

GRADIENTWIND

ENGINEERS & SCIENTISTS

November 18, 2024

Le Groupe Maurice
2400 rue des Nations, bureau 137
Saint-Laurent, QC H4R 3G4

Attn: Yveline Roc – Director of Development
yroc@legroupe maurice.com

Dear Ms. Roc:

Re: Pedestrian Level Wind Study Addendum
1174 Carp Road, Ottawa, Ontario
Gradient Wind File 23-299

Gradient Wind Engineering Inc. (Gradient Wind) completed a computational pedestrian level wind (PLW) study to satisfy a Site Plan Control (SPA) application submission¹ for the proposed development located at 1174 Carp Road in Ottawa, Ontario. The study was conducted based on architectural drawings of the proposed development provided by Hobin Architecture in January 2024².

The current architectural drawings, which were distributed to the consultant team in November 2024³ in preparation for the submission of the SPA application, include several modest changes to the proposed development as compared to the January 2024 massing. The most notable changes in the massing, from a wind engineering perspective, are the addition of two floors to the main wing to the northeast, increasing the height of the building to 14 storeys. Additionally, the building no longer includes a 9-storey massing at the north corner that had accommodated two units at each level above grade.

The March 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 nearby sidewalks, transit stops, and existing surface parking, and the proposed drive aisle, walkways, drop-off area, surface parking, central courtyard, and in the vicinity of building entrances.

¹Gradient Wind Engineering Inc, '1174 Carp Road – Pedestrian Level Wind Study', [March 1, 2024]

²Hobin Architecture, '1174 Carp Road', [January 12, 2024]

³Hobin Architecture, 'Carp & Hazeldean', [November 4, 2024]

Wind conditions over the parkland dedication were predicted to be suitable mostly for sitting during the typical use period (May to October, inclusive), with regions suitable for standing to the north and west. The March 2024 study concluded that the noted conditions may be considered acceptable if the noted windier areas will not accommodate designated seating or lounging activities; if required by programming, typical landscaping elements such as wind screens, clusters of coniferous plantings, or a combination thereof among other common elements may be implemented around sensitive-use areas to the north and west.

The differences between the January and November massing designs are considered minor from a wind engineering perspective, and the results and conclusions provided in the March 2024 study are expected to remain representative of the current architectural massing. Conditions at most areas at grade within and surrounding the subject site are expected to remain suitable for the intended pedestrian uses throughout the year, and conditions over the parkland are predicted to similarly be suitable for mostly sitting during the typical use period with standing conditions to the north and west. The results and recommendations regarding mitigation for the parkland as detailed in the March 2024 study remain applicable under the current architectural design.

Sincerely,

Gradient Wind Engineering Inc.



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

