

**WITNESS STATEMENT  
OF  
DALILA C. GIUSTI, P.ENG.**

for

Proposed Freymond Quarry  
Township of Faraday  
County of Hastings



Prepared on behalf of  
No Place For A Quarry Inc.

Prepared  
May 17, 2021

Local Planning Appeal Tribunal

LPAT File No.: PL 190020  
Township of Faraday

**LOCAL PLANNING APPEAL TRIBUNAL**  
**Tribunal d'appel de l'aménagement local**

**ISSUE DATE:    CASE NO(S): PL190595**



**PROCEEDING COMMENDED UNDER** subsection 17(36) of the  
Planning Act, R.S.O. 1990, c.P.13, as amended:

Applicant:	Freymond Lumber Ltd.
Appellant:	No Place for a Quarry Inc.
Subject:	County of Hastings OPA No. 18
Property Address/Description	Parts of Lots 51, 52 of Concession WHR
Municipality:	Upper Tier of Hastings
Municipal File No.:	12-OP-175106
LPAT Case No.:	PL190595
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## WITNESS STATEMENT

### **1.0 NAME AND BUSINESS ADDRESS**

Dalila C. Giusti, P.Eng.  
President  
Jade Acoustics Inc.  
411 Confederation Parkway  
Unit 19  
Concord, Ontario  
L4K 0A8

(905) 660-2444  
(905) 660-4110 (fax)



### **1.1 Qualifications**

- 1.1.1 Details of my education, experience and qualifications are included in my curriculum vitae attached here as Schedule "A".
- 1.1.2 I received by B.A.Sc. from the University of Toronto in 1984, in Civil Engineering.
- 1.1.3 I am a registered Professional Engineer (P.Eng) in the Province of Ontario since 1986.
- 1.1.4 My entire career as an engineer has been in the field of noise, vibration and acoustics.
- 1.1.5 I have provided evidence before the Local Planning Appeal Tribunal (LPAT), the former Ontario Municipal Board (OMB), the Alcohol and Gaming Commission (AGCO) and the Canadian Transportation Agency (CTA).
- 1.1.6 The signed Acknowledgement of Expert's Duty is attached as Appendix B.

## 1.2 Retainer

**1.2.1** No Place For A Quarry Inc. retained Jade Acoustics Inc. in April 2021 to conduct a peer review of the noise report and associated information prepared on behalf of No Place For A Quarry Inc. A summary of the noise reports and correspondence reviewed is summarized in Section 1.2.2 of this Witness Statement.

### 1.2.2 Reports/Documents/Correspondence Reviewed:

1. *Acoustic Assessment Report, Freymond Quarry*, prepared by Hugh Williamson Associates Inc., dated December 15, 2016;
2. *Peer Review of Acoustic Assessment Report*, Memorandum prepared by Valcoustics Canada Ltd., dated June 26, 2017;
3. *Acoustic Analysis of Noise Impacts at the Grail Springs Wellness Retreat from the Proposed Freymond Quarry*, Memo prepared by Hugh Williamson Associates Inc., dated July 24, 2017;
4. *Response to Peer Review of Acoustic Assessment Report*, prepared by Hugh Williamson Associates Inc., dated April 4, 2018;
5. *Acoustic Assessment Report, Freymond Quarry*, prepared by Hugh Williamson Associates Inc., dated Amended Report Issued January 16, 2018;
6. *Peer Review of Amended Acoustic Assessment Report*, Memorandum prepared by Valcoustics Canada Ltd. dated August 9, 2018;
7. *E-mail* from Brian Zeman (MHBC) to Justin Harrow *RE: Freymond – Response to Valcoustics Memo Dated August 9, 2018* dated August 22, 2018; and
8. A request was made for the CadnaA acoustic model on May 11, 2021. At the time of writing this Witness Statement, the acoustic model had not yet been provided. Any comments regarding the acoustic model will be provided in the Reply Witness Statement.



## 2.0 MATTERS TO BE ADDRESSED

### 2.1 Overview of the Site

2.1.1 The proposed Freymond Quarry is located at 2287 Bay Lake Road in the Township of Faraday, County of Hastings, Ontario. The application is to the Ministry of Natural Resources and Forestry (MNRF) for a Category 2, Class A, license under the Aggregate Resources Act (ARA). In addition, the application is for an Official Plan Amendment from the County of Hastings and a Zoning By-law Amendment from the Municipality of Faraday;

The Zoning By-law Amendment has been approved by the Township of Faraday.

2.1.2 The land-uses located in the area of the proposed quarry include rural residential, the existing Freymond Lumber Yard & Mill and highway commercial uses on Highway 62;

2.1.3 The Grail Springs Wellness Retreat is located at 2004 Bay Lake Road approximately 850 m south of the southern limit of the proposed quarry;

2.1.4 My evidence will address the matters summarized below as they relate to the proposed applications before the LPAT and the potential acoustic impact on the existing sensitive uses at Grail Springs Wellness Retreat;

2.1.5 Review of applicable guidelines;

2.1.6 Whether the proposed land use plans, including possible mitigative measures, result in an acceptable acoustical environment;

2.1.7 Review of the Issues List included in the Draft Procedural Order updated April, 2021;and

2.1.8 Any other related issues that may arise.

### 2.2 Specifically the evidence will be based on:

2.2.1 Review of documents listed in Section 1.2.2 and Section 5.0;

2.2.2 Information regarding the Grail Springs Wellness Retreat operations/activities;



- 2.2.3 Review of information provided by other consultants associated with the project;
- 2.2.4 Any other documents that may be prepared in the course of the review of the applications and preparation for the hearing; and
- 2.2.5 It should be noted that a site visit has not been conducted and no original work has been undertaken.

### **3.0 SUMMARY OF OPINIONS**

- 3.1 The noise report prepared by Hugh Williamson Associates and subsequent updates as requested by Valcoustics provide mitigation measures to meet the Ministry of the Environment, Conservation and Parks (MOE) sound level limits at the receptors analyzed.
- 3.2 The original noise reports did not include the Grail Springs Wellness Retreat as a receptor. The Retreat was specifically assessed in the July 24, 2017 Memo prepared by Hugh Williamson Associates.
- 3.3 The closest receptor to the Retreat, analyzed in the original report, is the dwelling at 2001 Bay Lake Road (POR5).
- 3.4 The Retreat has quiet activities that take place both indoors and outdoors.
- 3.5 The MOE guidelines do not specifically address sensitive land-uses such as the Retreat where meeting the numerical sound level limits in NPC-300 may not be adequate to address the unique uses.
- 3.6 The MOE NPC-300 guidelines do not include indoor sound level limits for stationary sources of noise, such as the activities that take place at a quarry. The sound level limits must be met on the outside façade of the residential buildings and at the outdoor points of reception.
- 3.7 The noise reports have used the exclusion limits as the sound level limits to assess the quarry. This is generally acceptable to meet the MOE guidelines. It is noted that the peer review comments note that the actual sound level at some receptors may be lower than the predicted road traffic or the exclusion limits. As the Retreat is located at a distance from Bay Lake Road, it is expected that the actual ambient may be lower than the exclusion limits.



- 3.8 As many of the activities that take place at the Retreat require a very quiet environment, both indoors and outdoors, meeting the exclusion limits may not be sufficient to allow the Retreat to operate as intended.
- 3.9 The MOE guidelines for stationary sources, such as the proposed quarry, are based on 1-hour Leqs. The definition of Leq is *the A-weighted sound level of a steady sound carrying the same total energy in the one-hour time period as the observed fluctuating sound*. This means that a very loud sound could occur for a short period of time during the one hour, but when no sound is included for the remaining portion of the hour the guidelines can be met at the receptor. However, when the sound is occurring it may be loud, audible and disruptive for the duration of the occurrence; despite the guidelines being met.
- 3.10 The characteristic of the noise sources should also be evaluated. For example, blasting noise, back-up beepers, crushing noise, generator noise, truck movements on the adjacent roads. These may not occur frequently and are predicted to meet the guidelines, however, they will be audible at the Retreat, particularly at the outdoor activities and may disrupt the acoustic environment during the activities that require a quiet and steady background sound level.
- 3.11 The mitigation that is required to meet the MOE guidelines includes both physical barriers and administrative controls such as number of pieces of equipment that can operate, hours of operation and location of equipment. If these do not occur as intended, it may result in disruptions at the Retreat during specific activities such as outdoor mediation sessions or walks on the extensive nature trails. This inconsistency applies to all receptors in the area, however, due to the unique nature of the Retreat, these disruptions are significant to the operation of the Retreat.
- 3.12 The MOE guidelines do not require that inaudibility be achieved but only that the sound level criteria be achieved. However, due to the lack of numerical sound level limits for particular sources, such as warning devices, intermittent sources, and the absence of indoor sound level limits for stationary sources, the resulting acoustical environment may not be appropriate because of the magnitude of the sound as well as the characteristic of the sound.
- 3.13 Issue 1 specifically addresses the noise considerations. In my opinion, the work completed to date does not adequately address Issue 1.
- 3.14 I did not review the blasting reports in detail as this is outside my area of expertise. However, I do note that Grail Springs is not included as a receptor.



**4.0 CONCLUSION AND RECOMMENDATIONS**

4.1 Based on my review of the materials provided, the applicable guidelines, and the proposed mitigation, it is my opinion that special consideration needs to be given to Grail Springs to address the unique nature of their operations. Simply meeting the MOE guidelines is not adequate as meeting the MOE sound level limits does not account for the impacts of the quarry and associated operations on Grail Springs operations.

Based on the above, allowing the OPA and rezoning of the subject lands to permit the proposed quarry is not appropriate.

**5.0 LIST OF DOCUMENTS**

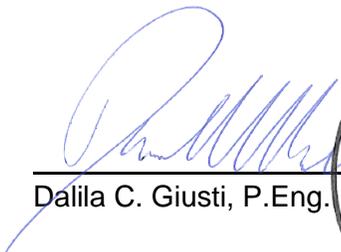
In addition to the documentation filed by the applicant and information obtain as itemized in Section 2.2 of this Witness Statement, the documents listed below have been utilized/reviewed in the preparation of this Witness Statement.

1. *Environmental Noise Guideline Stationary and Transportation Sources – Approval and Planning Publication NPC-300*, prepared by Ontario Ministry of the Environment and Climate Change, dated August, 2013, released October 21, 2013 (updated final version # 22);
2. *Land Use and Compatibility, Guideline D-1*, Ministry of the Environment, July 1995; and
3. *Compatibility Between Industrial Facilities and Sensitive Land Uses, Guideline D-6*, Ministry of the Environment, July 1995.

Respectfully submitted,

JADE ACOUSTICS INC.

Dated this 17th day of May, 2021

Per:   
 Dalila C. Giusti, P.Eng.



DCG/jg  
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**SCHEDULE "A"**

**TO THE  
WITNESS STATEMENT OF**

**DALILA C. GIUSTI**

**CURRICULUM VITAE**

## **DALILA C. GIUSTI, P.ENG.**

### **EDUCATION**

B.A.Sc., University of Toronto, 1984, Civil Engineering.

Undergraduate thesis topic "Sound Mechanisms and Methods of Control in Residential Development".

Course on Noise Control for Buildings and Manufacturing Plants, Bolt, Beranek and Newman, 1985. The course included the fundamentals of acoustics and sound propagation, and design of noise and vibration control for buildings and mechanical equipment.

### **AFFILIATIONS**

Association of Professional Engineers of Ontario (PEO)

Designated Consulting Engineer (PEO)

Canadian Acoustical Association (Treasurer)

Experience Requirements Committee (ERC), (PEO)

Experience Requirements Sub-Committee (PEO)

### **EXPERIENCE**

2003 to date - President, Jade Acoustics Inc., Vaughan

1989 to 2003 - Vice-president, Jade Acoustics Inc., Vaughan

Responsible for all aspects of company projects including environmental noise and vibration studies for residential developments including multi-family residences (townhouses, highrise), single family homes; and co-operative developments, control of noise and vibration in buildings due to occupants and mechanical equipment for both residential and commercial facilities, industrial noise control and room acoustics design.

Experience includes preparation of environmental noise studies for both the private sector and government agencies to address noise created by transportation vehicles, industrial operations, mechanical equipment, quarry and pit operations and landfills.



The preparation of the environmental noise studies involves on-site noise measurements, data analyses, design of mitigative measures, report preparation, interfacing with consultants, various levels of government, the public and client liaison.

Involved in committees convened by the Ministry of the Environment to review the noise prediction models (STAMSON 4.1) and to study revisions to the model noise control by-laws.

1984 to 1989 - Senior Engineer, Valcoustics Canada Ltd., Toronto

Responsible for supervision of technical staff, testing, analysis, design, report writing and client liaison.

Preparation of environmental impact studies of noise and vibration for residential, commercial and industrial development and public works projects such as highways, airports, etc., including measurements, analysis, design, computations and report writing.



#### **OTHER PROFESSIONAL ACTIVITIES**

Contributing researcher and author of the "Traffic Noise and its Mitigation" section, Roads and Transportation Association of Canada (RTAC) Geometric Design Standards Manual.

Lecturer for cross Canada RTAC seminars on the topic of "Traffic Noise and its Mitigation".

Section in RTAC Manual and lectures included the basic principles of acoustics with emphasis on traffic noise, criteria used to evaluate traffic noise, traffic noise prediction techniques, mitigative measures and sound barrier design.

Research for proposed changes to OBC with respect to exterior noise.

Participating consultant interviewed for the educational video tape, prepared by Event Horizon, "Applied Mathematics: Quadratics", discussion on the acoustics of Roy Thomson Hall.

Expert witness before the Ontario Municipal Board, the Local Planning Appeal Tribunal (LPAT) and the Alcohol & Gaming Commission of Ontario (AGCO).



**APPENDIX B**

**ACKNOWLEDGE OF EXPERT'S DUTY**



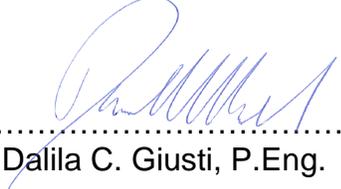
Ontario  
Local Planning Appeal Tribunal  
Tribunal d'appel de l'aménagement local

**ACKNOWLEDGMENT OF EXPERT'S DUTY**

<b>Case Number</b>	<b>Municipality</b>
<b>PL 190595</b>	<b>Township of Faraday</b>



1. My name is.....Dalila Giusti.....(*name*)  
I live at the .....Aurora.....(*municipality*)  
in the.....Region of York.....(*county or region*)  
in the .....Province of Ontario.....(*province*)
2. I have been engaged by or on behalf of **No Place For A Quarry Inc.** to provide evidence in relation to the above-noted LPAT proceeding.
3. I acknowledge that it is my duty to provide evidence in relation to this proceeding as follows:
  - a. to provide opinion evidence that is fair, objective and non-partisan;
  - b. to provide opinion evidence that is related only to matters that are within my area of expertise; and
  - c. to provide such additional assistance as the LPAT may reasonably require, to determine a matter in issue.
4. I acknowledge that the duty referred to above prevails over any obligation which I may owe to any party by whom or on whose behalf I am engaged.

Date..... May 17, 2021.....  
  
Dalila C. Giusti, P.Eng.