

# **Public Works Department Quarterly Report**

Wednesday, August 14, 2024

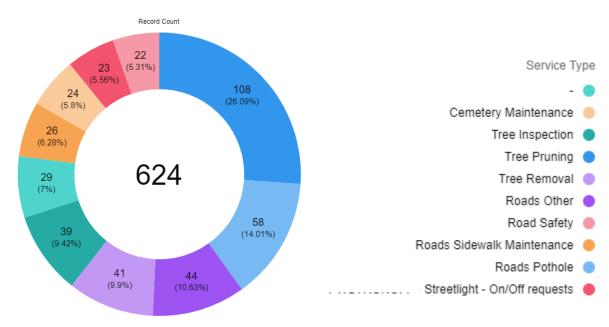
**Reporting Period:** Public Works Department Quarterly Report

for the period: April, May, June, and July 2024

#### **Recommendation:**

BE IT RESOLVED THAT the Q2 2024 Public Works Department Report be received for information.

#### **Department Overview and Statistics:**



The above image displays our year-to-date cases that have been opened in MuniPaas (Sales Force). For clarification, the light teal colour (the first colour under Service Type) are cases that have been opened by Sales Force for testing the system. In future reports, we hope to have quarterly case numbers to reflect the months captured within the report.

# **Public Works Operations:**

#### Roads

The primary function of the Roads Staff is to perform maintenance activities identified during routine road patrols as per the Ontario Regulation 239/02; Minimum Maintenance Standards (MMS) for Municipal Highways, passed pursuant to the *Municipal Act*, 2001.

April 1, 2024, marks the end of the 2023-2024 Winter Season. At the end of each winter season the Town of Pelham is required to report the quantity of de-icer used to perform winter maintenance to Environment Canada. The Town of Pelham uses two types of de-icers during winter operations: Salt (Sodium Chloride or NaCl) and treated abrasive (5:1 Sand/Salt mix). During the 2023-2024 winter season the Town of Pelham utilized 64 tonnes of salt, and 1802 tonnes of treated abrasive. The quantity of salt and treated abrasive used was well below the average of 292 tonnes of salt and 2680 tonnes of treated abrasive. While there are a great number of factors that contribute to the quantity of material used during any given season including: air and road surface temperature, accumulation of snow or ice, road condition, flash freeze events, and the individual plow operator, the 2023-2024 season was much milder than the average.

The milder winter temperatures have resulted in savings to the Winter Operations Budget. To date, 71% of the 2024 Winter Operations has been spent, leaving \$221,790, which is adequate for the beginning of the 2024-2025 winter season in November and December of this year. Staff anticipates that there will be an operating surplus in the Winter Operations budget at the end of 2024.

Throughout this quarter, road staff has concentrated their efforts on patching potholes on municipal roads, and other activities including culvert replacement and sign repair. Roads staff installed rubber speed cushions on Haist Street north of Brewerton to conduct a pilot traffic calming project. Once traffic speed data has been collected staff will report the results to Council. Requests for a similar pilot program have been received on Pancake Lane, west of Haist Street. If the speed cushions show an overall reduction in speed, staff recommend their installation on Pancake Lane, west of Haist Street where the road transitions from a rural to an urban road section.

#### **Beautification**

Throughout the second quarter, staff continued to respond to tree pruning, inspection, and removal requests. Staff are placing all Oak tree pruning requests on hold until November because oak wilt was detected in the Niagara Region in 2023.

All of the annual beds and 55 hanging baskets have been planted and installed. Staff continues to weed, maintain, and water the beds and baskets. The busy spring mowing season has continued through the end of the second quarter due to the relatively wet and warm start to summer. While some trail surface maintenance has been completed, the focus has been on maintaining turf. The number of property owners declining to maintain the boulevards fronting their properties has been steadily increasing year over year. This is placing greater pressure on the Beautification staff's time and budget.

Beautification Staff have increased the servicing of municipal garbage cans in parks and along trails in response to the higher frequency of use. Municipal cans in parks are being serviced three times a week, including a shift dedicated to emptying garbage cans on the weekends, when usage is the highest.

#### **Cemeteries**

In the second quarter, cemetery staff completed 27 interments, 5 of which were traditional (full) burials. The Town has sold 11 graves to families between Hillside and Fonthill Cemeteries, making our year to date plot sales 34.

The Cemeteries Stone Orchard Software Data Transfer project has been awarded to GEI Consultants (formally GM BluePlan) and is well under way with staff having regular progress update meetings.

#### Water/Wastewater

Water/wastewater maintenance activities continue throughout the year. Operators perform system pressure monitoring, flush water mains to ensure adequate chlorine residual, and respond to customer complaints or concerns.

Staff completed the spring watermain flushing program and have begun the 2024 fire hydrant maintenance program according to the Drinking Water Quality Management System.

Legislatively, the Town of Pelham Distribution System's Drinking Water Works Permit and Municipal Drinking Water License renewals were received from the Ministry of Environment, Conservation, and Parks. Additionally, the Town of Pelham's Drinking Water Quality Management System underwent a Fullscope Accreditation Audit performed by NSF International. As a result of a successful audit, the Town's Certificate of Accreditation to DWQMS Version 2, has been renewed.

In April, Water/Wastewater staff in conjunction with Beautification, and Engineering staff responded to a report of an exposed sewer main pipe running through an easement between Concord Street and Pancake Lane in Fonthill. A large section of the sewer pipe installed along the bottom of a steeply sloped valley had been exposed by erosion and was in danger of failure. A temporary access path to the site was constructed through Hillcrest Park, allowing staff to haul granular bedding and cover material, as well as geotextile to hold the soil that was pumped to the site from Concord Street utilizing specialized equipment. Rock was then brought in to armor the drainage course and control future erosion.





# **Public Works Engineering**

The following is a summary of the activities and projects that have occurred in the Engineering Department between April and July 2024:

# Pelham Street South (Phase 4) – South Spruceside Intersection to Town Limits

The project is substantially complete. The remaining work includes the reconstruction of the traffic signals at the intersection of Pelham Street and Quaker Road, the installation of the PXO lights, and final landscaping and surface works, which are scheduled to be completed in the summer of 2024. The Region is completing a sanitary sewer replacement project on Quaker Road between Pelham Street and Rice Road in 2024. Following the installation and connection of the sanitary sewer, the final asphalt will be installed at the intersection of Pelham Street and Quaker Road. This will mark the completion of the project.

The contractor completed the intersection works with new sidewalks and pavement markings. The Town is waiting on updated estimates for the Solar powered PXO lights. These works are anticipated to be done tentatively in October 2024.



Northbound on Pelham Street towards the intersection of Quaker Road/Welland Road and Pelham Street

## **Quaker Road Reconstruction Detailed Design**

The project includes the full urbanization of the roadway between Pelham Street and Line Avenue with concrete sidewalks on both sides, on-road cycling facilities, a new water main and services, a new storm sewer, and a new sanitary sewer. Niagara Region tendered the project in the summer of 2023, and it has been awarded to Peters Construction Group. The contractor commenced the work in mid-January 2024, starting with sewer installations at the east end of the project (intersection of Rice Road and Quaker Road).

As of July  $31^{st}$ , 2024, the contractor is approximately +/-100m to the boundary of Pelham, working their way out from the City of Welland's right-of-way. It is anticipated that the work on Quaker Road between Line Ave. and Pelham Street will commence in September 2024 and be completed in the summer of 2025.

## Pancake Lane Reconstruction Detailed Design

Pancake Lane, from Haist Street to Pelham Street, is to be reconstructed to include urbanization of the cross-section, upgrade the water main and sanitary sewer and a new storm sewer. The Town awarded this project to UEM, who are currently undertaking the detailed design, however, the Niagara Region is

currently in the design stages of the new trunk watermain feed to the new water tower location, which has put a hold on the progress until further details from the Region are forthcoming.

The Region and Town staff have had discussions regarding the proposed route for the new trunk watermain as the Region is proposing to use Pancake Lane instead of the current route along Bigelow Crescent. The Region has requested a partnership with the Town to include the detailed design of the Trunk Watermain into the detailed design of Pancake Lane.

This partnership is similar to the Quaker Road understanding where the Region carries out the full road design, construction costs and Contract Administration, and apportions out the Town's anticipated costs in a cost sharing agreement.

The details are currently being discussed between Town Staff, Regional Staff and UEM.

## **Canboro Road Reconstruction Detailed Design**

Canboro Road from Haist Street to Highway 20 is to be reconstructed to include urbanization of the cross-section and upgrade the water main and sanitary sewer. Kerry T. Howe Engineering is currently undertaking the detailed design; however, in the Niagara region's recent water study, they have requested that the water main be upsized throughout this corridor, which will significantly increase the overall project's cost. The town has notified the region that their request will require cost sharing. This project is scheduled to be constructed in 2025, pending budget approval.

# Northwest Fonthill Watermain Replacement

Approximately 1.9 km of non-PVC water mains will be replaced in Northwest Fonthill, complete with trench restoration. Kerry T. Howe Engineering has completed the design portion of this assignment. Cotton Inc. was awarded the tender for the construction portion of this project, which is scheduled to begin in August 2024 and be completed in November 2024.

# Reconstruction of Effingham St: Tice Road to 500M South of Metler Road

Effingham St from Tice Rd to 500m south of Metler Rd is to be reconstructed including improvements to the roadway and drainage. Upper Canada Consultants is currently undertaking the design which is planned to be in 2024 construction anticipated in 2027**Effingham Street from Highway 20** to Canboro Road

Effingham Street from Highway 20 to Canboro Road is to be reconstructed to include improvements to the roadway, a new sidewalk on the east side, and storm drainage. Upper Canada Consultants is currently undertaking the design assignment, with construction anticipated in 2026.

### **Church Street Culvert Replacement**

ELLIS Engineering completed the detailed engineering design for a concrete box culvert to replace the existing structure crossing Church Street, approximately 100m north of Chantler Road. The tender for this project was awarded to Rankin Construction, which has completed the removal of the existing structure. Construction is anticipated to be completed in September 2024.



#### **Bridge Replacement Program - Roland Road**

ELLIS Engineering is continuing to work on the Roland Road culvert design, which will be completed in 2024, with replacement anticipated in 2025.

## **Culvert Replacement Program - Balfour Street**

Staff identified a twin culvert crossing Balfour Street as being in need of replacement early in 2024. Staff identified a twin culvert crossing Balfour Street as needing replacement early in 2024. This tender for this project was awarded to County Line Construction, which is currently progressing with the removal of the existing steel multi-plate culverts, which have reached the end of their service life. The replacement of these twin culverts is anticipated to be complete by August 7<sup>th</sup>, 2024.



#### **Station Street Storm Pond Rehabilitation**

This project has been awarded to Duffin Contracting Inc. The commencement of the project has been delayed. This is mainly due to permitting restrictions from the NPCA and permission to enter and gain access over a hydro easement that runs between Station Street and Cataract Road directly adjacent to the stormwater pond outlet. The contractor continues working with the design consultant, Town Staff, and NPCA to get the necessary approvals to access the site and complete the work. Based on failed attempts to access the site via the Hydro One corridor, the Town has now directed the contractor to gain access to the site through the existing storm sewer easement and stormwater management facility. As a result, there will need to be limited tree removal and restoration work on the existing pond. All of this work for the access will be completed on Town property. A portion of the property is on NPCA-regulated lands, and approval for the work has been granted.

The Town and the contractor are discussing the construction timing. Staff will meet with the NPCA to discuss the application process for 2024. Pending authorization by the NPCA and the contractor's schedule, the rehabilitation is anticipated to be completed by the end of 2024.

## **Church Street Sanitary Sewer Design Upgrades**

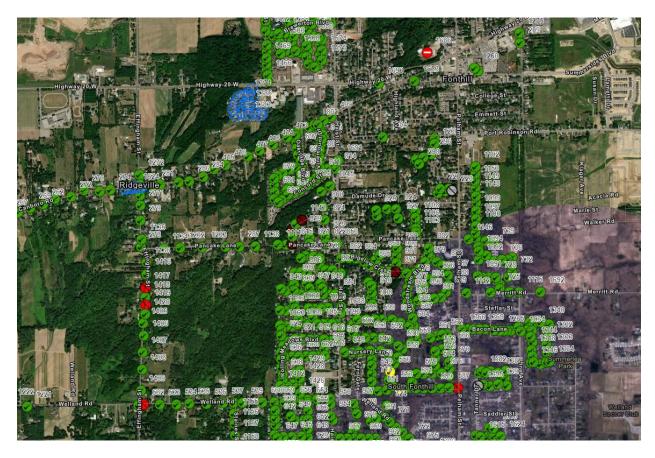
The project was tendered on March 9, 2023, and closed on April 4, 2023. In May 2023, the contract was awarded to Trenchline and Roads. In September, the contractor successfully executed the trenchless crossing of the CP Rail tracks. The contractor has completed all underground works, including Base asphalt and ditch restorations. The final top layer and deficiencies were completed in June 2024. The project is currently in the Maintenance Phase.



Church Street, North of the tracks, southbound approaching crossing.

## **LED Streetlight Conversion Project (Phase 2)**

Phase 1 was completed in February 2023. In early August, along with RealTerm and Transtest, a pre-construction meeting was held to discuss the project's second phase. It was anticipated that the project would be completed by the end of 2023; however, a supply chain issue affected the scheduling for this project. RealTerm and Transtest completed the project in February 2024, except for 31 LED Fixtures. These fixtures require different mounting hardware and will be completed once the contractor receives the mounting arms. It is anticipated that the project will be fully completed in October 2024.



Projected Map for Phase 2

In addition, the town has partnered with neighboring municipalities to maintain the streetlights. The contract was tendered on January 15 and awarded to Beam Power and Utilities LTD on February 16, 2024. The municipal partners are the Township of West Lincoln and the City of Port Colborne.

## Foss Road Sanitary Sewer Design Upgrades

Staff issued an RFP to complete the detailed design assignment and prepare tender documents (including permits and approvals from regulating approval agencies). The RFP closed on September 28, 2023, and was awarded to Associated Engineering Ltd. It is anticipated that the design will be completed by Q4 of 2024. Construction is scheduled to start in the spring of 2025, pending Council approval of the 2025 Capital Budget.

Staff and a consultant are currently conducting investigation work at the tracks to support the completion of the design in August 2024.

## **Centennial Park Washroom Upgrades**

From January to March, the project progressed steadily, with minor delays due to supply chain issues. The project was substantially completed by March 28th, 2024.



Completed Centennial Park Concession and Washrooms

## **Roadside Ditching Program** (2024)

CRL Campbell was awarded the 2024 tender for the concrete repair and replacement program. Due to the new soil regulations and additional testing requirements, quantities were reduced from previous years to stay within the approved budget. Once soil testing has been completed, the program is anticipated to begin in August and be completed by the end of the calendar year.

# **Concrete Repair and Replacement Program** (2024)

The 2024 concrete replacement tender was a three (3) year program that was awarded to Sacco Construction. The contractor has been working throughout the town in July and is nearing completion of all replacements, with sod reinstatements to follow.

## **Sidewalk Inspection and Trip Hazzard Removal**

This tender was awarded to Safe Sidewalks Canada, which completed the sidewalk inspection portion of this contract in May. The inspection results were

used to select replacement locations and locations for trip hazard cutting. Trip hazard removal will be completed by the end of summer 2024.

### Fire Station 1 Conceptual Design

Raimondo & Associates Architects Inc. prepared a conceptual design to reconstruct Fire Station 1, located on Highway 20. The conceptual design identified space requirements, a preliminary floor plan design, and a preliminary construction cost estimate. In addition to this assignment, staff requested that the architect complete a cost-benefit study and rehabilitation/replacement analysis to consider alternatives for the council's review. Staff prepared a report for council consideration in June 2024 with respect to different alternatives for rehabilitation and/or replacement of the fire station. At this meeting, Council has endorsed a complete replacement of the existing facility, and staff are currently preparing a companion report that looks at design options and location alternatives.

Following the report, which is expected to be presented in September 2024, staff intends to issue an RFP for architectural services to complete the detailed design for the preferred solution.

## 2023 Road Rehabilitation Program - Continuation

The contract was awarded to Walkers Construction LTD. The Town is working on rehabilitating 8 kilometers of the rural road network for 2023.

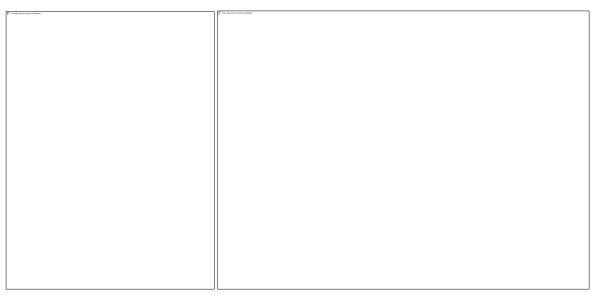
In September of 2023, a bonded wearing course (an innovative surfacing technology) was completed and applied to the following locations:

- (1) Maple Street;
- (2) Twenty Road to Sawmill Road;
- (3) Maple Street: Sixteen Road to Kilman Road;
- (4) Maple Street: Kilman Road to Metler Road; and
- (5) Effingham Street: Sumbler Road to Chantler Road.

However, due to surface temperature application constraints with the traditional surface treatment process, the following roads are scheduled to be completed in August of 2024.

Roland Road: Effingham Street to Centre Street Pihnach Street: Webber Road to Chantler Road Beamer Street: Twenty Road to Spring Creek Road

Sawmill Road: Moyer Road to Cream Street



Section of Maple Street and Effingham Street with Bonded Wearing coarse application

Based on the 2023 Pavement Index Study completed in May, the overall road network rating went down from 69 to 64. The timely replacement of the town's aging infrastructure benefits the town's infrastructure and is critical to ensuring the Town maintains a safe and efficient transportation network.

## 2024 Road Rehabilitation Program

The contract for this project was published on March 11, 2024, and closed on April 2, 2024. The project was awarded to Walker Construction LTD. The contract consists of 8 kilometers of rural road network for 2024. The works will commence in June and are anticipated to be completed in September 2024.

In June, the Contractor placed asphalt padding to eliminate surface imperfections. The Final Bonded Wearing Course of the Asphalt will be in place by mid-August 2024.

Bonded wearing course (an innovative surfacing technology) to be applied to the following locations: Kilman Road: Maple Street to Victoria Avenue Metler Road: Balfour Street to Victoria Avenue Wessel Drive: Town Limit to Sawmill Road Haist Street: Overholt Road to Metler Road



Kilman Road between Maple Street and Victoria Ave, before and after

## **Road Base and Patching Repair Program** (2024)

The contract was tendered on February 15, 2024, and closed on March 8, 2024. Circle P Paving was awarded the contract on March 9, 2024. This is a 3-year contract.

Circle P Paving started the patching and surface works in May 2024. In addition, the section of Merritt Road from Line Avenue to Rice Road will be rehabilitated as part of this contract. Work is scheduled to be completed August 2024.

## **Town Of Pelham Slope Stabilization Design**

The contract for this project was published on April 30, 2024, and closed on May 23, 2024. The Project has been awarded to Kontzamanis Grauman Smith McMillan Inc (KGS Group). The Proposal is to acquire design services to rehabilitate the areas with slope stabilization issues in the Town of Pelham. The locations noted below have been identified to have slope failures:

- 50 metres north of Centre Street and Roland Road North
- End of Spencer Lane overlooking Marlene Stewart Park
- Between 536 River Road and 531 River Road



Spencer Lane Slope Failure, overlooking Marlene Stewart Park

The designs are anticipated to be completed by Q1 of 2025.

# Timber Creek Stormwater Management Facility Rehabilitation (2024)

In 2024, the Council approved a \$300,000 budget to complete maintenance and repair work to the Town's stormwater management facilities. A study completed by Matrix Solutions Inc. in 2024 identified approximately \$3M of

rehabilitation and maintenance work to be completed in the next 10 years. In March, staff issued an RFP for the design portion of the assignment. The RFP closed on April 5th and was awarded to Matrix Solution. Matrix is currently working on the details for the storm pond cleanout.

### **CLI/ECA Operation Manuals**

Following the new legislation surrounding Consolidated Linear Infrastructure and Environmental Compliance Approval regulations, the Town must produce and implement an inspection and maintenance program for sanitary and storm sewer infrastructure. In 2024, the Council approved a \$150,000 budget to complete the operations and maintenance manuals for the Town's storm and sanitary system. In April 2024, the Town awarded GEI Consultants (formally GM BluePlan) in the amount of \$99,288.00. The project kicked off in July, with an estimated completion date of the operations manuals by the end of 2024.

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# Design of Station Street from Port Robinson Road to Hwy 20

In 2024, Council approved a project for \$100,000 to finalize the detailed design assignment for Station Street between Port Robinson Road and Hwy 20. The project includes the full urbanization of the roadway, including new sanitary and storm sewers, concrete curb and gutter, concrete sidewalks, a multi-use pedestrian path, and upgrades to the intersections at Port Robinson Road and Summersides Blvd. The project also includes coordinating the Station Street extension south of Port Robinson Road to accommodate the Forest Park development and the reconstruction of the intersection of Port Robinson Road and Station Street.

# **Sulphur Springs Road Slope Stabilization Project**

The project was approved by the Council in 2023. It was tendered as a design-build project and awarded to Duffin Contracting in October 2023 for \$437,310.

Duffin is currently in the design and consultation phase of the project, liaising with the NPCA and NEC about permitting. They have retained Maccaferi as their Geotechnical Engineer to assist with the proposed construction design and process.

It is anticipated that construction will begin in the spring of 2025.

### **Town Hall FOB KEY project**

This project aims to improve the security at Town Hall. The RFP was published on February 5th, 2024, and closed on March 5th, 2024. On March 15th, 2024, the project was awarded to Pinder's Security Products. The project commenced in May 2024. Cable runs and device installations were completed at the end of May 2024.

Staff and contractor investigations determined that power shortages and device defects are causing the project delay. To complete it in early August 2024, the contractor will replace the panels and devices at their own cost.

#### **Miscellaneous Topics:**

In addition to the current capital projects, Engineering staff continue to review all Planning and Committee of Adjustment applications thoroughly. Reviews entail a site visit and detailed analysis of drawings and reports to ensure Town standards are adhered to. For more complex applications, this process sometimes involves several re-submissions and repeated reviews by staff. Engineering staff also continue to manage requests for the assumption of subdivisions and the reduction of securities at various stages of the development process. In addition, the engineering staff reviews lot grading plans for building permits received through the Planning Department.

Further, Engineering Staff continue to support the Pelham Active Transportation Committee (PATC), Environmental and Climate Adaption Advisory Committee (ECAAC), and the Utility Sustainability working group.