

Memorandum

PWC-C 10-2024

Subject: Public Works Capital Project Update - September

Date: September 10, 2024

To: Public Works Committee

From: Terry Ricketts, Commissioner of Public Works

The purpose of this memorandum is to provide updates on 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 68 capital projects. These projects have been selected because they are of public interest, are in construction now or will be in 2024, they have an effect on the community, or because they are large or strategic in nature. Appendix 2 contains a visual representation of the 68 capital projects selected.

Four (4) projects below are profiled in detail because they are of particular interest to the Region and community.

(1) Quaker Road Sanitary Trunk Sewer Installation (Capital Project 20001149)

Construction is currently underway on a new 600mm sanitary trunk sewer along Quaker Road between Pelham Street and Rice Road. The new sanitary trunk is intended to provide additional capacity to the Region's sanitary collection system and reduce loading on the sanitary trunk along Pelham Street. The sanitary trunk sewer will vary between 6.0 and 8.0m deep, and runs approximately 1,240m. The proposed works for this project are part of a cost sharing between the Niagara Region, City of Welland, and Town of Pelham.

The Town of Pelham's long term road reconstruction plans for Quaker Road were accelerated to coincide with the planned Region trunk sanitary works that included the following:

- Additional local sanitary sewers to service new developments along the corridor,
- Watermain replacement, and
- Corridor urbanization including storm sewers, curb and gutter, sidewalks and bike lanes.

The City of Welland has included the following scope for the City's portion of Quaker Road:

- Watermain replacement, and
- Replacement / re-alignment of parts of the local sanitary sewer impacted by construction of the trunk sanitary sewer. – To be paid by Niagara Region as the changes are due to impacts from the Sanitary Trunk Sewer.

There have been a number of road closures to date for installation of the works along Quaker Road. Community outreach has been conducted accordingly by the Region and City of Welland and Town of Pelham project teams. There will continue to be road closures for the final connections of the infrastructure. The Region and local area municipalities will be working closely with the contractor to minimize the number of road closures and disruptions to the area.

Currently construction is on the Welland portion of the sanitary trunk sewer (heading west) which is scheduled to be completed by August this year. The Pelham portion of the project will continue into the winter with a final coat of asphalt applied for the entire stretch of Quaker Road in May of 2025.

(2) Ontario Street Sanitary Sewer and Watermain Replacement Project (Capital Project 20001175)

This watermain replacement project addresses the significant watermain breaks in 2019 and 2021 to the existing ductile iron pipe along Ontario Street in Lincoln. These breaks caused major service disruption to the area. Providing safe, reliable drinking water is a primary objective of Niagara Region. The deteriorating watermain is being replaced along Ontario Street from Greenlane to King Street with a new PVC watermain with valve chambers, fittings and joint restraints to avoid future problems that would affect the community of Beamsville.

Additionally, the Town of Lincoln, through a cost sharing agreement with the Niagara Region, is replacing and upsizing approximately 1.7 kilometers of PVC sanitary sewer

pipe, maintenance holes, and service laterals along the same stretch of road to address aging infrastructure and to meet future growth demands for the area and community.

The design work for this project was completed in 2023. Tendering for construction was initiated in Q3 2023, with construction starting in early Q1 2024. Construction work on this project, being completed by local contractor Alfred Beam Excavating, is targeting completion in the spring of 2025.

Project status, to date, includes the installation of the 1.7km of PVC watermain with associated valve chambers. Commissioning of the watermain began in June 2024 and will be completed before the end of the summer. Once the new watermain is in service, the contractor will begin installation of the Town of Lincoln's sanitary main components starting at Greenlane.

There have been a number of road closures to date for the watermain installation in major intersections. Community outreach has been conducted accordingly by both the Region and Town of Lincoln project teams. There will continue to be road closures for the final connections of the watermain and for portions of the sanitary main installation. The Region and Town will be working closely with the contractor to minimize the number and duration of road closures and disruptions to the area.

(3) Glenridge – Passive Gas Venting 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 involves upgrading the existing Passive Gas Venting System (PGVS) on the east side of the property and installation of a new PGVS on the south side of the site. The upgrades also include sheet pile/cut off walls down gradient of the PGVS to mitigate the potential for any combustible gas to migrate beyond either property boundary.

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

The design work for this project was completed in 2023. Tendering was initiated in February 2024 followed by construction in June 2024. Construction is slated for completion in late 2024.

Some accommodations are being implemented during construction but use of the site by the public has been maintained. Construction fences and signs along with information and updates provided on the Region's website and through social media are being used to help residents safely navigate the site during construction.

(4) 2024 Road Resurfacing Program – Region Wide (Capital Project 20001923)

Each year the Transportation Department completes an Annual Road Resurfacing Program. This pavement preservation strategy focuses on addressing roads that are within the recommended range for resurfacing. The pavement surface layer is milled and replaced with new asphalt. This action protects the health of the base asphalt, extends the life of the road and is part of routine pavement maintenance.

Candidates are selected using our Pavement Management System (PMS) and the condition assessment data from the annual pavement inspections. Additional criteria such as traffic volumes, road classification, subsurface requirements (i.e., culvert replacement, traffic signal infrastructure), where the road is in its lifecycle and the cost of the section are all factors used to determine candidate sections. The following are the roads selected for the 2024 Road Resurfacing Program:

- RR20 Lundy's Lane from Dorchester Road to Highland Road
- RR24 Victoria Avenue from RR63 Canborough Road to RR20 Hwy 20
- RR25 Netherby Road from Crowland Avenue to Point Abino Road
- RR33 Humberstone Road from Hwy 58 to Humberstone Landfill
- RR43 Bridge Street from RR102 Stanley Avenue to Second Avenue
- RR57 Thorold Stone Road from RR70 Thorold Townline Road to Kalar Road
- RR81 King Street from Thirteenth Street to Eleventh Street
- RR98 Kalar Road from RR98 Montrose Road to RR101 Mountain Road
- RR98 Montrose Road from RR57 Thorold Stone Road to Hwy 420
- RR116 Stevensville Road from Eagle Street to RR25 Netherby Road

The Region collaborated with the WWW Division and the Local Municipalities to ensure coordination with other projects.

The program began in May 2024 and will continue into late Fall 2024 or until the cold weather prevents paving. Traffic delays, road closures and detours are expected throughout the program to facilitate paving. A full list of the various traffic impacts can be found on the [Region's Annual Strengthening and Resurfacing Program Project page](https://www.niagararegion.ca/living/roads/strengthening-resurfacing-program.aspx). (https://www.niagararegion.ca/living/roads/strengthening-resurfacing-program.aspx)

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 and Appendix 2). Councillors may also find additional information in CAPEX.

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

Respectfully submitted and signed by

Terry Ricketts, P.Eng.
Commissioner of Public Works

Appendices

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| Appendix 1 | Public Works Capital Projects Update Summary |
| Appendix 2 | Public Works Capital Project Update Summary Map |