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**Date:** 2021-10-13

**From:** Steven Dollmaier, Director of Operations

**Subject:** 2021 Bridge Inspection Report

**Report:** OPS 2021-51

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## Recommendation

That staff report OPS 2021-51 entitled “2021 Bridge Inspection Report” be received as information only.

## Background

The Ontario Structure Inspection Manual (OSIM) under Ontario Regulation 104/97 requires that bridges and culverts with a span of 3 meters or greater be inspected every two years. The Township’s 37 bridges were last inspected in 2018 by WSP.

## Analysis

WSP inspected the Township’s 37 structures in compliance with the Ontario Structure Inspection Manual in September of 2020. The 37 structures were rated as good, fair, or poor—21 structures were rated to be in good condition, 12 in fair condition, while 4 structures were found to be in poor condition.

The engineer has recommended that the current weight limits of four (4) structures be maintained.

Structure D-007 on Sideroad 3 in the former Township of Derby is currently closed and in the process of having an Environmental Assessment being completed on it. This structure is located on a seasonally maintained road and is currently posted with a maximum load limit of 5 tonnes.

Structure S-003 on the Church Sideroad in the former Sarawak Township is listed with a maximum weight load of 9 tonnes. This structure is listed as poor condition and the engineer has stated that rehabilitation is no longer an economically viable option due to

the very poor condition of the structure and has recommended that the structure be replaced within the next five years. This structure is currently having an Environmental Assessment being completed on it.

Structure K-0017 located on Ledgerock Road is currently posted with a maximum weight of 14 tonnes. It is recommended that in the next five years concrete repair and barrier protection be addressed at an estimated cost of \$95,000.00.

Structure K-003 located at the eastern end of Concession 16 in the former Keppel Township is currently posted at a maximum weight load of 5 tonnes. The structure was constructed in the early 1900's and due to the water levels is hard to properly visually inspect.

There are two (2) structures that the engineer has recommended be deemed urgent in nature and completed within the next year (D-007, and K-009). The estimated cost of the urgent repairs is \$855,000.00. These repairs range from the full replacement to the replacement of damaged barriers.

The report estimates that within the next ten (10) years the 37 existing bridges will require \$1,363 500.00 worth of repairs and that \$2,850,000.00 will need to be spent on the replacement of five existing structures.

The Township in the past few years has been contributing \$200,000.00 per year to a dedicated bridge reserve in the budget and as such any emergency repairs would have to be funded from the road construction reserve.

In 2018, the Township implemented a program of spending approximately \$200,000.00 per year in addition to the reserve contribution to work at addressing the minor issues noted in the inspection report to preserve the structures and increase safety.

## Financial Impact

Any bridge maintenance and/or repairs would have to be funded from the 2022 operating budget or the road construction and bridge reserves.

## Strategic Priorities

### **Deliver Effective and Cost-Efficient Services**

The Township will strive to be a leader in municipal and customer service excellence. We will continue to offer remarkable service to those we serve. We will promote operational excellence by focusing on fiscal responsibility. The

corporation will be fiscally prudent, and we will invest in our staff to attract the best employees.

Maintain roads, bridges, and culverts at a high standard to protect the public's safety and property, and to carefully evaluate the need for new road, bridge, and culvert infrastructure to protect the long-term interests of the Township.

## Conclusion

The Ontario Structure Inspection Manual (OSIM) under Ontario Regulation 104/97 requires that bridges and culverts with a span of 3 meters or greater be inspected every two years. The structures were inspected by WSP in September 2020 and a full report of the condition of each structure and recommendations has been prepared.

## Supporting Documentation

Table 1 - Bridge/Culvert Inventory/Recommendation Summary (2020)

Table 2 - Summary of Future Bridge/Culvert Work (2020)

Table 3 - Barrier and Approach Protection Recommendations (2020)

Table 4 - Reduced Load Limit Summary (2020)

Respectfully Submitted: Steven Dollmaier, Director of Operations

## Report Approval Details

Document Title:	OPS 2021-51 2021 Bridge Inspection Report.docx
Attachments:	<ul style="list-style-type: none"><li>- Table 1 - Bridge Culvert Inventory Recommendation Summary (2020).pdf</li><li>- Table 2 - Summary of Future Bridge Culvert Work (2020).pdf</li><li>- Table 3 - Barrier and Approach Protection Recommendations (2020).pdf</li><li>- Table 4 - Reduced Load Limit Summary (2020).pdf</li></ul>
Final Approval Date:	Oct 7, 2021

This report and all of its attachments were approved and signed as outlined below:

Steven Dollmaier, Director of Operations

Tim Lewis, Chief Building Official

Jenn Burnett, Senior Planner

Kassandra Rocca, Director of Finance

Brittany Drury, Interim CAO/Clerk