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Attention: **Ms. Tess Gilchrist**

Subject: **Geotechnical Response to City Comments
Proposed Multi-Storey Building
1088 Maritime Way - Ottawa**

Dear Madam,

Further to your request, Paterson Group (Paterson) has prepared the present report to outline our responses to the City of Ottawa review comments dated July 6, 2017 for the engineering submission prepared for the aforementioned development. The present report should be read in conjunction with our updated geotechnical Report PG4006-1 Revision 1 dated August 3, 2017.

Geotechnical Comment 1 - Site Plan Review

Paterson has reviewed the following site plan prepared by Novatech Engineering Consultants Ltd. for the aforementioned building:

- General Plan of Services - Drawing No. 115198-GP - Revision 2 dated July 19, 2017

Based on our review, the proposed design details for the subject development are considered acceptable from a geotechnical perspective. The city review comments for the engineering design required geotechnical input on several items. The items of concern have been addressed below:

Offset of storm sewer from building footprint - The proposed location of the storm sewer is acceptable from a geotechnical perspective. The proposed building foundation at this location extends well below the storm sewer alignment and the proposed alignment location and any future maintenance will not negatively impact the proposed building foundation.

Retaining Wall - A small retaining wall is required along the north property boundary adjacent to a city pathway. The maximum height of the wall is noted to be less than 600 mm and is located greater than 1 m horizontally away from the adjacent pathway. Should the retaining wall fail, there would be no impact to the adjacent city pathway.

Geotechnical Comment 2 - Grading Plan Review

Refer to Paterson memorandum report PG4006-MEMO.01 dated August 9, 2017 for our comments regarding our review of the site grading plan.

Geotechnical Comment 3 - Permit to Take Water

Updated in our revised report. Based on our current information, a MOECC EASR permit will be required for this project.

Geotechnical Comment 4 - Tree Planting Restrictions

Updated in Subsection 6.8 of our revised report.

Geotechnical Comment 5 - Long-term Groundwater Levels

Our long-term groundwater level observation of 3 to 4 m was not based on our January groundwater level reading at the borehole locations. The long-term groundwater level observation was based on the colouring, moisture levels and consistency of the recovered soil samples, which are good indicators of the position of the long-term groundwater level. Due to the relatively impermeable nature of the silty clay deposit, minimal fluctuation of the long-term groundwater level occurs throughout the year. Due to the depth of the proposed building foundation, the seasonally high groundwater level does not have any impact on the proposed building or construction of any associated features.

Geotechnical Comment 6 - Analytical Testing

Refer to Section 6.7 of our report PG4006-1, dated February 2, 2017 for discussion. Appendix 1 of the same report contains the relevant laboratory results.

Geotechnical Comment 7 - Stormwater Dry Pond

Based on our review, the proposed 3H:1V sidewall profiles are acceptable from a geotechnical perspective. It should be further noted that sufficient separation has been provided between the swmp and proposed building footprint. No additional geotechnical input is required for the design of the proposed swmp.

We trust that this information satisfies your requirements.

Best Regards,

Paterson Group Inc.

Nathan Christie, P.Eng.




David J. Gilbert, P.Eng.