

The Corporation of the Town of Lakeshore

Report to Council

Engineering & Infrastructure Services

Environmental Services



To: Mayor & Members of Council

From: Nelson Cavacas
Director, Engineering and Infrastructure Services

Date: April 15, 2020

Subject: Denis St. Pierre Water Pollution Control Plant Expansion EA Update

Recommendation

Direct Administration to issue a Notice of Completion and place the Denis St. Pierre Water Pollution Control Plant Expansion (WPCP) Class Environmental Assessment on the public record for the 30-day mandatory review period, at its regular Council meeting on April 28, 2020 for information purpose in finalizing the Class EA for the Denis St. Pierre Water Pollution Control Expansion Environmental Assessment Update.

Background

The Town adopted its first comprehensive Water and Wastewater Master Plan in November 2008, and then an update of this Master Plan was undertaken and completed in 2018. The Master Plan and Update, which were prepared in accordance with Phases 1 and 2 of the Municipal Class Environmental Assessment, identified the need for additional capacity within the Denis St. Pierre Wastewater System servicing the Belle River and Maidstone communities. The Denis St. Pierre Wastewater System consists of sanitary sewers, pumping stations, and the Denis St. Pierre Water Pollution Control Plant (WPCP) including an outfall discharging to Lake St. Clair.

There are pressures from residential and industrial development in the Belle River and Maidstone areas and to avoid a restriction to development, additional treatment capacity is required. The expansion of the Denis St. Pierre WPCP was identified as the preferred solution to support the existing services areas and the anticipated future growth.

The Class EA process is a decision-making and planning process that ensures that potential effects of a project are identified and managed prior to implementation. The Class EA process is a self-assessment process that includes five phases that must be followed to ensure that the best approach is identified to address a specific problem. The process requires the evaluation of possible solutions, design concepts, and recommends

the best approach based on a rigorous evaluation of environmental effects and how to address or minimize them.

The Denis St. Pierre WPCP Expansion Class EA study is being conducted as a Schedule C Project and it is required to complete all five phases of the Class EA process comprising of multiple steps for each phase. These include the following:

- **Phase 1** – Defining the problem or opportunity
- **Phase 2** - Identifying and evaluating alternative solutions to address the problem and establishing the preferred solution
- **Phase 3** – Examining alternative design concepts for the preferred solution and establishing a preferred design concept, as well as identifying measures to minimize any adverse effects
- **Phase 4** – Preparing an Environmental Study Report which summarizes the rationale, planning, design and consultation process for the Project
- **Phase 5** – Implementation of the Project

Comments

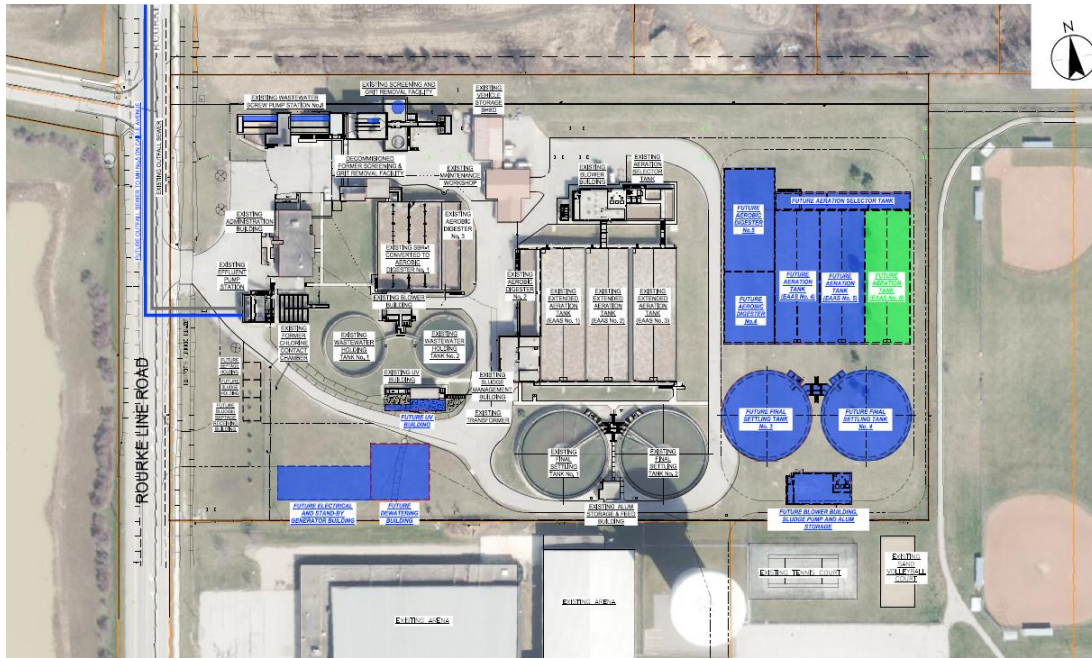
The Town commenced in 2019 a study to investigate alternatives and develop a preferred design for the Denis St. Pierre WPCP Expansion. This project is being planned as a Schedule C undertaking following the provisions of the Municipal Class Environmental Assessment document. The overall objective of this project is to identify a preferred solution and design that will satisfy wastewater servicing requirements for the anticipated future growth that is acceptable to the public and all concerned review agencies.

The Water and Wastewater Master Plan and Update were prepared in accordance with Phases 1 & 2 of the Class EA process, which identified the problem that needs to be addressed and consideration of alternative solutions leading to selection of the preferred solution. Through this process, the expansion of the Denis St. Pierre WPCP was identified as the preferred solution to meet future growth and development needs in the Belle River and Maidstone areas.

An Environmental Study Report has been prepared which presents the completed planning and decision-making process from the identification of the problem, through the selection of the preferred solution and evaluation of technical alternatives, to the recommendation of a specific design concept. The public and review agencies were consulted on several occasions during preparation of this ESR. Input from these sources has been incorporated in the ESR. The recommended design consists of the main elements shown in the aerial plan below as follows:

- Increase pumping capacity of the existing Maidstone Pumping Station No.8
- Add second fine screen and vortex grit tank in the existing Screening and Grit Removal Facility
- Add two new aeration tanks and final clarifiers
- Build new UV disinfection facility
- Construct new service building accommodating blowers, sludge pumps, and chemical feed and storage

- Add two new aerobic digesters
- Construct new centrifugal dewatering facility
- Construct new electrical and standby generator building
- Twinning of inland portion of outfall sewer along Rourke Line Road from the Denis St. Pierre WPCP to Caille Avenue.



The first phase of the plant expansion construction shaded in blue above will provide a 20 year design capacity of projected wastewater flows of an average daily flow of 25,000 m³ per day which is an increase from the current 14,500 m³ per day plant rated capacity. The green shaded area is a future aeration tank that would be constructed in a second phase beyond the 20 year period to further increase the plant capacity to an average daily flow 30,000 m³ per day for the ultimate design within existing footprint not requiring lands to the south.

Stakeholder consultation is an important component of the Class EA process, and there are requirements for mandatory notification and consultation with the public, agencies, and other stakeholders at key phases of the process.

Stantec has completed its consultation process with external groups. Some of the stakeholders and agencies included the following:

- Ministry of the Environment, Conservation and Parks (MECP)
- Ministry of Natural Resources and Forestry (MNRF)
- Ministry of Tourism, Culture and Sport (MTCS)
- Transport Canada
- Essex Region Conservation Authority (ERCA)
- Indigenous Services Canada (ISC)
- Hydro One
- Ontario Clean Water Agency (Town Operating Agent)

Further as part of the consultation process a public information Open House was held on September 11, 2019 to provide information regarding this undertaking and to invite input and comment from interested persons. Information on alternative concepts for the preferred design selected in Phase 3 of the Class EA process was available for review. The open house notice was published in the Windsor Star on August 24, 2019, Tilbury Times on August 27, 2019, the Lakeshore News on August 29, 2019, and the Shoreline News on August 30, 2019.

Denis St. Pierre Water Pollution Control Plant Expansion aligns with the objective of a sustainable healthy environment as stated in Lakeshore's Strategic Plan and is supported by Lakeshore's Water and Wastewater Master Plan.

Further, considering the needs of enhanced services to accommodate the pressures of existing residential and industrial development, and improve climate resilience to minimize sanitary sewer surcharging and flooding events and subject to completion and acceptance of Class Environmental Assessment, the recommended solution is the expansion of Denis St. Pierre Water Pollution Control Plant.

At this time, Administration is recommending that the Town of Lakeshore Denis St. Pierre Water Pollution Control Plant Expansion (WPCP) Class Environmental Assessment Update be adopted by Council and Administration be authorized to issue a Notice of Completion and place the Denis St. Pierre WPCP Expansion Environmental Assessment on the public record for the 30-day review period in accordance with the Class EA requirements.

Upon completion of the 30-day review period and assuming no Part II Order requests are submitted to the Ministry of the Environment, Conservation and Parks (MECP), the Town may then proceed with finalizing the engineering design and construction of the project as per the funding model described below.

Others Consulted

Stantec Consulting Ltd.

Financial Impacts

The 2019 Budget included \$200,000 to complete the Municipal Class Environmental Assessment (EA) for the Denis St. Pierre WPCP Expansion. The EA will be completed within budget which included completion an Archeological & Heritage Assessments that were in the range of \$25,000. Aside from the \$200,000 for the EA, Council approved \$2,200,000 in 2020 Budget to complete the engineering design for the plant expansion which is expected to be completed by summer of 2021.

Further, it is noted there are no immediate budget impacts arising out of the recommendations contained in this report and completion of the plant expansion project construction to be undertaken in the future as part of the recommendations in the Denis St. Pierre WPCP Expansion EA will have to obtain approval from Council before proceeding. The total construction cost of the plant expansion has been identified in the EA to be \$28,720,000.

Attachment(s): None.

Report Approval Details

Document Title:	Denis St. Pierre Water Pollution Control Plant Expansion EA Update.docx
Attachments:	
Final Approval Date:	Apr 23, 2020

This report and all of its attachments were approved and signed as outlined below:

Rosanna Pellerito

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Truper McBride