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May 10, 2024

Reference No. 2211-S092

Page 1 of 2

DIV Development (Barrie) Ltd.
130 Adelaide Street West
Suite 2200
Toronto, Ontario
M5H 3P5

Attention: Ms. Shahd Elshafei

**Re: Geotechnical Memo
West of 20th Sideroad, between Lockhart Road and Mapleview Drive East
City of Barrie**

Dear Madam:

The following comment was issued as part of the Environmental Risk Management and Compliance Memorandum, prepared by Lee Roberts, dated October 31, 2023.

- 4. Geotechnical Investigation as per the Terms of Reference*
a. Report shall also include expected maximum depth of excavation.

In response to the comment, a review of the proposed Preliminary Grading and Servicing Plan for the subdivision and underground services profiles, prepared by Schaeffers Consulting Engineers, was carried out. While the majority of the site will be raised by earth fill, the underground services will be constructed, for the most part within the subdivision, by excavating into the existing ground to depths ranging from approximately 1.5 to 6.0 m.

For the sanitary sewer alignment along the 20th Sideroad, which connects the servicing network from the subdivision to the pumping station at the southwest corner of 20th Sideroad and Mapleview Drive East, the anticipated depths of excavation range from approximately 3.8 to 10.8 m below grade. The deepest excavation will occur north of the northern subdivision connection, at approximately El. 253.0 to 254.0 m. Along Mapleview Drive East, the maximum depth of excavation is proposed at approximately 5.2 m below grade.



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Page 2 of 2

Two stormwater management (SWM) pond blocks (Blocks 64 and 65) have a preliminary designed bottom of El. 246.0 m and 247.0 m, respectively. The maximum depth of excavation will therefore extend to at least 9.7 m below grade in the north pond, and to 4.7 m in the south pond. In view that the ponds are underlain by sandy and silty subsoils, the excavation will likely be extended 1.0 to 2.0 m further into the native soils to account for the installation of a clay liner and subdrain system, if required. However, the required thickness of the liner or the design of the subdrain system shall be determined later during detailed design stage.

We trust this letter satisfies your present requirements; however, should any queries arise, please feel free to contact this office.

Yours truly,
SOIL ENGINEERS LTD.

Hui Wing Yang, P.Eng.
HWY/



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