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## **MEMORANDUM**

DATE:

2018-07-13

RWDI REFERENCE #: 1801684

TO:

Glen Ferguson

EMAIL: glen.ferguson@greatersudbury.ca

FROM:

Greg Conley

EMAIL: greg.conley@rwdi.com

Peter VanDelden

EMAIL: peter.vandelden@rwdi.com

RE:

**Noise Study Peer Review** 

Friends Fur-Ever Noise Assessment Peer Review

Sudbury, Ontario

Dear Mr. Ferguson,

RWDI has completed its peer review of a report prepared by ProSonics Ltd. titled Friends Fur-Ever Pet Resort Noise Assessment, dated April 4, 2018. This report was prepared in response to comments included in our Memorandum dated November 23, 2017 on ProSonics first noise assessment report dated September 21, 2017. The City of Sudbury has requested an opinion of whether the methodology and conclusions of this second report addresses the comments included in our November 23, 2017 Memorandum.

Our review of the 2018 report and analysis indicates that several significant items in our November 23, 2017 Memorandum still need to be clarified, corrected, or supplemented. Instead of providing another Memorandum highlighting items that are still outstanding, a telephone conversation occurred between Mr. Peter VanDelden of RWDI and Mr. David Peters of ProSonics on May 22, 2018 to review the methodology and findings of his study. The following highlights the specific key areas of discussion:

- The report does not follow the NPC-300 requirement to evaluate vacant lots that are zoned to allow future sensitive use. The report suggests that NPC-300 places the responsibility for compliance on the person responsible for introducing a sensitive use such as a residence. This is an incorrect interpretation of NPC-300. The land south of the kennel was already zoned to allow a future sensitive use therefore the report should have considered a point of reception on this property.
- The report refers to the source of noise as quasi-steady and follows an assessment method that is more consistent with quasi-steady impulsive sources. Although we



don't disagree with this characterization, the report does not refer to the NPC-104 specification which requires a 10 dB penalty for quasi-steady impulsive sources.

- The report indicates that the source was not audible at the measurement location but refers to background sound such as sounds of nature obscuring the source. If at other times the source can be heard and can be characterized as quasi-steady at the point of reception, the penalty of NPC-104 would apply. During conversation with Mr. VanDelden, Mr. Peters discussed that complaints had been received. The presence of complaints appears to show that the source can be heard at the point of reception.
- The report presents levels of 36 dBA, 39 dBA and 38 dBA as the source contribution at the points of reception. Mr. Peters confirmed that the results presented do not have the quasi-steady penalty applied.

For those not otherwise versed in acoustic assessment, NPC-300 and the Model Municipal By-Law (MOE, 1978), which includes supporting NPC documents, we offer the following background information.

- NPC-300 requires assessment at points of reception. The "Point of reception" specifically includes a "noise sensitive zoned lot". Among other things, the definition of a noise sensitive zoned lot means a lot that has been zoned to permit a dwelling and is currently vacant. Section B11 of NPC-300 refers to the land use planning process for a new noise sensitive land use. This process would include zoning by-law amendment, which would make the land available for noise sensitive uses. Once the zoning is in place, the owner of the source needs to consider the type of noise-sensitive use that could be constructed. Thus, there was obligation to assess noise at the lot once the zoning permitted it and already prior to the construction of a dwelling on it.
- Model Municipal By-Law to which NPC-300 refers includes the definition of a Quasi-Steady Impulsive Sound in NPC-101. The sound of barking dogs has the potential to be described as Quasi-Steady Impulsive Sound. If the source were described as quasi-steady impulsive, the 10 dB penalty provided in the Model Municipal By-Law's NPC-104 would apply. If an alternate description such as impulsive were applied, a measurement and assessment approach would apply which is completely different from the one used in the Prosonics report.

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The information provided in the Prosonics report, together with clarification provided by Mr. Peters, can be used to develop a better understanding of the current situation. Many questions remain regarding the assessment methodology, assessment location, source characterization, measurement procedure and validity. However, we would use the levels of 36 dBA, 39 dBA and 38 dBA presented as the existing source contributions in the absence of a more extensive and lengthy clarification. Applying the 10 dB penalty specified in NPC-104, these source levels would be 46 dBA, 49 dBA and 48 dBA, respectively. All three levels would then exceed the exclusion limits of 45 dBA for daytime and 40 dBA for evening provided in NPC-300. In other words, Friends Fur-Ever is not currently shown to be in compliance with the NPC-300 limits.

Based on the review comments and our discussion with ProSonics, compliance with NPC-300 has not been sufficiently demonstrated.

Should you have any questions, please contact the undersigned.

Yours truly,

Péter VanDelden, P. Phys., INCE Technical Director / Associate

Greg Conley, M.Eng., P.Eng. Senior Project Manager/Principal

GC/PV/klm

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