
To:	R. Scott Rowland Windlectric, Inc. c/o Algonquin Power Company.	From:	Eric Theriault, P.Eng. Stantec Consulting Ltd.
File:	133560104	Date:	August 30, 2017

Reference: Additional Geotechnical Information, Windlectric Inc. Response Table

The response to Geotechnical Comments, items No. 6 and summary question two on page 5 of the August 23, 2017 Loyalist Township letter is provided below. These questions were identified as Items No. 48 and No. 52 on the response table by Windlectric Inc.

Question No. 6 reads as follows: "Page14 - New section added to describe the proposed upgrades to the existing roads. For gravel roads, a single blanket solution provided for all roads: sub excavate upper 200mm of existing road base, place Combigrid 30/30 or equivalent and place and compact 300mm Granular A to 100% SPMDD. What is the design ESAL?" Summary question No. 2 essentially asked the same thing – "what is the design ESAL?"

To clarify, the recommendation on Page 14 of the geotechnical report is for placing 200mm of new Granular A rather than 300mm as noted in the above question. Note that the Project drawings call for use of Terrafix Combigrid 40/40 in lieu of the Combigrid 30/30 recommended in the geotextile report. This change was based on a request from Windlectric Inc. and was approved as the 40/40 product has higher strength capacity than the 30/30 product.

Using the pavement design parameters and methodology as provided in the geotechnical report, including defining "failure" as 50mm of wheel path rutting, the pavement structure consisting of existing subgrade overlain with Combigrid 40/40 and 200mm of compacted Granular A is estimated to support 20,000 ESALs.

Question No. 7 (Item 49 on the response table) is a request for the design ESALs for the section of Stella 40 Foot Road. As the proposed upgrade is the same as discussed above, this pavement is also estimated to support 20,000 ESALs.

Question No. 52 reads as follows: "Are the single blanket recommendations for gravel surface and asphalt surface roads adequate for all cases? What is the design ESAL?"

The answer is "yes" and the pavements are estimated to support 20,000 ESALs.

Regards,

Stantec Consulting Ltd.



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Design with community in mind