

COMMUNICATION UPDATE

то:	Mayor and Members City Council
DATE:	April 26, 2024
SUBJECT:	Convention Centre Parking Garage Structural Repairs (Ward 2)
WARD(S) AFFECTED:	Ward 2
SUBMITTED BY:	Brian Hollingworth Director, Transportation Planning and Parking Planning and Economic Development Department
SIGNATURE:	Bria Hollingworth
SUBMITTED BY:	Indra Maharjan Director, Corporate Facilities and Energy Management Public Works Department
SIGNATURE:	Indra Mohanjan.

This Communication Update is to provide members of Council with information on a recent Structural Risk Assessment of the Convention Centre Parking Garage at 80 Main Street West and required mitigation measures. A comprehensive plan for required structural repairs including scope, phasing and costing is under development and will be brought forward through a subsequent report to Council. Additionally, staff have identified the need for a holistic plan to guide short, medium and long-term asset management decisions on the Parking Garage, Summers Lane, and Commonwealth Square, as well as alternatives for consideration.

Constructed between 1973 and 1976, the Convention Centre Garage is part of a complex that includes the Hamilton Convention Centre, the Ellen Fairclough Building, Commonwealth Square, the Hamilton Art Gallery, and the Hamilton Municipal Parking System offices. Each of the buildings and facilities are controlled independently but the below grade parking structure is a shared component and ultimately a City asset. Hamilton Municipal Parking System (HMPS) is responsible for operation of the parking

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garage. A unique feature of the complex is Summers Lane, which is an integral element of the structure of the parking garage, while also functioning as a road. Appendix "A" attached to this communication update provides a site context.

Given the age of the Convention Centre Parking Garage, and consistent with best practices, staff have regularly commissioned condition assessments of the structural components of the parking garage and Summers Lane. Assessments were completed in December 2015, April 2020, October 2023, and March 2024. Each of these assessments identified an increasing rate of degradation consistent with an aging structure. A common concern was the deteriorating condition of the expansion joints on Summers Lane and below, which is allowing for water-infiltration and, in turn, degradation of columns and slabs within the parking garage structure due to freeze thaw cycles and de-icing salts.

Since 2020, a phased series of rehabilitation projects have been completed and planned. This includes for 2023 (Project ID 4901945900) the replacement of waterproofing membranes and concrete repairs in certain parts of the garage. A detailed design and tender for the replacement of the waterproofing membrane below Summers Lane was also advanced in 2019 (Project ID 3721949901) but was put on hold to ensure coordination with other major projects such as the Downtown Entertainment Precinct Initiative, and Hamilton LRT.

In 2023, staff observed an increasing level of degradation of the structural columns and slabs and requested EXP, the consultant overseeing the 2023 repairs, to provide a risk assessment. This risk assessment, completed in October 2023, identified a number of issues with the structure and recommended that repair work should be carried out as soon as possible to avoid further deterioration and potential failure of the suspended slab beneath Summers Lane. The report also recommended that the installation of temporary shoring and monthly inspections by a structural engineer until repairs are able to be carried out. Installations of temporary shoring was initiated in November 2023 through an emergency procurement process and installations were completed in January 2024. Monthly inspections are on-going.

To further ensure protection of the health and safety of those who access the parking lot and are users of Summers Lane, along with the protection of personal property, staff initiated a more detailed assessment involving concrete sounding tests (to identify delamination within concrete). This assessment was completed in March 2024 by J.P. Samuel and Associates Inc. and this detailed inspection "unveiled significant deterioration", especially around expansion joints and beneath Summers Lane, where columns, soffits, and walls show clear signs of compromise. Visible damage includes cracking, spalling, and corrosion of embedded metal components. The extensive use of de-icing salts, such as sodium chloride and calcium chloride, alongside environmental factors (e.g. rain and snow events) and freeze-thaw cycles, has significantly accelerated

Empowered Employees.

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the corrosion of metal and the breakdown of concrete, threatening the structural integrity of the facility".

J.P. Samuel and Associates Inc. recommended a phased approach to repairs. Phase 1 prioritizes urgent interventions where deterioration is extensively visible and most severe, while Phase 2 would involve a more comprehensive scope of repairs. Staff are in the process of developing a scope of work and cost estimate for both Phases under a Policy 10 Emergency procurement with funding through the previously approved Summers Lane Structural Rehabilitation and Pedestrianization Project (Project ID 3721949901).

As a result of the temporary shoring, there have been some changes to the garage operations and some loss of parking supply. Impacts include closing the east vehicle access and re-routing of vehicles around temporary shoring. Staff have communicated these changes to monthly permit holders and are in regular communication with the main users of the garage including the Art Gallery, Convention Centre, FirstOntario Concert Hall, and Ellen Fairclough Building manager. It is expected that these temporary measures will be in place for at least a year, with further operational impacts as the repair project commences.

This Communication Update is also intended to fulfil staff's obligations under the Code of Conduct for Employees, Schedule G: Sharing of Consultant Reports with Identified Imminent Risks to Human Health or Safety.

Staff will provide further updates to Council as work progresses.

If you have any questions regarding this communication, please contact Joanne Starr, Manager, Parking Operations by email at Joanne.Starr@hamilton.ca or by phone at (905) 546-2424 Ext. 5441.

APPENDICES AND SCHEDULES ATTACHED

Appendix "A" – Structural Assessment Report Site Context

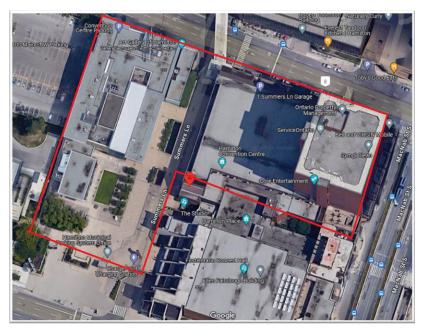


Figure 1: Site Key Plan

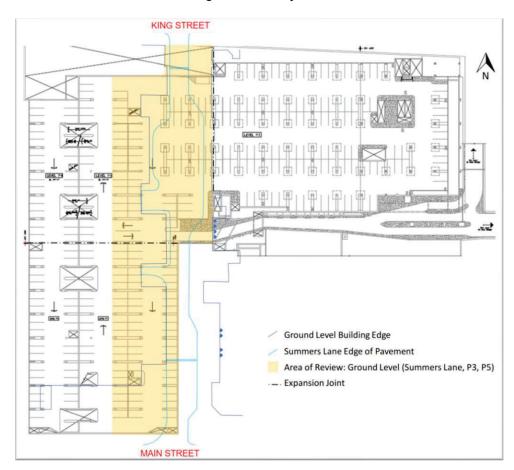


Figure 2: Area under review in Level 3 & 5