



CITY OF BURLINGTON
“SERVICE .. AN ATTITUDE, A
COMMITMENT”
Engineering Services
Development & Stormwater

Date: March 28, 2022

FROM: Annette Simpson
Engineering Services, Development and Infrastructure Division

RE: Site Engineering (March 2022) Noise (only) comments for the
NELSON QUARRY EXTENSION
**Application to change the Official Plan Designation to “Mineral
Resource Extraction Area”**

FILE: **505-04/20**

Site Engineering has completed the review of the March 7, 2022 revised Noise Impact Assessment (NIA) circulation for the Nelson Quarry Extension application to change the Official Plan Designation to “Mineral Resource Extraction Area” to permit the extraction of aggregate materials on 78.3 hectares located to the west of the existing operations, on lands which currently contain the Burlington Springs Golf Club and to the south, on lands which currently contain agricultural and residential uses.

1.5 ENVIRONMENTAL NOISE

- a) A revised Noise Impact Assessment dated November 15, 2021 was provided on March 7, 2022 for review and commenting. Please find below the Site Engineering comments/questions on this report:
- i. The “Limitations” section excludes reliance on the document for anyone except Nelson Aggregate Co. Please provide a letter of reliance from HGC Engineering, confirming the City of Burlington and other vested review agencies and the peer reviewer, J. E. Coulter Associates Limited, can rely on the information in the same manner as Nelson Aggregate Co.
 - ii. The J.E. Coulter Associates Limited January 29, 2022 peer review memo, item 3, stated *“The ambient sound levels calculated in STAMSON are used to justify the use of Class 2 sound level criteria for the receptors surrounding the quarry. Detailed tables of the ambient sound levels should be provided to justify the surrounding area designation as Class 2.”* Site Engineering defers to the expertise of J.E. Coulter Associates Limited to confirm if the justification of the Class 2 sound level criteria is acceptable.
 - iii. Section 1 indicates that an email from the MECP Senior Noise Engineer assigned to the application was included in Appendix F, but I am not able to locate the email, please provide.
 - iv. Section 2 indicates *“the site hosts a hot-mix asphalt plant owned by a third-party; sound emissions from the hot-mix plant have been jointly assessed with the quarry.”* Table 1 outlines the predicted “Worst-Case” Sound Levels. Appendix F contains the Acoustic Assessment Report (AAR) Section 3.2 indicates . Table A3 of the AAR outlines the Existing Worst Case Operation”. The hot-mix plant is proposed to continue to operate after the quarry extension. Will the ECA for the hot-mix plant need to be updated again if the quarry expansion is approved? We do note that the AAR existing worst case operation sound levels are worse than the predicted NIA worst case sound levels.
 - v. Is Figure 3a mislabeled as Figure 5? Noise Barriers/Berms Near Site Entrance

- vi. Appendix A - the proposed acoustical berms will need to be identified on a site plan drawing. Operational Plan Drawing 2 of 4 identifies the berms at the NE entrance, but not the berms for the west expansion or the south expansion. Please clearly identify all the Noise Barriers/Berms (including dimensions for length, width, height) on a site plan(s) and include in Appendix A. A Site Alteration Permit may be required for construction of the berm, please refer to the City of Burlington's website for Site Alteration Permit requirements.
- vii. Further to above, please ensure the deemed right of way width for all municipal and regional roads are clearly identified on the site plan(s) that identifies the proposed acoustical berms. The proposed acoustical berms shall not encroach into the deemed municipal/regional right of ways.
- viii. Appendix A, Operational Plan 2 of 4 (the second operational plan in the appendix) has a table for maximum sound power level of equipment, the quiet drill with max. 110dBA (as per Table B1) should be included in the table.
- ix. Please include the ARA Site plan in the appendix of the NIA. Appendix A of the NIA contains five plans, Existing Features, Operational Plan, Rehabilitation Plan., Cross Sections and another Operational Plan. Both Operational Plans indicate the working hours as Monday to Friday 7am to 7pm, statutory holidays excepted, and Blasting Monday to Friday 8am to 6pm excluding Statutory Holidays. Is the Operational Plan the same as the ARA Site Plan? If there is a separate ARA Site Plan please include it in Appendix A
- x. As per the applicant's response, please clearly state in Appendix C that the implementation of noise control measures is the responsibility of the two respective entities operating within the site, Halton Asphalt Supply (via an ECA) and Nelson Aggregate (via an ARA license)
- xi. Appendix C, please include the specific type of drill to be used on site, i.e. quiet drill sound power of 110dBA (as per Table B1), as this is also a noise control measure.
- xii. Appendix C, the response matrix indicated (item 13. of the JART comment summary table – Noise) that periodic noise surveys to confirm that extension operations comply with the limits stipulated in NPC-300 will be undertaken, Appendix C states that Nelson would undertake acoustic surveys during each phase of extraction of the extension to confirm sound emissions. Please

provide additional details of the proposed acoustic survey, i.e. what is the anticipated timing, yearly? Who will undertake the survey, an independent third party? Who will be provided the results of the survey, will all vested agencies be provided the information? What mechanisms will be in place should the noise survey indicate an excess of MECP limits, to mitigate so that MECP requirements are met.

- xiii. Appendix F, Acoustic Assessment Report (AAR) prepared by HGC Engineering dated April 27, 2021, section 7 indicates *“These levels are generally within the applicable criteria but can exceed the noise limits at locations R01, R04 through R08 and VL1”*, approximately a third of the receptor locations exceed noise limits. Section 8 of the same report states *“with the noise control measures outlined in Sections 6 and 8, the worst-case sound levels of the site are predicted to be within the applicable limits set out in MECP publication NPC-300”* Section 8 and Section 7 seem to state two different conclusions, please clarify.
- xiv. Section 8.3 of the AAR indicates that *“the measures detailed in Sections 8.1 and 8.2 will be implemented within 24 months following receipt of Approval from the MECP”*, the measures include both the acoustic silencers at the hot mix plant and the noise berms. Appendix B of the NIA states *“Prior to commencement of quarrying activities in the two extensions, berms will be constructed at the perimeter of the site as discussed in Appendix C,...”* . Please confirm the latter is true, that the berms will be constructed prior to extraction activities in the west or south expansions of the quarry, even if that timeline is less than 24 months after MEC approval.
- xv. The response matrix noted that HGC submitted the AAR on April 27, 2021, almost a year ago, was the ECA amendment for the hot-mix plant received? Please provide a copy of the ECA amendment.

Please be advised that the above comments are from a Site Engineering perspective, other departments/agencies may have additional comments/requirements, in case of discrepancy between departments/agencies, the most stringent criteria shall apply.

I am happy discuss the comments above if you, JART, JE Coulter, or the Applicant/Owner or their Consultants have questions or require clarification on the Site Engineering comments.

Yours truly,

A handwritten signature in black ink, consisting of a large, rounded initial 'A' followed by a long, sweeping horizontal line that tapers to the right.

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