



100 Queen Street West
 Toronto, ON M5H 2N2
 BCIN: 17523

Order to Remedy Unsafe Building

Pursuant to Subsection 15.9(4) of the *Building Code Act, 1992*

Order Number: 22 160823 UNS 00 VI

Date Order issued: June 12, 2022

Address to which Order applies:

Application/Permit Number:

21 WINDERMERE AVE

N/A

Order issued to:

TORONTO COMMUNITY HOUSING CORPORATION
 C/O NOAH SLATER
 931 YONGE ST 3RD FL
 TORONTO, ON M4W 2H2
 CANADA

An Inspection on or about Jun 12, 2022 at the above referenced address found the building to be in an unsafe condition as defined in Sentence 15.9 (2) of the Building Code Act, 1992.

You are hereby ordered to take the required actions itemized below immediately, or by the dates listed below.

Item	Reference	Description and location	Required action and compliance date
1	BCA 15.9(2)	On May 27, 2022 a section of the concrete ceiling collapsed in unit 19 and an Order to Remedy Unsafe Building was issued. Subsequently, Toronto Community Housing Corporation ("TCHC") has provided to Toronto Building reports prepared by Branko Kraincanic, P.Eng, of WSP Global Inc. dated May 30, June 10 and June 12, collectively "the Engineers Reports". The professional engineers reports have concluded that the that the 154 townhouse units at the Swansea Mews complex are in a condition that are unsafe for the purpose they are used.	As the occupancy of the building has been prohibited by Emergency Order bearing the number 22-160825 ECO 00 VI, you are hereby ordered to do the following actions: 1. Immediately, the Structural Engineer must formulate a repair methodology that will alleviate the unsafe conditions identified in the Engineer's Reports as to reinstate the occupancy; 2) By June 17, 2022 provide to Toronto Building, for review, an engineer's report outlining the repair methodology as to alleviate the unsafe conditions in the townhouse units; the report shall clearly identify the specific work that must be completed in order to allow safe re-occupancy of the units and include timeframe's for completing the work 3) Immediately, carry out the remedial measures under the direction / supervision of the engineer; 4) You are required to notify the CBO, in writing, when each unit is safe of re-occupancy. 5) Following the completion of all work prescribed by the engineer, you are required to provide the Chief Building Official with a final report from the engineer confirming that all remedial measures for each unit have been completed to the satisfaction of the professional engineer and that all unsafe conditions have been remedied. Continued on Page 2



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 Toronto, ON M5H 2N2
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Order to Remedy Unsafe Building

Pursuant to Subsection 15.9(4) of the *Building Code Act, 1992*

Item	Reference	Description and location	Required action and compliance date
			Continued from Page 1 Note: A building permit is required if the scope of work (demolition and/or construction) prescribed by the engineer extends beyond that required to remove the unsafe condition.

Order issued by:

Signature *Tony D'Amico* BCIN 18924 Telephone 416-338-0700
 Name Tony D'Amico, District Manager, Inspections Facsimile 416-696-4151
 Address Toronto Building Division, 95 The Esplanade Ground Floor Toronto, ON M5E 2A2

Note:

- The Signature above is the unique electronic signature of Tony D'Amico, it can only be added by Tony D'Amico and was produced after Tony D'Amico electronically authenticated this document.
- It is illegal to obstruct the visibility of a posted Order. It is also illegal to remove a posted Order unless authorized by an inspector or Registered Code Agency. [Building Code Act, 1992 s. 20]
- An Order may be appealed to the Superior Court of Justice. [Building Code Act, 1992 s. 25]. It may also be appealed to the Building Code Commission concerning the sufficiency of compliance with the technical requirements of the Building Code. [Building Code Act, 1992 s. 24]
- Failure to comply with this Order is an offence which could result in a fine. [Building Code Act, 1992 s.36]

Order Number: 22 160825 ECO 00 VI

Date Order issued: June 12, 2022

Address to which Order applies:
 21 WINDERMERE AVE

Order issued to:

TORONTO COMMUNITY HOUSING CORPORATION
 C/O NOAH SLATER
 931 YONGE ST 3RD FL
 TORONTO, ON M4W 2H2
 CANADA

The Building Inspector has determined that the condition of the building/site poses an immediate danger to the health or safety of any person [Building Code Act, 1992 s 15.10(1)] because:

Item	Description	Measures to be Carried Out Immediately
1	Toronto Community Housing Corporation has provided to Toronto Building an amended report prepared by Branko Kraincanic, P.Eng, of WSP Global Inc. dated June 12, 2022 (ref. Site Visit Report #2, appended to this Order, "the Engineer's Report". The Engineer's Report concludes that the 154 TCHC townhouse units in the complex at Swansea Mews are currently uninhabitable and therefore unsafe for occupancy.	<ol style="list-style-type: none"> 1. In accordance with the Engineer's Report, Occupancy and use of the 154 TCHC townhouse units are prohibited-effective immediately. 2. TCHC shall immediately notify and provide a copy of this order and the appended Engineer Report to each and every tenant of the subject building(s).

YOU ARE HEREBY ADVISED THAT the Chief Building Official or designates may exercise their emergency powers to take any measures necessary to terminate the danger, either before or after service of this order. [Building Code Act, 1992 s 15.10(3)]

AND PURSUANT to section 15.10-(7) recovery of expenses incurred by the City of Toronto to perform such work will be initiated through an application to court.

Order issued by:

Signature



BCIN 13792 Telephone 416-392-7523

Name Kamal Gogna, Director and Deputy Chief Building Official

Facsimile 416-696-4151

Address Toronto Building Division, 95 The Esplanade Ground Floor Toronto, ON M5E 2A2

Note:

- It is illegal to obstruct the visibility of a posted Order. It is also illegal to remove a posted Order unless authorized by an inspector or Registered Code Agency. [Building Code Act, 1992 s. 20]
- This order will be accompanied or followed by a statement from the Chief Building Official describing the measures taken and details of the amount spent in taking the measures [Building Code Act, 1992 s. 15.10(5) and 15.10(6)]



June 12, 2022

Attn: Tony D'Amico

District Manager (Acting), Inspection Services
Toronto and East York District
95 The Esplanade – Ground Floor
Toronto, Ontario M5E 2A2
(416) 338-1215

Dear Mr. D'Amico

**Re: 1 Swansea Mews, Toronto, Ontario
Toronto Community Housing (TCH)
Order to Remedy Unsafe Building
22 152852 UNS 00 VI (May 27, 2022)
Site Visit Report #2**

WSP Building Structures team was retained by CS&P Architects, on behalf of Toronto Community Housing, to investigate the reported collapse of the concrete ceiling in the townhouse complex at 1 Swansea Mews in Toronto. Refer to the attached Site Visit Report dated May 30, 2022 for detailed observations and recommendations.

Branko Kraincanic, P.Eng (Structural) at WSP visited the site on June 10, 2022. The following is the summary of the observations made by WSP on site.

1. WSP and CS&P entered the following units: #70, #81, #82, #149 and #150, in order to perform the destructive testing of the ceiling panels. The testing involved cutting out a square portion of the ceiling panels (non-structural component) at the ribs of a randomly selected precast floor panel, and removing it from the panel by hitting with a 2lb hammer. If the marked piece of the panel fell off the panel by detaching from the rib of a precast panel, this would indicate that the selected precast panel was not constructed as one monolithic panel and that its ceiling panel is prone to collapse, similar to the defective panel in Unit #19.
2. WSP and CS&P randomly selected and tested one precast panel at each level in each visited unit. One additional test was carried out in units #81 and #150.
3. Testing at selected panels in the units #81, #149 and #150 revealed that the selected precast panels were fabricated as monolithic panels. Other panels in these units were not tested at the time of the review, and WSP cannot ascertain as to the structural integrity of the ceiling portion of those panels.
4. Testing at selected panels at Level 1 in the units #70 and #82 revealed that the selected precast panels consist of a structural portion and a ceiling concrete panel bonded together into one panel, similar to the defective panel in Unit #19, and therefore **are deemed unsafe**. Testing at selected panels at the Level 2 revealed monolithic composition of the tested panels. Other panels in these units were not tested at the time of the review, and WSP cannot ascertain as to the structural integrity of the ceiling portion of those panels.
5. According to the original structural and architectural drawings, and according to the visits made by WSP to the townhouse units in the past 5 years on other occasions, the floor structure above the lowest level and at the roof level in all units consists of seven approx. 1200mm wide concrete precast panels, placed next to each



other and supported at ends on the concrete masonry walls located between the units or at the exterior wall of the end units.

6. Shoring was present in all visited units, as per WSP's recommendations. All units were vacant during the visit.

Conclusions and recommendations:

1. Due to the noticed inconsistency in the applied construction techniques between the units, and even within the units, and due to the uniform appearance of the slab soffits in all units, it is impossible to determine the composition of the precast floor panels from a visual survey. It is also impossible to predict in which dwelling unit and when the next ceiling panel may collapse. The destructive testing has pointed to an uncertainty of the prevalence of this defective detail throughout the complex. Until other non-destructive or less intrusive destructive testing methods are developed, at this point, the destructive testing of each panel in each unit per the paragraph #1 in the Observations section above is the only way to confirm the integrity of any panel. No tests to such scale have been performed in any unit so far.
2. Taking into consideration all information obtained during the visits, our opinion is that the existing precast floor structures in all 154 TCHC townhouse units in the complex at Swansea Mews are unsafe for the purpose they are used, **and therefore entire complex has been rendered uninhabitable.** We recommend that the tenants be evacuated from all occupied units immediately.
3. From the structural point of view, the tenants may be allowed to return to their units if the shoring is provided throughout the units and at all levels. The purpose of the shoring would be to prevent the ceiling portion of any faulty precast floor panels from detaching from the floor panels. Other considerations to allow tenants to return to their units include: life safety, path to egress, etc.
4. In our opinion, the ceiling panels in faulty precast panels are not structural components of the floor panels and may be removed from the precast floor panels during the repairs without compromising their structural integrity and load bearing capacity. Further testing is required to determine a long-term course of action.

We trust that the provided information satisfies your needs. Please call our office if you need any other information.

Yours truly,

WSP Canada Inc.
Branko Kraincanic, P.Eng
Senior Structural Engineer
Branko.Kraincanic@wsp.com
416-640-4877

Cc : CS&P Architects – Maureen O'Shaughnessy
Toronto Community Housing – Noah Slater



Attachments:

- Site Visit Report (May 30, 2022)