

April 25, 2013

Mr. Kevin A. Harper Development Manager – High Rise **Minto Communities Inc.** 200-180 Kent Street Ottawa, Ontario K1P 0B6

Dear Mr. Harper:

Re: 485 Richmond Road, Ottawa

Pedestrian Wind Comfort on Podium Deck *GmE* File Ref.: 12-082-PLW-TERRACE City

Gradient Microclimate Engineering Inc. (*GmE*) was retained by Minto Communities Inc. to investigate mitigation measures of wind conditions for the elevated common Outdoor Amenity Area (OAA) serving the proposed UpperWest condominium development located at 485 Richmond Road in Ottawa, Ontario.

The building massing comprises a curved plan-form tower of 25-storeys rising to a height of approximately 82.5 meters (m) above grade including a 5-storey podium. The OAA is located on the podium wrapping around the south side of the tower plan at a height of approximately 17 m above grade.

-GME

The mitigation work was based on architectural drawings of the study building, including detailed

drawings of the podium deck, prepared by Wallman Architects in February 2012, as well as

context data obtained from site visits, in-house archives and aerial images to obtain site exposure

information. For the methodology and theory behind the Computational Fluids Dynamics (CFD)

technique used to determine comfort conditions within the OAA, please refer to report GmE 12-

082-PLW, dated December 19<sup>th</sup>, 2012. A plan view of the podium deck, which includes the

mitigation measures developed from our study, is provided in Figure 1.

Concerning pedestrian wind comfort within the OAA, we hereby confirm that with the

implementation of (or similar to) the mitigation measures illustrated in Figure 1, the predicted

wind conditions will be acceptable for the expected uses during the summer months and shoulder

periods of spring and autumn over selected important areas of the podium. Wind conditions

during the mid and late autumn periods are expected to become somewhat windier at some

locations, while conditions during the remaining colder seasons from late autumn through to mid

spring are anticipated to become windier at the majority of locations within the OAA. These

outcomes are acceptable and consistent with the anticipated use of the outdoor living space. Of

particular importance, wind conditions within the OAA are dependent upon the implementation

of the large sweeping canopy wrapping around the south half of the tower on the west, south and

east sides (see Figure 1).

Please advise us if there are any questions or additional information required.

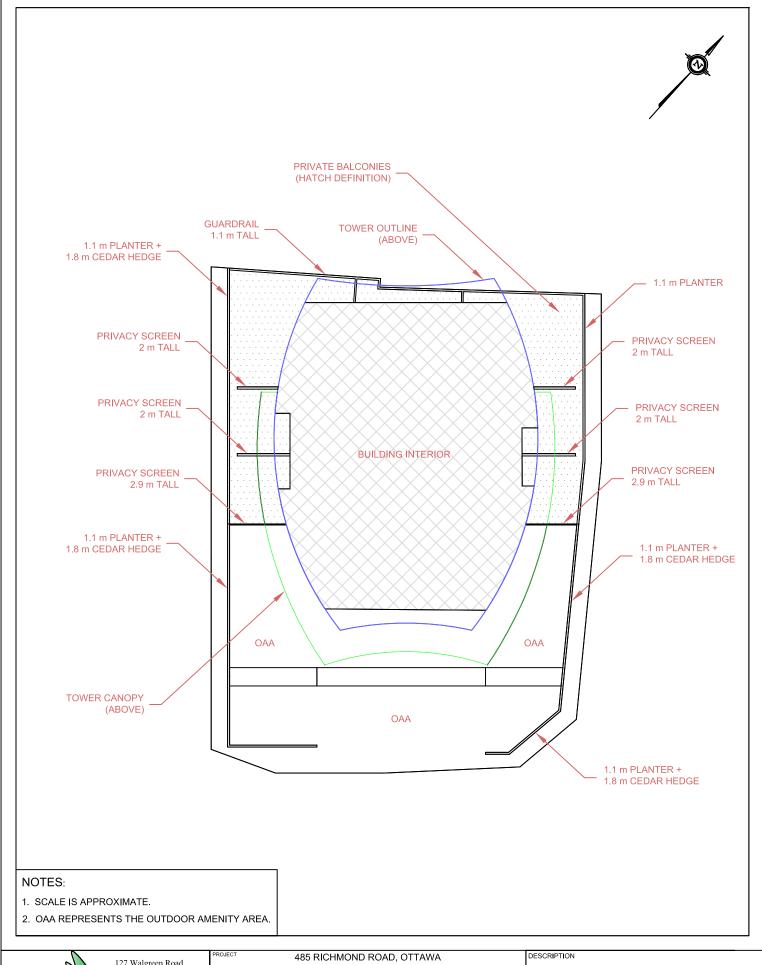
Sincerely,

Gradient Microclimate Engineering Inc.

Justin Ferraro, B.Eng., EIT, Project Manager

GmE 12-082-PLW-TERRACE City

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127 Walgreen Road Ottawa, Ontario KOA 1LO (613) 836-0934 Gradient Microclimate Engineering Inc

PROJE	<sup>CT</sup> 485 RICHMOND	ROAD, OTTAWA	DE
M	MITIGATION OF PEDESTRIAN LEVEL WINDS ON PODIUM DECK		
SCALE	1:400 (APPROX.)	DRAWING NO. GME12-082-PLW-TERRACE City-1	
DATE	APRIL 25, 2013	J.F.	

FIGURE 1: WIND MITIGATION FEATURES ON PODIUM DECK