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July 24, 2024

Scott Beedie Urban Solutions 3 Studebaker Place, Unit 1 Hamilton, ON L8L 0C8 T: (905) 546-1087

Re: Pedestrian Wind Study Report - Addendum to Address Design Changes
122 - 130 MAIN STREET NORTH
RWDI Reference No. 2105733

Rowan Williams Davies & Irwin Inc. (RWDI) was retained in 2021 to assess the pedestrian wind conditions for the then proposed project at 122-130 Main Street North in Brampton, ON. The results of that study were presented in the report issued on November 18, 2021.

RWDI has since received updated design information of the project on June 16 and 19, 2024. The intent of the present letter is to assess the design changes of the project and comment on potential wind conditions around the updated project.

Compared to the design information received in 2021, revisions to the proposed project massing that are significant from the perspective of pedestrian wind (see Image1 below) include:

- Revised tower heights, including total storey numbers of: Tower A increased from 29 to 35, and Tower B reduced from 29 to 22;
- 6-storey shared podium removed.



Image 1: 3D model of the project: 2021 design (left) and 2024 design (right)





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Despite the height and massing changes of the proposed building massing, wind conditions at most areas on and around the project are not expected to be altered significantly from the predictions in 2021. The height reduction of Tower B is considered positive with respect to wind comfort, whereas the increased height of Tower A is expected to redirect more winds towards its corners and through the passageway between the two towers.

Overall, the predicted wind conditions around the updated project are as follows:

- Grade-level conditions are expected to be appropriate for the intended use during the summer season;
- Strong winter winds would potentially induce uncomfortable winds at localized areas, primarily towards the east end of Tower B and through the passageway between the two towers; and
- The pedestrian wind safety criterion is expected to be met on and around the proposed project, with possible exceedances around Tower A corners and through the passageway.

If desired, wind tunnel test can be conducted to quantify the wind conditions and, if needed, to develop wind mitigation strategy for the updated project.

Closing

We trust that this letter gives the design team an insight about the impact of design changes on the predicted wind conditions. Should you have any questions or require additional information, please do not hesitate to contact us.

Yours truly,

Rowan Williams Davies & Irwin Inc. (RWDI)

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