



Soil Engineers Ltd.

CONSULTING ENGINEERS

GEOTECHNICAL • ENVIRONMENTAL • HYDROGEOLOGICAL • BUILDING SCIENCE

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March 23, 2021

Reference No. 1801-S032

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Zancor Homes (Bolton) Ltd.
221 North Rivermede Road
Concord, Ontario
L4K 3N7

**TOWN OF CALEDON
PLANNING
RECEIVED
September 1, 2021**

Attention: Mr. Frank Filippo

**Re: A Geotechnical Review for
Proposed Residential Development
Chickadee Lane and Glasgow Road
Town of Caledon**

Dear Sir:

It is our understanding that the Toronto and Region Conservation Authority (TRCA) has requested a geotechnical review regarding whether the proposed stormwater management pond and the outfall will have any adverse effect on the interpretation of the Long-Term Stable Slope Line (LTSSL) as determined in the supplementary slope stability assessment in Blocks 27, 29, 30 and 31 of the captioned site dated August 2020 (Reference No. 1801-S032). We herein provide our opinion on the subject matter.

Determination of Long-Term Stable Slope Line and Erosion Hazard Limit

Based on the Ontario Ministry of Natural Resources guideline, Erosion Hazard Limit is defined by three components: toe erosion allowance, stable slope allowance, and erosion access allowance.

By definition from the website of TRCA, the LTSSL is defined as “As determined through a geotechnical study: a) the physical top of slope where the existing slope is stable and not impacted by toe erosion; or b) the landward limit of the toe erosion allowance plus the stable slope allowance where the existing slope is unstable and/or impacted by erosion.”

The slope stability assessments performed by Soil Engineers Ltd. determined the LTSSL, which incorporates the toe erosion allowance and the stable slope allowance. And the erosion access allowance/development setback is to be implemented beyond the LTSSL and in compliance with the TRCA’s Living City Policy (LCP).



Discussion

It should be noted that the proposed development is not part of the component in determining the LTSSL, as one must determine the LTSSL prior to providing the development limit. Given that the proposed stormwater management pond is located behind the development limit setback and that the pond is designed as a retention pond (not an infiltration pond), the proposed stormwater management pond is unlikely to have an adverse effect to the condition of the slope.

As for the proposed outfall, proper erosion control should be considered at the outlet location in order to prevent any erosion at the toe of the valley due to the discharge of the pond water near the slope toe. Where necessary, preventive measure can also be implemented along the slope toe near the outlet location. This can be implemented as part of the engineering design for the outlet.

We trust the above satisfies your present requirements. Should you have any further queries, please feel free to contact this office.

Yours truly,

SOIL ENGINEERS LTD.

Kin Fung Li, P.Eng.
KFL/BL



Bernard Lee, P.Eng.

