EXP Services Inc.



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November 22, 2018

Reference: BRM00603505-D0

Mr. John Spina 7681 Highway 27 (Unit #16) Woodbridge, Ontario L4L 4M5

Via Email: jspina@mediterracorp.onmicrosoft.com

Re: Response to Niagara Escarpment Plan (NEP) Comments

Proposed Residential Development Belfountain, Town of Caledon, Ontario

Dear Mr. Spina:

As requested, EXP has prepared this response letter to address the comments provided by NEP after reviewing our geotechnical report listed below:

 Geotechnical Investigation – Proposed Residential Subdivision, Part of East Half and West Half Lot 9, Concession 5, W.H.S, Belfountain, Caledon, Ontario, Project No. BRM00603505-D0, dated September 8, 2017 (Revised November 16, 2017)

The table below included the NEP review comments and EXP's response to each comment.

NEP Review Comment	EXP's response
Page 8 of the report suggested that topsoil would be removed from the Site, Would the topsoil not be retained on the property in accordance with NEP, Part 2.13.8?	For the proposed subdivision development, the existing topsoil within future building footprints (houses) and pavement areas will be required to be removed. The stripped topsoil does not necessarily require off site disposal. It is understood that the stripped topsoil can be reused on site for landscaping purposes.
Page 11 of the report suggests slopes of no steeper than 1:1. Part 2.5.4 of the NEP does not permit development on slopes in excess of 25% (1:4 slope). In addition, Part 2.122 of the NEP (Infrastructure) states that finished slopes	In Appendix B of EXP's slope stability report, the slopes of Boreholes 1, 2 and 3 Sections are 5.2H:1V, 3.2H:1V and 4.9H:1V, respectively. Therefore, the slope configurations of

should have grades no steeper than 50% 1:2 slope. How have these policies been addressed in the design of the subdivision?

Boreholes 1 and 3 Sections are flatter than the required slopes in NEP Parts 2.5.4 and 2.122.

Borehole 2 Section meets the requirement of NEP Part 2.122, but the slope is steeper than 4H:1V as required by NEP Part 2.5.4. However, based on the results of slope stability analyses, the factor of safety is about 2.2, which is greater than the minimum factor of safety for Long Term Stable Top-of-Slope at 1.5. This demonstrated that the slope configuration at Borehole 2 Section will not have adverse impact to the future stability of the slope.

Page 12 of the report deals with fill quality and depth. Further discussions will be necessary with respect to the amount and location of imported fill. NEP Policy requires that any imported fill that may be allowed, must meet Table 1 standards. (NEP Part 2.13.10)

The statement in regard to imported fill material was included just in case if during cut/fill operations, there arises need for imported fill based on site grading plan. At this stage it is unknown if imported fill will be required or not.

It is understood that as stated in NEP Part 2.123.10, a fill imported onto the site shall meet Table 1 of the Soil and Groundwater and Sediment Standards for Use under Part XV.1 of the Environmental Protection Act, R.S.O 1990, c.E.19.

Section 7 of the Report implies that insufficient testing was done to inform decisions regarding the subdivision layout. No boreholes were taken in the area of steepest slopes according to Drawing 1 (northern boundary of the property). This requires further discussion

Subsurface conditions (soil and groundwater) can change from one borehole location to other, our statement in Section 7, is a standard cautionery statement for all our reports. It does not imply insufficient testing and this is cover the uncertainty about subsurface conditions from one borehole location to other.

As per our slope stability report included in Appendix A, Boreholes 2 and 4 were advanced at the crest and toe of the steepest slope area, respectively. It is considered sufficient to obtain subsurface conditions for the slope stability analyses for the selected cross sections.

In addition to the above responses, based on the our slope stability analysis results (presented in EXP's Report dated July 22, 2014 attached as Appendix A in the referenced Geotechnical Report), the Long Term Stable Top-of-Slope is considered at the physical top of slope. It is recommended that, to prevent the induced slope instability due to applying structure loading on the slope crest, the footprints of the proposed buildings should be kept at least 6 m from the physical top of slope.

We trust that our responses satisfy NEP review comments. If you have any questions, please feel free to contact us.

Yours truly EXP Services Inc.

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