



Staff Report to Council - for Information

Title: Durham Street Bridge - Flooding Impacts on Construction

From: Adam Stanley, Director of Transportation and Environmental Services

Date: April 3, 2025

Report Number: TES-2025-007

Report Purpose:

This report is for information.

Report Summary:

Due to the recent flooding at the Durham Street Bridge project site, the construction platform sustained significant damage. As a result, construction work is currently on hold. The project team consisting of representatives from Pullman, Triton Engineering and Bruce County's Transportation and Environmental Services team are working on a solution to resolve the damage sustained to the platform. A fulsome update on the project schedule and budget will be brought to a future Council meeting once all the information is available.

Background/Analysis:

A combination of warm temperatures and the melt of a substantial snow-pack, recently lead to high water levels in the Saugeen River. The Durham Street Bridge, in downtown Walkerton, was closed to traffic on the morning of March 17th, 2025 due to flood impacts on the centre span of the construction platform, and re-opened on the afternoon of March 19th, 2025.

In December of 2024, the project team recognized that flooding could impact the construction platform and prepared a flood mitigation procedure. It was recommended by the Contractor and Consultant that the Centre span remain in place to allow for the half-joint repairs to continue through January, February and March. The west platform (span 1) and east platform (span 3) were removed by mid-January to lessen the potential flooding impact.

Staff were vigilant in monitoring the flood threat potential with the Saugeen Valley Conservation Authority (SVCA) and once the Saugeen River levels began to rise due to the flood threat was raised from "cautiously monitoring" to "continuously monitoring" on March 16, 2025. The temporary bridge closure was implemented on March 17, 2025 out of an abundance caution. Emergency vehicles were permitted to use the bridge to respond to calls throughout the closure to ensure there was no change to emergency response times.

An Engineer's assessment of the bridge structure on March 19th, 2025 concluded that the recent spring thaw did not structurally damage the bridge. However, the centre span of the construction platform underneath the bridge, sustained significant damage from large debris carried downstream. The centre span of the construction platform requires immediate attention before construction activity underneath the bridge can resume. The centre section of platform has been in place since construction began in May of 2024 and is a crucial component to the ongoing work to repair the bridge's half-joints.

The project team consisting of representatives from Pullman, Triton Engineering and Bruce County's Transportation and Environmental Services team are working on a solution to resolve the damage sustained to the platform. In the meantime, construction on the bridge is on hold.

As discussed at the February 3rd, 2025 Council meeting, a number of significant winter weather events have created difficult working conditions on site and have impacted the project schedule. The additional impact on the project's schedule due to the flooding and damage caused by the debris is not entirely known at this time. The project team will be working to resolve the platform issues and update the project schedule as soon as possible. A fulsome update on the project schedule and budget will be brought to a future Council meeting once all of the information is available.

Photographs of Flooding & Debris at Durham Street Bridge, March 17-18, 2025



Pictured above, the Saugeen River breached the Centre Span of the construction platform at 5:30am Monday, March 17th, 2025. River Flows recorded upstream by station 02FC002 on Environment Canada's Real Time Hydrometric Flow Data website show a peak flow rate of 377m³/s was reached at 4:10pm Monday, March 17th, 2025. The average flow rate in this location is approximately 30m³/s.



Pictured above, the high water levels left significant debris and damage on the Centre span platform as water levels began to recede on Tuesday, March 18th, 2025.

Financial/Staffing/Legal/IT Considerations:

Staff are working with the project team to determine the extent of the construction platform damage resulting from the flooding and debris. Staff will work with the project team to identify any impacts to the project budget and report back to Council at a future meeting.

There are no staffing, legal or IT considerations with this report.

Interdepartmental Consultation:

The Office of the CAO was consulted.

Link to Strategic Goals and Objectives:

Community and Partnerships - Enhance and grow partnerships

Growth and Innovation - Strengthen County's use of technology and innovative initiatives

Link to Departmental Plan Goals and Objectives, if any:

Goal No. 5 from the Transportation & Environmental Services Departmental 2024 Business Plan - Re-enforcement of the Durham Street Bridge.

Departmental Approval:

Adam Stanley, Director of Transportation & Environmental Services

Approved for Submission:

Claire Dodds, Commissioner of Community Development