

30 Wertheim Court, Unit 25
Richmond Hill, Ontario, Canada, L4B 1B9

email • solutions@valcoustics.com

web • www.valcoustics.com

telephone • 905 764 5223

fax • 905 764 6813

March 10, 2020

Capital Paving Inc.,
P.O. Box 815
Guelph, Ontario
N1H 6L8

Attention: George Lourenco, P.Eng.
glourenco@capitalpaving.on.ca

VIA E-MAIL

**Re: Response to Peer Review Comments #2
Shantz Station Pit – Noise Impact Assessment
Part of Lots 81 and 82, German Tract Company
Breslau, Ontario
VCL File: 118-0188**

Dear Mr. Lourenco:

Valcoustics Canada Ltd. (VCL) prepared a Noise Impact Analysis (Report) dated May 10, 2019 in support of the proposed Shantz Station Pit in the Township of Woolwich. A letter (Letter #1) dated November 20, 2019 was prepared in response to peer review comments from SS Wilson Associates (SSWA), dated September 13, 2019. This letter has been prepared in response to the comments in Peer Review Letter #2, dated January 8, 2020, prepared by SSWA.

In Peer Review Letter #2, SSWA concluded that they are satisfied that the acoustic concerns have been addressed. However, there were two issues that should be looked at in detail: first, excavation and pathing of the excavation so that a significant drop in elevation be maintained at all times for acoustic reasons and second, on the specific details of the 11 m high barrier. Responses to these remaining peer review comments are provided below.

RESPONSE TO COMMENTS

Comment #1 – Haul Route Analysis (Section 2): *We have no objection to the use of the quantitative assessment undertaken based on the MECP Landfill Sites. However, seeing as the MNR addresses the issue as well, we recommend that VCL tailor their report to also include reference to the MNR policies (the applicable policy numbers were previously transmitted to VCL) for the sake of completeness, since MNR is the ultimate authority for such applications.*

VCL Response: It is our understanding that the applicability of the referenced MNR policies was reviewed and discussed with the Region of Waterloo. For example, one of the referenced policies applies to aggregate permits which only applies to applications on Crown land.

However, we will update our report to reference the other applicable policies and tailor the report to address these policies as well as the MECP Landfill Guideline requirements.

Comment #2 – Excavation Assessment (Section 3): *We agree with VCL that their initial assessment for the commencement of the quarry excavation was undertaken at ground level. This will result in acceptable sound levels at all receptor locations with their proposed mitigations. Our concern is that during subsequent phases, if the equipment were to continue to operate on ground level, there will be a significant noise impact. However, it appears that VCL intended for all equipment to operate within the pit at a lower elevation from the previous phase, thus taking advantage of the future existing grade difference which provides natural attenuation from the pit walls as a result. Therefore, VCL should clearly articulate this process in their recommendations and we will then have no issues with this concern.*

VCL Response: Once aggregate extraction starts in Phase 1 of the proposed pit (not quarry), the excavation will continue in each subsequent phase on the pit floor and not the existing ground elevation. In other words, the pit equipment will remain on the pit floor as the “active pit face” is excavated in the direction and manner as outlined on the ARA Site Plans.

VCL will add a recommendation to our report that the operation be undertaken in accordance with the ARA Site Plans including that pit equipment remain on the pit floor following the initial operations in Phase 1.

Comment #3 – Barrier and Berm Recommendations (Section 4): *The explanation provided by VCL in regards to the stability of the constructed berms/barriers is somewhat beyond our scope of acoustical engineering work as VCL is providing a position that such berms can be much higher using “telescoping radio stackers”. Such details should be vetted by the Site Engineering Consultant as stability of a berm is not an issue that we deal with, except to flag any berm height to base ratio that may not present a stable situation or where such height could cause a significant loss of floor space. Note that VCL is showing a very thin green line, which could be interpreted to be a sound barrier wall 11m high, equivalent to a four storey building.*

VCL Response: It is not uncommon for product stockpiles and berms to be used as sound barriers around processing plants at aggregate operations. Capital will employ the same approach at the Shantz Station Pit. The size of Phase 1 has been developed to account for the space required to accommodate such berms and product stockpiles to act as sound barriers.

To help clarify the barrier recommendations surrounding the processing plant, an aerial image and photos of the Wellington Pit, operated by Capital Paving Inc., are included as Appendix A.

Comment #4 – Sound Monitoring (Section 5): *In view of the extent of the questionable issues related to Site operations, it is our recommendation that the Noise Study be changed to include a recommendation to the Region to commission the services of an independent third-party acoustic consultant to undertake periodic monitoring. The periodic monitoring should monitor the sound levels at the closest points of reception, and to report the results directly to the Region. The report should note that this item is a recommendation and not a requirement.*

VCL Response: The Report already recommends that off-site noise measurements be completed by a qualified acoustical engineer when operations are underway to confirm compliance with the

noise guideline limits. See the last bullet point on page 14 of the Report.

Capital Paving Inc. further agrees to forward the report of such noise monitoring to both the Region of Waterloo and the Township of Woolwich. This requirement will be added to the notes on the ARA Site Plan.

We trust that the above responses address all the issues raised regarding the noise impact assessment.

Yours truly,

VALCOUSTICS CANADA LTD.

Per:



John Emeljanow, B.Eng., P.Eng.



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Enclosures

APPENDIX A

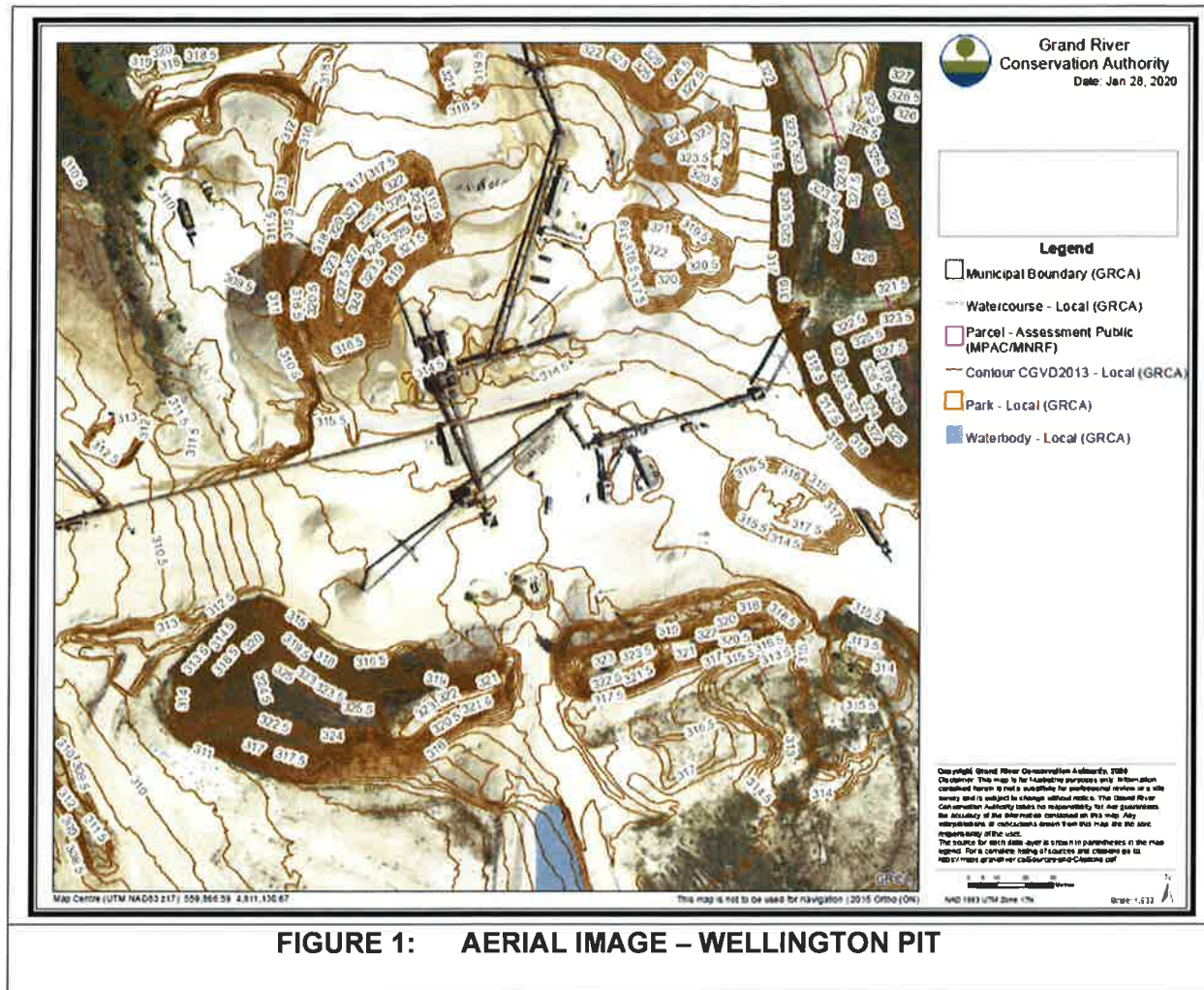




FIGURE 2: BERM AND STOCKPILES SURROUNDING PROCESSING PLANT



FIGURE 3: 10 METER HIGH BERM AT PROCESSING PLANT