

April 12, 2023

Mr. Lyle Levine 17 Elm GP Inc. 1840 Eglinton Avenue West, Suite 202 Toronto, ON M6E 2J4

SLR Project No.: 241.30447.00001

RE: Drawing Review and Addendum Letter for Pedestrian Wind Comfort 15-17 Elm Street – Toronto, ON

SLR Consulting (Canada) Ltd. (SLR), provides this letter at the request of 17 Elm GP Inc. This letter summarizes our opinion on the potential effect the recent design changes to the proposed development at 15-17 Elm Street in Toronto may have on the pedestrian wind conditions on the site and in the surrounding area.

SLR previously conducted a Pedestrian Wind Assessment using a quantitative wind tunnel study approach in August 2022. The results of the wind tunnel study were presented in the report: *Pedestrian Wind Study* - 15 - 17 Elm Street, Toronto, ON - SLR Project #241.30477.0000 dated August 31, 2022.

Updated Architectural Information

Updated architectural drawings (received April 11, 2023) were compared to the original drawings used for the wind tunnel study undertaken in August 2022 (drawings received June 27, 2022). The overall height and massing of the building has not changed. The following relevant differences were noted between the two sets of drawings:

- The northeast corner of the proposed development is chamfered from Level 1 through Level 7. A step back has been introduced at Level 8 along the north facade, implying an eight-storey podium, where previously it had been a ten-storey podium.
- The southeast corner was previously chamfered at Levels 1 and 2, but now it is rectangular.
- The building face has been setback approximately 7.5 m from the existing building to the east; an additional approximately 1.5 m from the original submission.
- A new amenity terrace is included on Level 3, on the south and east sides.

Pedestrian Wind Conditions

As the overall massing of the building has remained the same, the wind comfort conditions described in the SLR report generally remain applicable. The addition and removal of the chamfered corners at the northeast and southeast corners respectively, are considered minor changes, and wind conditions are not expected to be altered by them. The larger gap between the proposed development and the existing building to the east is a positive change, which may improve the overall wind conditions along the east

side of the proposed development. Wind conditions at the southwest corner and along the north side of the proposed development (i.e., the main and retail entrances, as well as the outdoor amenity space) are expected to remain unchanged. Wind control measures recommended in our August 2022 report remain applicable for the latest design.

The new amenity terrace on Level 3 will be exposed to the northeasterly, westerly, and southwesterly winds. The strong winds that occur at higher elevations are expected to be intercepted by the tower and redirect at the terrace level (i.e., downwashing wind flows). Wind conditions on this terrace are generally expected to be comfortable for walking or better in the summer. During the winter season, due to the stronger wind flows, wind conditions on the terrace are predicted to be uncomfortable in some localized areas. Wind control measures in the form of canopies or trellises wrapping around the tower corners, as well as tall vertical screens along the terrace edges and near seating areas, should be considered.

It is our understanding that the design of the building envelope is in progress and once it is confirmed with the City, an updated wind tunnel test will be conducted. The updated analysis will address the current and planned context for the surrounding areas and refine wind control measures for areas with elevated wind activity.

Conclusions

Overall, with the current design, we expect wind conditions on the site and on the surrounding sidewalks to be generally similar to the wind conditions presented in the report dated August 2022. Mitigation measures are suggested for the amenity terrace on Level 3. SLR will work with the design team to refine wind control measures with potential improvements in key locations and conduct additional wind tunnel test with updated surroundings to confirm efficacy.

Yours sincerely,

SLR Consulting (Canada) Ltd.



Nishat Nourin, M.Eng., P.Eng. Microclimate Engineer C: 240-614-6055 nnourin@slrconsulting.com

Johane hl-

Tahrana Lovlin, MAES, P.Eng. Principal, Microclimate O: 226 706-8080 x224 tlovlin@slrconsulting.com

