
Memorandum

PWC-C 1-2025

Subject: Update on Public Works Capital Projects – Q1 2025

Date: April 8, 2025

To: Public Works Committee

From: Terry Ricketts, Commissioner of Public Works

The purpose of this memorandum is to update the Public Works Committee on the status of Public Works capital projects.

There are currently 483 active capital projects in various stages within the Public Works Department relating to Transportation Services, Waste Management Services and Water and Wastewater (WWW) Services.

Appendix 1 contains a status update for 74 capital projects. These projects are mapped in Appendix 2 and have been selected because they are of public interest, are in construction now or will be in 2025, they have an effect on the community, because they are significant in scale or strategically important.

Five projects below are profiled in detail because they are of particular interest to the Region and community.

(1) Laurie Avenue Sewage Pumping Station and Forcemain Upgrade Project (Capital Project 20000702)

The Laurie Avenue Sewage Pumping Station was identified for growth driven capacity upgrade in the 2016 Master Servicing Plan which was further supported by the Town of Lincoln's Prudhommes Secondary Plan Area – Wastewater Servicing Impact Considerations memorandum. The existing station was constructed in 1979 with some rehabilitation work completed to the station in 2011 and a section of forcemain from the intersection at the North Service Road and Victoria Avenue North to south of the QEW upgraded in 1998. This capital project supports the development in progress at Prudhommes Landing in Lincoln by increasing the station's pumping capacity from 28 L/s to 90 L/s. The Region was successful in receiving the Housing Enabling Water Systems Funding from the Province for \$8.7 million for this growth supportive project.

The design work for this project was completed in Q2 2024 and construction is currently scheduled to mobilize in March 2025 and continue until October 2025. Installation of the new forcemain will be completed first and is anticipated to take nine (9) weeks followed by the station construction which is anticipated to take six (6) months. Project status, to date, includes initiating procurement of long lead delivery items to ensure a continual and organized schedule.

The construction upgrade for this project will:

- Construct new underground infrastructure (wet well, valve chamber) and install new pumps, process piping, electrical, instrumentation and control systems.
- Demolish existing control building and install a new covered shelter and outdoor natural gas generator.
- Install 520 metres of new forcemain from the station to the intersection of North Service Road and Victoria Avenue North
- Complete site restoration and improvements
- Reline culvert at Laurie Avenue creek crossing. The culvert relining is funded by the Town of Lincoln and included in the project through a cost sharing agreement.

During construction, no service interruptions for water, wastewater, power or gas supply to neighboring properties is expected. At times during the forcemain construction access to some driveways may be limited for a short duration but direct notice and accommodations will be coordinated in advance. Traffic impacts resulting in lane closures are expected during forcemain construction however occurrences and durations will be minimized where possible. Project status updates will be shared with interested parties and the public through the online project webpage and through postal delivered letters. Niagara Region is committed to support existing residents through construction and the Prudhommes Landing development through this project.

(2) New Fort Erie Elevated Tank (Capital Project 20000614)

Niagara Region is progressing with the construction of a 9,000m³ composite elevated water tank at 1886 Pettit Road, Fort Erie. This project was tendered in December 2024, with submissions closing on February 3, 2025. Contract award is expected by the end of May, and construction is set to commence in June 2025.

The scope of work for this project includes:

- Design and construction of a composite water storage tank with a net working capacity of 9,000m³, including a ground-level valve room, chemical room, washroom, piping, protective coatings, and related appurtenances,
- Construction of yard piping, encompassing a single inlet/outlet watermain, storm and sanitary sewers, duct structures, grading, access driveway, fencing, and landscaping, and
- Supply and installation of electrical, instrumentation, SCADA, and mechanical systems.

The new elevated tank will replace the aging Stevensville Reservoir and Central Avenue Elevated Tank, improving Fort Erie's water storage capacity, enhancing pumping operations, reducing long-term costs, and supporting the community's growth needs through 2051.

Community impact during construction will be carefully managed, with efforts to minimize disruptions in the vicinity. Updates on the project timeline and milestones will be shared with stakeholders and the public as work progresses. This project reflects the Region's commitment to ensuring reliable and efficient water services while accommodating the needs of a growing community.

(3) Glenridge – Passive Gas System for Closed Landfill (Capital Project 20000167)

The Glenridge Quarry Naturalization Site (GQNS), formerly known as the Glenridge Quarry Landfill Site was operated as a quarry prior to 1976 when it began operating as a landfill. In December 2001, the landfill closed and was subsequently turned into a naturalization site.

Although the site has long been closed as a landfill, it still produces gases from the buried landfill material. Over the past couple of years, gas has been observed near the east and south property boundaries. This project has upgraded the existing Passive Gas Venting System (the Gas System) on the east side of the property and a new Gas System has been installed on the south side of the site. Sheet pile/cut off walls were added down gradient to mitigate the potential for any combustible gas to migrate beyond either property boundary. The final stage of the project has involved the installation of over 60 boreholes on the east property boundary that have been used to grout/seal the overburden bedrock interface. Throughout the project, short-term trail

closures were posted at the trail heads and/or access roads. No issues or concerns were identified.

Completion of these project tasks will mitigate gas migration beyond the site and address instructions by the Ministry of Environment Conservation and Parks to address issues related to the presence of the combustible gas.

Work is expected to be completed at the end of February 2025

(4) Mountain Road – Leachate Collection System Upgrades for Closed Landfill (Capital Project 20000887)

The closed Mountain Road Landfill Site, in Niagara Falls, started operations in 1976 and closed in December 2001.

Sections of the leachate collection system (LCS) are nearly 50 years old, and the capacity is nearly maximized. Due to the age of the LCS, certain manholes are in poor condition and must be replaced. Improvements are being made to the LCS to increase its capacity and improve its effectiveness in capturing leachate.

The project is scheduled to start early spring, with completion in late 2025. As part of closing out the Class EA process, surrounding property owners were notified of the project. Periodic short-term closures or re-alignments of nearby walking trails might be required to accommodate project work. Like Glenridge, trail heads and impacted areas will be signed and fenced off as needed.

(5) Replacement of Twenty Mile Creek Arch Bridge (081220) (Capital Project 20000663)

The Twenty Mile Creek Arch Bridge on RR81 King Street in the Jordan Valley was recommended for replacement. In June 2022, the Municipal Class Environmental Assessment (EA) Study was completed, recommending replacement with a two-lane structure, and inclusion of active transportation facilities.

The Region and the Town of Lincoln collaborated throughout the design process to ensure local requirements were met. As part of the project, the rebuild of the Town's Sho'arishon Park, located adjacent to the bridge, has been integrated into the plan. Additionally, a First Nation-themed pedestrian barrier will be incorporated into the bridge structure, reflecting the area's cultural heritage.

In January 2025, a Public Information Centre was held to inform residents about the project and share details on the construction process.

Construction of the new bridge will be completed in stages. A temporary single-lane bridge has been installed to maintain traffic flow through the construction site, ensuring continued access along RR81 King Street through the valley.

Construction is expected to continue through March 2026, with periodic short closures required for site work. During this time, pedestrian access over the bridge may be temporarily restricted. Efforts will be made to minimize disruptions to businesses and residents as much as possible. Niagara Region staff will notify local resident in advance of any closure or service interruptions and work to arrange alternative solutions.

(5) Replacement of St. Paul West CNR Bridge (081215) (Capital Project 10RC1566)

The Municipal Class Environmental Assessment (EA) Study was completed in September 2016 identifying the bridge replacement. The EA recommended the following improvements:

- Replacement of bridge with a two-lane structure
- Geometric improvements to the approaches
- Bicycle facilities
- Sidewalk improvements
- Improvements to Great Western Street access

The Region and the City of St. Catharines collaborated through the design process to ensure local requirements were included. The bridge replacement is part of a broader project aimed at improving the transportation network and GO facilities in the area. The works as part of the overall project include:

- St. Paul Street West CNR Bridge replacement (Niagara Region)
- St. Catharines Train Station / Transit Hub site works (Niagara Region)
- Station access road from Ridley Road to the Train Station / Transit Hub (Niagara Region and City of St. Catharines)
- Ridley Road reconstruction (City of St. Catharines)

The bridge has been closed to traffic since November 2023 and the existing structure was demolished in November 2024. In January 2025, the station access road was

completed and Great Western Street was closed to allow for construction of the new bridge approaches on St. Paul Street. Construction of the new bridge has begun and is expected to continue through to 2026.

The bridge will remain closed until it reopens to one-way traffic in December 2025. Detours will remain in place for the duration of the project. While access to the bridge is limited, all businesses remain open and Region staff will continue to provide updates on progress and the scheduled reopening.

Where to Find More Information

Information about capital projects can be found online on project webpages found on the Region's website or where a project webpage is not available, by contacting the listed Director (information is provided in Appendix 1).

Staff will provide the next update on capital projects to Committee in fall of 2025.

Respectfully submitted and signed by

Terry Ricketts, P.Eng.
Commissioner of Public Works

Appendices

Appendix 1 Public Works Capital Projects Update Summary

Appendix 2 Niagara Region Public Works Capital Projects [Map]