

File No.: 04-1000-20-2018-104

June 14, 2018

s.22(1)

Dear s.22(1)

Re: Request for Access to Records under the Freedom of Information and Protection of Privacy Act (the "Act")

I am responding to your request of February 16, 2018 for:

- 1. A copy of the structural engineer's report the City commissioned in January 2018 for the Cobalt; and
- A copy of the full structural review of the Regent Hotel completed by a professional engineer in 2017 that was referenced in this City news release: <u>http://vancouver.ca/news-calendar/over-426-orders-issued-against-sahota-</u> family-for-regent-and-balmoral-hotels.aspx

Date Range: January 1, 2017 to February 16, 2018

All responsive records are attached.

Under section 52 of the Act you may ask the Information & Privacy Commissioner to review any matter related to the City's response to your request. The Act allows you 30 business days from the date you receive this notice to request a review by writing to: Office of the Information & Privacy Commissioner, <u>info@oipc.bc.ca</u> or by phoning 250-387-5629.

If you request a review, please provide the Commissioner's office with: 1) the request number assigned to your request (#04-1000-20-2018-104); 2) a copy of this letter; 3) a copy of your original request for information sent to the City of Vancouver; and 4) detailed reasons or grounds on which you are seeking the review.

Please do not hesitate to contact the Freedom of Information Office at <u>foi@vancouver.ca</u> if you have any questions.

Yours truly,

Barbara J. Van Fraassen, BA Director, Access to Information & Privacy

Barbara.vanfraassen@vancouver.ca 453 W. 12th Avenue Vancouver BC V5Y 1V4 Phone: 604.873.7999 Fax: 604.873.7419

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PH: 604-544-1082 601-625 Fifth Ave. New Westminster, B.C. V3M1X4

Project Number: K1119

Date: January 31, 2018

Project Name: Cobalt Hotel Repairs

RE: Deadline extension for the repairs

To: City of Vancouver Permits Department Attn: Mr. Saul Schwebs 453 West 12th Ave. Vancouver, BC, V5Y 1V4

Dear Mr. Schwebs,

We understand that the construction of the repairs at the above noted address has had further delays. We reassessed the site on January 29, 2018 for further deterioration. The floor is substantially unchanged from our previous review. We can extend the delay to another 3 months (ending on April 30, 2018). However, we will have to review the crawl space on a monthly basis to confirm there is no more significant deterioration during that period.

We also observed the proposed bracing as per the previous letter.

If you require any further assistance or have any further concerns or questions, please do not hesitate to contact us.



Andrew McLellan, P.Eng., Struct. Eng., M.A.Sc.



Project No.: K1081

Date: September 29, 2016

Attention: The City of Vancouver c/o Spratt Emanuel Engineering Ltd. Attn: Mr. Mark Emanuel 2348 Yukon Street Vancouver, B.C. V5Y 3T6

Re: Structural Review of 160 E. Hastings St., Vancouver, BC

Structure Description

The following descriptions of the structural systems that pertain to this project were developed from our site work, and our experience with similar projects.

We understand that the building was constructed in the early part of the 20th century. The complex consists of eight stories and a basement. The floor to floor height on the ground floor is considerably higher than the rest of the building.

The property line wall on the east and west sides, front (north side), and back (south) are constructed of reinforced concrete (some reinforcing bars are exposed on a spalled corner). The north wall is faced with a brick veneer.



Photo: Brick veneer on north face over concrete archways.

The light well walls are set in from the property line walls and were presumably constructed to allow light into the rooms if taller adjacent structures were constructed. The long light well walls running north/south appear to be constructed from thick heavy vertical heavy timbers (a small area of wall was opened up on the outside stairwell wall). The short walls running east/west



appear to be a combination of brick and clay tile (walls/ceilings were opened up in two of the bathrooms).

There were a few areas of the ceiling missing where we observed a solid wood laminated floor system above the first and basement levels. Laminations span in the north-south direction while the support steel beams span in the east-west direction between columns and the outside walls. Openings in the bathroom walls/ceiling were made where the light well walls meet the property line walls. A steel beam on a corbel was observed at the intersection with a solidly laminated floor (consist with other areas of the building).

There were no columns observed below the east light well wall. This suggests that there must be transfer beams to support this wall and the floors above.

There is an exterior steel fire escape at the rear (south) side of the building. Some paint was removed. The extent of rust is still difficult to determine. However, the steel was soft where it was exposed indicating a thicker layer of rust.

There is currently scaffolding, screening and hoarding on the north face of the building.



Photo: North façade with scaffolding, hoarding and screening.



Scope of Review & Terms of Reference

Structural Solutions Engineering Inc. performed two visual reviews of the structure at 160 E. Hastings St. in order to identify structural deficiencies. The report is based on restricted access to the existing structure (finishes covered much of the structure) and is limited accordingly. Original construction drawings were not available for review. Due to the non-invasive nature of this investigation there was no attempt to confirm the existence of hidden components.

The purpose of this investigation is to review the condition of the building and fire escape structural elements and comment on areas of concern, distress, or failure. Although there are issues related to the building envelope and structure, the report only addresses the structural component of any issues. There may also be issues related to the structure that could not be seen due to finishes and/or limited access. Reviews were conducted on a walk-through basis and cannot be expect to be exhaustive.

In this report the term structural elements pertain only to the elements that are intended to act as the building's primary structural support and generally consist of load bearing interior and exterior walls, floor joists, roof joists, beams, and columns.

Buildings from this era were not designed to resist earthquakes and are generally not very well tied together. However, the purpose of this report did not include a seismic assessment. A seismic assessment would be difficult to conduct based on the limited structural information (no drawings available).

Structural elements from this era were typically designed to resist applied loads which may result from:

- Self-weight;
- Superimposed dead weight;
- Occupant live/snow weight;

Loads from wind, earthquakes, foundation settlements and/or volumetric changes were generally not commonly considered. Gravity load resisting systems were also not designed to current standards, thus it would not be appropriate to assess these elements to current levels of safety. Our main concern is to determine if the original level of safety is significantly compromised.

A structural defect occurs when (with the exception of earthquake induced loads) a structural element is appreciably deformed, damaged or weakening or that life safety or protection of property is significantly reduced below the intended levels. There will be deformations, cracks



and other forms of damage that are expected in most structures. However, water egress and/or freezing can exacerbate structural damage. Minor damage or defects can eventually develop into more significant issues if these factors are not corrected.

Field Review Observations:

The review was conducted by Mr. Andrew McLellan of Structural Solutions Engineering Inc. (SSEI) on September 9, 2016 and accompanied by the client, and representatives from Spratt Emanuel Engineers (SEE) and Ocean West Construction (OCW). An additional site review was conducted by SSEI and OCW on September 29, 2016

The purpose of the reviews was to determine if there were any indications of structural distress, excessive settlement, excessive movement or excessive deflections.

Areas that were reviewed included: the basement, roof, fire escape, exterior walls (where accessible), public and services areas.

Observations, Discussions and Recommendations

There is a spalled area of concrete on the east property line wall (south end of the light well) that needs to be patched. There is reinforcing steel exposed. The rust on the bars needs to be removed, bonding agent applied and a concrete patch poured. The contractor needs to check the rest of the exposed concrete wall for areas that are spalling or have loose concrete that may spall. These areas will need to be repaired as well.



Photo: spalling and plywood around spalled area at south end of west light well.



Brick veneer anchors fasten the façade brick to the supporting wall. Without these anchors, sections of a veneer can become unstable and fall away from the building. Most brick veneer anchors on buildings from this era are usually significantly corroded. The veneer can be re-attached with Helical stainless steel anchors that screw through the mortar lines and into the concrete wall behind. Although we could not observe the veneer anchors, it is our experience that the veneer likely needs to be re-attached (simply based on the era of the building). The owner could also investigate further if they wish to confirm the condition of the existing veneer anchors.



Photo: North facing brick veneer above the cornice. West side property line concrete wall.

There are sections of the basement ceiling that are peeling away from the wood floor over. We recommend sections of the ceiling be demolished/removed where there are signs of detachment from the ceiling. This is to avoid segments of the ceiling from falling on anyone who



may be working in the basement. The ceiling itself is a non-structural element but the wood laminations and steel beams are structural and may not be removed/altered.



Photo: basement ceiling peeling away from structure.

There are signs of systemic water damage throughout the ground floor observed in the basement. Due to the finishes, it is difficult to determine if there is any critical damage. We recommend that a baseline survey of the floor elevations be taken with continued observation to identify any issues with the floor. We also recommend a more detailed/invasive review of the floor be carried out by a contractor and further spot checks of the steel beams and wood framing over the basement be carried out on a periodic basis.

There was water damage observed on the 2nd level floor (observed from the ground floor) at the north-west corner of the building. We understand that there was a sprinkler on the second floor that caused the damage. Since this was a onetime event, we do not suspect that there is rot damage. The rest of the damage is non-structural in nature.



There are cracks between the light well walls and the property line walls. These cracks are likely due to a change of material (a change between concrete and tile/brick). We specially looked for any movement between the outside property line walls and the floors. Small areas of finish between the walls and ceiling were removed in two bathrooms (near where the cracks could be seen in the light well walls). No movement was observed which leads us to believe the cracks are due to a change of material and are not a serious structural issue.

There is significant corrosion on parts of the cornice which needs repair. This is not a structural element but can present a falling hazard if it is not repaired.



Photo: An example of corrosion damage on the cornice. North face concrete wall is behind the cornice.

There is significant damage on the fire escape. We went for a second review on September 29,2016 once some of the paint was scraped away. Given the amount of damage and the likely potential for discovering further corrosion it is our opinion that the fire escape should be replaced. This will also allow for additional safety with higher guards and more tightly spaced pickets.





Photo: Fire escape on south side and adjacent hydro lines.

SPRATT H EN RING 2348 Yukon Street Vancouver, B.C. V5Y 3T6 Phone: 604-872-1211 Fax: 604-872-1274 see@lelus.rel GI N E LTD. Ē PROJECT: 160 E Hastings FILE: 514-460 DATE: Sed 91.16 3 Kegent SHEET N DOOR. 个 20 3/4" × 13/4" × 1/16 L-ANGLE 28 STAIR 23/4" 1214" 214" 216 L-ANGLE CNOKSH FACE - 14" - 56' - 42" -14" 26" LARGE KNEE BRACE BELOW SHALL KNEE BRACE BELOW LAND OFFOSITE SIDE) FIRE ESCAPE PLATFORM NTS FLAN YIEW 11/2 =1/2 =1/8" L-ANGLES UPLEG OF 244" ~42" 22/4" L-ANGE 3/4" × 12/4"×"16 IN CENTRE OF 40 fi PLATFORM THIS ANGLE IS CONTINUOUS STAIR STRINGERS ACROSS; DOWNLEG. CUT NORTH ELEVATION NORTH FACE

Figure: Typical layout of the existing fire escape.

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Figure: Sketch of typical support brackets.

Some of the damage we observed includes:

- 2nd floor: grating is not properly seated/secured. Knee braces supporting landing are more corroded than other brackets.
- 3rd floor: Centre brace has a spliced in piece to repair a previously corroded strut. East knee brace is badly corroded at bottom connection.
- 4th floor: grating is in poor condition. Many of the slats are not secured to rods and are loose. The bottom bolt of the east knee brace is badly corroded.



- 5th floor: The centre knee brace is more corroded than the other braces (especially at the interface with the wall).
- 6th Floor: The centre knee brace and bottom gusset plate are badly corroded.

Typical issues on the fire escape include bent gusset plates (this may have been done during the original installation). The bent gusset plates trap debris and moisture which promotes corrosion.

There is significant corrosion on some of the stringers. These stringers will have to be replaced or repaired.

At this time we do not know how the fire escapes are connected to the south wall. However, it appears that the south wall is concrete which makes it easier to secure a new fire escape to the building.

Final Remarks

It should be noted that reviews that are described in this report were limited to the areas and assemblies that are specifically noted in the report. No testing or dismantling of any assemblies was performed and reviews were made on a random basis with no attempt to review every element or portion of the building, therefore, it is possible that some deficiencies may not have been discovered. Our comments are not a guarantee or warranty of any aspect of the building condition.

This report was prepared by Structural Solutions Engineering Inc. (SSEI) for Strata Corporation (Plan BCS 1660). SSEI accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report. The observations and recommendations that are described in this report are not intended to replace detailed engineering specifications and therefore the recommendations contained in this report should not be used as the basis of a contract to perform remedial work on these buildings.

We trust this meets your requirements at this time, and should you have any questions or concerns, please contact our office.

STRUCTURAL SOLUTIONS ENGINEERING INC.

Kindest regards,

Andrew McLellan, P.Eng., Struct. Eng., M.I.Struct.E., M.A.Sc.