



TOWN OF MINTO

DATE: August 15, 2016
REPORT TO: Mayor Bridge and Members of Council
FROM: Mike McIsaac, Roads Foreman
SUBJECT: Structure P Rail Trail Fire

STRATEGIC PLAN:

- 7.2 Promote and pursue in partnership with trail groups and landowners a trail link from Palmerston to Harriston to Clifford, and develop additional trails, paths and walking tours throughout each area to link parks, natural and historic areas.

BACKGROUND:

Minto Fire responded to a Rail Trail Bridge fire between the 3rd Line and 5th Line on Saturday, August 6. Damage from the fire left the bridge unpassable and resulted in its immediate closure. August 8 Andrew Burgess of Burgess Engineering Inc visited the site to investigate the structural integrity and submitted the attached preliminary report.

Before a final reconstruction cost estimate can be prepared the following is needed:

- remove and dispose of the deck members
- excavate the south approach and remove and dispose of the barrier railway system
- remove all surface charred material to expose sound timber on all the substructure members.

Once the above is finished further inspection of the existing structure will confirm how much of the substructure is compromised.



COMMENTS:

Preliminary investigation suggests the structure may not require full replacement, but this has to be confirmed to report on rebuilding options and costs. The structure may not need replacement for pedestrian use, but may require support to accommodate heavy maintenance vehicles. Staff and the consulting engineer will work with the Town's insurer to bring forward solutions. The Palmerston Trail Association contacted the Town and offered assistance and advice if needed.

FINANCIAL CONSIDERATIONS:

To be determined until the final structural report is completed.

RECOMMENDATION:

That Council receives the Road Foreman's August 15, 2016 report regarding Structure P Rail Trail Fire and provides direction on proceeding with this matter.

Mike McIsaac, Road Foreman



August 12th, 2016

Mike McIsaac
Public Works,
Road Foreman & Drainage Superintendant
Town of Minto
6941 Highway 89, Harriston, ON,
N0G 1Z0

Re: Bridge P - Fire Damage Report

Dear Mike,

On August 9th, 2016 we conducted a visual inspection of the above captioned pedestrian bridge. The structure was recently damaged in a fire.



Inspection Summary:

- ✓ The deck members (super-structure) have considerable section loss.
- ✓ The fire was concentrated on the south end.

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- ✓ The railing system is badly warped.
- ✓ The south approach fill has some erosion (crack). Likely a result of girder expansion (resulting from the generated heat) and water damage.



- ✓ The steel girders appear to be undamaged, no warping or section loss. The girders are relatively heavy in design.

Recommendations:

Phase 1

- ✓ Install temporary barrier system across both approaches and post bridge closed.
- ✓ Remove and dispose of the deck members and railing system.
- ✓ Remove all surface chard material to expose sound timber on all the sub-structure members.
- ✓ Complete a follow-up inspection.



Phase 2

- ✓ Determine usage requirements (load carrying capacity, deck width and railing needs)
- ✓ Prepare double stamped structural design rehabilitation drawings to address usage requirements:
 - Reinforcing of sub-structure
 - New deck and railing details
 - Approach fill retaining wall reinforcing/modification
 - Notes detailing construction details/specifications and bridge usage
- ✓ Post the bridge with Ministry standard load limit signs (single level) at both ends of the bridge.
- ✓ Inspect the completed rehabilitation and provide general letter of conformance to the design drawings and specifications.

If you have any questions or require clarification, please contact me. I would be willing to meet at your request to further discuss.

Yours truly,

A handwritten signature in black ink, appearing to read "Andrew D. Burgess", is written over the typed name and title.

Andrew D. Burgess, P.Eng
President
ADB/km

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