



**re: Grading & Servicing Plan Review**  
Proposed Multi-Storey Building  
1166 Bank Street – Ottawa, Ontario

**to:** Ambassador Realty Inc. – **Arthur Loeb** – [arthurloeb@gmail.com](mailto:arthurloeb@gmail.com)

**cc:** Architects DCA – **Toon Dreessen** – [tdreessen@architectsDCA.com](mailto:tdreessen@architectsDCA.com)

**date:** July 25, 2023

**file:** PG6191-MEMO.02

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Further to your request and authorization, Paterson Group (Paterson) prepared the current memorandum to document our review of the grading and servicing plans for the proposed development to be located at 1166 Bank Street in the City of Ottawa. The following memorandum should be read in conjunction with the current Geotechnical Investigation Report (Paterson Group Report PG6191-1 Revision 1 dated July 25, 2023).

### **Grading Plan Review**

Paterson reviewed the following drawing prepared by EXP for the aforementioned development:

- Site Grading Plan – 1166 Bank Street, Ottawa – Project No. OTT – 22018175 – A0 – Drawing No. C200 - Revision 1 dated February 7, 2023.

Based on our review of the above-noted grading plan drawing, the proposed grade raises at the subject site are within the recommended permissible grade raise of 1.0 m. Therefore, the proposed grading is acceptable, from a geotechnical perspective.

### **Site Servicing Plan Review**

Paterson reviewed the following drawing prepared by EXP for the aforementioned development:

- Site Servicing Plan – 1166 Bank Street, Ottawa – Project No. OTT – 22018175 – A0 – Drawing No. C100 - Revision 1 dated February 7, 2023.

Based on our review of the site servicing plan, sufficient soil cover has been provided to the proposed watermain and sanitary services. However, insufficient soil cover was noted to be provided to the proposed stormwater service. Where insufficient soil cover (i.e. less than 2.1 m of soil cover is present above the obvert of the pipe) is available, the following frost protection criteria outlined in Table 1 should be followed. Please refer to Figure 1 – Servicing Plan Review attached which indicates the frost protection provided to each service.





<b>Table 1 - Rigid Insulation Recommendations for Storm Sewer and Water Pipes with Reduced Soil Cover</b>			
<b>Thermal Condition</b>	<b>Soil Cover Provided (mm)</b>	<b>Insulation Dimensions</b>	
		<b>Thickness (mm)</b>	<b>Extension (mm)</b>
Unheated	600 to 900	125	Extend 1200 mm horizontally beyond edge face of the pipe
	900 to 1200	100	Extend 1200 mm horizontally beyond edge face of the pipe
	1200 to 1500	75	Extend 900 mm horizontally beyond edge face of the pipe
	1500 to 1800	50	Extend 600 mm horizontally beyond edge face of the pipe
	1800 to <2100	25	Extend 300 mm horizontally beyond edge face of the pipe

**Notes:** All designs are based on a freezing index of 1000°C-days

All rigid insulation should consist of either Dow Chemical High-Load 40 (HI-40), Styro Rail SR.P400, or equivalent approved by Paterson. The placement of all insulation within the service trenches must be reviewed and approved by Paterson personnel at the time of construction.

We trust that this information satisfies your immediate requirements.

Best Regards,

Paterson Group Inc.

Kevin A. Pickard, P.Eng.



Scott S. Dennis, P.Eng.



