

June 7, 2024

Attention: Mr. Saud Adi
Adi Developments (Masonry) Inc.
1100 Burloak Drive
Burlington, ON L7L 6B2

SLR Project No.: 241.V30122.00003

Revision: 0

**RE: Opinion Letter on CN Rail Aldershot Rail Yard Environmental Noise
1120 Cooke Boulevard - Burlington**

SLR Consulting (Canada) Ltd. (SLR) provides this letter at the request of Adi Developments (Masonry) Inc, for the proposed development at 1120 Cooke Boulevard, Burlington ("Project site"). This letter provides our opinion on the environmental noise from CN Rail ("CN") Aldershot Yard ("Yard") operations at the Project site.

Background

SLR previously completed the following studies with regards to this Project site:

- *Environmental Noise Study – 1120 Cooke Boulevard – Burlington, ON*, dated August 12, 2021;
- *Environmental Noise Study – 1120 Cooke Boulevard – Burlington, ON*, dated November 18, 2021; and
- *Environmental Noise Study – 1120 Cooke Boulevard – Burlington, ON*, dated February 23, 2023 (February 2023 study).

SLR completed on-site observations of the CN Yard during site visits completed in February 2016, October 2018, and April 2021 to the development lands and surrounding area. The SLR assessments noted above were completed based on our site visit observations and using rail yard information provided by CN for Environmental Noise Assessments for the approved 101 Masonry Court development (located on adjacent lands) and the approved nearby 1085 Clearview Avenue development.

Jade Acoustics Inc. ("Jade") was retained by CN to conduct a peer review of SLR noise assessment. Jade/CN provided their peer review of the February 2023 study in their letter dated May 12, 2023. SLR provided a response letter dated June 26, 2023 to address the comments. SLR received a final response letter from Jade/CN on August 4, 2023.

In their August 4, 2023 letter, Jade concluded:

"Based on our review, the responses provided are generally acceptable and its concluded that the development has been designed to mitigate the noise sources to meet the CN, RAC/FCM [Railway Association of Canada/ Federation of Canadian Municipalities] and MOE [Ministry of Environment, Conservation and Parks] guidelines."

Approximately seven (7) months later, on March 15, 2024, Dentons on behalf of CN provided comments to the City of Burlington City Council, requesting council to defer its consideration for Project site to address CN's concerns before the City of Burlington Council meeting to consider approval of the Development Applications originally scheduled for March 19, 2024.

On March 18, 2024, Dentons on behalf of CN provided Adi Developments (Masonry) Inc. and SLR with a Cadna/A acoustic model representative of CN's operations at the CN Yard. In addition to the model, a memorandum, dated February 27, 2024 from Jade was provided, detailing the acoustic modelling parameters in the Cadna/A model.

SLR Opinion on CN Aldershot Rail Yard Acoustic Model

SLR has reviewed the acoustic model prepared by Jade, received on March 18, 2024. It is SLR's opinion that the acoustic model is overly conservative and not likely representative of the predictable worst-case scenario for the CN Aldershot Rail Yard. Site visits by SLR staff have been conducted on various dates, with the most recent occurring on December 2023 to the development lands and surrounding area. The operations included in the Jade acoustic model appear to greatly exceed operations observed during these site visits.

CN has previously approved SLR's acoustic modelling for the Project site based on SLR's on-site observations, as well as information provided by CN for Yard operations on August 4, 2023. The Project site has been designated a Class 4 area with relaxed guideline limits for noise. The February 2023 study demonstrates that the Project site is anticipated to be compliant with MECP Publication NPC-300 Class 4 guideline limits. Notable differences between the Jade March 18, 2024 model and SLR onsite observations, that increase the predicted sound level at the Project site include:

- An Increase from three (3) simultaneous idling CN locomotives to seven (7);
- A +5 dB correction has been included for each of the idling locomotives; and
- The location and sound power level (noise emission level) of impulsive noise from trains coupling/uncoupling and stretching.

A total of seven (7) locomotives idling simultaneously in the rail yard is more than double the observations made by SLR staff on various dates. Based on SLR observations and modelling previously approved by CN, three (3) idling locomotives is representative of a predictable worst-case for the CN Yard.

The +5 dB correction applied to the idling locomotives, which SLR assumes is to address low frequency noise, does not follow the guidelines for sound level adjustment procedures outlined in MECP Publication NPC-104. It is SLR's opinion this correction is unwarranted and overly conservative.

During site visits conducted by SLR staff, direct measurements of impulsive noise from the rail yard were taken. Impulsive from rail car movements were not consistently present, where trains of rail cars were observed to come to a complete stop without the associated knuckle-thump impulsive noise. On occasion, a single impulse was observed when the train came to a stop, as opposed to the successive impulses associated with a long train of railway cars. It is SLR's opinion that the modelling of impulsive noise sources in the model provided by Jade is overly conservative and does not match actual activities at the site.



Acoustic assessments conducted in accordance with MECP Publication NPC-300 assess the predictable worst-case noise impacts. A predictable worst-case scenario is one based on “planned and predictable” operations of an industry and its equipment, and is not necessarily the absolute worst-case operation. It is SLR’s opinion that the new acoustic model received from CN on 2024 represents an absolute worst-case scenario, rather than a predictable worst-case scenario, and therefore significantly overstates potential impacts.

Statement of Limitations

This letter has been prepared by SLR Consulting (Canada) Ltd. (SLR) for Adi Developments (Masonry) Inc. (Client) in accordance with the scope of work and all other terms and conditions of the agreement between such parties. SLR acknowledges and agrees that the Client may provide this report to government agencies, interest holders, and/or Indigenous communities as part of project planning or regulatory approval processes. Copying or distribution of this letter, in whole or in part, for any other purpose other than as aforementioned is not permitted without the prior written consent of SLR.

Any findings, conclusions, recommendations, or designs provided in this letter are based on conditions and criteria that existed at the time work was completed and the assumptions and qualifications set forth herein.

This letter may contain data or information provided by third party sources on which SLR is entitled to rely without verification and SLR does not warranty the accuracy of any such data or information.

Nothing in this letter constitutes a legal opinion nor does SLR make any representation as to compliance with any laws, rules, regulations, or policies established by federal, provincial territorial, or local government bodies, other than as specifically set forth in this report. Revisions to legislative or regulatory standards referred to in this letter may be expected over time and, as a result, modifications to the findings, conclusions, or recommendations may be necessary.

Closure

It is SLR’s opinion that MECP Publication NPC-300 Class 4 Area guideline limits will be met at the proposed development, based on predictable worst-case noise impacts from the CN Rail Aldershot Yard, as per SLR Report dated February 23, 2023.

Should you have any questions or comments, please feel free to contact us.

Regards,

SLR Consulting (Canada) Ltd.



Dylan Diebolt, B.Sc.
Acoustics Consultant
ddiebolt@slrconsulting.com



Aaron Haniff, P.Eng.
Principal Acoustic Engineer
ahaniff@slrconsulting.com

