

B. M. ROSS AND ASSOCIATES LIMITED Engineers and Planners
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File No. 19234

VIA EMAIL ONLY

June 9, 2025

Andrew Giesen C.E.T, PMP Transportation Manager Municipality of Middlesex Centre 10227 Ilderton Road Ilderton, ON N0M 2A0

Re: Closure of Structure C-576 on Poplar Hill Road

On Tuesday, June 3, 2025, BMROSS staff were completing biennial OSIM inspections for the Municipality. During inspection of structure C-576 on Poplar Hill Road, with the assistance of Municipal staff, significant corrosion, section loss, and separation of the multi-plate corrugated steel pipe just below water level was observed.

Near the inlet of the structure (west end), the steel plates of the pipe have complete section loss for a length of approximately 2.0 m on the north side of the structure, and a length of approximately 4.0 m on the south side. It appears the structure may be undermined and unsupported at the outlet for approximately 2.4 m. There are smaller perforations near the outlet.

We are of the opinion the structural capacity of the pipe is significantly reduced compared to its likely as-built condition and that the structure could fail suddenly.

We recommend closure of Poplar Hill Road on each side of the culvert until the structure can be replaced. If access over the structure is required until it can be replaced, one mitigatory measure is to close the west (southbound) lane over the structure, and monitor. The structure should be monitored by qualified Municipal staff familiar with the condition of the culvert, on a regular basis not exceeding 2 week intervals, and after high-flow events. If changes are observed, the structure should be closed immediately, and the undersigned should be notified.

If you have any questions or concerns, or require additional information about this structure, feel free to contact the undersigned.

GODERICH KINCARDINE MOUNT FOREST SARNIA



Yours very truly

B. M. ROSS AND ASSOCIATES LIMITED

Per

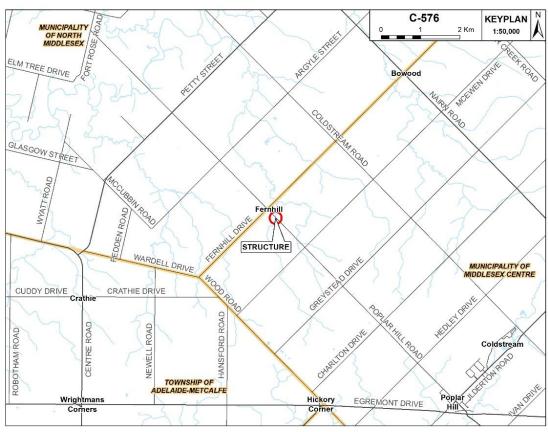
Nic Gowing, P. Eng



Per

Ryan Munn, P. Eng.

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Structure C-576 Key Plan



West Elevation