



Sorensen Gravely Lowes
P l a n n i n g A s s o c i a t e s I n c .

509 Davenport Road
Toronto, Ontario M4V 1B8
Telephone (416) 923-6630
Facsimile (416) 923-6916

Principals: Warren Sorensen, P.Eng, MCIP, RPP
Catherine Gravely, MES, MCIP, RPP
Paul Lowes, MES, MCIP, RPP
Senior Associate: Carol-Anne Munroe, MCIP, RPP

BY EMAIL

May 27, 2011

Messrs. Kennaley and Vink
Planning Department
Township of Woolwich
24 Church Street West
P.O. Box 158
Elmira, ON
N3B 2Z6

Gentlemen:

Re: **Hunder Development Ltd.**
Aggregate extraction proposal

Thank you for the opportunity you provided earlier this month to meet and review my letter of May 6th, 2011 summarizing the applicable public policy context within which the Hunder Development Ltd. applications for aggregate extraction and recycling should be considered. As you know, we are planning consultants retained by the Conestogo Winterbourne Residents Association (CWRA) in this matter.

Further to our meeting, please find enclosed the following reporting letters prepared by other members of the consulting team retained by the CWRA:

- April 29, 2011 letter from Mr. Geordy Fournier, P.Eng. and Ms. Rebecca Walker, P.Eng., of exp Services Inc. (formerly Trow Associates) commenting on the submissions by Hunder Development Ltd. and their consultants respecting hydrogeological, aggregate resource and related matters.
- May 10, 2011 letter from Mr. R.L. Scott Penton, P.Eng., of Novus Environmental Inc., commenting on the noise assessments conducted for the Hunder proposal.
- May 15, 2011 letter from Mr. Nigel M. Taylor, M.Sc., EP, of Novus Environmental Inc., commenting on the dust assessment conducted for this proposal.



While these reports speak for themselves, I felt it may be of assistance to provide a brief overview and summary based on my understanding of the key findings noted by the specialist consultants in their advice to the CWRA.

The **report on hydrogeology and aggregate quality/quantity by exp Services Inc.** notes that there are outstanding concerns related to the quality and the quantity of the aggregate particularly for the lands north of Hunsberger Road, related to the actual subsurface conditions on this section of the property. A number of such concerns with the submissions by the proponent's consultants were identified.

- The lack of representative laboratory grain size analyses for lands north of Hunsberger Road do not enable the quality of the aggregate to be accurately determined.
- Petrographic Analyses needs to be undertaken to determine the quality of the aggregate, including an assessment of objectionable properties such as clay coatings, cementations, and presence and percentage soft and weathered rocks.
- The lack of groundwater monitoring wells within the north portion of the proposed extraction area leaves uncertainty in determining actual water levels and providing correlation to the test pit data, as well as defining the thickness of the till aquitard.
- A shallow groundwater table is indicated by the actual data obtained from test pit observations and monitoring wells. Discrepancies between this actual data and the groundwater flow model suggest that more data within the central part of the north Hunsberger property is required.
- Accurate evaluation of the groundwater level is required to determine the buffer zone for the potential aggregate extraction. In the opinion of exp Services Inc. the total average thickness of the aggregate layer may be in the range of 3.0 to 3.6 m and, depending on the actual average groundwater level, this thickness will be reduced by a minimum of 1.5 m for a groundwater buffer, resulting in a corresponding reduction of volume.
- No information has been submitted about existing groundwater temperatures. Removal of the overburden material and portions of the sand and gravel material, may result in the temperature of the water perched above the silt till being subject to warming effects, as a result of increased exposure to sunlight, with potential impacts on local watercourses and aquatic habitats which are sourced, in part, from shallow groundwater flow in the area.



The **noise peer review by Novus Environmental Inc.** identifies a significant disagreement with the noise reports submitted by consultants for Hunder Development Ltd., with respect to the classification of nearby residential areas in Conestogo as a Class 2 area. In the opinion of Novus, the area would be properly classified as a Class 3 area, and this view is supported by long-term ambient noise measurements undertaken by Novus and presented in their peer review.

The result of applying the proper classification to the nearby residential area is that the noise mitigation measures proposed by Hunder would be insufficient to meet the applicable provincial guidelines.

The Novus noise peer review also concludes that insufficient information has been provided in the submissions by the proponent's consultants to ensure that the noise modeling has been properly performed, in accordance with provincial guidelines.

The **dust peer review by Novus Environmental Inc.** identifies concerns with the assessment of dust submitted in support of the Hunder Development Ltd. proposal. These relate to the lack of justification for a number of inputs used in the assessment, including the choice of a more distant monitoring station as a data source for background suspended particulate matter, the use of the 90th percentile (rather than 98th percentile) and other estimates or assumptions.

We trust that the information provided in these peer reviews, and the brief summary in this letter, will be helpful to your consideration of the subject proposal. Please do not hesitate to call if any further information is desired.

Yours very truly,

SORENSEN GRAVELY LOWES PLANNING ASSOCIATES INC.

A handwritten signature in black ink that reads "W. Sorensen".

Warren Sorensen, P.Eng., MCIP, RPP
Principal

Enclosures as noted