

GRADIENTWIND

ENGINEERS & SCIENTISTS

September 22, 2025

Heritage Investments Limited
1010 Polytek, Unit 5
Gloucester, ON K1J 9H8

Attn: Guy Whissel, President
guy.whissel@longwoodbuilders.com

Dear Mr. Whissel:

Re: Pedestrian Level Wind Study Addendum
601 Laurier Avenue West, Ottawa
Gradient Wind File 24-134

Gradient Wind Engineering Inc. (Gradient Wind) completed a computational pedestrian level wind (PLW) study to satisfy application submission requirements for the proposed development located at 601 Laurier Avenue West in Ottawa, Ontario¹. The study was conducted based on architectural drawings of the proposed development provided by Project1 Studio in July 2024².

The current architectural drawings, which were distributed to the consultant team in September 2025³ in preparation for a resubmission of the ZBLA application, include modest changes to the building as compared to the July 2024 design. Most notably, the grade-level outdoor amenity has been relocated from the northeast corner to the south of the proposed development. Additionally, the residential units to the south and at the southeast corner at Levels 7 and 8, respectively, have been reprogrammed as indoor amenities; the Level 7 common amenity terrace has increased in area as it now also extends along the south elevation, and Level 8 is now served by a common amenity terrace within the setback at the northeast corner, adjoining the new indoor amenity.

¹ Gradient Wind Engineering Inc., '601 Laurier Avenue West – Pedestrian Level Wind Study', [July 15, 2024]

² Project1 Studio, '601 Laurier, Issued for City Review', [April 29, 2024]

³ Project1 Studio, '601 Laurier, Reissued for ZBLA', [Sept 16, 2025]

The July 2024 study concluded that most grade-level areas within and surrounding the subject site were predicted to experience conditions considered acceptable for the intended pedestrian uses throughout the year, inclusive of surrounding sidewalks, transit stops, nearby surface parking lots, Tech Wall Dog Park, Nanny Goat Hill Community Garden, the proposed drive aisle and walkways, the grade-level outdoor amenity, and in the vicinity of building access points.

A limited region of conditions that may be considered occasionally uncomfortable for walking was predicted to the southwest of the subject site during the spring and winter seasons over a forested area where pedestrian access is limited, and the conditions in this area were considered satisfactory given the programmed use of the area and the marginal exceedance of the walking criteria. Regarding the common amenity terrace serving the proposed development at Level 7, which was modelled with 1.8-metre (m) tall perimeter wind screens, conditions during the typical use period (that is, May to October, inclusive) were predicted to be suitable for sitting, which was considered acceptable.

There are no significant changes to the 2025 massing as compared to the 2024 massing. Similar wind conditions suitable for the intended pedestrian uses are expected at most areas at grade level within and surrounding the subject site. The conclusions and recommendations as detailed in the 2024 PLW study and as summarized above are expected to remain representative of the current site massing. Wind conditions over the relocated grade-level outdoor amenity and the extended Level 7 common amenity terrace are predicted to remain calm and suitable for sitting during the typical use period.

Furthermore, the design team has incorporated the recommended 1.8-m-tall wind screens along the perimeter of the Level 7 terrace and incorporated similar screens along the perimeter of the Level 8 terrace. Conditions within the Level 8 terrace are expected to be suitable for sitting during the typical use period with this screen, which may be considered acceptable.

The City of Ottawa provided the applicant with the following comment:

Comment D17:

“The southwest area of the site will change from being comfortable standing and strolling to becoming considered uncomfortable conditions during the winter and spring as a result of this proposal. This area is planned for a pedestrian connection. Explore how impacts to this area can be mitigated either through the building design or once the pedestrian connection is built. A written summary of potential mitigation measures are required.”

Although limited in extent and magnitude, the isolated region of uncomfortable conditions predicted at the southwest corner at grade may be further mitigated through the implementation of wind barriers at the southwest corner of the proposed development, such as coniferous trees, a wind barrier such as a fence or wall, an overhead canopy such as a trellis or pergola structure, or other methods to reduce wind accelerations at the southwest corner of the proposed development. These elements would be most effective if orientated perpendicularly to the northwest façade of the proposed development along the northeast elevation of the pedestrian connection. Notably, the current dense vegetation along the escarpment, while not in full foliage during the spring and winter seasons, is expected to provide a modest benefit to wind conditions throughout the year owing to its significant density.

Sincerely,

Gradient Wind Engineering Inc.



David Huitema, M.Eng., P.Eng.
CFD Lead Engineer

