

August 1, 2019

**Trinity Development Group Inc.**  
77 Bloor Street West, Suite 1601  
Toronto, ON M5S 1M2

Re: Addendum to Pedestrian Level Wind Study  
145 Loretta Avenue & 951 Gladstone Avenue  
GWE File No.: 18-075-CFDPLW Addendum

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Gradient Wind Engineering Inc. (Gradient Wind) was retained by Trinity Development Group Inc. to undertake a computer-based pedestrian level wind (PLW) study for the proposed mixed-use development at 145 Loretta Avenue and 951 Gladstone Avenue in Ottawa, Ontario. This letter provides a summary of significant architectural changes to the site which have been made since the study was issued, as well as the anticipated impact of those changes on the predicted pedestrian wind conditions. For a complete summary of the methodology and results pertaining to the original pedestrian wind study, please refer to GWE report #18-075-CFDPLW, dated October 18, 2018.

Overall, the revised site design remains similar to the tested configuration, with three towers organized north to south along the site. Notable design changes which would have an influence on pedestrian wind comfort surrounding the site are summarized as follows:

1. Tower 1 has decreased from 40 storeys to 35 storeys, and Tower 2 has decreased from 35 storeys to 33 storeys. Tower 3 remains at 30 storeys.
2. The two-storey link between Towers 2 and 3 at the north side of the site has been removed and replaced with a plaza (P.O.P.S.) An additional P.O.P.S. is included at the southeast corner of the site adjacent to the future Gladstone Station.
3. The pedestrian bridge to Gladstone Station has been removed.
4. The office portion at the south side of the site now contains five floors above the ground floor and comprises an expanded L-shaped planform to the north.

In addition, other changes have been made to the building exterior and interior of the building that will not have a significant influence on wind conditions over the site.

With respect to pedestrian comfort, the reduced height of Towers 1 and 2 and expanded office portion will result in marginally calmer conditions at grade over the south portion of the site, as compared to the tested configuration. Towards the north side of the site, the removal of the link between Towers 2 and 3 is expected to produce some channelling of prominent westerly wind directions between the study buildings. As such, if seating areas will be provided within the East Plaza (P.O.P.S.), it may be necessary to introduce vertical wind barriers to shield such spaces from west quadrant winds. Mitigation may comprise high-solidity architectural wind screens and/or dense coniferous plantings. Additionally, the lobby entrance for Tower 3 on the east elevation of the building may benefit from either recessing the doorway within the building façade or providing vertical wind barriers to shield the entrance from channelled wind flows.

This concludes our review of the design changes for the proposed development at 145 Loretta Avenue and 951 Gladstone Avenue in Ottawa, Ontario. Please advise the undersigned of any questions or concerns.

Sincerely,

***Gradient Wind Engineering Inc.***



Andrew Slihas, M.A.Sc., P.Eng.,  
Principal

*18-075-CFDPLW Addendum*