required to meet long-term Inter-Urban Water Supply capacity and quality demands within the County. The proposed watermain route is shown on the key map below.



This Study was conducted in accordance with the requirements for Schedule 'B' projects within the Municipal Class EA document (as amended in 2015), under the Ontario Environmental Assessment Act.

A Project File Report summarizing the study process and recommendations is available for public review for 30 calendar days from **April 26, 2023, to May 26, 2023**. The Project File Report will be available for review at the following locations:

Online: https://engagenorfolk.ca/simcoe-townsend-water-supply

In person: ServiceNorfolk Counter, 185 Robinson St., Simcoe
519-426-5870 ext. 0

Interested persons may provide written comments to the following by **May 26, 2023**:

Mariana Balaban, P.Eng., PhD - Project Director - Norfolk County
Phone: 519-426-5870 ext. 8158 - Email: mariana.balaban@norfolkcounty.ca

In addition, a request may be made to the Ministry of the Environment, Conservation and Parks for an order requiring a higher level of study (i.e., requiring an individual/comprehensive EA approval before being able to proceed), or that conditions be imposed (e.g., require further studies), only on the grounds that the requested order may prevent, mitigate, or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests on other grounds will not be considered. Requests should include the requester contact information and full name for the ministry.

Minister of the Environment, Conservation and Parks
Ministry of Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto ON M7A 2J3
minister.mecp@ontario.ca

and

Director, Environmental Assessment Branch
Ministry of Environment, Conservation and Parks
135 St. Clair Ave. W, 1st Floor
Toronto ON, M4V 1P5
EABDirector@ontario.ca

Accessible formats and communication supports available upon request.

Personal information collected on this subject is collected under the authority of the Freedom of Information and Privacy Act, the Municipal Act, and the Environmental Assessment Act. With the exception of personal information, all comments and information received will be maintained on file for use during the project and may be included in project documentation.

This notice was first published on April 26, 2023.

Comments

Contact	Date	Comment	Draft Response/ Status
Agencies			
Chipman Hicks Eastlink Jerry.thorne@corp.eastlink.ca Al.carnahan@corp.eastlink.ca Chipman.hicks@corp.eastlink.ca Michael.macdougall@corp.eastlink.ca	July 29, 2022 Email NOSC	From your prelim route it looks like Eastlink will be in conflict in the area of Norfolk St N and 14th St E. When you have solid plans/designs for this area, please forward them to me. Do you have an estimate as to when this work will take place? I assume several years?	**Email Response August 3, 2022:** Sorry for the delay in getting back to you. We are actually hoping to get to construction in 2024/2025 with commissioning in 2025. The Public Information Centre #1 materials are now available online and can give some additional context if needed. Please use the following link. https://engagenorfolk.ca/simcoe-townsend-water-supply I'll pass your email along to our design team to make sure they are aware of the potential conflict and to reach out once we have more solidified designs in the area. Thanks for letting us know!
Hydro One secondarylanduse@hydroone.com	August 3, 2022 Email PIC 1	Thank you for sending us notification regarding (Simcoe-Townsend Water Supply System). In our preliminary assessment, we have confirmed that Hydro One has existing distribution assets within your study area. At this time, we do not have sufficient information to comment on the potential resulting impacts that your project may have on our infrastructure. As such, we must stay informed as more information becomes available so that we can advise if any of the alternative solutions present actual conflicts with our assets, and if so; what resulting measures and costs could be incurred by the proponent. Note that this response does not constitute approval for your plans and is being sent to you as a courtesy to inform you that we must continue to be consulted on your project. Hydro One must be consulted during all stages of your project. Please ensure that all future communications about this and future project(s) are sent to us electronically to secondarylanduse@hydroone.com	
Joan Del Villar Cuicas Regional Environmental Planner Ministry of the Environment, Conservation and Parks Joan.delvillarcuicas@ontario.ca	July 20, 2022 Email NOSC	Please find attached MECP's Letter of Acknowledgement and attachments in response to the Notice of Commencement for Simcoe- Townsend Water Supply System.	**Email Response July 20, 2022** Thank you Joan. Due diligence consultation will be completed as indicated. We will reach out if need be.
	February 22, 2023 Email		Norfolk County retained Stantec Consulting Ltd. to complete the Schedule 'B' Municipal Class Environmental Assessment for the Simcoe-Townsend Water Supply System study. The draft Project File Report is now available for MECP's review, and is attached to this email. Please let me know if you have any questions or comments.
	March 22, 2023 Email	Thank you for circulating the Project File Report for Norfolk County Schedule B Municipal Class Environmental Assessment for the Simcoe-Townsend Water Supply System. Please find attached MECP Project Review Unit comments.	**Email Response March 31, 2023:** Thank you for taking the time to review the draft Project File Report for the Simcoe-Townsend Water Supply System EA, and for providing your comments.

		Should you or any members of your project team have any questions regarding the material above, please contact me. (comments appended)	Please find the attached responses to the comments provided. Please let us know if you have any additional comments, or if you wish to discuss these items in greater detail.
	April 11, 2023 Email	**Email Response to sent email:** We have no further comments. You can proceed with the issuance of the Notice of Completion and 30-day public review period	I just wanted to follow up to see if MECP intends to provide any additional feedback on our Project File Report or the attached comments associated with the Simcoe-Townsend Water Supply EA? If no further comments, we will proceed towards issuing our Notice of Completion and 30-day public review period.
Infrastructure Ontario Rachael Contini Rachael.contini@infrastructureontario.ca	July 15, 2022 Email NOSC	Thank you for sending us the Notice of Application for Townsend Water Supply System in the Norfolk County. It is ultimately the proponent's responsibility to verify if provincial government property is within the study area. Title documents may identify owners of provincial government property as any of the following: • His Majesty the King • Her Majesty the Queen • Hydro One • Hydro One Networks Inc. • Management Board Secretariat (MBS) • Minister of Economic Development, Employment and Infrastructure (MEDEI) • Minister of Energy and Infrastructure (MEI) • Minister of Government and Consumer Services (MGCS) • Minister of Infrastructure (MOI) • Minister of Natural Resources and Forestry (MNRF) • Minister of Public Infrastructure Renewal (PIR) • Minister of Public Works • Minister of Transportation (MTO) • Ontario Lands Corporation (OLC) • Ontario Realty Corporation (ORC) If provincial government property in the study area is not required for the project, please continue to consult us as a directly affected stakeholder. However, if government property is required for the project, the proponent should contact us so that we can advise about requirements for obtaining government property. Additionally, please remember to send notices to our dedicated notice email address: noticereview@infrastructureontario.ca	

	July 26, 2022 Email PIC 1	Thank you for sending us the Notice of public information for the Norfolk County, Simcoe-Townsend Water Supply System. It is ultimately the proponent's responsibility to verify if provincial government property is within the study area. Title documents may identify owners of provincial government property as any of the following: • His Majesty the King • Her Majesty the Queen • Hydro One • Hydro One Networks Inc. • Management Board Secretariat (MBS) • Minister of Economic Development, Employment and Infrastructure (MEDEI) • Minister of Energy and Infrastructure (MEI) • Minister of Government and Consumer Services (MGCS) • Minister of Infrastructure (MOI) • Minister of Natural Resources and Forestry (MNRF) • Minister of Public Infrastructure Renewal (PIR) • Minister of Public Works • Minister of Transportation (MTO) • Ontario Lands Corporation (OLC) • Ontario Realty Corporation (ORC) If provincial government property in the study area is not required for the project, please continue to consult us as a directly affected stakeholder. However, if government property is required for the project, the proponent should contact us so that we can advise about requirements for obtaining government property. Additionally, please remember to send notices to our dedicated notice email address: noticereview@infrastructureontario.ca	
Dan Minkin Heritage Planner Ministry of Tourism, Culture and Sport Dan.minkin@ontario.ca	August 31, 2022 NOSC email	Thank you for providing the Ministry of Tourism, Culture and Sport (MTCS) with the Notice of Commencement for the above-referenced project. MTCS's interest in this Environmental Assessment (EA) project relates to its mandate of conserving Ontario's cultural heritage, which includes: • archaeological resources, including land and marine; • built heritage resources, including bridges and monuments; and • cultural heritage landscapes. Under the EA process, the proponent is required to determine a project's potential impact on known (previously recognized) and potential cultural heritage resources. **Project Summary**	**Email Response September 7, 2022:** Thank you for your email and letter dated August 31, 2022 regarding the Norfolk County Simcoe-Townsend Water Supply System study. Your interest in this project is appreciated. The study includes a desktop review of the existing natural, socio-economic and cultural (cultural heritage and archaeology) environments to satisfy the requirements of the Municipal Class Environmental Assessment (EA) process. This will include a review of the Municipal Heritage Register and Norfolk County databases for listed and designated properties, as well as consultations with MTCS, Ontario Heritage Trust, and the municipality.

		The purpose of this project is to implement an approximately 20 km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. Identifying Cultural Heritage Resources While some cultural heritage resources may have already been formally identified, others may be identified through screening and evaluation. **Archaeological Resources** This EA project may impact archaeological resources and should be screened using the MTCS Criteria for Evaluating Archaeological Potential and Criteria for Evaluating Marine Archaeological Potential to determine if an archaeological assessment is needed. MTCS archaeological sites data are available at archaeology@ontario.ca. 0017151 – Norfolk – Simcoe-Townsend Water Supply System MTCS Comments 2 If the EA project area exhibits archaeological potential, then an archaeological assessment (AA) shall be undertaken by an archaeologist licenced under the Ontario Heritage Act (OHA), who is responsible for submitting the report directly to MTCS for review. **Built Heritage Resources and Cultural Heritage Landscapes** A Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment will be undertaken for the entire study area during the planning phase and will be summarized in the EA Report. This study will: 1. Describe the existing baseline cultural heritage conditions within the study area by identifying all known or potential built heritage resources and cultural heritage landscapes, including a historical summary of the study area. MTCS has developed screening criteria that may assist with this exercise: Criteria for Evaluating for Potential Built Heritage Resources and Cultural Heritage Landscapes. 2. Identify preliminary potential project-specific impacts on the known and potential built heritage resources and cultural heritage landscapes that have been identified. The report should include a description of the anticipated impact to each known or potential built heritage resource or cultural heritage landscape that has been identified. 3. Recommend measures to avoid or mitigate potential negative impacts to known or potential built heritage resources and cultural heritage landscapes. The proposed mitigation measures are to inform the next steps of project planning and design. Given that this project covers a large study area, MTCS recommends that the Cultural Heritage Report is carried out so that step 1 described above is undertaken early in the	The proposed booster pumping station location will be screened in accordance with the checklists referenced in your letter to determine if an archaeological assessment or further heritage reports may be required. An electronic copy of technical studies will be provided to your email address upon project completion. We look forward to ongoing consultation with MTCS as the study progresses. Should you have any questions or concerns, please contact Mariana Balaban of Norfolk County by telephone at 519-426-5870, ext. 8158 or by email, mariana.balaban@norfolkcounty.ca, or the undersigned

		planning process. Then, steps 2 and 3 can be undertaken once the preferred alternatives have been selected. Cultural Heritage Reports will be undertaken by a qualified person who has expertise, recent experience, and knowledge relevant to the type of cultural heritage resources being considered and the nature of the activity being proposed. Community input should be sought to identify locally recognized and potential cultural heritage resources. Sources include, but are not limited to, municipal heritage committees, historical societies and other local heritage organizations. Cultural heritage resources are often of critical importance to Indigenous communities. Indigenous communities may have knowledge that can contribute to the identification of cultural heritage resources, and we suggest that any engagement with Indigenous communities includes a discussion about known or potential cultural heritage resources that are of value to them. **Environmental Assessment Reporting** All technical cultural heritage studies and their recommendations are to be addressed and incorporated into EA projects. Please advise MTCS whether any technical cultural heritage studies will be completed for this EA project, and provide them to MTCS before issuing a Notice of Completion. If screening has identified no known or potential cultural heritage resources, or no impacts to these resources, please include the completed checklists and supporting documentation in the EA report or file. 0017151 – Norfolk – Simcoe-Townsend Water Supply System MTCS Comments 3 Thank you for consulting MTCS on this project and please continue to do so throughout the EA process. If you have any questions or require clarification, please do not hesitate to contact me.	
Public			
Adam Mohammed Veronica vanBeuzekom	NOSC July 12, 2022 Email	Hello, I am emailing to ask for more information about the proposed Simcoe-Townsend Water Supply System, and to state that we would like to be added to the contact list for future notices. My W The Rail Trail corridor is the easten border of our property (for about 260 metres), and we also have frontage on We are curious about the impact on our access: when is the project	**Email Response July 12, 2022:** Thank you for your inquiry. The project is considering non-destructive (trenchless) technologies for the construction of the transmission watermain, which will be located within the Right of Way and/or municipal property boundaries. This approach will allow us to minimize excavation and trees removal along the watermain route, and therefore the impact on the farm land will be insignificant. We are just starting to looking into the project impact and value your input. Looking forward to welcoming you at the PIC for a more detailed discussion.

		likely to proceed, and how long will it likely take, and will we still be able to come and go from during construction? We are also wondering about the likely impacts of the watermain construction and operation on the ecology of the rail trail corridor. Specifically, we are concerned about the impact on the treeline/hedgerow (situated on county land) between us and the trail, because of the ecological function of the trees, shrubs, and other plant and animal life. As you may be aware the treeline consists of many decades-old trees including black walnuts and black cherries, and helps act as a windbreak between us and the field east of the rail trail. It is habitat for birds, pollinators, and other wildlife which are beneficial to agriculture, and it also serves as a corridor for deer, coyotes, and wild turkeys. Will the trees be removed for watermain construction, or will they remain intact? In other words, will the watermain be placed on/under the west side of the trail, or under the trail itself, or on the eastern side? Thank you in advance for any information you can provide me by email. I also intend on coming to the PIC on Thursday August 4th. Take care,	
Dennis & Diane Sovereign	August 4, 2022 PIC 1 Comment Form	We have a field between our home and the trail. We use the trail behind our house 2-3 times each day. We are concerned about the wildlife (plants and animals) that exist along the trail.	**No response requested.**
Waterford Heritage Trail Frank	July 26, 2022 PIC 1 Email	Has the County concluded their deal with the Province to purchase the trail lands north of Simcoe?	**Email response July 26, 2022:** The County has not concluded the purchase of the former railway north of Simcoe where the new wells are located. We have been working our way through some of the requests made by the IO for the Purchase. Unfortunately I do not have a timeframe for you at the moment.
Sean Abonyi	September 18, 2022 Email	I am both surprised and upset about the Simcoe to Townsend water supply system proposed and the fact that I stumbled across it while researching the county budget. I am wondering why as a I was not notified earlier of this project. I also wonder how many of my neighbors were also not notified? The deadline of September 1 for being part of the engagement group is completely unfair. I am asking to be part of that group and ask that all parties on Concession 13 East and Thirteenth Street West be properly notified about the intentions of this project.	**Email Response September 20, 2022:** Thank you for your interest in the Simcoe-Townsend Water Supply System project. We have added your information to the project contact list, and you will receive all future notifications for this study via email. The Inter-Urban Water Supply Program was launched late 2021 and started with the Simcoe-Townsend Interconnection as being one of the highest priority for the Norfolk County water supply. An update presentation was provided to the Council on April 12, 2022 and another report on the agreement with Haldimand County was approved by Council on June 21, 2022. The Simcoe-Townsend Water Supply project commenced in May 2022 and a Class Environmental Assessment is underway. Feedback from the public is accepted throughout the entire duration of the study, and we encourage

			you to register to the project website to review the first PIC, additional project information, and provide your comments. A link to the project website is provided below: Engage Norfolk website: https://engagenorfolk.ca/simcoe-townsend-water-supply The first Public Information Centre (PIC) for this project was held on July 28, 2022. The County published newspaper advertisements/notices and press releases informing the public of the first PIC. These were published in the Norfolk and Tillsonburg News, Port Dover Maple Leaf, and Haldimand Press newspapers the weeks of July 11th, July 18th, and July 25th. The information was also posted on the County's website, social media platforms, and emailed to a list of stakeholders, agencies, and members of the public that expressed interest in the project. The project team is currently planning the second PIC, tentatively scheduled for October 27th, 2022, at the Norfolk County Administration Building Council Chambers. More details on the PIC will be provided closer to the date. Thank you again for your interest in this study. Please don't hesitate to reach out anytime if you have any questions!
Roland Katzer	September 23, 2022 Email	My name is Roland Katzer. I am a Simcoe resident with an extensive background in water treatment resulting from a 35-year career in water treatment in the City of Hamilton. As such I am very interested in learning more about our project to bring water from Nanticoke to supply all of Norfolk. Please include my email in future public information mailings.	**Email Response September 23, 2022:** Thank you for your interest in the IUWS project. You will receive all project correspondence moving forward.
Bruce Hietkamp	September 29, 2022 Email	An industry peer has brought this project to my attention. It appears the Communities of Delhi, Simcoe and Waterford are proposing to obtain water from another municipality and change the water taking source from groundwater to surface water. I am concern about: •Potential impacts regarding the 2018 Lake Erie Action Plan and overall Lake Erie protection •Relative costs (surface water vs groundwater) •The potential environmental impacts appear to be significant. Should this be a Class C EA? I was wondering if I could obtain more information?	**Email Response September 29, 2022:** Thank you for your email. This project was heavily scrutinized by Council and recommended by the 2016 Integrated Servicing Master Plan as Norfolk has currently major challenges in terms of both quantity and quality of drinking water. Here are few quick answers to your concerns: 1. The water will be supplied from the existing Nanticoke WTP, which has a very large PTTW already in place and a better intake/raw water quality. A centralized system is more efficient and economic to operate and maintain over the long term. 2. Norfolk has currently five independent water supply systems that require significant upgrades to service the projected 2041 growth and fire flow demand. The Inter-Urban system will secure safe drinking water services for all areas, growth capacity and fire flows. Groundwater in Norfolk is susceptible to contamination due to the agricultural and industrial land use, making the treatment process more difficult and expensive. 3. We are undertaking a Class EA Schedule B according to the MEA guidelines to assess all impacts (environmental, social, economic and so forth). PIC#1 was held on Aug 4 and PIC#2 will follow on Oct

			27, 2022 at the Council Chambers. We are happy to answer questions from anyone in attendance. We will add your email address to the project list for future project correspondence. Looking forward to meeting with you at our next PIC.
	October 27, 2022 PIC 2	Thank you for taking the time to listen to my concerns regarding water well maintenance. The poor welds on the County Test Wells suggests the County is not interested in maintaining water wells. As mentioned, attached are my pre meeting notes (plus annotations).	**Discussed at PIC – no follow up required.**
	February 15, 2023 PIC 2	I was wondering if my meeting notes re the Nov 8, 2022 PIC where included/addressed in the Class EA documentation? I did not receive a response. I looked on line and did not find PIC comments/responses.	**County Email February 15, 2023:** Per my email below our Norfolk Phase 1 includes Schedule B Class EA that speaks to the impact associated with the booster pumping stations and elevated tank. For your convenience I am reiterating the key considerations in response to your peer's concerns: 1. The water is taken from Lake Erie under a current PTTW issued for the Nanticoke WTP via existing transmission mains. This source is of better quality compared to the underground water sources we have currently. 2. Costs are reviewed as part of our financial due diligence and budgeting process for this project. 3. Haldimand County will manage the plant upgrades and due diligence steps (Class EA) are being taken. I copied Mr. Wilson in this email so he's aware of your concerns. Should you and your peer have any further concerns please do not hesitate to contact me.

			Stantec Email February 15, 2023: Following Mariana email below, we appreciate the comments and concerns you presented to us, which we were able to discuss with you at Public Information Centre #2. As discussed, the decision to proceed with the Inter-Urban Water Supply (IUWS) system was determined in previous Norfolk County studies; the Integrated Sustainable Master Plan (ISMP) (2016), and the Water Supply Operational Strategy (2021). The IUWS project seeks to interconnect the communities within the County to deliver high quality water services, ensure fire flow and water supply for growth to 2041 and beyond, and build reliable infrastructure. As noted in PIC #2, water supply will be secured from the Nanticoke Water Treatment Plant. Please be advised that the Nanticoke Permit to Take Water maximum daily flow is 1,818,000m3. Your comments will be included in the final Project File Report, which will be made available for a 30-day public comment period once the study is complete.
	February 15, 2023 Email	I am concern that the County may have ignored well maintenance because the surface water supply is forthcoming. (Inferior Welding Photos ~ May 2, 2019). Is there an abandonment plan for municipal and/or private wells? According the Ont. Reg. 903 of the Ontario Water Resources Act, unused wells must be properly abandoned.	**Email Response February 15, 2023:** We hear you. We will definitely prepare a plan for municipal wells decommissioning as soon as the new watermain is commissioned. The county is not managing the private wells, therefore the well owners must take due diligence steps to maintain or abandon their wells.
Peter Hellyer	October 26, 2022 Email	I would like to be kept apprised of the planned location for the elevated tower and pumping station as per your ad in the Port Dover Maple Leaf today. I would also like to know if the water in the described pipeline is potable or raw. I would further like to know the proposed size, depth and operating line pressure where it goes along fourteenth street west in Simcoe; And whether the existing municipal easement is large enough or whether land at this location will be expropriated to accommodate the water line. I should also have asked which side of Fourteenth street west, north or south, and I need reminding which side of the rod has the six inch high pressure natural gas line?	Email Response October 26, 2022: My consultants are verifying all that for us. The design didn't start as of yet. We will bring drinking water and we intent to install the main through trenchless technologies on the north side of the road on the ROW. A more detailed response will follow, and we could also chat about this at the PIC#2 on Nov 8.
	October 27, 2022 PIC 2	There is a gas line & irrigation pipe running east to west below the rail trail. There is a culvert where this is visible. Also believes that cable/hydro/bell lines are on the south side of Concession 13.	**Discussed at PIC – no follow up required.**
Michael Douel	November 26, 2022	I am writing this email to voice my concerns of the impact this water main being installed will and can impact my property with respect to my well water.. To be clear, the soil structure where I live is made up of sand, so leaching of contaminants is a great concern.	**Town responded November 29, 2023.**

		A little history for you to consider. In 2012 the solar electric farm located on the had started construction with completion was in 2013. The construction of the solar panel pedestals resulted in the contamination of our water wells. These pedestals at the closest to our water wells is 100 meters and more away. The solar farm paid for the installation of filtration (for sediment) and UV treatment for our water. Now, a water line from Townsend will be buried under ground in the right of way which will be in the neighbourhood of 20 meters away from these water wells. As it appears from the previous issue, any major disturbance of the soil results in water well contamination. With the new water line, non-native materials will be used to surround the water line which will lead to the leaching of contaminants into the ground water leading to contamination of our drinking water. Here are some questions that need to be addressed before said construction can be started: 1. Will a full and complete environmental assessment with respect to well water contamination be conducted by Environmental Engineers and provided to the respective homeowners? 2. Will complete water testing be conducted by licensed laboratories prior to and after the installation of this water line be paid for by the county with full and complete results being made available to the residents of the affected homes. Testing would be the same as conducted by SGS Canada Inc. for the Well Testing and Monitoring Program conducted by Banks Groundwater Engineering Ltd. In 2020. My report was issued 16 December 2020 for water analysis done during the testing of the test wells near Bloomsburg. 3. In the event of contamination, will the county provide and pay for all costs for the installation and maintenance of water purification systems to the affected homes? One final item, it is mentioned in all your information that this water supply is solely from the Nanticoke Water Treatment Plant, so I ask if that is the only source that water will be provided to Simcoe from Haldimand County through this water line?	

F om [redacted]
To [redacted]
...bject [redacted]
Date Wednesday August 3 2022 2:20:03 M

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So y fo the de ay n gent ng back o you We a e actua y hop ng o get to onst uct on n 2024 2025 w h comm ss on ng n 2025 The Pub c Info mat on Cent e #1 ma e a s a e now ava ab e on ne and can g ve some add t ona content f needed P ease u e the fo ow ng sk
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---- Cl g na Message- ---
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T cket 1455392 has been upda ed

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From:	Kalra, Jitin
To:	Lang, Sarah; Mueller, Al; Gundry, Mike; Greg Smith; Hohner, Paula
Subject:	FW: IO EA Response - Norfolk County, Simcoe-Townsend Water Supply System
Date:	Friday, July 15, 2022 10:56:56 AM
Attachments:	image001.png Notice of Study Commencement - Norfolk County, Simcoe-Townsend Water Supply System.pdf

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From: Contini, Rachael (IO) <Rachael.Contini@infrastructureontario.ca>
Sent: Friday, July 15, 2022 10:46 AM
To: mariana.balaban@norfolkcounty.ca; Kalra, Jitin <Jitin.Kalra@stantec.com>
Subject: IO EA Response - Norfolk County, Simcoe-Townsend Water Supply System

Good Morning,

Thank you for sending us the Notice of Application for Townsend Water Supply System in the Norfolk County.

It is ultimately the proponent's responsibility to verify if provincial government property is within the study area. Title documents may identify owners of provincial government property as any of the following:

- His Majesty the King
- Her Majesty the Queen
- Hydro One
- Hydro One Networks Inc.
- Management Board Secretariat (MBS)
- Minister of Economic Development, Employment and Infrastructure (MEDEI)
- Minister of Energy and Infrastructure (MEI)
- Minister of Government and Consumer Services (MGCS)
- Minister of Infrastructure (MOI)
- Minister of Natural Resources and Forestry (MNRF)
- Minister of Public Infrastructure Renewal (PIR)
- Minister of Public Works
- Minister of Transportation (MTO)
- Ontario Lands Corporation (OLC)
- Ontario Realty Corporation (ORC)

If provincial government property in the study area is not required for the project, please continue to consult us as a directly affected stakeholder. However, if government property is required for the project, the proponent should contact us so that we can advise about requirements for obtaining government property.

Additionally, please remember to send notices to our dedicated notice email address: noticereview@infrastructureontario.ca

Kind regards,

Rachael Contini (she, her)
Infrastructure Ontario
Co-op, Environmental Management
rachael.contini@infrastructureontario.ca
Phone: +1 647-264-0969
www.infrastructureontario.ca

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From:	Mariana Balaban
To:	Whitelaw, Clarissa (MECP); Del Villar Cuicas, Joan (MECP); Kalra, Jitin
Cc:	Potter, Katy (MECP); Ferraro, Stefanie (MECP); Williamson, Lisa (MECP); Lang, Sarah; Hohner, Paula; Chee Sing, Elizabeth (MECP); Hannington, Neil (MECP); Durst, Michael (MECP)
Subject:	Re: Norfolk County, MCEA, Simcoe-Townsend Water Supply System
Date:	Wednesday, July 20, 2022 11:13:37 AM

Noted. Thank you.

Get Outlook for iOS

Mariana Balaban, P.Eng., Ph.D.
Project Director
Engineering
Environmental and Infrastructure Services Division
185 Robinson St., Simcoe, Ontario, N3Y 5L6
519-426-5870 x. 8158
Mobile: 519-420-0732

Working together with our community

From: Whitelaw, Clarissa (MECP) <Clarissa.Whitelaw@ontario.ca>
Sent: Wednesday, July 20, 2022 11:02:46 AM
To: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; Del Villar Cuicas, Joan (MECP) <Joan.DelVillarCuicas@ontario.ca>; Kalra, Jitin <Jitin.Kalra@stantec.com>
Cc: Potter, Katy (MECP) <Katy.Potter@ontario.ca>; Ferraro, Stefanie (MECP) <Stefanie.Ferraro@ontario.ca>; Williamson, Lisa (MECP) <Lisa.Williamson@ontario.ca>; 'Lang, Sarah' <Sarah.Lang@stantec.com>; Hohner, Paula <Paula.Hohner@stantec.com>; Chee Sing, Elizabeth (MECP) <Elizabeth.CheeSing@ontario.ca>; Hannington, Neil (MECP) <Neil.Hannington@ontario.ca>; Durst, Michael (MECP) <Michael.Durst@ontario.ca>
Subject: RE: Norfolk County, MCEA, Simcoe-Townsend Water Supply System

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Hi All,

Apologies if I have not caught this previously, however this site falls within the area of MECP's Hamilton District Office. I am including Michael Durst, Neil Hannington and Elizabeth Chee Sing on this email.

Thank you.

From: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>
Sent: July 20, 2022 10:45 AM

To: Del Villar Cuicas, Joan (MECP) <Joan.DelVillarCuicas@ontario.ca>; Kalra, Jitin <Jitin.Kalra@stantec.com>
Cc: Potter, Katy (MECP) <Katy.Potter@ontario.ca>; Ferraro, Stefanie (MECP) <Stefanie.Ferraro@ontario.ca>; Whitelaw, Clarissa (MECP) <Clarissa.Whitelaw@ontario.ca>; Williamson, Lisa (MECP) <Lisa.Williamson@ontario.ca>; 'Lang, Sarah' <Sarah.Lang@stantec.com>; Hohner, Paula <Paula.Hohner@stantec.com>
Subject: RE: Norfolk County, MCEA, Simcoe-Townsend Water Supply System

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Thank you Joan. Due diligence consultation will be completed as indicated.
We will reach out if need be.

Best regards,
Mariana

Mariana Balaban, P.Eng., Ph.D.
Project Director
Engineering
Environmental and Infrastructure Services Division
185 Robinson St., Simcoe, Ontario, N3Y 5L6
519-426-5870 x. 8158
Mobile: 519-420-0732

Working together with our community

From: Del Villar Cuicas, Joan (MECP) <Joan.DelVillarCuicas@ontario.ca>
Sent: Wednesday, July 20, 2022 10:11 AM
To: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; Kalra, Jitin <Jitin.Kalra@stantec.com>
Cc: Potter, Katy (MECP) <Katy.Potter@ontario.ca>; Ferraro, Stefanie (MECP) <Stefanie.Ferraro@ontario.ca>; Whitelaw, Clarissa (MECP) <Clarissa.Whitelaw@ontario.ca>; Williamson, Lisa (MECP) <Lisa.Williamson@ontario.ca>
Subject: RE: Norfolk County, MCEA, Simcoe-Townsend Water Supply System

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning,

Please find attached MECP's Letter of Acknowledgement and attachments in response to the Notice of Commencement for Simcoe- Townsend Water Supply System.

Please do not hesitate to contact me if you have any questions.

Regards,

Joan Del Villar Cuicas (she/her)
Regional Environmental Planner (A)
Project Review Unit | Environmental Assessment Branch
Ontario Ministry of the Environment, Conservation and Parks
Joan.delvillarcuicas@ontario.ca|Phone: 365-889-1180

From: Lang, Sarah <Sarah.Lang@stantec.com>
Sent: Wednesday, July 13, 2022 5:03 PM
To: EA Notices to WCRegion (MECP) <eanotification.wcregion@ontario.ca>
Cc: Mariana Balaban <mariana.balaban@norfolkcounty.ca>; Kalra, Jitin <Jitin.Kalra@stantec.com>; Hohner, Paula <Paula.Hohner@stantec.com>
Subject: Norfolk County, MCEA, Simcoe-Townsend Water Supply System

CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.

Hello,

Please find the attached Notice of Study Commencement and Project Information Form for the Norfolk County, Simcoe-Townsend Water Supply System Study.

Please let me know if you have any questions or concerns.

Thank you,

Sarah Lang
Environmental Planner
sarah.lang@stantec.com

Stantec

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Ministry of the Environment, Conservation and Parks

Environmental Assessment Branch

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Toronto ON M4V 1P5
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Ministère de l'Environnement, de la Protection de la nature et des Parcs

Direction des évaluations environnementales

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Ontario

July 20, 2022

Mariana Balaban (*Via Email Only*)
Project Director
Norfolk County
Email: mariana.balaban@norfolkcounty.ca

Jitin Kalra
Project Manager
Stantec Consulting Ltd.
Email: jitin.kalra@stantec.com

Re: **Simcoe- Townsend Water Supply System**
Norfolk County
Municipal Class Environmental Assessment
Schedule B Municipal Class Environmental Assessment
Response to Notice of Commencement

Dear Mariana Balaban and Jitin Kalra,

This letter is in response to the Notice of Commencement for the above noted project. The Ministry of the Environment, Conservation and Parks (MECP) acknowledges that the Norfolk County has indicated that the study is following the approved environmental planning process for a Schedule B project under the Municipal Class Environmental Assessment (Class EA).

The **updated (February 2021)** attached "Areas of Interest" document provides guidance regarding the ministry's interests with respect to the Class EA process. Please address all areas of interest in the EA documentation at an appropriate level for the EA study. Proponents who address all the applicable areas of interest can minimize potential delays to the project schedule. **Further information is provided at the end of the Areas of Interest document relating to recent changes to the Environmental Assessment Act through Bill 197, Covid-19 Economic Recovery Act 2020.**

The Crown has a legal duty to consult Aboriginal communities when it has knowledge, real or constructive, of the existence or potential existence of an Aboriginal or treaty right and contemplates conduct that may adversely impact that right. Before authorizing this project, the Crown must ensure that its duty to consult has been fulfilled, where such a duty is triggered. Although the duty to consult with Aboriginal peoples is a duty of the Crown, the Crown may delegate procedural aspects of this duty to project proponents while retaining oversight of the consultation process.

The proposed project may have the potential to affect Aboriginal or treaty rights protected under Section 35 of Canada's *Constitution Act* 1982. Where the Crown's duty to consult is triggered in relation to the proposed project**, the MECP is delegating the procedural aspects of rights-based consultation to the proponent through this letter.** The Crown intends to rely on the delegated consultation process in discharging its duty to consult and maintains the right to participate in the consultation process as it sees fit.

Based on information provided to date and the Crown`s preliminary assessment the proponent is required to consult with the following communities who have been identified as potentially affected by the proposed project:

- Mississaugas of the Credit First Nation
- Six Nations of the Grand River (Elected Council, Haudenosaunee Confederacy Chiefs Council and the Haudenosaunee Development Institute)

Steps that the proponent may need to take in relation to Aboriginal consultation for the proposed project are outlined in the "Code of Practice for Consultation in Ontario's Environmental Assessment Process". Additional information related to Ontario's Environmental Assessment Act is available online at: www.ontario.ca/environmentalassessments.

Please also refer to the attached document "A Proponent's Introduction to the Delegation of Procedural Aspects of consultation with Aboriginal Communities" for further information, including the MECP's expectations for EA report documentation related to consultation with communities.

The proponent must contact the Director of Environmental Assessment Branch (EABDirector@ontario.ca) under the following circumstances subsequent to initial discussions with the communities identified by MECP:

- Aboriginal or treaty rights impacts are identified to you by the communities
- You have reason to believe that your proposed project may adversely affect an Aboriginal or treaty right
- Consultation with Indigenous communities or other stakeholders has reached an impasse
- A Part II Order request is expected on the basis of impacts to Aboriginal or treaty rights

The MECP will then assess the extent of any Crown duty to consult for the circumstances and will consider whether additional steps should be taken, including what role you will be asked to play should additional steps and activities be required.

A draft copy of the report should be sent directly to me prior to the filing of the final report, allowing a minimum of 30 days for the ministry's technical reviewers to provide comments.

Please also ensure a copy of the final notice is sent to the ministry's West Central Region EA notification email account (eanotification.wcregion@ontario.ca) after the draft report is reviewed and finalized.

Should you or any members of your project team have any questions regarding the material above, please contact me at joan.delvillarcuicas@ontario.ca.

Yours truly,



Joan Del Villar C
Regional Environmental Planner – West Central Region

cc Katy Potter, Supervisor, Environmental Assessment Services, MECP
Elizabeth Chee Sing, Water Compliance Supervisor, MECP
Michael Durst, Hamilton District Supervisor
Sarah Day, Issues Project Coordinator, Hamilton District Office, MECP

Attach: Areas of Interest
A Proponent's Introduction to the Delegation of Procedural Aspects of Consultation with Aboriginal Communities

AREAS OF INTEREST (v. February 2021)

It is suggested that you check off each section after you have considered / addressed it.

☐ **Planning and Policy**

- Projects located in MECP Central Region are subject to **A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2020).** Parts of the study area may also be subject to the Oak Ridges Moraine Conservation Plan (2017), Niagara Escarpment Plan (2017), Greenbelt Plan (2017) or Lake Simcoe Protection Plan (2014). Applicable plans and the applicable policies should be identified in the report, and the proponent should describe how the proposed project adheres to the relevant policies in these plans.

- The **Provincial Policy Statement (2020)** contains policies that protect Ontario's natural heritage and water resources. Applicable policies should be referenced in the report, and the proponent should describe how the proposed project is consistent with these policies.

- In addition to the provincial planning and policy level, the report should also discuss the planning context at the municipal and federal levels, as appropriate.

☐ **Source Water Protection**

The *Clean Water Act*, 2006 (CWA) aims to protect existing and future sources of drinking water. To achieve this, several types of vulnerable areas have been delineated around surface water intakes and wellheads for every municipal residential drinking water system that is located in a source protection area. These vulnerable areas are known as a Wellhead Protection Areas (WHPAs) and surface water Intake Protection Zones (IPZs). Other vulnerable areas that have been delineated under the CWA include Highly Vulnerable Aquifers (HVAs), Significant Groundwater Recharge Areas (SGRAs), Event-based modelling areas (EBAs), and Issues Contributing Areas (ICAs). Source protection plans have been developed that include policies to address existing and future risks to sources of municipal drinking water within these vulnerable areas.

Projects that are subject to the Environmental Assessment Act that fall under a Class EA, or one of the Regulations, have the potential to impact sources of drinking water if they occur in designated vulnerable areas or in the vicinity of other at-risk drinking water systems (i.e. systems that are not municipal residential systems). MEA Class EA projects may include activities that, if located in a vulnerable area, could be a threat to sources of drinking water (i.e. have the potential to adversely affect the quality or quantity of drinking water sources) and the activity could therefore be subject to policies in a source protection plan. Where an activity poses a risk to drinking water, policies in the local source protection plan may impact how or where that activity is undertaken. Policies may prohibit certain activities, or they may require risk management measures for these activities. Municipal Official Plans, planning decisions, Class EA projects (where the project includes an activity that is a threat to drinking water) and prescribed instruments must conform with policies that address significant risks to drinking water and must have regard for policies that address moderate or low risks.

- In October 2015, the MEA Parent Class EA document was amended to include reference to the Clean Water Act (Section A.2.10.6) and indicates that proponents undertaking a Municipal Class EA project must identify early in their process whether a project is or could potentially be occurring with a vulnerable area. **Given this requirement, please include a section in the report on source water protection.**

    - The proponent should identify the source protection area and should clearly document how the proximity of the project to sources of drinking water (municipal or other) and any delineated vulnerable areas was considered and assessed. Specifically, the report should discuss whether or not the project is located in a vulnerable area and provide applicable details about the area.

- If located in a vulnerable area, proponents should document whether any project activities are prescribed drinking water threats and thus pose a risk to drinking water (this should be consulted on with the appropriate Source Protection Authority). Where an activity poses a risk to drinking water, the proponent must document and discuss in the report how the project adheres to or has regard to applicable policies in the local source protection plan. This section should then be used to inform and be reflected in other sections of the report, such as the identification of net positive/negative effects of alternatives, mitigation measures, evaluation of alternatives etc.

- While most source protection plans focused on including policies for significant drinking water threats in the WHPAs and IPZs it should be noted that even though source protection plan policies may not apply in HVAs, these are areas where aquifers are sensitive and at risk to impacts and within these areas, activities may impact the quality of sources of drinking water for systems other than municipal residential systems.

- In order to determine if this project is occurring within a vulnerable area, proponents can use this mapping tool: http://www.applications.ene.gov.on.ca/swp/en/index.php. Note that various layers (including WHPAs, WHPA-Q1 and WHPA-Q2, IPZs, HVAs, SGRAs, EBAs, ICAs) can be turned on through the "Map Legend" bar on the left. The mapping tool will also provide a link to the appropriate source protection plan in order to identify what policies may be applicable in the vulnerable area.

- For further information on the maps or source protection plan policies which may relate to their project, proponents must contact the appropriate source protection authority. **Please consult with the local source protection authority to discuss potential impacts on drinking water. Please document the results of that consultation within the report and include all communication documents/correspondence.**

More Information
For more information on the *Clean Water Act*, source protection areas and plans, including specific information on the vulnerable areas and drinking water threats, please refer to Conservation Ontario's website where you will also find links to the local source protection plan/assessment report.

A list of the prescribed drinking water threats can be found in section 1.1 of Ontario Regulation 287/07 made under the *Clean Water Act*. In addition to prescribed drinking water threats, some source protection plans may include policies to address additional "local" threat activities, as approved by the MECP.

- **Climate Change**

The document "Considering Climate Change in the Environmental Assessment Process" (Guide) is now a part of the Environmental Assessment program's Guides and Codes of Practice. The Guide sets out the MECP's expectation for considering climate change in the preparation, execution and documentation of environmental assessment studies and processes. The guide provides examples, approaches, resources, and references to assist proponents with consideration of climate change in EA. Proponents should review this Guide in detail.

- **The MECP expects proponents of Class EA projects to:**

1. Consider during the assessment of alternative solutions and alternative designs, the following:
    a. the project's expected production of greenhouse gas emissions and impacts on carbon sinks (climate change mitigation); and
    b. resilience or vulnerability of the undertaking to changing climatic conditions (climate change adaptation).
2. Include a discrete section in the report detailing how climate change was considered in the EA.

How climate change is considered can be qualitative or quantitative in nature and should be scaled to the project's level of environmental effect. In all instances, both a project's impacts on climate change (mitigation) and impacts of climate change on a project (adaptation) should be considered.

- The MECP has also prepared another guide to support provincial land use planning direction related to the completion of energy and emission plans. The "Community Emissions Reduction Planning: A Guide for Municipalities" document is designed to educate stakeholders on the municipal opportunities to reduce energy and greenhouse gas emissions, and to provide guidance on methods and techniques to incorporate consideration of energy and greenhouse gas emissions into municipal activities of all types. We encourage you to review the Guide for information.

Air Quality, Dust and Noise

- If there are sensitive receptors in the surrounding area of this project, a quantitative air quality/odour impact assessment will be useful to evaluate alternatives, determine impacts and identify appropriate mitigation measures. The scope of the assessment can be determined based on the potential effects of the proposed alternatives, and typically includes source and receptor characterization and a quantification of local air quality impacts on the sensitive receptors and the environment in the study area. The assessment will compare to all applicable standards or guidelines for all contaminants of concern. **Please contact this office for further consultation on the level of Air Quality Impact Assessment required for this project if not already advised.**

- If a quantitative Air Quality Impact Assessment is not required for the project, the MECP expects that the report contain a qualitative assessment which includes:

    - A discussion of local air quality including existing activities/sources that significantly impact local air quality and how the project may impact existing conditions;
    - A discussion of the nearby sensitive receptors and the project's potential air quality impacts on present and future sensitive receptors;
    - A discussion of local air quality impacts that could arise from this project during both construction and operation; and
    - A discussion of potential mitigation measures.

- As a common practice, "air quality" should be used an evaluation criterion for all road projects.

- Dust and noise control measures should be addressed and included in the construction plans to ensure that nearby residential and other sensitive land uses within the study area are not adversely affected during construction activities.

- The MECP recommends that non-chloride dust-suppressants be applied. For a comprehensive list of fugitive dust prevention and control measures that could be applied, refer to *Cheminfo Services Inc. Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities* report prepared for Environment Canada. March 2005.

- The report should consider the potential impacts of increased noise levels during the operation of the completed project. The proponent should explore all potential measures to mitigate significant noise impacts during the assessment of alternatives.

Ecosystem Protection and Restoration

- Any impacts to ecosystem form and function must be avoided where possible. The report should describe any proposed mitigation measures and how project planning will protect and enhance the local ecosystem.

- Natural heritage and hydrologic features should be identified and described in detail to assess potential impacts and to develop appropriate mitigation measures. The following sensitive environmental features may be located within or adjacent to the study area:

- Key Natural Heritage Features: Habitat of endangered species and threatened species, fish habitat, wetlands, areas of natural and scientific interest (ANSIs), significant valleylands, significant woodlands; significant wildlife habitat (including habitat of special concern species); sand barrens, savannahs, and tallgrass prairies; and alvars.
- Key Hydrologic Features: Permanent streams, intermittent streams, inland lakes and their littoral zones, seepage areas and springs, and wetlands.
- Other natural heritage features and areas such as: vegetation communities, rare species of flora or fauna, Environmentally Sensitive Areas, Environmentally Sensitive Policy Areas, federal and provincial parks and conservation reserves, Greenland systems etc.

We recommend consulting with the Ministry of Natural Resources and Forestry (MNRF), Fisheries and Oceans Canada (DFO) and your local conservation authority to determine if special measures or additional studies will be necessary to preserve and protect these sensitive features. In addition, you may consider the provisions of the Rouge Park Management Plan if applicable.

Species at Risk

- The Ministry of the Environment, Conservation and Parks has now assumed responsibility of Ontario's Species at Risk program. Information, standards, guidelines, reference materials and technical resources to assist you are found at https://www.ontario.ca/page/species-risk.

- The Client's Guide to Preliminary Screening for Species at Risk (Draft May 2019) has been attached to the covering email for your reference and use. Please review this document for next steps.

- For any questions related to subsequent permit requirements, please contact SAROntario@ontario.ca.

Surface Water

- The report must include enough information to demonstrate that there will be no negative impacts on the natural features or ecological functions of any watercourses within the study area. Measures should be included in the planning and design process to ensure that any impacts to watercourses from construction or operational activities (e.g. spills, erosion, pollution) are mitigated as part of the proposed undertaking.

- Additional stormwater runoff from new pavement can impact receiving watercourses and flood conditions. Quality and quantity control measures to treat stormwater runoff should be considered for all new impervious areas and, where possible, existing surfaces. The ministry's Stormwater Management Planning and Design Manual (2003) should be referenced in the report and utilized when designing stormwater control methods. **A Stormwater Management Plan should be prepared as part of the Class EA process** that includes:

    - Strategies to address potential water quantity and erosion impacts related to stormwater draining into streams or other sensitive environmental features, and to ensure that adequate (enhanced) water quality is maintained
    - Watershed information, drainage conditions, and other relevant background information
    - Future drainage conditions, stormwater management options, information on erosion and sediment control during construction, and other details of the proposed works
    - Information on maintenance and monitoring commitments.

- Ontario Regulation 60/08 under the *Ontario Water Resources Act* (OWRA) applies to the Lake Simcoe Basin, which encompasses Lake Simcoe and the lands from which surface water drains into Lake Simcoe. If the proposed sewage treatment plant is listed in Table 1 of the regulation, the report should describe how the proposed project and its mitigation measures are consistent with the requirements of this regulation and the OWRA.

- Any potential approval requirements for surface water taking or discharge should be identified in the report. A Permit to Take Water (PTTW) under the OWRA will be required for any water takings that exceed 50,000 L/day, except for certain water taking activities that have been prescribed by the Water Taking EASR Regulation – *O. Reg. 63/16*. These prescribed water-taking activities require registration in the EASR instead of a PTTW. Please review the Water Taking User Guide for EASR for more information. Additionally, an Environmental Compliance Approval under the OWRA is required for municipal stormwater management works.

Groundwater

- The status of, and potential impacts to any well water supplies should be addressed. If the project involves groundwater takings or changes to drainage patterns, the quantity and quality of groundwater may be affected due to drawdown effects or the redirection of existing contamination flows. In addition, project activities may infringe on existing wells such that they must be reconstructed or sealed and abandoned. Appropriate information to define existing groundwater conditions should be included in the report.

- If the potential construction or decommissioning of water wells is identified as an issue, the report should refer to Ontario Regulation 903, Wells, under the OWRA.

- Potential impacts to groundwater-dependent natural features should be addressed. Any changes to groundwater flow or quality from groundwater taking may interfere with the ecological processes of streams, wetlands or other surficial features. In addition, discharging contaminated or high volumes of groundwater to these features may have direct impacts on their function. Any potential effects should be identified, and appropriate mitigation measures should be recommended. The level of detail required will be dependent on the significance of the potential impacts.

- Any potential approval requirements for groundwater taking or discharge should be identified in the report. A Permit to Take Water (PTTW) under the OWRA will be required for any water takings that exceed 50,000 L/day, with the exception of certain water taking activities that have been prescribed by the Water Taking EASR Regulation – *O. Reg. 63/16*. These prescribed water-taking activities require registration in the EASR instead of a PTTW. Please review the Water Taking User Guide for EASR for more information.

- Consultation with the railroad authorities is necessary wherever there is a plan to use construction dewatering in the vicinity of railroad lines or where the zone of influence of the construction dewatering potentially intercepts railroad lines.

Excess Materials Management

- In December 2019, MECP released a new regulation under the Environmental Protection Act, titled "On-Site and Excess Soil Management" (O. Reg. 406/19) to support improved management of excess construction soil. This regulation is a key step to support proper management of excess soils, ensuring valuable resources don't go to waste and to provide clear rules on managing and reusing excess soil. New risk-based standards referenced by this regulation help to facilitate local beneficial reuse which in turn will reduce greenhouse gas emissions from soil transportation, while ensuring strong protection of human health and the environment. The new regulation is being phased in over time, with the first phase in effect on January 1, 2021. For more information, please visit https://www.ontario.ca/page/handling-excess-soil.

- The report should reference that activities involving the management of excess soil should be completed in accordance with O. Reg. 406/19 and the MECP's current guidance document titled "Management of Excess Soil – A Guide for Best Management Practices" (2014).

- All waste generated during construction must be disposed of in accordance with ministry requirements

Contaminated Sites

- Any current or historical waste disposal sites should be identified in the report. The status of these sites should be determined to confirm whether approval pursuant to Section 46 of the EPA may be required for land uses on former disposal sites. We recommend referring to the MECP's D-4 guideline for land use considerations near landfills and dumps.
  - Resources available may include regional/local municipal official plans and data; provincial data on large landfill sites and small landfill sites; Environmental Compliance Approval information for waste disposal sites on Access Environment.

- Other known contaminated sites (local, provincial, federal) in the study area should also be identified in the report (Note – information on federal contaminated sites is found on the Government of Canada's website).

- The location of any underground storage tanks should be investigated in the report. Measures should be identified to ensure the integrity of these tanks and to ensure an appropriate response in the event of a spill. The ministry's Spills Action Centre must be contacted in such an event.

- Since the removal or movement of soils may be required, appropriate tests to determine contaminant levels from previous land uses or dumping should be undertaken. If the soils are contaminated, you must determine how and where they are to be disposed of, consistent with *Part XV.1 of the Environmental Protection Act* (EPA) and Ontario Regulation 153/04, Records of Site Condition, which details the new requirements related to site assessment and clean up. Please contact the appropriate MECP District Office for further consultation if contaminated sites are present.

Servicing, Utilities and Facilities

- The report should identify any above or underground utilities in the study area such as transmission lines, telephone/internet, oil/gas etc. The owners should be consulted to discuss impacts to this infrastructure, including potential spills.

- The report should identify any servicing infrastructure in the study area such as wastewater, water, stormwater that may potentially be impacted by the project.

- Any facility that releases emissions to the atmosphere, discharges contaminants to ground or surface water, provides potable water supplies, or stores, transports or disposes of waste must have an Environmental Compliance Approval (ECA) before it can operate lawfully. Please consult with MECP's Environmental Permissions Branch to determine whether a new or amended ECA will be required for any proposed infrastructure.

- We recommend referring to the ministry's environmental land use planning guides to ensure that any potential land use conflicts are considered when planning for any infrastructure or facilities related to wastewater, pipelines, landfills or industrial uses.

Mitigation and Monitoring

- Contractors must be made aware of all environmental considerations so that all environmental standards and commitments for both construction and operation are met. Mitigation measures should be clearly referenced in the report and regularly monitored during the construction stage of the project. In addition, we encourage proponents to conduct post-construction monitoring to ensure all mitigation measures have been effective and are functioning properly.

- Design and construction reports and plans should be based on a best management approach that centres on the prevention of impacts, protection of the existing environment, and opportunities for rehabilitation and enhancement of any impacted areas.

- The proponent's construction and post-construction monitoring plans must be documented in the report, as outlined in Section A.2.5 and A.4.1 of the MEA Class EA parent document.

Consultation

- The report must demonstrate how the consultation provisions of the Class EA have been fulfilled, including documentation of all stakeholder consultation efforts undertaken during the planning process. This includes a discussion in the report that identifies concerns that were raised and **describes how they have been addressed by the proponent** throughout the planning process. The report should also include copies of comments submitted on the project by interested stakeholders, and the proponent's responses to these comments (as directed by the Class EA to include full documentation).

- Please include the full stakeholder distribution/consultation list in the documentation.

Class EA Process

- If this project is a Master Plan: there are several different approaches that can be used to conduct a Master Plan, examples of which are outlined in Appendix 4 of the Class EA. **The Master Plan should clearly indicate the selected approach for conducting the plan**, by identifying whether the levels of assessment, consultation and documentation are sufficient to fulfill the requirements for Schedule B or C projects. Please note that any Schedule B or C projects identified in the plan would be subject to Part II Order Requests under the Environmental Assessment Act, although the plan itself would not be. **Please include a description of the approach being undertaken (use Appendix 4 as a reference).**

- If this project is a Master Plan: Any identified projects should also include information on the MCEA schedule associated with the project.

- The report should provide clear and complete documentation of the planning process in order to allow for transparency in decision-making.

- The Class EA requires the consideration of the effects of each alternative on all aspects of the environment (including planning, natural, social, cultural, economic, technical). The report should include a level of detail (e.g. hydrogeological investigations, terrestrial and aquatic assessments, cultural heritage assessments) such that all potential impacts can be identified, and appropriate mitigation measures can be developed. Any supporting studies conducted during the Class EA process should be referenced and included as part of the report.

- Please include in the report a list of all subsequent permits or approvals that may be required for the implementation of the preferred alternative, including but not limited to, MECP's PTTW, EASR Registrations and ECAs, conservation authority permits, species at risk permits, MTO permits and approvals under the *Impact Assessment Act*, 2019.

- Ministry guidelines and other information related to the issues above are available at http://www.ontario.ca/environment-and-energy/environment-and-energy. We encourage you to review all the available guides and to reference any relevant information in the report.

Amendments to the EAA through the Covid-19 Economic Recovery Act, 2020

Once the EA Report is finalized, the proponent must issue a Notice of Completion providing a minimum 30-day period during which documentation may be reviewed and comment and input can be submitted to the proponent. The Notice of Completion must be sent to the appropriate MECP Regional Office email address (for projects in MECP Southwest Region, the email is eanotification.swregion@ontario.ca).

The public has the ability to request a higher level of assessment on a project if they are concerned about potential adverse impacts to constitutionally protected Aboriginal and treaty rights. In addition, the Minister may issue an order on his or her own initiative within a specified time period. The Director (of the Environmental Assessment Branch) will issue a Notice of Proposed Order to the proponent if the Minister is considering an order for the project within 30 days after the conclusion of the comment period on the Notice of Completion. At this time, the Director may request additional information from the proponent. Once the requested information has been received, the Minister will have 30 days within which to make a decision or impose conditions on your project.

Therefore, the proponent cannot proceed with the project until at least 30 days after the end of the comment period provided for in the Notice of Completion. Further, the proponent may not proceed after this time if:

- a Part II Order request has been submitted to the ministry regarding potential adverse impacts to constitutionally protected Aboriginal and treaty rights, or
- the Director has issued a Notice of Proposed order regarding the project.

Please ensure that the Notice of Completion advises that outstanding concerns are to be directed to the proponent for a response, and that in the event there are outstanding concerns regarding potential adverse impacts to constitutionally protected Aboriginal and treaty rights, Part II Order requests on those matters should be addressed in writing to:

Minister Jeff Yurek
Ministry of Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto ON M7A 2J3
minister.mecp@ontario.ca

and

Director, Environmental Assessment Branch
Ministry of Environment, Conservation and Parks
135 St. Clair Ave. W, 1st Floor
Toronto ON, M4V 1P5
EABDirector@ontario.ca

A PROPONENT'S INTRODUCTION TO THE DELEGATION OF PROCEDURAL ASPECTS OF CONSULTATION WITH ABORIGINAL COMMUNITIES

DEFINITIONS

The following definitions are specific to this document and may not apply in other contexts:

Aboriginal communities – the First Nation or Métis communities identified by the Crown for the purpose of consultation.

Consultation – the Crown's legal obligation to consult when the Crown has knowledge of an established or asserted Aboriginal or treaty right and contemplates conduct that might adversely impact that right. This is the type of consultation required pursuant to s. 35 of the *Constitution Act, 1982*. Note that this definition does not include consultation with Aboriginal communities for other reasons, such as regulatory requirements.

Crown – the Ontario Crown, acting through a particular ministry or ministries.

Procedural aspects of consultation – those portions of consultation related to the process of consultation, such as notifying an Aboriginal community about a project, providing information about the potential impacts of a project, responding to concerns raised by an Aboriginal community and proposing changes to the project to avoid negative impacts.

Proponent – the person or entity that wants to undertake a project and requires an Ontario Crown decision or approval for the project.

I. PURPOSE

The Crown has a legal duty to consult Aboriginal communities when it has knowledge of an existing or asserted Aboriginal or treaty right and contemplates conduct that may adversely impact that right. In outlining a framework for the duty to consult, the Supreme Court of Canada has stated that the Crown may delegate procedural aspects of consultation to third parties. This document provides general information about the Ontario Crown's approach to delegation of the procedural aspects of consultation to proponents.

This document is not intended to instruct a proponent about an individual project, and it does not constitute legal advice.

II. WHY IS IT NECESSARY TO CONSULT WITH ABORIGINAL COMMUNITIES?

The objective of the modern law of Aboriginal and treaty rights is the *reconciliation* of Aboriginal peoples and non-Aboriginal peoples and their respective rights, claims and interests. Consultation is an important component of the reconciliation process.

The Crown has a legal duty to consult Aboriginal communities when it has knowledge of an existing or asserted Aboriginal or treaty right and contemplates conduct that might adversely impact that right. For example, the Crown's duty to consult is triggered when it considers issuing a permit, authorization or approval for a project which has the potential to adversely impact an Aboriginal right, such as the right to hunt, fish, or trap in a particular area.

The scope of consultation required in particular circumstances ranges across a spectrum depending on both the nature of the asserted or established right and the seriousness of the potential adverse impacts on that right.

Depending on the particular circumstances, the Crown may also need to take steps to accommodate the potentially impacted Aboriginal or treaty right. For example, the Crown may be required to avoid or minimize the potential adverse impacts of the project.

III. THE CROWN'S ROLE AND RESPONSIBILITIES IN THE DELEGATED CONSULTATION PROCESS

The Crown has the responsibility for ensuring that the duty to consult, and accommodate where appropriate, is met. However, the Crown may delegate the procedural aspects of consultation to a proponent.

There are different ways in which the Crown may delegate the procedural aspects of consultation to a proponent, including through a letter, a memorandum of understanding, legislation, regulation, policy and codes of practice.

If the Crown decides to delegate procedural aspects of consultation, the Crown will generally:

- Ensure that the delegation of procedural aspects of consultation and the responsibilities of the proponent are clearly communicated to the proponent;
- Identify which Aboriginal communities must be consulted;
- Provide contact information for the Aboriginal communities;
- Revise, as necessary, the list of Aboriginal communities to be consulted as new information becomes available and is assessed by the Crown;
- Assess the scope of consultation owed to the Aboriginal communities;
- Maintain appropriate oversight of the actions taken by the proponent in fulfilling the procedural aspects of consultation;
- Assess the adequacy of consultation that is undertaken and any accommodation that may be required;
- Provide a contact within any responsible ministry in case issues arise that require direction from the Crown; and
- Participate in the consultation process as necessary and as determined by the Crown.

IV. THE PROPONENT'S ROLE AND RESPONSIBILITIES IN THE DELEGATED CONSULTATION PROCESS

Where aspects of the consultation process have been delegated to a proponent, the Crown, in meeting its duty to consult, will rely on the proponent's consultation activities and documentation of those activities. The consultation process informs the Crown's decision of whether or not to approve a proposed project or activity.

A proponent's role and responsibilities will vary depending on a variety of factors including the extent of consultation required in the circumstance and the procedural aspects of consultation the Crown has delegated to it. Proponents are often in a better position than the Crown to discuss a project and its potential impacts with Aboriginal communities and to determine ways to avoid or minimize the adverse impacts of a project.

A proponent can raise issues or questions with the Crown at any time during the consultation process. If issues or concerns arise during the consultation that cannot be addressed by the proponent, the proponent should contact the Crown.

a) What might a proponent be required to do in carrying out the procedural aspects of consultation?

Where the Crown delegates procedural aspects of consultation, it is often the proponent's responsibility to provide notice of the proposed project to the identified Aboriginal communities. The notice should indicate that the Crown has delegated the procedural aspects of consultation to the proponent and should include the following information:

- a description of the proposed project or activity;
- mapping;
- proposed timelines;
- details regarding anticipated environmental and other impacts;
- details regarding opportunities to comment; and
- any changes to the proposed project that have been made for seasonal conditions or other factors, where relevant.

Proponents should provide enough information and time to allow Aboriginal communities to provide meaningful feedback regarding the potential impacts of the project. Depending on the nature of consultation required for a project, a proponent also may be required to:

- provide the Crown with copies of any consultation plans prepared and an opportunity to review and comment;
- ensure that any necessary follow-up discussions with Aboriginal communities take place in a timely manner, including to confirm receipt of information, share and update information and to address questions or concerns that may arise;
- as appropriate, discuss with Aboriginal communities potential mitigation measures and/or changes to the project in response to concerns raised by Aboriginal communities;
- use language that is accessible and not overly technical, and translate material into Aboriginal languages where requested or appropriate;
- bear the reasonable costs associated with the consultation process such as, but not limited to, meeting hall rental, meal costs, document translation(s), or to address technical & capacity issues;
- provide the Crown with all the details about potential impacts on established or asserted Aboriginal or treaty rights, how these concerns have been considered and addressed by the proponent and the Aboriginal communities and any steps taken to mitigate the potential impacts;
- provide the Crown with complete and accurate documentation from these meetings and communications; and
- notify the Crown immediately if an Aboriginal community not identified by the Crown approaches the proponent seeking consultation opportunities.

b) What documentation and reporting does the Crown need from the proponent?

Proponents should keep records of all communications with the Aboriginal communities involved in the consultation process and any information provided to these Aboriginal communities.

As the Crown is required to assess the adequacy of consultation, it needs documentation to satisfy itself that the proponent has fulfilled the procedural aspects of consultation delegated to it. The documentation required would typically include:

- the date of meetings, the agendas, any materials distributed, those in attendance and copies of any minutes prepared;
- the description of the proposed project that was shared at the meeting;
- any and all concerns or other feedback provided by the communities;
- any information that was shared by a community in relation to its asserted or established Aboriginal or treaty rights and any potential adverse impacts of the proposed activity, approval or disposition on such rights;
- any proposed project changes or mitigation measures that were discussed, and feedback from Aboriginal communities about the proposed changes and measures;
- any commitments made by the proponent in response to any concerns raised, and feedback from Aboriginal communities on those commitments;
- copies of correspondence to or from Aboriginal communities, and any materials distributed electronically or by mail;
- information regarding any financial assistance provided by the proponent to enable participation by Aboriginal communities in the consultation;
- periodic consultation progress reports or copies of meeting notes if requested by the Crown;
- a summary of how the delegated aspects of consultation were carried out and the results; and
- a summary of issues raised by the Aboriginal communities, how the issues were addressed and any outstanding issues.

In certain circumstances, the Crown may share and discuss the proponent's consultation record with an Aboriginal community to ensure that it is an accurate reflection of the consultation process.

c) Will the Crown require a proponent to provide information about its commercial arrangements with Aboriginal communities?

The Crown may require a proponent to share information about aspects of commercial arrangements between the proponent and Aboriginal communities where the arrangements:

- include elements that are directed at mitigating or otherwise addressing impacts of the project;
- include securing an Aboriginal community's support for the project; or
- may potentially affect the obligations of the Crown to the Aboriginal communities.

The proponent should make every reasonable effort to exempt the Crown from confidentiality provisions in commercial arrangements with Aboriginal communities to the extent necessary to allow this information to be shared with the Crown.

The Crown cannot guarantee that information shared with the Crown will remain confidential. Confidential commercial information should not be provided to the Crown as part of the consultation record if it is not relevant to the duty to consult or otherwise required to be submitted to the Crown as part of the regulatory process.

V. WHAT ARE THE ROLES AND RESPONSIBILITIES OF ABORIGINAL COMMUNITIES' IN THE CONSULTATION PROCESS?

Like the Crown, Aboriginal communities are expected to engage in consultation in good faith. This includes:

- responding to the consultation notice;
- engaging in the proposed consultation process;
- providing relevant documentation;
- clearly articulating the potential impacts of the proposed project on Aboriginal or treaty rights; and
- discussing ways to mitigates any adverse impacts.

Some Aboriginal communities have developed tools, such as consultation protocols, policies or processes that provide guidance on how they would prefer to be consulted. Although not legally binding, proponents are encouraged to respect these community processes where it is reasonable to do so. Please note that there is no obligation for a proponent to pay a fee to an Aboriginal community in order to enter into a consultation process.

To ensure that the Crown is aware of existing community consultation protocols, proponents should contact the relevant Crown ministry when presented with a consultation protocol by an Aboriginal community or anyone purporting to be a representative of an Aboriginal community.

VI. WHAT IF MORE THAN ONE PROVINCIAL CROWN MINISTRY IS INVOLVED IN APPROVING A PROPONENT'S PROJECT?

Depending on the project and the required permits or approvals, one or more ministries may delegate procedural aspects of the Crown's duty to consult to the proponent. The proponent may contact individual ministries for guidance related to the delegation of procedural aspects of consultation for ministry-specific permits/approvals required for the project in question. Proponents are encouraged to seek input from all involved Crown ministries sooner rather than later.

From:	Kalra, Jitin
To:	Minkin, Dan (MHSTCI)
Cc:	Lang, Sarah; Hohner, Paula; mariana.balaban@norfolkcounty.ca; Choi, Joon
Subject:	RE: Notice of Study Commencement - Norfolk County, Simcoe-Townsend Water Supply System [MTCS File 0017151]
Date:	Wednesday, September 7, 2022 1:05:28 PM
Attachments:	2022-08-31_SincoeTowsendWaterSupply.pdf

Good Afternoon,

Thank you for your email and letter dated August 31, 2022 regarding the Norfolk County Simcoe-Townsend Water Supply System study. Your interest in this project is appreciated.

The study includes a desktop review of the existing natural, socio-economic and cultural (cultural heritage and archaeology) environments to satisfy the requirements of the Municipal Class Environmental Assessment (EA) process. This will include a review of the Municipal Heritage Register and Norfolk County databases for listed and designated properties, as well as consultations with MTCS, Ontario Heritage Trust, and the municipality.

The proposed booster pumping station location will be screened in accordance with the checklists referenced in your letter to determine if an archaeological assessment or further heritage reports may be required. An electronic copy of technical studies will be provided to your email address upon project completion.

We look forward to ongoing consultation with MTCS as the study progresses. Should you have any questions or concerns, please contact Mariana Balaban of Norfolk County by telephone at 519-426-5870, ext. 8158 or by email, mariana.balaban@norfolkcounty.ca, or the undersigned.

Thank You,

Jitin Kalra P.Eng, M.Eng., PMP
Senior Project Manager

Direct: 416-598-7695
Mobile: 437 488-2384
Jitin.Kalra@stantec.com

Stantec
100-401 Wellington Street West
Toronto ON M5V 1E7

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From: Minkin, Dan (MTCS) <Dan.Minkin@ontario.ca>
Sent: Wednesday, August 31, 2022 5:40 PM
To: mariana.balaban@norfolkcounty.ca; Kalra, Jitin <Jitin.Kalra@stantec.com>
Cc: Lang, Sarah <Sarah.Lang@stantec.com>; Hohner, Paula <Paula.Hohner@stantec.com>
Subject: RE: Notice of Study Commencement - Norfolk County, Simcoe-Townsend Water Supply System [MTCS File 0017151]

Good afternoon,
Please see attached.

Dan Minkin | Heritage Planner
Ministry of Tourism, Culture and Sport
Heritage, Tourism and Culture Division | Programs and Services Branch | Heritage Planning Unit
T. 416. 786.7553 | Email: dan.minkin@ontario.ca

From: Lang, Sarah <Sarah.Lang@stantec.com>
Sent: July-13-22 4:56 PM
Cc: Mariana Balaban <mariana.balaban@norfolkcounty.ca>; Kalra, Jitin <Jitin.Kalra@stantec.com>; Hohner, Paula <Paula.Hohner@stantec.com>
Subject: Notice of Study Commencement - Norfolk County, Simcoe-Townsend Water Supply System

CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.

Good Afternoon,

Please find the attached Notice of Study Commencement for the Norfolk County (County) Simcoe-Townsend Water Supply System, Municipal Class Environmental Assessment (EA). The County has initiated the EA to implement an approximately 20km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. This study is being undertaken in accordance with the requirements for Schedule 'B' projects within the Municipal Class EA document (2000, as amended), under the Ontario Environmental Assessment Act.

If you would like more information about the study, or would like to be added to the contact list to receive future notices, please contact a member of the project team.

Thank you,

Sarah Lang
Environmental Planner
sarah.lang@stantec.com

Stantec

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Please consider the environment before printing this email.

From: Mariana Balaban
To: Kalra, Jitin
Cc: Lang, Sarah
Subject: RE: Requesting information about Simcoe-Townsend Water Supply System - contact to be added
Date: Tuesday, July 12, 2022 9:03:44 AM

Good morning Adam,

Thank you for your inquiry. The project is considering non-destructive (trenchless) technologies for the construction of the transmission watermain, which will be located within the Right of Way and/or municipal property boundaries. This approach will allow us to minimize excavation and trees removal along the watermain route, and therefore the impact on the farm land will be insignificant.

We are just starting to looking into the project impact and value your input.

Looking forward to welcoming you at the PIC for a more detailed discussion.

Regards,
Mariana

Mariana Balaban, P.Eng., Ph.D.
Project Director
Engineering
Environmental and Infrastructure Services Division
185 Robinson St., Simcoe, Ontario, N3Y 5L6
519-426-5870 x. 8158
Mobile: 519-420-0732

Working together with our community

From:
Sent: Tuesday, July 12, 2022 8:10 AM
To: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; jitin.kalra@stantec.com
Subject: Requesting information about Simcoe-Townsend Water Supply System

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello, I am emailing to ask for more information about the proposed Simcoe-Townsend Water Supply System, and to state that we would like to be added to the contact list for future notices.

which we primarily use to enter and leave our property, as do customers to our farm-gate stall. We are curious about the impact on our access: when is the project likely to proceed, and how long will it likely take, and will we still be able to come and go from 14th St during construction?

We are also wondering about the likely impacts of the watermain construction and operation on the ecology of the rail trail corridor. Specifically, we are concerned about the impact on the treeline/hedgerow (situated on county land) between us and the trail, because of the ecological function of the trees, shrubs, and other plant and animal life. As you may be aware the treeline consists of many decades-old trees including black walnuts and black cherries, and helps act as a windbreak between us and the field east of the rail trail. It is habitat for birds, pollinators, and other wildlife which are beneficial to agriculture, and it also serves as a corridor for deer, coyotes, and wild turkeys. Will the trees be removed for watermain construction, or will they remain intact? In other words, will the watermain be placed on/under the west side of the trail, or under the trail itself, or on the eastern side?

Thank you in advance for any information you can provide me by email. I also intend on coming to the PIC on Thursday August 4th.

Take care,

-Adam Mohammed

Please be patient when waiting for a response, as we work 60-80 hours a week for most of the year.

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COMMENT FORM
Norfolk County Simcoe-Townsend Water Supply System
Municipal Class Environmental Assessment Study

Public Information Centre 1, Norfolk County Administration Building Council Chambers
Thursday, August 4, 2022

☐ **Response Requested**
☐ **Response Not Required**

Please leave your completed comment sheet in the drop box provided or submit (**by September 1, 2022**) to either of the project team contacts below:

Mariana Balaban, P.Eng, PhD
Project Director
Norfolk County
Tel.: 519-426-5870 ext. 8158
Email: mariana.balaban@norfolkcounty.ca

Jitin Kalra, P.Eng
Project Manager
Stantec Consulting Ltd.
Tel: 416-598-7695
Email: jitin.kalra@stantec.com

Name and Address (optional) PLEASE PRINT

Name: Dennis & Diane Sovereign

COMMENT FORM
Norfolk County Simcoe-Townsend Water Supply System
Municipal Class Environmental Assessment Study

Public Information Centre 1, Norfolk County Administration Building Council Chambers
Thursday, August 4, 2022

Your comments will help us to understand what is important to people in the study area.
Please provide your comments and use the back of this sheet if you need more space.

Comments: We have a field between our home and the trail. We use the trail behind our house 2-3 times each day. We are concerned about the wildlife (plants and animals) that exist along the trail.

Sent: Sunday, September 18, 2022 7:16:08 PM
To: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; Michael Columbus <Michael.Columbus@norfolkcounty.ca>; Kristal Chopp <Kristal.Chopp@norfolkcounty.ca>
Subject: Simcoe-Townsend water supply system

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Ms. Balaban,

I am both surprised and upset about the Simcoe to Townsend water supply system proposed and the fact that I stumbled across it while researching the county budget. I am wondering why t I was not notified earlier of this project. I also wonder how many of my neighbors were also not notified?
The deadline of September 1 for being part of the engagement group is completely unfair. I am asking to be part of that group and ask that all parties on Concession 13 East and Thirteenth Street West be properly notified about the intentions of this project.

Sincerely,

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From: Mariana Balaban
To:
Cc: Lang, Sarah; Kalra, Jitin
Subject: RE: Simcoe-Townsend water supply system
Date: Tuesday, September 20, 2022 1:56:00 PM

Dear

Thank you for your interest in the Simcoe-Townsend Water Supply System project. We have added your information to the project contact list, and you will receive all future notifications for this study via email.

The Inter-Urban Water Supply Program was launched late 2021 and started with the Simcoe-Townsend Interconnection as being one of the highest priority for the Norfolk County water supply. An update presentation was provided to the Council on April 12, 2022 and another report on the agreement with Haldimand County was approved by Council on June 21, 2022.

The Simcoe-Townsend Water Supply project commenced in May 2022 and a Class Environmental Assessment is underway. Feedback from the public is accepted throughout the entire duration of the study, and we encourage you to register to the project website to review the first PIC, additional project information, and provide your comments. A link to the project website is provided below:

Engage Norfolk website: https://engagenorfolk.ca/simcoe-townsend-water-supply

The first Public Information Centre (PIC) for this project was held on July 28, 2022. The County published newspaper advertisements/notices and press releases informing the public of the first PIC. These were published in the *Norfolk and Tillsonburg News, Port Dover Maple Leaf,* and *Haldimand Press* newspapers the weeks of July 11th, July 18th, and July 25th. The information was also posted on the County's website, social media platforms, and emailed to a list of stakeholders, agencies, and members of the public that expressed interest in the project.

The project team is currently planning the second PIC, tentatively scheduled for October 27th, 2022, at the Norfolk County Administration Building Council Chambers. More details on the PIC will be provided closer to the date.

Thank you again for your interest in this study. Please don't hesitate to reach out anytime if you have any questions!

Regards,

Mariana Balaban, P.Eng., Ph.D.
Project Director
Engineering
Environmental and Infrastructure Services Division
185 Robinson St., Simcoe, Ontario, N3Y 5L6
519-426-5870 x. 8158
Mobile: 519-420-0732

Working together with our community

From:
Sent: Sunday, September 18, 2022 7:16 PM
To: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; Michael Columbus <Michael.Columbus@norfolkcounty.ca>; Kristal Chopp <Kristal.Chopp@norfolkcounty.ca>
Subject: Simcoe-Townsend water supply system

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Ms. Balaban,

I am both surprised and upset about the Simcoe to Townsend water supply system proposed and the fact that I stumbled across it while researching the county budget. I am wondering why I was not notified earlier of this project. I also wonder how many of my neighbors were also not notified?
The deadline of September 1 for being part of the engagement group is completely unfair. I am asking to be part of that group and ask that all parties on Concession 13 East and Thirteenth Street West be properly notified about the intentions of this project.

Sincerely,

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From: Kalra, Jitin
To: Lang, Sarah; Choi, Joon
Subject: FW: Simcoe Class EA
Date: Thursday, September 29, 2022 3:11:12 PM

Please add the below to Stakeholder Contact List.

Jitin Kalra P.Eng, M.Eng., PMP
Senior Project Manager

Direct: 416-598-7695
Mobile: 437 488-2384
Jitin.Kalra@stantec.com

Stantec
100-401 Wellington Street West
Toronto ON M5V 1E7

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From: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>
Sent: Thursday, September 29, 2022 2:09 PM
To: Kalra, Jitin <Jitin.Kalra@stantec.com>
Subject: RE: Simcoe Class EA

Hello Mr. Kamp,

Thank you for your email. This project was heavily scrutinized by Council and recommended by the 2016 Integrated Servicing Master Plan as Norfolk has currently major challenges in terms of both quantity and quality of drinking water. Here are few quick answers to your concerns:

1. The water will be supplied from the existing Nanticoke WTP, which has a very large PTTW already in place and a better intake/raw water quality. A centralized system is more efficient and economic to operate and maintain over the long term.
2. Norfolk has currently five independent water supply systems that require significant upgrades to service the projected 2041 growth and fire flow demand. The Inter-Urban system will secure safe drinking water services for all areas, growth capacity and fire flows. Groundwater in Norfolk is susceptible to contamination due to the agricultural and industrial land use, making the treatment process more difficult and expensive.
3. We are undertaking a Class EA Schedule B according to the MEA guidelines to assess all impacts (environmental, social, economic and so forth). PIC#1 was held on Aug 4 and PIC#2 will follow on Oct 27, 2022 at the Council Chambers. We are happy to answer questions from anyone in attendance.

We will add your email address to the project list for future project correspondence.

Looking forward to meeting with you at our next PIC.

Best regards,
Mariana

Mariana Balaban, P.Eng., Ph.D.
Project Director
Engineering
Environmental and Infrastructure Services Division
185 Robinson St., Simcoe, Ontario, N3Y 5L6
519-426-5870 x. 8158
Mobile: 519-420-0732

Working together with our community

From:
Sent: Thursday, September 29, 2022 1:44 PM
To: Mariana Balaban <mariana.balaban@norfolkcounty.ca>; jitin.kalra@stantec.com
Subject: Simcoe Class EA

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Hi Mariana and Jitin,

An industry peer has brought this project to my attention.

It appears the Communities of Delhi, Simcoe and Waterford are proposing to obtain water from another municipality and change the water taking source from groundwater to surface water.

I am concern about:

- Potential impacts regarding the 2018 Lake Erie Action Plan and overall Lake Erie protection
- Relative costs (surface water vs groundwater)
- The potential environmental impacts appear to be significant. Should this be a Class C EA?

I was wondering if I could obtain more information?

Thank you,

Bruce

Geo Kamp Limited
Bruce Hietkamp, P. Geo.
Hydrogeologist and Water Well Contractor

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From: Kalra, Jitin
To: Lang, Sarah
Subject: FW: Emailing: 20220803-NoticeOfPIC1-Simcoe-Townsend Water Supply System
Date: Wednesday, August 3, 2022 2:42:42 PM
Attachments: 20220803-NoticeOfPIC1-Simcoe-Townsend Water Supply System.pdf

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FYI,

Please save on server.

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-----Original Message-----
From: SUN Hongxia <Susan.SUN@HydroOne.com> On Behalf Of SECONDARY LAND USE Department
Sent: Wednesday, August 3, 2022 2:23 PM
To: mariana.balaban@norfolkcounty.ca
Cc: SECONDARY LAND USE Department <Department.SecondaryLandUse@hydroone.com>; Kalra, Jitin <Jitin.Kalra@stantec.com>
Subject: Emailing: 20220803-NoticeOfPIC1-Simcoe-Townsend Water Supply System

Please see the attached for Hydro One's Response.

Hydro One Networks Inc
SecondaryLandUse@HydroOne.com

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Hydro One Networks Inc.
483 Bay Street
8th Floor South Tower
Toronto, Ontario M5G 2P5
HydroOne.com

August 03, 2022

Re: Simcoe-Townsend Water Supply System

Attention:
Mariana Balaban, P.Eng., PhD
Project Director
Norfolk County

Thank you for sending us notification regarding (Simcoe-Townsend Water Supply System). In our preliminary assessment, we have confirmed that Hydro One has existing distribution assets within your study area.

At this time, we do not have sufficient information to comment on the potential resulting impacts that your project may have on our infrastructure. As such, we must stay informed as more information becomes available so that we can advise if any of the alternative solutions present actual conflicts with our assets, and if so; what resulting measures and costs could be incurred by the proponent. Note that this response does not constitute approval for your plans and is being sent to you as a courtesy to inform you that we must continue to be consulted on your project.

Hydro One must be consulted during all stages of your project. Please ensure that all future communications about this and future project(s) are sent to us electronically to secondarylanduse@hydroone.com

Sent on behalf of,

Secondary Land Use
Asset Optimization
Strategy & Integrated Planning
Hydro One Networks Inc.

From:	Kalra, Jitin
To:	Lang, Sarah
Subject:	FW: IO EA Response - Norfolk County, Simcoe-Townsend Water Supply System
Date:	Tuesday, July 26, 2022 4:13:06 PM
Attachments:	image003.png

FYI

From: Contini, Rachael (IO) <Rachael.Contini@infrastructureontario.ca>
Sent: Tuesday, July 26, 2022 4:01 PM
To: mariana.balaban@norfolkcounty.ca; Kalra, Jitin <Jitin.Kalra@stantec.com>
Subject: IO EA Response - Norfolk County, Simcoe-Townsend Water Supply System

Good Afternoon,

Thank you for sending us the Notice of public information for the Norfolk County, Simcoe-Townsend Water Supply System.

It is ultimately the proponent's responsibility to verify if provincial government property is within the study area. Title documents may identify owners of provincial government property as any of the following:

- His Majesty the King
- Her Majesty the Queen
- Hydro One
- Hydro One Networks Inc.
- Management Board Secretariat (MBS)
- Minister of Economic Development, Employment and Infrastructure (MEDEI)
- Minister of Energy and Infrastructure (MEI)
- Minister of Government and Consumer Services (MGCS)
- Minister of Infrastructure (MOI)
- Minister of Natural Resources and Forestry (MNRF)
- Minister of Public Infrastructure Renewal (PIR)
- Minister of Public Works
- Minister of Transportation (MTO)
- Ontario Lands Corporation (OLC)
- Ontario Realty Corporation (ORC)

If provincial government property in the study area is not required for the project, please continue to consult us as a directly affected stakeholder. However, if government property is required for the project, the proponent should contact us so that we can advise about requirements for obtaining government property.

Additionally, please remember to send notices to our dedicated notice email address: noticereview@infrastructureontario.ca

Kind regards,

Rachael Contini (she, her)
Infrastructure Ontario
Co-op, Environmental Management
rachael.contini@infrastructureontario.ca
Phone: +1 647-264-0969
www.infrastructureontario.ca

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From: Mariana Balaban
"
Cc: Lang, Sarah; Kalra, Jitin
Subject: RE: Water project - stakeholders project list
Date: Friday, September 23, 2022 12:35:51 PM

Hello Mr. Katzer,

Thank you for your interest in the IUWS project. You will receive all project correspondence moving forward.

Regards,

Mariana Balaban, P.Eng., Ph.D.
Project Director
Engineering
Environmental and Infrastructure Services Division
185 Robinson St., Simcoe, Ontario, N3Y 5L6
519-426-5870 x. 8158
Mobile: 519-420-0732

Working together with our community

From: Roland
Sent: Friday, September 23, 2022 12:12 PM
To: Mariana Balaban <mariana.balaban@norfolkcounty.ca>
Subject: Water project

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Good afternoon Ms. Balaban

My name is Roland Katzer. I am a Simcoe resident with an extensive background in water treatment resulting from a 35-year career in water treatment in the City of Hamilton. As such I am very interested in learning more about our project to bring water from Nanticoke to supply all of Norfolk. Please include my email in future public information mailings.

Thank you, and have a great day

From:	Scott Zerbes
To:	"waterfordheritagetrail@yahoo.ca"
Cc:	Mariana Balaban; Lang, Sarah
Subject:	RE: Notice of Public Information Centre 1 - Norfolk County, Simcoe-Townsend Water Supply System EA
Date:	Tuesday, July 26, 2022 3:32:52 PM

Good afternoon Frank,
The County has not concluded the purchase of the former railway north of Simcoe where the new wells are located. We have been working our way through some of the requests made by the IO for the Purchase. Unfortunately I do not have a timeframe for you at the moment.
Thanks!!

Scott Zerbes, C.Tech
Project Manager
Engineering
Environmental and Infrastructure Services Division
185 Robinson Street, Suite 200, Simcoe, Ontario, N3Y 5L6
519-426-5870 x. 8014
Mobile: 519-420-9367

Working together with our community

From: Waterford Heritage Trail <waterfordheritagetrail@yahoo.ca>
Sent: Tuesday, July 26, 2022 1:18 PM
To: Lang, Sarah <Sarah.Lang@stantec.com>
Subject: Re: Notice of Public Information Centre 1 - Norfolk County, Simcoe-Townsend Water Supply System EA

Has the County concluded their deal with the Province to purchase the trail lands north of Simcoe?
Cheers,
Frank,
Secretary, WHT

On Monday, July 25, 2022 at 04:30:07 p.m. EDT, Lang, Sarah <sarah.lang@stantec.com> wrote:

Hello,

Please find the attached Notice of Public Information Centre (PIC) 1 for the Norfolk County (County),

Simcoe-Townsend Water Supply System, Municipal Class Environmental Assessment (EA). The County has initiated the EA to implement an approximately 20km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station.

The first PIC will be held in-person at the **Norfolk County Administration Building Council Chambers (50 Colborne St S, Simcoe, ON) on Thursday, August 4, 2022 from 5:00pm to 7:00pm**. PIC materials will also be available on the County's website for your review on August 4, 2022.

County's Website: https://engagenorfolk.ca

Please contact a member of the project team identified on the attached Notice if you have any questions, comments or concerns.

Sarah Lang

Environmental Planner
sarah.lang@stantec.com

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4

COMMENT FORM
Norfolk County Simcoe-Townsend Water Supply System
Municipal Class Environmental Assessment Study

Your comments will help us to understand what is important to people in the study area.
Please provide your comments and use the back of this sheet if you need more space.

Comments:

gas line & irrigation pipe runs east to west below the rail trail
↳ culvert is visible

gas on Conc. 13 on south side, also cable & hydro & bell

- In view of the ... treatment? Has the ... Action Plan and overall Lan...
- ... is going to happen with unused wells. ... unused wells must be abandoned. ...

COMMENT FORM
Norfolk County Simcoe-Townsend Water Supply System
Municipal Class Environmental Assessment Study

☐ **Response Requested**

☐ **Response Not Required**

Please leave your completed comment sheet in the drop box provided or submit to either of the project team contacts below:

Mariana Balaban, P.Eng, PhD
Project Director
Norfolk County
Tel.: 519-426-5870 ext. 8158
Email: mariana.balaban@norfolkcounty.ca

Jitin Kalra, P.Eng
Project Manager
Stantec Consulting Ltd.
Tel: 416-598-7695
Email: jitin.kalra@stantec.com

Name and Address (optional) PLEASE PRINT

Name: John De Dumanski

From:	Lang, Sarah
To:	rvanstone@sixnations.ca; lonnybomberry@sixnations.ca; markhill@sixnations.ca; HFCO@sixnations.ca; dlaforme@sixnations.ca; politicaladvisor@sixnations.ca; tammymartin@sixnations.ca
Cc:	Mariana Balaban; Kalra, Jitin; Hohner, Paula
Subject:	RE: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA
Date:	Monday, November 7, 2022 9:03:00 AM

Hello,

I just wanted to send a reminder about the upcoming PIC for the Simcoe-Townsend Water Supply System EA being hosted by Norfolk County on November 8th. The presentation materials are now available online on the project website: Simcoe-Townsend Water Supply System —Municipal Class Environmental Assessment | Engage Norfolk

If you have any questions regarding the study, please don't hesitate to reach out. If you would like to arrange a meeting with Norfolk County to discuss the project in more detail, please provide a few times and dates which you would be available.

Thank you!

Sarah Lang
Environmental Planner
sarah.lang@stantec.com
Direct: 519-432-4292

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From: Lang, Sarah
Sent: Monday, October 31, 2022 3:29 PM
To: 'rvanstone@sixnations.ca' <rvanstone@sixnations.ca>; 'lonnybomberry@sixnations.ca' <lonnybomberry@sixnations.ca>; 'markhill@sixnations.ca' <markhill@sixnations.ca>; 'HFCO@sixnations.ca' <HFCO@sixnations.ca>; 'dlaforme@sixnations.ca' <dlaforme@sixnations.ca>; 'politicaladvisor@sixnations.ca' <politicaladvisor@sixnations.ca>; 'tammymartin@sixnations.ca' <tammymartin@sixnations.ca>
Cc: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; Kalra, Jitin <Jitin.Kalra@stantec.com>; Hohner, Paula <Paula.Hohner@stantec.com>
Subject: FW: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA

Good Afternoon,

As per my email below, Norfolk County is planning the second Public Information Centre (PIC) for the Simcoe-Townsend Water Supply System, Municipal Class Environmental Assessment study. The PIC is

th

being held in-person on November 8 , 2022 from 5:00pm-7:00pm, at the Norfolk County Administration Building in the Town of Simcoe. The PIC materials will also be available online on the project website (https://engagenorfolk.ca/simcoe-townsend-water-supply), starting November 8th.

Norfolk County would like to provide the opportunity for Six Nations of the Grand River to meet virtually with the project team to discuss the study in greater detail. If you are interested in participating in a meeting with the County, we ask that you please provide us with a few times and dates in which you would be available to attend.

Please let me know if you have any questions or concerns. We look forward to hearing from you!

Thank you,

Sarah Lang
Environmental Planner
sarah.lang@stantec.com
Direct: 519-432-4292

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From: Lang, Sarah
Sent: Thursday, October 27, 2022 9:28 AM
Cc: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; Kalra, Jitin <Jitin.Kalra@stantec.com>; Choi, Joon <Joon.Choi@stantec.com>
Subject: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA

Hello,

Please find the attached Notice of Public Information Centre (PIC) 2 for the Norfolk County (County), Simcoe-Townsend Water Supply System, Municipal Class Environmental Assessment (EA). The County has initiated the EA to implement an approximately 20km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station.

The PIC will be held in-person at the **Norfolk County Administration Building Council Chambers (50 Colborne St S, Simcoe, ON) on Tuesday, November 8, 2022 from 5:00pm to 7:00pm**. PIC materials will also be available on the County's website for your review on November 8, 2022.

County's Website: https://engagenorfolk.ca

Please contact a member of the project team identified on the attached Notice if you have any questions, comments or concerns

Thank you,

Sarah Lang
Environmental Planner
sarah.lang@stantec.com

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From:	Abby LaForme
To:	Lang, Sarah
Cc:	Mariana Balaban; Hohner, Paula; Kalra, Jitin; Choi, Joon; Mark LaForme; Adam LaForme
Subject:	RE: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA
Date:	Monday, October 31, 2022 2:56:33 PM

Good Afternoon Sarah,

November 10th at 2:30m works well for our team.

Than you for setting this up!

Abby (LaForme) Lee
Acting Consultation Coordinator

Mississaugas of the Credit First Nation (MCFN)
Department of Consultation & Accommodation (DOCA)
4065 Highway 6, Hagersville, ON N0A 1H0
Ph: (905) 768 – 4260
Email: Abby.LaForme@mncfn.ca

From: Lang, Sarah <Sarah.Lang@stantec.com>
Sent: Monday, October 31, 2022 2:29 PM
To: Abby LaForme <Abby.LaForme@mncfn.ca>
Cc: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; Hohner, Paula <Paula.Hohner@stantec.com>; Kalra, Jitin <Jitin.Kalra@stantec.com>; Choi, Joon <Joon.Choi@stantec.com>; Mark LaForme <Mark.LaForme@mncfn.ca>; Adam LaForme <Adam.LaForme@mncfn.ca>
Subject: RE: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA

Hello Abby,

Thank you for your email! We will be happy to meet virtually with MCFN to discuss the project in greater detail.

November 10th, at 2:30pm would work well for Norfolk County and Stantec. If you can please confirm that this time will still work for your team, I will send over a meeting invitation shortly!

Thank you,

Sarah Lang
Environmental Planner
sarah.lang@stantec.com
Direct: 519-432-4292

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From: Abby LaForme <Abby.LaForme@mncfn.ca>
Sent: Thursday, October 27, 2022 2:21 PM
To: Lang, Sarah <Sarah.Lang@stantec.com>
Cc: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; Kalra, Jitin <Jitin.Kalra@stantec.com>; Choi, Joon <Joon.Choi@stantec.com>; Mark LaForme <Mark.LaForme@mncfn.ca>; Adam LaForme <Adam.LaForme@mncfn.ca>
Subject: RE: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA

Good Afternoon Sarah,

Thank you for reaching out to MCFN DOCA for Consultation.
MCFN DOCA is interested in meeting with you Virtually, to hear more about the Norfolk County, Simcoe-Townsend Water Supply System EA Project.
We have availability Nov. 8th, 9th- 9am-2pm, 10th-1pm-4pm, 15th
Please let me know if any of these dates and times work for you and your team.

Thank you

Abby (LaForme) Lee
Acting Consultation Coordinator

Mississaugas of the Credit First Nation (MCFN)
Department of Consultation & Accommodation (DOCA)
4065 Highway 6, Hagersville, ON N0A 1H0
Ph: (905) 768 – 4260
Email: Abby.LaForme@mncfn.ca

From: Lang, Sarah <Sarah.Lang@stantec.com>
Sent: Thursday, October 27, 2022 9:28 AM
Cc: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; Kalra, Jitin <Jitin.Kalra@stantec.com>; Choi, Joon <Joon.Choi@stantec.com>
Subject: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA

Hello,

Please find the attached Notice of Public Information Centre (PIC) 2 for the Norfolk County (County), Simcoe-Townsend Water Supply System, Municipal Class Environmental Assessment (EA). The County has initiated the EA to implement an approximately 20km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station.

The PIC will be held in-person at the **Norfolk County Administration Building Council Chambers (50 Colborne St S, Simcoe, ON) on Tuesday, November 8, 2022 from 5:00pm to 7:00pm**. PIC materials will also be available on the County's website for your review on November 8, 2022.

County's Website: https://engagenorfolk.ca

Please contact a member of the project team identified on the attached Notice if you have any questions, comments or concerns

Thank you,

Sarah Lang
Environmental Planner
sarah.lang@stantec.com

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From: Lang, Sarah
To: Dawn Russell
Cc: Hohner, Paula; Kalra, Jitin; Mariana Balaban
Subject: RE: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA
Date: Wednesday, November 16, 2022 1:58:00 PM
Attachments: image001.png

Hello Dawn,

Thank you for providing availability to meet with the Simcoe-Townsend Water Supply EA project team. We will arrange for a virtual meeting on Tuesday, December 13th, at 2:00pm.

I will send out the meeting invitation shortly to secure the time and date! Please feel free to forward the invitation to your colleagues as necessary.

Thank you!

Sarah Lang
Environmental Planner
sarah.lang@stantec.com
Direct: 519-432-4292

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From: Dawn Russell <dawnrussell@sixnations.ca>
Sent: Wednesday, November 16, 2022 8:24 AM
To: Lang, Sarah <Sarah.Lang@stantec.com>
Subject: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA

Good morning Sarah,

On behalf of Six Nations of the Grand River Elected Council Lands and Resources Department Consultation and Accommodation Process (CAP) Team we are available to meet:

Tuesday, December 13th 2pm
Thursday, December 15th 2pm
Friday, December 16th 10am

Please advise what works best for you and your Team for an in-person or virtual meeting at your earliest convenience. If your preference is virtual please send an invitation to confirm. Thanking you in advance.

Have a great day!

Dawn Russell

Consultation Administrative Assistant

Six Nations of the Grand River Lands and Resources

dawnrussell@sixnations.ca

519-753-0665



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From:
To: Kalra, Jitin
Cc: "Mariana Balaban"; Lang, Sarah
Subject: RE: Simcoe Class EA
Date: Wednesday, November 9, 2022 9:06:23 AM
Attachments: Meeting Notes - Nov 8, 2022 with Annotations.pdf

---

Hi Jitin (and all),

Thank you for taking the time to listen to my concerns regarding water well maintenance.

The poor welds on the County Test Wells suggests the County is not interested in maintaining water wells.

As mentioned, attached are my pre meeting notes (plus annotations).

Thank you,

Bruce

Geo Kamp Limited
Bruce Hietkamp, P. Geo.
Hydrogeologist and Water Well Contractor

From: Kalra, Jitin [mailto:Jitin.Kalra@stantec.com]
Sent: Thursday, Octobe

Cc: Mariana Balaban; Lang, Sarah
Subject: RE: Simcoe Class EA

Hi Bruce,

We sent out the email this morning, see attached email. Also please find attached notice of PIC #2.

Thanks,

Jitin Kalra P.Eng, M.Eng., PMP
Senior Project Manager

Direct: 416-598-7695
Mobile: 437 488-2384
Jitin.Kalra@stantec.com

Stantec
100-401 Wellington Street West
Toronto ON M5V 1E7

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From: G
Sent: Thursday, October 27, 2022 9:05 AM
To: Mariana Balaban Mariana.Balaban@norfolkcounty.ca; jitin.kalra@stantec.com
Subject: RE: Simcoe Class EA

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Hi Mariana and Jitin,

We are interested in attending the Oct 27, 2022 PIC re the Nanticoke WTP.

Could you please kindly provide the meeting details?

Thank you,

Bruce

Geo Kamp Limited
Bruce Hietkamp, P. Geo.
Hydrogeologist and Water Well Contractor

From: Mariana Balaban [mailto:Mariana.Balaban@norfolkcounty.ca]
Sent: Thursday, September 29, 2022 2:09 PM
To: 'Geo Kamp Limited'; jitin.kalra@stantec.com
Subject: RE: Simcoe Class EA

Hello Mr. Kamp,

Thank you for your email. This project was heavily scrutinized by Council and recommended by the 2016 Integrated Servicing Master Plan as Norfolk has currently major challenges in terms of both quantity and quality of drinking water. Here are few quick answers to your concerns:

1. The water will be supplied from the existing Nanticoke WTP, which has a very large PTTW already in place and a better intake/raw water quality. A centralized system is more efficient and economic to operate and maintain over the long term.
2. Norfolk has currently five independent water supply systems that require significant upgrades to service the projected 2041 growth and fire flow demand. The Inter-Urban system will secure safe drinking water services for all areas, growth capacity and fire flows. Groundwater in Norfolk is susceptible to contamination due to the agricultural and industrial land use, making the treatment process more difficult and expensive.
3. We are undertaking a Class EA Schedule B according to the MEA guidelines to assess all impacts (environmental, social, economic and so forth). PIC#1 was held on Aug 4 and PIC#2 will follow on Oct 27, 2022 at the Council Chambers. We are happy to answer questions from anyone in attendance.

We will add your email address to the project list for future project correspondence.

Looking forward to meeting with you at our next PIC.

Best regards,
Mariana

Mariana Balaban, P.Eng., Ph.D.
Project Director
Engineering
Environmental and Infrastructure Services Division
185 Robinson St., Simcoe, Ontario, N3Y 5L6
519-426-5870 x. 8158
Mobile: 519-420-0732

Working together with our community

From:
Sent: Thursday, September 29, 2022 1:44 PM
To: Mariana Balaban <mariana.balaban@norfolkcounty.ca>; jitin.kalra@stantec.com
Subject: Simcoe Class EA

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Mariana and Jitin,

An industry peer has brought this project to my attention.

It appears the Communities of Delhi, Simcoe and Waterford are proposing to obtain water from another municipality and change the water taking source from groundwater to surface water.

I am concern about:

- Potential impacts regarding the 2018 Lake Erie Action Plan and overall Lake Erie protection
- Relative costs (surface water vs groundwater)
- The potential environmental impacts appear to be significant. Should this be a Class C EA?

I was wondering if I could obtain more information?

Thank you,

Bruce

Geo Kamp Limited

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GEO KAMP LIMITED

MEETING NOTES

Date:	November 8, 2022
From:	Bruce Hietkamp
Re:	PIC For Simcoe-Townsend Water Supply
Date of Meeting:	November 8, 2022
Location:	Norfolk County ~ 50 Colborne Street South, Simcoe

The welding photos are of a County Test Well. There is no way this work was not completed by a licenced well technician

BACKGROUND

Norfolk County initiated a Class EA to interconnect communities. Change from a Groundwater Taking to Surface Water Taking.

Project study was initiated in the summer of 2022. PIC Tuesday Nov 8 at 5:00 to 7:00.

NOTES

- Anecdotal comments have been raised that the County decided on a lake water supply many years ago (2020 News Article). As such, the County may have ignored well maintenance for surface water advantage. As a Groundwater Profession, I am annoyed about the perception that groundwater is inferior. I am also concern about substandard well maintenance. (Welding Photos ~ May 2, 2019)

- I am curious about relative costs (surface water vs groundwater). Has a cost benefit analysis been completed?

I am not against the pipeline, but groundwater usually less expensive.

- The PTTW amounts issued to Nanticoke seem excessive (rates taken from the MOE PTTW Atlas). For example, the flows are about 25% of the flow over the US side of Niagara Falls. A comparison of the water taking to the PTTW issued for Oakville/Milton, suggests 1000% more for Nanticoke. (PTTW screen Shots)

Is the 1,818,000,000 L/day a typo?

- ~~Has the PTTW been issued for Nanticoke? If so, why do a Class EA? The project is complete, after the fact.~~

- There are Engineering comments that Groundwater in Norfolk is susceptible to contamination due to the agricultural and industrial land use, making the treatment process more difficult and expensive. Is Lake Erie not susceptible to contamination too such as algae, spills and protozoa? Is there not more treatment required for surface water than groundwater (such as bacteriological and protozoa)?

- In view of the potential increase in water taking, is there capacity for additional sewage treatment? Has the Class EA addressed potential impacts regarding the 2018 Lake Erie Action Plan and overall Lake Erie protection?

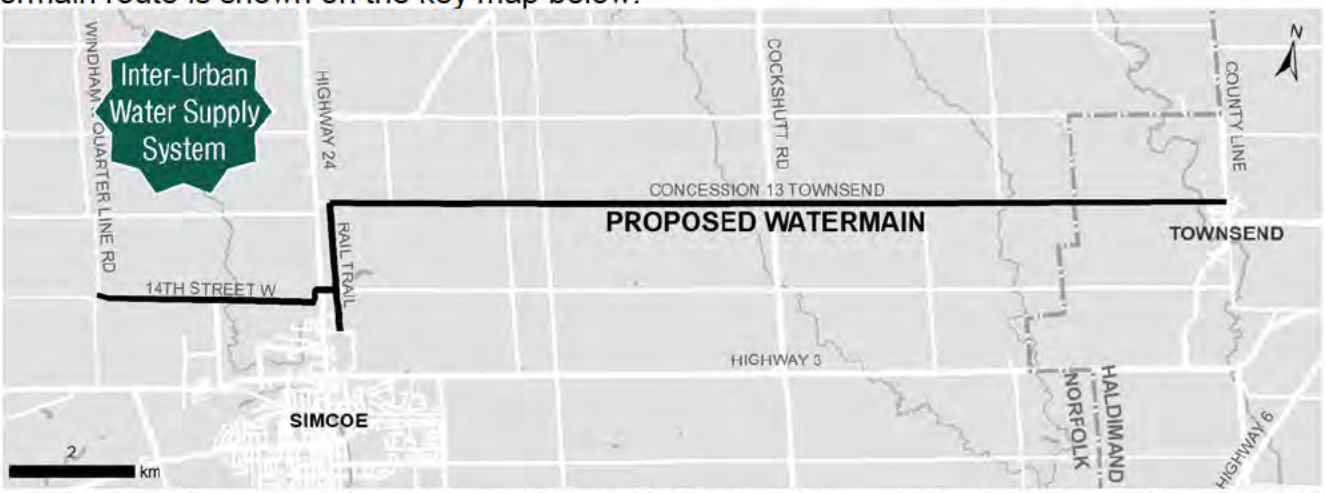
1,818,000,000 L/day plus Norfolk That's a lot of sewage.

- What is going to happen with unused wells? According the Ont. Reg. 903 of the Ontario Water Resources Act, unused wells must be abandoned. Is there an abandonment plan for municipal and private wells?

The poor welds suggest the County is not interested in properly maintaining water wells.

Notice of Public Information Centre 2
Simcoe-Townsend Water Supply System
Municipal Class Environmental Assessment

Norfolk County (County) has initiated a Municipal Class Environmental Assessment (EA) to implement an approximately 20 km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. These improvements are required to meet long-term Inter-Urban Water Supply capacity and quality demands within the County. The proposed watermain route is shown on the key map below.



This Study is being undertaken in accordance with the requirements for Schedule 'B' projects within the Municipal Class EA document (2000, as amended), under the Ontario Environmental Assessment Act.

How can I participate in this Study?

The first Public Information Centre (PIC) was held on August 4, 2022, to present background information and introduce the project team. The second PIC is scheduled to provide a study update and present the preferred site location for the booster pumping station and elevated tower. The PIC will be in-person at the **Norfolk County Administration Building Council Chambers (50 Colborne St S, Simcoe, ON) on Tuesday, November 8, 2022 from 5:00-7:00pm**. PIC materials will be available on the County's website for your review on November 8, 2022: https://engagenorfolk.ca/.

If you would like more information about the study, or would like to be added to the contact list to receive future notices, please contact the following by **Tuesday, December 6, 2022**:

Mariana Balaban, P.Eng., PhD
Project Director
Norfolk County
Phone: 519-426-5870 ext. 8158
Email: mariana.balaban@norfolkcounty.ca

Jitin Kalra, P.Eng.
Project Manager
Stantec Consulting Ltd.
Phone: 416-598-7695 (Collect: +0 collect)
Email: jitin.kalra@stantec.com

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

This Notice was first issued on October 26, 2022.

Norfolk sets sights on Haldimand pipeline

Water issues in Port Dover, Simcoe, Delhi, Waterford

Monte Sonnenberg
More from Monte Sonnenberg

Published on: February 11, 2020 | Last Updated: February 11, 2020 12:55 PM EST



A consensus has emerged on Norfolk council that a pipeline from Haldimand County would solve many of the mounting water problems afflicting Port Dover, Simcoe, Waterford and Delhi.

SHAREADJUSTCOMMENTPRINT

Norfolk council has concluded that piping water in from Haldimand is not only the solution to capacity issues in Port Dover, but a host of other water problems afflicting Simcoe, Waterford and Delhi.

“I am supportive of prioritizing getting water into Port Dover,” Simcoe Coun. Ian Rabbitts said at the Feb. 4 council meeting.

“It’s been a long time coming. I think we need to focus our priority on inter-municipal partnerships with Haldimand – getting water into Port Dover, fixing this clarifier (in Port Dover), and eventually bringing this water up into Simcoe and the other urban centres that serve the larger populations of Norfolk County.

“We’ve known for some time that we need to get off wells in Simcoe and across Norfolk. We’ve kicked the can so far down the road that we’ve hit a place where we’re having treatment issues and capacity issues. With the amount of infrastructure we have this is not sustainable.”

Rabbitts made his remarks before council approved a number of measures conducive to providing a “safe and secure water supply for all of Norfolk.”

Steps taken so far include co-operating with Haldimand County on a rate study to determine how Norfolk’s participation in its network would affect water prices in both municipalities.

As well, council has tapped MMM Group Ltd. — an engineering firm with knowledge of the county water system — to rework Norfolk’s master plan with a sole supplier in mind.

This direction emerged during a discussion of an urgent $5.6-million repair to the clarifier unit at the Nelson Street West treatment plant in Port Dover.

Following the province’s annual inspection of the Port Dover plant last year, the Ministry of the Environment ordered Norfolk to take immediate action before the clarifier fails.

The unexpected failure of filtration units at the plant was a problem in 2019. Now there are concerns Norfolk might have to tanker water into town at a cost of $30,000 a day if the aging plant fails in its entirety.

Jason Godby, Norfolk’s interim general manager of public works, said a temporary clarifier will be installed this fall to allow the work to proceed next winter and into the spring of 2021. The repair should be completed mid-year.

During the discussion, Godby spoke of other issues in Norfolk’s urban areas that rely on well water.

Waterford, for example, is served by two wells 55 feet apart. Council heard that Waterford would lose its water if even one of the wells were contaminated.

The situation in Delhi is similar. A report to council says a serious contamination event there would knock all four of the community’s wells out of commission.

Godby said urban engineers today design well systems with redundancy in mind. If one well has to close, there are others elsewhere to continue supplying the community.

In Simcoe, the issue is high sodium in places and iron content in general that prematurely wears out pumps and screens. Public works has noticed that the capacity of the seven wells serving Simcoe is diminishing, suggesting they are not reliable in the long run.

“It’s pretty clear from this report that we have a serious water issue across Norfolk County, not just Port Dover,” said Mayor Kristal Chopp.

“I think this needs to be elevated in importance to the province. We need to move on this now.”

A total solution is seen in the gigantic treatment plant that was built along the north shore of Lake Erie in Nanticoke when the province was planning the satellite city of Townsend near Jarvis 50 years ago.

The satellite city never materialized but the plant continues, to this day, to service Jarvis, Townsend, New Credit, Hagersville and the Nanticoke Industrial Park.

Last year, Chopp said her preferred solution in Port Dover is an $18-million pipeline from Jarvis. The mayor has been lobbying the province for support ever since.

MSonnenberg@postmedia.com


Well Construction
Clean, reliable drinking water
$4.5M
Spring 2019
bien Construction
Nettoyer, fiable en buvant eau
4.5M$
printemps 2019
Canada
Norfolk COUNTY
Ontario





Nanticoke	
PTTW L/day	1,818,000,000
PTTW L/min	1,262,500
Niagara Falls US	
L/sec	75,500
L/min	4,530,000
% comparison	
Nanticoke/NF	28%

Nanticoke	
PTTW L/day	1,818,000,000
PTTW L/min	1,262,500

Oakville	
PTTW L/day	155,000,000
PTTW L/min	107,639

% comparison	
Nanticoke/Oakville	1173%

From:	Mariana Balaban
To:	'
Cc:	Kalra, Jitin; Lang, Sarah
Subject:	RE: Elevated tower and pumping station - response
Date:	Thursday, October 27, 2022 1:07:13 PM

Hi Peter,

Thank you for your comments, and interest in the Simcoe-Townsend Water Supply EA. You have been added to the project contact list, and will be notified of all future milestones for this study.

As noted in my earlier email, the infrastructure will deliver drinking water through a 600mm transmission main. The depth of the watermain will vary from 2m to 6m, depending on the road right-of-way, and utility crossings. The project team is aware of existing natural gas infrastructure in the area, and is working with Enbridge to determine the exact locations. The potential water pressure for the watermain within this area may be within the range of +/- 75-85 psi; this range does not account for the potential for any private connections. Please note that the watermain will be buried within the existing municipal right-of-way.

The watermain will extend to the location of the elevated tower, which will be erected on municipally owned lands at 14th Street and Windham East Quarter Line Road. Please refer to the Public Information Centre (PIC) 1 materials on the Norfolk County Engage platform to see the approximate location: https://engagenorfolk.ca/simcoe-townsend-water-supply.

The second PIC for this project is being held on November 8, 2022 from 5:00pm to 7:00pm, at the Norfolk County Administration Building Council Chambers (50 Colborne Street S, Simcoe, ON) and the project team will be happy to answer additional questions at that time.

Regards,
Mariana

Mariana Balaban, P.Eng., Ph.D.
Project Director
Engineering
Environmental and Infrastructure Services Division
185 Robinson St., Simcoe, Ontario, N3Y 5L6
519-426-5870 x. 8158
Mobile: 519-420-0732

From: Mariana Balaban
To: Kalra, Jitin; Lang, Sarah; Hohner, Paula
Subject: Fwd: Elevated tower and pumping station
Date: Thursday, October 27, 2022 8:17:54 AM

519-426-5870 x. 8158
Mobile: 519-420-0732

Working together with our community

From: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>
Sent: Thursday, October 27, 2022 8:16:27 AM

Subject: Re: Elevated tower and pumping station

Hi Peter,

My consultants are verifying all that for us. The design didn't start as of yet. We will bring drinking water and we intent to install the main through trenchless technologies on the north side of the road on the ROW. A more detailed response will follow, and we could also chat about this at the PIC#2 on Nov 8.

Thanks,
Mariana

Get Outlook for iOS

Mariana Balaban, P.Eng., Ph.D.
Project Director
Engineering
Environmental and Infrastructure Services Division
185 Robinson St., Simcoe, Ontario, N3Y 5L6
519-426-5870 x. 8158
Mobile: 519-420-0732

Working together with our community

From:
Sent: Thursday, October 27, 2022 7:42:28 AM
To: Mariana Balaban <mariana.balaban@norfolkcounty.ca>
Subject: Fwd: Elevated tower and pumping station

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I should also have asked which side of Fourteenth street west, north or south, and I need reminding which side of the road has the six inch high pressure natural gas line?

Many thanks

Peter Hellyer

Sent from my iPad

Begin forwarded message:

> **From:**
> **Date:** October 26, 2022 at 4:00:02 PM EDT
> **To:** mariana.balaban@norfolkcounty.ca
> **Subject: Elevated tower and pumping station**
>
> Mariana
>
> I would like to be kept apprised of the planned location for the elevated tower and pumping station as per your ad in the Port Dover Maple Leaf today. I would also like to know if the water in the described pipeline is potable or raw. I would further like to know the proposed size, depth and operating line pressure where it goes along fourteenth street west in Simcoe; And whether the existing municipal easement is large enough or whether land at this location will be expropriated to accommodate the water line.
>
> Many thanks
>
> Peter Hellyer

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From:	Mariana Balaban
To:	"
Cc:	Lang, Sarah; "Philip Wilson"; Stephanie Davis; Kalra, Jitin; Andrew Grice
Subject:	RE: Simcoe Class EA - response
Date:	Wednesday, February 15, 2023 10:34:02 AM

Hi Bruce,

We hear you. We will definitely prepare a plan for municipal wells decommissioning as soon as the new watermain is commissioned.
The county is not managing the private wells, therefore the well owners must take due diligence steps to maintain or abandon their wells.

Regards,

Mariana Balaban, P.Eng., Ph.D.
Project Director
Engineering
Environmental and Infrastructure Services Division
185 Robinson St., Simcoe, Ontario, N3Y 5L6
519-426-5870 x. 8158
Mobile: 519-420-0732

Working together with our community

From: Geo Kamp Limited
Sent: Wednesday, February 15, 2023 10:29 AM
To: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>
Cc: 'Lang, Sarah' <Sarah.Lang@stantec.com>; 'Philip Wilson' <pwilson@haldimandcounty.on.ca>; Stephanie Davis <Stephanie.Davis@norfolkcounty.ca>; 'Kalra, Jitin' <Jitin.Kalra@stantec.com>; Andrew Grice <Andrew.Grice@norfolkcounty.ca>
Subject: RE: Simcoe Class EA - response

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Mariana,

Thank you for your response.

I am concern that the County may have ignored well maintenance because the surface water supply is forthcoming. (Inferior Welding Photos ~ May 2, 2019).

Is there an abandonment plan for municipal and/or private wells? According the Ont. Reg.

903 of the Ontario Water Resources Act, unused wells must be properly abandoned.

Thank you,

Bruce

Geo Kamp Limited
Bruce Hietkamp, P. Geo.
Hydrogeologist and Water Well Contractor

From: Mariana Balaban [mailto:Mariana.Balaban@norfolkcounty.ca]
Sent: Wednesday, February 15, 2023 9:56 AM
To:
Cc: 'Lang, Sarah'; 'Philip Wilson'; Stephanie Davis; 'Kalra, Jitin'; Andrew Grice
Subject: RE: Simcoe Class EA - response
Importance: High

Hi Bruce,

Per my email below our Norfolk Phase 1 includes Schedule B Class EA that speaks to the impact associated with the booster pumping stations and elevated tank.
For your convenience I am reiterating the key considerations in response to your peer's concerns:

1. The water is taken from Lake Erie under a current PTTW issued for the Nanticoke WTP via existing transmission mains. This source is of better quality compared to the underground water sources we have currently.
2. Costs are reviewed as part of our financial due diligence and budgeting process for this project.
3. Haldimand County will manage the plant upgrades and due diligence steps (Class EA) are being taken. I copied Mr. Wilson in this email so he's aware of your concerns.

Should you and your peer have any further concerns please do not hesitate to contact me.

Regards,

Mariana Balaban, P.Eng., Ph.D.
Project Director
Engineering
Environmental and Infrastructure Services Division
185 Robinson St., Simcoe, Ontario, N3Y 5L6
519-426-5870 x. 8158
Mobile: 519-420-0732

From:	Kalra, Jitin
To:	'
Cc:	Lang, Sarah; "Philip Wilson"; Stephanie Davis; Andrew Grice; Mariana Balaban; Hohner, Paula
Subject:	RE: Simcoe Class EA - response
Date:	Wednesday, February 15, 2023 10:06:23 AM

Good Morning Bruce,

Following Mariana email below, we appreciate the comments and concerns you presented to us, which we were able to discuss with you at Public Information Centre #2. As discussed, the decision to proceed with the Inter-Urban Water Supply (IUWS) system was determined in previous Norfolk County studies; the Integrated Sustainable Master Plan (ISMP) (2016), and the Water Supply Operational Strategy (2021).

The IUWS project seeks to interconnect the communities within the County to deliver high quality water services, ensure fire flow and water supply for growth to 2041 and beyond, and build reliable infrastructure. As noted in PIC #2, water supply will be secured from the Nanticoke Water Treatment Plant. Please be advised that the Nanticoke Permit to Take Water maximum daily flow is 1,818,000m3.

Your comments will be included in the final Project File Report, which will be made available for a 30-day public comment period once the study is complete.

Thank you

Jitin Kalra P.Eng, M.Eng., PMP
Senior Project Manager

Direct: 416-598-7695
Mobile: 437 488-2384
Jitin.Kalra@stantec.com

Stantec
100-401 Wellington Street West
Toronto ON M5V 1E7

The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the intended recipient, please delete all copies and notify us immediately.

VACATION ALERT : Please take note that I will be on vacation from March 10 to 29, 2023 inclusively.

From: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>
Sent: Wednesday, February 15, 2023 9:56 AM
To: 'Geo Kamp Limited'
Cc: Lang, Sarah <Sarah.Lang@stantec.com>; 'Philip Wilson' <pwilson@haldimandcounty.on.ca>; Stephanie Davis <Stephanie.Davis@norfolkcounty.ca>; Kalra, Jitin <Jitin.Kalra@stantec.com>; Andrew Grice <Andrew.Grice@norfolkcounty.ca>
Subject: RE: Simcoe Class EA - response
Importance: High

Hi Bruce,

Per my email below our Norfolk Phase 1 includes Schedule B Class EA that speaks to the impact

associated with the booster pumping stations and elevated tank.
For your convenience I am reiterating the key considerations in response to your peer's concerns:

1. The water is taken from Lake Erie under a current PTTW issued for the Nanticoke WTP via existing transmission mains. This source is of better quality compared to the underground water sources we have currently.
2. Costs are reviewed as part of our financial due diligence and budgeting process for this project.
3. Haldimand County will manage the plant upgrades and due diligence steps (Class EA) are being taken. I copied Mr. Wilson in this email so he's aware of your concerns.

Should you and your peer have any further concerns please do not hesitate to contact me.

Regards,

Mariana Balaban, P.Eng., Ph.D.
Project Director
Engineering
Environmental and Infrastructure Services Division
185 Robinson St., Simcoe, Ontario, N3Y 5L6
519-426-5870 x. 8158
Mobile: 519-420-0732

Working together with our community

From: Geo Kamp Limited
Sent: Wednesday, February 15, 2023 8:54 AM
To: 'Kalra, Jitin' <Jitin.Kalra@stantec.com>
Cc: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; 'Lang, Sarah' <Sarah.Lang@stantec.com>
Subject: RE: Simcoe Class EA

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Hi Jitin (and all),

I was wondering if my meeting notes re the Nov 8, 2022 PIC where included/addressed in the Class EA documentation?

I did not receive a response. I looked on line and did not find PIC comments/responses.

Thank you,

Bruce

Geo Kamp Limited
Bruce Hietkamp, P. Geo.
Hydrogeologist and Water Well Contractor

From: Geo Kamp Limited [
Sent: Wednesday, November 09, 2022 9:05 AM
To: 'Kalra, Jitin'
Cc: 'Mariana Balaban'; 'Lang, Sarah'
Subject: RE: Simcoe Class EA

Hi Jitin (and all),

Thank you for taking the time to listen to my concerns regarding water well maintenance.

The poor welds on the County Test Wells suggests the County is not interested in maintaining water wells.

As mentioned, attached are my pre meeting notes (plus annotations).

Thank you,

Bruce

Geo Kamp Limited
Bruce Hietkamp, P. Geo.

From: Kalra, Jitin [mailto:Jitin.Kalra@stantec.com]
Sent: Thursday, October 27, 2022 10:48 AM
To: 'Geo Kamp Limited'
Cc: Mariana Balaban; Lang, Sarah
Subject: RE: Simcoe Class EA

Hi Bruce,

We sent out the email this morning, see attached email. Also please find attached notice of PIC #2.

Thanks,

Jitin Kalra P.Eng, M.Eng., PMP
Senior Project Manager

From:	Del Villar Cuicas, Joan (MECP)
To:	Mariana Balaban; Micks, Sarah
Cc:	Hohner, Paula
Subject:	RE: Simcoe-Townsend Water Supply System MCEA - MECP 30-day Project File Report Review
Date:	Wednesday, March 22, 2023 3:57:54 PM
Attachments:	MECP PRU Comments - Simcoe- Townsend Water Supply System.pdf

Good afternoon,

Thank you for circulating the Project File Report for Norfolk County Schedule B Municipal Class Environmental Assessment for the Simcoe-Townsend Water Supply System. Please find attached MECP Project Review Unit comments.

Should you or any members of your project team have any questions regarding the material above, please contact me.

Regards,

Joan Del Villar Cuicas (she/her)
Regional Environmental Planner
Project Review Unit | Environmental Assessment Branch
Ontario Ministry of the Environment, Conservation and Parks
Joan.delvillarcuicas@ontario.ca|Phone: 365-889-1180

From: Micks, Sarah <Sarah.Micks@stantec.com>
Sent: February 22, 2023 10:26 AM
To: Del Villar Cuicas, Joan (MECP) <Joan.DelVillarCuicas@ontario.ca>
Cc: EA Notices to WCRegion (MECP) <eanotification.wcregion@ontario.ca>; Mariana Balaban <mariana.balaban@norfolkcounty.ca>; Kalra, Jitin <Jitin.Kalra@stantec.com>; Hohner, Paula <Paula.Hohner@stantec.com>
Subject: Simcoe-Townsend Water Supply System MCEA - MECP 30-day Project File Report Review

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Hello Joan,

Norfolk County retained Stantec Consulting Ltd. to complete the Schedule 'B' Municipal Class Environmental Assessment for the Simcoe-Townsend Water Supply System study. The draft Project File Report is now available for MECP's review, and is attached to this email.

Please let me know if you have any questions or comments.

Thank you!

Sarah Micks (Lang)
Environmental Planner
sarah.micks@stantec.com
Direct: 519-432-4292

Ministry of the Environment, Conservation and Parks

Environmental Assessment Branch

1st Floor
135 St. Clair Avenue W
Toronto ON M4V 1P5
Tel.: 416 314-8001
Fax.: 416 314-8452

Ministère de l'Environnement, de la Protection de la nature et des Parcs

Direction des évaluations environnementales

Rez-de-chaussée
135, avenue St. Clair Ouest
Toronto ON M4V 1P5
Tél. : 416 314-8001
Téléc. : 416 314-8452

March 22, 2023

Mariana Balaban *(Via Email Only)*
Project Director
Norfolk County
Email: mariana.balaban@norfolkcounty.ca

Sarah Micks
Environmental Planner
Stantec
Email: sarah.micks@stantec.com

Re: Simcoe-Townsend Water Supply System
Norfolk County
Municipal Class Environmental Assessment – Schedule B
Project Review Unit Comments – Draft Project File Report

Dear Mariana Balaban and Sarah Micks:

Thank you for providing the ministry with an opportunity to comment on the draft Project File Report (Report) for the above-noted Class Environmental Assessment (EA) project. Our understanding is that in order to meet future water supply demands for the planned growth within the County, Norfolk County (the proponent) has determined that the Simcoe-Townsend Supply System require the following improvements

- Construct a transmission watermain connecting Simcoe to the Townsend Water Supply System
- Build a booster pumping station along transmission watermain alignment
- Build an elevated water tank along transmission watermain alignment

The Ministry of the Environment, Conservation and Parks (ministry) provides the following comments for your consideration.

Consultation

1. Consultation records should be updated with the Notice of Study Completion circulation and with any follow-up correspondence.

Indigenous Consultation

2. It appears that The County provided notices to an appropriate list of communities, however, not all the communities have responded to the notifications. Please note Indigenous communities frequently receive a high volume of project notices and require time to review project proposals. For this reason, it is important that a proponent utilize different methods of reaching out to communities and reach out to the communities at different points in the process. Please make sure that detailed documentation of these efforts is contained in the consultation record of the Report.

3. Further to any follow-up during the review period for the EA, the proponent should continue reaching out to all communities previously engaged if there any substantial changes to the project/process or if they are applying for subsequent permits from the ministry that may be of interest or concern to communities. We recommend that the proponent include the record of consultation with any subsequent applications to the MECP to help in our review of those applications.

Source Water Protection

4. The project study area for the proposed wastewater works is located in the **Long Point Protection Area (SPA)** and is, therefore, subject to the approved **Long Point Source Protection Plan (SPP)**.
   Norfolk County has identified the need to increase the region's urban water supply, including adding an approximately 20km length watermain, connecting Simcoe to the Townsend Water Supply System. The proposed works include an approximately 20km length watermain, an elevated water tank, and a booster pumping station and will support the county's long-term needs. Stantec Consulting Ltd. has been contracted to complete the Project File Report) and EA process. Only the location of the booster pumping station was evaluated with alternative solutions. The path of the watermain following right-of-way access along roadways and the elevated water tower location do not have alternatives, as their locations have been deemed preferable. The preferred alternative of the booster

pumping station has been identified as alternative 3, with alternative 1 also being considered.

The proposed route for the forcemain and the location of the booster pumping station and elevated water tower are defined in the Draft study review. The proposed works intersect a Wellhead Protection Area (WHPA)-D with a vulnerability score of 6, a WHPA-E with a vulnerability score of 6.3, a highly vulnerable aquifer (HVA) with a vulnerability score of 6, and a Significant Groundwater Recharge Area (SGRA). Given that the proposed works will not intersect any high-scoring vulnerable area, they are **not** a significant drinking water threat**.**

In the Draft Project File Report for the Simcoe-Townsend water supply expansion, the proponent discusses source protection in Sections 4.3: Clean Water Act and 7.3: Drinking Water Source Protection. The proponent correctly identifies the Long Point Source Protection Area as the applicable SPA and refers to the Long Point Source Protection Plan and its policies as applicable to proposed works. Further, the proponent identifies the vulnerable areas that intersect with the study area, including a WHPA with a vulnerability score of 6, a highly vulnerable aquifer (HVA) with a vulnerability score of 6 and a significant groundwater recharge area (SGRA). However, the proponent **does not** identify the WHPA-E with a vulnerability score of 6.3 and **incorrectly** identifies the proposed works as intersecting an Issue Contributing Area (ICA) and a WHPA with a vulnerability score of 8. Moreover, the mapping used in the report appears to be outdated, and some areas identified in the report no longer intersect with the proposed works. The most up-to-date mapping can be found using the (Source Protection Information Atlas (SPIA).

Consequently, we recommend that the proponent identify the correct vulnerable areas, including a WHPA-**D** with a vulnerability score of 6, an HVA with a vulnerability score of 6, an SGRA, and a WHPA-**E** with a vulnerability score of 6.3. The draft report should also be updated to use the most up-to-date mapping, replacing figures 7, 8, and 9 with current vulnerable area boundaries, as shown in SPIA. Additionally, the proponent should provide a general summary of associated activities that may pose a risk to sources of drinking water, such as fuel storage, and include subsequent mitigation measures in "Section 9.0: Potential Environmental Impacts and Proposed Mitigation."

The proponent should also determine if any other types of drinking water systems could be affected during the construction or operation of the project that is not explicitly addressed in source protection plans, such as private systems – individual or clusters, and designated facilities within the meaning of O. Reg. 170/03 under the *Safe Drinking Water Act* – i.e., camps, schools, health care facilities, seasonal users, etc. The proponent should contact the Long Point Region Conservation Authority to get the most up-to-date GIS files for their mapping. The Long Point Region Conservation Authority functions as the source protection authority under the Clean Water Act.

Species at Risk

5. It is the responsibility of the proponent to ensure that Species at Risk are not killed, harmed, or harassed, and that their habitat is not damaged or destroyed through the proposed activities to be carried out on the site. If the proposed activities cannot avoid impacting

protected species and their habitats, then the proponent will need to apply for an authorization under the Endangered Species Act (ESA). If the proponent believes that their proposed activities are going to have an impact or are uncertain about the impacts, they should contact SAROntario@ontario.ca to undergo a formal review under the ESA.

Permits and Approvals

6. Section 9.5 of the Report indicates that dewatering may be required for the anticipated construction activities associated with the proposed booster pumping station and the elevated tower areas. Please note that any water extraction over 50,000 L/day will require MECP approval(s) under the *Environmental Protection Act* and *Ontario Water Resource Act*, such as a Permit to Take Water (PTTW). Certain water taking activities that have been prescribed by the Water Taking Regulation O. Reg. 63/16 may require registration in the Environmental Activity and Sector Registry instead of a PTTW. More information regarding PTTW is accessible online at this link: www.ontario.ca/page/water-taking-and-transfer-user-guide-clarifications-and-exemptions. The ministry recommends that any potential approval requirements for water taking or discharge be identified in the Report, such as in section 10.0 where other approvals are discussed.

Others:

7. Please note my office's address in the consultation contact list is incorrect. Please see correct address below

   Ministry of the Environment, Conservation and Parks
   West Central Region
   119 King St. W., 12th Flr
   Hamilton, ON L8P 4Y7

Thank you for circulating this Report for the ministry's consideration. Please document the receipt of this Project Review Unit Comments letter in the final report. We look forward to receiving a written response from County to address our comments provided above.

Should you or any members of your project team have any questions regarding the material above, please contact me at joan.delvillarcuicas@ontario.ca.

Sincerely,



Joan Del Villar Cuicas

Regional Environmental Planner
Project Review Unit, Environmental Assessment Branch
Ontario Ministry of the Environment, Conservation and Parks

Cc: Paula Hohner, Senior Environmental Planner, Stantec

Indigenous / First Nation Engagement

Contact	Date	Comment	Draft Response/ Status
Indigenous			
Six Nations of the Grand River Chief Mark Hill – markhill@sixnations.ca Robbin Vanstone – rvanstone@sixnations.ca Lonny Bomberry – lonnybomberry@sixnations.ca Lily-Anne Mt. Pleasant – HFCO@sixnations.ca Dawn Laforme – dlaforme@sixnations.ca Christopher Mahon – politicaladvisor@sixnations.ca Tammy Martin – tammymartin@sixnations.ca	NOSC July 13, 2022 Email		**Email Sent July 13, 2022:** Please find the attached Notice of Study Commencement for the Norfolk County (County) Simcoe- Townsend Water Supply System, Municipal Class Environmental Assessment (EA). The County has initiated the EA to implement an approximately 20km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. This study is being undertaken in accordance with the requirements for Schedule ‘B’ projects within the Municipal Class EA document (2000, as amended), under the Ontario Environmental Assessment Act. If you would like more information about the study, or would like to be added to the contact list to receive future notices, please contact a member of the project team.
	PIC 1 July 25, 2022 Email		**Email Sent July 25, 2022:** Please find the attached Notice of Public Information Centre (PIC) 1 for the Norfolk County (County), Simcoe-Townsend Water Supply System, Municipal Class Environmental Assessment (EA). The County has initiated the EA to implement an approximately 20km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. The first PIC will be held in-person at the Norfolk County Administration Building Council Chambers (50 Colborne St S, Simcoe, ON) on Thursday, August 4, 2022 from 5:00pm to 7:00pm. PIC materials will also be available on the County’s website for your review on August 4, 2022. County’s Website: https://engagenorfolk.ca Please contact a member of the project team identified on the attached Notice if you have any questions, comments or concerns.
	PIC2 October 27, 2022 Email		**Email Sent October 27, 2022:** Please find the attached Notice of Public Information Centre (PIC) 2 for the Norfolk County (County), Simcoe-Townsend Water Supply System, Municipal Class Environmental Assessment (EA). The County has initiated the EA to implement an approximately 20km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. The PIC will be held in-person at the Norfolk County Administration Building Council Chambers (50 Colborne St S, Simcoe, ON) on Tuesday, November 8, 2022 from 5:00pm to 7:00pm. PIC materials will also be available on the County’s website for your review on November 8, 2022.

			County’s Website: https://engagenorfolk.ca Please contact a member of the project team identified on the attached Notice if you have any questions, comments or concerns
	November 7, 2022 Email		**Email Sent November 7, 2022:** I just wanted to send a reminder about the upcoming PIC for the Simcoe-Townsend Water Supply System EA being hosted by Norfolk County on November 8th. The presentation materials are now available online on the project website: Simcoe-Townsend Water Supply System —Municipal Class Environmental Assessment | Engage Norfolk If you have any questions regarding the study, please don’t hesitate to reach out. If you would like to arrange a meeting with Norfolk County to discuss the project in more detail, please provide a few times and dates which you would be available.
	November 16, 2022 Phone Call/ Email	**Phone Call November 16, 2022:** Discussed the Six Nations of the Grand River’s interest in holding a meeting to discuss this project in greater detail. They noted they would follow up by email. **November 16, 2022:** On behalf of Six Nations of the Grand River Elected Council Lands and Resources Department Consultation and Accommodation Process (CAP) Team we are available to meet: Tuesday, December 13th 2pm Thursday, December 15th 2pm Friday, December 16th 10am Please advise what works best for you and your Team for an in-person or virtual meeting at your earliest convenience. If your preference is virtual please send an invitation to confirm. Thanking you in advance. Have a great day!	**November 16, 2022:** Thank you for providing availability to meet with the Simcoe-Townsend Water Supply EA project team. We will arrange for a virtual meeting on Tuesday, December 13th, at 2:00pm. I will send out the meeting invitation shortly to secure the time and date! Please feel free to forward the invitation to your colleagues as necessary.
	December 13, 2022 Meeting	**A Meeting was held over Microsoft Teams on December 13, 2022. Minutes are appended.**	
	NOSC (completion)		
Mississaugas of the Credit First Nation Chief Stacey LaForme – Stacey.laforme@mncfn.ca Abby LaForme – Abby.laforme@mncfn.ca Adam LaForme – adam.laforme@mncfn.ca Mark Laforme – mark.laforme@mncfn.ca	NOSC July 13, 2022 Email		**Email Sent July 13, 2022:** Please find the attached Notice of Study Commencement for the Norfolk County (County) Simcoe- Townsend Water Supply System, Municipal Class Environmental Assessment (EA). The County has initiated the EA to implement an approximately 20km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. This study is being undertaken

			in accordance with the requirements for Schedule ‘B’ projects within the Municipal Class EA document (2000, as amended), under the Ontario Environmental Assessment Act. If you would like more information about the study, or would like to be added to the contact list to receive future notices, please contact a member of the project team.
	July 15, 2022 Email	My name is Abby LaForme, the Acting Consultation Coordinator for the Mississaugas of the Credit First Nation (MCFN), Department of Consultation and Accommodation (DOCA). I have been with MCFN DOCA for the last 3 years and have worked closely with Fawn Sault. So with that, I am very familiar with the consultation process. I have a question concerning Archaeology. Is there a study going to be conducted? If so, please contact our Archaeological Operations Supervisor Adam LaForme, who will give you the information needed for MCFN DOCA involvement. I am also interested in reviewing the Municipal Class EA study when complete.	
	PIC 1 July 25, 2022 Email		**Email Sent July 25, 2022:** Please find the attached Notice of Public Information Centre (PIC) 1 for the Norfolk County (County), Simcoe-Townsend Water Supply System, Municipal Class Environmental Assessment (EA). The County has initiated the EA to implement an approximately 20km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. The first PIC will be held in-person at the Norfolk County Administration Building Council Chambers (50 Colborne St S, Simcoe, ON) on Thursday, August 4, 2022 from 5:00pm to 7:00pm. PIC materials will also be available on the County’s website for your review on August 4, 2022. County’s Website: https://engagenorfolk.ca Please contact a member of the project team identified on the attached Notice if you have any questions, comments or concerns.
	PIC2 October 27, 2022 Email		**Email Sent October 27, 2022:** Please find the attached Notice of Public Information Centre (PIC) 2 for the Norfolk County (County), Simcoe-Townsend Water Supply System, Municipal Class Environmental Assessment (EA). The County has initiated the EA to implement an approximately 20km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station.

			The PIC will be held in-person at the Norfolk County Administration Building Council Chambers (50 Colborne St S, Simcoe, ON) on Tuesday, November 8, 2022 from 5:00pm to 7:00pm. PIC materials will also be available on the County’s website for your review on November 8, 2022. County’s Website: https://engagenorfolk.ca Please contact a member of the project team identified on the attached Notice if you have any questions, comments or concerns
	October 27, 2022 Email	Thank you for reaching out to MCFN DOCA for Consultation. MCFN DOCA is interested in meeting with you Virtually, to hear more about the Norfolk County, Simcoe-Townsend Water Supply System EA Project. We have availability Nov. 8th, 9th- 9am-2pm, 10th-1pm-4pm, 15th Please let me know if any of these dates and times work for you and your team.	**Email Response October 31, 2022:** Thank you for your email! We will be happy to meet virtually with MCFN to discuss the project in greater detail. November 10th, at 2:30pm would work well for Norfolk County and Stantec. If you can please confirm that this time will still work for your team, I will send over a meeting invitation shortly!
	November 10, 2022 Meeting	**A Meeting was held over Microsoft Teams on November 10, 2022. Minutes are appended.**	
	NOSC (completion)		
Haudenosaunsee Confederacy Chiefs Council Leroy Hill 1749resource@gmail.com info@hdi.land	NOSC July 13, 2022 Email		**Email Sent July 13, 2022:** Please find the attached Notice of Study Commencement for the Norfolk County (County) Simcoe- Townsend Water Supply System, Municipal Class Environmental Assessment (EA). The County has initiated the EA to implement an approximately 20km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. This study is being undertaken in accordance with the requirements for Schedule ‘B’ projects within the Municipal Class EA document (2000, as amended), under the Ontario Environmental Assessment Act. If you would like more information about the study, or would like to be added to the contact list to receive future notices, please contact a member of the project team.
	PIC 1 July 25, 2022 Email		**Email Sent July 25, 2022:** Please find the attached Notice of Public Information Centre (PIC) 1 for the Norfolk County (County), Simcoe-Townsend Water Supply System, Municipal Class Environmental Assessment (EA). The County has initiated the EA to implement an approximately 20km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station. The first PIC will be held in-person at the Norfolk County Administration Building Council Chambers (50 Colborne St S, Simcoe, ON) on Thursday, August 4, 2022 from 5:00pm to 7:00pm. PIC materials will also be available on the County’s website for your review on August 4, 2022.

			County’s Website: https://engagenorfolk.ca Please contact a member of the project team identified on the attached Notice if you have any questions, comments or concerns.
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	NOSC (completion)		

From:	Abby LaForme
To:	Lang, Sarah
Cc:	Mariana Balaban; Hohner, Paula; Kalra, Jitin; Choi, Joon; Mark LaForme; Adam LaForme
Subject:	RE: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA
Date:	Monday, October 31, 2022 2:56:33 PM

Good Afternoon Sarah,

November 10th at 2:30m works well for our team.

Than you for setting this up!

Abby (LaForme) Lee
Acting Consultation Coordinator

Mississaugas of the Credit First Nation (MCFN)
Department of Consultation & Accommodation (DOCA)
4065 Highway 6, Hagersville, ON N0A 1H0
Ph: (905) 768 – 4260
Email: Abby.LaForme@mncfn.ca

From: Lang, Sarah <Sarah.Lang@stantec.com>
Sent: Monday, October 31, 2022 2:29 PM
To: Abby LaForme <Abby.LaForme@mncfn.ca>
Cc: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; Hohner, Paula <Paula.Hohner@stantec.com>; Kalra, Jitin <Jitin.Kalra@stantec.com>; Choi, Joon <Joon.Choi@stantec.com>; Mark LaForme <Mark.LaForme@mncfn.ca>; Adam LaForme <Adam.LaForme@mncfn.ca>
Subject: RE: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA

Hello Abby,

Thank you for your email! We will be happy to meet virtually with MCFN to discuss the project in greater detail.

November 10th, at 2:30pm would work well for Norfolk County and Stantec. If you can please confirm that this time will still work for your team, I will send over a meeting invitation shortly!

Thank you,

Sarah Lang
Environmental Planner
sarah.lang@stantec.com
Direct: 519-432-4292

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Please consider the environment before printing this email.

From: Abby LaForme <Abby.LaForme@mncfn.ca>
Sent: Thursday, October 27, 2022 2:21 PM
To: Lang, Sarah <Sarah.Lang@stantec.com>
Cc: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; Kalra, Jitin <Jitin.Kalra@stantec.com>; Choi, Joon <Joon.Choi@stantec.com>; Mark LaForme <Mark.LaForme@mncfn.ca>; Adam LaForme <Adam.LaForme@mncfn.ca>
Subject: RE: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA

Good Afternoon Sarah,

Thank you for reaching out to MCFN DOCA for Consultation.
MCFN DOCA is interested in meeting with you Virtually, to hear more about the Norfolk County, Simcoe-Townsend Water Supply System EA Project.
We have availability Nov. 8th, 9th- 9am-2pm, 10th-1pm-4pm, 15th
Please let me know if any of these dates and times work for you and your team.

Thank you

Abby (LaForme) Lee
Acting Consultation Coordinator

Mississaugas of the Credit First Nation (MCFN)
Department of Consultation & Accommodation (DOCA)
4065 Highway 6, Hagersville, ON N0A 1H0
Ph: (905) 768 – 4260
Email: Abby.LaForme@mncfn.ca

From: Lang, Sarah <Sarah.Lang@stantec.com>
Sent: Thursday, October 27, 2022 9:28 AM
Cc: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; Kalra, Jitin <Jitin.Kalra@stantec.com>; Choi, Joon <Joon.Choi@stantec.com>
Subject: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA

Hello,

Please find the attached Notice of Public Information Centre (PIC) 2 for the Norfolk County (County), Simcoe-Townsend Water Supply System, Municipal Class Environmental Assessment (EA). The County has initiated the EA to implement an approximately 20km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water Treatment Plant, including a new elevated water tank and booster station.

The PIC will be held in-person at the **Norfolk County Administration Building Council Chambers (50 Colborne St S, Simcoe, ON) on Tuesday, November 8, 2022 from 5:00pm to 7:00pm**. PIC materials will also be available on the County's website for your review on November 8, 2022.

County's Website: https://engagenorfolk.ca

Please contact a member of the project team identified on the attached Notice if you have any questions, comments or concerns

Thank you,

Sarah Lang
Environmental Planner
sarah.lang@stantec.com

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From: Lang, Sarah
To: Dawn Russell
Cc: Hohner, Paula; Kalra, Jitin; Mariana Balaban
Subject: RE: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA
Date: Wednesday, November 16, 2022 1:58:00 PM
Attachments: image001.png

Hello Dawn,

Thank you for providing availability to meet with the Simcoe-Townsend Water Supply EA project team. We will arrange for a virtual meeting on Tuesday, December 13th, at 2:00pm.

I will send out the meeting invitation shortly to secure the time and date! Please feel free to forward the invitation to your colleagues as necessary.

Thank you!

Sarah Lang
Environmental Planner
sarah.lang@stantec.com
Direct: 519-432-4292

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From: Dawn Russell <dawnrussell@sixnations.ca>
Sent: Wednesday, November 16, 2022 8:24 AM
To: Lang, Sarah <Sarah.Lang@stantec.com>
Subject: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA

Good morning Sarah,

On behalf of Six Nations of the Grand River Elected Council Lands and Resources Department Consultation and Accommodation Process (CAP) Team we are available to meet:

Tuesday, December 13th 2pm
Thursday, December 15th 2pm
Friday, December 16th 10am

Please advise what works best for you and your Team for an in-person or virtual meeting at your earliest convenience. If your preference is virtual please send an invitation to confirm. Thanking you in advance.

Have a great day!

Dawn Russell

Consultation Administrative Assistant

Six Nations of the Grand River Lands and Resources

dawnrussell@sixnations.ca

519-753-0665



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From:	Marie-Annick Prevost
To:	Lang, Sarah
Cc:	Mariana Balaban; Simmons, Caitlin; Hohner, Paula; Kalra, Jitin; Adam LaForme
Subject:	RE: Norfolk County, Simcoe-Townsend Water Supply EA - Stage 1 AA Report, Signed Agreement
Date:	Wednesday, December 14, 2022 4:25:34 PM
Attachments:	image001.png

Aanii Sarah,

On behalf of the Mississaugas of the Credit First Nation, Department of Consultation and Accommodation, I reviewed the Stage 1 Archaeological Assessment report prepared by Stantec for the Simcoe-Townsend Water Supply EA.

I currently do not have questions or comments about the content of the report and the recommendations within it.

We look forward to collaborating with you on this project.
Miigwech,

Marie-Annick Prevost, Ph.D. (she/her)
Field archaeologist
Mississaugas of the Credit First Nation (MCFN)
Department of Consultation and Accommodation (DOCA)
4065 Highway 6 North, Hagersville, ON N0A 1H0
Cell: 905-870-5844

From: Lang, Sarah <Sarah.Lang@stantec.com>
Sent: Wednesday, December 14, 2022 11:44 AM
To: Adam LaForme <Adam.LaForme@mncfn.ca>
Cc: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; Simmons, Caitlin <Caitlin.Simmons@stantec.com>; Hohner, Paula <Paula.Hohner@stantec.com>; Kalra, Jitin <Jitin.Kalra@stantec.com>; Mark LaForme <Mark.LaForme@mncfn.ca>; Abby LaForme <Abby.LaForme@mncfn.ca>
Subject: Norfolk County, Simcoe-Townsend Water Supply EA - Stage 1 AA Report, Signed Agreement

Good Morning Adam,

Please find the attached draft Stage 1 Archaeological Assessment for your review, along with the signed MCFN FLR Participation Agreement (completed and signed by the County).

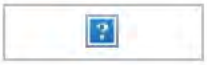
We are still targeting Monday, December 19th for the Stage 2 Archaeological Assessment to be completed at both the Booster Pumping Station and Elevated Water Tank locations. Caitlin Simmons from Stantec Consulting Ltd. is the Project Archaeologist who will be conducting the fieldwork, and has been copied on this email. Her contact information is also included in the Participation Agreement, listed as the Field Coordinator. The ability to complete the fieldwork will be dependent on weather cooperation; we will continue to keep you updated throughout the week if we anticipate any changes.

Please don't hesitate to reach out if you have any questions or concerns!

Thank you,

Sarah Lang
Environmental Planner
sarah.lang@stantec.com
Direct: 519-432-4292

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Atención: Este correo electrónico proviene de fuera de Stantec. Por favor, tome precauciones adicionales.

From:	Lang, Sarah
To:	Adam LaForme
Cc:	Mariana Balaban; Simmons, Caitlin; Hohner, Paula; Kalra, Jitin; Mark LaForme; Abby LaForme
Subject:	Norfolk County, Simcoe-Townsend Water Supply EA - Stage 1 AA Report, Signed Agreement
Date:	Wednesday, December 14, 2022 11:43:00 AM
Attachments:	IUWS Phase 1 - MCFN FLR Participation Agreement Norfolk.pdf dft_P1060-0132-2022_14Dec2022_RE.pdf

---

Good Morning Adam,

Please find the attached draft Stage 1 Archaeological Assessment for your review, along with the signed MCFN FLR Participation Agreement (completed and signed by the County).

We are still targeting Monday, December 19th for the Stage 2 Archaeological Assessment to be completed at both the Booster Pumping Station and Elevated Water Tank locations. Caitlin Simmons from Stantec Consulting Ltd. is the Project Archaeologist who will be conducting the fieldwork, and has been copied on this email. Her contact information is also included in the Participation Agreement, listed as the Field Coordinator. The ability to complete the fieldwork will be dependent on weather cooperation; we will continue to keep you updated throughout the week if we anticipate any changes.

Please don't hesitate to reach out if you have any questions or concerns!

Thank you,

Sarah Lang
Environmental Planner
sarah.lang@stantec.com
Direct: 519-432-4292

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From:	Lang, Sarah
To:	Tanya Hill-Montour
Subject:	FW: Norfolk County, Simcoe-Townsend Water Supply EA - Stage 1 AA, Arch Monitor Agreement
Date:	Tuesday, January 17, 2023 1:20:00 PM
Attachments:	2022 Arch Monitor Agreement for One Monitor_Norfolk County.pdf RE Archaeological Assessment.msg dft_P1060-0132-2022_14Dec2022_RE.pdf

---

Good Afternoon Tanya,

I am just following up on my email below regarding your review of the Stage 1 Archaeological Assessment Report for the Simcoe-Townsend Water Supply EA. Do you have any comments or concerns on the draft report? If none, we will proceed with submitting the report to MCM.

Thank you!

Sarah Lang
Environmental Planner
sarah.lang@stantec.com
Direct: 519-432-4292

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From: Lang, Sarah
Sent: Wednesday, December 14, 2022 11:53 AM
To: Tanya Hill-Montour <tanyahill-montour@sixnations.ca>
Cc: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; Hohner, Paula <Paula.Hohner@stantec.com>; Kalra, Jitin <Jitin.Kalra@stantec.com>; Simmons, Caitlin <Caitlin.Simmons@stantec.com>; LRCS@sixnations.ca
Subject: Norfolk County, Simcoe-Townsend Water Supply EA - Stage 1 AA, Arch Monitor Agreement

Good Morning Tanya,

Please find the attached draft Stage 1 Archaeological Assessment for your review, along with the Arch Monitor Agreement (completed and signed by the County, per Mariana's attached email).

We are still targeting Monday, December 19th for the Stage 2 Archaeological Assessment to be completed at both the Booster Pumping Station and Elevated Water Tank locations. Caitlin Simmons from Stantec Consulting Ltd. is the Project Archaeologist who will be conducting the fieldwork, and has been copied on this email. The ability to complete the fieldwork will be dependent on weather cooperation; we will continue to keep you updated throughout the week if we anticipate any changes.

Please don't hesitate to reach out if you have any questions or concerns!

Thank you,

Sarah Lang
Environmental Planner
sarah.lang@stantec.com
Direct: 519-432-4292

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Please consider the environment before printing this email.

From:	Lang, Sarah
To:	"Abby LaForme"; Mark LaForme; Adam LaForme
Cc:	Kalra, Jitin; Hohner, Paula; Mariana Balaban
Subject:	RE: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA
Date:	Thursday, November 24, 2022 4:20:00 PM
Attachments:	mtg_30226_MCFN_final_20221115.pdf

Good Afternoon,

Please find the attached minutes from the November 10th meeting with Norfolk County regarding the Simcoe-Townsend Water Supply System EA.

Please let me know if there are any questions or concerns.

Thank you!

Sarah Lang
Environmental Planner
sarah.lang@stantec.com
Direct: 519-432-4292

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From: Abby LaForme <Abby.LaForme@mncfn.ca>
Sent: Thursday, November 10, 2022 1:32 PM
To: Lang, Sarah <Sarah.Lang@stantec.com>
Cc: Mark LaForme <Mark.LaForme@mncfn.ca>
Subject: RE: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA

Hey Sarah,

I was thinking along these lines.
Introductions, have you and your team do a run-through of the project and we can have an open discussion.

Thank you for reaching out.

Abby (LaForme) Lee
Acting Consultation Coordinator

Mississaugas of the Credit First Nation (MCFN)
Department of Consultation & Accommodation (DOCA)
4065 Highway 6, Hagersville, ON N0A 1H0
Ph: (905) 768 – 4260
Email: Abby.LaForme@mncfn.ca

From: Lang, Sarah <Sarah.Lang@stantec.com>
Sent: Thursday, November 10, 2022 12:10 PM
To: Abby LaForme <Abby.LaForme@mncfn.ca>
Subject: RE: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA

Hi Abby,

I just wanted to reach out to you ahead of this afternoons meeting to make sure we're on the same page. Are you hoping to have us run through the project details, or does your team have a certain approach to the meeting that you would like to follow?

We're happy to follow whichever approach works best for you, just let me know!

Thank you,

Sarah Lang
Environmental Planner
sarah.lang@stantec.com
Direct: 519-432-4292

Stantec

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From: Abby LaForme <Abby.LaForme@mncfn.ca>
Sent: Monday, October 31, 2022 2:56 PM
To: Lang, Sarah <Sarah.Lang@stantec.com>
Cc: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; Hohner, Paula <Paula.Hohner@stantec.com>; Kalra, Jitin <Jitin.Kalra@stantec.com>; Choi, Joon <Joon.Choi@stantec.com>; Mark LaForme <Mark.LaForme@mncfn.ca>; Adam LaForme <Adam.LaForme@mncfn.ca>
Subject: RE: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA

Good Afternoon Sarah,

November 10th at 2:30m works well for our team.

Than you for setting this up!

Abby (LaForme) Lee
Acting Consultation Coordinator

Mississaugas of the Credit First Nation (MCFN)
Department of Consultation & Accommodation (DOCA)
4065 Highway 6, Hagersville, ON N0A 1H0
Ph: (905) 768 – 4260
Email: Abby.LaForme@mncfn.ca

From: Lang, Sarah <Sarah.Lang@stantec.com>
Sent: Monday, October 31, 2022 2:29 PM
To: Abby LaForme <Abby.LaForme@mncfn.ca>
Cc: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; Hohner, Paula <Paula.Hohner@stantec.com>; Kalra, Jitin <Jitin.Kalra@stantec.com>; Choi, Joon <Joon.Choi@stantec.com>; Mark LaForme <Mark.LaForme@mncfn.ca>; Adam LaForme <Adam.LaForme@mncfn.ca>
Subject: RE: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA

Hello Abby,

Thank you for your email! We will be happy to meet virtually with MCFN to discuss the project in greater detail.

November 10th, at 2:30pm would work well for Norfolk County and Stantec. If you can please confirm that this time will still work for your team, I will send over a meeting invitation shortly!

Thank you,

Sarah Lang
Environmental Planner
sarah.lang@stantec.com
Direct: 519-432-4292

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From: Abby LaForme <Abby.LaForme@mncfn.ca>
Sent: Thursday, October 27, 2022 2:21 PM
To: Lang, Sarah <Sarah.Lang@stantec.com>
Cc: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; Kalra, Jitin <Jitin.Kalra@stantec.com>; Choi, Joon <Joon.Choi@stantec.com>; Mark LaForme <Mark.LaForme@mncfn.ca>; Adam LaForme <Adam.LaForme@mncfn.ca>
Subject: RE: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA

Good Afternoon Sarah,

Thank you for reaching out to MCFN DOCA for Consultation.
MCFN DOCA is interested in meeting with you Virtually, to hear more about the Norfolk County, Simcoe-Townsend Water Supply System EA Project.
We have availability Nov. 8th, 9th- 9am-2pm, 10th-1pm-4pm, 15th
Please let me know if any of these dates and times work for you and your team.

Thank you

Abby (LaForme) Lee
Acting Consultation Coordinator

Mississaugas of the Credit First Nation (MCFN)
Department of Consultation & Accommodation (DOCA)
4065 Highway 6, Hagersville, ON N0A 1H0
Ph: (905) 768 – 4260
Email: Abby.LaForme@mncfn.ca

From: Lang, Sarah <Sarah.Lang@stantec.com>
Sent: Thursday, October 27, 2022 9:28 AM
Cc: Mariana Balaban <Mariana.Balaban@norfolkcounty.ca>; Kalra, Jitin <Jitin.Kalra@stantec.com>; Choi, Joon <Joon.Choi@stantec.com>
Subject: Notice of Public Information Centre 2 - Norfolk County, Simcoe-Townsend Water Supply System EA

Hello,

Please find the attached Notice of Public Information Centre (PIC) 2 for the Norfolk County (County), Simcoe-Townsend Water Supply System, Municipal Class Environmental Assessment (EA). The County has initiated the EA to implement an approximately 20km length transmission watermain that connects Simcoe to the Townsend Water Supply System, to secure water supply from the Nanticoke Water

Treatment Plant, including a new elevated water tank and booster station.

The PIC will be held in-person at the **Norfolk County Administration Building Council Chambers (50 Colborne St S, Simcoe, ON) on Tuesday, November 8, 2022 from 5:00pm to 7:00pm**. PIC materials will also be available on the County's website for your review on November 8, 2022.

County's Website: https://engagenorfolk.ca

Please contact a member of the project team identified on the attached Notice if you have any questions, comments or concerns

Thank you,

Sarah Lang
Environmental Planner
sarah.lang@stantec.com

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Meeting Notes

Simcoe-Townsend Water Supply EA – Mississaugas of the Credit First Nation Meeting

Simcoe-Townsend Water Supply EA / 165630226

Date/Time:	November 10, 2022 / 2:30 PM	
Place:	Microsoft Teams	
Attendees:	Mariana Balaban	Project Director, Norfolk County
	Abby LaForme	Acting Consultation Coordinator, MCFN
	Mark LaForme	Director of Consultation, MCFN
	Adam LaForme	Director of Archaeology, MCFN
	Jitin Kalra	Project Manager, Stantec
	Paula Hohner	Senior Environmental Planner, Stantec
	Sarah Lang	Environmental Planner, Stantec
Distribution:	Attendees	

Item:	Action:
Introductions were completed for those on the call.	
Mississaugas of the Credit First Nation (MCFN) provided background on their community and treaty lands in Ontario. A map was presented and is appended to these minutes. MCFN noted they hold a treaty for the lands identified in the study area. MCFN functions as a government body, not as a stakeholder in projects. MCFN prefers information on projects to be presented in meetings, not through PICs.	
While MCFN's main focus and involvement in the study will be regarding archaeological sites and areas of archaeological potential, there is still an interest in receiving all environmental reports for this project (e.g., water, groundwater, species at risk, etc.). MCFN is not interested in reviewing the design documents.	
MCFN would like to review the draft Stage 1 Archaeological Assessment (AA) Report once completed, and prior to submission to the Ministry of Citizenship and Multiculturism (MCM). If a Stage 2 Archaeological Assessment is required, MCFN would like to be involved and participate in the fieldwork. MCFN noted they have approximately 36 Field Liaison Representatives (FLR's) staff to participate in archaeological assessments, with potential to have up to 50 FLR's at a time. Norfolk County and MCFN would enter into an agreement for this.	
The County provided an overview of the Inter-Urban Water Supply (IUWS) System, explaining the purpose of the IUWS and the proposed future community connections. The County explained that the first phase of the IUWS program is the Simcoe-Townsend Water Supply study.	
The project team then presented specifically about the Simcoe-Townsend EA study for the booster pumping station location and the elevated tower location.	
MCFN advised that the project should proceed with the Stage 1 AA on booster pumping station locations 1 and 3, prior to purchasing the lands. The County agreed, and Stantec	Stantec

Item:	Action:
is coordinating the Stage 1 AA. Norfolk County to engage MCFN representative (FLR) during the Stage 2 AA. MCFN advised that no groundwork should be completed prior to the Stage 2 AA. Following the meeting, MCFN emailed the County to provide their DOCA's Consultation process documentation.	

The meeting adjourned at 3:30 PM

The foregoing is considered to be a true and accurate record of all items discussed. If any discrepancies or inconsistencies are noted, please contact the writer immediately.

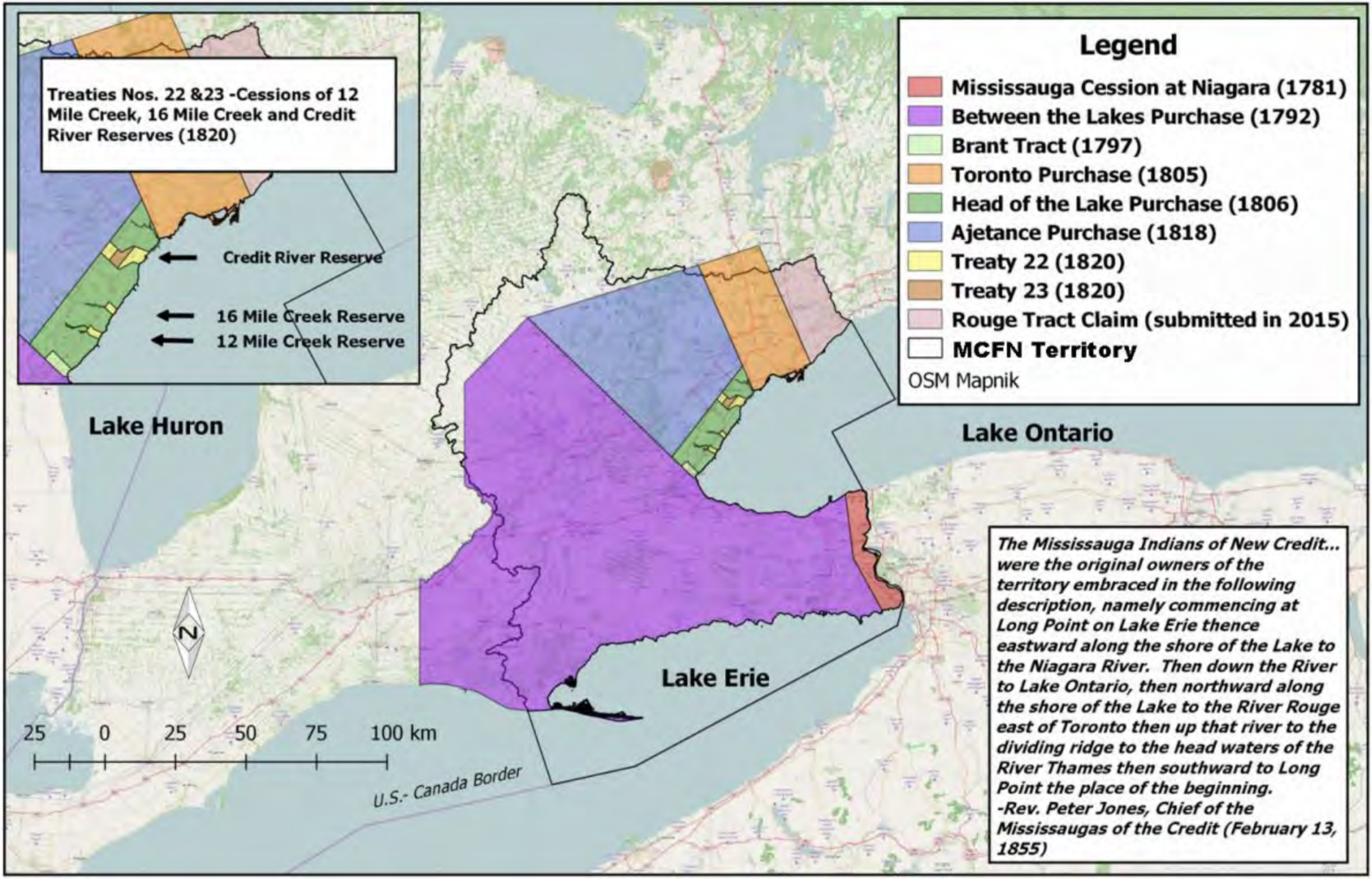
Stantec Consulting Ltd.



Sarah Lang
Environmental Planner

Phone: 519-432-4292
Fax: Fax Number
sarah.lang@stantec.com

Attachment: Attachment



Mississaugas of the Credit First Nation Land Cessions 1781-1820 and Rouge Tract Claim, 2015

From:	Lang, Sarah
To:	tayler.hill@sixnations.ca; laurenjones@sixnations.ca; LRCS@sixnations.ca; daylongee@sixnations.ca; lonnybomberry@sixnations.ca; Tanya Hill-Montour; philmonture@sixnations.ca
Cc:	Mariana Balaban; Kalra, Jitin; Hohner, Paula
Subject:	Simcoe-Townsend Water Supply System - December 14th Meeting Minutes
Date:	Wednesday, December 14, 2022 10:32:00 AM
Attachments:	mtg_30226_SNGR_fnl_20221213.pdf

Hello,

Please see the attached minutes from yesterday's meeting with Norfolk County, regarding the Simcoe-Townsend Water Supply System study. Please don't hesitate to let me know if you have any questions or concerns with these.

Thank you,

Sarah Lang
Environmental Planner
sarah.lang@stantec.com
Direct: 519-432-4292

Stantec





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Please consider the environment before printing this email.

Meeting Notes

Simcoe-Townsend Water Supply EA – Six Nations of the Grand River Meeting

Simcoe-Townsend Water Supply EA / 165630226

Date/Time:	December 13, 2022 / 2:00 PM	
Place:	Microsoft Teams	
Attendees:	Mariana Balaban	Project Director, Norfolk County
	Peter Graham	Consultation Supervisor, Six Nations of the Grand River
	Daylon Gee	Land Use, Six Nations of the Grand River
	Tanya Hill-Montour	Archaeology Supervisor, Six Nations of the Grand River
	Phil Monture	Treaty Rights, Six Nations of the Grand River
	Lauren Jones	Wildlife and Stewardship, Six Nations of the Grand River
	Tayler Hill	Six Nations of the Grand River
	Lonny Bomberry	Director of Lands and Resources, Six Nations of the Grand River
	Jitin Kalra	Project Manager, Stantec
	Sarah Lang	Environmental Planner, Stantec
Distribution:	Attendees	

Item:	Action:
Introductions were completed for those on the call. The County provided an overview of the Inter-Urban Water Supply (IUWS) program, explaining the purpose of the IUWS system and the proposed future phases for Norfolk community connections. The County explained that the first phase of the IUWS program is the Simcoe-Townsend Water Supply study. The project team then presented information specifically about the Simcoe-Townsend EA study for the booster pumping station location and the elevated tower location. Six Nations of the Grand River (SNGR) would like to review the draft Stage 1 Archaeological Assessment (AA) Report prior to submission to the Ministry of Citizenship and Multiculturism (MCM). The project team advised that a Stage 2 Archaeological Assessment is required, and is tentatively scheduled for December 19th, 2022. SNGR would like to be involved and participate in the fieldwork, sending Field Liaison Representatives (FLR's). Norfolk County and SNGR will enter into an agreement for SNGR review and participation. Stantec to provide updates on the tentative date of December 19, 2022 for the Stage 2 AA throughout the week of December 12th. SNGR agreed that no groundwork (boreholes drilling for geotechnical investigation) should be completed prior to Stage 2 AA. Previously disturbed land (e.g. former road at the elevated tank site by the Delhi trail) must be field-verified prior to drilling as part of the Stage 2 AA.	Stantec Stantec/County

Item:	Action:
SNGR noted that the project should consider mitigation measures for impacts to all types of wildlife, and encourages naturalization following construction. Stantec confirmed that the class EA report includes wildlife protection and mitigation measures as part of the impact assessment on the natural environment. SNGR would like to review the geotechnical report once complete. In regards to contacts at SNGR, Peter Graham is the contact for consultation matters, and Tanya Hill-Montour is the contact for Archaeology related matters. Following the meeting, SNGR emailed the County to provide their DOCA's Consultation process documentation.	

The meeting adjourned at 3:00 PM

The foregoing is considered to be a true and accurate record of all items discussed. If any discrepancies or inconsistencies are noted, please contact the writer immediately.

Stantec Consulting Ltd.

Sarah Lang
Environmental Planner

Phone: 519-432-4292
sarah.lang@stantec.com

Appendix B Stage 1 Archaeological Assessment

STAGE 1 ARCHAEOLOGICAL ASSESSMENT: SIMCOE-TOWNSEND WATER SUPPLY SYSTEM

Part of Lots 6 and 7, Concession 13, and Lot 6, Concession 14, Township of Windham, and Lot 13, Concession 12, Township of Townsend, Norfolk County, Ontario

February 9, 2023

Prepared for:
Norfolk County, Environmental and Infrastructure Services Division
185 Robinson Street
Simcoe, Ontario N3Y 5L6

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

Licensee: Caitlin Simmons, M.Sc.
License Number: P1060
Project Information Form Number:
P1060-0132-2022

Project Number: 165630226

ORIGINAL REPORT

Limitations and Sign-off

The conclusions in the Report titled Stage 1 Archaeological Assessment: Simcoe-Townsend Water Supply System are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

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

This Report is intended solely for use by the Client in accordance with Stantec's contract with the Client. While the Report may be provided to applicable authorities having jurisdiction and others for whom the Client is responsible, Stantec does not warrant the services to any third party. The report may not be relied upon by any other party without the express written consent of Stantec, which may be withheld at Stantec's discretion.

Prepared by: Digitally signed by Avery, Creighton Date: 2023.02.13 08:52:35 -05'00'
Signature

Creighton Avery, Ph.D.
Printed Name

Reviewed by: Digitally signed by Colin Varley Date: 2023.02.09 09:43:54 -05'00'
Signature

Colin Varley, MA, RPA
Printed Name

Approved by: Dickson, Parker 2023.02.13 09:44:23 -05'00'
Signature

Parker Dickson, MA
Printed Name

Executive Summary

Stantec Consulting Ltd. (Stantec) was retained by Norfolk County to complete Stage 1 archaeological assessment for the proposed locations for an elevated tank and booster pumping station for the Simcoe-Townsend Water Supply System (the Project). The study area for the elevated tank comprises parts of Lots 6 and 7, Concession 13, and Lot 6, Concession 14, Geographic Township of Windham, and the study area for the booster pumping station is located in part Lot 13, Concession 12, Geographic Township of Townsend, Norfolk County, Ontario. The study area for the booster station is approximately 0.85 hectares, and the study area for the elevated tank is approximately 0.63 hectares. The total study area for the Project is approximately 1.48 hectares. The Stage 1 archaeological assessment was triggered by the planning and design process for 'Schedule B' projects outlined in the Municipal Class Environmental Assessment process under the Ontario *Environmental Assessment Act*.

The Stage 1 archaeological assessment for the study area was conducted under Project Information Form number P1060-0132-2022 issued to Caitlin Simmons, M.Sc., of Stantec, by the Ministry of Citizenship and Multiculturalism (MCM). The Stage 1 background research determined that portions of the study areas exhibit potential for the identification and recovery of archaeological resources. 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 required for the study area.** Full and detailed recommendations are provided in the body of the 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.

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Project Personnel

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Project Manager:	Jitin Kalra, P.Eng, PMP
Task Manager:	Caitlin Simmons, M.Sc. (P1060)
Report Writers:	Creighton Avery, Ph.D., Michael Moloney, Ph.D.
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Quality Review:	Colin Varley, MA, RPA (P002)
Independent Review:	Parker Dickson, MA (P256)

Acknowledgements

Norfolk County:	Mariana Balaban, P.Eng., Ph.D.
Ministry of Citizenship and Multiculturalism:	Robert von Bitter, Archaeological Data Coordinator

1.0 Project Context

1.1 Development Context

Stantec Consulting Ltd. (Stantec) was retained by Norfolk County to complete Stage 1 archaeological assessment for the proposed locations for an Elevated Tank and booster pumping station (Booster Station) for the Simcoe-Townsend Water Supply System (the Project). The study area for the Elevated Tank comprises parts of Lots 6 and 7, Concession 13, and Lot 6, Concession 14, Geographic Township of Windham, and the study area for the Booster Station is located in part of Lot 13, Concession 12, Geographic Township of Townsend, Norfolk County, Ontario (Figure 1). The Elevated Tank study area comprises approximately 0.63 hectares (ha) of scrubland between 14th Street West, Windham East Quarter Line Road, and the Delhi Rail Trail, a public walking path (Figure 2). The Booster Station study area comprises approximately 0.85 ha of agricultural fields, adjacent to the north side of Concession 13 Townsend (Figure 3). The total study area for the Project is approximately 1.48 ha. The Stage 1 archaeological assessment was triggered by the planning and design process for 'Schedule B' projects outlined in the Municipal Class Environmental Assessment process (June 2000, as amended in 2007, 2011, and 2015) under the Ontario *Environmental Assessment Act* (Government of Ontario 1990a).

1.1.1 Objectives

In compliance with the provincial standards and guidelines set out in the Ministry of Citizenship and Multiculturalism's (MCM's) 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the objectives of the Stage 1 archaeological assessment 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 assessments which have occurred within 50 metres of the study area.

Permission to enter the study area for the Stage 1 archaeological assessment was not required as a property inspection was not completed.

1.2 Historical Context

1.2.1 Post-contact Indigenous Resources

"Contact" is typically used as a chronological benchmark when discussing Indigenous archaeology in Canada and describes the contact between Indigenous and European cultures. The precise moment of contact is a constant matter of discussion. Contact in what is now the province of Ontario is broadly assigned to the 16th century (Loewen and Chapdelaine 2016). The post-contact Indigenous occupation of southern Ontario was heavily influenced by the dispersal of various Iroquoian-speaking communities by the New York State Iroquois and the subsequent arrival of Algonkian speaking groups from northern Ontario at the end of the 17th century and the beginning of the 18th century (Konrad 1981; Schmalz 1991). Thus, numerous Indigenous groups and communities are associated with the post-contact occupation of southern Ontario and the general area of the Project.

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

Around 1680, the Mississauga had begun moving south into the lower Great Lakes basin and began a counter-offensive against the Seneca (Mississaugas of the New Credit First Nation n.d; Konrad 1981; Rogers 1978). Mississauga oral traditions, as told by Chief Robert Paudash and recorded in 1904, indicate that after the Mississauga defeat of the Mohawk, who retreated to their homeland south of Lake Ontario, a peace treaty was negotiated between those groups. Upon the Mississaugas' return they decided to settle permanently in southern Ontario. These events occurred around 1695 (Praxis Research Associates n.d.). The Mississaugas' settled and inhabited a large area at the western end of Lake Ontario throughout the 1700s and into the 1800s. Between 1695 and the mid-1820s the Mississaugas' continued to follow a yearly cycle of resource harvest and movement throughout their southern Ontario territory (Praxis Research Associates n.d.).

With the end of the American Revolutionary War in 1783, the Six Nations Iroquois (Haudenosaunee) were forced to leave their traditional homeland in the New York State and elsewhere after the British failed to secure the needs of the Six Nations Iroquois in the 1783 Treaty of Paris and surrendered their land to the Americans (Hill 2017). The Six Nations Iroquois (Haudenosaunee) therefore moved into their previous hunting grounds of southern Ontario in land provided by the British who were presuming control

of the lands. The largest group settled in the Grand River valley near Brantford, Ontario, to become the Six Nations of the Grand River. The Indigenous economy from the turn of the 18th century focused on fishing and the fur trade, supplemented by agriculture and hunting.

Despite the differentiation among these groups in Euro-Canadian sources, there was a considerably different view by Indigenous groups concerning their self-identification during the first few centuries of European contact. These peoples relied upon kinship ties that cut across European notions of nation identity (Bohaker 2006:277-283). Many of the British-imposed nation names such as Chippewa, Ottawa, Potawatomi, or Mississauga artificially separated how self-identified Indigenous peoples' classified themselves; these groups were culturally and socially more alike than contemporary European documentation might indicate (Bohaker 2006:1-8).

The expansion of the fur trade led to increased interaction between European and Indigenous people, and ultimately intermarriage between European men and Indigenous women. During the 18th century the progeny of these marriages began to identify as Métis and no longer identified directly either their paternal or maternal cultures. The ethnogenesis of the Métis progressed with the establishment of distinct Métis communities along the major waterways in the Great Lakes of Ontario. Métis communities were primarily focused around the upper Great Lakes and along Georgian Bay, however Métis people have historically lived throughout Ontario (Métis Nation of Ontario 2022; Stone and Chaput 1978:607-608).

The study area falls within the historical and traditional territory of several Indigenous communities, including but not limited to: the Six Nations of the Grand River, the Mississaugas of the Credit First Nation (Mississaugas of the New Credit First Nation 2022), and the Haudenosaunee Confederacy. Since contact with European explorers and immigrants, and, later, with the establishment of provincial and federal governments (the Crown), the lands within Ontario 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 4. According to Morris (1943), the study area is situated within the described limits of the 1792 indenture of the 1784 Between the Lakes Purchase between the Crown and the Mississaugas, indicated with the letter "D". This treaty:

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

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

1.2.2 Euro-Canadian Resources

1.2.2.1 Norfolk County

European explorers first reached the territories of present-day Norfolk County in the 17th century. A Recollet father named De Laroche-Dallion and two Frenchmen travelled to meet the Neutral on October 23rd, 1626, visiting multiple villages during their stay (Owen 1898). Over the next 100 years, various explorers travelled through the territories and commented on the beauty and abundance of resources in the region but did not settle in the area (Owen 1898).

In 1791, the Provinces of Upper Canada and Lower Canada were created from the former Province of Quebec by an act of British Parliament. At this time, Colonel John Graves Simcoe was appointed as the Lieutenant-Governor of Upper Canada and was tasked with governing the new province, directing its settlement, and establishing a constitutional government modelled after that of Britain (Petryshyn 1985). 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 the Crown. These new counties stretched from Essex in the west to Glengarry in the east.

The County of Norfolk was described as a "section of unbroken wilderness stretching from the Grand River to the mouth of Catfish Creek" (Owen 1898:21). In 1798, however, Norfolk County was reduced in size, and contained the townships of Charlotteville, Houghton, Middleton, Rainham, Townsend, Walpole, Walsingham, Windham, and Woodhouse.

Like much of Ontario, European settlers were a mix of United Empire Loyalists fleeing a post-revolution United States and immigrants from Britain and other European countries. The largest settlement in Norfolk County, the Town of Simcoe, was first settled in 1795, when Lieutenant-Governor Simcoe gave land to Aaron Culver to build mills. By 1812, a small hamlet had formed around the mills named Birdtown and Queensway. During the War of 1812, the settlement was burned down by American forces. Between 1819 and 1823, Culver set out to build a new village, and called it Simcoe after the Lieutenant-Governor. The settlement quickly grew, becoming one of the most prominent communities in the county. By 1869, it had a population of 2,100 people

In 1837, Norfolk County was separated from the London District to form the Talbot District, which was later abolished in 1850 (Ontario Tax Assessment Rolls 1853, S.Prov.C 1849, c.78, Sch B.). In 1974, Norfolk merged with the County of Haldimand into the Regional Municipality of Haldimand-Norfolk. In 2001, the region split into two municipalities, roughly coinciding with the original county boundaries.

Between 1860 and 1880, industry focused on logging, but switched to agricultural production shortly after due to the nutrient rich soils which were beneficial for fruit production. Around the time of the First World War, the introduction of flue-cured tobacco dramatically increased the value of local crops, and today tobacco and small grains are key field crops.

1.2.2.2 Township of Windham

The Township of Windham was named after George Wyndham, 3rd Earl of Egremont, a distinguished statemen who promoted emigration from England to Canada by paying the passage fair for those living on his lands (Scadding 1876). The township was opened for settlement in 1792, and in 1794, Reverend Jabez Culver settled on Lot 1, Concession 12 of Windham, erecting the first log house in the township (Owen 1898). By 1817, there were 48 houses and 293 inhabitants (Middleton 1927), and by 1871, Windham had a recorded population of 4, 799, which decreased slightly, to 4,252 by 1891 (Census of Canada 1873; Census of Canada 1893).

Mapping from 1856 (Tremaine 1856) indicates that much of the land in Norfolk County was purchased and populated, providing the names of landowners across the county. Few structures around the study area are indicated with the exception of a railway at the north end of Lot 6, Concession 13 (Figure 5). This section of the rail line was built by the Woodstock & Lake Erie Railway and Harbour Company, created in 1848, but eventually purchased by Port Dover & Lake Huron Railway, with the intention of extending the line from Woodstock to Port Dover. The line was abandoned in 1936.

Mapping from 1877 (Page & Co. 1877) indicates the addition of a second rail line through the study area, an Air Line (straight line between communities, rather than winding around geographical features) by Great Western Railway (GWR) (Figure 6). Construction of the line began in 1871 and was opened for business in 1873. The line was abandoned in 1996 and is now used as the Delhi Rail Trail, a public walking path. Historical mapping, tax assessment rolls and gazettes were consulted to build a picture of land use and occupation during the 18th to 20th century. These are summarized in Table 1. In addition to the names, mapping from 1877 (Page & Co. 1877) indicates a small orchard and structure for landowner Elias Boughner, (southwest quarter of Lot 6, Con 13), D.C. Wood (east half of Lot 7, Con 13) and Jno. Berry (north half of Lot 6, Con 14).

Table 1: Relevant Property Histories in the Township of Windham

Year	Concession 13		Concession 14	Source
	Lot 6	Lot 7	Lot 6	
1844	Abraham Young Benj. P Young Martin Boughner William Wood	William Wood Daniel Boughner Francis Walsh	John Mills John Berry	Ontario Tax Assessment Rolls 1853
1853	Martin Boughner Wm Wood	Wm Wood	John Berry John Mills	Ontario Tax Assessment Rolls 1853

Year	Concession 13		Concession 14	Source
	Lot 6	Lot 7	Lot 6	
1856 (Figure 5)	M Boughner N. C. Widner A. Young	W. Wood C. Burlington W. Fawls	J Berry John Mills J.C.	Tremaine 1856
1857	N.C. Widner M. Boughner A. Young	W. Wood W. Falls C. Burlington	John Mills J. Berry	Earl 1857
1877 (Figure 6)	Elias Boughner M Boughner Jno. Curtis	Abram Liesk Jas Liesk Dc. Wood	Jno. Berry Jno. Mills	Page and Co. 1877

Lot 6, Concession 13

The Boughner family originally settled in New Jersey, moving to Upper Canada in 1789 following the American Revolutionary War. The family of Matthais Boughner purchased 800 acres of land in the 13th and 14th Concessions, and erected a log cabin on Lot 6, Concession 13 (Owen 1898:431-432). It was “a rude shanty, with blankets and the skins of animals hung up as substitutes for doors and windows” (Owen 1898:281). Following Matthais Boughner’s death, Martin Boughner, his fifth son, took over the homestead until his death in 1861. Mr. Elias Boughner, who is listed in Tremaine’s 1856 map of Norfolk County, was “one of Windham’s most popular and best-known citizens” of the time (Owen 1898:435), living in a new home erected in the same place as the original log cabin on Lot 6, Concession 13 (Owen 1898).

According to tax roll assessment, the Youngs and Woods cultivated land on Lot 6, Concession 13, but did not live in any structures on the property. N. C Widner is buried at the Old Windham Pioneer Cemetery (also called the United Empire Loyalist Burial Ground), having died on 28 September 1892, at the age of 81.

Lot 7, Concession 13

The Wood family, headed by Israel Wood, arrived in Norkfolk County in the late 18th century, prior to his death in 1817. His sixth son, Caleb Wood, settled in Windham on “Buckwheat Street” in the early 19th century, and was succeeded by his son, William Wood, who resided on Lot 7, Concession 13.

Lot 6, Concession 14

No details could be found for the Mills or Berry family that could be confidently associated with those holding land in Lot 6, Concession 14.

1.2.2.3 Township of Townsend

The Township of Townsend, named after the Marquis of Townshend, a military officer and Commander-in-Chief when Quebec was surrendered to British forces, was opened for settlement in 1792 (Scadding 1876). However, the first land deed registered in the county from Townsend was in 1797, being a deed from Gideon Cooley to Aaron Culver, head of a prominent family who moved from New Jersey following

the American Revolutionary War (Owen 1898: 86). By 1871, the recorded population for the Township of Townsend was 5,474, which decreased to 4,291 by 1891 (Census of Canada 1873, Census of Canada 1893).

Historical mapping, tax assessment rolls and gazettes were consulted to build a picture of land use and occupation during the 18th to 20th century. These are summarized in Table 2. The original land grant was provided to James Wilson of the Regulations Township of Niagara and included two hundred acres of land. Mapping from 1856 (Tremaine 1856) includes several names and landowners, including L. Heath, landowner of the portion of the lot where the study area is located, but no structures are indicated (Figure 7). However, mapping from 1877 (Page & Co. 1877) demonstrates a small orchard and structures owned Jas. Pritchard and another structure on a small corner lot that are part of the study area (Figure 8). The crossroads are labeled “Tyrrell”, representing the location of the historic hamlet of Tyrrell.

Table 2: Relevant Property Histories in the Township of Townsend

Year	Lot 13, Concession 12	Source
1797	James Wilson	Upper Canada Land Grants
1849	Efraim Emerick James Rickare Lewis Heath Jacob Lemmons Richard Silverthorn	Ontario Tax Assessment Rolls 1853
1852	William Heath E.E. Conuck James Pritchard	Ontario Tax Assessment Rolls 1853
1856 (Figure 7)	E. Emerick W. Heath L. Heath J. Pritchard	Tremaine 1856
1857	E. Emerick J Pritchard W. and L. Heath	Earl 1857
1877 (Figure 8)	Eph Emrick Wm Heath Jas Pritchard Aaron Culver	Page and Co. 1877

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). Review of historical mapping has inherent accuracy difficulties due to potential error in geo-referencing. 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, watercourses, etc.),

errors/difficulties of scale and the relative idealism of historical cartography, historical maps may not translate accurately into real space points. This may provide obvious inconsistencies during historical map review.

1.2.3 20th Century Development

The study area for the booster station has remained essentially undeveloped through the 20th century and remains in use for agricultural purposes. A portion of the study area for the elevated water tank has undergone deep land alterations, as evidenced by aerial photography of the study area. An aerial photo including the elevated water tank study area in 1954 shows Windham East Quarter Line Road running parallel to the Lot divisions and meeting 14th Street West at a perpendicular angle with the GWR line crossing just south of the intersection on an angle (University of Toronto 2009, Figure 9 top panel). By 1964, Windham East Quarter Line Road had been realigned so that it crosses the railway at a perpendicular angle, shifting to the west and intersecting with 14th Street West slightly to the north of its original intersection (University of Toronto 2009, Figure 9 bottom panel). The necessary land alteration to complete this realignment has impacted the study area for the elevated water and is evidenced by LiDar imaging of the study area (Norfolk County 2022, Figure 10).

As mentioned in Section 1.2.2.2, the GWR line that is located outside and along the southern boundary of the elevated water tank study area was closed in 1996 and converted to the Delhi Rail Trail for public use. The Delhi Rail Trail is a 13.8-kilometre multi-use trail between Fertilizer Road on the eastern outskirts of Delhi and North Cresent, Simcoe where it connects with the Norfolk Sunrise Trail. The trail can be accessed at either end, or approximately every three kilometers at crossroads such as Windham East Quarter Line Road. The Delhi Rail Trail has a surface of crushed stone and soil (Norfolk Tourism 2020).

1.3 Archaeological Context

1.3.1 The Natural Environment

The study area is located within the Norfolk Sand Plains, as identified by Chapman and Putnam (1984). These sand plains range in thickness from one to 20 metres, with an average thickness of five to 10 metres. There are occasional moraines and eolian dunes, and closer to Lake Erie, the sand plain transitions to small silt and clay plains (Presant & Acton 1984:12). Drainage is good around main streams, but further from these water sources, drainage is poor. The Elevated Tank study area is composed of two soil types: well-drained Plainfield find sand at the west end of the site, and the imperfect to well-drained Brady loamy-sand in the east part (Presant & Acton 1984: Map 9). The Booster Station site is located entirely within Beverly sandy-silty-clay, an imperfect to poorly drained soil type (Presant & Acton 1984: Map 4).

There are numerous sources of potable water relative to the study areas. The Elevated Tank study area is located approximately 450 metres south of an unnamed tributary of Patterson Creek, which is two kilometres (km) southwest of the study area. Other nearby watercourses include Davis Creek (two km to the west) and Kent Creek (two km to the north). The Booster Station study area is located 0.5 km east of Black Creek, seven km west of Nanticoke Creek, and eight km southeast of Waterford Ponds. In addition

to these small water sources, both locations are approximately 12 km north of Lake Erie. Moreover, additional ancient and/or relic tributaries of the various primary and secondary water sources may have existed but are not identifiable today and are not indicated on historical mapping.

1.3.2 Pre-Contact Indigenous Resources

This portion of southwestern Ontario has been occupied by Indigenous peoples since the retreat of the Wisconsin glacier approximately 11,000 years ago. Much of what is understood about the lifeways of these Indigenous peoples is derived from archaeological evidence and ethnographic analogy. In Ontario, Indigenous culture prior to the period of contact with European peoples has been distinguished into cultural periods based on observed changes in material culture. These cultural periods are largely based in 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 paradigm for understanding changes in Indigenous culture through time.

The following summary of the pre-contact occupation of southern Ontario is based on syntheses in Archaeologix (2008) and Ellis and Ferris (1990). A summary of the generalized cultural chronology of eastern and southern Ontario is provided in Table 3. The provided time periods are based on the "Common Era" calendar notation system, i.e., Before Common Era (BCE) and Common Era (CE).

Table 3: Generalized Overview of Pre-contact Indigenous Cultural Chronology

Archaeological Period	Time Period	Characteristics
Early Paleo	10000 – 8400 BCE	Fluted projectile points; caribou and extinct Pleistocene mammal hunters, small camps
Late Paleo	8400 – 8000 BCE	Hi-Lo projectile points; smaller but more numerous sites
Early Archaic	8000 – 6000 BCE	Nettling and bifurcate projectile points; slow population growth, development of specialized tools
Middle Archaic	6000 – 2500 BCE	Brewerton-like projectile points; environment similar to present, hunting and nut processing, decreased residential mobility
Late Archaic	2500 – 1800 BCE	Lamoka (narrow projectile points), increasing site size
	1800 – 1500 BCE	Broad projectile points, large chipped lithic tools
	1500 – 1100 BCE	Small projectile points, introduction of bow hunting
Terminal Archaic	1100 – 950 BCE	Hind projectile points, emergence of true cemeteries, seasonal mobility patterns
Early Woodland	950 – 400 BCE	Meadowood complex; introduction of pottery, polished stone tools, diverse subsistence
Middle Woodland	400 BCE – 500 CE	Dentate/pseudo-scallop pottery, increased sedentism, seasonal mobility patterns, more elaborate mortuary ceremonialism
Transitional Woodland	550 – 900 CE	Princess Point complex, cord-wrapped stick pottery decoration, introduction of corn

Archaeological Period	Time Period	Characteristics
Late Woodland	900 – 1300 CE	Early Late Woodland, emergence of agricultural villages
	1300 – 1400 CE	Middle Late Woodland, large longhouses (100+ metres)
	1400 – 1650 CE	Late Late Woodland, group warfare and displacement

Early Paleo (*circa* [ca.] 10000 to 8400 BCE) settlement patterns suggest that small groups, or "bands", followed a pattern of seasonal mobility extending over large territories. Many (although by no means all) of the Early Paleo sites were located on former beach ridges associated with glacial lakes such as Lake Algonquin and Lake Iroquois. Vegetative cover of these areas would have consisted of open spruce parkland, given the cool climatic conditions. Sites tend to be located on well-drained loamy soils, and on elevations in the landscape, such as knolls. Large game, such as caribou, mastodon, and mammoth, appears to be of central importance to the sustenance of these early inhabitants.

The Late Paleo period (ca. 8400 to 8000 BCE) is relatively poorly understood, the result of less research focus. As the climate warmed, the spruce parkland was gradually replaced from south to north with closed coniferous forests. As a result, many of the large game species that had been hunted in the Early Paleo period either moved north or became locally extinct. Late Paleo peoples covered large territories as they moved around to exploit different resources.

The transition from the Paleo period to the Archaic archaeological culture of Ontario is marked by the development of new tool technologies, correlated with increasing resource diversification. During the Early Archaic period (ca. 8000 to 6000 BCE), the jack and red pine forests that characterized the Late Paleo environment were replaced by forests dominated by white pine with some associated deciduous elements. Early Archaic projectile points differ from Paleo forms most notably by the presence of side and corner notching on their bases. A ground stone tool industry, including celts and axes, also emerges, indicating that woodworking was an important component of the technological development of Archaic peoples. Although there may have been some reduction in the degree of seasonal mobility, it is still likely that population density during the Early Archaic was low, and band territories large.

The development of more diversified tool technology continued into the Middle Archaic period (ca. 6000 to 2500 BCE). The presence of grooved stone net-sinkers suggests an increase in the importance of fishing in subsistence activities. Bannerstones also appear during this period and are thought to be weights for "atlatls" or spear-throwers. The increased reliance on local, often poor-quality chert resources for chipped stone tools suggests that in the Middle Archaic, groups inhabited smaller territories lacking high quality raw materials. This reduction in territory size appears to have been the result of gradual region-wide population growth, which forced a reorganization of subsistence patterns. A major development of the later part of the Middle Archaic period was the initiation of long-distance trade. Native copper tools manufactured from sources near Lake Superior were being widely traded in eastern Ontario ('Old Copper complex'). A distinctive occupation or tradition, known as the Laurentian Archaic, appears in eastern Ontario, western Quebec, northern New York, and Vermont within the transitional zone between the deciduous forests to the south and coniferous forests to the north and is identifiable through the association of certain diagnostic tool types, including ground slate semi-lunar knives (or "ulus"), plummets

for use in fishing, ground slate points and knives, and ground stone gouges, adzes and grooved axes. The tool assemblage has been used to suggest that there was less reliance on plant foods and a greater reliance on hunting and fishing in this region than for Archaic peoples in southern Ontario, where people made use of various nut-bearing trees. Stone tools designed specifically for the preparation of wild plant foods suggest that subsistence catchment was being widened and new resources being more intensively exploited.

The trend towards decreased territory size, increased population density, and a broadening subsistence base continued during the Late Archaic (ca. 2500 to 1100 BCE). Increased territoriality and more limited movement are also consistent with the development of distinct local styles of projectile points. The trade networks which began in the Middle Archaic expand during this period and begin to include marine shell artifacts from as far away as the Mid-Atlantic coast, polished stone pipes, and slate gorgets. One of the more unusual of the Late Archaic artifacts is the “birdstone”, small, bird-like effigies usually manufactured from green banded slate. In southern Ontario, the Late Archaic is subdivided into three traditions based on projectile point styles: Narrow points, broad points, and small points. The small point tradition (e.g., Crawford Knoll, Innes, etc.) is thought to represent the spread of bow and arrow technology. The Terminal Archaic period (ca. 1100 to 950 BCE) is marked by the appearance of the first true cemeteries. Prior to this period, individuals were interred close to the location where they died. However, burial patterns changed wherein individuals who died at a distance from the cemetery would be returned for final burial at the group cemetery, often resulting in disarticulated skeletons occasionally missing minor bone elements (i.e., finger bones). The emergence of local group cemeteries has been interpreted as being a response to both increased population densities and competition between local groups for access to resources; cemeteries would have provided symbolic claims over a local territory and its resources.

The Early Woodland period (ca. 950 to 400 BCE) is distinguished from the Late Archaic period primarily by the addition of ceramic technology. While the introduction of pottery provides a useful demarcation point for archaeologists, it may have made less difference in the lives of the Early Woodland peoples. Lifeways show a great deal of continuity with the preceding Late Archaic period. For instance, birdstones continue to be manufactured, although the Early Woodland varieties have “pop-eyes” which protrude from the sides of their heads. Likewise, well-made projectile points which were produced during the terminal part of the Archaic period continue in use. The Meadowood complex, marked by thin, well-made, side-notched points appears primarily in southern Ontario, although there are some sites with Meadowood artifacts in eastern Ontario. The trade networks which were established in the Middle and Late Archaic also continued to function, although there does not appear to have been as much traffic in marine shell during the Early Woodland period. These trade items were included in increasingly sophisticated burial ceremonies, some of which involved construction of burial mounds, particularly in the north shore region of Lake Ontario.

In terms of settlement and subsistence patterns, the Middle Woodland (ca. 400 BCE –500 CE) provides a major point of departure from previous periods with a great degree of sedentism. Fish were becoming an even more important part of the diet, and rich, densely occupied sites appear along the margins of major rivers and lakes. Unlike earlier seasonally utilized locations, these sites appear to have functioned as base camps, occupied off and on throughout the course of the year. There are also numerous small upland sites, many of which can be interpreted as special purpose camps from which localized resource

patches were exploited. Middle Woodland vessels are often decorated with tool impressed designs covering the entire exterior surface and upper portion of the vessel interior. In eastern Ontario, the Point Peninsula ceramic style features stamped zigzag pattern applied at various angles to the exterior of the vessel, known as “pseudo scallop shell”. Another common decorative style is the dentate stamp, a comb-like tool creating square impressions.

The relatively brief period of the Transitional Woodland period (ca. 550 – 900 CE) is marked by the acquisition of cultivar plants species, such as maize and squash, from communities living south of the Great Lakes. This crop would have initially only supplemented Indigenous peoples diet and economy (Birch and Williamson 2013:13-14). With the transition to food production, sites were occupied for longer periods and by larger populations. In southern Ontario, the Transitional Woodland period is represented by the Princess Point complex and cord marked pottery. Maize-based agriculture gradually became more important to societies and by approximately 900 CE permanent communities emerge which are primarily focused on agriculture and the storage of crops, with satellite locations oriented toward the procurement of other resources such as hunting, fishing, and foraging. By approximately 1250 CE, evidence exists for the common cultivation Indigenous cultigens, including maize, beans, squash, sunflower, and tobacco. These communities living within the region of the study area believed to have spoken a form of Iroquoian language and possessed many cultural traits similar to historical Indigenous nations (Williamson 2013:55).

1.3.3 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 areas are located within Borden Blocks AfHb and AfHc.

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 there are 27 registered archaeological sites within one kilometre of the study areas for the Project (Government of Ontario 2022a). One site, Norfolk Solar Farm 5 (AfHc-20) is located within 300 metres of the Elevated Tank study area. No sites are located within 300 metres of the Booster Station. Table 4 summarizes the registered archaeological sites within one kilometre of the study area for the Project, and site within 300 metres are bolded. There are no registered archaeological sites within 50 metres of either study area for the Project.

Table 4: Registered Archaeological Sites within One Kilometre of the Study Areas

Borden Number	Site Name	Cultural Affiliation	Site Type
AfHc-17	Norfolk Solar Farm 1	Indigenous Pre-Contact	Scatter
AfHc-18	Norfolk Solar Farm 3/6/7/22	Indigenous Middle Woodland	Other campsite, special purpose
AfHc-19	Norfolk Solar Farm 4	Indigenous Pre-Contact	Special purpose
AfHc-20	**Norfolk Solar Farm 5**	**Euro-Canadian**	**Homestead**
AfHc-21	Norfolk Solar Farm 11	Indigenous Archaic	Findspot
AfHc-22	Norfolk Solar Farm 12	Indigenous Early Archaic	Findspot
AfHc-23	Norfolk Solar Farm 13	Indigenous Late Archaic	Findspot
AfHc-24	Norfolk Solar Farm 14	Indigenous Pre-Contact	
AfHc-25	Norfolk Solar Farm 15	Indigenous Pre-Contact	Scatter
AfHc-26	Norfolk Solar Farm 16	Indigenous Pre-Contact	Scatter
AfHc-27	Norfolk Solar Farm 17	Indigenous Paleo-Indian	Scatter
AfHc-28	Norfolk Solar Farm 18	Indigenous Late Archaic, Middle Archaic	Other campsite, special purpose
AfHc-29	Norfolk Solar Farm 19	Indigenous Pre-Contact	Scatter
AfHc-30	Norfolk Solar Farm 20	Indigenous Pre-Contact	Scatter
AfHc-31	Norfolk Solar Farm 21	Indigenous Pre-Contact	Scatter
AfHc-32	Norfolk Solar Farm 23	Indigenous Middle Archaic	Findspot
AfHc-33	Norfolk Solar Farm 24	Indigenous Pre-Contact	Other campsite, special purpose
AfHc-34	Norfolk Solar Farm 25	Indigenous Pre-Contact	Other campsite, special purpose
AfHc-35	Norfolk Solar Farm 26	Indigenous Pre-Contact	Scatter
AfHc-36	Norfolk Solar Farm 27	Indigenous Pre-Contact	Scatter
AfHc-50	Norfolk 28	Indigenous Late Archaic	Findspot
AfHc-51	Norfolk 29	Indigenous Middle Woodland	Findspot
AfHc-52	Norfolk 30	Indigenous Middle Woodland	Findspot
AfHc-53	Norfolk 31	Indigenous Middle Woodland	Findspot
AfHc-54	Location 4	Indigenous Pre-Contact, Post-Contact	Scatter
AfHc-55	Location 5	Indigenous Pre-Contact, Post-Contact	Scatter

Borden Number	Site Name	Cultural Affiliation	Site Type
AfHc-56	Location 7	Indigenous Pre-Contact	Indeterminate

The Norfolk Solar Farm 5 (AfHc-20) site was identified during the Stage 2 archaeological assessment of the Norfolk Solar Farm (Timmins Martelle Heritage Consulting [TMHC] 2008). The site was identified as a mid-19th century Euro-Canadian homestead site with cultural heritage value or interest (CHVI) and additional assessment was recommended. Stage 3 archaeological assessment of the site was completed by Archaeological Research Associates (ARA) in 2009 (ARA 2010). Stage 3 assessment resulted in the recovery of 429 Euro-Canadian period artifacts and the CHVI of the site sufficiently documented and Stage 4 archaeological mitigation was not recommended.

A query of the *Ontario Public Register of Archaeological Reports* indicated one previously completed archaeological survey within 50 metres of the study area (Table 5) (Government of Ontario 2022b).

Table 5: Previous Archaeological Assessments within 50 Metres

Study Area	Project Information Form (PIF) Number	Report	Reference
Elevated Tanks	P218-0213-2012	*Stage 1 and 2 Archaeological Assessment: Livingston Pit Application, Part of Lots 5 and 6, Concession 13, Former Township of Windham, Now Norfolk County, Ontario*	Golder Associates Ltd (Golder) 2015

In 2012, Golder examined the area immediately north of the Elevated Tanks study area ahead of the aggregate pit licensing process. Golder's (2015) Stage 1 assessment determined areas of archaeological potential, and Stage 2 field assessment was undertaken. During the Stage 2 field assessment, nine archaeological sites were identified. Of these, Location 4 (AfHc-54) and Location 5 (AfHc-55) were determined to retain CHVI, and further work was recommended (Golder 2015). Both Location 4 (AfHc-54) and Location 5 (AfHc-55) represent Euro-Canadian assemblages characteristic of the mid- to late-19th century (Golder 2015). Neither archaeological site is located within 50 metres of the study area for the Project.

1.4 Existing Conditions

The study area for the Project comprises two locations. The first is for the Elevated Tank, approximately 0.63 ha composed of scrubland between 14th Street West, Windham East Quarter Line Road, and adjacent to the Delhi Rail Trail that has been subject to previous disturbance associated with the realignment of Windham East Quarter Line Road (Figure 2 and 10). It is located on part of Lots 6 and 7, Concession 13, and Lot 6, Concession 14, Geographic Township of Windham. The second is for a Booster Station, approximately 0.85 ha composed of agricultural field located immediately north of Concession 13 Townsend (Figure 3). It is located on part of Lot 13, Concession 12, Geographic Township of Townsend, Norfolk County. The total study area for the Project is approximately 1.48 ha.

2 Field Methods

The Stage 1 archaeological assessment complied information concerning registered and/or potential archaeological resources within the study area. No property inspection was conducted as a part of this assessment under Project Information Form (PIF) number P1060-0132-2022 issued to Caitlin Simmons, M.Sc., by the MCM.

3 Analysis and Conclusions

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Stantec applied archaeological potential criteria commonly used by the MCM (Government of Ontario 2011) to determine areas of archaeological potential within the region under study. These variables include proximity to registered 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, current 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, or 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, and shorelines of drained lakes or marshes.
- Accessible or inaccessible shorelines: high bluffs, swamp or marshy lake edges, and sandbars stretching into marsh.

Based on mapping, the study areas are located close to potential water sources. The Elevated Tank study area is located approximately 450 metres south of an unnamed tributary of Patterson Creek, which is two km southwest of the study area. Other nearby watercourses include Davis Creek (two km to the west) and Kent Creek (two km to the north). The Booster Station study area is located 0.5 km east of Black Creek, seven km west of Nanticoke Creek, and eight km southeast of Waterford Ponds. In addition to these small water sources, both locations are approximately 12 km north of Lake Erie. The proximity of these features meets the MCM'Ss defined characteristics for archaeological potential. Moreover, additional ancient and/or relic tributaries of the various primary and secondary water sources may have existed but are not identifiable today and are not indicated on historical mapping.

Further examination of the natural environment of the study area identified soil conditions suitable for Indigenous and Euro-Canadian agriculture, particularly when close to water sources where drainage is good (Presant & Acton 1984). The Elevated Tank study area is composed of two soil types: well-drained Plainfield find sand at the west end of the site, and the imperfect to well-drained Brady loamy-sand in the east part of the site (Presant & Acton 1984: Map 9). The Booster Station site is located entirely within Beverly sandy-silty-clay, an imperfect to poorly drained soil type (Presant & Acton 1984: Map 4).

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 1990c) or property that local histories or informants have identified with possible historical events. Historical mapping reviewed during this assessment demonstrates that the study area and its environs were occupied by Euro-Canadian farmers by the mid-19th century. The elevated water tank study area is adjacent to the Delhi Rail Trail which follows the GWR line established in the late 19th century. Much of the established rail, road, and agricultural settlement from that time is still visible today.

While no properties near the study areas are listed on the *Ontario Heritage Act* register, several nearby places are recognized for their local heritage value. This includes several historical cemeteries and historical hamlets and small communities. The Elevated Tank study area is located 0.5 km east of the historical hamlet of Bethlehem and the Bethel Methodist Church Cemetery, and 1.5 km north of Mills Cemetery (Norfolk County 2022). Both cemeteries are abandoned. The Booster Station study area is located in the historical hamlet of Tyrrell, across the street from the Tyrrell Baptist Church, established in 1859 and still active today. Additionally, the Mount Hope Cemetery (also known as the Tyrrell Cemetery) is located three km east of the Booster Station study area (Norfolk County 2022).

Evidence of 20th century development and disturbance of the elevated water tank study area was observed through aerial photography taken before and after realignment of Windham East Quarter Line Road (Figure 9). The road realignment would have caused extensive and deep land alterations that would have removed archaeological potential. LiDAR imagining of the elevated study area shows this disturbance in the changes of elevation (Figure 10),

The Stage 1 archaeological assessment has determined that the study areas retain archaeological potential and require Stage 2 assessment. The results of the Stage 1 assessment are illustrated on 11 and Figure 122. Areas of presumed previous disturbance will need to be confirmed as a part of the Stage 2 survey.

4 Recommendations

The Stage 1 archaeological assessment resulted in the determination that the study area for the Project exhibits potential for the identification and recovery of archaeological resources. Thus, 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 (Figure 11and Figure 12).**

The objective of the Stage 2 archaeological assessment is to document archaeological resources within the study area 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 comprise 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 comprise text pit survey as outlined 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 soil screened through six-millimetre hardware cloth to facilitate the recovery of cultural material that may be present. Prior to backfilling, each test pit will be examined for stratigraphy, cultural features, or evidence of fill.

Background documentation indicates that the study area for the elevated water tank has likely been subject to deep and significant previous disturbance that has removed archaeological potential (see Figures 9 and 10). This previous disturbance will be confirmed during the Stage 2 archaeological assessment and photo documented as outlined in Section 2.1 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Should any additional areas of disturbance or features indicating that archaeological potential has been removed, including permanently wet areas, exposed bedrock, and steep slopes, not identified during the Stage 1 background research be encountered during the Stage 2 archaeological assessment, they will be photo documented as outlined in Section 2.1 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

The MCM is asked to review the results presented and 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 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), the following standard statements are a required component of archaeological reporting and are provided from the MCM's 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

This report is submitted to the Minister of Tourism, Culture and Sport as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c. O.18 (Government of Ontario 1990c). 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 Ministry of Tourism, Culture and Sport a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* (Government of Ontario 1990c) 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 1990c)

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 1990c) 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 1990c)

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 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 1990c) and may not be altered, or have artifacts removed, except by a person holding an archaeological license.

6 References

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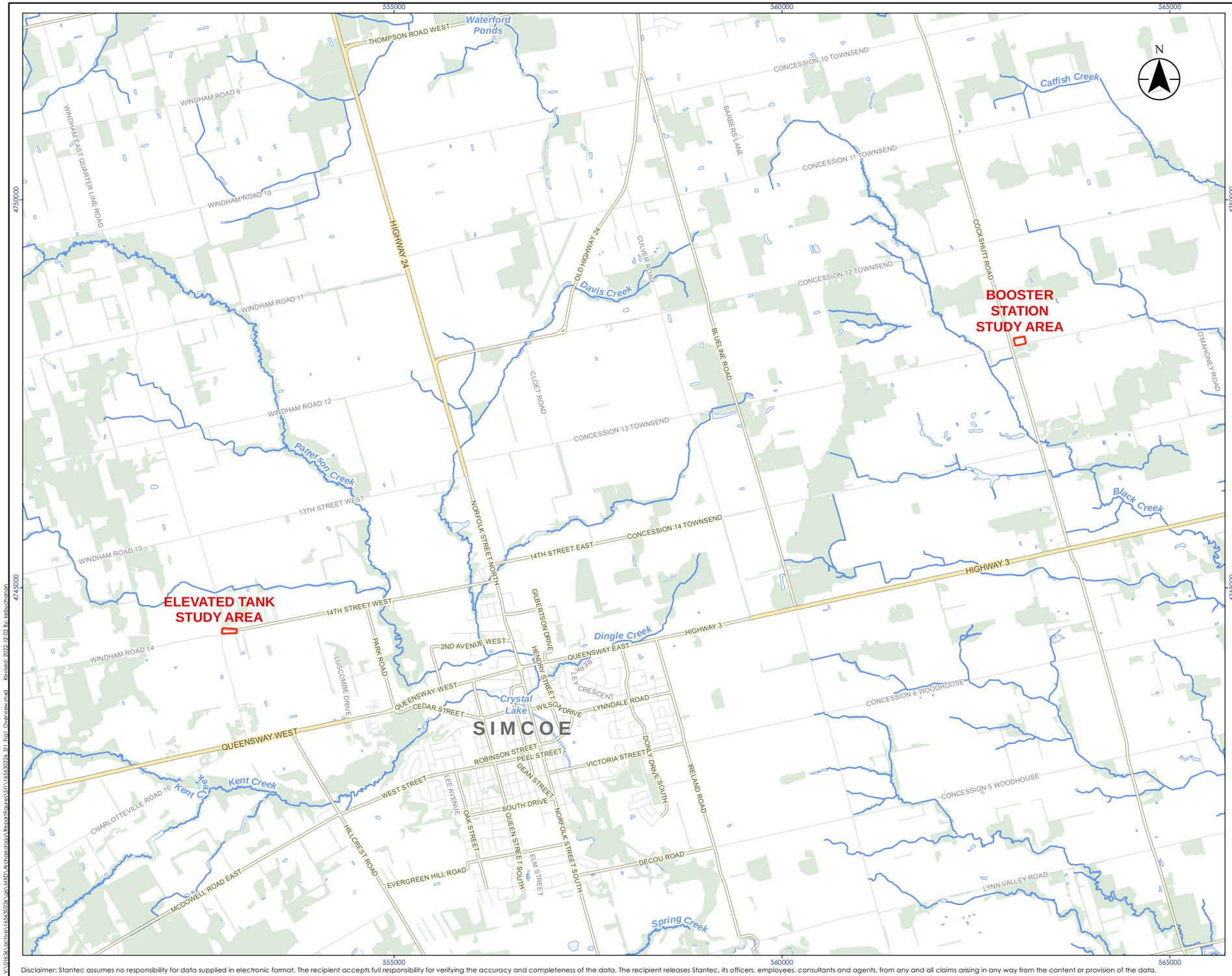
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7 Maps

Maps for the Stage 1 archaeological assessment of the study area follow on succeeding pages.



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Legend

Study Area

0 1,000 2,000 m

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

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
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Project Location
County of Norfolk

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Client/Project
NORFOLK COUNTY
SIMCOE – TOWNSEND WATER SUPPLY SYSTEM
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
1

Title
Location of the Project

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Stantec

Legend
- Study Area
- Assessment Parcel

0 20 40 m

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Notes
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Project Location
County of Norfolk

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Client/Project
NORFOLK COUNTY
SIMCOE – TOWNSEND WATER SUPPLY SYSTEM
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
2

Title
Location of the Elevated Tank Study Area

V:\165\active\165630226\gis\MXD\Archaeology\ReportFigures\S11\165630226_S11_Fig2_StudyAreaRef.mxd Revised: 2022-11-30 By: kebuchanan

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Stantec

Legend

Study Area

0 20 40 m

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

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
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Project Location
County of Norfolk

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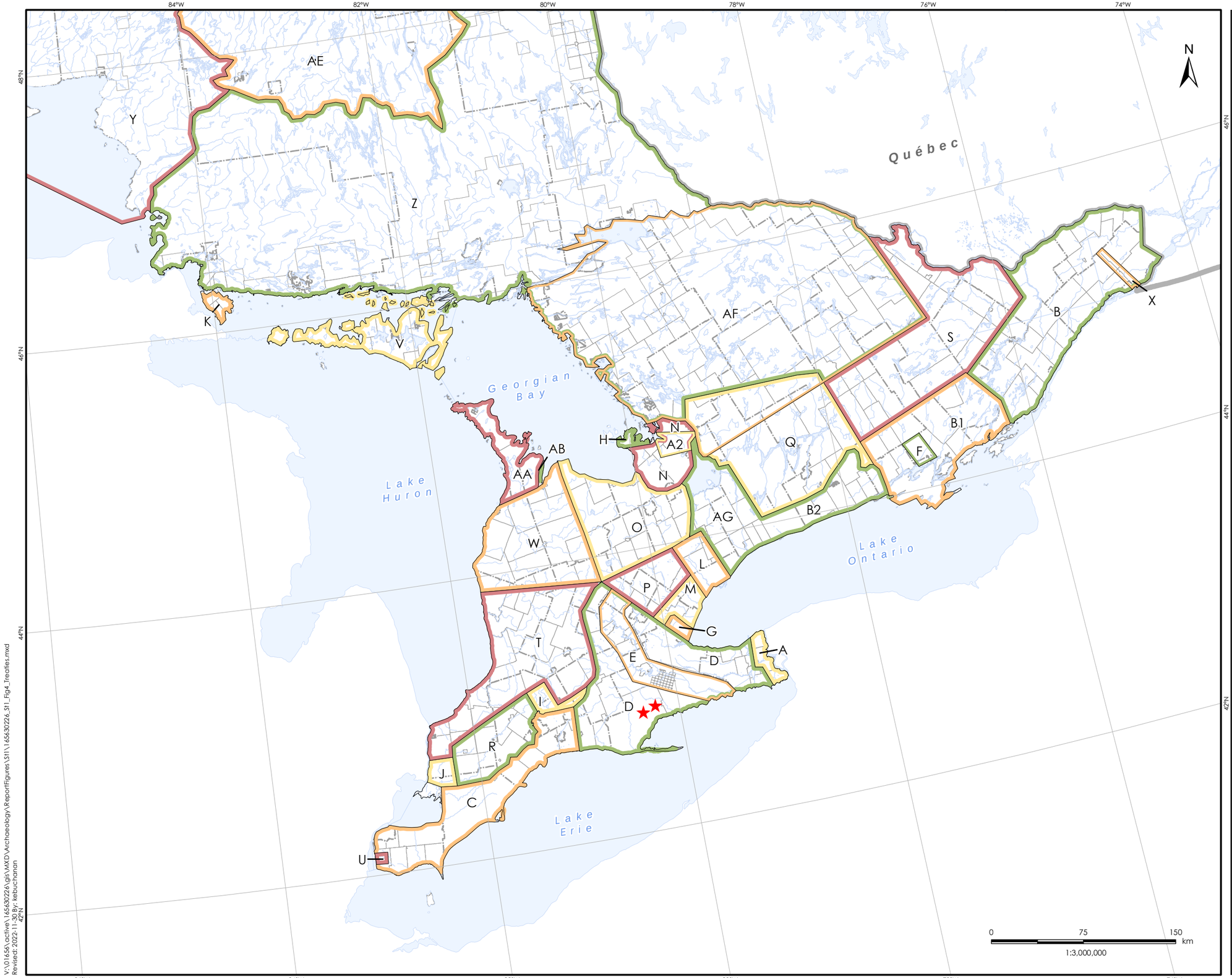
Client/Project
NORFOLK COUNTY
SIMCOE – TOWNSEND WATER SUPPLY SYSTEM
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
3

Title
Location of the Booster Station Study Area

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Stantec

Legend

- Study Area Location
- Municipal Boundary - Upper Tier
- Municipal Boundary - Lower or Single Tier
- Watercourse
- Waterbody

- **A** Treaty No. 381, May 9th, 1781 (Mississauga and Chippewa)
- **B** Crawford's Purchase, October 9th, 1783 (Algonquin and Iroquois)
- **B1** Crawford's Purchase, October 9th, 1783 (Mississauga)
- **B2** Crawford's Purchases, 1784, 1787 And 1788 (Mississauga)
- **A2** John Collins' Purchase, 1785 (Chippewa)
- **C** Treaty No. 2, May 19th, 1790 (Odawa, Chippewa, Pottawatomi, and Huron)
- **D** Treaty No. 3, December 2nd, 1792 (Mississauga)
- **E** Haldimand Tract:from the Crown to the Mohawk, 1793
- **F** Tyendinaga:from the Crown to the Mohawk, 1793
- **G** Treaty No. 3 3/4:from the Crown to Joseph Brant, October 24th, 1795
- **H** Treaty No. 5, May 22nd, 1798 (Chippewa)
- **I** Treaty No. 6, September 7th, 1796 (Chippewa)
- **J** Treaty No. 7, September 7th, 1796 (Chippewa)
- **L** Treaty No. 13, August 1st, 1805 (Mississauga)
- **M** Treaty No. 13A, August 2nd, 1805 (Mississauga)
- **N** Treaty No.16, November 18th, 1815 (Chippewa)
- **O** Treaty No. 18, October 17th, 1818 (Chippewa)
- **P** Treaty No. 19, October 28th 1818 (Chippewa)
- **Q** Treaty No. 20, November 5th, 1818 (Chippewa)
- **R** Treaty No. 21, March 9th, 1819 (Chippewa)
- **S** Treaty No. 27, May 31st, 1819 (Mississauga)
- **T** Treaty No. 27½, April 25th, 1825 (Ojibwa and Chippewa)
- **U** Treaty No. 35, August 13th, 1833 (Wyandot or Huron)
- **V** Treaty No. 45, August 9th, 1836 (Chippewa and Odawa, "For All Indians To Reside Thereon")
- **W** Treaty No. 45½, August 9th, 1836 (Saugeen)
- **X** Treaty No. 57, June 1st, 1847 (Iroquois of St. Regis)
- **Z** Treaty No. 61, September 9th, 1850 (Robinson Treaty:Ojibwa)
- **AA** Treaty No. 72, October 30th, 1854 (Chippewa)
- **AB** Treaty No. 82, February 9th, 1857 (Chippewa)
- **AF** Williams Treaty, October 31st and November 15th, 1923 (Chippewa and Mississauga)
- **AG** Williams Treaty, October 31st, 1923 (Chippewa)

Notes

1. Coordinate System: NAD 1983 Statistics Canada Lambert
2. Contains information licensed under Open Government License - Ontario.
3. Treaty boundaries adapted from Morris 1943 (1964 reprint). For cartographic representation only.

November 2022
165630226

Client/Project

NORFOLK COUNTY
SIMCOE – TOWNSEND WATER SUPPLY SYSTEM
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.

4

Title

Treaties and Purchases (Adapted from Morris 1943)

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Revised: 2022-11-30 By: kebuchanan



Legend

Approximate Location of Elevated Tank Study Area

Notes

1. Historic mapping not to scale.
2. Reference: Tremaine, George C. 1856. *Map of the County of Norfolk, Canada West*. George C. Tremaine, Kingston.

Project Location
County of Norfolk

165630226 REV4
Prepared by KDB on 2022-11-30

Client/Project
NORFOLK COUNTY
SIMCOE – TOWNSEND WATER SUPPLY SYSTEM
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
5

Title
Elevated Tank Study Area Shown Over Portion of 1856 Map of the Township of Windham, Norfolk County

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Notes
1. Historic mapping not to scale.
2. Reference: Page, H. R. and Co. 1877. *Illustrated Historical Atlas of the County of Norfolk, Ont.* H. R. Page and Co., Toronto.

Legend
Approximate Location of Elevated Tank Study Area

Project Location
County of Norfolk

165630226 REV4
Prepared by KDB on 2022-11-30

Client/Project
NORFOLK COUNTY
SIMCOE – TOWNSEND WATER SUPPLY SYSTEM
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
6

Title
Elevated Tank Study Area Shown Over Portion of 1877 Map of the Township of Windham, Norfolk County

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Notes
1. Historic mapping not to scale.
2. Reference: Tremaine, George C. 1856. *Map of the County of Norfolk, Canada West.* George C. Tremaine, Kingston.

Project Location
County of Norfolk

165630226 REV4
Prepared by KDB on 2022-12-02

Client/Project
NORFOLK COUNTY
SIMCOE – TOWNSEND WATER SUPPLY SYSTEM
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
7

Title
Booster Station Study Area Shown Over Portion of 1856 Map of the Township of Townsend, Norfolk County

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Stantec

Legend

Approximate Location of Booster Station Study Area

Notes

1. Historic mapping not to scale.
2. Reference: Page, H. R. and Co. 1877. *Illustrated Historical Atlas of the County of Norfolk, Ont.* H. R. Page and Co., Toronto.

Project Location
County of Norfolk

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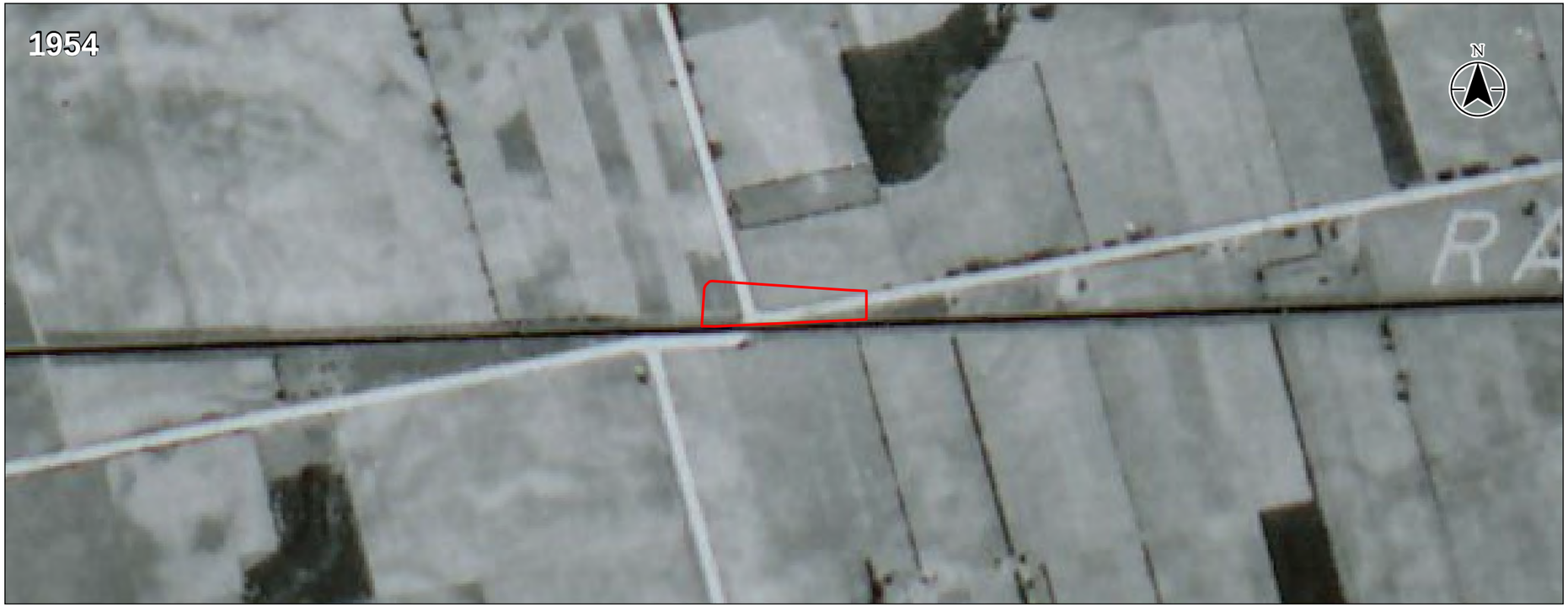
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SIMCOE – TOWNSEND WATER SUPPLY SYSTEM
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

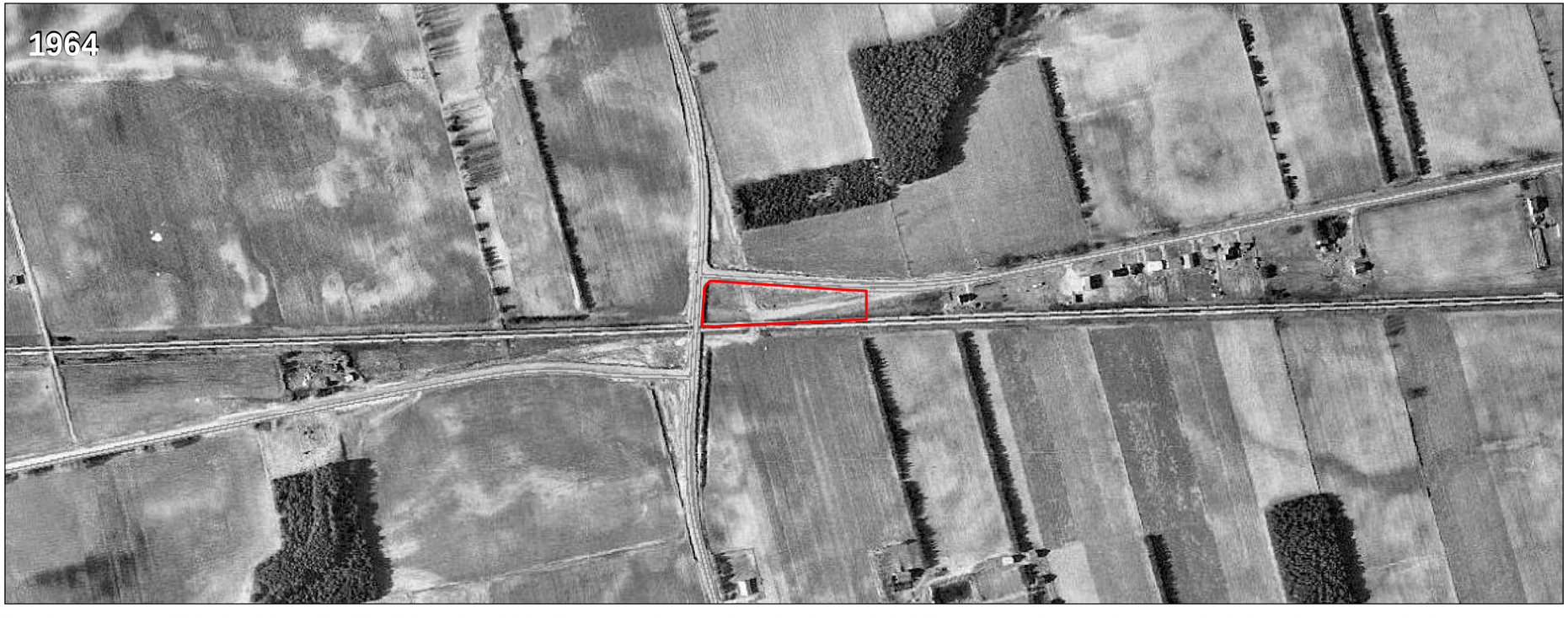
Figure No.
8

Title
Booster Station Study Area Shown Over Portion of 1877 Map of the Township of Townsend, Norfolk County

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Stantec

Legend

Approximate Location of Elevated Tank Study Area

Notes

1. Historic imagery not to scale.

2. References:

University of Toronto. 2009. *Digital Aerial Phtoographs, Southern Ontario 1954 – West Index.* Electronic document: https://maps.library.utoronto.ca/data/on/AP_1954/indexwest.html. Last Accessed December 8, 2022.

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Project Location
County of Norfolk

165630226 REV4
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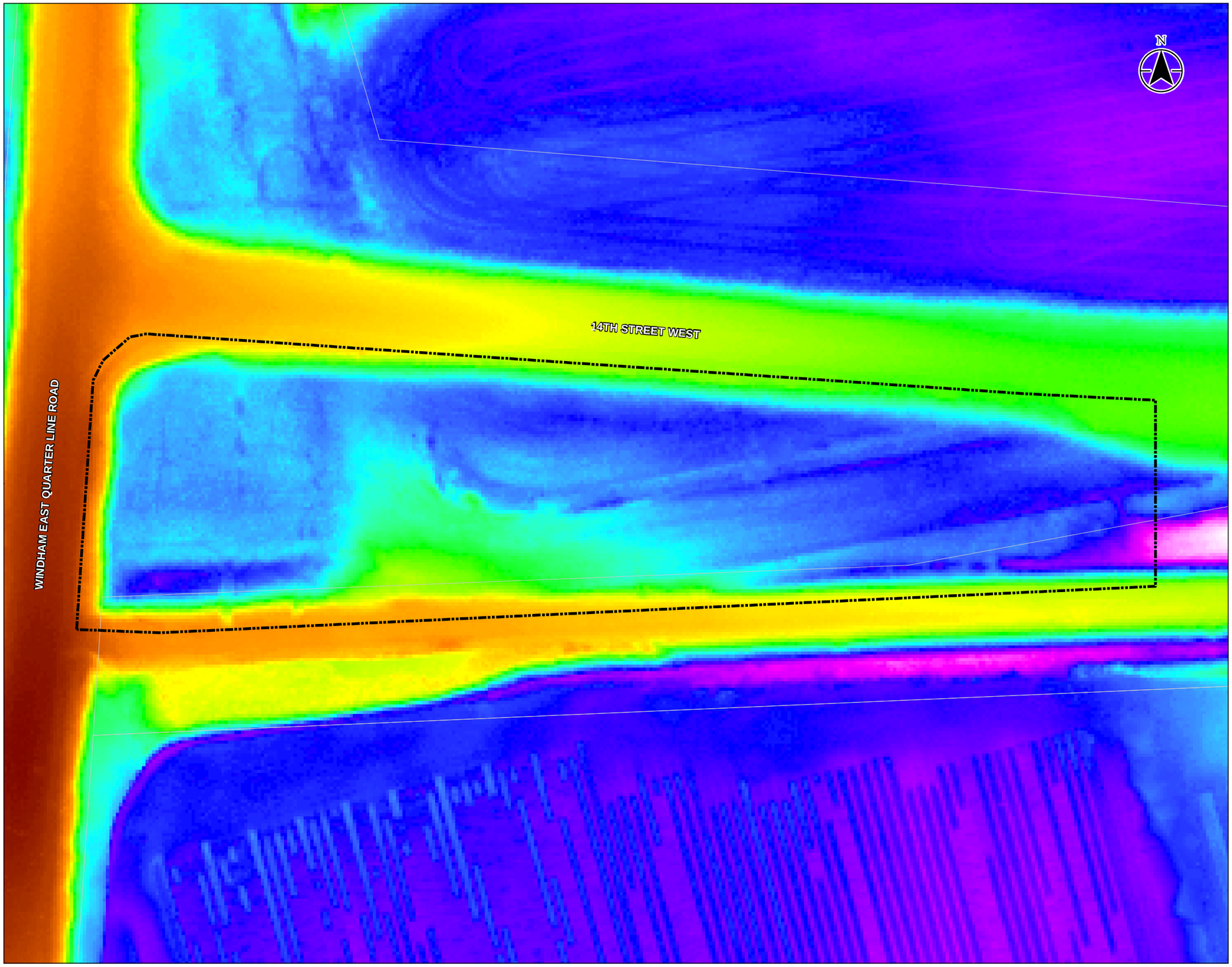
Client/Project
NORFOLK COUNTY
SIMCOE – TOWNSEND WATER SUPPLY SYSTEM
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
9

Title
20th Century Aerial Photography
Elevated Tank Study Area

V:\0165\active\165630226\gis\MXD\Archaeology\ReportFigures\STAGE1\165630226_S1_Fig9_PhotosET.mxd Revised: 2022-12-08 By: kdbuchanan

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Stantec

Legend

Study Area

Assessment Parcel

Elevation (m)

High : 228.61

Low : 224

0 20 40 m

1:600 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
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County of Norfolk

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Client/Project
NORFOLK COUNTY
SIMCOE – TOWNSEND WATER SUPPLY SYSTEM
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
10

Title
Ontario Digital Terrain Model (Lidar-Derived), Elevated Tank Study Area

V:\0165\active\165630226\gis\MXD\Archaeology\ReportFigures\10_165630226_Stage1_Fig10_ElevationEtank.mxd Revised: 2022-12-08 By: kdbuchanan

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Stantec

Legend

- Study Area
- Assessment Parcel

Archaeological Potential

- Area of Archaeological Potential - Stage 2 Test Pit Survey Required
- Presumed Previous Disturbance - To Be Confirmed During Stage 2 Survey

0 20 40 m

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

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Client/Project
NORFOLK COUNTY
SIMCOE – TOWNSEND WATER SUPPLY SYSTEM
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
11

Title
Stage 1 Results and Recommendations
Elevated Tank Study Area

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Stantec

Legend

Study Area

Assessment Parcel

Archaeological Potential

Area of Archaeological Potential - Stage 2 Pedestrian Survey Required

0 20 40 m

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Client/Project
NORFOLK COUNTY
SIMCOE – TOWNSEND WATER SUPPLY SYSTEM
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

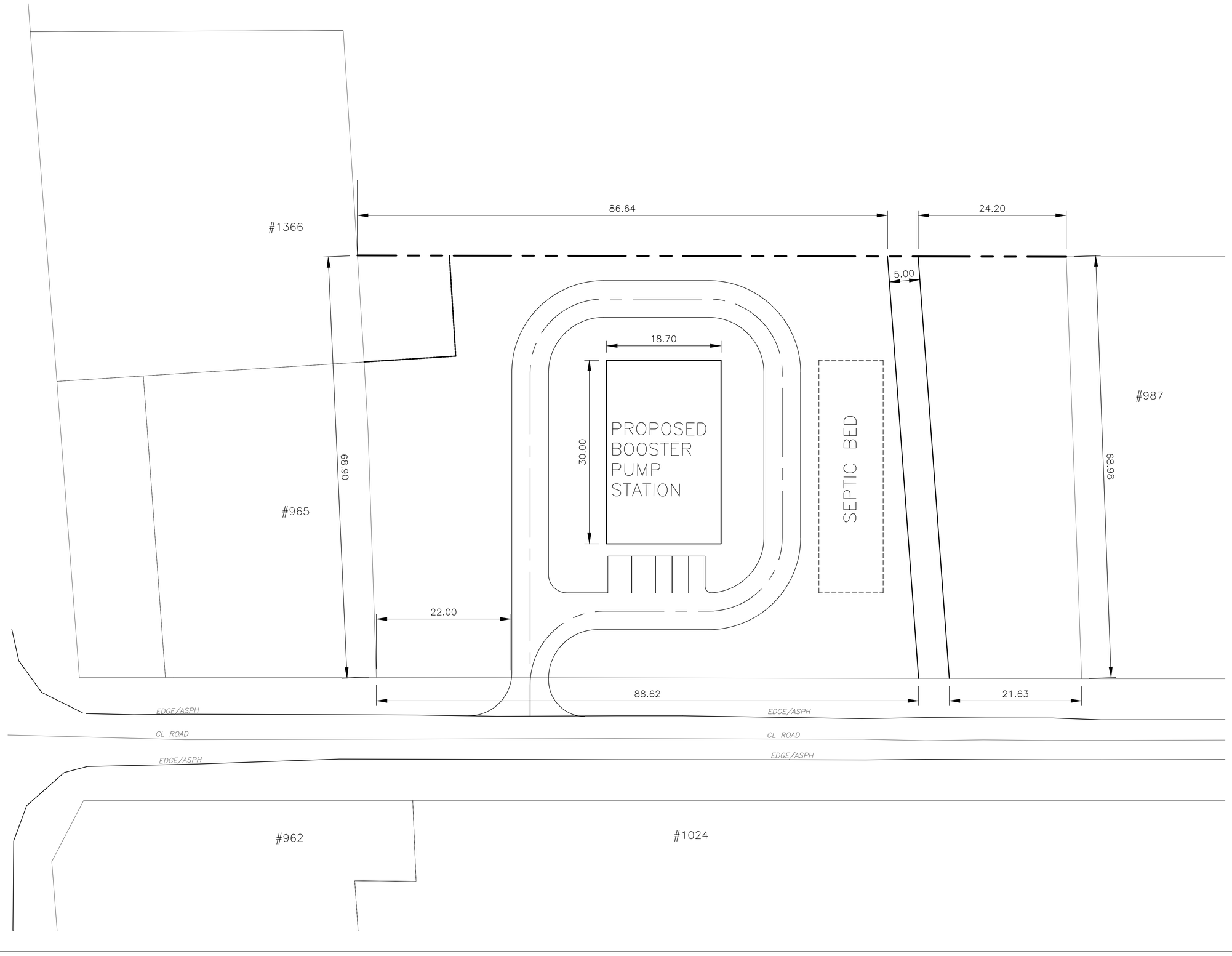
Figure No.
12

Title
Stage 1 Results and Recommendations
Booster Station Study Area

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Appendix C Preliminary Drawings



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Legend

Notes

Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD

File Name: 165630226-SK-101 — Dwn. — Chkd. — Dsgn. — 2020. YY.MM.DD

Permit/Seal

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Client/Project
SIMCOE TOWNSEND

WATER SUPPLY SYSTEM

, Ontario

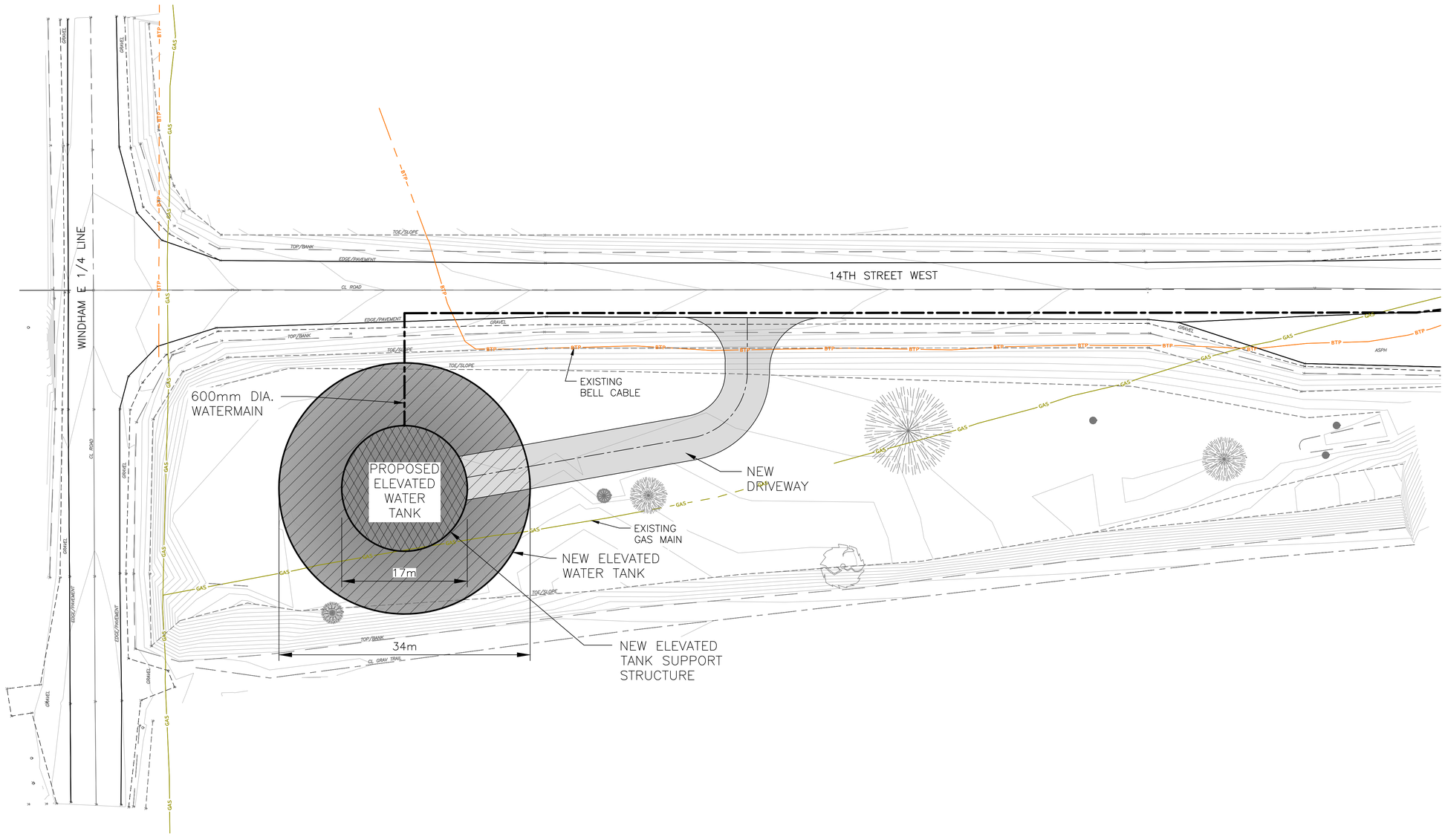
Title
BOOSTER PUMP STATION
SITE PLAN

Project No.
165630226

Scale
1:300

Revision

Drawing No.
SK-101



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File Name: 165630226-SK-102

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Client/Project
SIMCOE TOWNSEND

WATER SUPPLY SYSTEM

NORFORK COUNTY, Ontario

Title
ELEVATED TANK
SITE PLAN

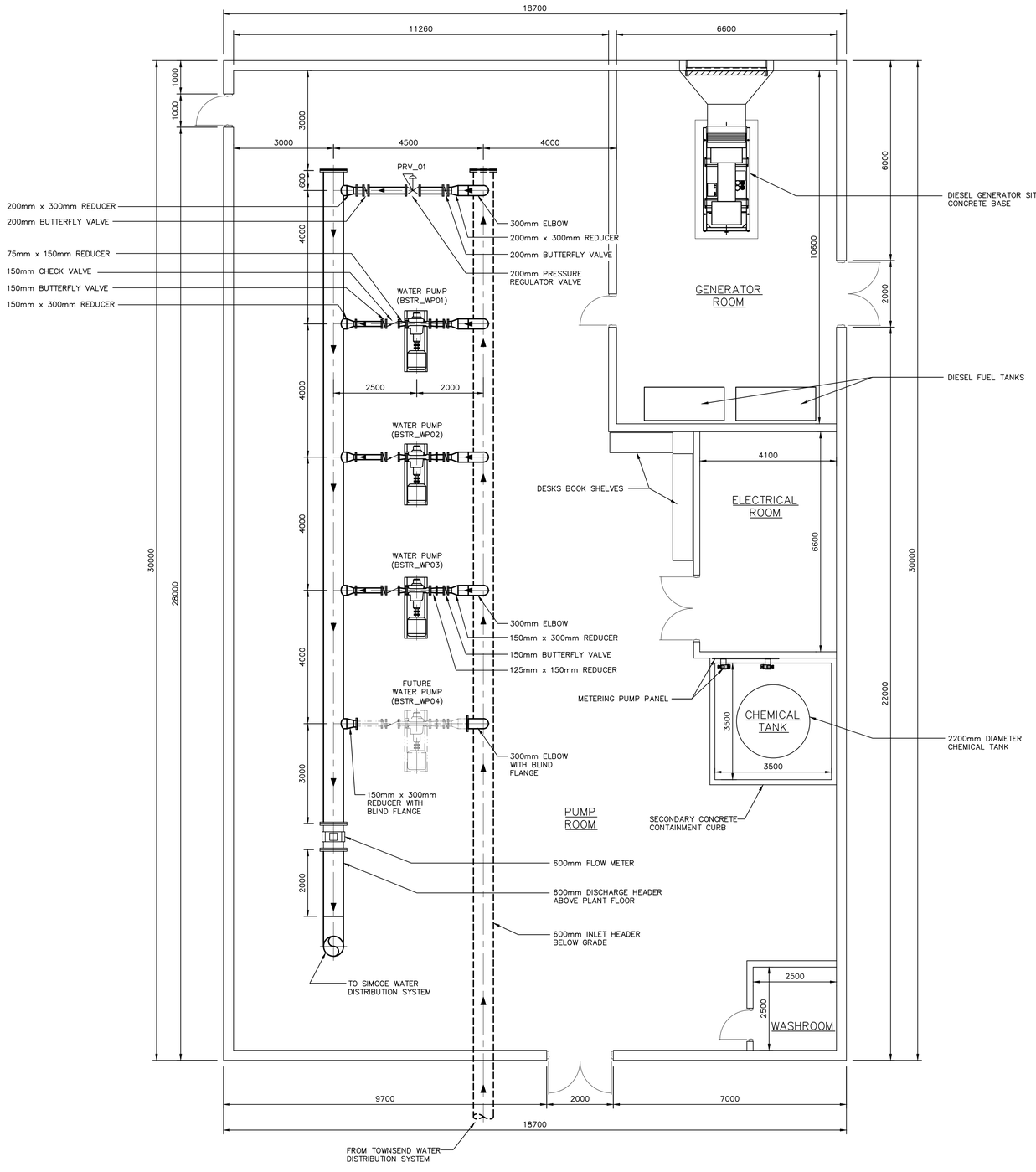
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Revision

Drawing No.
SK-102

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FLOOR PLAN

SCALE: 1:75

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File Name: 165630226-SK-201

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Client/Project
SIMCOE TOWNSEND

WATER SUPPLY SYSTEM

, Ontario

Title
BOOSTER PUMP STATION
FLOOR PLAN

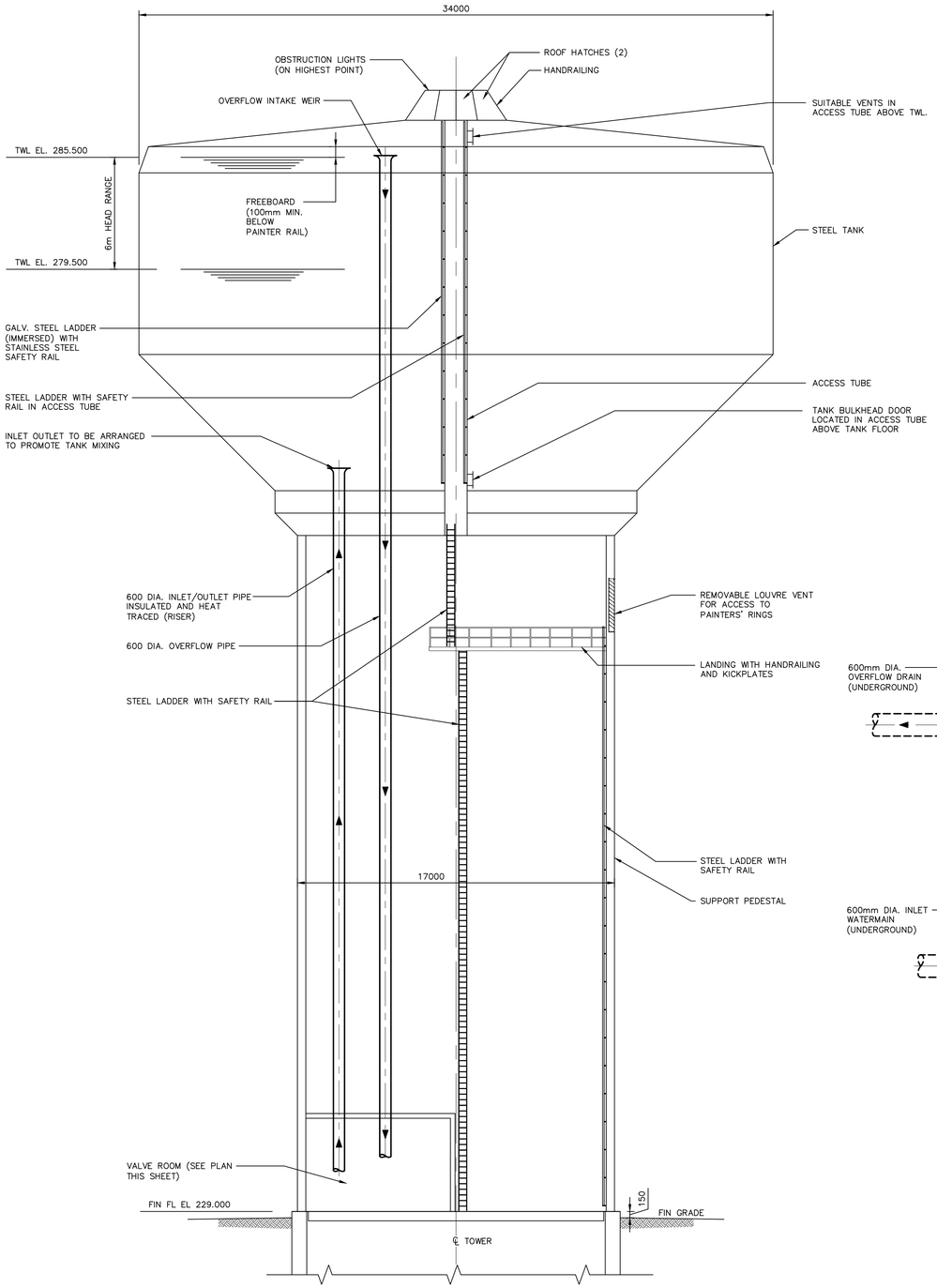
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Scale
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Revision

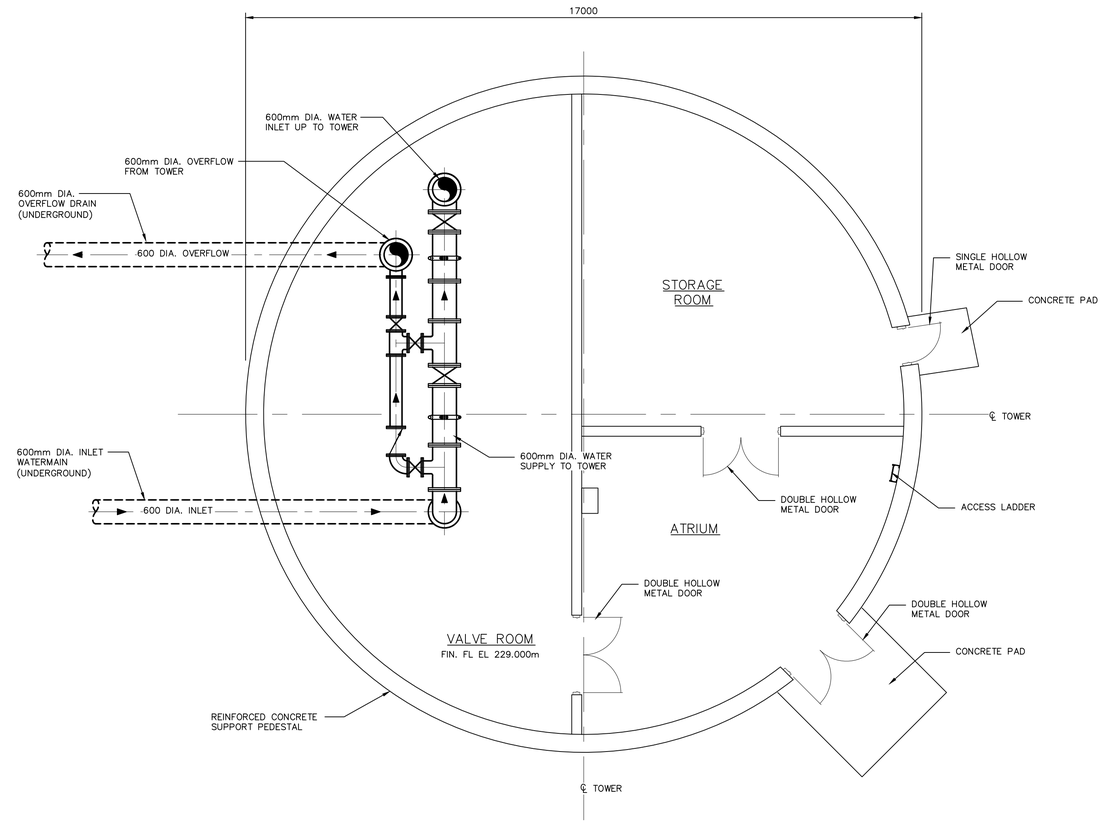
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ELEVATED TANK SECTION

SCALE: 1:150



ELEVATED TANK ARRANGEMENT PLAN

SCALE: 1:75

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Client/Project
SIMCOE TOWNSEND

WATER SUPPLY SYSTEM

, Ontario

Title
ELEVATED TANK
PLAN AND SECTION

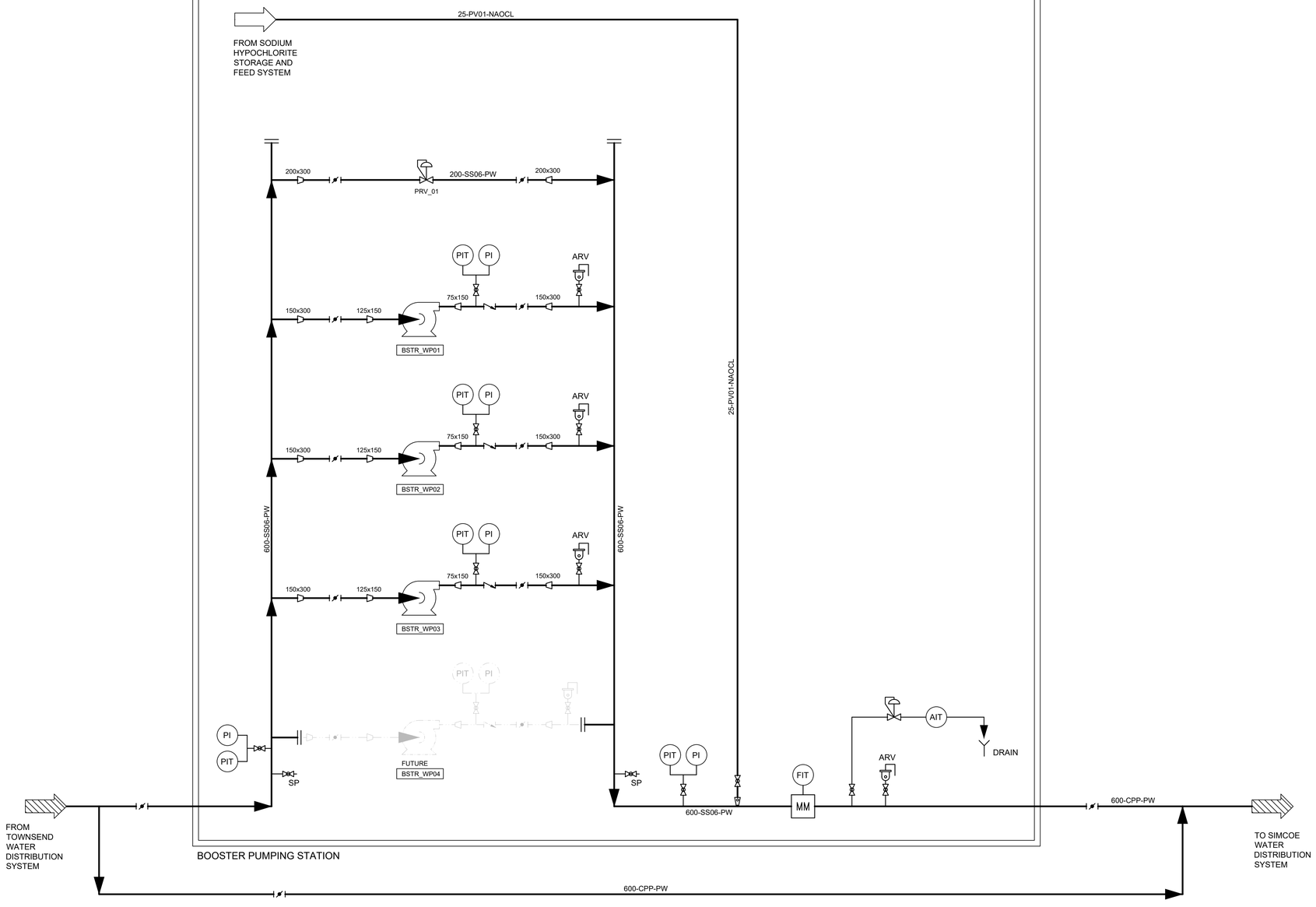
Project No.
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Scale
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Revision

Drawing No.
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Client/Project
SIMCOE TOWNSEND

WATER SUPPLY SYSTEM

, Ontario

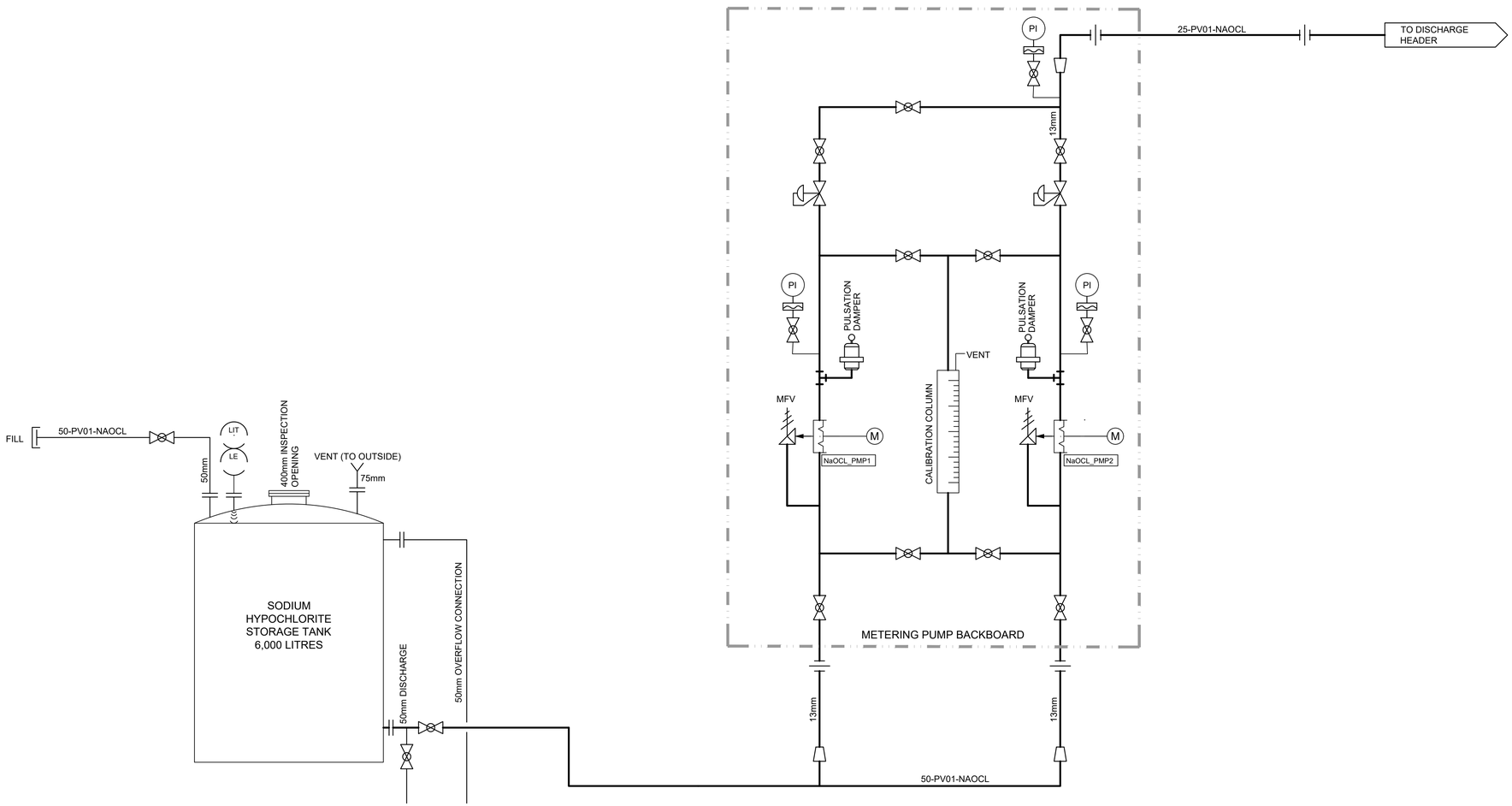
Title
PROCESS FLOW DIAGRAM

Project No.
165630226

Scale
NONE

Revision

Drawing No.
SK-601



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Client/Project
SIMCOE TOWNSEND

WATER SUPPLY SYSTEM

, Ontario

Title
CHEMICAL PROCESS FLOW DIAGRAM

Project No.
165630226

Scale
NONE

Revision

Drawing No.
SK-602

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Appendix D Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes Checklist

Ontario

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.

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Project or Property Name

Simcoe-Townsend Water Supply System, Municipal Class Environmental Assessment

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

Norfolk County

Proponent Name

Norfolk County

Proponent Contact Information

Mariana Balaban, P.Eng.; 519-426-5870 ext. 8158

Screening Questions

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

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

If No, continue to Question 2.

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

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

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

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

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

The summary and appropriate documentation may be:

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

If No, continue to Question 3.

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

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

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

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

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

If No, continue to Question 4.

Part B: Screening for Potential Cultural Heritage Value

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

Part C: Other Considerations

	Yes	No
5. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area):		
a. is considered a landmark in the local community or contains any structures or sites that are important in defining the character of the area?	☐	☑
b. has a special association with a community, person or historical event?	☐	☑
c. contains or is part of a cultural heritage landscape?	☐	☑

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

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

- a Cultural Heritage Evaluation Report (CHER)

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

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

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

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

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

The summary and appropriate documentation may be:

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

Instructions

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

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

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

In this context, the following definitions apply:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

i. designated under the *Ontario Heritage Act*

- individual designation (Part IV)
- part of a heritage conservation district (Part V)

Individual Designation – Part IV

A property that is designated:

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

Heritage Conservation District – Part V

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

For more information on Parts IV and V, contact:

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

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

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

The primary purpose of the agreement is to:

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

For more information, contact:

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

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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

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

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

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

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

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

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

For more information, see the National Historic Sites website.

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

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

For more information, see the Directory of Designated Heritage Railway Stations.

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

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

For more information, see the Heritage Lighthouses of Canada website.

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

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

For more information, contact the Federal Heritage Buildings Review Office.

See a directory of all federal heritage designations.

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

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

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

For more information, see Parks Canada – World Heritage Site website.

Part B: Screening for potential Cultural Heritage Value

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

Heritage resources are often recognized with formal plaques or markers.

Plaques are prepared by:

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

For more information, contact:

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

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

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

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

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

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

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

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

For more information, contact the Canadian Heritage River System.

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

- your conservation authority
- municipal staff

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

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

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

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

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

A building or structure can include:

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

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

Part C: Other Considerations

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

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

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

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

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

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

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

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

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

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

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

An internet search may find helpful resources, including:

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

Information specific to trails may be obtained through Ontario Trails.