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December 20, 2019 File: PG4777-LET.03R

Greely Family Farm Inc. 6598 Pebble Trail Way Greely, Ontario K4P 0B6

Attention: Mr. Daniel Payer, P.Eng.

Subject: Geotechnical Grading Plan and Site Servicing Plan Review **Proposed Commercial Development** 6075 Bank Street Ottawa (Greely)

Dear Mr. Payer,

Introduction

Further to your request, Paterson Group Inc. (Paterson) has completed a geotechnical grading and servicing plan review for the proposed commercial development to be located at the aforementioned site.

This memo should be read in conjunction with the updated geotechnical report for the project, Paterson Report PG4777-LET.01R4, dated December 20, 2019.

Geotechnical Grading and Site Servicing Plans Review

This memo will confirm that Paterson has reviewed the latest revisions of the grading and site servicing plans, prepared by ARK Engineering and Development (ARK) for the subject commercial development, at 6075 Bank Street, in Ottawa (Greely), Ontario.

Paterson has reviewed the following engineering plans for this submission:

- 1. ARK Drawing No. GP – Grading Plan, Revision 4, dated December 18, 2019.
- 2. ARK Drawing No. SS – Site Servicing Plan, Revision 4, dated December 18, 2019.

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The subject development is underlain by coarse grained soil deposits of silty fine to coarse sand, sandy silt and sand-gravel. These deposits are not susceptible to significant settlement due to grade raise, and as such, there is no practical grade raise restriction for this development.

Based on the present ground elevations, the finished floor levels of the proposed buildings will represent a grade raise of between 1.0 and 1.4 m. There are existing fill deposits that extend to depths of up to 1.52 m below the existing ground surface. Based on the interpreted native soil surface levels, the grade raise is 1.2 to 2.7 m. These grade raises are acceptable from a geotechnical perspective for the proposed commercial buildings.

The development will be served by municipal services. The water service has obvert levels of between 89.1 and 88.8 m. The sanitary sewers have invert levels of between 89.5 and 89.2 m at the building connections and 88.54 m at the street connection. The storm sewers have invert levels of between 88.6 and 87.9 m.

The groundwater levels measured, on October 26, 2016, as part of the geotechnical investigation ranged from elevation 87.05 to 87.90 m. A groundwater level was recently (July 10, 2019) taken in borehole BH 4 that gave a groundwater level reading of elevation 87.75 m, as compared to the reading of 87.90 m, on October 26, 2016, in the same borehole.

The groundwater levels are, therefore expected to be at or below the invert levels of the proposed servicing for the development. As such, the installation of services for the development will not be adversely influenced by groundwater and groundwater control should be routinely handled by pumping from temporary sumps in the trench excavations.

The Grading Plan and the Site Servicing Plan - Revision 4, as referenced above, are acceptable from a geotechnical perspective for the proposed commercial building development.

Paterson Group Inc.

Andrew J. Tovell, P.Eng.



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