



December 20, 2017

Larco Investments Ltd.
c/o Dennis Jacobs, MCIP, RPP, Principal Planner
Momentum - Planning & Communications
1165 Greenlawn Crescent
Ottawa, ON K2C 1Z4
djacobs@momentumplancom.ca

Dear Mr. Jacobs:

Re: Pedestrian Level Wind Study
Revised Massing Commentary
Château Laurier Hotel Addition, Ottawa
GWE File No.: 16-068

Following the submission of a pedestrian level wind study¹, we understand that the massing of the planned addition at the Château Laurier, located at 1 Rideau Street in Ottawa, has been modified. Relating to wind impacts, the changes, as summarized below, are considered substantial but generally favourable.

- 1) The building height has been reduced from a maximum height of approximately 36.2 metres (m) to 26.65 m above grade.
- 2) The original design included two building sections, referred to as the 'West Wing' and 'East Wing' rising above a rectangular podium, with a 30.81-m wide gap beginning at Level 6. The updated design includes a gap width of 5.94 m at grade connecting a gallery / lounge on the north side of the development to the existing hotel through an enclosed glass link. However, the noted gap is eliminated at Level 2, which sees the building rise to its roof with a single rectangular floorplan.

¹ GWE16-068-PLW, 'Pedestrian Level Wind Study', December 8, 2016

- 3) As such, the updated design eliminates the original podium terrace overlooking Major's Hill Park to the north.
- 4) The building planform is fully rectangular from Levels 1-6, while the northeast corner of the East Wing (closest Mackenzie Avenue) transitions to triangular at Levels 7 and 8.
- 5) The southwest corner of the central courtyard, which is situated at grade between the planned addition and the existing hotel, has been expanded following the removal of the building link to the existing hotel at the southeast corner of the West Wing (closest Rideau Canal).

The original wind study revealed grade-level wind conditions to be acceptable for the intended pedestrian uses on a seasonal and annual basis. Surrounding sidewalks and building access points were determined to experience acceptable wind conditions throughout the year, while conditions along Mackenzie Avenue were predicted to be moderately windy but nevertheless acceptable for the intended uses of the area. Wind conditions over the north-facing podium roof terrace in the original massing were found to be windy, which required mitigation.

The revised massing eliminates the windy terrace conditions, while maintaining similar conditions at grade level. Based on prior experience in the area and our knowledge of wind flow patterns, the revised massing is expected to have a neutral or beneficial impact on all grade-level pedestrian areas, including the central courtyard, the forecourt fronting onto Mackenzie Avenue, and all building access points. Therefore, repeat wind simulations are not justified or recommended.

Please advise the undersigned of any questions or further information required.

Sincerely,

Gradient Wind Engineering Inc.

A handwritten signature in dark ink, appearing to read 'J Ferraro'.

Justin Ferraro
Principal

A handwritten signature in dark ink, appearing to read 'Vincent Ferraro'.

Vincent Ferraro, M.Eng., P.Eng.
Managing Principal