

TECHNICAL MEMORANDUM

DATE May 30, 2018

Project No. 13-1121-0083 (1046)

TO Erin O'Connor, MCIP, RPP
Leitrim South Holdings Inc.

FROM Christine Ko, P.Eng.

EMAIL Christine_Ko@golder.com

**GEOTECHNICAL REVIEW OF PROPOSED SITE GRADING
PATHWAYS RESIDENTIAL DEVELOPMENT – PHASE 1
4800 BANK STREET
OTTAWA, ONTARIO**

It is understood that Leitrim South Holdings Inc. has been requested to provide a detailed geotechnical review of the proposed site grading, including a summary table for each individual lot/block, for Phase 1 of the Pathways residential development located at 4800 Bank Street in Ottawa, Ontario. This memo provides our review and geotechnical recommendations pertaining to the grading of this site, and as described below fulfills the same intended purpose of a detailed table for each lot/block.

Subsurface Conditions

Golder Associates previously carried out a geotechnical investigation for this proposed development and the results of that investigation were provided in a report to Leitrim South Holdings Inc. and 4840 Bank Street Ltd. titled "*Geotechnical Investigation, Proposed Residential Development, Remer and Idone Lands, Ottawa, Ontario*" dated January 2017 (report number 13-1121-0083 (1046)).

Based on the results of the geotechnical investigation, in general, the subsurface conditions on this site consist of topsoil or peat (at the western portion of the site) overlying sands, silts, and followed by bouldery glacial till, which is in turn underlain by bedrock. Localized thin layers of silty clay were encountered below the peat or topsoil at two of the test holes (i.e., TP16-15 and TP 1).

The depth to the bedrock surface varies from about 2 to greater than 7 metres below the ground surface, generally increasing in depth from east to west.

Grading Plan Review

As mentioned above, localized layers of silty clay soils were encountered only in TP 16-15 and TP 1. TP 16-5 is located just outside of the northwest boundary of the site, whereas TP 1 is located within the extreme southwest corner of the site, which is designated as a "No Touch Zone" (i.e., no structures will be constructed in this area). In other words, silty clay soils were not encountered in areas where structures are being proposed on the Pathways site. It is the presence and strength of a silty clay deposit that typically imposes grade raise restrictions on a development site.

Based on the above and as noted in the geotechnical report, from a foundation design perspective there is no practical restrictions for the thickness of grade raise fill that may be placed within the proposed residential development area.

Golder Associates has reviewed the following grading plans prepared by IBI Group for this site.

- Grading Plan, Project No. 33956, Drawing Nos. 200 to 205, Revision 8, Revised April 13, 2018.

Upon review, the grading plans were found to be in general accordance with the recommendations provided in Golder Associates' report from a grading perspective and therefore considered acceptable from a geotechnical point of view. As such, detailed grading and underside of footing elevation review on a lot-by-lot or block-by-block basis for Phase 1 is not relevant in view of the subsurface conditions at the Pathways site and therefore preparation of a summary table for each individual lot/block is deemed not necessary.

Closure

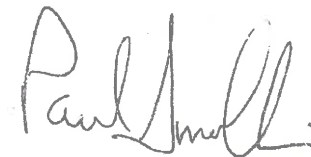
We trust that this memo provides sufficient information for your present requirements. If you have any questions concerning this memo, please don't hesitate to contact the undersigned.

Yours truly,

GOLDER ASSOCIATES LTD.


Christine Ko, P.Eng.
Geotechnical Engineer




Paul Smolkin, P.Eng.
Principal

CK/PAS/mvrd

n:\active\2013\1121 - geotechnical\13-1121-0083 remer and idone lands\phase 1046 remer detailed design\07-memos\techmem-002 detailed grading review\final_rev1\13-1121-0083-tm-rev1-grading review-30may2018.docx