

July 14, 2022

Robert MacFarlane
2683421 Ontario Limited
2300 Yonge Street, Suite 904
Toronto, ON M4P1E4

SLR Project No.: 241.30010.00000

Dear Robert,

**RE: Drawing Review & Addendum Letter for Pedestrian Wind Comfort
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 pedestrian wind 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 a pedestrian wind assessment for the site, using a 3D computer modeling approach, per SLR's report entitled *Pedestrian Wind 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 (dated July 5, 2022) were received by SLR on July 13, 2022. This information was compared to the previous design information (received November 19 and 20, 2020) used for the construction of the 3D computer model for the February 2021 pedestrian wind assessment. This letter presents a summary of our findings in support of the OPA/ZBA resubmission.

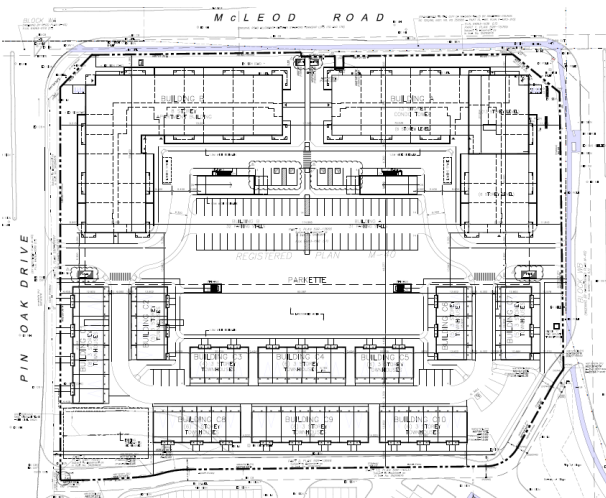


Figure 1a: Site Plan of the Proposed development
(Dated July 5, 2022)

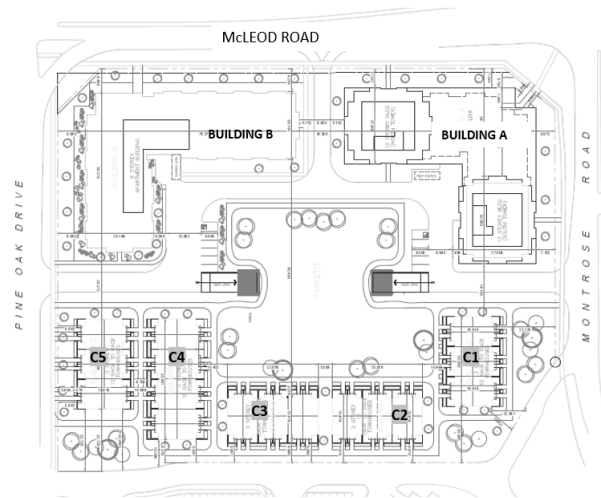


Figure 1b: Site Plan of the Proposed development
(Received November 20, 2020)

PEDESTRIAN WIND CONDITIONS

Updated architectural drawings (Figure 1a, dated July 5, 2022, in support of the OPA/ZBA resubmission) were compared to the original drawings used for the construction of the 3D computer model (Figure 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 along the north edge, with a six-storey tall element along the east edge.
- 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 most significant change to the site is the changes in height to Building A. By enlarging the facades, more wind flows will be deflected down to grade by the building, particularly at the northeast corner of the building. In addition, more northwesterly and southwesterly winds will be redirected and hence channeled between Buildings A and B. Therefore, we expect wind conditions between Buildings A and B, as well as at the northeast corner of Building A, to be suitable for fast walking in the winter.

The reorganization of the townhouses on the south half of the site will have negligible influence on wind conditions, as the townhouses remain at three-storeys in height. Hence, wind conditions around the townhouses are expected to remain suitable for sitting or standing throughout the year. At the west edge of the site, on the driveway between Buildings B, C1 and C2 wind conditions are expected to remain comfortable for leisurely walking or better throughout the year. Similar wind conditions are predicted for the driveway between Buildings A, C6 and C7, again due to the channeling of wind flows between the tall Building A and the townhouses.

CLOSING

Overall, the wind conditions surrounding the site are not expected to change significantly from those previously predicted, although slightly stronger wind flows are anticipated at the northwest and northeast corners of Building A. These wind conditions can be confirmed, through a 3D computer modeling approach, for the next planning submission.

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

Yours sincerely,
SLR Consulting (Canada) Ltd.



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