

### **COMMUNICATION UPDATE**

ТО:	Mayor and Members City Council
DATE:	December 6, 2022
SUBJECT:	City Hall Pedestrian Access Walkway (Wishbone Structure) Repairs Communication Update (Ward 2) (EFFM22-02)
WARD(S) AFFECTED:	Ward 2
SUBMITTED BY:	Craig Murdoch Acting Director, Energy Fleet & Facilities Maintenance Public Works Department
SIGNATURE:	Public Works Department

This Communication Update is to advise members of Council and City Hall staff of upcoming work to complete concrete repairs on the Wishbone Structure on the South side of City Hall.

As part of routine inspections and maintenance of the pedestrian access walkway located between the City Hall parking lot and second floor entrance, City staff discovered concrete spalling in sections of the walkway. Spalling concrete is a common problem where parts of the surface peels, breaks or chips away making it more susceptible to damage and if serious enough, can put structural integrity at risk. City staff engaged the services of a structural engineering consultant (J.P. Samuel & Associates Inc.), to evaluate the structural integrity of the pedestrian access walkway (Wishbone Structure) at City Hall and the consultant has recommended that concrete repairs be undertaken immediately at numerous locations of the elevated wishbone roadway at the south side of City Hall, to avoid damaging the structural integrity of the walkway, prevent any future damage and ensure no loose debris could fall on to the walkway below.

A copy of the consultant's recommendation letter is attached as Appendix A. The contents of the structural engineer's letter stipulate the required repairs that need to be conducted immediately, to mitigate the risk of structural issues, including stability concerns over time that could cause a risk to the health and safety of pedestrians travelling under the bridge.

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Staff are undertaking the following actions in order to proactively mitigate the risk of structural impacts to the pedestrian bridge, and ensure it remains safe for users travelling on and below the pedestrian access walkway:

- Facility operations is taking immediate steps in the week of December 5, 2022 to barricade and sign the areas of risk to allow maintaining pedestrian access during construction;
- The recommended contractor will prepare shop drawings to erect scaffolding for the repair work to be executed. This scaffolding will also provide and maintain safe passage of pedestrian access on the south side of City Hall. City staff will share plans showing access and egress based on the construction phasing once these are prepared by the contractor;
- The repair work is anticipated to commence immediately once the scaffolding shop drawings are approved and building permit for the repairs is issued. The repair work is expected to take four to six months to complete and will be wrapped up by the end of spring 2023;
- The pedestrian Wishbone Structure remains safe to use and access to the second floor City Hall entrance via the Wishbone Structure will be maintained. Access to the back entrance of the first floor of City Hall will be maintained with scaffolding and protective measures in place;
- There will be no impacts to parking at City Hall, however, additional facility trucks will be present while work is underway;
- Staff will keep members of Council and City Hall staff apprised as construction progresses related to any operational impacts. While access impacts are not anticipated, changes in access to City Hall and/or parking will be shared on the City's corporate social media channels and via www.hamilton.ca web alert.

The work will be phased in order to minimize disruptions to daily operations.

The drawings and specifications detailing the required structural repairs are ready to be issued to the recommended Contractor (Triple Crown Enterprises) for immediate repair. Triple Crown Enterprises (TCE) is a City used General Contractor, with experience in completing similar concrete repair and remediation work and are available to mobilize immediately.

For further information please contact Janet Warner, Acting Manager, Strategic Planning & Capital Compliance, Public Works Department at 905-546-2424, Extension 7041.

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#### **APPENDICES AND SCHEDULES ATTACHED:**

Appendix A: J.P. Samuel & Associates Structural Engineers Letter

### JP SAMUEL AND ASSOCIATES INC.

#### STRUCTURAL ENGINEERS

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November 23rd 2022

Mr. Brad Merritt
Facilities Supervisor
Public Works
Energy Fleet & Facilities Management,
City of Hamilton

RE: Structural review of Existing Concrete Entrance Structure at the rear of the Building Located at

71 Main St. W, Hamilton, ON Our Project No. 2022-JPS-101

We were requested by the City of Hamilton to review the structural integrity of the existing concrete structure at the rear entrance of the building located at 71 Main St. W., Hamilton, ON.

The objective of this structural condition assessment is to determine the existing condition of the structure by observing visible signs of deterioration and to quantify and qualify the current structural condition and provide mitigation measures. Compliance of any buildings or other elements on the property to existing or past building codes or any other regulations, statutes, requirements by law or similar matters is not under the scope of this assessment and report.

Within this report is a detailed review of components of the building structure which are relevant to the structural assessment. The report includes any items of concern which were identified by the building owner, along with items which were identified during our on-site visual review.

Based on the current condition of the structure, it is our recommendation that repairs be completed immediately where specified in this report. Until these urgent repairs are completed, access to the entrance structure should be restricted. We note that the state of the concrete at a few locations is an immediate falling hazard. We have provided safety precaution recommendations to the owner.

J.P. Samuel & Associates accepts no liability for injury sustained for the unsafe conditions which were observed during our site review. Our review is solely based on the information collected on-site through visual observation. Comments and conclusions are therefore based on our visual observations only.

During our review, no physical or destructive testing was performed. Comments and conclusions are therefore based on our understanding of the site review.

We performed a visual review of the slab soffits, columns and other areas of concern that were visible at the time of our site walkthrough. The structure was also surveyed for any obvious signs of damage in the form of abnormal cracks, displacements, and signs of deterioration where readily visible during our walk-through. A few pictures are included below identifying the structural damage to the elements of the entrance structure.

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Figure 1: Partly Damaged Column and Slab



Figure 2: Spalled Concrete

Our observations based on our site visit as below:

- The portion of the structural elements and areas identified in the attached drawings need to be repaired immediately as they may lead to a catastrophic structural damage and also are safety hazards.
- Barricades and adequate caution signage should be provided and not removed until concrete repairs identified in the drawings are undertaken.
- The deteriorated slab soffits are an immediate safety hazard and tenant/pedestrian access should be prohibited until repairs are completed.
- To prevent any catastrophic structural failures and to prevent injuries, it is our recommendation that concrete repairs should begin immediately in conjunction with the application of permit to perform the concrete repairs.

J.P. Samuel & Associates accepts no liability for injury sustained for the unsafe conditions which were observed during our site review. Should you have any concerns or questions regarding the contents of this document, please do not hesitate to contact our office.

Regards,

J.P. Samuel & Associates Inc.

James Samuel, P. Eng.



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Appendix A: Additional site photos











