

**re: Response to City of Ottawa Comments**  
**Proposed Multi-Storey Building - 440 and 444 Bronson Avenue - Ottawa**  
**to: Fotenn - Mr. Jeff Nadeau - nadeau@fotenn.com**  
**to: TC United - Mr. Daniel Boulanger - dan.boulanger@tcunitedgroup.com**  
**date: May 2, 2019**  
**file: PG4304-MEMO.01**

---

Further to your request, Paterson Group (Paterson) prepared the following response to the comments issued by the City of Ottawa and dated February 13, 2018, for the proposed project located at the aforementioned site. This response should be read in conjunction with Paterson Report PG4304-1 Revision 1 dated May 2, 2019

## **Traffic Noise Feasibility Study**

### **City Comment 1**

Provide scaled plan with distances and angles between noise sources and installed receptors as per Environmental Noise Control Guidelines – Section 3.1.1 c) – Revise

### **Paterson Response**

The aforementioned noise attenuation study has been updated with the scaled plans, located in Appendix 1.

### **City Comment 2**

Provide detailed section of source / receptor showing height, distances etc. - Revise

### **Paterson Response**

A chart indicating the heights of the source/receptor has been updated in the updated noise attenuation study, under Table 11.

The distances are provided both on the scaled plans and on Table 11 located in Appendix 1 of the updated report.

### **City Comment 3**

Appendix 1 Tables refer to “Distance”, “Horizontal” and “Total” measures in metres. These numbers do not appear to correlate with the STAMPSON data in Appendix 2. Please Clarify and Revise as needed.

### **Paterson Response**

On Table 11 in Appendix, the vertical and horizontal distances are recorded, with the total overall distance calculated. When inputting information into STAMPSON, only the horizontal distance and the height of the receptor above ground surface is input. Therefore, the total distance noted on the excel chart is an overall observation of the environment and not used for calculated inputs. These values match the values entered into the STAMPSON software.

### **City Comment 4**

The recommended STC Rating of 33+ found in the “Proposed Construction Specifications” section of your report is lower than the minimum STC Rating of 50 required by the Ontario Building Code (OBC 2012 as amended) – Section 9.11.2.1. as referenced in MMAH Supplementary Standard SB-3 in Tables 1 & 2. Revise

### **Paterson Response**

When the calculated noise at the pane of window exceeds 60 dBA, further analysis is required to determine if the proposed building materials are sufficient for noise reduction for the interior rooms. Based on the noise levels encountered at the exterior pane of glass, an STC rating of 33 or greater is required for the noise levels at this location. Therefore, any material that is in compliance with the STC rating of 50 as required by the Ontario Building Code (OBC 2012 as amended) is considered acceptable. The proposed building materials were further reviewed with respect to their noise reduction characteristics and is considered acceptable.

### **City Comment 5**

Regarding Indoor Living Area Mitigation Solutions, we would require detailed shop drawings and material specifications for sufficient soundproofing as identified in Table 9 in your report. Please add these criteria. Revise

## Paterson Response

Detailed shop drawing are not available at the time of issuance of this memo. It is understood through e-mail correspondence that the building materials will consist of the following:

- double paned windows
- ground floor will be brick construction
- upper floors will be cement board cladding
- construction will be steel stud walls with concrete structure

From a review of these construction materials, it was determined that they are sufficient for the noise attenuation properties to ensure that the indoor living areas will be below 45 dBA.

We trust that this information satisfies your requirements.

Best Regards,

**Paterson Group Inc.**

Stephanie A. Boisvenue, P.Eng.



David J. Gilbert, P.Eng.

**Paterson Group Inc.**

**Head Office and Laboratory**  
154 Colonnade Road South  
Ottawa - Ontario - K2E 7J5  
Tel: (613) 226-7381 Fax: (613) 226-6344

**Northern Office and Laboratory**  
63 Gibson Street  
North Bay - Ontario - P1B 8Z4  
Tel: (705) 472-5331 Fax: (705) 472-2334

**St. Lawrence Office**  
993 Princess Street  
Kingston - Ontario - K7L 1H3  
Tel: (613) 542-7381