SLR Consulting (Canada) Ltd.
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July 13, 2022

Robert MacFarlane
2683421 Ontario Limited
2300 Yonge Street, Suite 904
Toronto, ON M4P 1E4

SLR Project No.: 241.30010.00000

Dear Mr. MacFarlane,

RE: Drawing Review & Addendum Letter for Environmental Noise
7449 Montrose Road – Niagara Falls

At the request of 2683421 Ontario Limited, SLR Consulting (Canada) Ltd. (SLR) has conducted a review of the potential influences the recent design changes to the proposed 7449 Montrose Road development in Niagara Falls may have on environmental noise conditions on-site and in the surrounding area. This letter presents the results of our findings, in support of the combined Official Plan Amendment and Zoning Bylaw Amendment resubmission for the development. SLR previously completed an environmental noise assessment for the site, per SLR's report entitled Environmental Noise Assessment – *7449 Montrose Road – Niagara Falls, ON - SLR Project #241.30010.00000*, dated February 24, 2021.

We understand that since completion of the original OPA/ZBA submission, there have been design changes to the proposed development. Revised architectural drawings were received by SLR in July 2022. This information was compared to the previous design information (received November 19 and 20, 2020) used for in the analysis and prediction of environmental noise levels for the February 2021 SLR report. This letter presents a summary of our findings in support of the OPA/ZBA resubmission.

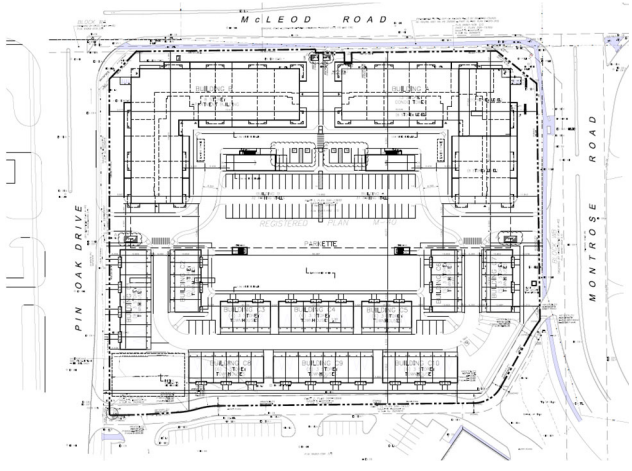

Figure 1a: Site Plan of the Proposed development (Received July 5, 2022)

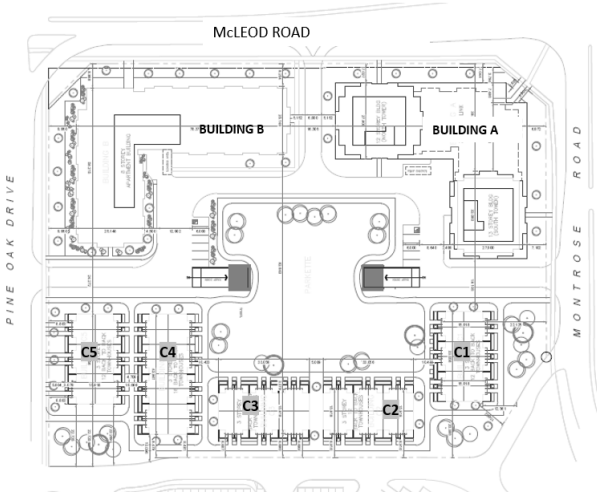

Figure 1b: Site Plan of the Proposed development (Received November 20, 2020)

ENVIRONMENTAL NOISE CONCLUSIONS

Updated architectural drawings (Image 1a, received July 5, 2022, in support of the OPA/ZBA resubmission) were compared to the original drawings used for the environmental noise predictions (Image 1b, received November 2020). The following relevant differences were noted between the two sets of drawings:

- Previously Building A, in the northeast corner of the site, included a three-storey podium connecting two 13-storey elements. Currently, Building A is 13-storeys in height.
- The location of the numerous townhouse buildings on the south half of the site have been re-arranged. Previously, there were five townhouse buildings (Buildings C1 through C5). Now there are ten townhouse buildings (Buildings C1 through C10). They have remained three-storeys in height.

The major parameters that influence environmental noise results are a change in traffic volumes or setback distances between the roadway traffic or stationary noise sources and the building facades. Changes in building heights should not affect the results. The proposed July 2022 design changes do not shift any of the buildings substantially closer to the transportation or surrounding stationary noise sources. Therefore, we do not anticipate the predicted sound levels or conclusions of the February 2021 report to change.

STATIONARY NOISE MITIGATION MEASURES

Noise mitigation is proposed to include the installation of a new dryer fan for an off-site use. It is appropriate to consider an alternative approach that would mitigate noise on-site. A viable alternative for on-site mitigation is for the lands to be appropriately identified as Class 4 designation, in combination with design matters to be refined through detailed site and building design.

CLASS 4 GUIDELINE LIMITS

Under Ministry of the Environment, Conservation & Parks (MECP) Publication NPC-300 noise guidelines, noise sensitive receptors are defined using area classifications. The receptor areas are classified as either:

- Class 1 – Urban areas;
- Class 2 – Suburban / semi-rural areas;
- Class 3 – Rural areas; and
- Class 4 – Infill areas.

The area is urban in nature and dominated by man-made sounds, including road traffic noise and an “urban hum”. The acoustic environment is considered to be a Class 1 area. The proposed development is characteristic of what could be considered for identification as a Class 4 designation, and therefore it is appropriate to undertake such an evaluation.

In NPC-300, a “Class 4” area is defined as:

> An area or specific site that would otherwise be defined as Class 1 or 2 and which:
>
> - is an area intended for development with new noise sensitive land use(s) that are not yet built;
> - is in proximity to existing, lawfully established stationary source(s);
> - has formal confirmation from the land use planning authority with the Class 4 area classification which is determined during the land use planning process; and

Section C4.4.2 of Publication NPC-300 further discusses the use of Class 4 areas:

"Class 4 area classification is based on the principle of formal confirmation of the classification by the land use planning authority. Such confirmation would be issued at the discretion of the land use planning authority and under the procedures developed by the land use planning authority, in the exercise of its responsibility and authority under the Planning Act.

The following considerations apply to new noise sensitive land uses proposed in a Class 4 area:

- an appropriate noise impact assessment should be conducted for the land use planning authority as early as possible in the land use planning process that verifies that the applicable sound level limits will be met;
- noise control measures may be required to ensure the stationary source complies with the applicable sound level limits at the new noise sensitive land use;
- noise control measures may include receptor-based noise control measures and/or source-based noise control measures;
- source based noise control measures may require an MECP approval;
- receptor based noise control measures may require agreements for noise mitigation, as described in Part A of this guideline;
- prospective purchasers should be informed that this dwelling is in a Class 4 area through appropriate means and informed of the agreements for noise mitigation. Registration on title of the agreements for noise mitigation is recommended. Additionally, registration on title of an appropriate warning clause to notify purchasers that the applicable Class 4 area sound level limits for this dwelling are protective of indoor areas and assume of closed windows, such as warning clause F in Section C8.3 is also recommended; and
- any final agreements for noise mitigation as described in Part A of this guideline and all other relevant documentation are to be submitted to the MECP by the stationary source owner(s) when applying for an MECP approval. These agreements will be assessed during the review of the application for MECP approvals."

The Project meets the definitions and requirements for a Class 4 area listed in Publication NPC-300:

- the Project site is close proximity to an area that contains existing and proposed mixed-use developments and is intended for new high-intensity developments.
- the Project site is in proximity to existing lawfully established noise generating sources.
- the Project site does not contain existing noise-sensitive land-uses.
- An appropriate, detailed noise impact assessment will be conducted as part of the zoning by-law amendment application (i.e., this study and report).

It is therefore appropriate for the Municipal Authority to declare the development property as a Class 4 area, under their role as the land use planning authority, in the exercise of its responsibility and authority under the Planning Act.

The table below set out the exclusion limits from the guideline for continuous, non-impulsive sounds in Class 1 and Class 4 areas.

NPC-300 Exclusion Limits for Non-Impulsive Sounds (L_{eq} (1-hr), dBA)

Time of Day	Class 1 Area		Class 4 Area	
	Plane of Window of Noise Sensitive Spaces	Outdoor Points of Reception	Plane of Window of Noise Sensitive Spaces	Outdoor Points of Reception
Daytime (7 am to 7 pm)	50	50	60	55
Evening (7 pm to 11 pm)	50	45	60	55
Night-time (11 pm to 7 am)	45	n/a	55	n/a

The Class 4 limits were adopted for this memo for compliance comparison. Below is the predicted levels from Table 11 of the SLR February 24, 2021 Report, along with the updated exclusionary Class 4 limits.

Table 1: Summary of Stationary Façade Sound Levels

Building	Façade [1]	Stationary Sound Levels [2]		Applicable Guideline Limit	
		Day and Evening	Night	Day and Evening	Night
Building A - 3 storey Section	North	44	41	60	55
	East	36	32		
	South	45	39		
	West	45	41		
Building A – North Tower	North	44	41		
	East	43	40		
	South	48	43		
	West	48	43		
Building A – South Tower	North	41	37		
	East	35	32		
	South	48	43		
	West	48	43		
Building B	North	48	42		
	East	44	40		
	South	53	46		
	West	56	47		
Building C1	North	41	37		
	East	41	37		
	South	49	45		
	West	46	42		
Building C2	North	43	37		
	East	49	45		
	South	50	46		
	West	46	42		
Building C3	North	43	37		
	East	43	40		
	South	50	45		
	West	49	46		
Building C4	North	50	44		

Building	Façade [1]	Stationary Sound Levels [2]		Applicable Guideline Limit	
		Day and Evening	Night	Day and Evening	Night
	East	46	41		
	South	52	46		
	West	52	42		
Building C5	North	53	46		
	East	50	45		
	South	54	45		
	West	56	46		

Notes: - All values are L_{eq} (1 hr) sound levels, in dBA.
[1] Façade locations are identified on **Figures 6 and 7** of the SLR February 2021 Report.
[2] Sound levels shown represent the worst-case impact along the identified facade.

Though the site layout building design has changed, buildings B and C5 are still the closest buildings to the car wash noise and the predicted result are anticipated to be very similar. Based on a preliminary assessment of stationary noise impacts, the predicted sound levels are predicted to meet the applicable Class 4 exclusionary guideline limits. No additional noise mitigation measures are required.

A warning clause is required for notification that the proposed development is located within an MECP NPC-300 Class 4 Area. An MECP NPC-300 Type F warning clause must be included in all agreements of purchase and sale or lease and all rental agreements.

> MECP Type F: "Purchasers/tenants are advised that sound levels due to the adjacent industry are required to comply with sound level limits that are protective of indoor areas and are based on the assumption that windows and exterior doors are closed. This dwelling unit has been supplied with a ventilation/air conditioning system which will allow windows and exterior doors to remain closed."

CONCLUSIONS AND RECOMMENDATIONS

Based on the July 2022 updated OPA/ZBA drawings, the changes do not significantly affect the noise predicted results. The majority of the same conclusions are drawn for the updated drawings, as those submitted with the February 2021 report.

A summary of the results are as follows:

- Upgrades to façade construction (windows and walls) are required for the proposed development for the residential units;
- Provisions and requirements for air conditioning are required;
- Common outdoor amenity areas will require a 1.25m high solid parapet wall;
- Applicable MECP Type A, Type C and Type D warning clauses must be included in all agreements of purchase and sale or lease and all rental agreements; and
- The surrounding commercial stationary sources of noise can meet the applicable Class 1 guideline limits with the inclusion of appropriate noise mitigation measures.

- Alternatively a Class 4 designation can be sought for the proposed development and compliance can be demonstrated without additional off-site mitigation measures. A Type F warning clauses must be included in all agreements of purchase and sale or lease and all rental agreements.

SLR will work with the design team, as the proposed development evolves, to confirm the environmental noise results and recommendations, where necessary.

CLOSING

Overall, the predicted environmental noise levels at the proposed development are not expected to change significantly from those previously predicted. Therefore, we do not expect the predicted sound levels or conclusions of the February 2021 report to change.

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

Yours sincerely,
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