

GRADIENTWIND

ENGINEERS & SCIENTISTS

February 13, 2026

Sun Life Assurance Company of Canada
c/o BentallGreenOak (Canada) LP
1 York Street, Suite 1100
Toronto, ON M5J 0B6

Attn: Ryan Moore, MPI, MCIP, RPP, Vice President, Development Eastern Canada
Ryan.moore@bgo.com

Dear Mr. Moore:

Re: Pedestrian Level Wind Study Addendum
1824 Bank Street, Ottawa
Gradient Wind File 24-150

Gradient Wind Engineering Inc. (Gradient Wind) completed a computational pedestrian level wind (PLW) study for the proposed development located at 1824 Bank Street in Ottawa, Ontario¹. The work, which was performed to satisfy Official Plan Amendment (OPA) and Zoning By-Law Amendment (ZBLA) application submission requirements, was conducted based on architectural drawings received by Hobin Architecture Incorporated in September 2024.

The October 2024 PLW study concluded that most grade-level areas within and surrounding the subject site are predicted to experience conditions that are considered acceptable for their intended uses throughout the year. Specifically, conditions over nearby sidewalks, neighbouring existing surface parking lots, the proposed public road and drop-off areas, most of the proposed drive aisle, walkways, and transit stops, and in the vicinity of the building access points serving the proposed development are considered acceptable.

Isolated conditions that may occasionally be considered uncomfortable for walking were predicted over the drive aisle and walkways between Buildings 3 and 4, and over the walkways between Buildings 2 and 3.

¹ Gradient Wind Engineering Inc., '1824 Bank Street – Pedestrian Level Wind Study', [Oct 11, 2024]

Wind conditions over the westbound transit stop along Walkley Road to the immediate south of Building 2 were predicted to be suitable for strolling during the spring and winter, becoming suitable for standing during the summer and autumn. During the typical use period (May to October, inclusive), wind conditions with the POPS and open space serving the proposed development were predicted to be suitable for standing, or better, where areas suitable for standing may be considered acceptable if the noted areas will not accommodate sedentary activities.

During the typical use period, wind comfort conditions within the common amenity terraces serving Building 1 at grade and at the Mezzanine Level, and serving Building 4 at the MPH level (modelled using 1.8-m-tall perimeter wind screens), were predicted to be suitable for sitting and are considered acceptable. Those serving Buildings 1-3 at the MPH Level (similarly modelled using 1.8-m-tall perimeter wind screens) were predicted to be suitable for a mix of sitting and standing during the same period.

An updated architectural package was received from Hobin Architecture Incorporated in February 2026². Notable revisions to the proposed massing included an increase in the height of Building 3 from 34 storeys to 36 storeys, a decrease in the height of Building 4 from 34 storeys to 32 storeys, a change in the orientation and extent of the MPH Level amenity terraces, and several revisions to the extent of the proposed grade-level canopies, which are discussed below. The revisions in building height are considered minor and are not expected to significantly impact the grade-level wind conditions predicted and illustrated within the October 2024 PLW study. Likewise, the wind comfort conditions predicted within the MPH Level amenity terraces following the noted revisions would be expected to remain similar to those predicted during the October 2024 PLW study and would require similar mitigation measures to improve wind conditions, comprising a 1.8-m-tall wind screen around the terrace perimeter in combination within inboard mitigation targeted around sensitive areas. The extent of mitigation is dependent on the programming of each terrace. It is recommended that a mitigation strategy be developed in collaboration with the building and landscape architects as the design of the proposed development progresses. This work may support the future Site Plan Control application.

² Hobin Architecture Incorporated, '*BGO Bank and Walkley, Re-issued for Zoning App,*' [Feb 5, 2026]



Noted revisions to grade-level canopies were developed in collaboration with the building architects and would be expected to further improve grade-level wind conditions. The noted canopy revisions comprise the following:

- The northeast corner canopy serving Building 1 was extended approximately 10 m along the east façade.
- The canopy at the northwest corner of Building 2 was extended 6 m along the north elevation and 8 m along the west elevation.
- The southwest corner canopy at Building 3 was extended along the west elevation, wrapping around the northwest corner of the podium.
- The canopy along the south façade of Building 4 was limited to directly over the primary access point and a wraparound canopy was introduced at the southeast corner.

Additional revisions to the proposed grade-level landscaping are illustrated in a landscape and lighting plan provided by Ferris + Associates in February 2026³. Of note, landscape features have been programmed to the east of Building 4, to the west of Building 1, and between Buildings 2 and 3, including deciduous tree planting and landscape features.

The City of Toronto provided the applicant, Sun Life Assurance Company of Canada, with the following comments:

Comment 30:

“Uncomfortable conditions in spring, fall, and winter are identified between Buildings 2 and 3, and Buildings 3 and 4. Please confirm what mitigation measures will achieve acceptable conditions. Consideration should be given to adjusting the proposed massing as necessary to improve these conditions.”

³ Ferris + Associates, ‘BGO Bank and Walkley, Reissued for Rezoning,’ [Feb 10, 2026]



Mitigation measures that may improve wind conditions between Buildings 2 and 3 and Buildings 3 and 4 include the targeted placement of additional canopies that extend from select podium facades to deflect downwash and isolated clusters of vertical wind barriers to disrupt accelerating winds that channel between the noted buildings.

Specifically, isolated wind barriers, such as wind screens, artwork, tall-backed bench seating, cabanas, pergolas with vertical louvered walls, and other similar landscaping elements and treatments may be incorporated within the landscaped area between Buildings 2 and 3. As noted above, several landscaping features have been included in the current landscaping plan to the east of Building 4 and between Buildings 2 and 3. It is recommended that additional landscaping features be included, such as those listed above, and that landscaping elements implemented for wind mitigation be mostly solid and orientated predominantly north-south to be effective at blocking winds channelling through the space. If these features will comprise vegetation, it is recommended that they be coniferous and placed in dense arrangements.

Additional elements that may be considered by the design team to diffuse downwashing winds include the implementation of additional canopies extending from the east elevations of Buildings 2 and 3, at least 3 m from the podia façades and that wrap around the northeast corners of the respective podia, as well as a canopy that extends and wraps around the southwest corner of the podium serving Building 4.

Comment 31:

“Only a small area in the new park can be suitable for sitting in the summer. In all other seasons, the park is unsuitable for sitting. How will this be addressed?”

The proposed facility fit plan⁴ includes a combination of tree plantings throughout the park, including along its northern, eastern, and southern boundaries, in combination with play structures and an overhead shade structure. The shade structure and the plantings are expected to provide a benefit to wind conditions during the summer and shoulder seasons. Additional elements that may be considered include canopies extending from the west elevations of Buildings 1 and 4 at Level 2 to diffuse the modest downwash during the warmer months over the tower façades to grade that is then redirected over the

⁴ Ferris + Associates, '1846 Bank Street Development, Facility Fit Landscape Concept,' [March 17, 2025]



central open space. Wind comfort conditions within the proposed park during the typical use period may be further improved by implementing strategically placed tall wind screens, dense arrangements of coniferous plantings in tall planters, high-back bench seating, and other common landscape elements to deflect and diffuse winds across the space. It is recommended that these elements be predominantly orientated with physical barriers along the south and north perimeters of the open space, owing to the directionality of the winds. Additionally, the mitigation as noted above in response to Comment 30, particularly the vertical wind barriers between Buildings 2 and 3, would be expected to reduce the impact of channelling winds from these buildings on the park during the colder months.

While not considered in the October 2024 study, podia rooftop common amenities may serve the proposed development, which may be determined at a future planning stage as the amenity plan and programming of amenities is further defined. Similar to the MPH Level amenity terraces, common amenity areas proposed atop large podia roofs would be expected require similar mitigation to achieve suitable wind conditions. Any podia-level amenity terrace is recommended to include a 1.8-m-tall wind screen. Furthermore, any amenity terrace proposed atop the large podia roofs of Building 4 are recommended to include 1.8-m-tall perimeter wind screens in combination with mitigation inboard the terrace perimeter. Such inboard mitigation may include canopies that extend from the tower facades, free-standing canopies, wind screens, dense arrangements of planting in tall planters, and other common landscape elements.

The details of the mitigation strategy at grade and within the proposed amenity terraces may be further developed with the consultant team and the building and landscape architects as the design of the proposed development progresses and the programming of each space is further defined. This work may support the future Site Plan Control application.

Sincerely,

Gradient Wind Engineering Inc.

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

