

MEMORANDUM

To: Town of Pelham Council

From: Gimuel Ledesma, C.E.T., rcjj; Senior Engineering Technologist

Date: March 5, 2025

Subject: Winter 2025 Road Condition Inspection and Needs Assessment

Recommendation:

BE IT RESOLVED THAT Council receive memo 2025-0074-Public Works - Winter 2025 Road Condition Inspection and Needs Assessment for information;

AND THAT Council APPROVE \$517,081 (includes net HST) of additional capital funds to complete additional Road Rehabilitation on Foss Road between the CP Rail Tracks and Balfour Street and between Effingham Street and the Town boundary approximately 350 m east of Haist Street;

AND THAT Council approve the funding from the underspent Road Rehabilitation budgets: RD-09-23 for \$145,764 and RD-07-24 for \$282,298; for a total of \$428,062;

AND THAT Council approve an additional budget of \$89,019 to be funded from the roads reserve. A new project, # RD-17-25, will be set up called "Foss Road Emergency Repairs" for a total of \$517,081.

Analysis:

Over the last few weeks, the Town's Road Network has gone through a significant freeze-thaw cycle that has impacted the road base and road surface treatment in areas throughout the Town. The standard mandatory road maintenance practice of applying salt and sand has added to the thaw cycle and increased the thaw of the road surface and sub-base. This has impacted the aging infrastructure and accelerated the deterioration of the road network.

Attached to this report, Appendix A, is a map indicating a subset of potholes documented within the Town's Road Patrols and inspections from November 2024 to February 2025. It indicates that the Town's roads have been severely impacted and need additional remediation. The coloured lines (Red and Cyan) indicate where inspections and preventative measures were

applied. The Other lines (Green and Purple) represent the road candidates proposed for the 2025 Road Rehabilitation Program. Appendix B Shows recent photographs of roads that have experienced severe failure.

The 2023 average PCI of the Town’s Road network is 65 out of 100. A decrease from the 2019 average PCI of 69. The 2023 Pavement Condition Study completed by ARA recommended that an annual investment into the road network of \$8 million per year is required to maintain the average PCI at its current level. As the Town cannot allocate this level of funding, it is expected that the average PCI of the Road Network will continue to decrease over time. The Town has made progress with the rehabilitation program with the increased road maintenance and rehabilitation budget over the last 5 years, with an average of 7 km of pavement being rehabilitated each year, which equates to approximately 2.8% of the approximately 244 km of roads within the Town.

Based on the severe weather experienced in January and February of 2025 and the recent freeze-thaw cycles, the road network has experienced more distress and failures than regular winter seasons.

This memorandum informs Council of the challenges the Town and the Public Works Department face in maintaining minimum maintenance standards and providing a safe transportation network. It also requests that Council approve additional funds to supplement the 2025 Road Rehabilitation Program and the 2025 Road Base and Surface Repair Program.

Foss Road Road Patrols and Estimates

Based on the recent road patrols and inspections, Foss Road between the CP Rail tracks in Fenwick and the Pelham boundary (approximately 350 m east of Haist Street) has experienced severe pavement distress and complete failure in some locations.

The Region will be upgrading the Foss Road Sanitary Pumping Station (SPS) at some point in the next 10 years, mainly due to growth, and will also need to upgrade the force main from the SPS to South Pelham Street. In addition, the 10-year capital forecast includes a project to replace the sanitary sewer on Foss Road from Church Street to the Region’s pumping station. The project will include road restoration from Church Street to Balfour Road. As a result of the above-anticipated projects, staff have been holding off on completing major rehabilitation work on Foss Road. Roads staff have diligently maintained the minimum maintenance standards for these sections. However, these are becoming more difficult to maintain, ultimately putting the corporation at risk. It has now become a situation where a rehabilitation of Foss Road is required for public safety.

Staff have identified two road segments on Foss Road that need full-depth reclamation and repair. Table 1 shows the extent of the repair limits and the areas requiring immediate attention due to their existing conditions.

Table 1: Road Sections Identified as Requiring Immediate Attention

Segment	Length(m) LxW	Rehabilitation Estimate
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1) Foss Road: Train Tracks to Balfour Road	532 x 7	\$ 271,421
2) Foss Road: Effingham Street to Town Boundary	1580 x 7	\$ 236,717
TOTAL		\$ 508,138

Note*

Asphalt premium cost for winter paving included in the above estimates.
Above cost does not include net HST of 1.76%

Based on the traffic volume on Foss Road, the existing pavement structure, and the types of failures observed, Staff recommend a full-depth reclamation of the existing pavements for the above areas. The total estimated cost to complete the work on Foss Road this winter is \$508,138 (\$517,081 including net HST).

In accordance with the Town's purchasing policy (S402-00) staff are required to issue a tender for capital projects exceeding \$25,000. The Request for Tender (RFT) process would potentially delay the project by two months. Under the procurement policy staff have considered this repair to be an emergency in accordance with Schedule H(e). The policy allows the CAO or the Fire Chief to authorize a purchase without a competitive procurement process to secure the required goods and/or services as expeditiously and economically as possible. Staff intend to issue a Request for Quotation (RFQ) to complete the repairs to three contractors that have completed this type of work for the Town in the past.

Staff investigated opportunities to complete patching in these sections of the road network; however, these road patches would not hold due to extensive surface cracking/deterioration and the compromised condition of the road base.

Road Base and Surface Repair Estimates

In 2025 Council approved a capital budget of \$300,000 to complete asphalt repairs to roads throughout the Town's network under RD 04-25. Based on the surveys completed by staff, it is estimated that an additional 3,300 m² of patching will be required in 2025. This represents an additional cost of approximately \$250,000 based on recent tender results. The 2025 Road Base Repair and Asphalt Patching program would be exhausted if the budget was used to only address the areas recently identified, resulting in less patching work on other town roads, especially in the urban areas.

Staff will use the approved capital budget for RD 04-25 to complete patching work to ensure that the roads remain safe. Staff will reevaluate the budget later in the spring/summer to determine whether additional funding will be required (this is likely). If so, this information will be reported to Council before proceeding with additional work.

The Town currently has a three-year contract with Circle P Paving for the 2025 Road Base and Surface Repair program. As a result, this work can proceed as required using this vendor.

Furthermore, Staff have identified two other candidates for the Road Rehabilitation program based on the recent inspections. The two roads are Kilman Road from Centre Street to Effingham Street and Sawmill Road from Cream Street to Wessel Drive. The rehabilitation treatment will be a full-depth process, including pulverization and the application of a double-surface treatment. The estimated cost to complete this work is \$156,000 for Kilman Road and \$218,450 for Sawmill Road for \$374,450 (plus HST). These segments of Road would be completed in late spring/early summer when the 2025 Road Rehabilitation program is completed. The 2025 Road Rehabilitation project is currently out for tender and closes on March 20th.

Staff will complete patching on these sections of road using RD 06-25 and re-evaluate their condition in the spring of 2025. It is highly likely that these roads will need to be included in the road rehabilitation program. Staff will report back to Council if additional funds are required.

Financial Considerations:

Council approved RD-06-25 (cost centre # 300685) for the 2025 Road Rehabilitation in the amount of \$1,250,000 and RD-04-25 (cost centre # 300682) Road Base and Surface Replacement Program \$300,000.

The estimated cost to complete the required repairs on Foss Road is \$517,081 (including net HST). Due to the road's current state, staff recommend that this work commence immediately.

It is anticipated that approximately \$250,000 more patching work will be required on Town roads this year. Staff will utilize the budget approved in RD 06-25 and report back to Council in the spring/summer to determine if an additional budget is required. (See Appendix C).

Further, Staff have identified two roads that may require full-depth remediation: 1) Kilman Road from Centre Street to Effingham and 2) Sawmill Road from Centre Street to Wessel Drive. The estimated cost to complete this work is \$381,040 (including net HST). Staff will monitor the condition of these roads and report back to the Council if an additional budget is required.

There is an approved budget from previous road rehabilitation programs (RD-09-23 and RD-07-24), with remaining carry-forward amounts of \$145,764 and \$282,298, for a total of \$428,062. The Roads Reserve will cover the remainder of the required funds of \$89,019.

A project number RD-17-25 will be created called "Foss Road Emergency Repairs."

Alternatives Reviewed:

Council may choose not to approve the additional funds for Foss Road rehabilitation. Staff are not in support of this action since doing nothing would increase safety concerns for the public and put the Town at risk. Also, the Town would incur significant operational maintenance costs to maintain the roadway, if possible, based on the road's poor condition. If staff do not complete the required repairs, it may also result in potential road closures.

Strategic Plan Relationship: Infrastructure Investment and Renewal

The timely replacement of our aging infrastructure benefits the town's infrastructure and is critical to maintaining a safe and efficient transportation network.

Consultation:

The manager of Engineering, the Manager of Public Works, the Supervisor of Roads, and the Town Treasurer were consulted regarding this Memo's financial and budgetary considerations.

Other Pertinent Reports/Attachments:

Appendix A- Town Map Roads

Appendix B- February 2025 Roadway Inspection Photos

Appendix C- Repair List Overall

Reviewed by:

Jason Marr, P.Eng ; Director of Public Works