



Via email: <denislacroix@msn.com>

April 25, 2017

Our File Ref: 160796

Denis Lacroix
6909 Notre Dame Street
Ottawa, Ontario K1C 1H6

Attention: Mr. Denis Lacroix

Subject: **Additional Recommendation to Slope Stability Analysis Letter, Dated February 14, 2017.
6909 Notre Dame Street, Ottawa, Ontario.**

Dear Mr. Lacroix,

LRL Associates Ltd. (LRL) was retained by Denis Lacroix for an additional recommendation in order to try and reduce the setback requirement of the subject slope. In the Slope Stability Analysis Letter previously submitted, LRL recommended a 7.0 m setback (6.0 m for erosion access allowance + 1.0 m for toe erosion allowance).

In accordance with the Ministry of Natural Resources (MNR) Technical Guide and Slope Stability Guidelines for Development Applications in the City of Ottawa, 2012, the Limit of Hazard Land (minimum setback requirement) consists of three components: stable slope allowance, toe erosion allowance, and erosion access allowance. In this case, stable slope allowance can be neglected because the Factor of Safety (FoS) > 1.5 in all simulations.

At the time of the original field investigation, the site was covered by snow, and possible signs of toe erosion or previous slope failures were unable to be observed. For this reason, a conservative approach was taken, and a 1.0 m setback for toe erosion allowance was included in the total setback requirement.

Based on LRL's observations from the additional site visit conducted on April 12, 2017, with no snow present on site, no toe erosion of any kind was observed. Therefore, the 1.0 m setback allowance for toe erosion can be omitted from the total setback requirement, reducing the total setback requirement to 6.0 m.



We trust this provides sufficient information for your present purposes. If you have any questions concerning this letter or if we may be of further service to you, please do not hesitate to contact our office.

Yours truly,
LRL Associates Ltd.



Brad Johnson, B.Sc. Eng.
Geotechnical Services



Stéphane Leclerc, P.Eng.
Principal Engineer

