
HALDIMAND COUNTY

Report PW-ES-06-2018 Pyle Driveway Bridge - Update to By-law 1425/14 Bridge Load Limit Restrictions

For Consideration by Council in Committee on April 24, 2018



OBJECTIVE:

To update By-law 1425/14 Bridge Load Limit Restrictions to reflect the current status of bridge load restrictions in Haldimand County.

RECOMMENDATIONS:

1. THAT Report PW-ES-06-2018 Pyle Driveway Bridge - Update to By-law 1425/14 Bridge Load Limit Restrictions be received;
2. AND THAT a by-law be passed to amend Schedule "A" of By-law 1425/14.

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Reviewed by: Tyson Haedrich, M. Eng., P. Eng., Director, Engineering Services

Respectfully submitted: Paul Mungar, C.E.T., CMM III, General Manager of Public Works

Approved: Donald G. Boyle, Chief Administrative Officer

EXECUTIVE SUMMARY:

The Pyle Driveway Bridge was identified for a bridge load evaluation as a result of the 2017 Ontario Structure Inspection Manual (OSIM) inspections. The bridge load evaluation, conducted by G. D. Vallee Ltd., determined that the Pyle Driveway Bridge requires a regulatory vehicle load posting of 5 tonnes and that Schedule "A" of By-law 1425/14 Bridge Load Limit Restrictions needs to be updated to include the new load posting.

BACKGROUND:

The last update to the Bridge Load Limit Restrictions By-law was passed in 2014 through Report PW-ES-01-2014 Re: Update to By-law 1184/11 - Bridge Structures Load Limit Restrictions. Through this update, the load limit was removed from three bridges (Kincardine Street Bridge, Miedema Bridge and the Gates Bridge) and the Woodlawn Bridge load limit was increased to 27 tonnes.

Schedule "A" of By-law 1425/14 Bridge Load Limit Restrictions, currently states the following:

Site Number	Structure Name	Load Limit (Tonnes)	Location
010003	Woodlawn Bridge	27 Tonnes	Cheapside Road – 1.4 km south of Rainham Road
000027	Glanbrook Townline Bridge	Structure Closed	Haldibrook Road – 1.5 km east of Haldimand Highway 56
000075	Reicheld Road Bridge	Structure Closed	Reicheld Road – 0.7 km north of Lakeshore Road

ANALYSIS:

The Pyle Driveway Bridge serves as a driveway access over the Boulton-Furry Drain from Hutchinson Road to a residential property located at 32 Hutchinson Road (see Attachment 1). As a result of the 2017 OSIM inspections, the Pyle Driveway Bridge was recommended for a load limit analysis to determine its capacity to carry traffic loads. The load limit analysis of the bridge completed by G. D. Vallee Ltd. resulted in a recommendation to limit the gross vehicle load on the bridge to 5 tonnes.

Schedule "A" of By-law 1425/14 Bridge Load Limit Restrictions is required to be updated to include the following load limit restrictions:

Site Number	Structure Name	Load Limit (Tonnes)	Location
010003	Woodlawn Bridge	27 Tonnes	Cheapside Road – 1.4 km south of Rainham Road
000027	Glanbrook Townline Bridge	Structure Closed	Haldibrook Road – 1.5 km east of Haldimand Highway 56
000075	Reicheld Road Bridge	Structure Closed	Reicheld Road – 0.7 km north of Lakeshore Road
986501	Pyle Driveway Bridge	5 Tonnes	Hutchinson Road – 0.2 km north of North Shore Drive

FINANCIAL/LEGAL IMPLICATIONS:

The estimated replacement cost for the structure is approximately \$200,000 including engineering, however, staff are investigating alternative solutions that will still provide the property with adequate access but at a lower cost.

Staff have also identified four other similar “driveway” type structures:

- the entrance to the Jarvis lagoons;
- a driveway on Road 20 west of Hagersville;
- the Kincardine Bridge; and
- the entrance to the Blue Heron Trail on Hutchinson Road.

Of these four, the first three are in good condition and the trail entrance is identified for rehabilitation in 2020.

STAKEHOLDER IMPACTS:

The current bridge serves as a driveway for the home located at 32 Hutchinson Road and only provides access to the one property. The residence is currently serviced by cistern for water and propane for fuel, both of which require vehicles to cross the driveway bridge for access.

The 5 tonnes load limit will restrict the normal delivery of water, propane and access for fire services to the property. The County has discussed these issues with the property owner and Haldimand County Emergency Services Division and has confirmed that water delivery can still be done and that EMS is able to modify their response to this property to provide fire protection. The County has been working with Union Gas to arrange for a new service to the property which will eliminate the need for propane delivery.

REPORT IMPACTS:

Agreement: No

By-law: Yes

Budget Amendment: No

Policy: No

ATTACHMENTS:

1. Pyle Driveway Bridge Location Map.
2. Photo of Pyle Driveway Bridge.