

April 6, 2021

VIA E-MAIL TO: cjee@graywoodgroup.com

Graywood Group
200 King Street W, Suite 1602, Box 42
Toronto, ON M5H 3T4
Attn: Christine Yee

**Re: Addendum to Noise and Vibration Feasibility Study for 506-516 Church Street
OPA/ZBA Application No: 20 172161 STE 13 OZ**

Dear Ms. Yee,

As you know, HGC Engineering provided a Noise & Vibration Feasibility Study report for the proposed mixed-use development site at 506-516 Church Street, dated July 20, 2020, to support an application for an Official Plan and Zoning By-law Amendment.

Comments received from the City's planning department, outlined in their letter of November 13, 2020, indicate two outstanding concerns. We respond these concerns in the following letter.

1. Staff is supportive of space being reserved within the development for future re-integration of a bar/nightclub use. Tenant interior space planning and fit-out considerations have just begun. Potential noise mitigation strategies as part of the tenant fit-out of the space could include some or all of the following:
 - Include a good suspended acoustical ceiling in any areas with high sound levels (several layers of drywall suspended with isolation hangers and filled with insulation). The ceiling should be minimally penetrated.
 - Provide insulated double-layer drywall partitions to protect any concrete walls or columns in areas with high sound levels.
 - To some extent, high noise levels and activities (dancing) impacting the floor will transfer through the structure and up the building. A floating slab could be considered in such areas. Typical floating slab assemblies consist of 100 mm concrete on 50 mm isolation material.
 - Provide acoustically treated vestibules between loud areas and quiet areas to try to limit the sound transfer within the space. Doors to back of house areas may require additional vestibules or acoustical doors, depending on their location.

- The ventilation system for the club should be completely separate from the ventilation for the rest of the building (i.e. a dedicated AHU). Additional ventilation silencing measures may still need to be integrated depending on the routing of the ductwork.
 - Loudspeakers may need to be separately isolated at points of support from the structure, depending on whether or not they are supported from isolated assemblies. No loudspeakers should be allowed in, or supported through, the acoustical ceilings.
 - A volume limiter should be included within the sound system design so that the owner/operator of the club can maintain control. The volume limiter should be contained in a locked cabinet. The level of the limiter can be set through site testing and/or resident feedback.
 - Notwithstanding any physical noise controls integrated into the design to help reduce potential conflicts with residents in the building, the lease agreement with the tenant will need to clearly delineate responsibilities and requirements, including the need for administrative controls to reasonably limit noise emission levels and/or operational profiles. A warning clause specific to the nightclub use should be included in all residential APS and tenancy agreements, informing residents of the potential for sounds from the nightclub to be audible at times.
2. Staff has noted that it was not possible to assess noise from bars and patios along Church Street during the COVID-19 pandemic, and has requested additional assessment when such facilities have re-opened. This will be addressed further at a later date when restrictions have lifted sufficiently to allow for bar and patio activities to resume at or close to normal levels.

We trust that this information is sufficient for your purposes. If you have any questions or concerns, please do not hesitate to contact the undersigned.

Yours truly,
Howe Gastmeier Chapnik Limited



Brian Chapnik, PhD, PEng