# patersongroup

## memorandum

### consulting engineers

re: Geotechnical Response to City Comments

Proposed Residential Development 3604 - 3646 Innes Road - Ottawa

to: Glenview Homes (Innes) Ltd.- Mr. Michael Michaud - mmichaud@glenview.ca

date: April 2, 2020

file: PG4026-MEMO.01

Paterson Group (Paterson) prepared the following memo to provide our responses to the geotechnical-related comments towards the Geotechnical Investigation completed for the subject site. This memo should be read in conjunction with our geotechnical Report PG4026-2 Revision 2 dated April 2, 2020.

#### **Geotechnical Investigation - Section B Comment 9**

**Comment 9:** Remove references to HL-3 and HL-8 in the pavement structure.

**Response:** Please refer to SubSection 5.6 of the revised geotechnical Report # PG4026-2 Revision 2 dated April 2, 2020.

#### **Geotechnical Investigation - Section B Comment 10**

**Comment:** Provide discussion on the depth of services.

**Response:** Currently, no finalized drawings were provided in regards to the proposed site servicing for review. However, upon discussions with the civil engineer, it is understood that the proposed service alignments within the main roadways will be at depths greater than 2 m and less than 4 m for sanitary and storm and greater than 2.4 m for the watermain service alignments. These numbers are considered acceptable from a geotechnical perspective to ensure each service alignment is below the frost depth and founded over a sufficient subgrade material.

It is our understanding that the service alignments passing though Street 7, 8 and Block 191 will reach a depth of 6.5 m below finished grade. The depth of the service alignments may result in interfering of the proposed services with the lateral support zone of the adjacent buildings, specifically along Block 191. The footings of the lots situated along 191 should be reviewed by Paterson, once the finalized design drawings are available. To assist in the design phase, where services cross the lateral support zone of the adjacent footings (i.e 1.5H:1V from the exterior toe of the footings going down and outward), the footings should be lowered to a safe depth where the lateral support is protected.

Mr. Michael Michaud Page 2 PG4026-MEMO.01

Alternatively, a concrete in-filled, zero entry vertical trench should be excavated below the outside footings down to an acceptable depth, lowering the lateral support zone below the desired service excavation depths. The vertical trench should be in-filled with a minimum 15 MPa concrete and should extend horizontally a minimum 300 mm beyond the exterior footing face. The side wall of the vertical trenches can be used as the forms for the concrete prior to placement of the concrete.

#### **Geotechnical Investigation - Section B Comment 11**

**Comment:** Provide discussion on the decommissioning of the standpipe piezometers per Ontario Regulation 903.

**Response:** Please refer to SubSection 5.2 of the revised geotechnical Report # PG4026-2 Revision 2 dated April 2, 2020.

We trust that this information satisfies your immediate requirements.

Paterson Group Inc.

Golanda Tang

Y.L. Yolanda Tang

F. I. ABOU-SEIDO 100156744

Paterson Group Inc.

Faisal I. Abou-Seido, P.Eng.