

GRADIENTWIND

ENGINEERS & SCIENTISTS

June 14, 2023

Riverain Developments Inc.
109 Atlantic Avenue, Suite 302B
Toronto, ON M6K 1X4

Attn: Emily Roukhkian, Director of Development
emily@mainandmain.ca

Dear Ms. Roukhkian:

Re: Pedestrian Level Wind Study Addendum
2 Montreal Road, 280 Montgomery Street,
300 Montgomery Street, and 3 Selkirk Street, Ottawa
Gradient Wind File 20-077 June 2023

Gradient Wind Engineering Inc. (Gradient Wind) completed a computational pedestrian level wind (PLW) study to satisfy concurrent Official Plan Amendment (OPA) and Zoning By-Law Amendment (ZBLA) application submissions¹ for the proposed three phase development located at 2 Montreal Road, 280 Montgomery Street, 300 Montgomery Street, and 3 Selkirk Street in Ottawa, Ontario. The study was conducted based on architectural drawings of the proposed development provided by HOK Inc. in December 2020². Following the completion of the noted study, a PLW addendum letter was provided to satisfy a Site Plan Control application submission³ for Phase 1 of the proposed development (Tower A, currently under construction). The current architectural drawings for Phase 3 (Tower C), which were distributed to the consultant team in May 2023⁴ in preparation for a Site Plan Control application submission for Phase 3 of the proposed development, include several changes: (i) a rectangular notch applied at the southwest corner of the 3-storey podium; (ii) private terraces at the podium rooftop along the west, south, and east elevations of Tower C; (iii) a common amenity terrace at the podium rooftop to the northeast of Tower C; and (iv) a reduction of approximately 1.5 m of the maximum building height.

¹ Gradient Wind Engineering Inc., '3 Selkirk Street & 2 Montreal Road – Pedestrian Level Wind Study', [Feb 4, 2021]

² HOK Inc., '3 Selkirk Street & 2 Montreal Road', [Dec 23, 2020]

³ Gradient Wind Engineering Inc., '3 Selkirk Street & 2 Montreal Road – Pedestrian Level Wind Study Addendum', [Aug 12, 2021]

⁴ Roderick Lahey Architects Inc., '300 Montgomery Street', [May 30, 2023]

The original study concluded that most grade-level areas within and surrounding the subject site were predicted to be acceptable for the intended pedestrian uses throughout the year. Specifically, wind comfort conditions over the walkways and sidewalks within the site and over the adjacent public sidewalks along Montreal Road, Montgomery Street, Selkirk Street, and North River Road were considered acceptable for the intended pedestrian uses throughout the year. Mitigation measures to provide wind comfort conditions suitable for the intended pedestrian uses throughout the year were recommended for the main entrance serving Tower C fronting the new interior road and the nearby bus stops along Montreal Road. Specifically, the noted main entrance was recommended to either be recessed within the façade by at least 2 m, flanked with 2-m-tall solid wind barriers, or replaced with sliding doors to ensure safe operability throughout the year, and typical shelters which provide pedestrian with a means to protect themselves from the elements, including during periods of strong wind activity, were recommended for the noted bus stops. Additionally, solid wind screens and/or coniferous plantings in dense arrangements were recommended around the parkland dedication area to the east of Tower C if conditions suitable for sitting were required over the area during the shoulder months of spring and autumn.

From a wind engineering perspective, the introduction of Phase 3 into the existing site massing, prior to the introduction of Phase 2 (Tower B), is not expected to significantly change the wind comfort conditions predicted in the detailed PLW study. Furthermore, the 2021 and 2023 massing designs for Phase 3 are similar. As such, the recommendations and conclusions provided in the detailed PLW report remain representative of the current massing. Regarding the common amenity terrace serving Phase 3 at the podium rooftop, Phase 1 and Tower C are expected to provide some sheltering effects from prominent winds, and wind comfort conditions within the noted common amenity are expected to be suitable for a mix of sitting and standing during the typical use period.

Sincerely,

Gradient Wind Engineering Inc.

Justin Ferraro, P.Eng.
Principal

