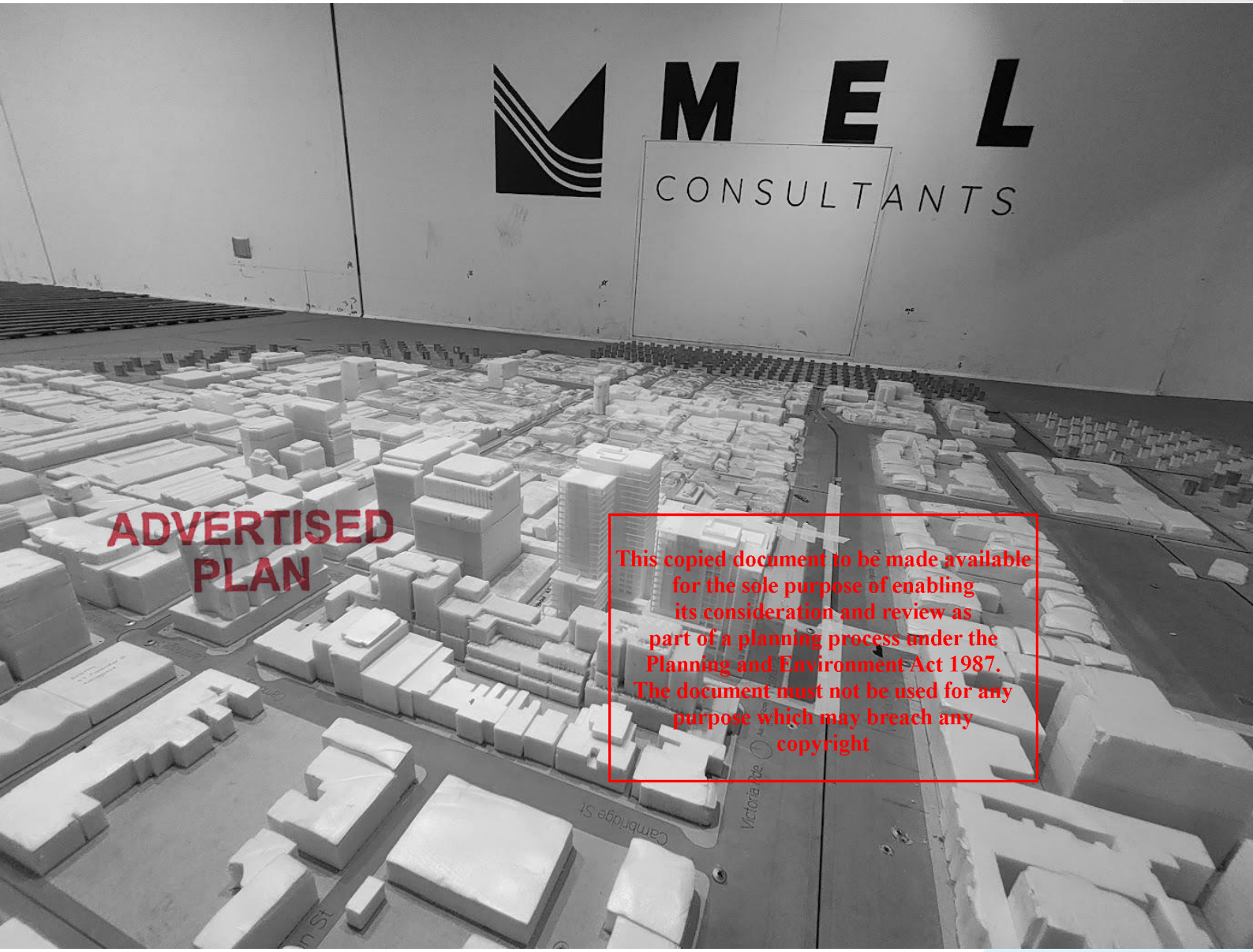
79-81 VICTORIA PARADE DEVELOPMENT, COLLINGWOOD

ENVIRONMENTAL WIND CONDITIONS STUDY



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Prepared for:
Stockland

Report: 25082A-WT-ENV01

SUMMARY

A wind tunnel study has been conducted to quantify the pedestrian wind safety and comfort conditions for the proposed 79-81 Victoria Parade development in Collingwood. The wind tunnel study was completed in MEL Consultants boundary layer wind tunnel facility for 360 degrees of wind direction at 22.5-degree increments. The testing was performed using a 1/400 scale model of the proposed development based on architectural drawings from Wardle received on 16 March 2026. The model was inserted into a proximity model that included topography, existing and under construction buildings out to a minimum radius of 300m.

The model of the development within surrounding buildings, was tested in a simulated upstream boundary layer of the natural wind to determine likely environmental wind conditions. Mean and peak wind speeds were measured at locations within and around the development using hot-wire anemometers. The wind speed ratios determined from the wind tunnel measurements were combined with local wind climate data for the site to determine equivalent full-scale wind conditions around the proposed development. These full-scale wind conditions were compared against the City of Yarra Planning Scheme Clause 58.04-4 (Standard D17) wind safety and comfort criteria. These criteria are based on the 3 second gust wind speed for pedestrian safety and the Gust Equivalent Mean (GEM) wind speed for pedestrian comfort. The wind conditions for the Existing Configuration were also quantified to allow that assessment of the wind impacts of the proposed development. The study did not include the effects any landscaping or street trees.

The findings of this study are as follows:

For the ground level

- For the Proposed Configuration, wind conditions at the pedestrian areas within the development and the surrounding streetscapes satisfy the walking comfort criteria at a minimum, with the majority of locations satisfying the standing or sitting comfort criteria.
- The wind conditions at the building entrances and along the internal laneway satisfy the recommended standing criterion.
- The wind conditions for the Proposed Configuration at all Test Locations on the ground level satisfy the wind safety criterion.

For the upper levels

- For the Proposed Configuration, the wind conditions on the neighbouring upper-level car park to the east of the development have been shown to satisfy the standing comfort criterion, similar to the wind criterion satisfied for the Existing Configuration.
- For the Proposed Configuration, the wind conditions on the communal terraces satisfy the safety and the suggested standing comfort criteria with the demonstrated mitigation strategy
- For the Proposed Configuration, the wind conditions on the private terraces satisfy the safety and the suggested walking comfort criteria with most of the terraces satisfying the standing comfort criterion. Some corner terraces required full height edge screens to satisfy the safety and walking comfort criteria.

MEL CONSULTANTS

Report 25082A-WT-ENV01

79-81 VICTORIA PARADE, COLLINGWOOD
ENVIRONMENTAL WIND TUNNEL MODELLING

MEL CONSULTANTS REPORT NO: **25082A-WT-ENV01**

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CONTENTS

1. INTRODUCTION

The proposed 79-81 Victoria Parade development in Collingwood is located on the corner of Victoria Parade and Wellington Street, as shown in Figure 1. The development will consist of two residential towers of 17-levels (approximately 80m) and 23 levels (approximately 100m) with retail tenancy at the ground level.

Figure 1 - Satellite imagery showing the proposed 79-81 Victoria Parade development site in Collingwood (highlighted red).

A wind tunnel study was commissioned by Stockland to examine the wind conditions for the proposed development and, if necessary, to develop wind mitigation strategies. This report details the environmental wind assessment of the 1/400 scale model of the proposed development within a proximity model of surrounding buildings out to a minimum radius of 300m. These tests were carried out in the MEL Consultants 400kW Boundary Layer Wind Tunnel during April, 2026.

2. WIND TUNNEL MODEL

A 1/400 scale model of 79-81 Victoria Parade development was constructed from architectural drawings provided by Wardle and received on 16th March 2026. The model of the 79-81 Victoria Parade development was inserted into a proximity model of the local topography and existing and future (under construction) surrounding buildings out to a minimum radius of 300m. No existing or proposed landscape trees were included within the model. Photographs of wind tunnel model inserted into the proximity model are presented in Figures 2a – 2c.

Figure 2a - View from the southwest of the 1/400 scale model of the proposed 79-81 Victoria Parade development in the wind tunnel.

Figure 2b - View from the southeast of the 1/400 scale model of the proposed 79-81 Victoria Parade development in the wind tunnel.

Figure 2b - View from the west of the 1/400 scale model of the proposed 79-81 Victoria Parade development in the wind tunnel.

3. ENVIRONMENTAL WIND CRITERIA

The advancement of wind tunnel testing techniques, using large boundary layer flows to simulate the natural wind, has facilitated the prediction of wind speeds likely to be induced around a development. To assess whether the predicted wind conditions are likely to be acceptable or not, the City of Yarra Planning Scheme Clause 58.04-4 (Standard D17) wind safety and comfort criteria will be used. The criteria are as follows:

Unsafe wind conditions means the annual maximum 3 second gust wind speed which exceeds 20 metres/second with the probability of exceedance of 0.1% from any wind direction considering at least 16 wind directions with the corresponding probability of exceedance percentage.

Comfortable wind conditions means hourly mean wind speed or gust equivalent mean speed from all wind directions combined with probability of exceedance less than 20% of the time, equal to or less than:

- 3 metres/second for sitting areas
- 4 metres/second for standing areas
- 5 metres/second for walking areas

Mean wind speed means the maximum of:

- Hourly mean wind speed, or
- Gust equivalent mean wind speed (3 second gust wind speed divided by 1.85)

The above comfort criteria are pass/fail criteria which assess the integrated probability of all wind directions to determine whether a location passes or fails the threshold criterion. The safety criterion is a pass/fail criterion based upon exceedance of the wind speed for any one wind direction.

The wind condition must be assessed within a distance of half the greatest length of the building, or half the total height of the building, whichever is greater.

The criteria use the definition of mean wind speed as based on the hourly wind speed so the probabilities will be determined from the hourly wind data for an applicable automatic weather station for the Melbourne Airport. The probability data used have been corrected for the approach terrain at the location of the automatic weather station and referenced to 10m in Terrain Category 2. This is the standard reference height of AS/NZS1170.2:2021. The wind climate rose for Melbourne Airport is shown in Figure 3.

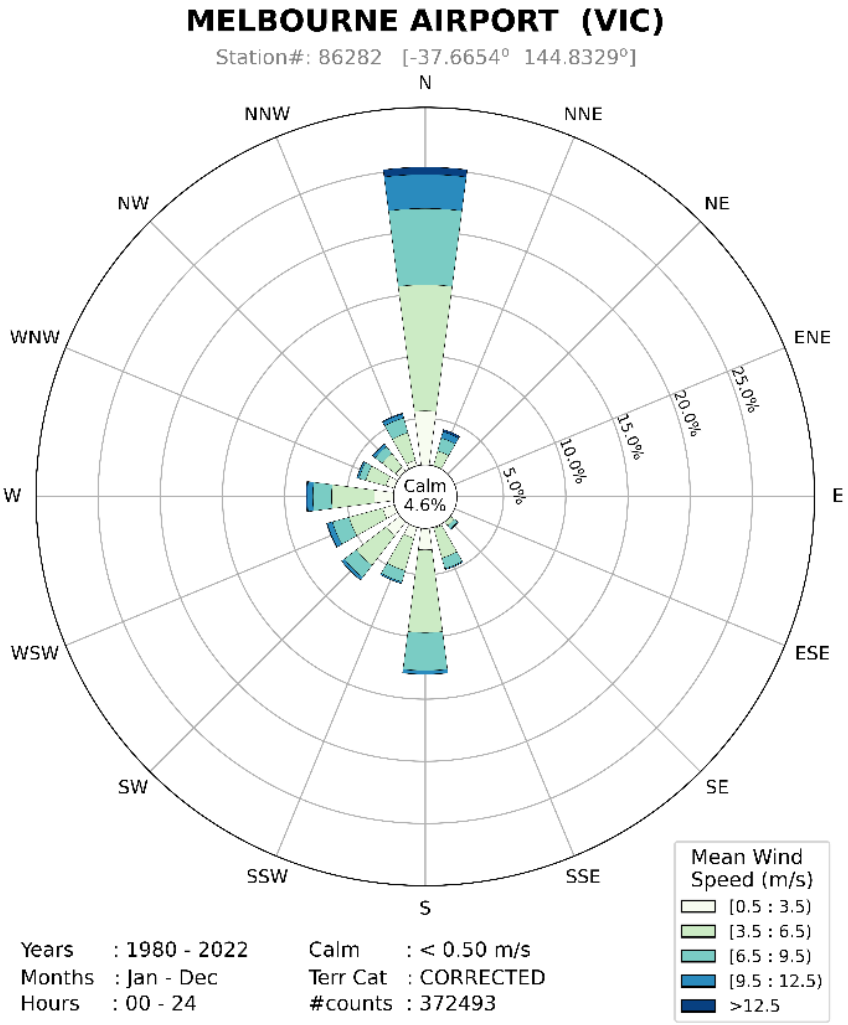

Figure 3: Wind Rose for Melbourne Airport

3.1 Suggested Comfort Criteria

The suggested comfort criteria for the proposed 79-81 Victoria Parade development are as follows:

- Pedestrian transit areas — Walking Criterion
- Building entrances — Standing Criterion
- Private terraces — Walking Criterion†
- Communal terraces — Standing Criterion†

†The wind conditions at outdoor terraces have been suggested to satisfy the standing criterion as these terraces could be considered elective when external conditions would be perceived as acceptable for the desired activity. Users of these terraces will need to be educated on the wind effects and loose objects should not be left unattended in outdoor areas.

The activation of the public realm external to the site would depend on the existing wind conditions in the streetscapes that are often beyond the control of the proposed development. For cases where the existing wind conditions in the public realm external to the site are on the walking criterion, then the proposed Development should not have any adverse wind effects in these areas.

All areas of the development must satisfy the pedestrian wind safety criterion.

4. EXPERIMENTAL TECHNIQUE

The building model was tested in a model of the natural wind generated by flow over roughness elements augmented by vorticity generators at the beginning of the wind tunnel working section. The approach Terrain Categories have been assessed based on the definitions in AS/NZS1170.2:2021 and has been determined as Terrain Category 3 (suburban terrain) for all wind directions.

The velocity and turbulence profiles for the Terrain Category is provided in Appendix A.

Hot-wire anemometers were used to measure the local wind speeds at locations in and around the development. The positions of the measurement locations satisfied the minimum study radius from the development as required by Clause 58.04-4. Some of the positions of the measurement locations were outside the minimum radius where significant pedestrian spaces were identified. The minimum radius examined was half the building height or width, whichever is greater, measured from the site boundaries. Since the development consists of multiple buildings, the minimum radius used by MEL Consultants is large compared to a radius for an individual development site. The Test Locations at the ground level, neighbouring upper level car park, and upper level terraces (typical locations) are shown in Figures 4a-4d.

The wind tunnel velocity measurements were made for an equivalent 1 hour period in full scale and filtered to determine the mean and an equivalent full scale 3 second gust wind speed for 16 wind directions.

The following velocity ratios were measured in the wind tunnel:

$$\text{mean } \bar{V}_R = \frac{\bar{V}_{local}}{\bar{V}_{300m}}$$

$$\text{gust } \hat{V}_R = \frac{\hat{V}_{local}}{\bar{V}_{300m}}$$

where:

$\bar{V}_{local}$ is the mean velocity

$\hat{V}_{300m}$ is the gust velocity

V_{300m} is the velocity at the free-stream reference height of 300m

These measured velocity ratios were combined with a statistical model of the local wind climate that relates wind speed to a probability of exceedance. The model of the wind climate also includes the directional variation of wind speed (frequency). The measured wind speeds are assessed against the pedestrian safety and the pedestrian comfort criteria. The pedestrian safety criterion is applied to the annual hourly maximum wind gusts for each wind direction. The pedestrian comfort criteria are based on all wind directions combined (i.e. summation of exceedances across 360° of wind direction) and the pedestrian comfort criterion utilises the maximum of either the hourly mean wind speed, or the gust equivalent mean wind speed (GEM) as follows

$$\text{Mean wind speed for comfort criterion} = \max\left(\bar{V}, \frac{\hat{V}}{1.85}\right)$$

where:

$\bar{V}$ is the mean wind speed

$\hat{V}$ is the 3-second gust wind speed

$\frac{\hat{V}}{1.85}$ is the gust equivalent mean (GEM) velocity

The three model configurations examined by this study are as follows:

Existing Configuration

- Existing surrounding proximity model
- Existing building occupying the development site

Proposed Configuration

- Existing surrounding proximity model
- Proposed 79-81 Victoria Parade development

Proposed Configuration with wind mitigation strategies

- Existing surrounding proximity model
- Proposed 79-81 Victoria Parade development
- 2m balustrade on Level 14 and 22 communal terraces
- Full height screen on Level 12, 16 and 20 private terraces

The wind tunnel study has been undertaken to exceed the requirements of the Australasian Wind Engineering Society Quality Assurance Manual for Wind Tunnel Studies.

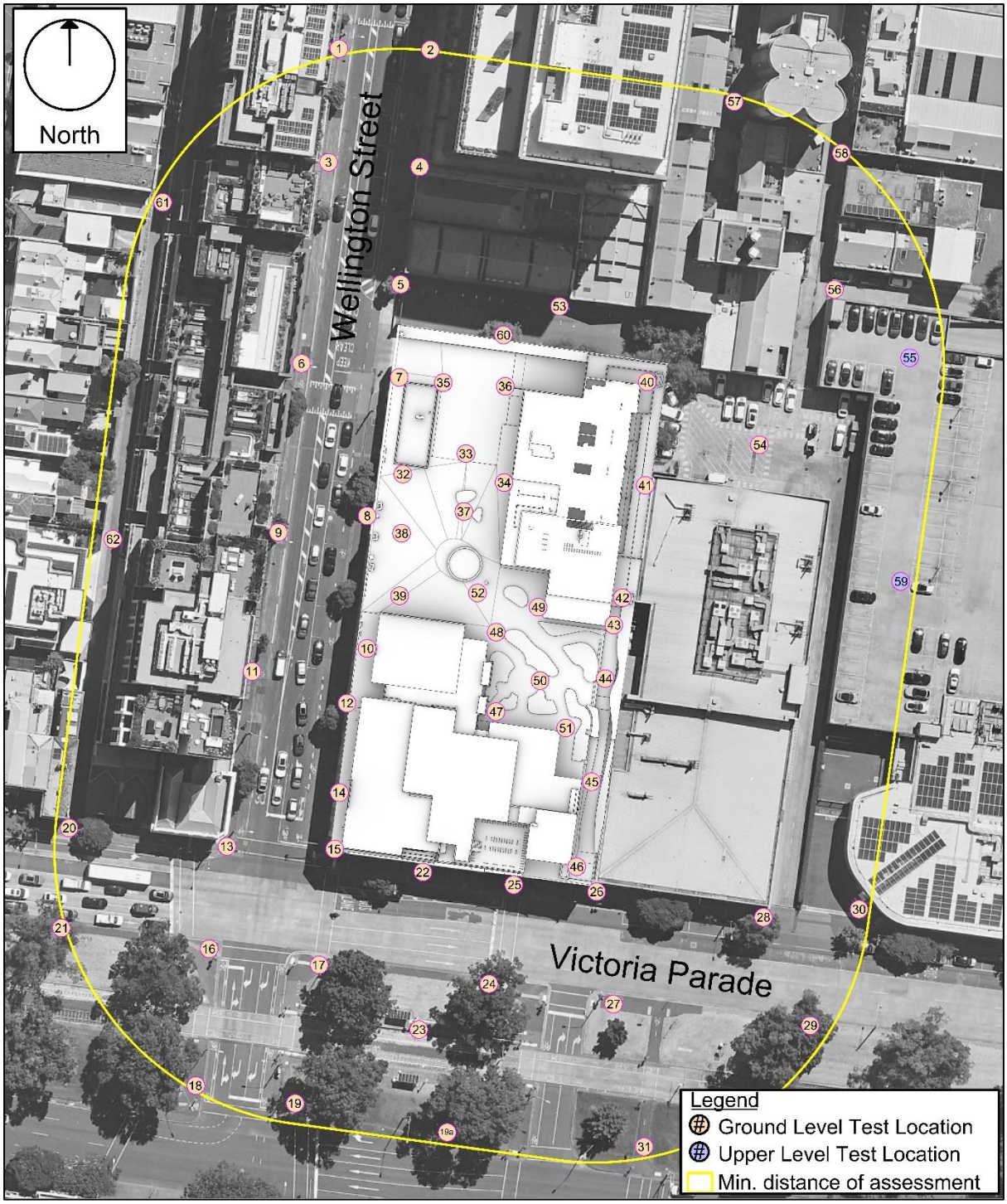

Figure 4a - Test Locations in the streetscapes surrounding and neighbouring upper level car park of the proposed 79-81 Victoria Parade development.

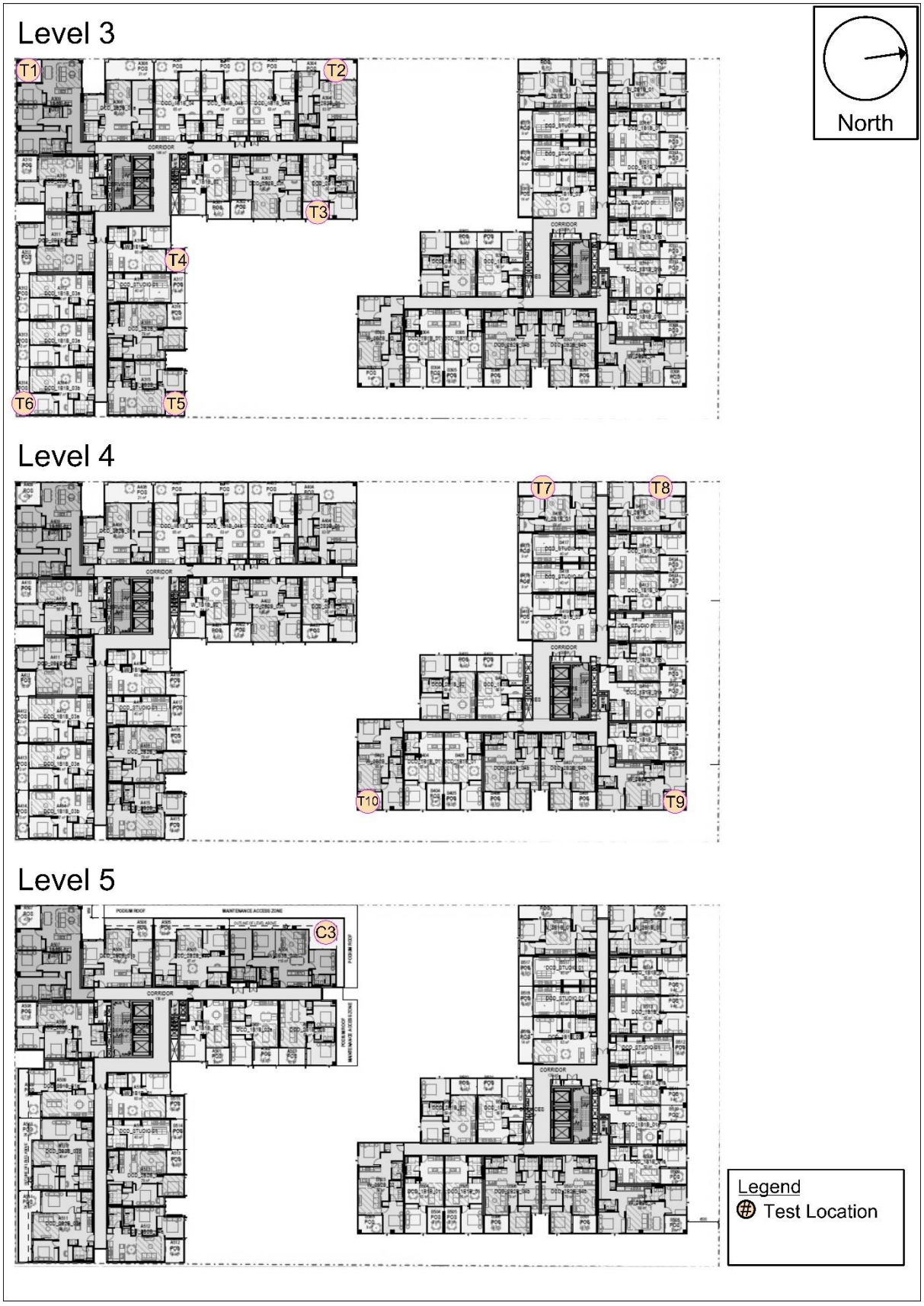

Figure 4b - Level 3, 4 and 5 Terraces Test Locations on the proposed 79-81 Victoria Parade development.

Figure 4c - Level 7, 12 and 14 Terraces Test Locations on the proposed 79-81 Victoria Parade development.

Figure 4d - Level 16, 20 and 22 Terraces Test Locations on the proposed 79-81 Victoria Parade development.

5. DISCUSSION OF RESULTS

The assessment of the wind safety and comfort criteria are presented in Tables 1 to 3. The Tables detail the yearly exceedances and mean wind speed for wind comfort, peak wind speed for wind safety, and the result compared to the recommended wind safety and comfort criteria. The wind conditions for the Existing Configuration have been provided where applicable, for comparison purposes.

In addition to the tabular format, the assessment of the pedestrian comfort and safety are summarised in the following;

Figure 5	Existing Configuration
Figures 6a - 6d	Proposed Configuration
Figures 7a & 7b	Proposed Configuration with wind mitigation strategies

The figures present the pedestrian comfort criteria satisfied using colour code system, where different colours have been used to represent the wind criteria satisfied at each Test Location.

5.1 Wind Safety Assessment

The wind conditions for the Proposed Configurations at all ground level and neighbouring upper-level car park satisfy the safety criterion.

The wind conditions on the communal terrace at level 14 of the south tower (Test Location P2) and the on the communal terrace at level 22 (Test Location P4) of the north tower exceeded the safety criterion.

The wind conditions on the private terraces (typical locations) that are located on the corners of the towers (Test Locations M1, H1, H2, and H4) exceeded the safety criterion.

The mitigation strategies for the above exceedances will be discussed in Section 5.3.

The annual maximum 3 second gust wind speed from each of the 16 wind directions are also presented in polar plots and compared against the safety criterion in Appendix B.

5.2 Wind Comfort Assessment

5.2.1 Ground Level

The wind conditions for the Proposed Configuration on the ground level (Test Locations 1 - 62) satisfy the pedestrian walking comfort criterion at a minimum, with the majority of locations satisfying the standing or sitting comfort criteria.

5.2.2 Building Entrances

The wind conditions for the Proposed Configuration at the building entrances (Test Locations 10, 14, 32, 34, 42, 46 and 47) satisfy the suggested standing comfort criterion or better.

5.2.3 Neighbouring Upper-Level Car Park

The wind conditions for the Proposed Configuration on the neighbouring upper-level car park (Test Locations 55 and 59) satisfy the standing comfort criterion. These Proposed Configuration wind criteria have been shown to be similar or better compared to the Existing Configuration.

5.2.4 Communal and Private Terraces

The wind conditions for the Proposed Configuration at the communal terraces on levels 14 and 22 satisfy the standing (Test Location P1) or walking (Test Locations P2, P3, and P4) comfort criteria at Levels 14 and 22. This outcome is irrelevant due to the exceedance of the safety criterion discussed in Section 5.1 and the effect of the mitigation strategy on the wind comfort will be discussed in Section 5.3.

The wind conditions for the Proposed Configuration on the private terraces on Levels 3, 4, 5, 7, 12, 16, and 20 have been shown to satisfy the suggested walking comfort criterion, with many of the terraces satisfying the sitting or standing comfort criteria. The wind mitigation strategies to address the safety criterion exceedance will be discussed in Section 5.3.

Table 1: Pedestrian Wind Comfort and Safety – Ground Level

Configuration		Wind Criteria							
		Comfort						Safety	
		Yearly exceedence of given wind speed			Mean wind speed (exceeded 20% of year)	Recommended criterion	Result (compared against Recommended criterion)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
		Sitting (3m/s)	Standing (4m/s)	Walking (5m/s)					
		%	%	%	m/s		Pass/Fail	m/s	Pass/Fail
1	Proposed Configuration	24.8%	10.4%	3.7%	3.3	Walking	Pass	13.1	Pass
	Existing Configuration	29.2%	13.3%	5.2%	3.5	Walking	Pass	13.1	Pass
2	Proposed Configuration	26.6%	10.0%	2.8%	3.3	Walking	Pass	13.5	Pass
	Existing Configuration	34.4%	16.5%	6.4%	3.8	Walking	Pass	13.7	Pass
3	Proposed Configuration	21.0%	8.2%	3.1%	3.1	Walking	Pass	14.7	Pass
	Existing Configuration	23.8%	10.1%	3.9%	3.2	Walking	Pass	13.9	Pass
4	Proposed Configuration	19.7%	7.6%	2.3%	3.0	Walking	Pass	12.0	Pass
	Existing Configuration	21.0%	8.1%	2.7%	3.1	Walking	Pass	13.5	Pass
5	Proposed Configuration	39.0%	22.4%	13.9%	4.2	Walking	Pass	19.1	Pass
	Existing Configuration	23.2%	10.9%	5.2%	3.2	Walking	Pass	17.4	Pass
6	Proposed Configuration	22.7%	9.9%	3.9%	3.2	Walking	Pass	14.3	Pass
	Existing Configuration	16.9%	8.1%	4.0%	2.8	Walking	Pass	17.9	Pass
7	Proposed Configuration	36.5%	21.4%	12.2%	4.1	Walking	Pass	16.9	Pass
	Existing Configuration	11.7%	3.1%	1.1%	2.5	Walking	Pass	12.2	Pass
8	Proposed Configuration	12.0%	3.0%	0.8%	2.6	Walking	Pass	12.0	Pass
	Existing Configuration	6.5%	1.4%	0.3%	2.2	Walking	Pass	9.4	Pass
9	Proposed Configuration	10.8%	3.9%	1.8%	2.5	Walking	Pass	15.9	Pass
	Existing Configuration	11.0%	5.1%	2.7%	2.3	Walking	Pass	14.4	Pass
10	Proposed Configuration	7.8%	1.5%	0.3%	2.3	Standing	Pass	9.0	Pass
11	Proposed Configuration	13.3%	4.8%	1.6%	2.6	Walking	Pass	12.4	Pass
	Existing Configuration	11.2%	4.8%	1.7%	2.4	Walking	Pass	11.3	Pass
12	Proposed Configuration	12.0%	4.4%	1.5%	2.5	Walking	Pass	12.6	Pass
	Existing Configuration	14.7%	5.4%	2.0%	2.7	Walking	Pass	12.2	Pass
13	Proposed Configuration	20.3%	8.5%	2.8%	3.0	Walking	Pass	12.4	Pass
	Existing Configuration	12.4%	3.3%	0.6%	2.6	Walking	Pass	9.8	Pass
14	Proposed Configuration	17.8%	5.5%	1.4%	2.9	Standing	Pass	11.7	Pass
	Existing Configuration	7.0%	1.0%	0.2%	2.3	Walking	Pass	9.0	Pass
15	Proposed Configuration	34.9%	18.2%	8.7%	3.9	Walking	Pass	14.6	Pass
	Existing Configuration	17.5%	5.5%	1.3%	2.9	Walking	Pass	10.4	Pass
16	Proposed Configuration	33.1%	15.7%	6.4%	3.7	Walking	Pass	14.0	Pass
	Existing Configuration	30.0%	13.9%	6.3%	3.5	Walking	Pass	15.2	Pass
17	Proposed Configuration	41.9%	22.9%	10.4%	4.2	Walking	Pass	14.6	Pass
	Existing Configuration	28.2%	12.4%	4.9%	3.5	Walking	Pass	14.0	Pass
18	Proposed Configuration	35.0%	17.2%	7.0%	3.8	Walking	Pass	13.9	Pass
	Existing Configuration	27.4%	11.8%	4.5%	3.4	Walking	Pass	15.5	Pass
19	Proposed Configuration	32.2%	14.2%	4.8%	3.6	Walking	Pass	12.7	Pass
	Existing Configuration	29.0%	12.4%	3.8%	3.4	Walking	Pass	12.8	Pass
19a	Proposed Configuration	33.1%	14.9%	5.5%	3.6	Walking	Pass	13.5	Pass
	Existing Configuration	22.8%	8.3%	2.5%	3.1	Walking	Pass	12.2	Pass
20	Proposed Configuration	34.9%	18.1%	8.1%	3.9	Walking	Pass	14.5	Pass
	Existing Configuration	28.1%	11.5%	3.6%	3.4	Walking	Pass	13.0	Pass

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Table 1 (continued): Pedestrian Wind Comfort and Safety – Ground Level

	Configuration	Wind Criteria							
		Comfort						Safety	
		Yearly exceedence of given wind speed			Mean wind speed (exceeded 20% of year)	Recommended criterion	Result (compared against Recommended criterion)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
		Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s		Pass/Fail	m/s	Pass/Fail
21	Proposed Configuration	38.1%	20.0%	8.9%	4.0	Walking	Pass	14.3	Pass
	Existing Configuration	35.4%	17.1%	7.3%	3.8	Walking	Pass	15.0	Pass
22	Proposed Configuration	17.9%	7.0%	3.0%	2.9	Walking	Pass	15.3	Pass
	Existing Configuration	18.5%	8.3%	3.7%	2.9	Walking	Pass	14.5	Pass
23	Proposed Configuration	38.0%	19.5%	8.8%	4.0	Walking	Pass	14.0	Pass
	Existing Configuration	18.5%	5.7%	1.4%	2.9	Walking	Pass	11.3	Pass
24	Proposed Configuration	39.8%	20.9%	9.6%	4.1	Walking	Pass	16.2	Pass
	Existing Configuration	24.3%	10.2%	3.8%	3.2	Walking	Pass	14.4	Pass
25	Proposed Configuration	13.1%	3.9%	1.0%	2.6	Walking	Pass	11.2	Pass
	Existing Configuration	14.4%	5.8%	2.0%	2.6	Walking	Pass	12.5	Pass
26	Proposed Configuration	26.1%	11.7%	4.8%	3.3	Walking	Pass	15.0	Pass
	Existing Configuration	18.2%	7.9%	3.2%	2.9	Walking	Pass	14.6	Pass
27	Proposed Configuration	33.9%	16.3%	6.5%	3.7	Walking	Pass	14.8	Pass
	Existing Configuration	24.3%	10.6%	4.0%	3.2	Walking	Pass	14.3	Pass
28	Proposed Configuration	50.3%	33.2%	19.1%	4.9	Walking	Pass	18.5	Pass
	Existing Configuration	34.2%	16.6%	6.7%	3.8	Walking	Pass	15.8	Pass
29	Proposed Configuration	50.4%	33.3%	19.6%	5.0	Walking	Pass	18.6	Pass
	Existing Configuration	35.2%	16.6%	7.0%	3.8	Walking	Pass	14.7	Pass
30	Proposed Configuration	30.4%	14.7%	5.8%	3.6	Walking	Pass	15.0	Pass
	Existing Configuration	2.18%	7.3%	1.9%	3.1	Walking	Pass	11.7	Pass
31	Proposed Configuration	4.10%	23.6%	13.3%	4.3	Walking	Pass	17.7	Pass
	Existing Configuration	34.5%	17.7%	7.3%	3.8	Walking	Pass	14.9	Pass
32	Proposed Configuration	4.3%	0.7%	0.1%	2.0	Standing	Pass	8.8	Pass
33	Proposed Configuration	37.6%	20.8%	9.9%	4.1	Walking	Pass	16.4	Pass
34	Proposed Configuration	22.0%	9.3%	3.3%	3.1	Standing	Pass	12.5	Pass
35	Proposed Configuration	32.6%	19.3%	10.3%	3.9	Walking	Pass	16.9	Pass
36	Proposed Configuration	14.7%	5.4%	1.8%	2.6	Walking	Pass	12.1	Pass
37	Proposed Configuration	19.8%	7.5%	2.9%	3.0	Walking	Pass	14.0	Pass
38	Proposed Configuration	23.4%	8.7%	2.8%	3.2	Walking	Pass	13.2	Pass
39	Proposed Configuration	31.9%	16.0%	6.8%	3.7	Walking	Pass	14.6	Pass
40	Proposed Configuration	42.0%	25.6%	13.4%	4.4	Walking	Pass	16.9	Pass
	Existing Configuration	10.4%	2.9%	0.6%	2.4	Walking	Pass	10.7	Pass

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Table 1 (continued): Pedestrian Wind Comfort and Safety – Ground Level

Configuration		Wind Criteria							
		Comfort						Safety	
		Yearly exceedence of given wind speed			Mean wind speed (exceeded 20% of year)	Recommended criterion	Result (compared against Recommended criterion)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
		Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s		Pass/Fail	m/s	Pass/Fail
41	Proposed Configuration	20.3%	12.8%	8.2%	3.0	Walking	Pass	18.1	Pass
42	Proposed Configuration	17.3%	5.3%	1.2%	2.9	Standing	Pass	11.4	Pass
43	Proposed Configuration	18.4%	7.1%	2.3%	2.9	Walking	Pass	12.2	Pass
44	Proposed Configuration	16.2%	5.6%	1.4%	2.8	Walking	Pass	11.1	Pass
45	Proposed Configuration	18.3%	5.3%	1.1%	2.9	Walking	Pass	10.0	Pass
46	Proposed Configuration	19.7%	8.6%	2.9%	3.0	Standing	Pass	12.4	Pass
47	Proposed Configuration	10.5%	3.4%	0.9%	2.4	Standing	Pass	10.4	Pass
48	Proposed Configuration	31.4%	15.5%	7.7%	3.6	Walking	Pass	14.4	Pass
49	Proposed Configuration	39.7%	21.9%	12.3%	4.2	Walking	Pass	17.8	Pass
50	Proposed Configuration	26.6%	12.6%	5.8%	3.4	Walking	Pass	15.0	Pass
51	Proposed Configuration	30.2%	12.9%	4.8%	3.5	Walking	Pass	13.0	Pass
52	Proposed Configuration	23.7%	8.3%	2.1%	3.2	Walking	Pass	11.0	Pass
53	Proposed Configuration	21.3%	7.2%	1.9%	3.1	Walking	Pass	11.5	Pass
	Existing Configuration	9.7%	2.9%	0.8%	2.4	Walking	Pass	12.1	Pass
54	Proposed Configuration	24.0%	14.0%	6.7%	3.4	Walking	Pass	15.9	Pass
	Existing Configuration	3.7%	0.7%	0.2%	2.0	Walking	Pass	8.9	Pass
56	Proposed Configuration	13.9%	6.0%	2.2%	2.5	Walking	Pass	12.5	Pass
	Existing Configuration	3.3%	0.7%	0.1%	1.8	Walking	Pass	8.7	Pass
57	Proposed Configuration	2.4%	0.2%	0.0%	1.9	Walking	Pass	6.7	Pass
	Existing Configuration	2.8%	0.4%	0.1%	1.9	Walking	Pass	8.3	Pass
58	Proposed Configuration	9.7%	2.6%	0.4%	2.3	Walking	Pass	10.3	Pass
	Existing Configuration	13.0%	3.6%	0.6%	2.6	Walking	Pass	10.7	Pass
60	Proposed Configuration	20.1%	8.4%	2.8%	3.0	Walking	Pass	12.9	Pass
	Existing Configuration	10.9%	3.5%	1.0%	2.5	Walking	Pass	13.0	Pass
61	Proposed Configuration	7.5%	2.1%	0.5%	2.2	Walking	Pass	11.0	Pass
	Existing Configuration	7.7%	2.1%	0.5%	2.2	Walking	Pass	10.7	Pass
62	Proposed Configuration	8.1%	2.1%	0.5%	2.3	Walking	Pass	10.2	Pass
	Existing Configuration	4.9%	1.4%	0.3%	1.9	Walking	Pass	9.9	Pass

(continued on next page)

Table 2: Pedestrian Wind Comfort and Safety – Neighbouring Upper Level Car Park

Configuration		Wind Criteria							
		Comfort						Safety	
		Yearly exceedence of given wind speed			Mean wind speed (exceeded 20% of year)	Recommended criterion	Result (compared against Recommended criterion)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
		Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s		Pass/Fail	m/s	Pass/Fail
55	Proposed Configuration	36.4%	19.2%	8.5%	3.9	Walking	Pass	15.9	Pass
	Existing Configuration	28.1%	12.1%	4.9%	3.5	Walking	Pass	13.7	Pass
59	Proposed Configuration	32.7%	16.7%	7.1%	3.7	Walking	Pass	14.1	Pass
	Existing Configuration	32.9%	15.6%	6.4%	3.7	Walking	Pass	14.1	Pass

Table 3: Pedestrian Wind Comfort and Safety – Upper Level Terraces

Configuration		Wind Criteria							
		Comfort						Safety	
		Yearly exceedence of given wind speed			Mean wind speed (exceeded 20% of year)	Recommended criterion	Result (compared against Recommended criterion)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
		Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s		Pass/Fail	m/s	Pass/Fail
T1	Proposed Configuration	11.4%	6.3%	3.2%	2.1	Walking	Pass	16.1	Pass
T2	Proposed Configuration	12.6%	4.0%	1.2%	2.6	Walking	Pass	11.5	Pass
T3	Proposed Configuration	6.6%	1.5%	0.3%	2.0	Walking	Pass	9.0	Pass
T4	Proposed Configuration	2.6%	0.7%	0.2%	1.6	Walking	Pass	9.4	Pass
T5	Proposed Configuration	7.3%	1.6%	0.3%	2.1	Walking	Pass	9.7	Pass
T6	Proposed Configuration	11.4%	4.2%	1.2%	2.3	Walking	Pass	13.2	Pass
T7	Proposed Configuration	17.2%	5.5%	1.4%	2.8	Walking	Pass	11.0	Pass
T8	Proposed Configuration	25.9%	10.2%	3.5%	3.3	Walking	Pass	14.3	Pass
T9	Proposed Configuration	5.3%	1.6%	0.6%	1.9	Walking	Pass	11.0	Pass
T10	Proposed Configuration	4.6%	1.5%	0.5%	1.7	Walking	Pass	10.6	Pass
M1	Proposed Configuration	29.0%	18.8%	11.1%	3.9	Walking	NA - Safety criterion failed	21.9	Fail
	Proposed Configuration with wind mitigation strategies	16.1%	9.5%	5.7%	2.6	Walking	Pass	17.8	Pass
M2	Proposed Configuration	35.6%	22.7%	14.6%	4.3	Walking	Pass	18.6	Pass
M3	Proposed Configuration	33.9%	22.5%	14.8%	4.3	Walking	Pass	18.6	Pass
M4	Proposed Configuration	15.6%	9.5%	4.5%	2.5	Walking	Pass	17.0	Pass
M5	Proposed Configuration	8.5%	1.5%	0.3%	2.3	Walking	Pass	10.0	Pass
M6	Proposed Configuration	19.2%	9.4%	4.3%	2.9	Walking	Pass	16.3	Pass
M7	Proposed Configuration	12.1%	3.7%	1.0%	2.5	Walking	Pass	12.0	Pass
M8	Proposed Configuration	26.4%	11.0%	3.9%	3.3	Walking	Pass	15.8	Pass
M9	Proposed Configuration	10.9%	3.2%	0.6%	2.4	Walking	Pass	10.1	Pass
P1	Proposed Configuration	23.4%	9.2%	3.8%	3.2	Standing	Pass	15.6	Pass
P2	Proposed Configuration	42.6%	25.9%	13.5%	4.4	Standing	NA - Safety criterion failed	22.4	Fail
	Proposed Configuration with wind mitigation strategies	27.8%	12.6%	5.1%	3.5	Standing	Pass	14.7	Pass
P3	Proposed Configuration	36.5%	23.8%	15.8%	4.4	Standing	Fail	19.0	Pass
P4	Proposed Configuration	43.7%	28.8%	19.4%	4.9	Standing	NA - Safety criterion failed	21.3	Fail
	Proposed Configuration with wind mitigation strategies	22.9%	9.7%	3.6%	3.2	Standing	Pass	14.9	Pass
H1	Proposed Configuration	36.7%	22.3%	13.3%	4.2	Walking	NA - Safety criterion failed	20.9	Fail
	Proposed Configuration with wind mitigation strategies	29.5%	16.6%	9.0%	3.7	Walking	Pass	17.3	Pass
H2	Proposed Configuration	37.3%	24.9%	15.7%	4.5	Walking	NA - Safety criterion failed	20.4	Fail
	Proposed Configuration with wind mitigation strategies	9.7%	4.5%	1.8%	2.0	Walking	Pass	12.4	Pass
H3	Proposed Configuration	29.2%	13.6%	5.5%	3.5	Walking	Pass	15.9	Pass
H4	Proposed Configuration	40.4%	28.3%	20.2%	5.0	Walking	NA - Safety criterion failed	21.6	Fail
	Proposed Configuration with wind mitigation strategies	24.1%	15.3%	9.5%	3.4	Walking	Pass	17.3	Pass
H5	Proposed Configuration	29.1%	18.7%	12.2%	3.8	Walking	Pass	19.7	Pass
H6	Proposed Configuration	25.1%	14.8%	9.2%	3.4	Walking	Pass	18.9	Pass
C1	Proposed Configuration	35.9%	18.5%	7.2%	3.9	Walking	Pass	13.6	Pass
C2	Proposed Configuration	29.1%	16.8%	7.9%	3.7	Walking	Pass	19.2	Pass
C3	Proposed Configuration	40.2%	21.4%	10.1%	4.1	Walking	Pass	16.4	Pass

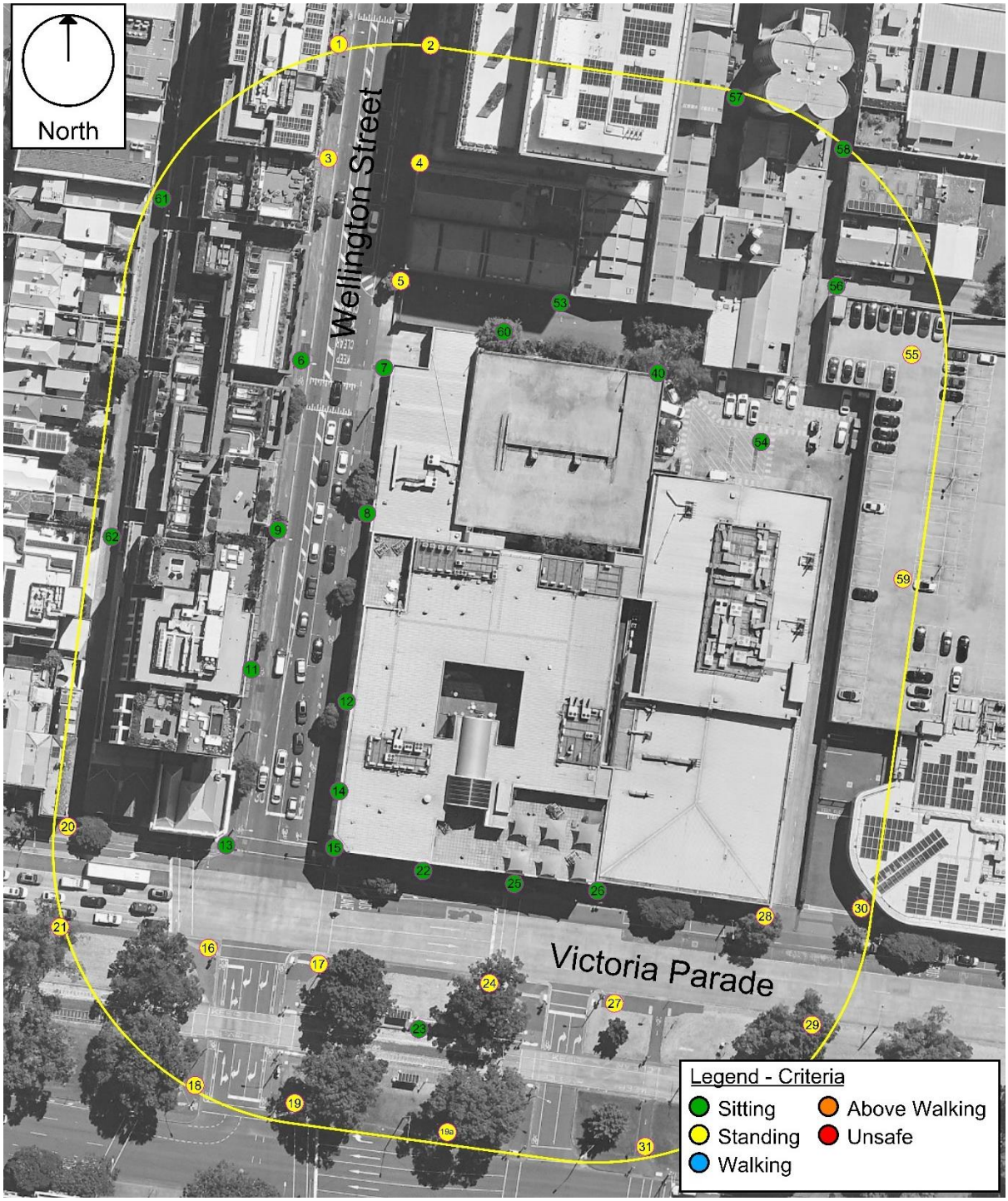


Figure 5 - Summary of wind criteria satisfied on the ground level surrounding and neighbouring upper level car park of the 79-81 Victoria Parade development for the Existing Configuration.

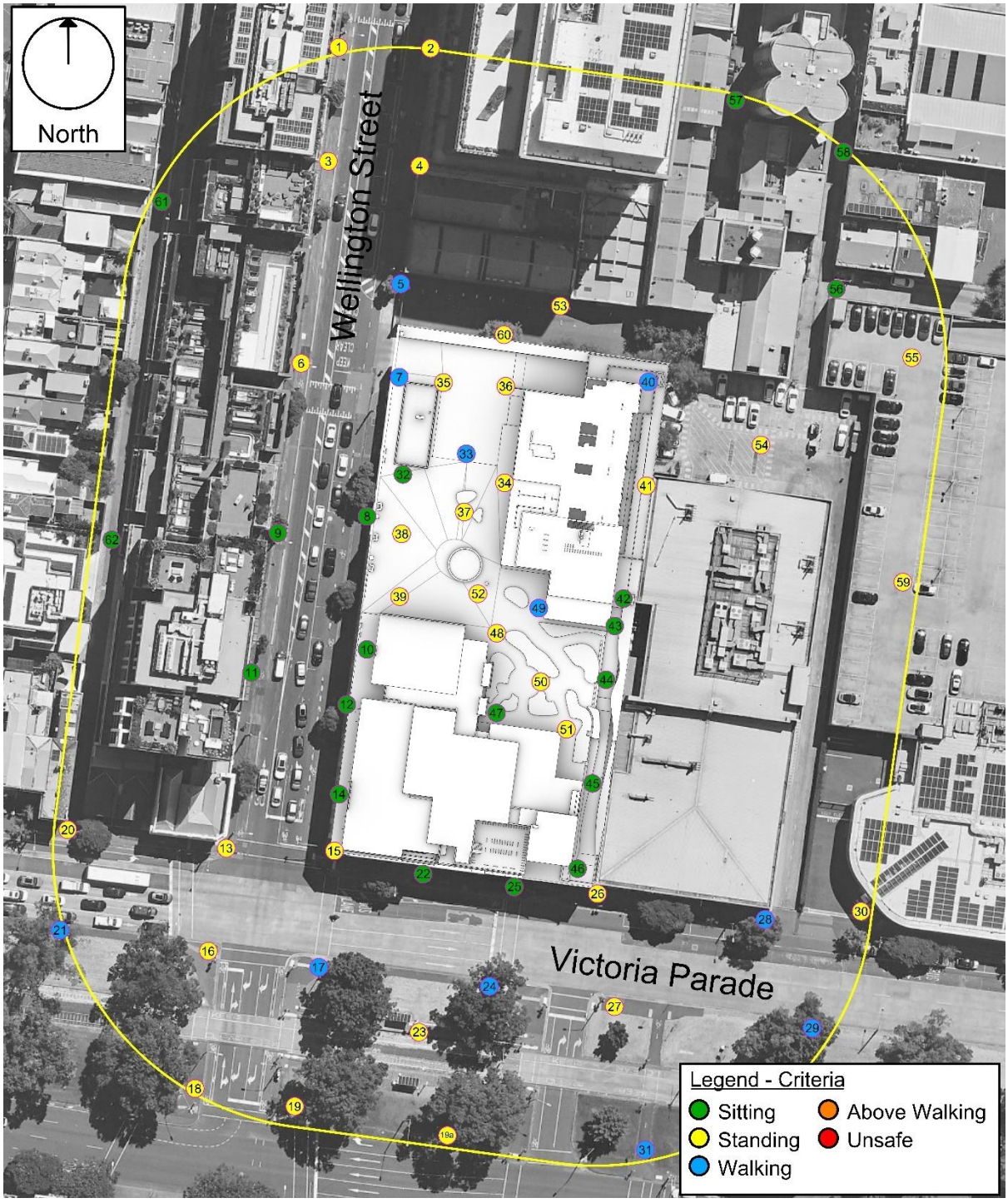


Figure 6a - Summary of wind criteria satisfied on the ground level surrounding and neighbouring upper level car park of the 79-81 Victoria Parade development for the Proposed Configuration.

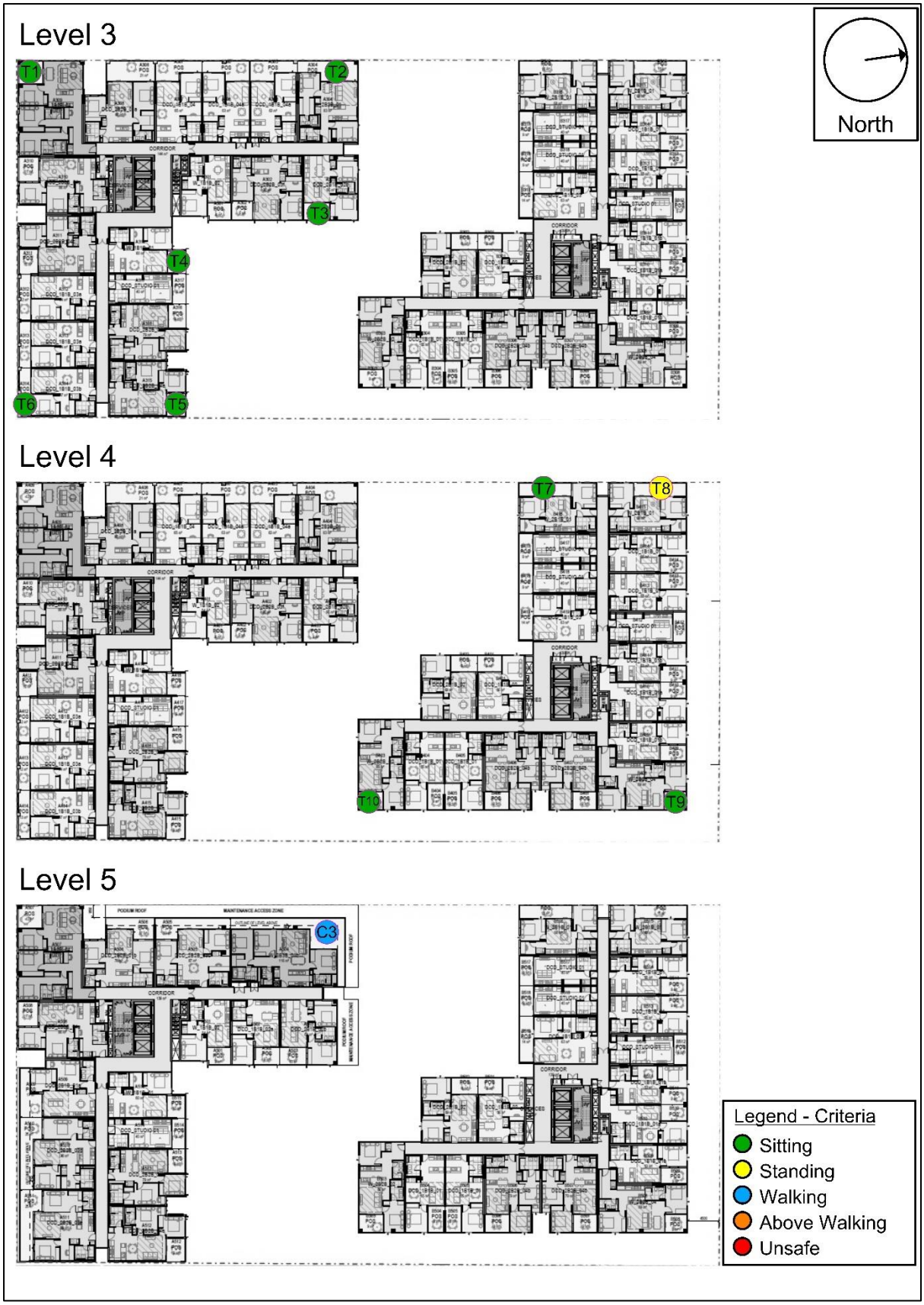


Figure 6b - Summary of wind criteria satisfied on the Level 3, 4 and 5 terraces of the 79-81 Victoria Parade development for the Proposed Configuration.

Figure 6c - Summary of wind criteria satisfied on the Level 7, 12 and 14 terraces of the 79-81 Victoria Parade development for the Proposed Configuration.

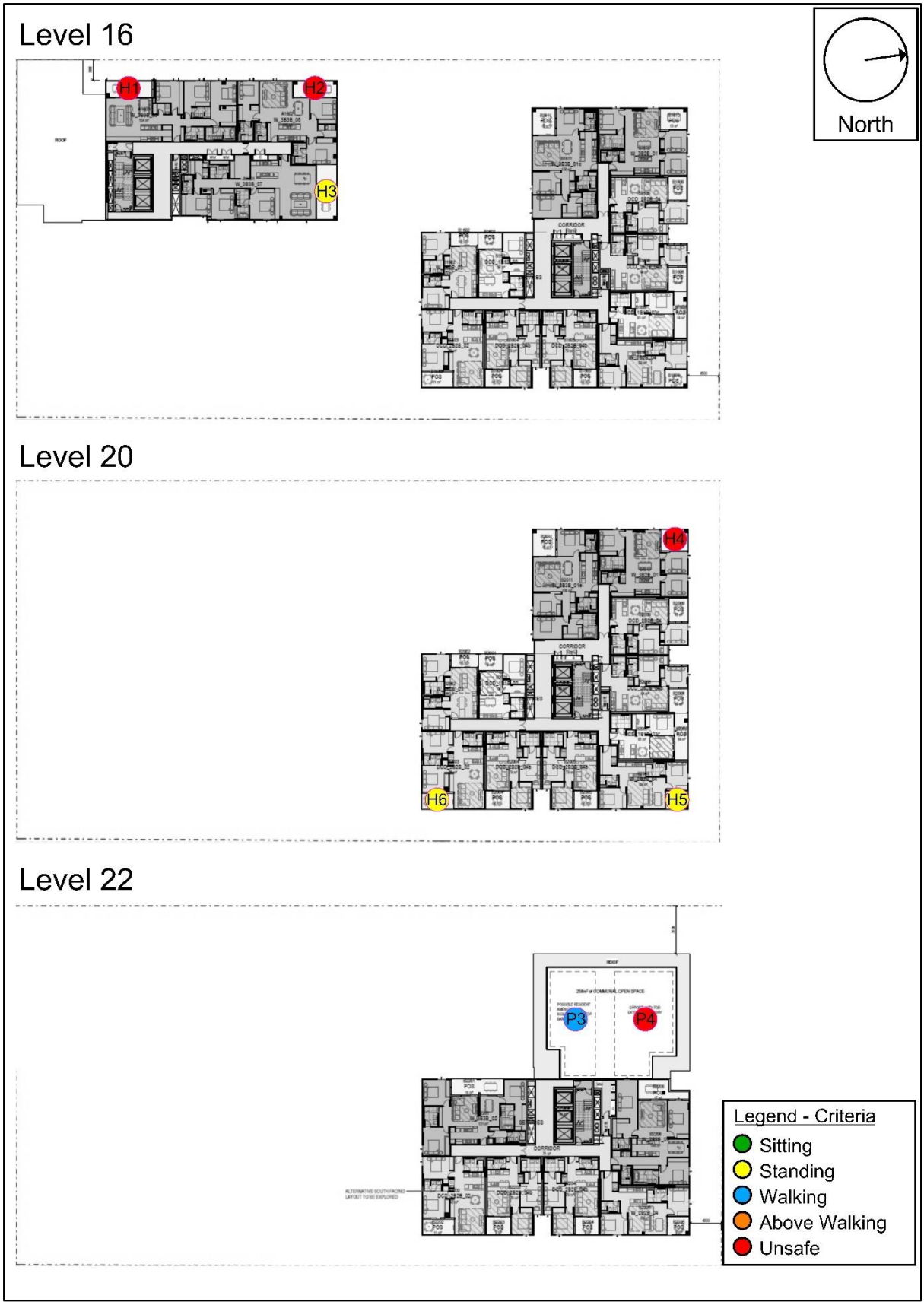


Figure 6d - Summary of wind criteria satisfied on the Level 16, 20 and 22 terraces of the 79-81 Victoria Parade development for the Proposed Configuration.

5.3 Wind Mitigation Strategies

Wind mitigation strategies to demonstrate the exceedances of the safety criterion on the communal and private terraces are able to be mitigated have been developed and tested.

The wind conditions on the levels 14 and 22 communal terraces have been shown to improve to satisfy the safety criterion with a 2m high perimeter balustrades as shown in Figures 7a and 7b. This wind mitigation strategy also improved the wind comfort to satisfy the standing comfort criterion. The improvement of the wind comfort was demonstrated at Test Locations P2 and P4, and a similar outcome is expected to Test Locations P1 and P3.

The wind conditions on the private terraces at levels 12, 16, and 20 (Test Locations M1, H1, H2 and H4) have been demonstrated to improve to satisfy the safety criterion with the addition of a full height solid screen along one edge of the terrace (see details in Figures 7a and 7b). This mitigation strategy also improved the wind comfort on the terraces to satisfy the standing or sitting comfort criterion. The terraces examined are typical locations, so the mitigation strategies must be applied to the terraces above and below the typical location terrace.

MEL Consultants will work with the design team during the detailed design stage to develop the architectural response to achieve the wind mitigation for the terraces.

Figure 7a - Summary of wind criteria satisfied on Level 12 and 14 of the 79-81 Victoria Parade development for the Proposed Configuration with wind mitigation strategies.

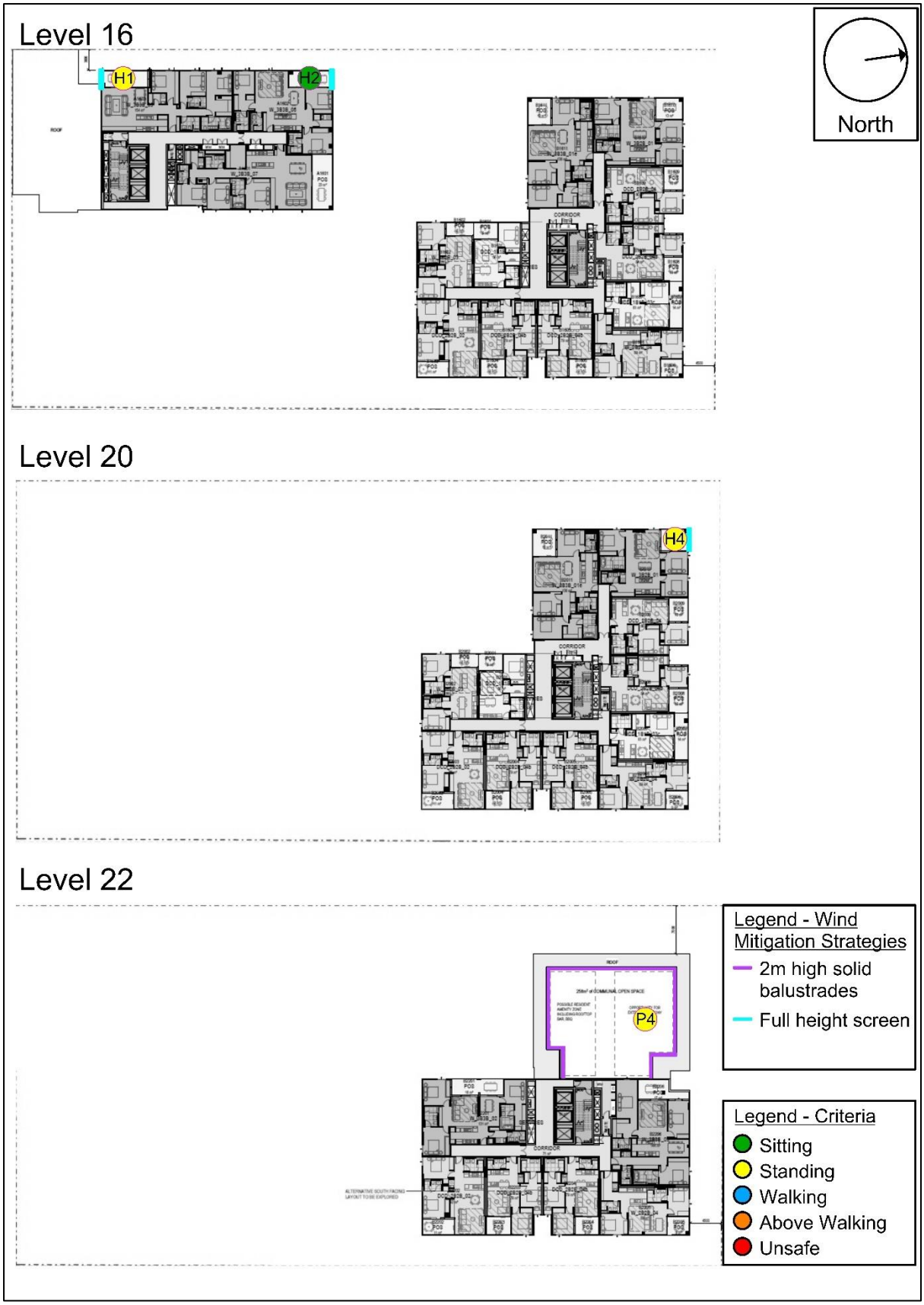


Figure 7b - Summary of wind criteria satisfied on Level 16, 20 and 22 of the 79-81 Victoria Parade development for the Proposed Configuration with wind mitigation strategies.

APPENDIX A – VELOCITY AND TURBULENCE PROFILES

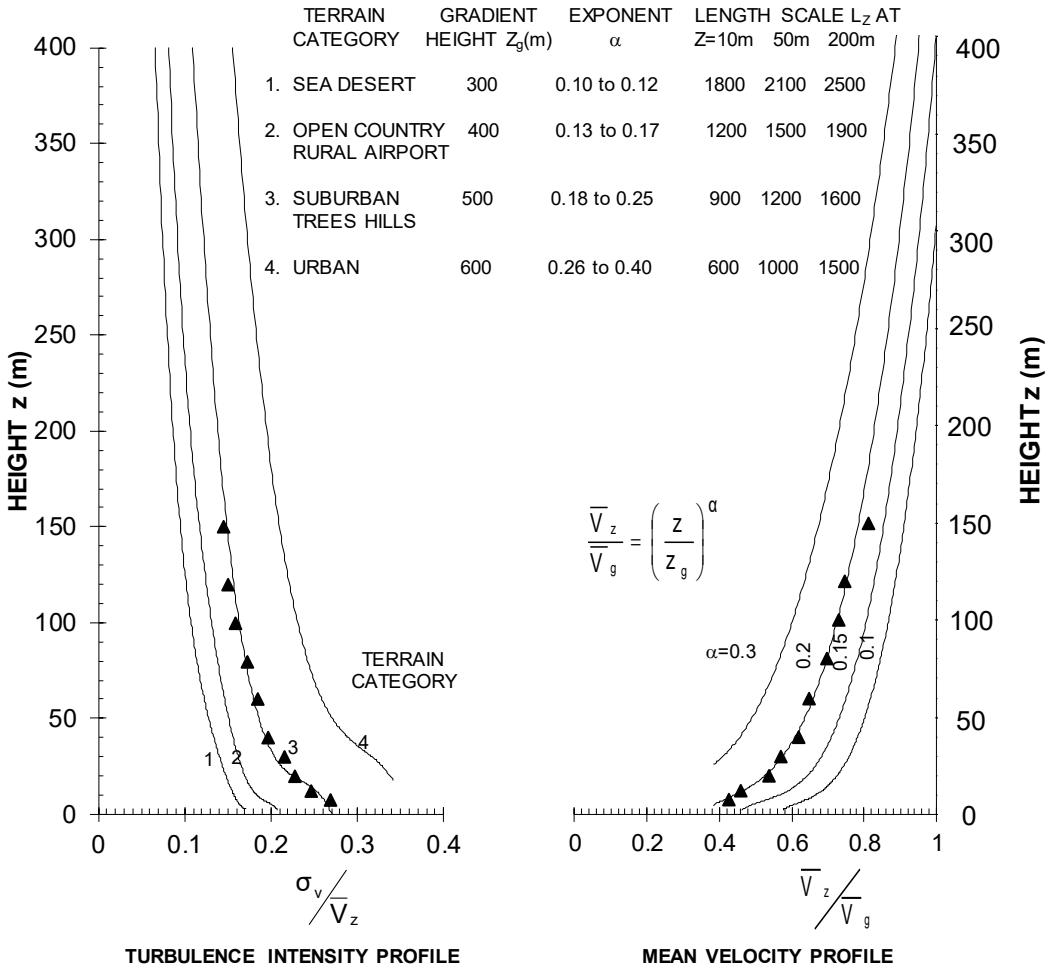


Figure A1 -1/400 scale TC3 boundary layer turbulence intensity and mean velocity profiles in the MEL Consultants Boundary Layer Wind Tunnel 4.8m x 2.2m working section, scaled to full scale dimensions.

APPENDIX B – PEDESTRIAN SAFETY PLOTS

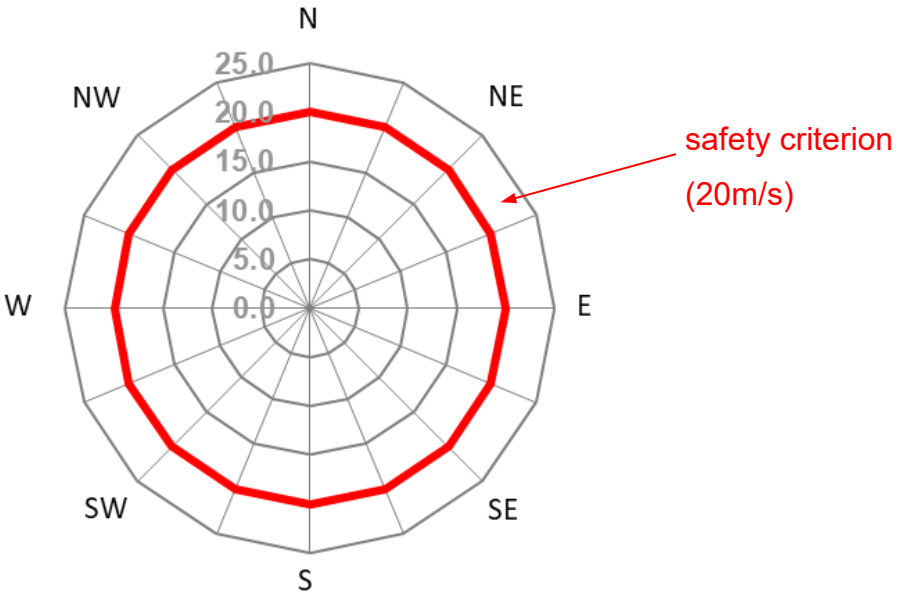
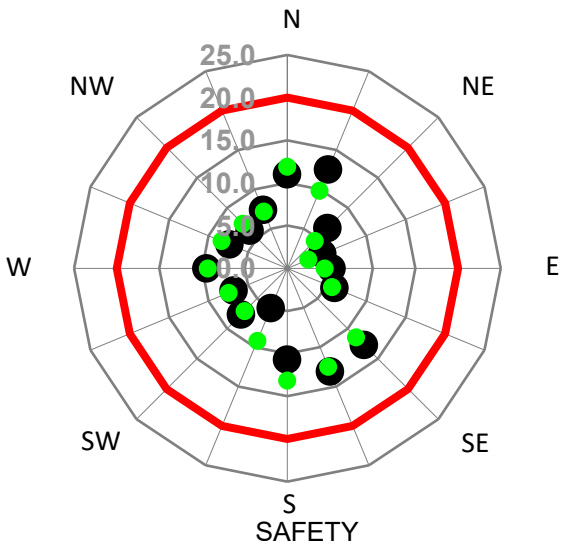


Figure B1 – Environmental wind safety criterion for Melbourne Region based on local 3 second peak gust wind speed

Test Location **1**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	24.8%	10.4%	3.7%	3.3	Pass	13.1	Pass
● **Existing Configuration**	29.2%	13.3%	5.2%	3.5	Pass	13.1	Pass
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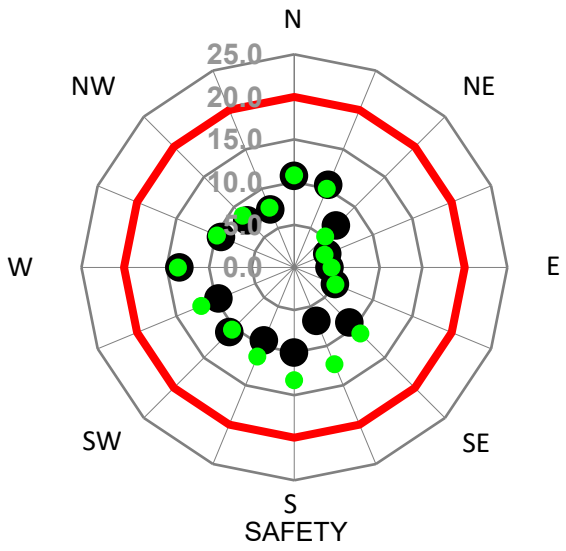
Test Location **2**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	26.6%	10.0%	2.8%	3.3	Pass	13.5	Pass
● **Existing Configuration**	34.4%	16.5%	6.4%	3.8	Pass	13.7	Pass
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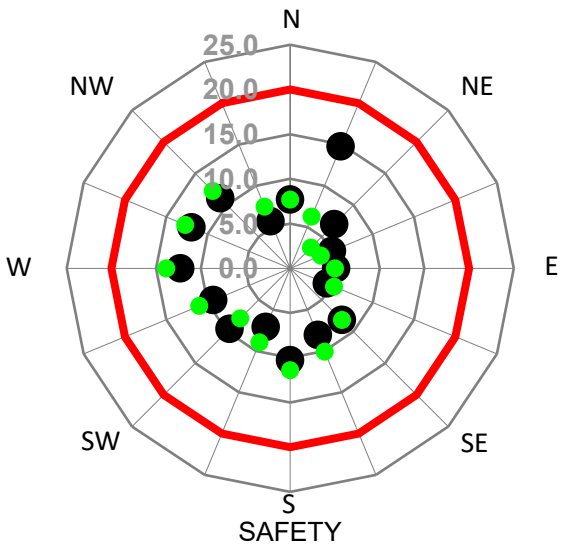
Test Location **3**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	21.0%	8.2%	3.1%	3.1	Pass	14.7	Pass
● **Existing Configuration**	23.8%	10.1%	3.9%	3.2	Pass	13.9	Pass
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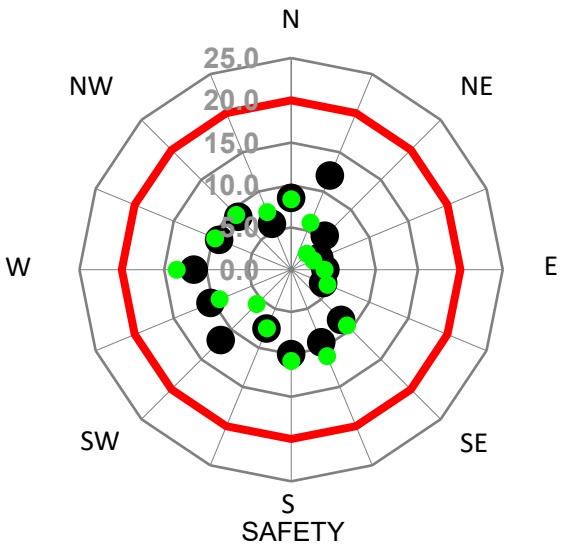
Test Location **4**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	21.7%	7.9%	2.4%	3.1	Pass	12.0	Pass
● **Existing Configuration**	21.0%	8.1%	2.7%	3.1	Pass	13.5	Pass
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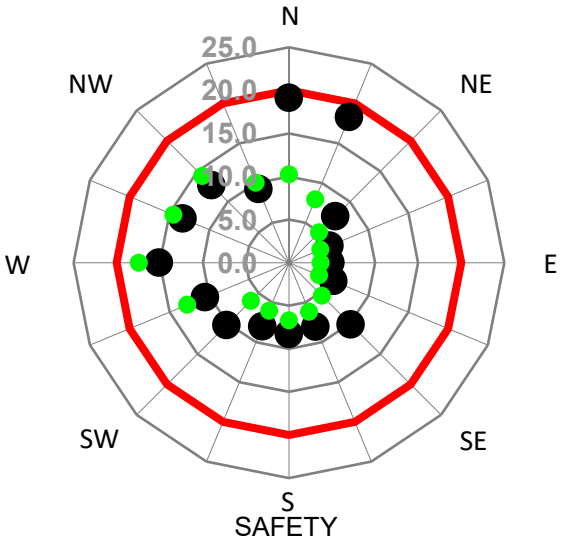
Test Location **5**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	39.0%	22.4%	13.9%	4.2	Pass	19.1	Pass
● **Existing Configuration**	23.2%	10.9%	5.2%	3.2	Pass	17.4	Pass
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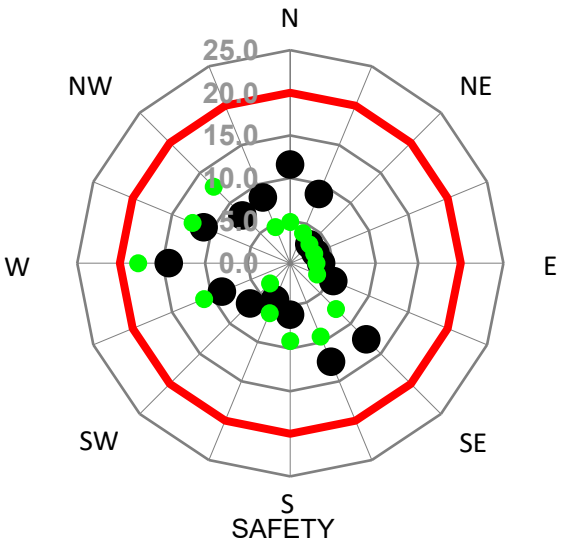
Test Location **6**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	22.7%	9.9%	3.9%	3.2	Pass	14.3	Pass
● **Existing Configuration**	16.9%	8.1%	4.0%	2.8	Pass	17.9	Pass
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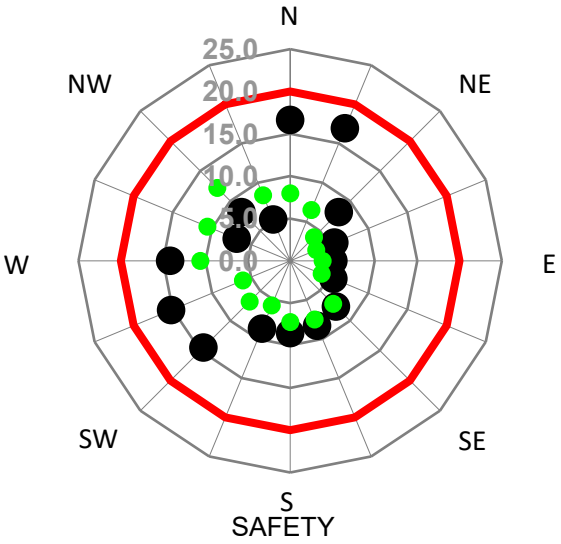
Test Location **7**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	36.5%	21.4%	12.2%	4.1	Pass	16.9	Pass
● **Existing Configuration**	11.7%	3.1%	1.1%	2.5	Pass	12.2	Pass
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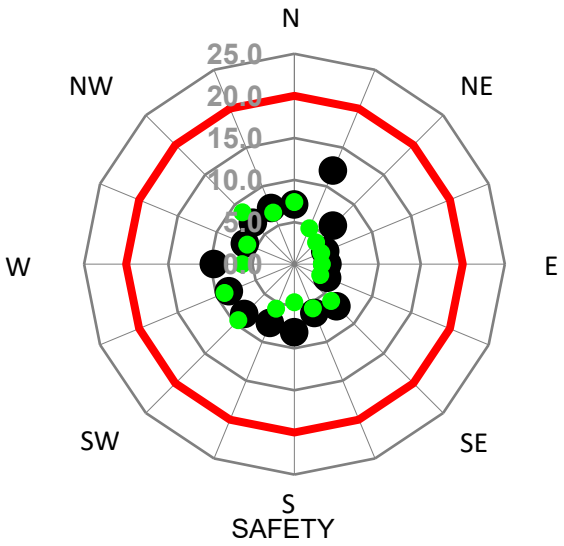
Test Location **8**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	12.0%	3.0%	0.8%	2.6	Pass	12.0	Pass
● **Existing Configuration**	6.5%	1.4%	0.3%	2.2	Pass	9.4	Pass
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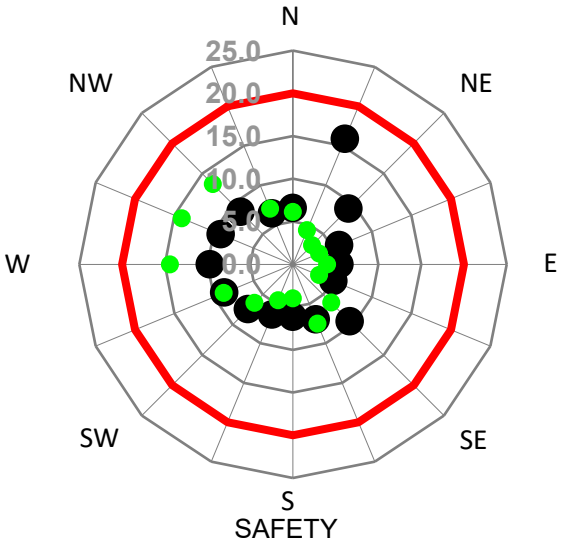
Test Location **9**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	10.8%	3.9%	1.8%	2.5	Pass	15.9	Pass
● **Existing Configuration**	11.0%	5.1%	2.7%	2.3	Pass	14.4	Pass
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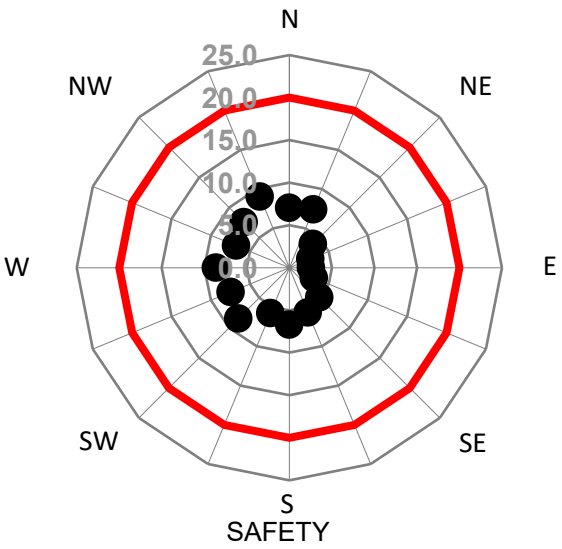
Test Location **10**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 4m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	7.8%	1.5%	0.3%	2.3	Pass	9.0	Pass
● **Existing Configuration**							
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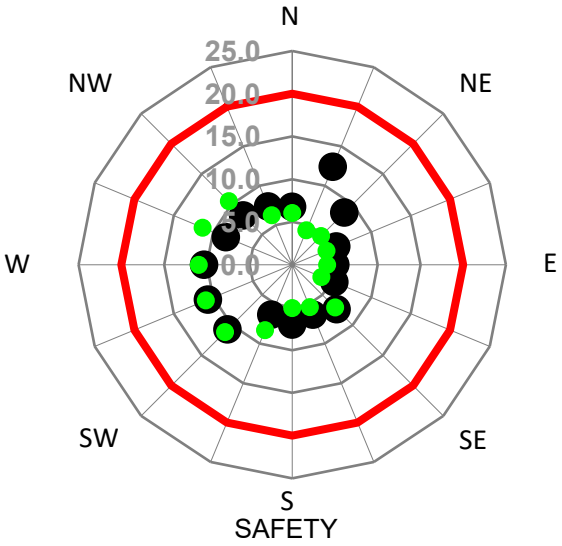
Test Location **11**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	13.3%	4.8%	1.6%	2.6	Pass	12.4	Pass
● **Existing Configuration**	11.2%	4.8%	1.7%	2.4	Pass	11.3	Pass
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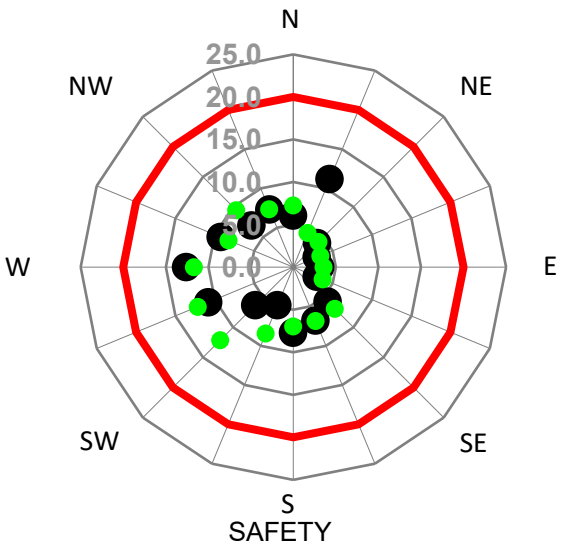
Test Location **12**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	12.0%	4.4%	1.5%	2.5	Pass	12.6	Pass
● **Existing Configuration**	14.7%	5.4%	2.0%	2.7	Pass	12.2	Pass
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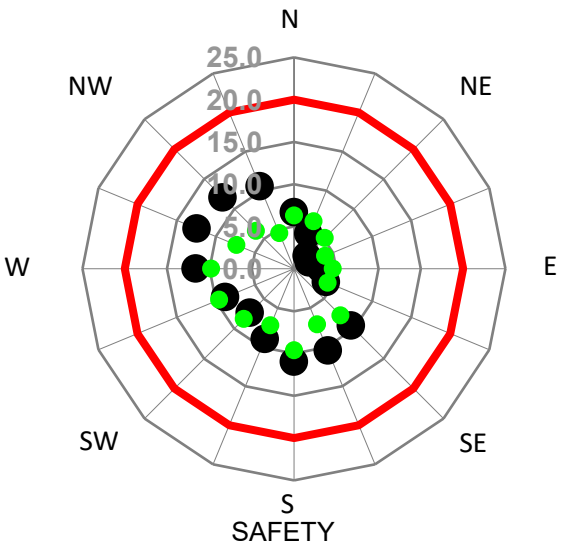
Test Location **13**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	20.3%	8.5%	2.8%	3.0	Pass	12.4	Pass
● **Existing Configuration**	12.4%	3.3%	0.6%	2.6	Pass	9.8	Pass
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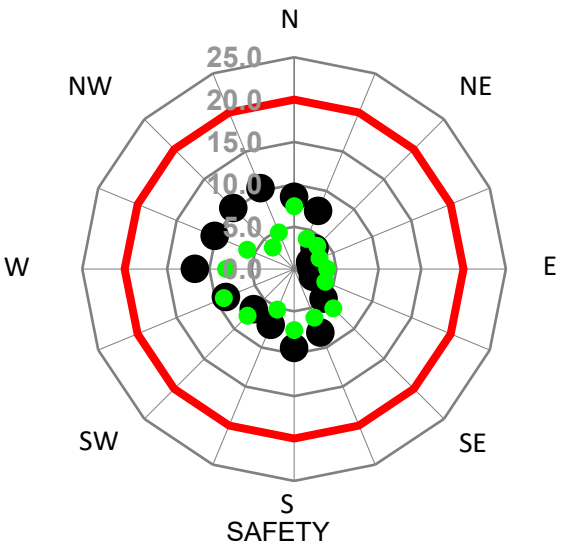
Test Location **14**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 4m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	17.8%	5.5%	1.4%	2.9	Pass	11.7	Pass
● **Existing Configuration**	7.0%	1.0%	0.2%	2.3	Pass	9.0	Pass
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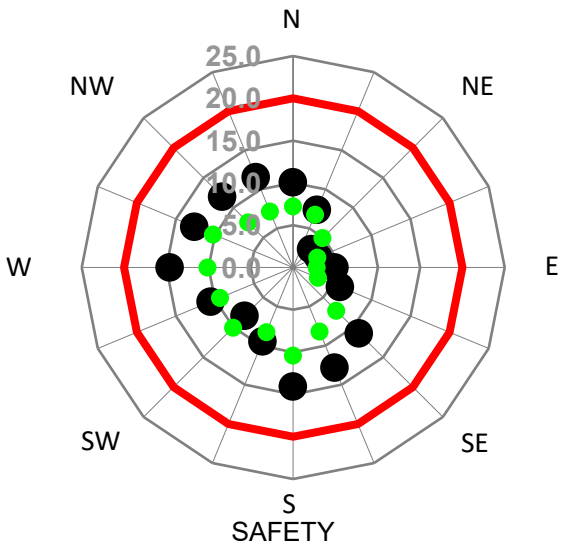
Test Location **15**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	34.9%	18.2%	8.7%	3.9	Pass	14.6	Pass
● **Existing Configuration**	17.5%	5.5%	1.3%	2.9	Pass	10.4	Pass
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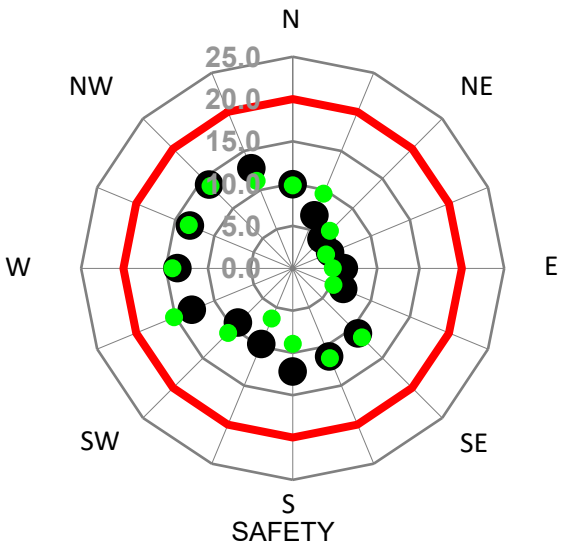
Test Location **16**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	33.1%	15.7%	6.4%	3.7	Pass	14.0	Pass
● **Existing Configuration**	30.0%	13.9%	6.3%	3.5	Pass	15.2	Pass
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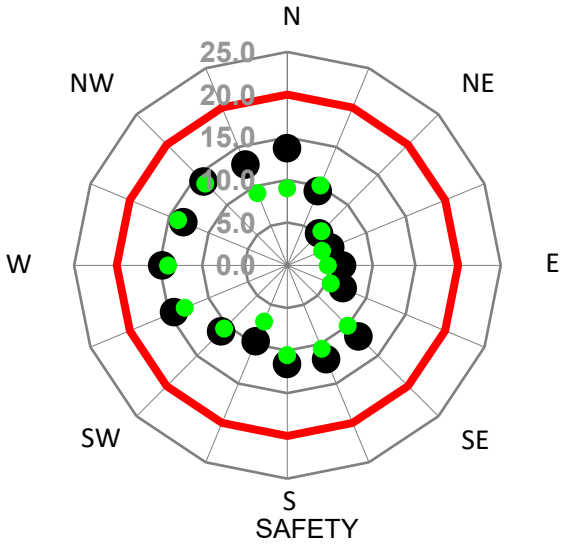
Test Location **17**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	41.9%	22.9%	10.4%	4.2	Pass	14.6	Pass
● **Existing Configuration**	28.2%	12.4%	4.9%	3.5	Pass	14.0	Pass
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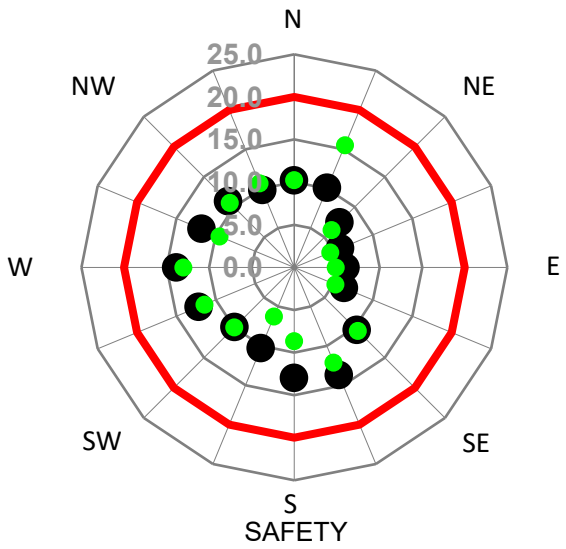
Test Location **18**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	35.0%	17.2%	7.0%	3.8	Pass	13.9	Pass
● **Existing Configuration**	27.4%	11.8%	4.5%	3.4	Pass	15.5	Pass
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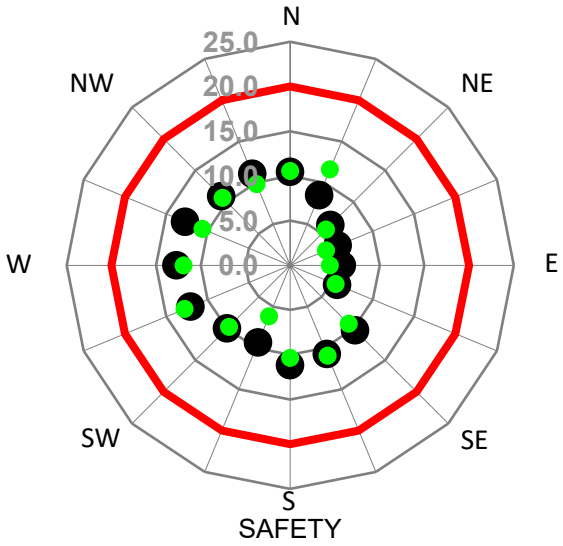
Test Location **19**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	32.2%	14.2%	4.8%	3.6	Pass	12.7	Pass
● **Existing Configuration**	29.0%	12.4%	3.8%	3.4	Pass	12.8	Pass
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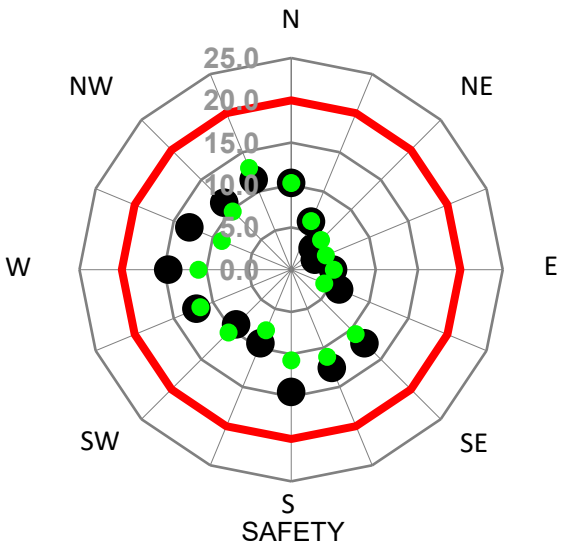
Test Location **20**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	34.9%	18.1%	8.1%	3.9	Pass	14.5	Pass
● **Existing Configuration**	28.1%	11.5%	3.6%	3.4	Pass	13.0	Pass
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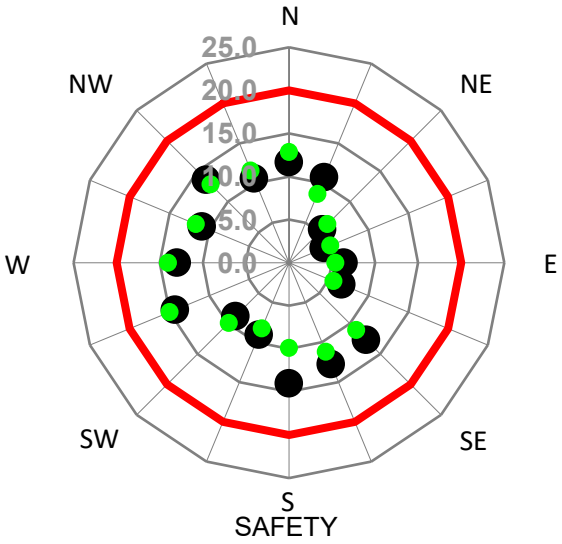
Test Location **21**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	38.1%	20.0%	8.9%	4.0	Pass	14.3	Pass
● **Existing Configuration**	35.4%	17.1%	7.3%	3.8	Pass	15.0	Pass
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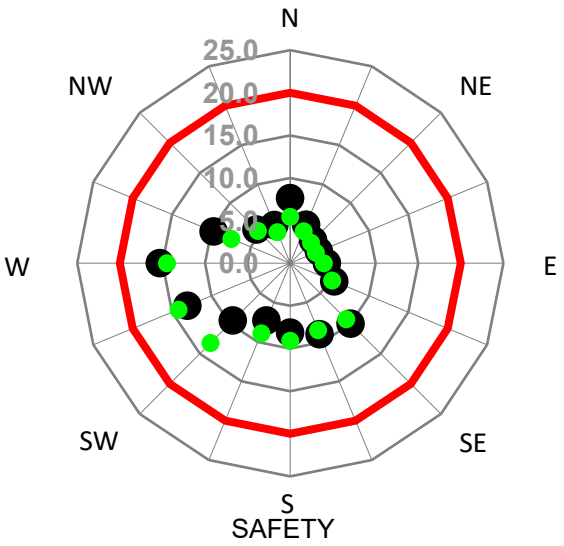
Test Location **22**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	17.9%	7.0%	3.0%	2.9	Pass	15.3	Pass
● **Existing Configuration**	18.5%	8.3%	3.7%	2.9	Pass	14.5	Pass
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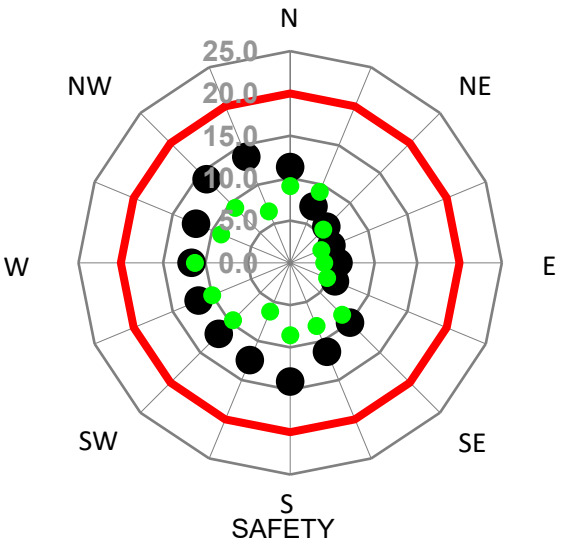
Test Location **23**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	38.0%	19.5%	8.8%	4.0	Pass	14.0	Pass
● **Existing Configuration**	18.5%	5.7%	1.4%	2.9	Pass	11.3	Pass
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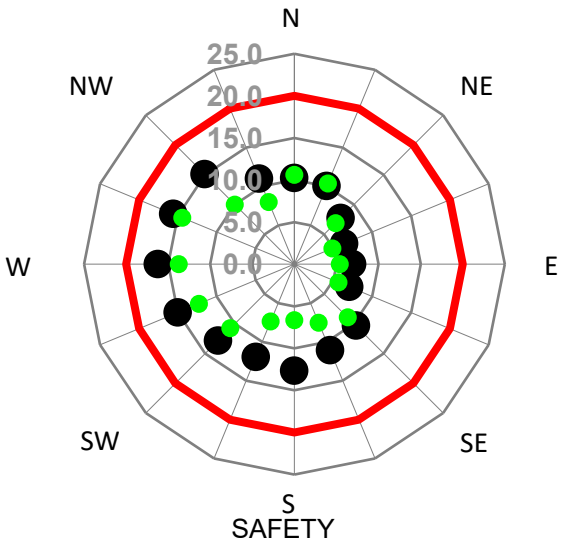
Test Location **24**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	39.8%	20.9%	9.6%	4.1	Pass	16.2	Pass
● **Existing Configuration**	24.3%	10.2%	3.8%	3.2	Pass	14.4	Pass
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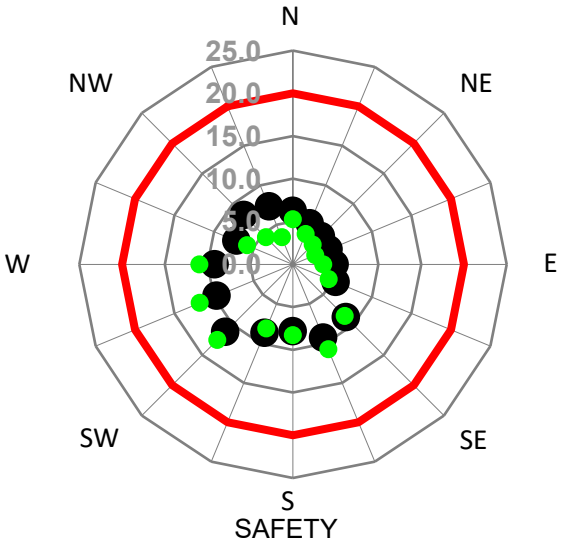
Test Location **25**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	13.1%	3.9%	1.0%	2.6	Pass	11.2	Pass
● **Existing Configuration**	14.4%	5.8%	2.0%	2.6	Pass	12.5	Pass
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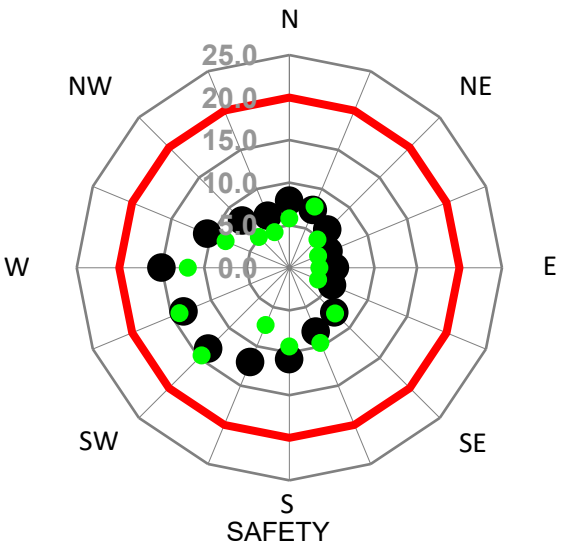
Test Location **26**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	26.1%	11.7%	4.8%	3.3	Pass	15.0	Pass
● **Existing Configuration**	18.2%	7.9%	3.2%	2.9	Pass	14.6	Pass
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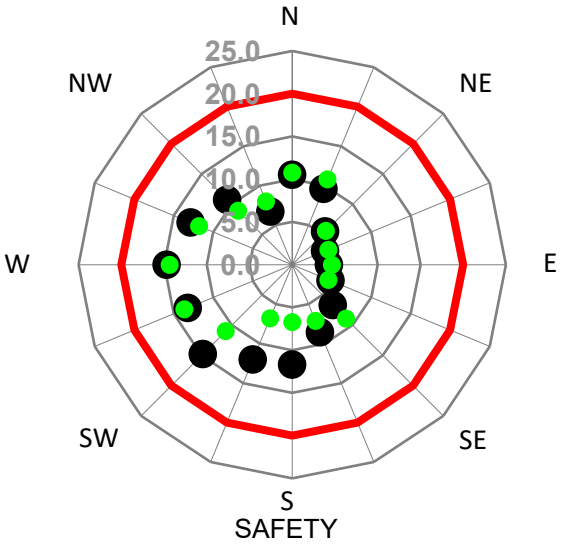
Test Location **27**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	33.9%	16.3%	6.5%	3.7	Pass	14.8	Pass
● **Existing Configuration**	24.3%	10.6%	4.0%	3.2	Pass	14.3	Pass
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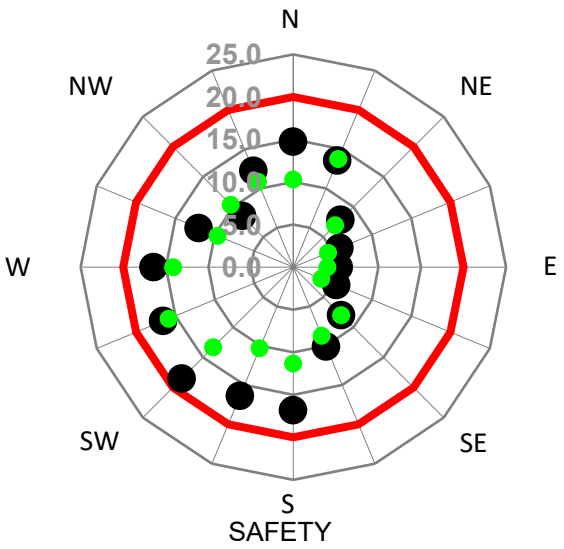
Test Location **28**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	50.3%	33.2%	19.1%	4.9	Pass	18.5	Pass
● **Existing Configuration**	34.2%	16.6%	6.7%	3.8	Pass	15.8	Pass
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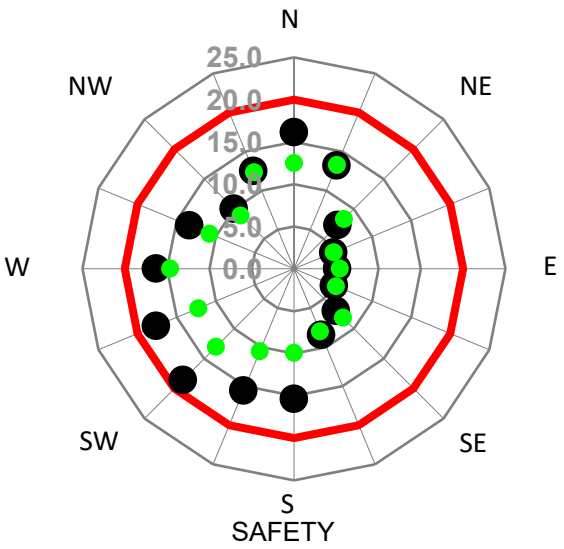
Test Location **29**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	50.4%	33.3%	19.6%	5.0	Pass	18.6	Pass
● **Existing Configuration**	35.2%	16.6%	7.0%	3.8	Pass	14.7	Pass
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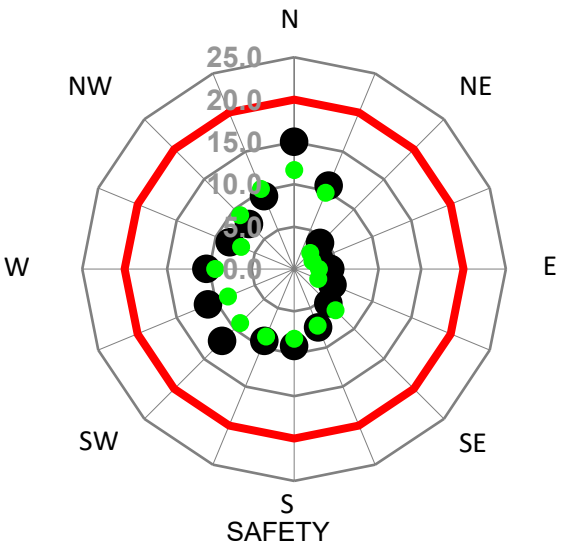
Test Location **30**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	30.4%	14.7%	5.8%	3.6	Pass	15.0	Pass
● **Existing Configuration**	21.8%	7.3%	1.9%	3.1	Pass	11.7	Pass
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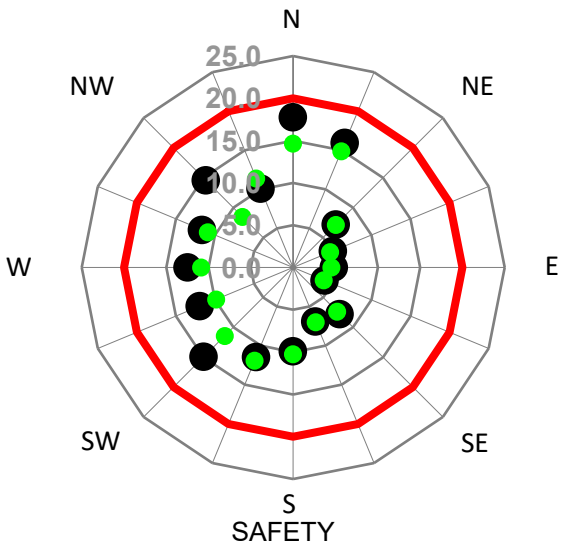
Test Location **31**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	41.0%	23.6%	13.3%	4.3	Pass	17.7	Pass
● **Existing Configuration**	34.5%	17.7%	7.3%	3.8	Pass	14.9	Pass
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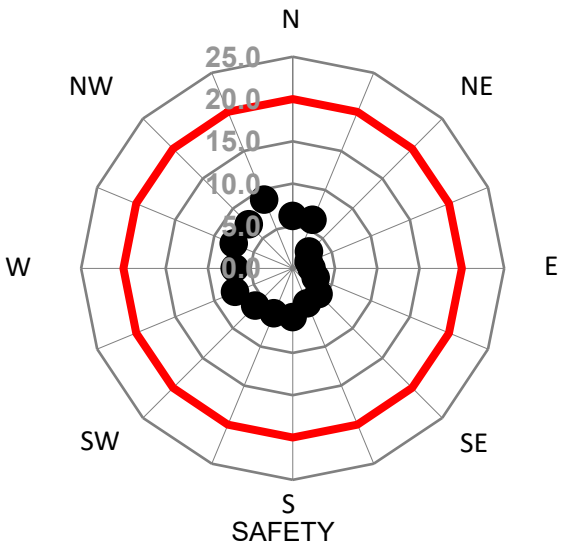
Test Location **32**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 4m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	4.3%	0.7%	0.1%	2.0	Pass	8.8	Pass
● **Existing Configuration**							
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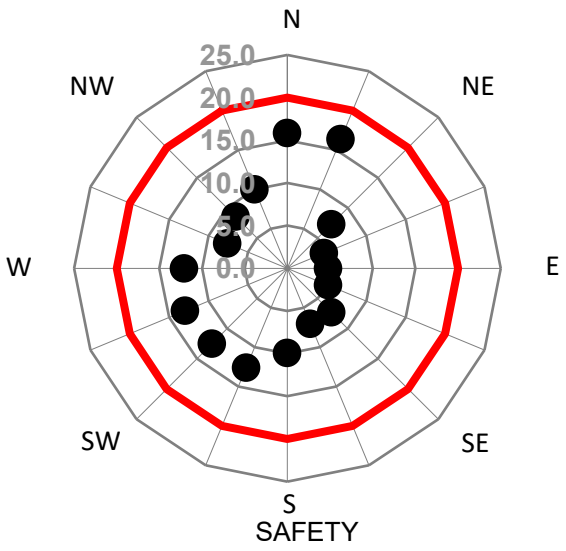
Test Location **33**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	37.6%	20.8%	9.9%	4.1	Pass	16.4	Pass
● **Existing Configuration**							
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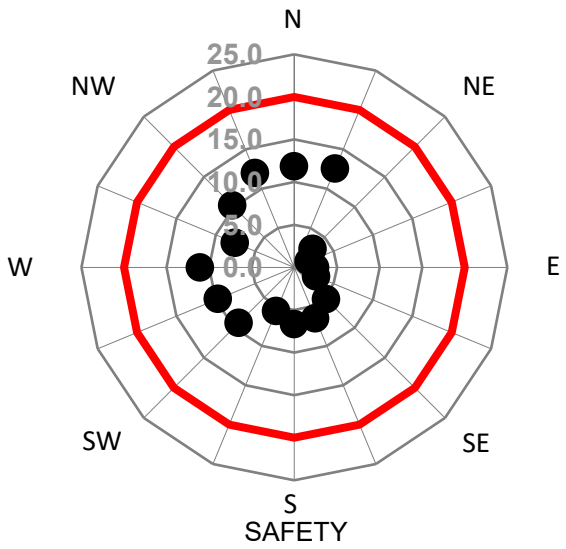
Test Location **34**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 4m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	22.0%	9.3%	3.3%	3.1	Pass	12.5	Pass
● **Existing Configuration**							
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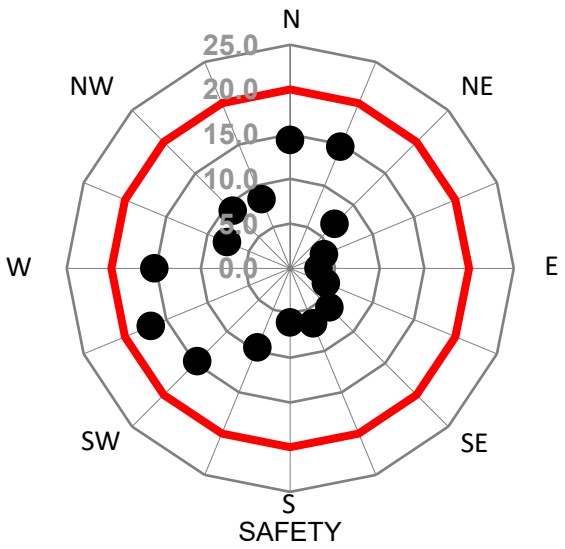
Test Location **35**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	32.6%	19.3%	10.3%	3.9	Pass	16.9	Pass
● **Existing Configuration**							
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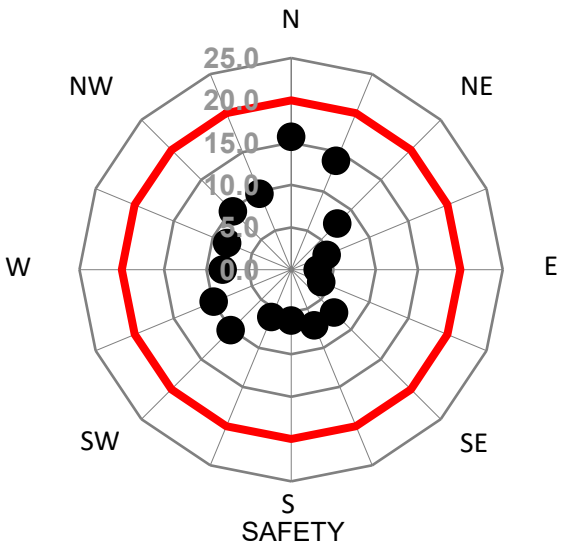
Test Location **36**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	25.2%	13.8%	6.4%	3.4	Pass	15.7	Pass
● **Existing Configuration**							
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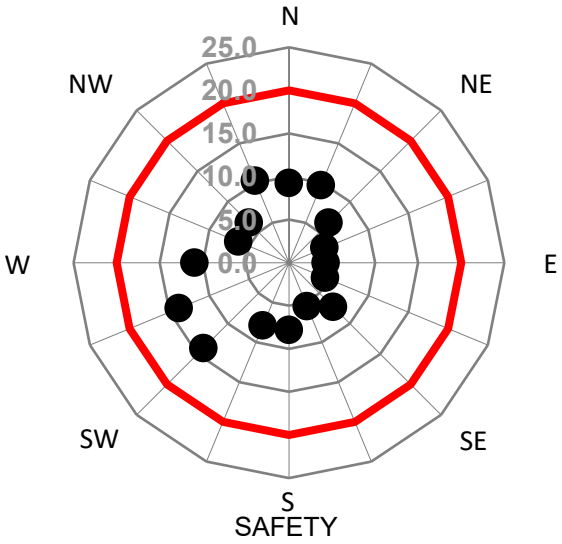
Test Location **37**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	20.3%	8.0%	3.0%	3.0	Pass	14.0	Pass
● **Existing Configuration**							
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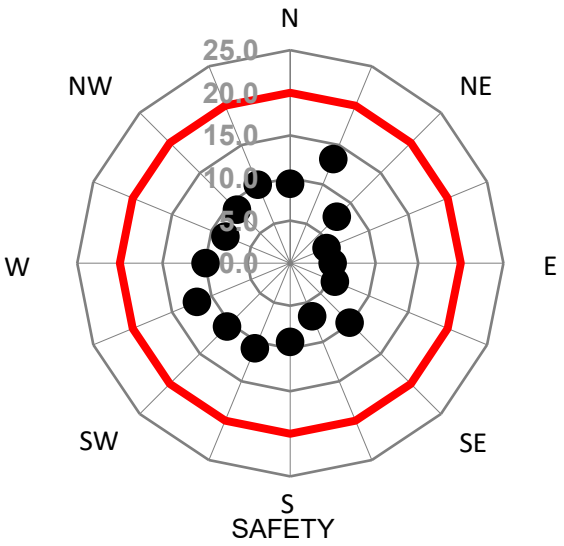
Test Location **38**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	23.4%	8.7%	2.8%	3.2	Pass	13.2	Pass
● **Existing Configuration**							
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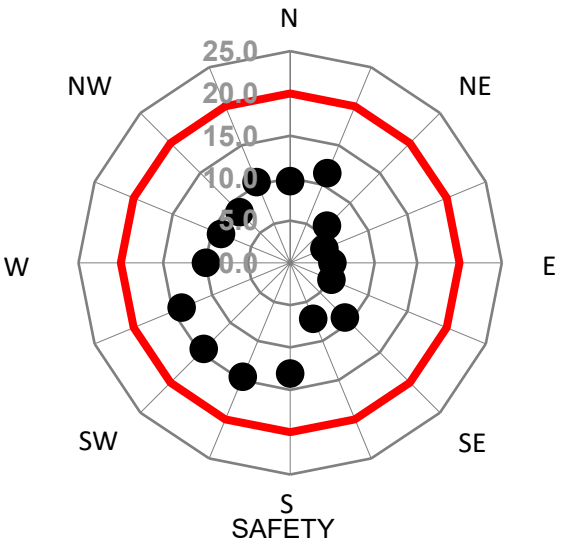
Test Location **39**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	31.9%	16.0%	6.8%	3.7	Pass	14.6	Pass
● **Existing Configuration**							
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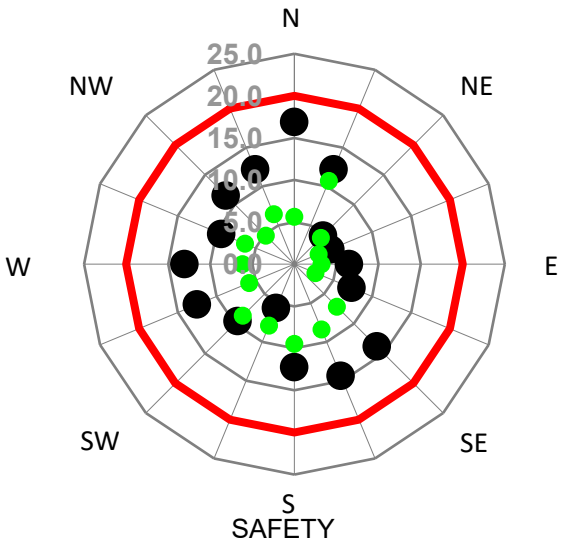
Test Location **40**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	42.0%	25.6%	13.4%	4.4	Pass	16.9	Pass
● **Existing Configuration**	10.4%	2.9%	0.6%	2.4	Pass	10.7	Pass
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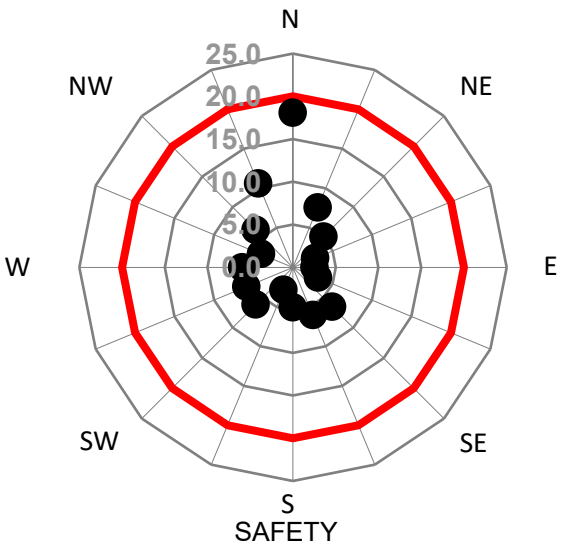
Test Location **41**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	20.3%	12.8%	8.2%	3.0	Pass	18.1	Pass
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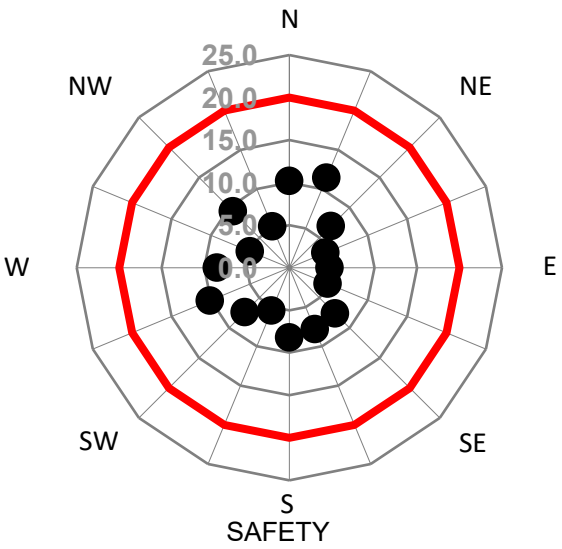
Test Location **42**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 4m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	17.3%	5.3%	1.2%	2.9	Pass	11.4	Pass
●							
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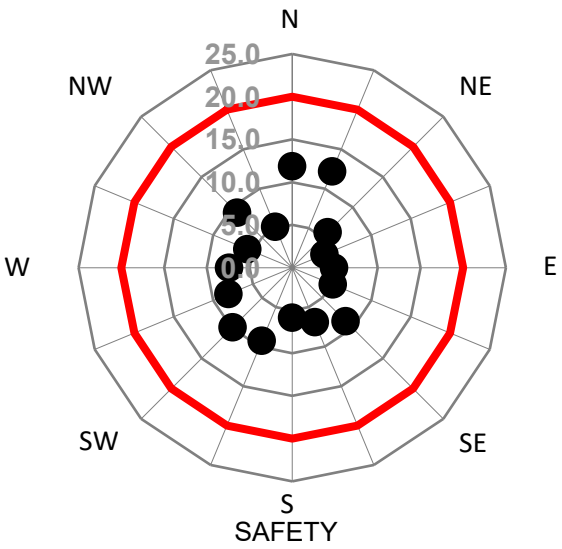
Test Location **43**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	18.4%	7.1%	2.3%	2.9	Pass	12.2	Pass
●							
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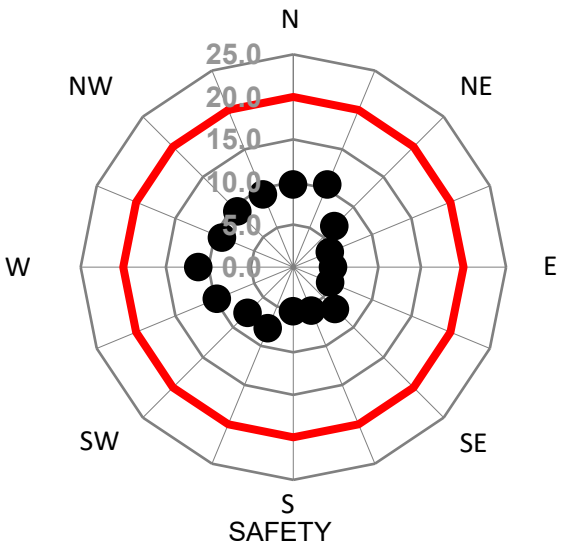
Test Location **44**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	16.2%	5.6%	1.4%	2.8	Pass	11.1	Pass
●							
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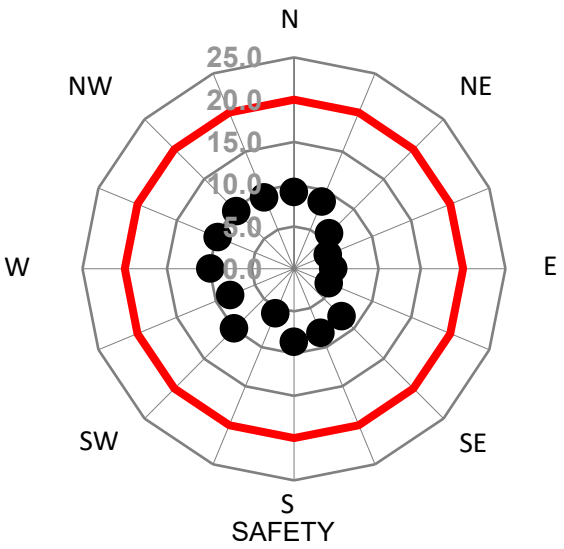
Test Location **45**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	18.3%	5.3%	1.1%	2.9	Pass	10.0	Pass
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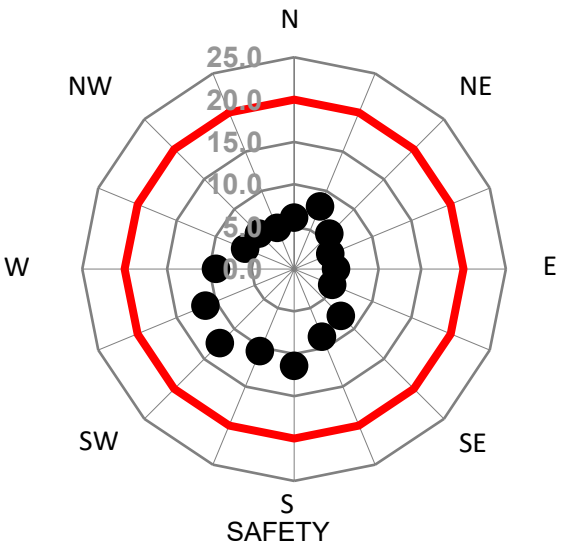
Test Location **46**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 4m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	19.7%	8.6%	2.9%	3.0	Pass	12.4	Pass
●							
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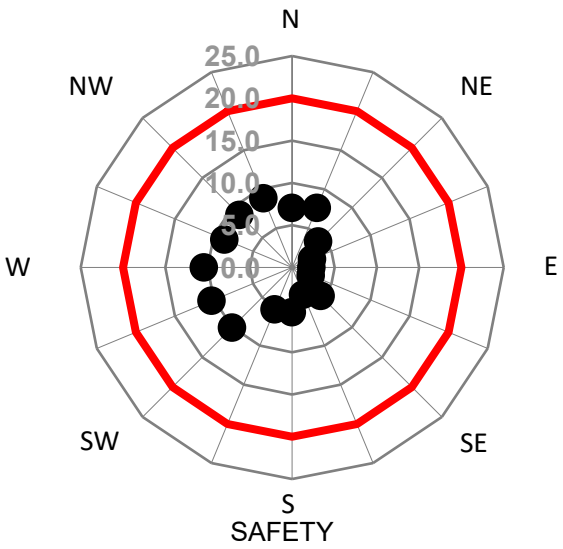
Test Location **47**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 4m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	10.5%	3.4%	0.9%	2.4	Pass	10.4	Pass
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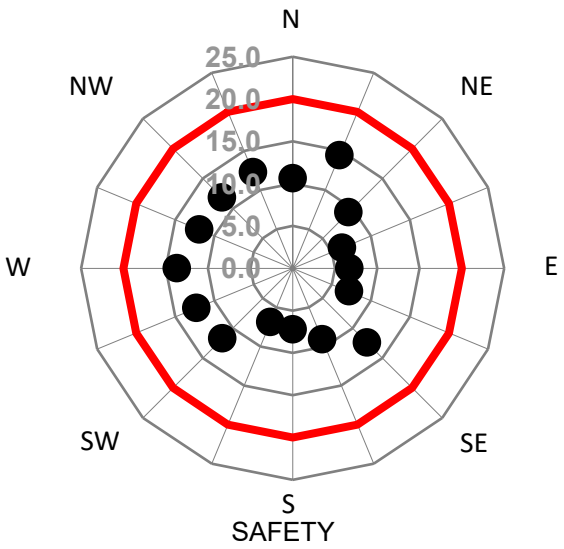
Test Location **48**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	31.4%	15.5%	7.7%	3.6	Pass	14.4	Pass
●							
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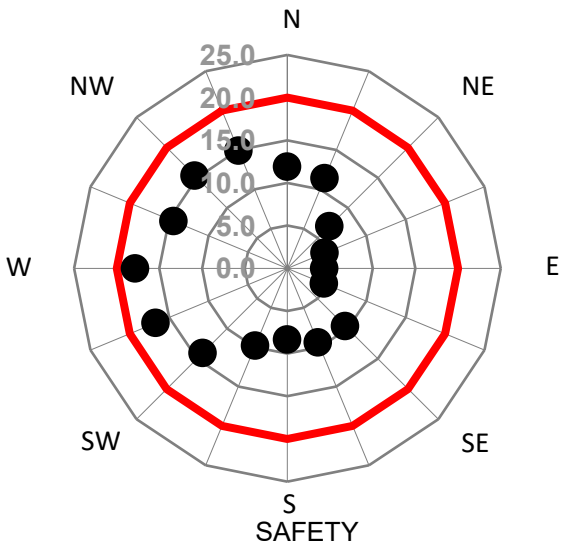
Test Location **49**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	39.7%	21.9%	12.3%	4.2	Pass	17.8	Pass
●							
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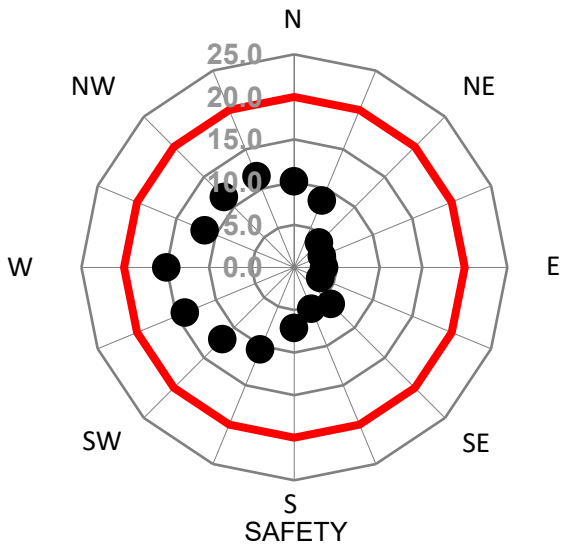
Test Location **50**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	26.6%	12.6%	5.8%	3.4	Pass	15.0	Pass
●							
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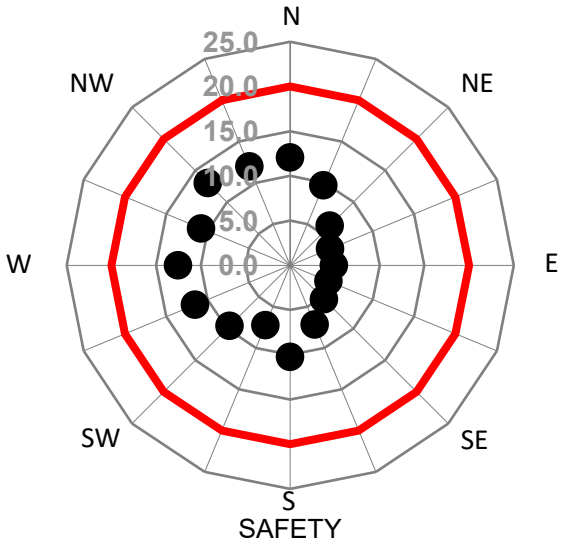
Test Location **51**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	30.2%	12.9%	4.8%	3.5	Pass	13.0	Pass
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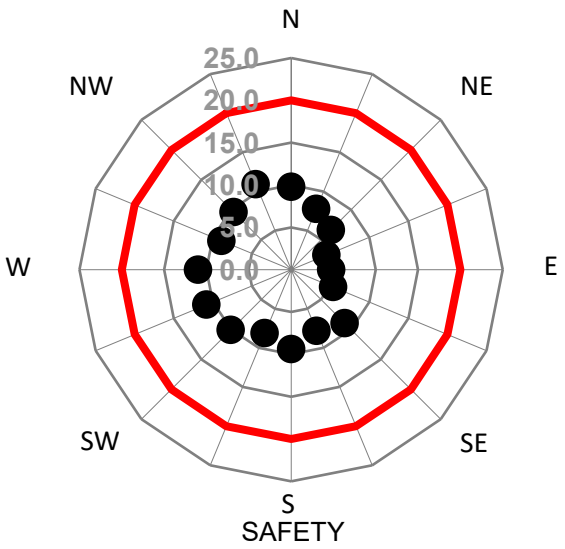
Test Location **52**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	23.7%	8.3%	2.1%	3.2	Pass	11.0	Pass
●							
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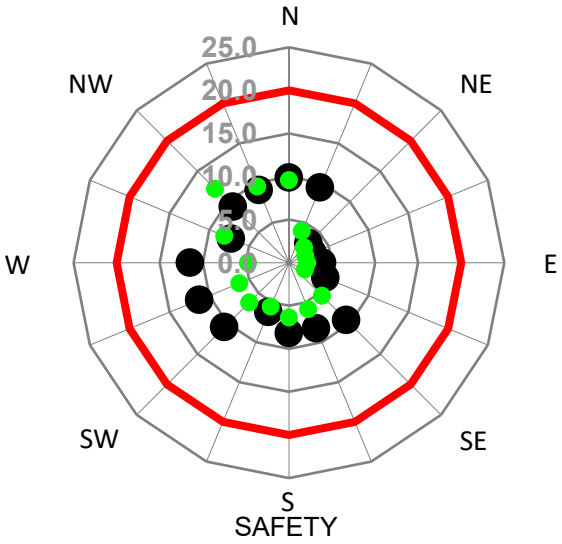
Test Location **53**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	21.3%	7.2%	1.9%	3.1	Pass	11.5	Pass
● **Existing Configuration**	9.7%	2.9%	0.8%	2.4	Pass	12.1	Pass
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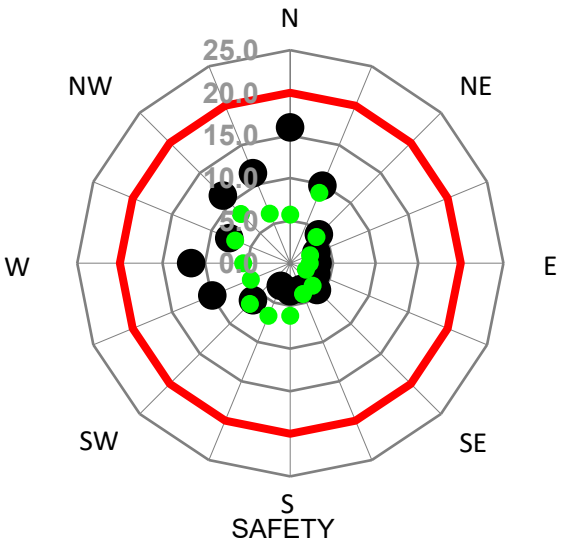
Test Location **54**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	24.0%	14.0%	6.7%	3.4	Pass	15.9	Pass
● **Existing Configuration**	3.7%	0.7%	0.2%	2.0	Pass	8.9	Pass
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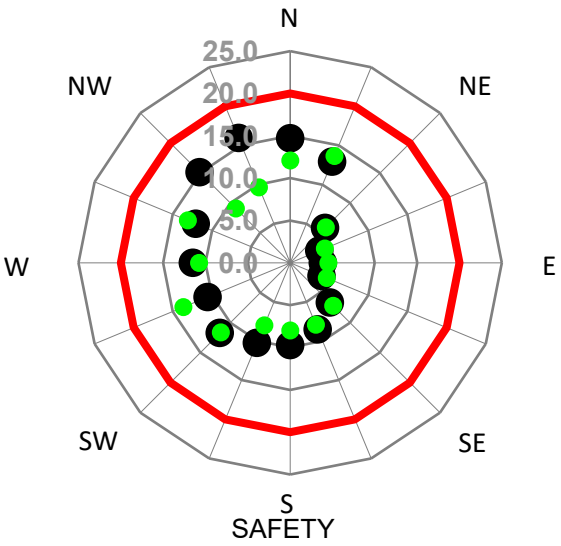
Test Location **55**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	36.4%	19.2%	8.5%	3.9	Pass	15.9	Pass
● **Existing Configuration**	28.1%	12.1%	4.9%	3.5	Pass	13.7	Pass
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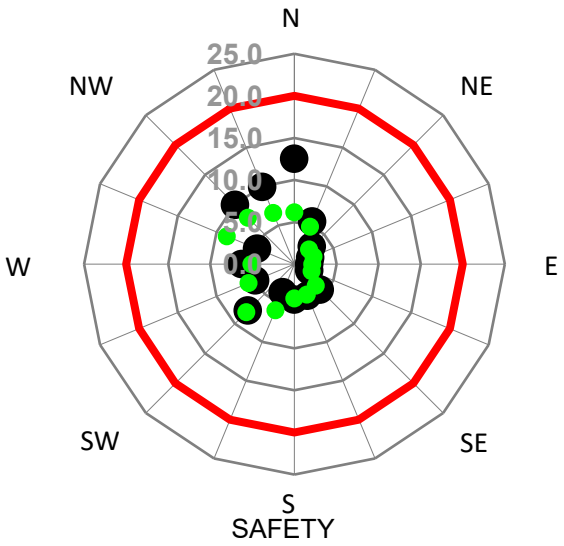
Test Location **56**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	13.9%	6.0%	2.2%	2.5	Pass	12.5	Pass
● **Existing Configuration**	3.3%	0.7%	0.1%	1.8	Pass	8.7	Pass
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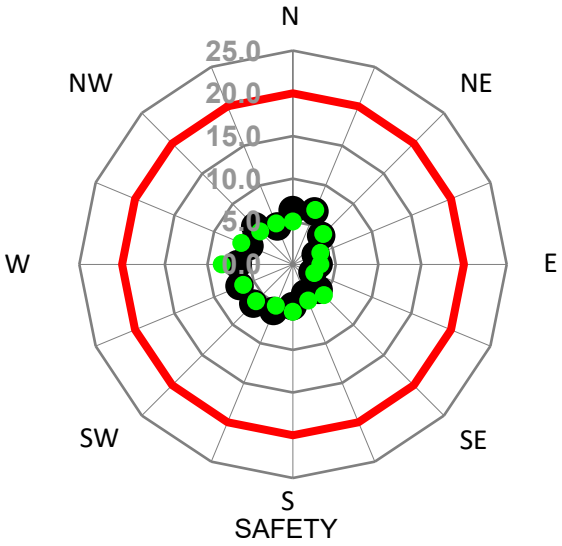
Test Location **57**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	2.4%	0.2%	0.0%	1.9	Pass	6.7	Pass
● **Existing Configuration**	2.8%	0.4%	0.1%	1.9	Pass	8.3	Pass
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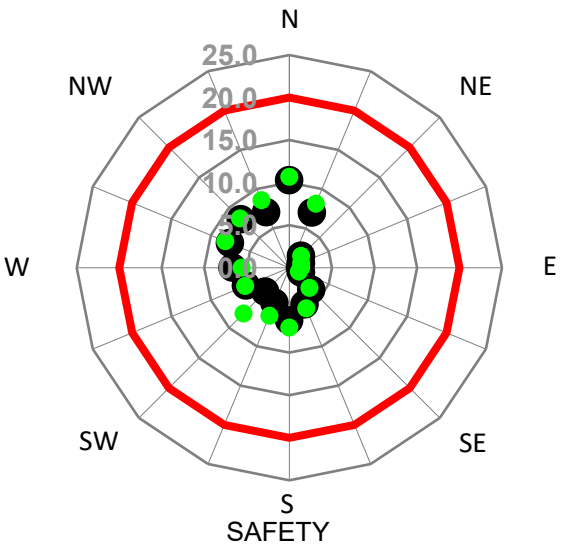
Test Location **58**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	9.7%	2.6%	0.4%	2.3	Pass	10.3	Pass
● **Existing Configuration**	13.0%	3.6%	0.6%	2.6	Pass	10.7	Pass
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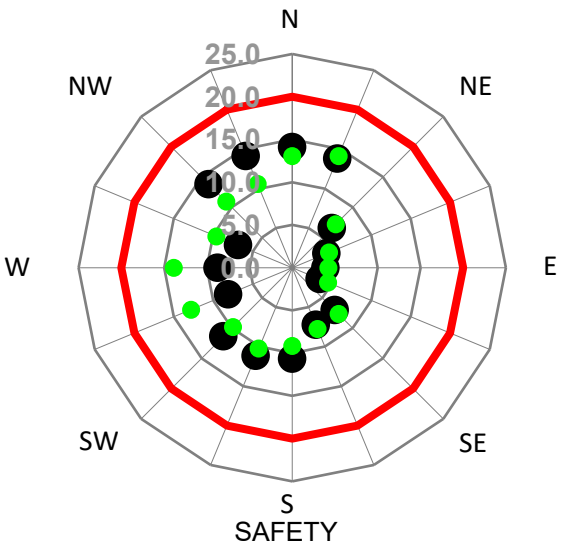
Test Location **59**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	32.7%	16.7%	7.1%	3.7	Pass	14.1	Pass
● **Existing Configuration**	32.9%	15.6%	6.4%	3.7	Pass	14.1	Pass
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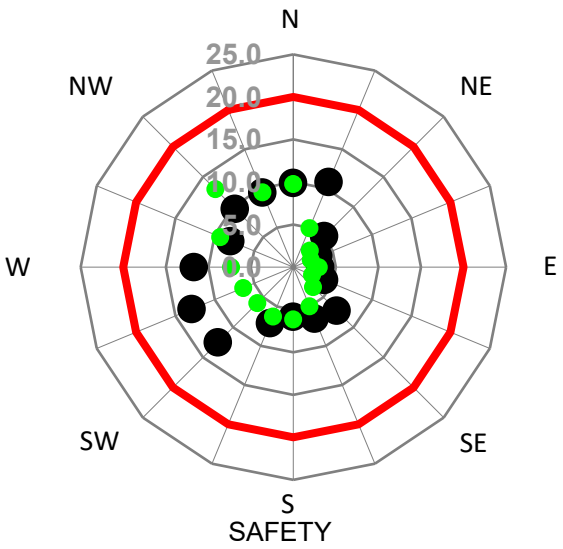
Test Location **60**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	20.1%	8.4%	2.8%	3.0	Pass	12.9	Pass
● **Existing Configuration**	10.9%	3.5%	1.0%	2.5	Pass	13.0	Pass
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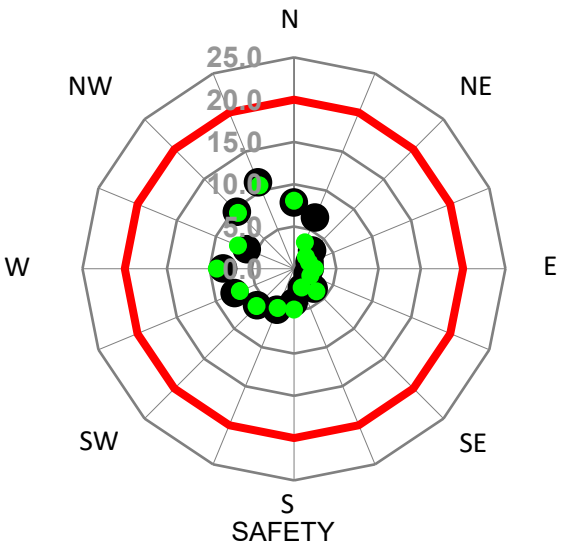
Test Location **61**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	7.5%	2.1%	0.5%	2.2	Pass	11.0	Pass
● **Existing Configuration**	7.7%	2.1%	0.5%	2.2	Pass	10.7	Pass
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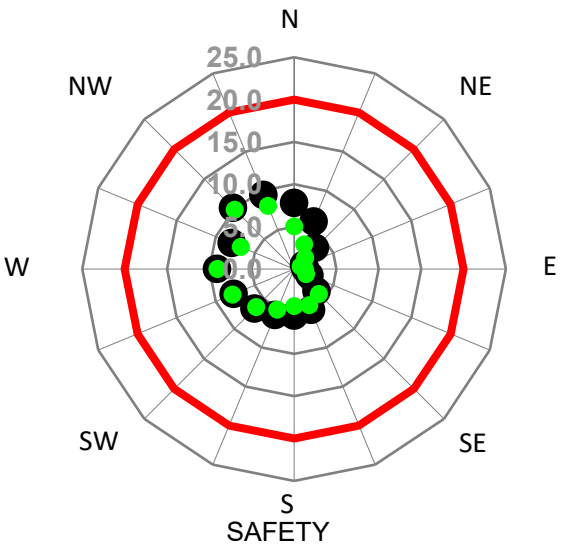
Test Location **62**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	8.1%	2.1%	0.5%	2.3	Pass	10.2	Pass
● **Existing Configuration**	4.9%	1.4%	0.3%	1.9	Pass	9.9	Pass
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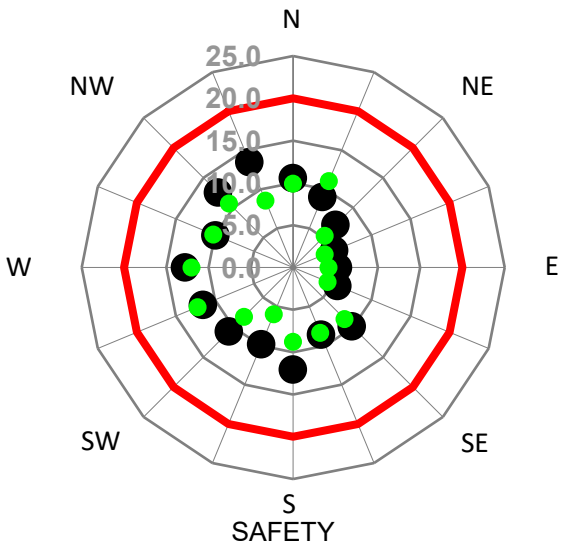
Test Location **19a**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	33.1%	14.9%	5.5%	0.0	Pass	13.5	Pass
● **Existing Configuration**	22.8%	8.3%	2.5%	3.1	Pass	12.2	Pass
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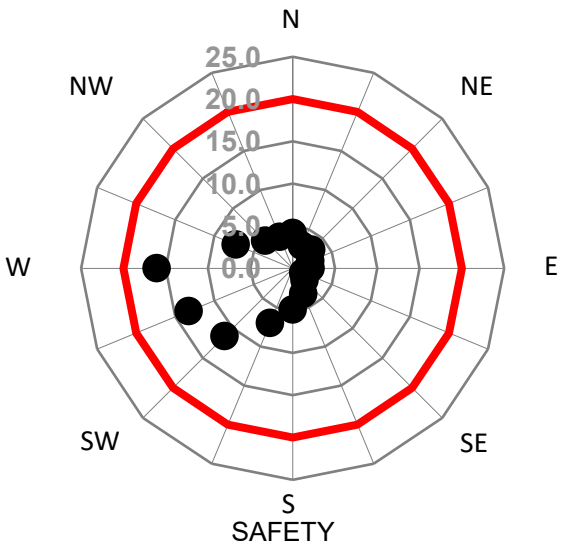
Test Location **T1**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	11.4%	6.3%	3.2%	2.1	Pass	16.1	Pass
● **Existing Configuration**							
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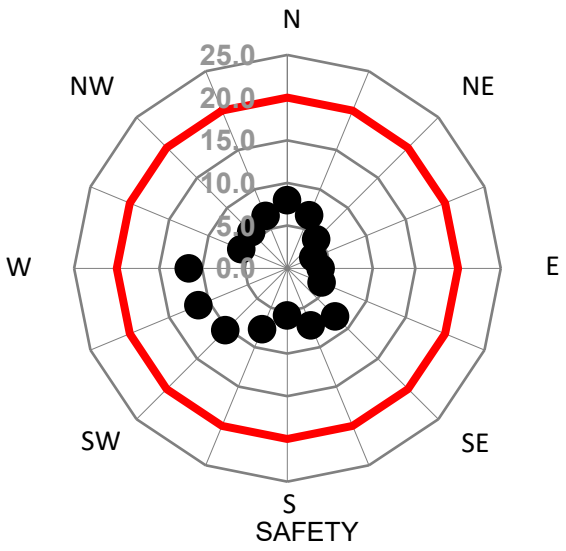
Test Location **T2**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	12.6%	4.0%	1.2%	2.6	Pass	11.5	Pass
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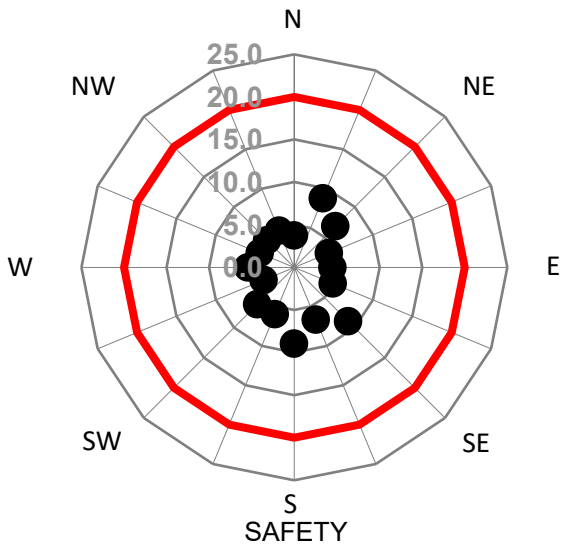
Test Location **T3**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	6.6%	1.5%	0.3%	2.0	Pass	9.0	Pass
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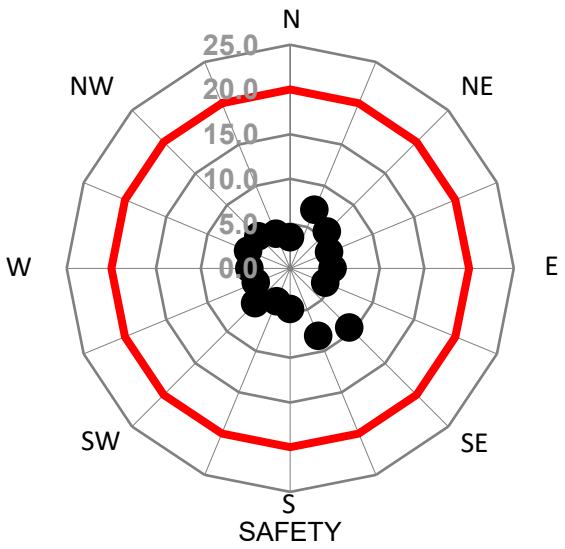
Test Location **T4**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	2.6%	0.7%	0.2%	1.6	Pass	9.4	Pass
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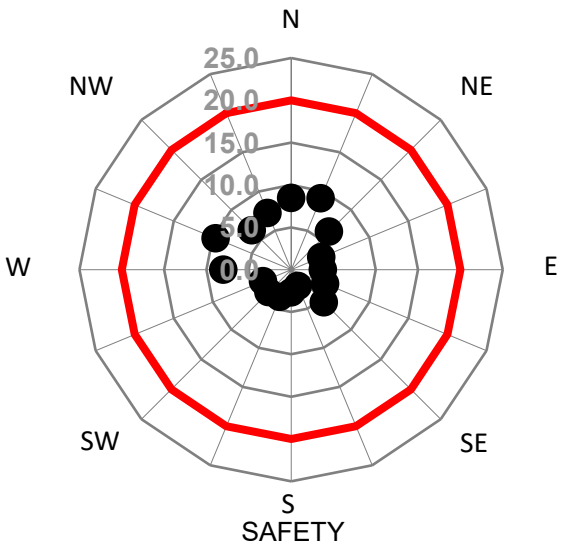
Test Location **T5**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	7.3%	1.6%	0.3%	2.1	Pass	9.7	Pass
●							
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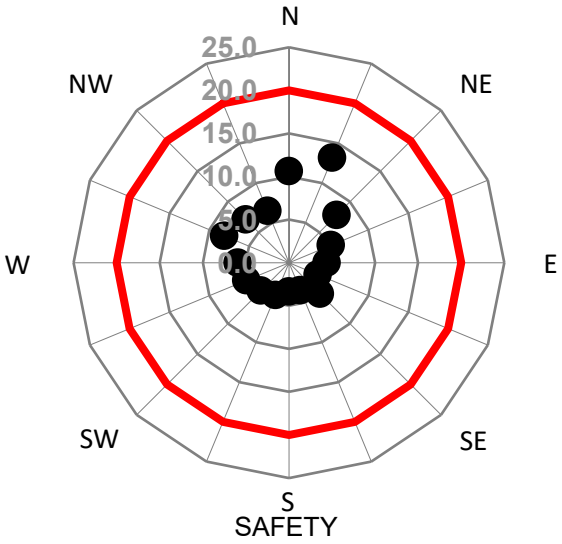
Test Location **T6**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	11.4%	4.2%	1.2%	2.3	Pass	13.2	Pass
●							
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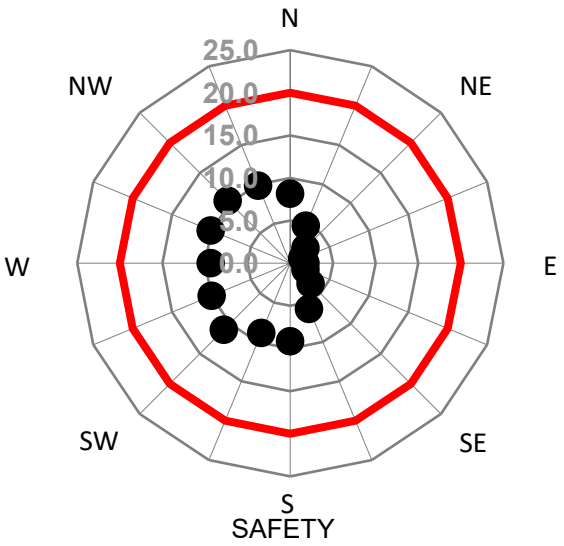
Test Location **T7**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	17.2%	5.5%	1.4%	2.8	Pass	11.0	Pass
●							
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■							
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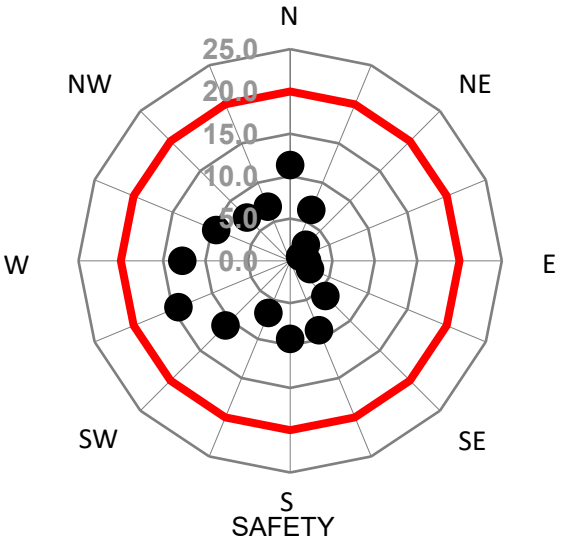
Test Location **T8**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	25.9%	10.2%	3.5%	3.3	Pass	14.3	Pass
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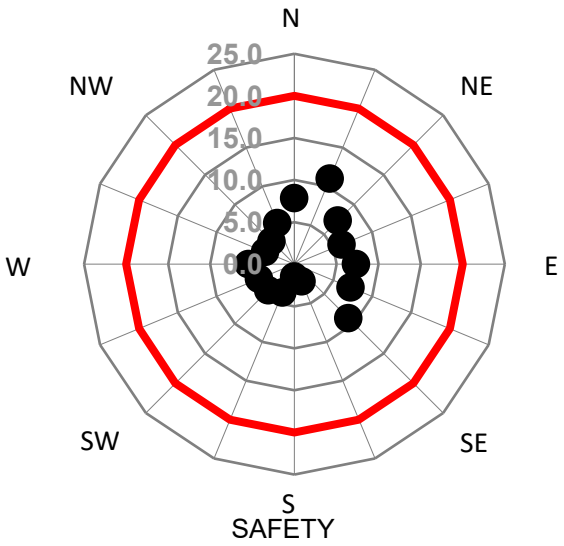
Test Location **T9**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	5.3%	1.6%	0.6%	1.9	Pass	11.0	Pass
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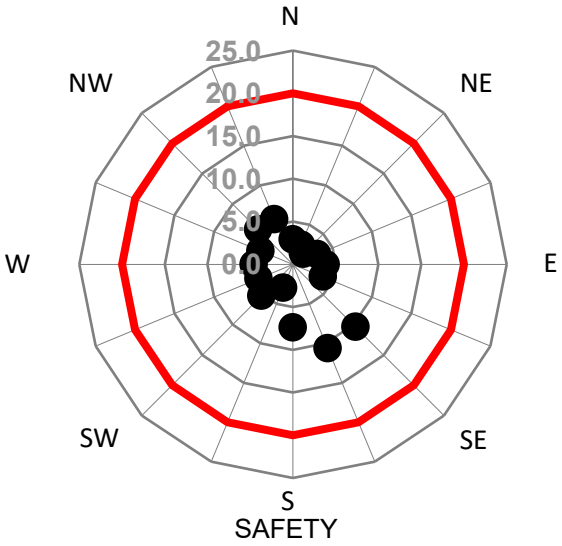
▲							

Test Location **T10**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	4.6%	1.5%	0.5%	1.7	Pass	10.6	Pass
●							
■ **Proposed Configuration with wind mitigation strategies**							
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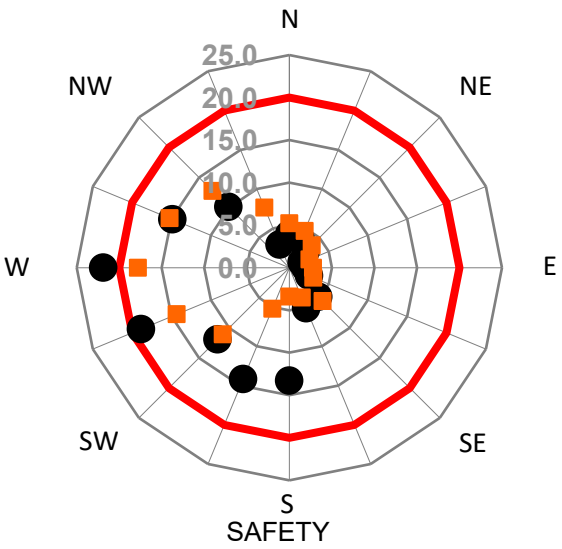
▲							

Test Location **M1**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	29.0%	18.8%	11.1%	3.9	NA - Safety criterion failed	21.9	Fail
●							
■ **Proposed Configuration with wind mitigation strategies**	16.1%	9.5%	5.7%	2.6	Pass	17.8	Pass
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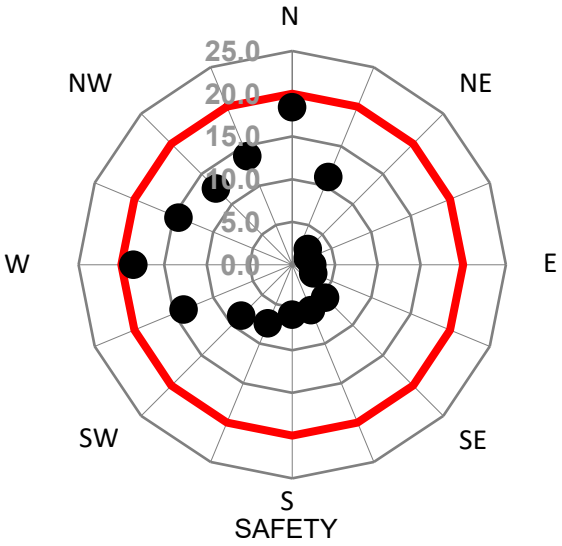
Test Location **M2**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	35.6%	22.7%	14.6%	4.3	Pass	18.6	Pass
●							
■ **Proposed Configuration with wind mitigation strategies**							
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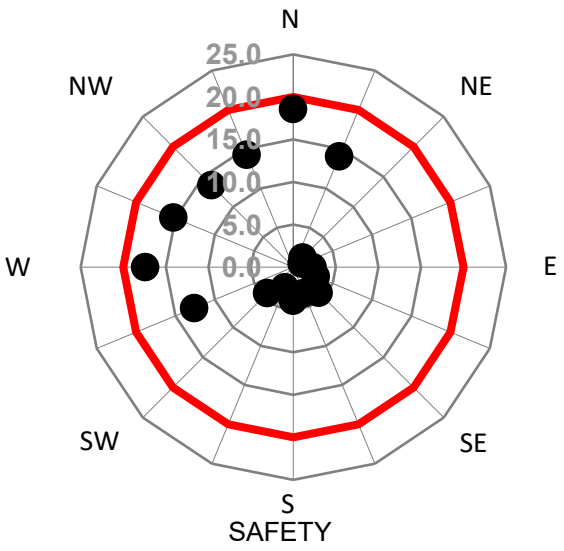
Test Location **M3**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	33.9%	22.5%	14.8%	4.3	Pass	18.6	Pass
●							
■ **Proposed Configuration with wind mitigation strategies**							
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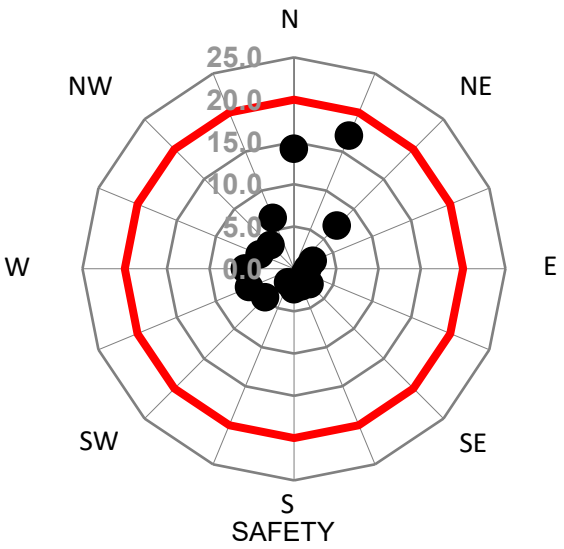
Test Location **M4**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	15.6%	9.5%	4.5%	2.5	Pass	17.0	Pass
●							
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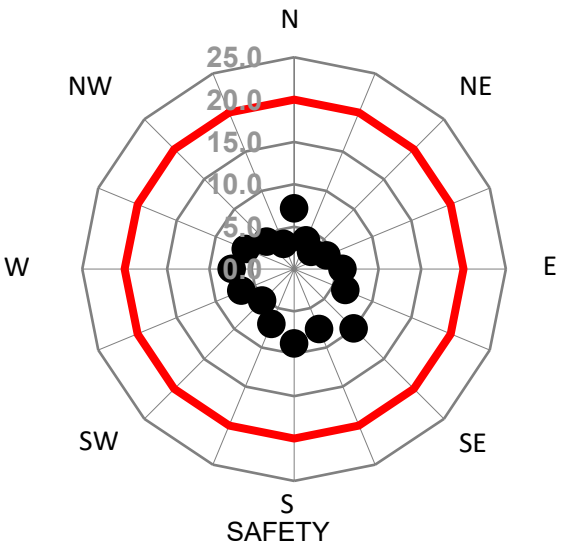
Test Location **M5**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	8.5%	1.5%	0.3%	2.3	Pass	10.0	Pass
●							
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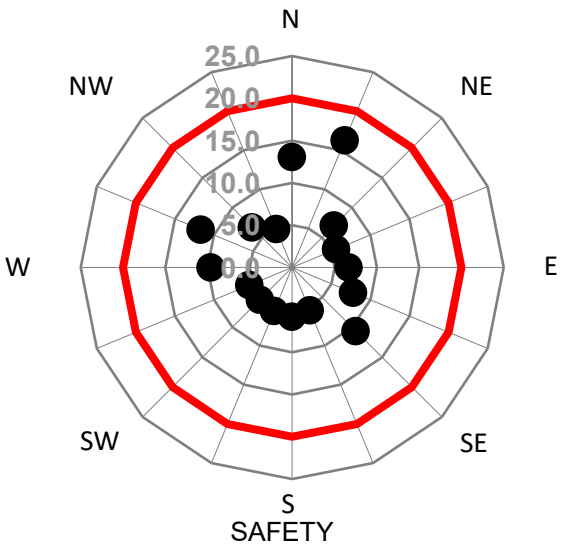
Test Location **M6**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	19.2%	9.4%	4.3%	2.9	Pass	16.3	Pass
●							
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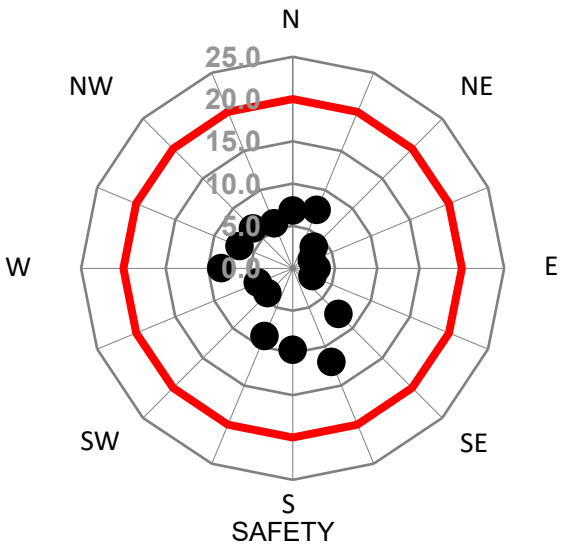
Test Location **M7**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	12.1%	3.7%	1.0%	2.5	Pass	12.0	Pass
●							
■							
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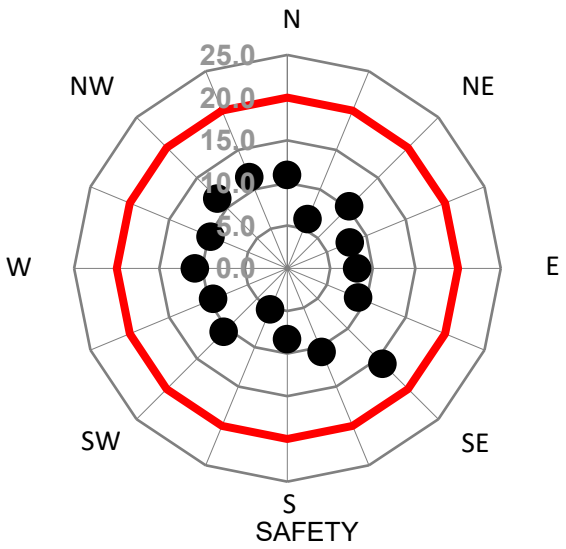
▲							
■							
◆							
▲							

Test Location **M8**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	26.4%	11.0%	3.9%	3.3	Pass	15.8	Pass
●							
■ **Proposed Configuration with wind mitigation strategies**							
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■							
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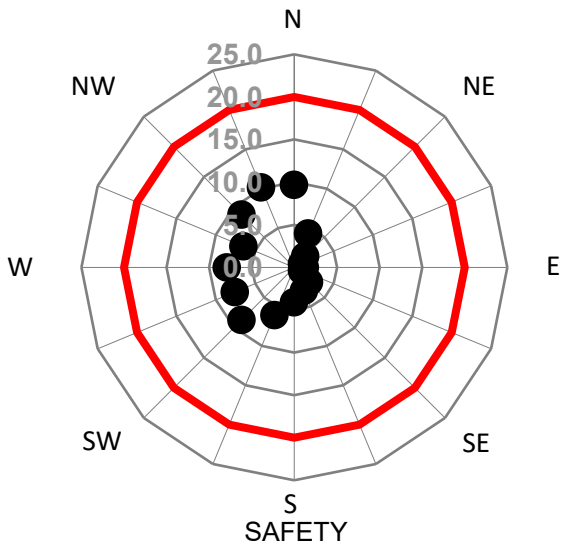
Test Location **M9**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	10.9%	3.2%	0.6%	2.4	Pass	10.1	Pass
●							
■ **Proposed Configuration with wind mitigation strategies**							
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■							
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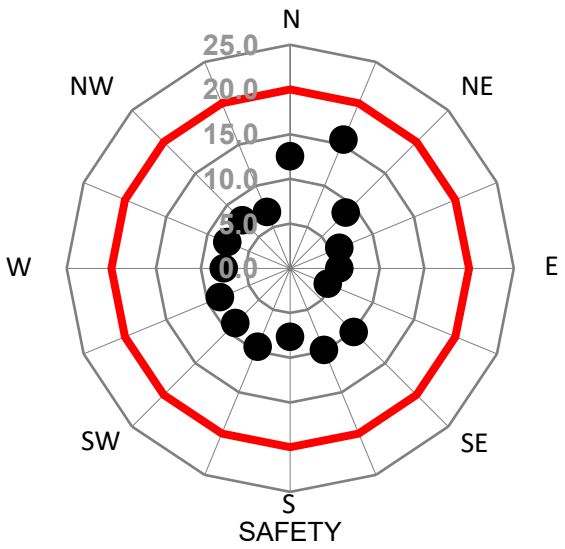
▲							

Test Location **P1**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	23.4%	9.2%	3.8%	3.2	Pass	15.6	Pass
●							
■ **Proposed Configuration with wind mitigation strategies**							
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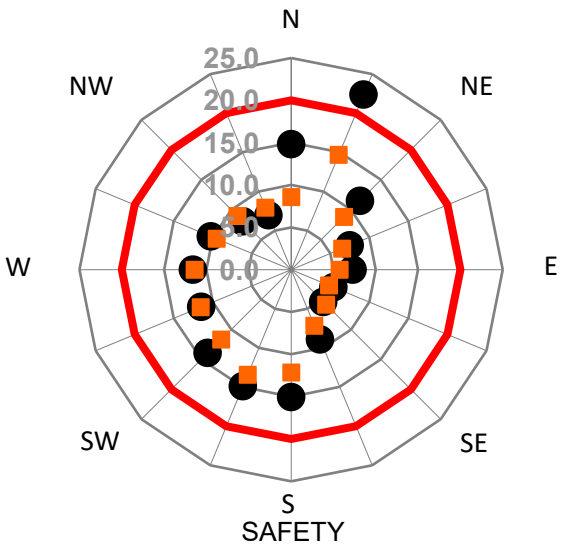
■							
◆							
▲							

Test Location **P2**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	42.6%	25.9%	13.5%	4.4	NA - Safety criterion failed	22.4	Fail
●							
■ **Proposed Configuration with wind mitigation strategies**	27.8%	12.6%	5.1%	3.5	Pass	14.7	Pass
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■							
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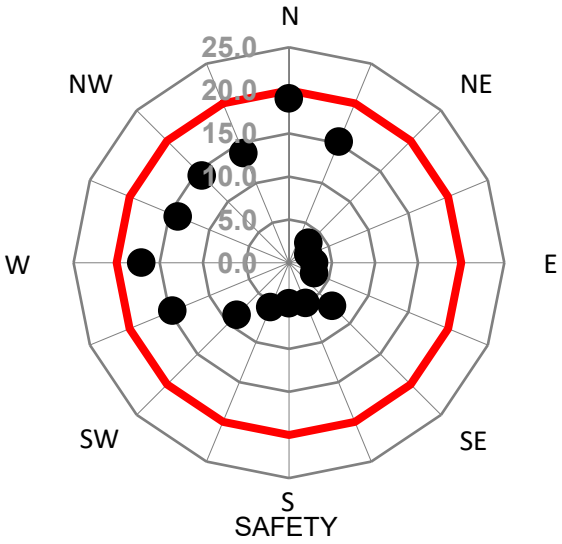
▲							

Test Location **P3**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	36.5%	23.8%	15.8%	4.4	Pass	19.0	Pass
●							
■ **Proposed Configuration with wind mitigation strategies**							
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■							
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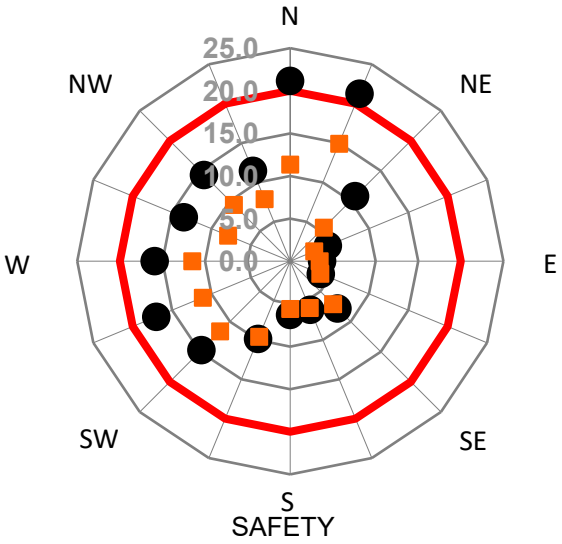
Test Location **P4**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	43.7%	28.8%	19.4%	4.9	NA - Safety criterion failed	21.3	Fail
●							
■ **Proposed Configuration with wind mitigation strategies**	22.9%	9.7%	3.6%	3.2	Pass	14.9	Pass
◆							
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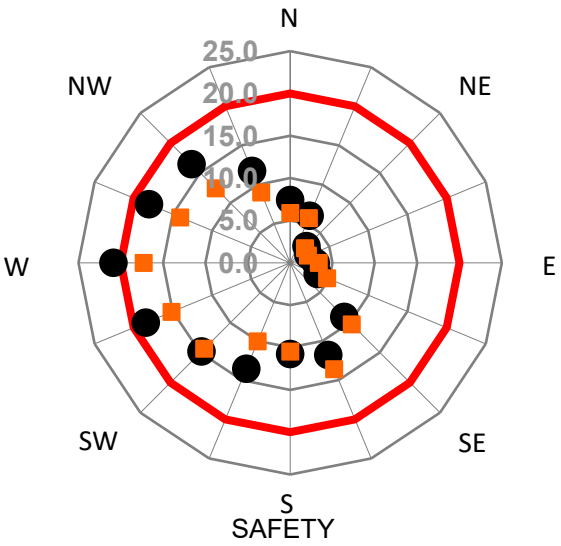
■							
◆							

Test Location **H1**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	36.7%	22.3%	13.3%	0.0	NA - Safety criterion failed	20.9	Fail
●							
■ **Proposed Configuration with wind mitigation strategies**	29.5%	16.6%	9.0%	3.7	Pass	17.3	Pass
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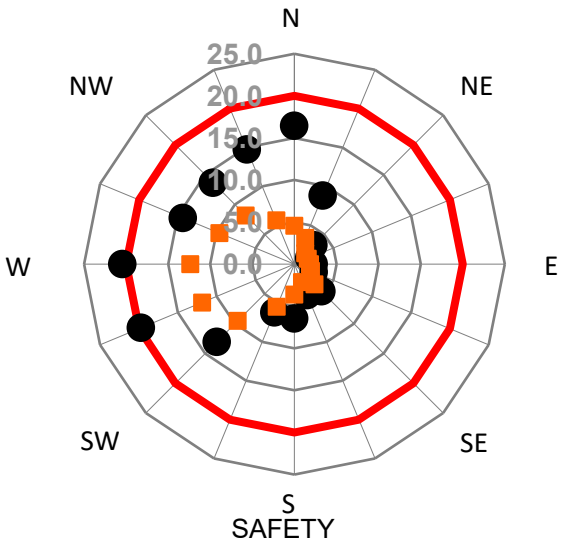
■							
◆							
▲							

Test Location **H2**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	37.3%	24.9%	15.7%	4.5	NA - Safety criterion failed	20.4	Fail
●							
■ **Proposed Configuration with wind mitigation strategies**	9.7%	4.5%	1.8%	2.0	Pass	12.4	Pass
◆							
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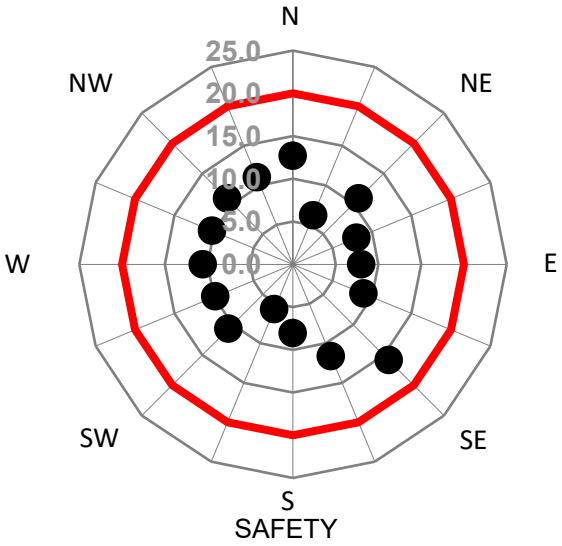
■							
◆							
▲							

Test Location **H3**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	29.2%	13.6%	5.5%	3.5	Pass	15.9	Pass
●							
■ **Proposed Configuration with wind mitigation strategies**							
◆							
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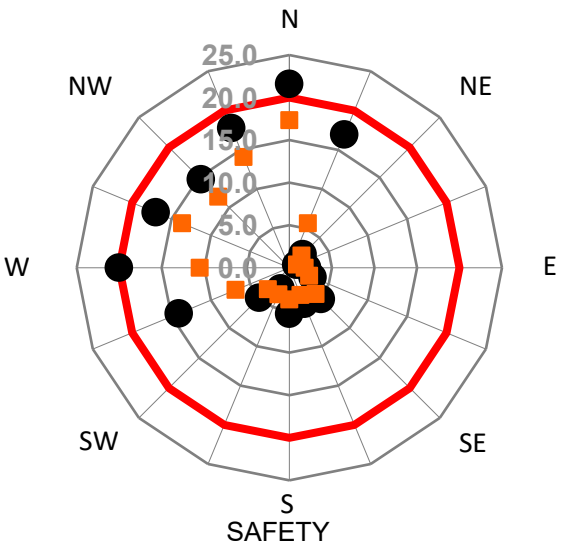
■							
◆							
▲							

Test Location **H4**

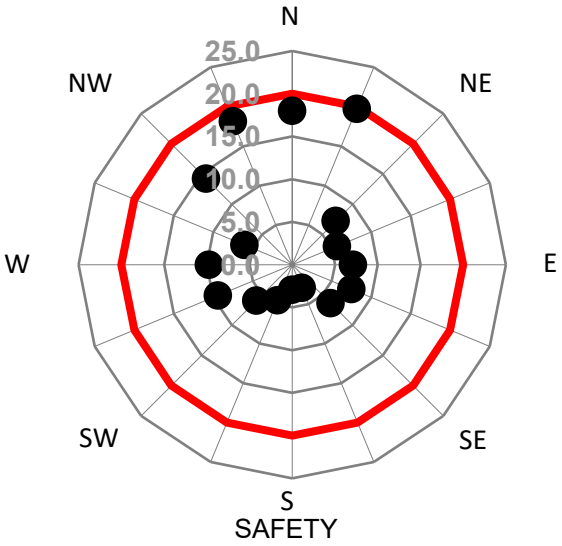


Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	40.4%	28.3%	20.2%	5.0	NA - Safety criterion failed	21.6	Fail
●							
■ **Proposed Configuration with wind mitigation strategies**	24.1%	15.3%	9.5%	3.4	Pass	17.3	Pass
◆							
▲							
■							
◆							
▲							

Test Location **H5**

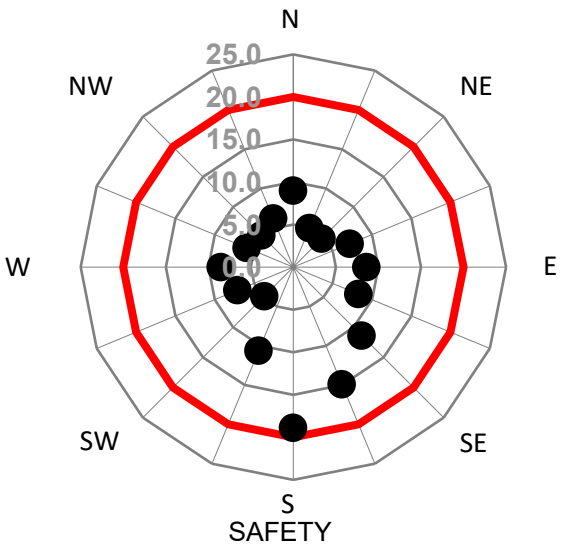


Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	29.1%	18.7%	12.2%	3.8	Pass	19.7	Pass
●							
■ **Proposed Configuration with wind mitigation strategies**							
◆							
▲							
■							
◆							
▲							

Test Location **H6**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	25.1%	14.8%	9.2%	3.4	Pass	18.9	Pass
●							
■ **Proposed Configuration with wind mitigation strategies**							
◆							
▲							
■							
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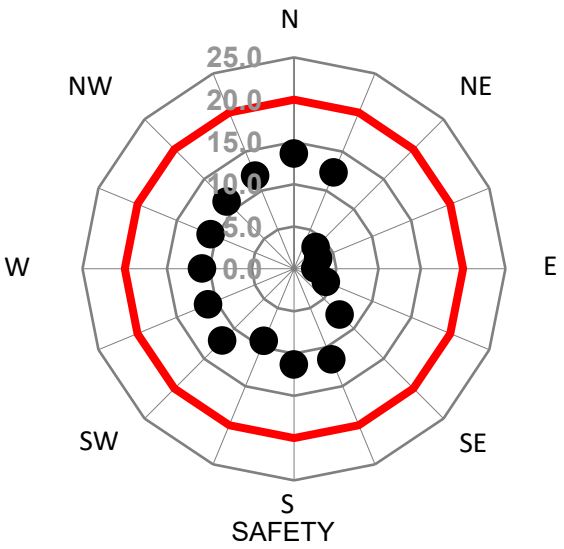
▲							

Test Location **C1**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	35.9%	18.5%	7.2%	3.9	Pass	13.6	Pass
●							
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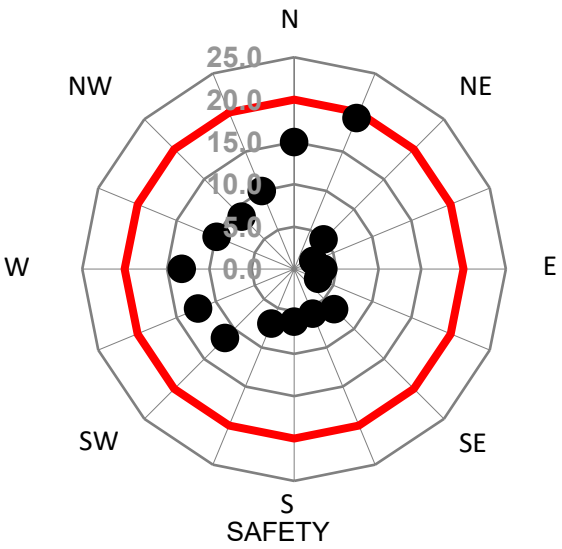
▲							
■							
◆							
▲							

Test Location **C2**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	29.1%	16.8%	7.9%	3.7	Pass	19.2	Pass
●							
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■							
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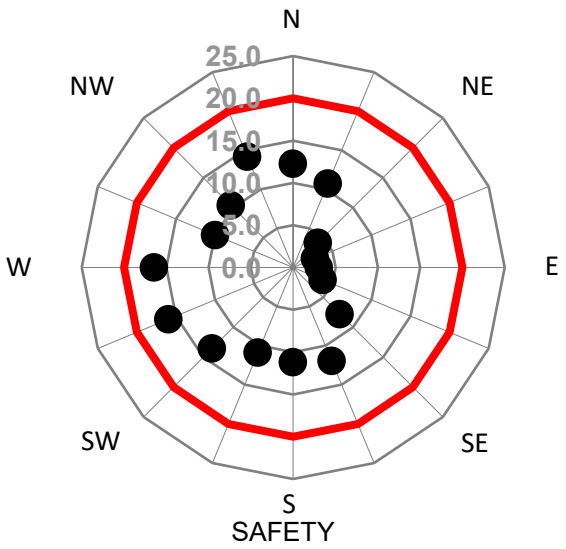
Test Location **C3**



Local peak 3 second gust wind speed (m/s)

Safety Wind Speed = 20m/s

Configuration	Wind Comfort Criteria					Safety Criterion	
	Exceedence of given wind speed per year			Mean wind speed (exceeded 20% of year)	Result (compared against Target wind speed of 5m/s)	Peak wind speed (of all wind directions)	Result (compared against Safety wind speed of 20m/s)
	Sitting (3m/s) %	Standing (4m/s) %	Walking (5m/s) %	m/s	Pass/Fail	m/s	Pass/Fail
● **Proposed Configuration**	40.2%	21.4%	10.1%	4.1	Pass	16.4	Pass
●							
■							
◆							
▲							
■							
◆							
▲							