

re: **Geotechnical Response to City of Ottawa Review Comments
Proposed Hi-Rise Residential Development
180 Metcalfe Street - Ottawa**

to: Jadco - **Mr. Simon Labelle** - slabelle@jadcogroup.com

date: February 25, 2019

file: PG4491-MEMO.03

Further to your request, Paterson Group (Paterson) prepared a response to the City of Ottawa review comments issued February 5, 2019 for the site plan control application prepared for the aforementioned development.

Engineering Comment 9 - Geotechnical Study

Please note: The Geotechnical Investigation Report indicates that line drilling and controlled blasting are planned for excavation of the below grade parking garage and building foundation. As per the norm, for site servicing a pre and post CCTV inspection with video and report will be required as well as monitoring devices for all infrastructure in the vicinity of the work area.

Please also note that constructability and vibration reports will also be required prior to approval of this application.

Paterson Response

A pre-construction survey of the neighbouring structures will be carried out prior to construction. Prior to commencing the blasting program, a vibration monitoring plan will be prepared and will discuss blasting monitoring requirements. Paterson will install seismographs at specific locations as required for the adjacent buildings.

The vibrations expected from the blasting operation should produce peak particle velocities (PPVs) that are less than 25 mm/s along the property boundary. These vibrations are considered acceptable and will not impact underground utilities within the city right-of-way and, therefore, **a CCTV inspection of the underground utilities is not required**. The rationale and justification for this comment is that most of the utilities are located in the overburden soil at a depth between 3 and 5 m below the existing grade and that bedrock is located much deeper at 12.5 to 14 m below the existing grade. The blasting at that deeper level will produce less vibrations to the underground utilities due to the vibration attenuation of the overburden soil.

Engineering Comment 10 - Phase II - Environmental Site Assessment

Further to Phase I ESA and this study, soil remediation is required for development of this property. Please provide strategy and scheduling for this work to be done. Please note that there is a Brownfield Rehabilitation Grant Application available to applicants for properties that met the specified requirements. Please note a RSC is also required.

Paterson Response

For the subject development, a RSC will be required due to a land use change and to satisfy a Brownfield Rehabilitation Grant program. Paterson is currently completing a Brownfield Rehabilitation Grant application that will be submitted to the City of Ottawa for acceptance.

The remedial program will be carried in conjunction with the construction excavation phase. Once completed, a groundwater monitoring program is required for final confirmation of remedial compliance. The RSC application will be submitted to the MECP after the two quarterly groundwater events are completed and in compliance with Table 3 residential standards. An acknowledged RSC may take up to 12 months to obtain once the clean up is completed. The acknowledged RSC will be required prior to final occupancy which is typically carried out for downtown projects in the City of Ottawa.

We trust that this information satisfies your requirements.

Best Regards,

Paterson Group Inc.

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