REPORT

8885-8911 LUNDY'S LANE

NIAGARA FALLS, ONTARIO

PEDESTRIAN WIND STUDY
RWDI # 2206394
May 16, 2025

SUBMITTED TO

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EXECUTIVE SUMMARY

RWDI was retained to conduct a pedestrian wind assessment for the proposed development at 8885-8911 Lundy's Lane in Niagara Falls, Ontario. The assessment was based on the wind-tunnel testing conducted for the proposed development under the Existing and Proposed configurations of the site and surroundings. The results were analysed using the regional wind climate records and evaluated against the Niagara Region Pedestrian Wind Criteria for pedestrian comfort (pertaining to common wind speeds conducive to different levels of human activity) and pedestrian safety (pertaining to infrequent but strong gusts that could affect a person's footing). The predicted wind conditions are presented in Figures 1A through 2B and Table 1, and are summarized as follows:

Existing Configuration

- Wind speeds at all locations assessed meet the pedestrian wind safety criterion.
- Wind conditions on and around the existing site are generally comfortable for standing in the summer and for walking in the winter. This is considered appropriate for the intended pedestrian use.

Proposed Configuration

- Wind conditions are predicted to meet the pedestrian wind safety criterion at all locations assessed.
- In the summer, wind speeds conducive to sitting or standing are anticipated at most areas assessed, with slightly elevated wind speeds and conditions comfortable for walking expected around the northwest building corner. Wind conditions at the outdoor amenity areas at grade are expected to be comfortable for sitting or standing, which are generally suitable for passive patron use.
- During the winter, wind conditions on and around the proposed project are expected to be comfortable for walking or calmer at all locations assessed. An exception is an isolated area near the northwest building corner, where uncomfortable wind conditions are predicted. Wind speeds comfortable for standing or walking are expected at the outdoor amenity areas during the winter which might be acceptable as these areas may not be used frequently during the colder months.
- Appropriate wind conditions are predicted near the main building entrances throughout the year.

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1 INTRODUCTION

RWDI was retained to conduct a pedestrian wind assessment for the proposed development at 8885-8911 Lundy's Lane in Niagara Falls, Ontario. This report presents the project objectives, approach and the main results from RWDI's assessment and provides conceptual wind control measures, where necessary. Our Statement of Limitations as it pertains to this study can be found in Section 4 of this report.

1.1 Project Description

The proposed development site is located on the northeast corner of Garner Road and Lundy's Lane (Image 1). Located at the west end of the city, the site is surrounded by low buildings and open lands in all directions.

The development will consist of a 10-story mixed-use residential and commercial building at an approximate height of 31 m. The proposed building features stepped massing and ground floor retail space. Outdoor amenity areas are proposed at ground level, on the north and southwest sides.

1.2 Objectives

The objective of the study was to assess the effect of the proposed development on local conditions in pedestrian areas on and around the study site and provide recommendations for minimizing adverse effects, if needed. This quantitative assessment was based on wind speed measurements on a scale model of the project and its surroundings in one of RWDI's boundary-layer wind tunnels. These measurements were combined with the local wind records and compared to Niagara Region criteria for gauging wind comfort and safety in pedestrian areas. The assessment focused on critical pedestrian areas, including main building entrances, public sidewalks, and outdoor amenity areas.

Image 1: Aerial View of Site and Surroundings (Source: Google™ Earth)

2 BACKGROUND AND APPROACH

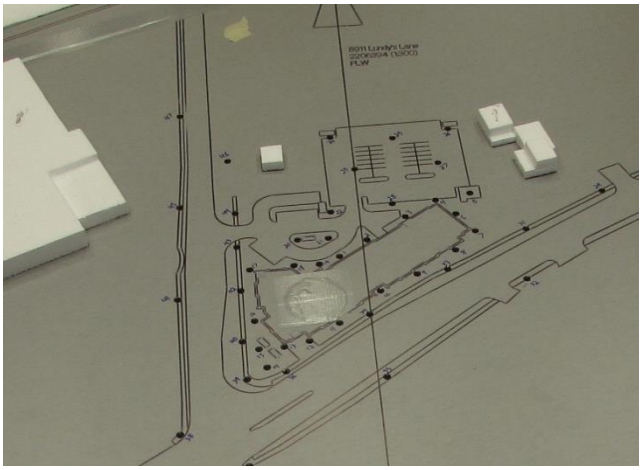
2.1 Wind Tunnel Study Model

To assess the wind environment around the proposed project, a 1:300 scale model of the project site and surroundings was constructed for the wind tunnel tests of the following configurations:

A - Existing: Existing site with existing surroundings (Image 2A), and

B - Proposed: Proposed project with existing surroundings (Image 2B).

The wind tunnel model included all relevant surrounding buildings and topography within an approximate 360 m radius around the study site. The wind and turbulence profiles in the atmospheric boundary layer beyond the modelled area were also simulated in RWDI's wind tunnel. The wind tunnel model was instrumented with 47 specially designed wind speed sensors to measure mean and gust speeds at a full-scale height of approximately 1.5 m above local grade in pedestrian areas throughout the study site. The placement of wind measurement locations was based on our experience and understanding of the pedestrian usage for this site. Wind speeds were measured for 36 directions in 10-degree increments. The measurements at each sensor location were recorded in the form of ratios of local mean and gust speeds to the mean wind speed at a reference height above the model.



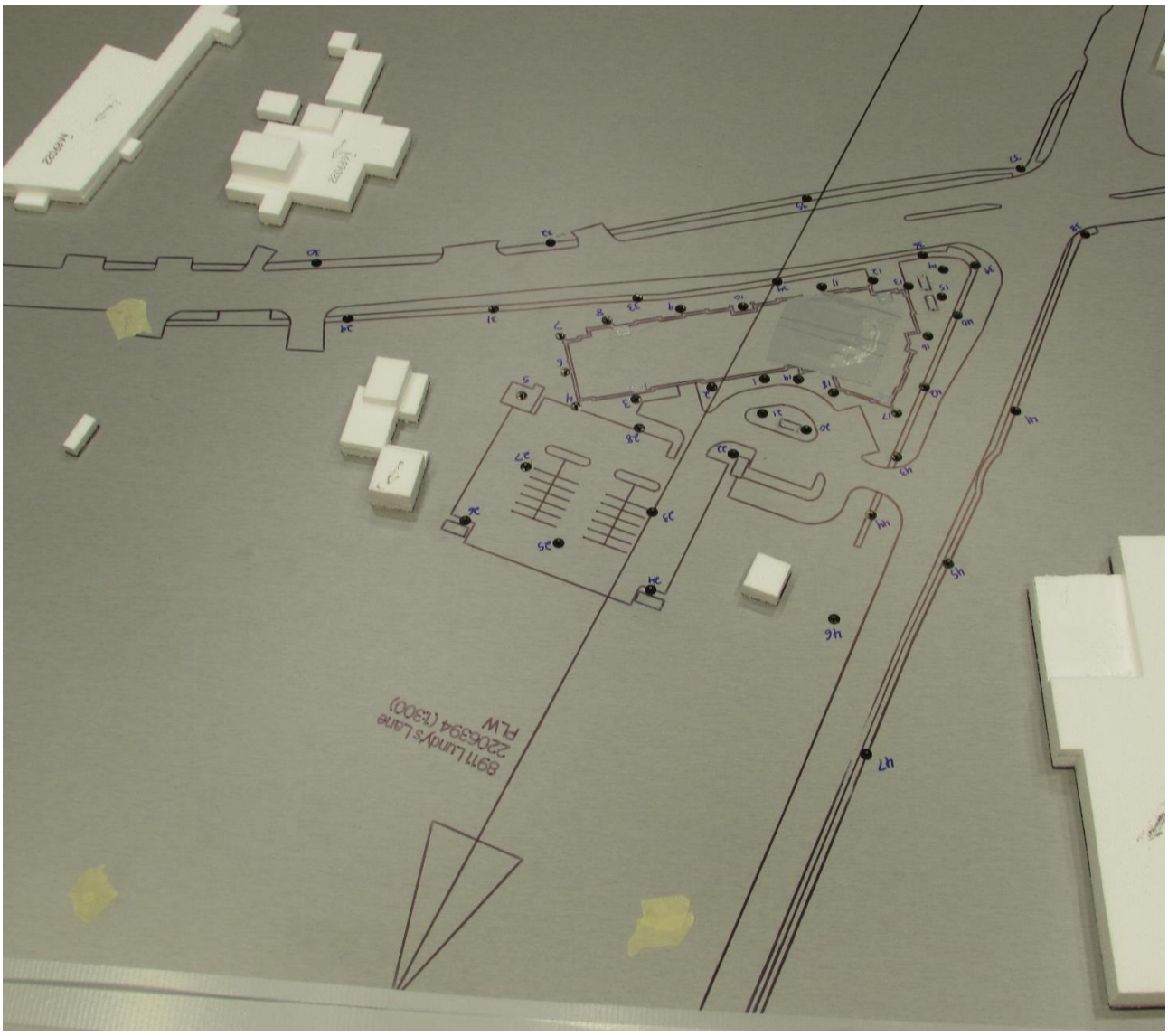


Image 2A: Wind Tunnel Study Model – Existing Configuration

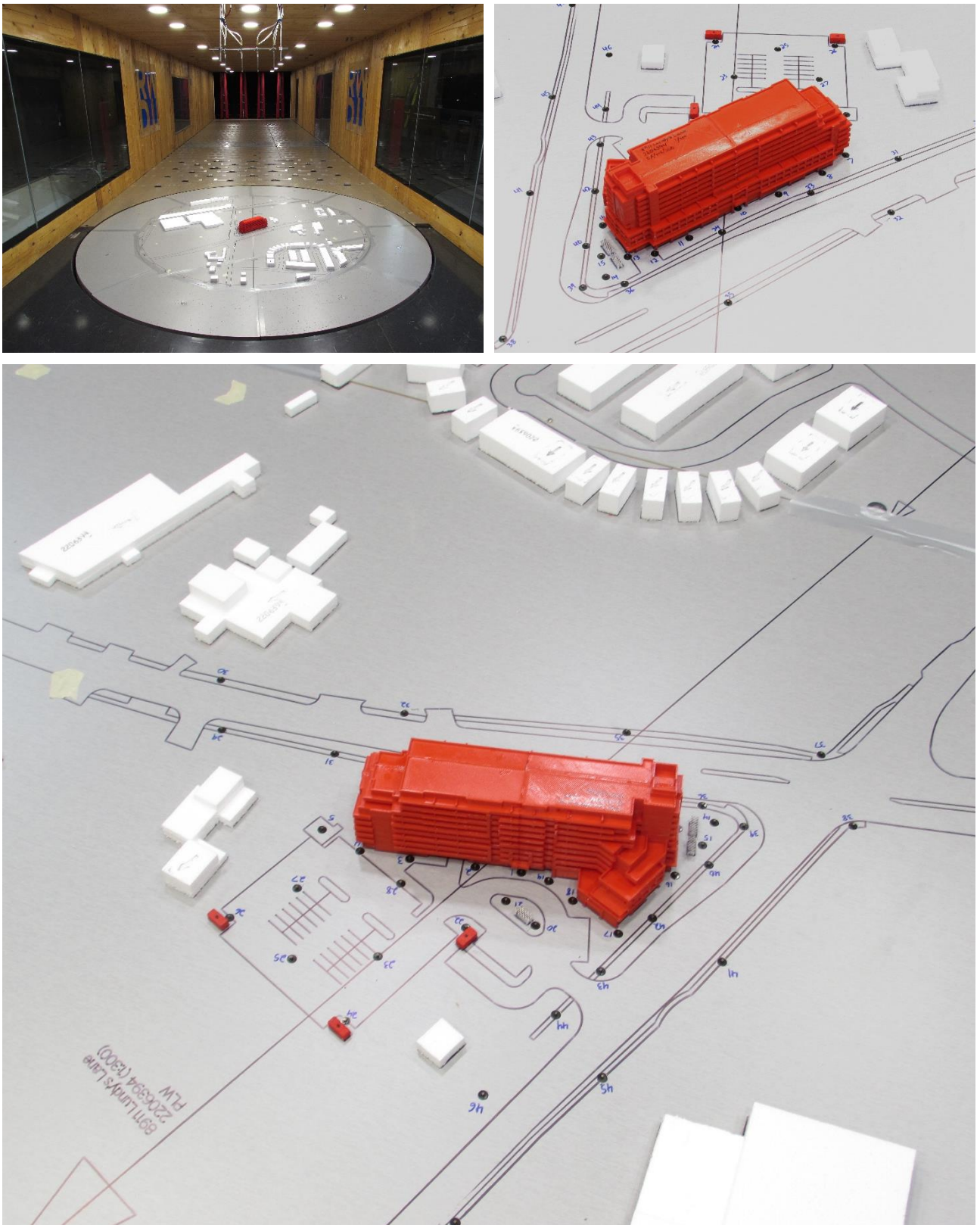
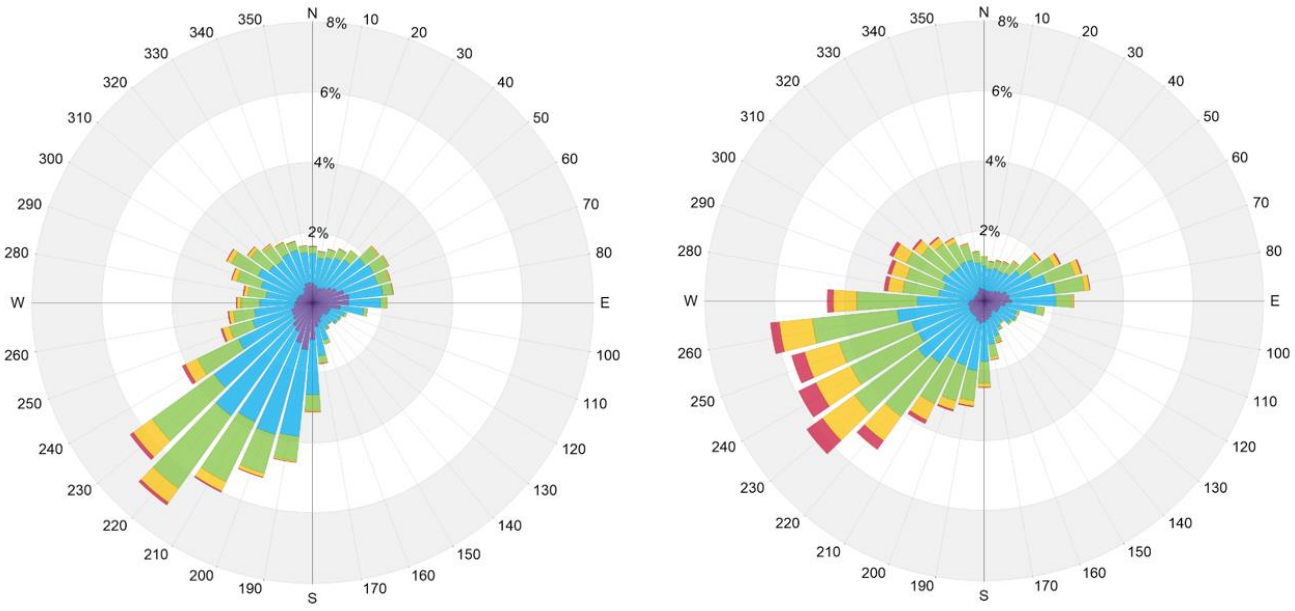


Image 2B: Wind Tunnel Study Model – Proposed Configuration

2.2 Wind Climate Data

Wind statistics recorded at Niagara Falls International Airport between 1991 and 2021, inclusive, were analyzed for the Summer (May through October) and Winter (November through April) seasons. Image 3 graphically depicts the directional distributions of wind frequencies and speeds for these two seasons. Winds from the southwest quadrant are predominant throughout the year as indicated by the wind roses, with secondary winds from the northeast and northwest quadrants. Strong winds of a mean speed greater than 30 km/h measured at the airport (at an anemometer height of 10 m) occur for 3.9% and 12.8% of the time during the summer and winter seasons, respectively, and they are primarily from the southwest and west directions.

Wind statistics were combined with the wind tunnel data to predict the frequency of occurrence of full-scale wind speeds. The full-scale wind predictions were then compared with the wind criteria for pedestrian comfort and safety.



Wind Speed (km/h)	Probability (%) Summer	Winter
Calm	10.4	5.9
1-10	23.4	16.1
11-20	42.6	36.3
21-30	19.7	28.9
31-40	3.3	9.8
>40	0.6	3.0

Image 3: Directional Distribution of Winds Approaching Niagara Falls International Airport between 1991 and 2021

2.3 Pedestrian Wind Criteria

Based on pedestrian level wind study terms of reference guide for Niagara Region (dated July 2022), the public realm, streetscapes and public/private outdoor open spaces related to the existing and proposed buildings are to be comfortable for their intended use. The table below describes the minimum criteria for specific locations. The criteria deal with comfort and safety of pedestrians:

Comfort: Commonly experienced wind speeds have been categorized into ranges based on the activity level of a person that the winds would be conducive to. Lower wind speeds are desirable for passive activities and active pedestrians would be tolerant of higher wind speeds.

Safety: It is important to assess wind conditions in the pedestrian realm from a safety perspective as strong wind gusts can deter safe pedestrian use of outdoor spaces. Wind speeds associated with wind gusts are infrequent but deserve special attention due to their potential impact on pedestrian safety.

Comfort Category	GEM Speed (km/h)	Minimum Occurrence (% of Time)	Description	Area of Application
Sitting	≤ 10	80	Light breezes desired for outdoor seating areas where one can read a paper without having it blown away.	Park benches, restaurant and café seating, balconies, amenity terraces, children's areas, etc. intended for relaxed, and usually seated activities.
Standing	≤ 15	80	Gentle breezes suitable for passive pedestrian activities where a breeze may be tolerated.	Main entrances, bus-stops, dog areas, and other outdoor areas where seated activities are not expected.
Walking	≤ 20	80	Relatively high speeds that can be tolerated during intentional walking, running and other active movements.	Sidewalks, parking lots, alleyways, and areas where pedestrian activity is primarily for walking.
Uncomfortable	> 20	20	Strong winds, considered a nuisance for most activities.	Not acceptable in areas with pedestrian access.

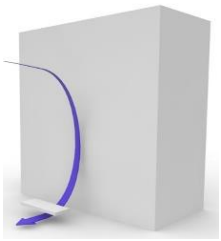
NOTES:
1) Gust Equivalent Mean (GEM) speed = maximum of either mean speed or gust speed/1.85. The gust speed can be measured directly from wind tunnel or estimated as mean speed + (3 x RMS speed).
2) Comfort calculations are to be based on wind events recorded between 6:00 and 23:00 daily.

Safety Criterion	Gust Speed (km/h)	Minimum Occurrence Annual	Description	Area of Application
Exceeded	> 90	0.1% (9 hours in a year)	Excessive gust speeds that can adversely affect a pedestrian's balance and footing. Wind mitigation is typically required.	Not acceptable in any area of interest.

NOTES:
3) Safety calculations are to be based on wind events recorded for 24 hours a day.

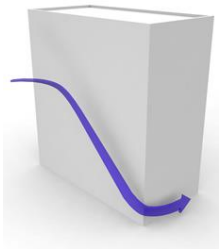
2.4 General Wind Flow Mechanisms

In the discussion of wind conditions, reference is made to the following wind flow mechanisms (Image 4):



DOWNWASHING

Tall buildings tend to intercept the stronger winds at higher elevations and redirect them to the ground level. This is often the main cause for wind accelerations around large buildings at the pedestrian level.



CORNER ACCELERATION

When wind moves around the buildings a localized increase in the wind activity or corner acceleration can be expected around the exposed building corners at pedestrian level. The effect is intensified when the wind approaches at an oblique angle to a tall façade and are deflected down and around the exposed corners.

Image 4: General Wind Flow Mechanisms

If these building/wind combinations occur for prevailing winds, there is a greater potential for increased wind activity. Design details such as setting back a tall tower from the edges of a podium, deep canopies close to ground level, wind screens, tall trees with dense landscaping, etc. (Image 5) can help reduce wind speeds. The choice and effectiveness of these measures would depend on the exposure and orientation of the site with respect to the prevailing wind directions and the size and massing of the proposed buildings.

Podium/tower setback, canopy, landscaping and wind screens (left to right)

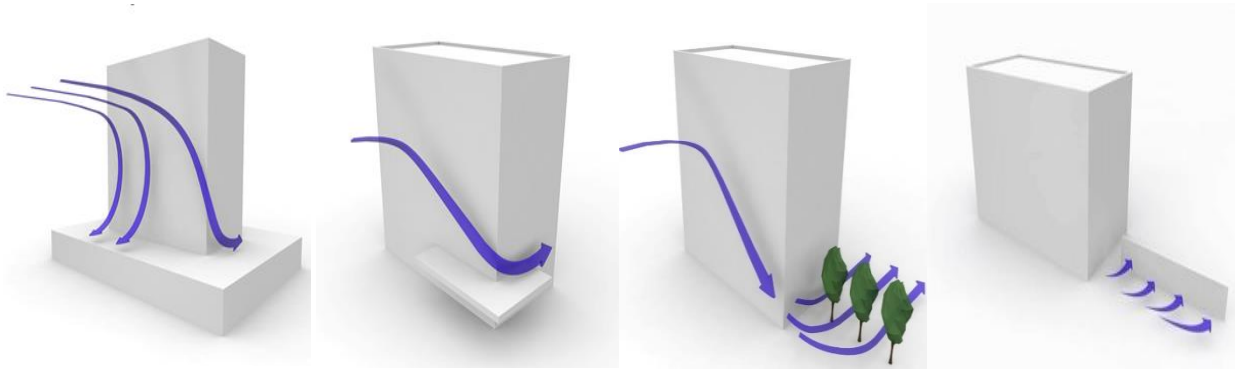


Image 5: Common Wind Control Measures

3 RESULTS AND DISCUSSION

The predicted wind conditions are shown on site plans in Figures 1A through 2B located in the "Figures" section of this report and the associated wind speeds are presented in Table 1, located in the "Tables" section of this report.

Wind conditions comfortable for walking are appropriate for sidewalks and walkways as pedestrians will be active and less likely to remain in one area for prolonged periods of time. Lower wind speeds conducive to standing are preferred at main entrances where pedestrians are apt to linger. Wind speeds comfortable for sitting are preferred for areas intended for passive activities in the summer season, such as outdoor amenity areas. The following is a detailed discussion of the suitability of the predicted wind conditions for the anticipated pedestrian use of each area of interest.

Wind conditions that meet the safety criterion are predicted at all locations assessed for both the Existing and Proposed configurations.

3.1 Existing Configuration

Wind conditions on and around the existing site are generally comfortable for standing in the summer and for walking in the winter (Figures 1A and 2A). These wind speeds are considered comfortable for the intended use of public sidewalks.

3.2 Proposed Configuration

In the summer, wind speeds conducive to sitting or standing are anticipated at most areas assessed, with slightly elevated wind speeds and conditions comfortable for walking expected around the northwest building corner (Figure 1B). Wind conditions at the north outdoor amenity area are expected to be comfortable for sitting which is appropriate for passive use of the area. At the southwest amenity space, wind conditions comfortable for standing are predicted, which may be acceptable if the area is not planned to be occupied for prolonged leisure usage. Any use of landscaping in the southwest amenity area can help enhance the comfort conditions and achieve wind speeds suitable for sitting – see examples in Image 6.

During the winter, wind conditions on and around the proposed project are expected to be comfortable for walking or calmer at all locations assessed (Figure 2B). An exception is an isolated area near the northwest building corner, where uncomfortable wind conditions are predicted. The high wind activity at this corner can be attributed to the direct exposure of the site to the predominant southwesterly winds. These winds are expected to be deflected down by the west building façade and subsequently accelerate around the exposed northwest building corner (see Section 2.4). Wind speeds comfortable for standing or walking are expected at the outdoor amenity areas during the winter which might be acceptable as the areas may not be used frequently during the colder months (Figure 2B).

Main entrances of the proposed building are situated near Locations 1 and 10 in Figures 1B and 2B. Wind conditions comfortable for sitting or standing are expected at these locations throughout the year, which is considered appropriate for the intended pedestrian use.

To improve the uncomfortable conditions around the northwest building corner, vertical wind control measures in the form of landscaping can be considered near the corner area to diffuse the energy of accelerating wind flows. Note that for vertical wind control elements to be effective, a minimum height of 2 m and a porosity that is no more than 30% open are recommended. For effective wind control, trees should have large canopies and retain their foliage during the winter months (coniferous/marcescent species). Examples of the use of such mitigation solutions are shown in Image 7.

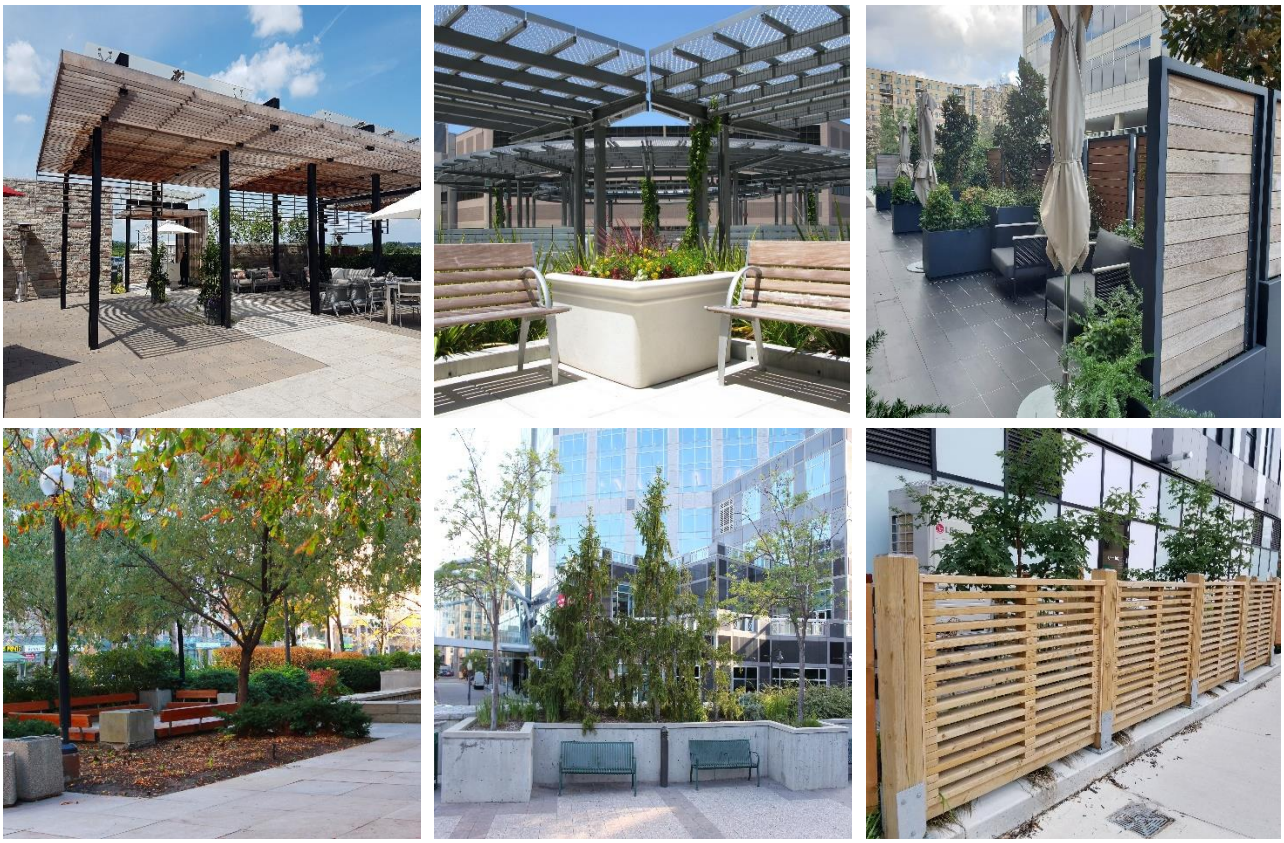


Image 6: Wind Mitigation Solutions Applicable to the Southwest Amenity Area

Image 7: Vertical Wind Control Measures Applicable to the Northwest Building Corner

3.3 Updated Massing

RWDI received new drawings on April 16, 2025, with an updated massing of the proposed development (see Images 8 and 9). The changes include:

- Changes to the building footprint and location of the main entrances,
- Reduction of building height from 10-storey to 6-storey,
- Elimination of the stepped massing at the northwest corner of the building, and
- Addition of an outdoor amenity area to the north of the site.

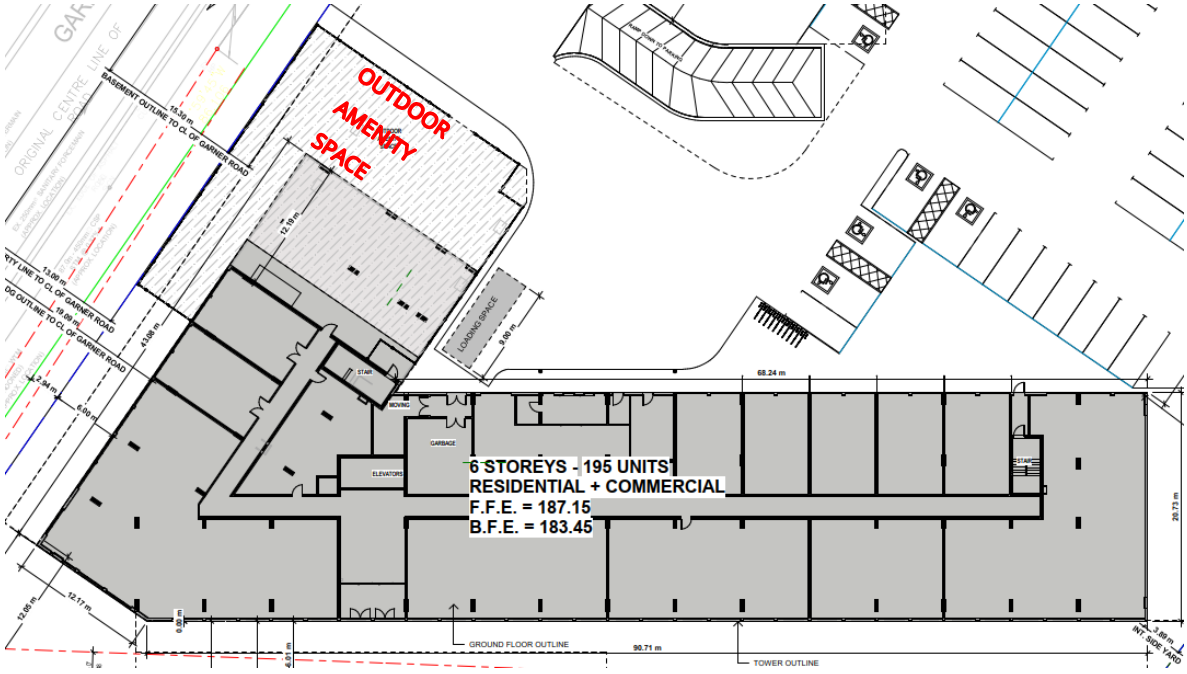


Image 8: Site Plan Based on the New Drawings Received on April 16, 2025

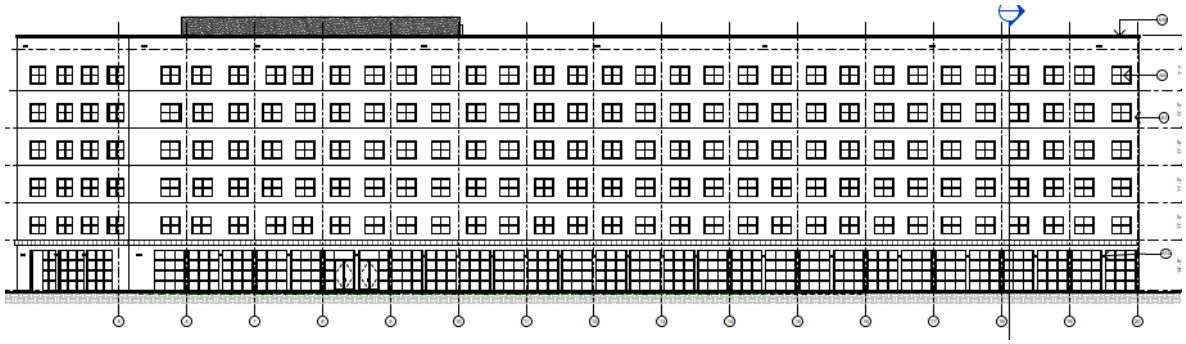


Image 9: South Elevation Based on the New Drawings Received on April 16, 2025

Overall, the changes to the building design are not significant enough to modify the overall wind conditions around the site, predicted during the 2022 wind tunnel test. As a result of the reduction of building height, wind speeds might be slightly lower compared to what was predicted. Wind speeds at the surrounding sidewalks and building entrances are expected to remain appropriate for the intended use. Wind conditions at the outdoor amenity area to the north of the building are expected to be comfortable for sitting or standing. If desired, reduced wind speeds can be achieved by including landscaping elements in this area. Uncomfortable conditions at the northwest corner of the building are expected to be eliminated.

4 STATEMENT OF LIMITATIONS

4.1 Limitations

This report was prepared by RWDI AIR Inc. ("RWDI") for M5V Developments ("Client"). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein ("Project"). The conclusions and recommendations contained in this report are based on the information available to RWDI when this report was prepared.

The conclusions and recommendations contained in this report have also been made for the specific purpose(s) set out herein. Should the Client or any other third party utilize the report and/or implement the conclusions and recommendations contained therein for any other purpose or project without the involvement of RWDI, the Client or such third party assumes any and all risk of any and all consequences arising from such use and RWDI accepts no responsibility for any liability, loss, or damage of any kind suffered by Client or any other third party arising therefrom.

Finally, it is imperative that the Client and/or any party relying on the conclusions and recommendations in this report carefully review the stated assumptions contained herein and to understand the different factors which may impact the conclusions and recommendations provided.

4.2 Design Assumptions

RWDI confirms that the pedestrian wind assessment (the "**Assessment**") discussed herein was performed by RWDI in accordance with generally accepted professional standards at the time when the Assessment was performed and in the location of the Project. No other representations, warranties, or guarantees are made with respect to the accuracy or completeness of the information, findings, recommendations, or conclusions contained in this Report. This report is not a legal opinion regarding compliance with applicable laws.

The findings and recommendations set out in this report are based on the following information disclosed to RWDI. Drawings and information listed below were used to construct the scale model of the proposed development at 8885-8911 Lundy's Lane in Niagara Falls ("**Project Data**").

File Name	File Type	Date Received (dd/mm/yyyy)
A-100r2.1 (Lundy's Lane - Site Plan - ZBAII) - 24-01-25 - Outline amenities	PDF	14/02/2024
23012 Lundy's Lane 2022	Revit	02/06/2024

The recommendations and conclusions are based on the assumption that the Project Data and Climate Data are accurate and complete. RWDI assumes no responsibility for any inaccuracy or deficiency in information it has received from others. In addition, the recommendations and conclusions in this report are partially based on historical data and can be affected by a number of external factors, including but not limited to Project design, quality of materials and construction, site conditions, meteorological events, and climate change. As such, the conclusions and recommendations contained in this report do not list every possible outcome.

The opinions in this report can only be relied upon to the extent that the Project Data and Project Specific Conditions have not changed. Any change in the Project Data or Project Specific Conditions not reflected in this report can impact and/or alter the recommendations and conclusions in this report. Therefore, it is incumbent upon the Client and/or any other third party reviewing the recommendations and conclusions in this report to contact RWDI in the event of any change in the Project Data and Project Specific Conditions in order to determine whether any such change(s) may impact the assumptions upon which the recommendations and conclusions were made.

5 REFERENCES

1. ASCE Task Committee on Outdoor Human Comfort (2004). *Outdoor Human Comfort and Its Assessment*, 68 pages, American Society of Civil Engineers, Reston, Virginia, USA.
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FIGURES

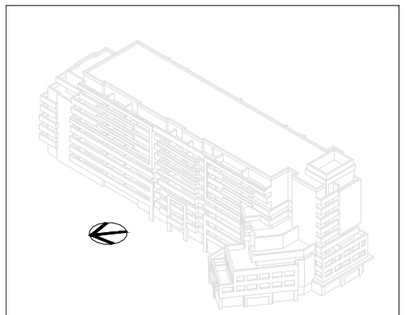
Pedestrian Wind Comfort Conditions
Existing Configuration
Summer (May to October, 6:00 to 23:00)

8885 – 8911 Lundy's Lane - Niagara Falls, ON

True North

Project #2206394

Drawn by: ALJM	Figure: 1A
Approx. Scale:	1:750
Date Revised:	Mar. 7, 2024



Isometric View of Building

GARNER ROAD

LUNDY'S LANE

LEGEND:

COMFORT CATEGORIES:

- Sitting
- Standing
- Walking
- Uncomfortable

Grade Level Sensor

Building Above Removed for Clarity

Main Entrance Location

Trellis

0 10 30m

Pedestrian Wind Comfort Conditions

Proposed Configuration

Summer (May to October, 6:00 to 23:00)

8885 – 8911 Lundy's Lane - Niagara Falls, ON

True North

Project #2206394

Drawn by: ALJM	Figure: 1B
Approx. Scale:	1:750
Date Revised:	Mar. 7, 2024

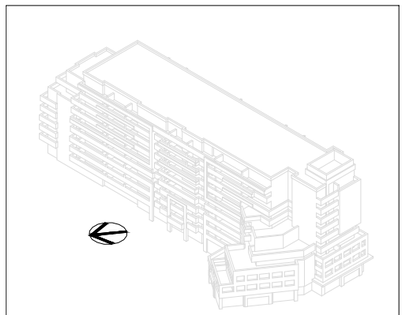
Pedestrian Wind Comfort Conditions
Existing Configuration
Winter (November to April, 6:00 to 23:00)

8885 – 8911 Lundy's Lane - Niagara Falls, ON

True North

Project #2206394

Drawn by: ALJM	Figure: 2A
Approx. Scale:	1:750
Date Revised:	Mar. 7, 2024



Isometric View of Building

GARNER ROAD

LUNDY'S LANE

LEGEND:

COMFORT CATEGORIES:

- Sitting
- Standing
- Walking
- Uncomfortable

Grade Level Sensor

Building Above Removed for Clarity

Main Entrance Location

Trellis

0 10 30m

Pedestrian Wind Comfort Conditions

Proposed Configuration

Winter (November to April, 6:00 to 23:00)

8885 – 8911 Lundy's Lane - Niagara Falls, ON

True North

Project #2206394

Drawn by: ALJM	Figure: 2B
Approx. Scale:	1:750
Date Revised:	Mar. 7, 2024

TABLES

Table 1: Pedestrian Wind Comfort and Safety Conditions

Location	Configuration	Wind Comfort				Wind Safety	
		Summer		Winter		Annual	
		Speed (km/h)	Rating	Speed (km/h)	Rating	Speed (km/h)	Rating
1	Existing	14	Standing	18	Walking	56	Pass
	Proposed	12	Standing	14	Standing	43	Pass
2	Existing	14	Standing	18	Walking	58	Pass
	Proposed	10	Sitting	12	Standing	46	Pass
3	Existing	14	Standing	18	Walking	59	Pass
	Proposed	10	Sitting	13	Standing	57	Pass
4	Existing	14	Standing	18	Walking	58	Pass
	Proposed	14	Standing	18	Walking	70	Pass
5	Existing	14	Standing	17	Walking	56	Pass
	Proposed	13	Standing	16	Walking	63	Pass
6	Existing	14	Standing	18	Walking	58	Pass
	Proposed	9	Sitting	10	Sitting	38	Pass
7	Existing	14	Standing	18	Walking	58	Pass
	Proposed	10	Sitting	12	Standing	56	Pass
8	Existing	14	Standing	18	Walking	59	Pass
	Proposed	11	Standing	13	Standing	41	Pass
9	Existing	15	Standing	18	Walking	59	Pass
	Proposed	9	Sitting	10	Sitting	39	Pass
10	Existing	14	Standing	18	Walking	59	Pass
	Proposed	8	Sitting	10	Sitting	32	Pass
11	Existing	14	Standing	18	Walking	59	Pass
	Proposed	9	Sitting	12	Standing	42	Pass
12	Existing	14	Standing	18	Walking	58	Pass
	Proposed	12	Standing	15	Standing	80	Pass
13	Existing	14	Standing	18	Walking	59	Pass
	Proposed	13	Standing	19	Walking	76	Pass
14	Existing	14	Standing	18	Walking	60	Pass
	Proposed	13	Standing	18	Walking	62	Pass
15	Existing	14	Standing	18	Walking	58	Pass
	Proposed	11	Standing	14	Standing	53	Pass
16	Existing	14	Standing	18	Walking	59	Pass
	Proposed	13	Standing	15	Standing	63	Pass
17	Existing	14	Standing	18	Walking	59	Pass
	Proposed	18	Walking	22	Uncomfortable	81	Pass

Table 1: Pedestrian Wind Comfort and Safety Conditions

Location	Configuration	Wind Comfort				Wind Safety	
		Summer		Winter		Annual	
		Speed (km/h)	Rating	Speed (km/h)	Rating	Speed (km/h)	Rating
18	Existing	14	Standing	18	Walking	60	Pass
	Proposed	8	Sitting	10	Sitting	39	Pass
19	Existing	14	Standing	18	Walking	60	Pass
	Proposed	10	Sitting	12	Standing	44	Pass
20	Existing	14	Standing	18	Walking	59	Pass
	Proposed	9	Sitting	12	Standing	44	Pass
21	Existing	14	Standing	18	Walking	59	Pass
	Proposed	10	Sitting	13	Standing	46	Pass
22	Existing	14	Standing	17	Walking	56	Pass
	Proposed	11	Standing	15	Standing	63	Pass
23	Existing	14	Standing	17	Walking	59	Pass
	Proposed	13	Standing	16	Walking	59	Pass
24	Existing	14	Standing	17	Walking	55	Pass
	Proposed	11	Standing	15	Standing	56	Pass
25	Existing	14	Standing	17	Walking	56	Pass
	Proposed	12	Standing	16	Walking	55	Pass
26	Existing	14	Standing	17	Walking	53	Pass
	Proposed	11	Standing	14	Standing	55	Pass
27	Existing	14	Standing	17	Walking	55	Pass
	Proposed	13	Standing	17	Walking	60	Pass
28	Existing	14	Standing	18	Walking	58	Pass
	Proposed	13	Standing	16	Walking	62	Pass
29	Existing	15	Standing	18	Walking	61	Pass
	Proposed	14	Standing	17	Walking	60	Pass
30	Existing	14	Standing	18	Walking	59	Pass
	Proposed	14	Standing	17	Walking	61	Pass
31	Existing	14	Standing	18	Walking	57	Pass
	Proposed	14	Standing	16	Walking	58	Pass
32	Existing	14	Standing	18	Walking	58	Pass
	Proposed	15	Standing	17	Walking	60	Pass
33	Existing	15	Standing	18	Walking	59	Pass
	Proposed	12	Standing	13	Standing	55	Pass
34	Existing	14	Standing	18	Walking	58	Pass
	Proposed	11	Standing	14	Standing	59	Pass

Table 1: Pedestrian Wind Comfort and Safety Conditions

Location	Configuration	Wind Comfort				Wind Safety	
		Summer		Winter		Annual	
		Speed (km/h)	Rating	Speed (km/h)	Rating	Speed (km/h)	Rating
35	Existing	15	Standing	18	Walking	60	Pass
	Proposed	14	Standing	20	Walking	68	Pass
36	Existing	14	Standing	18	Walking	60	Pass
	Proposed	14	Standing	18	Walking	61	Pass
37	Existing	14	Standing	17	Walking	58	Pass
	Proposed	14	Standing	18	Walking	59	Pass
38	Existing	14	Standing	18	Walking	59	Pass
	Proposed	14	Standing	18	Walking	58	Pass
39	Existing	14	Standing	18	Walking	60	Pass
	Proposed	13	Standing	17	Walking	58	Pass
40	Existing	14	Standing	18	Walking	59	Pass
	Proposed	12	Standing	15	Standing	58	Pass
41	Existing	15	Standing	18	Walking	60	Pass
	Proposed	14	Standing	16	Walking	54	Pass
42	Existing	14	Standing	18	Walking	60	Pass
	Proposed	16	Walking	19	Walking	69	Pass
43	Existing	14	Standing	18	Walking	59	Pass
	Proposed	17	Walking	20	Walking	73	Pass
44	Existing	14	Standing	17	Walking	58	Pass
	Proposed	15	Standing	18	Walking	62	Pass
45	Existing	13	Standing	15	Standing	52	Pass
	Proposed	14	Standing	16	Walking	56	Pass
46	Existing	14	Standing	16	Walking	53	Pass
	Proposed	13	Standing	16	Walking	55	Pass
47	Existing	13	Standing	15	Standing	55	Pass
	Proposed	12	Standing	15	Standing	57	Pass

Season	Months	Hours
Summer	May - October	6:00 - 23:00 for comfort
Winter	November - April	6:00 - 23:00 for comfort
Annual	January - December	0:00 - 23:00 for safety

Configurations	
Existing	Existing site and surroundings
Proposed	Project with existing surroundings

Comfort Speed (km/h)	
(20% Seasonal Exceedance)	
≤ 10	Sitting
11 - 15	Standing
16 - 20	Walking
> 20	Uncomfortable

Safety Speed (km/h)	
(0.1% Annual Exceedance)	
≤ 90	Pass
> 90	Exceeded