




Hamilton

INFORMATION REPORT

TO:	Chair and Members Public Works Committee
COMMITTEE DATE:	April 4, 2022
SUBJECT/REPORT NO:	2020 Bridge Ontario Structure Inspection Manual Summary Reports (PW22020) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Rafael Sandoval (905) 546-2424 Ext. 2508
SUBMITTED BY:	Susan Jacob Acting Director, Engineering Services Division Public Works Department
SIGNATURE:	

COUNCIL DIRECTION

In January 2020, City of Hamilton (City) Council approved Policy HR-01-09, Sharing of Consultant Reports with Identified Imminent Risk to Human Health or Safety, which requires staff to ensure Council is promptly and appropriately informed of any identified imminent danger to human health or safety.

Public Works Policy PW-P-008-001 - Sharing of Consultant Reports with Identified Imminent Risks to Human Health or Safety - requires that any member of Public Works staff who receive reports from consultants which identify an imminent danger to human health or safety share the reports with Council. Imminent in the Policy is defined as a circumstance or condition that is certain to happen soon.

The purpose of this information report is to inform Council regarding a number of safety concerns identified through the structural inspection program.

INFORMATION

Ontario Regulation 104/97, s. 3., states *that every bridge shall be kept safe and in good repair, and as such, works identified herein have been repaired.*

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2020 Bridge Ontario Structure Inspection Manual Summary Reports
(PW22020) (City Wide) - Page 2 of 3**

O Reg. 104/97, s.3. also requires *that every bridge be inspected at least once every second calendar year to evaluate structural integrity, safety and condition.* Accordingly, the City's Engineering Services Division maintains a systematic inspection program of the structures on the roadway network.

Currently, the inspection program is divided into four groups, geographically distributed throughout the City. Two groups, or half of the inventory, are inspected annually. Inspections are carried out under the direction of a professional engineer and in accordance with the Ontario Structure Inspection Manual (OSIM).

In addition to the regulatory OSIM inspections, the City requires the engineer to complete less-involved field inspections on structures not owned by the City to ensure that those bridges are safe for use.

The Terms of Reference for each inspection mandates engineering consultants to immediately notify the City upon finding any critical performance deficiency or imminent safety condition, and in advance of submittal of the final summary report. It is understood that health and safety deficiencies marked by the engineer as "now" are to be considered as imminent.

For inspections required in 2020, the City retained Morrison Hershfield Limited and Wood Environmental & Infrastructure Solutions, from the Professional and Consultant Services Roster. Final summary reports for each consultant are provided in Appendices "A" and "B" attached to Report PW22020.

Morrison Hershfield Limited inspected 94 City-owned structures; 12 structures were noted with urgent and/or critical works as defined by inspection standards. However, it should be noted that only one issue related to delaminated concrete over the Lincoln Alexander Expressway at Bridge 289 - Upper Sherman Avenue was flagged as now (imminent). The noted issue was communicated to Transportation, Operations & Maintenance in September 2020 and was addressed by removing loose concrete and completing repairs through use of Procurement Policy # 10 – Emergency Procurements.

Wood Environmental & Infrastructure Solutions inspected 129 structures, including 32 structures not owned by the City; 12 structures, including 2 non-City-owned bridges were noted with urgent and/or critical works. However, it should be noted that only one issue per each of the following three structures were flagged as imminent: Bridge 234 – South Service Road (257 m east of Jones Road), Bridge 244 – Highway # 8 (15 m west of Fifty Road), and Bridge 314 - Claremont Access (over Charlton Avenue). Safety issues related to performance deficiencies of the steel beam guide rail at Bridges 234 and 244, and a missing utility access hole lid at Bridge 314.

**SUBJECT: 2020 Bridge Ontario Structure Inspection Manual Summary Reports
(PW22020) (City Wide) - Page 3 of 3**

Transportation, Operations & Maintenance were notified of the noted issues for immediate attention. All imminent health and safety deficiencies were addressed and completed between January and early March 2022.

The City maintains \$2M in the annual Bridge & Culvert Maintenance account to address minor rehabilitation and maintenance works.

APPENDICES AND SCHEDULES ATTACHED

Appendix "A" to Report PW22020 - 2020 Overall Summary Report Batches 1A & 1B by Morrison Hershfield Limited, dated June 2021.

Appendix "B" to Report PW22020 - 2020 Overall Summary Report Batches 1C & 1D by Wood Environmental & Infrastructure Solutions, dated November 2021.