

GREEN SQUARE STAGE 3

ZETLAND, NSW

SSDA NATURAL VENTILATION DESIGN REVIEW

RWDI #2512280

16 December 2025

SUBMITTED TO

Mirvac
Level 28, 200 George Street
Sydney NSW 2000 Australia

SUBMITTED BY

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DOCUMENT CONTROL

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EXECUTIVE SUMMARY

RWDI Australia Pty Ltd (RWDI) was retained to conduct an assessment with regards to the natural ventilation performance of the proposed Stage 3 of the Green Square Town Centre at Zetland, NSW. The assessment was performed with consideration of the Apartment Design Guide (ADG) of the State Environmental Planning Policy (Housing) 2021 (or Housing SEPP 2021).

In this report, the assessment was undertaken for the three residential towers (Site 7, 17 and 18) of the proposed development. On review of the proposed design, it is expected that **60.5% (124/205)** of the assessed apartments on the first 9 storeys (i.e., Site 7 and 17 from Level 2 to Level 9, and Site 18 from Level 3 to Level 9) will be naturally ventilated. This is achieved via:

- Dual-aspect design for **97** corner apartments that are considered naturally cross-ventilated under the ADG; and
- Single-aspect apartment design with openings located in significantly different pressure regions which is expected to drive natural ventilation cross flow through the apartments. There are **27** apartments which were demonstrated by CFD modelling to have the potential of achieving natural ventilation flow rates on par with the corner apartments and/or above the threshold recommended in AS 1668.4.

All flow paths were found to be less than 18m long, as per the ADG. Habitable rooms of the proposed development will need to include openable windows / doors etc., to be equivalent to 5% of the floor area served in accordance with the National Construction Code.

The cumulative impact of future significant developments has been considered and is unlikely to have a significant impact on these findings.



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1 INTRODUCTION

This report supports one of the detailed State Significant Development Applications (SSDA) (SSD-83899206) and concurrent rezoning being lodged with the Department of Planning, Housing and Infrastructure (DPHI) for the construction of three mixed-use Build-to-Rent buildings at 960A Bourke Street (the site). The site is also known collectively as Sites 7, 17 and 18 of the Green Square Town Centre (GSTC) and is legally described as Lot 6, DP 1199427. The proponent for the SSDA is Mirvac Green Square Pty Limited.

The proposal aims to:

- Respond to the housing challenges facing Sydney through the delivery of diverse housing types in a highly accessible location;
- Demonstrate the strategic and site-specific merit of accommodating the proposed height and FSR of development on the site;
- Contribute to the establishment of Green Square as a town centre through a mixed-use approach and use urban design principles to integrate residential and non-residential land uses;
- Improve the pedestrian connectivity throughout the site, while encouraging the direct connections to public transport and the existing street network; and
- Appropriately respond to neighbouring development and public domain within the GSTC through podium and tower forms with appropriate massing, which protect solar access and minimise environmental impact.

RWDI Australia Pty Ltd (RWDI) was retained to provide advice with regards to the natural ventilation performance of the proposed development (the proposed development) at Zetland, NSW, as shown in Figure 1. The assessment was performed with consideration of the Apartment Design Guide (ADG) in conjunction with State Environmental Planning Policy (Housing) 2021 (the Housing SEPP). This report documents the findings of the desktop assessment based on the following:

- Architectural drawings provided by FK Australia and Plus Studio to RWDI up to 5 December 2025;
- Preliminary steady-state CFD study of the selected apartment units;
- Local meteorological data for the Sydney region; and
- RWDI's knowledge of air flows within and around buildings.

The analysis was based on a desktop review of the architectural drawings of the proposed development and its surrounding context, combined with the meteorological data for Sydney. Preliminary Computational Fluid Dynamics (CFD) studies were also undertaken for selected apartments to demonstrate if these apartments have merit to be considered naturally ventilated. No wind tunnel studies were undertaken as part of this desktop review. To better quantify these conditions or refine any conceptual mitigation measures, further detailed investigations can be undertaken during the detailed design stage, if required.



1.1 Background – Housing Delivery Authority

On 19 December 2024, the Housing Development Authority (HDA) was established by DPHI to accelerate the delivery of housing across NSW, under the Environmental Planning and Assessment (Housing Delivery Authority) Order 2024. This has provided a new State Significant Development pathway in which the proposed redevelopment can be undertaken through.

The site was declared State Significant Development (SSD) pursuant to State Significant Declaration Order 2025 (No 2) issued on 26 February 2025. The order specifies development in EOI application 232525 dated 17 January 2025, including development for the purposes of mixed use development comprising commercial premises and residential accommodation with the provision for affordable housing and Build to Rent (BTR) at 960A Bourke Street, 6 Geddes Ave and 411 Botany Road, Zetland as identified in Schedule 18, is declared to be SSD.

The HDA SSD pathway has been established to accelerate delivery of housing and requires that the subject SSD is lodged within 9 months from receipt of the Secretary's Environmental Assessment Requirements (SEARs). Current SEARs for the project were issued for Early Works on 15 April 2025 (SSD-82328958) (SSDA 1), Sites 7, 17 and 18 on 15 May 2025 (SSD-83899206) (SSDA 2) and for Sites 8 and 19 on 15 May 2025 (SSD- 84322496) (SSDA 3).

The key features of the Mirvac Green Square HDA proposal are:

- Detailed development consent for the purposes of a mixed use development, with significant residential components comprising build to sell and build to rent dwelling stock and ground floor non-residential uses.
- Delivery of between 1,000 to 1,200 dwellings across 9 buildings in low rise and high rise tower formats.
- Delivery of Affordable Housing dwellings.
- Delivery of the components in two-stage detailed SSDA process.

In conjunction with the SSDA, a State-assessed rezoning process is intended to facilitate the proposed development.

This SSDA forms the second application as part of broader HDA declared development and forms the main works to develop sites 7, 17 and 18 of the GSTC.

1.2 Site Description

The site is located at 960A Bourke Street, Zetland and is located within the GSTC. It is situated within the Sydney Local Government Area (LGA), approximately 3.5km south of the Sydney CBD and within immediate proximity of the Green Square Railway Station. The site forms the northern component of the Mirvac HDA proposal, consisting of one lot which is legally described as Lot 6, DP 1199427. An aerial photo of the site is shown at Figure 1 below.

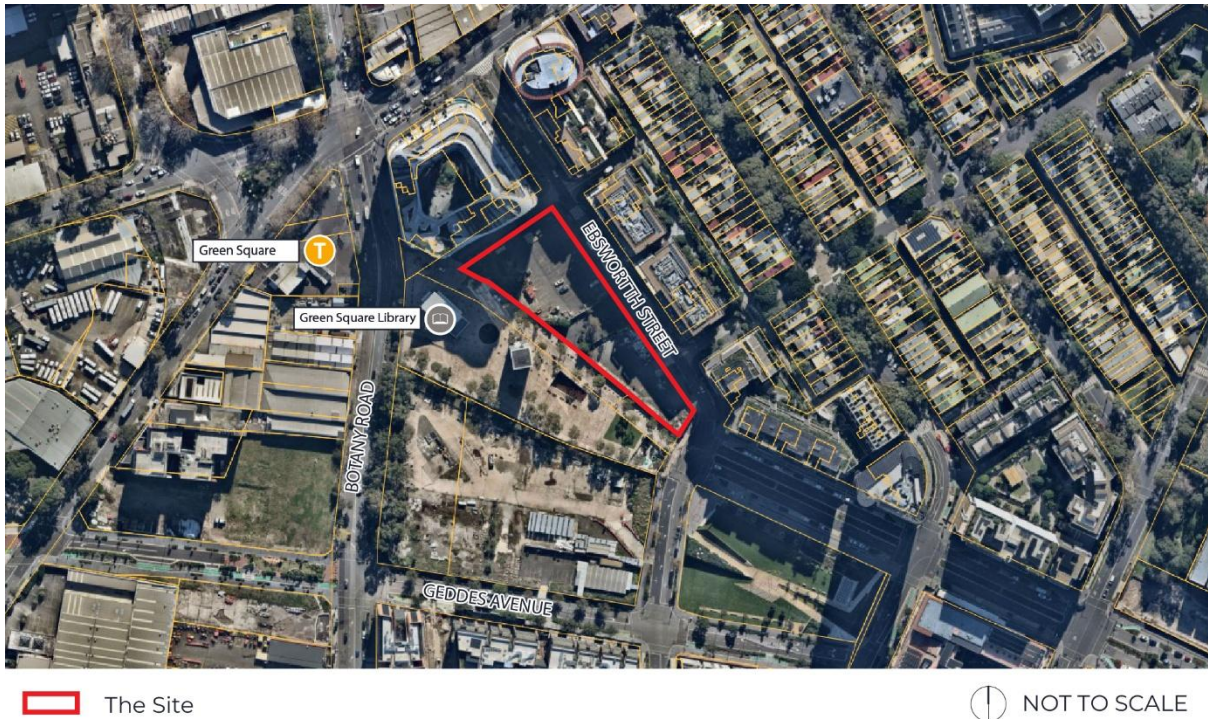


Figure 1: Development Site in Red (Source: NearMap)

1.3 Overview of the Proposed Development

The Proposed development seeks to deliver the construction of three BTR buildings which will integrate residential, retail, resident amenity and public domain uses. Specifically, the proposal seeks approval for:

- Excavation and enabling works.
- Construction of 3 mixed use BTR buildings up to 21 storeys in height, comprising:
 - 511 BTR dwellings including a variety of dwelling types including Studio, 1, 2 and 3-bedroom apartments, a portion of which will be affordable housing.
 - Shared internal and external residential amenity space.
 - Non-residential floor space including retail, BTR staff offices and BTR resident lobbies
 - A shared basement level, incorporating loading zones, waste collection and servicing.
 - Car parking and bike parking to service the proposed development.
- Public domain and landscaping improvements, including:
 - External pedestrian laneways, pathways and through-site links.
 - Tree removal, protection, new plantings and landscaping works.
- Utility and stormwater connections to support the new development.
- Concurrent amendments to the Sydney Local Environmental Plan (Green Square Town Centre) 2013 to facilitate the SSDA.

1.4 Secretary’s Environmental Assessment Requirements

In accordance with section 4.39 of the Environmental Planning & Assessment Act 1979 (EP&A Act), Secretary’s Environmental Assessment Requirements (SEARs) (SSD-83899206) have been issued. This report has been prepared to respond to the issued SEARs, as set out in the table below.

Table 1: SSD-83899206 SEAR

SEAR	Response / Location Addressed in Report
<p>6. Built Form and Urban Design</p> <p>The design principles for residential apartment development set out in Schedule 9 of the Housing SEPP and the Apartment Design Guide (ADG). This should include a table which demonstrates how each dwelling (including affordable dwellings) performs against the ADG design criteria.</p>	Section 5

1.5 Summary of Mitigation Measures

Table 2: Mitigation Measures

ID	Mitigation Measure
Design and Operation – Site 7, 17 and 18	
D/O	<p>The study in this report showed that 60.5% (124/205) of the assessed apartments on the first 9 storeys for the proposed development will be naturally ventilated, fulfilling the ADG requirement. No mitigation was proposed. The apartments assessed include:</p> <ul style="list-style-type: none"> • Site 7 and 17 from Level 2 to Level 9, and • Site 18 from Level 3 to Level 9

2 CRITERIA

2.1 Apartment Design Guide (ADG)

Section 4B of the ADG states that:

"Natural cross ventilation is achieved by apartments having more than one aspect with direct exposure to the prevailing winds, or windows located in significantly different pressure regions, rather than relying on purely wind driven air."

The ADG guidance focuses on two key aspects for natural ventilation in apartment developments. This is noted in the following sections:

Section 4B-1: All Habitable rooms are naturally ventilated.

This section provides guidance to support natural ventilation. The main guidance provided is that an area of unobstructed window opening be provided for each habitable room of 5% of the floor area served. Furthermore, the buildings orientation should be such that it maximizes the capture and use of the prevailing breezes.

Section 4B-3: Number of apartments with natural cross ventilation is maximized to create a comfortable indoor environment for residences.

This section details design criteria for natural cross ventilation in the first 9 storeys of the building being assessed, specifically that at least 60% of the apartments on these levels be naturally cross ventilated. Apartments located on Level 10 and above are deemed to be considered naturally cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed.

Furthermore, depth of cross-over or cross-through apartments should not be more than 18 m from glass line to glass line.

Noting that the ADG is a guideline, it does not provide specific metrics detailing what constitutes adequate ventilation. It therefore falls to the wind consultant to recommend an appropriate metric.

3 METEOROLOGICAL DATA

Meteorological data recorded at the Sydney International Airport in Sydney, Australia, the closest meteorological station to the proposed development, for the period from 2013 to 2022, were used as a reference for wind conditions in the area. The wind rose (Figure 1) graphically depicts the combined directional distributions of wind frequencies and speeds annually measured at the airport at an anemometer height of 10 m. Winds from the northeast (NE), northwest (NW), and southerly (S) directions are most prevalent throughout the year, as indicated by the wind rose. Natural ventilation at the project will be primarily driven by exposure to winds from these directions.

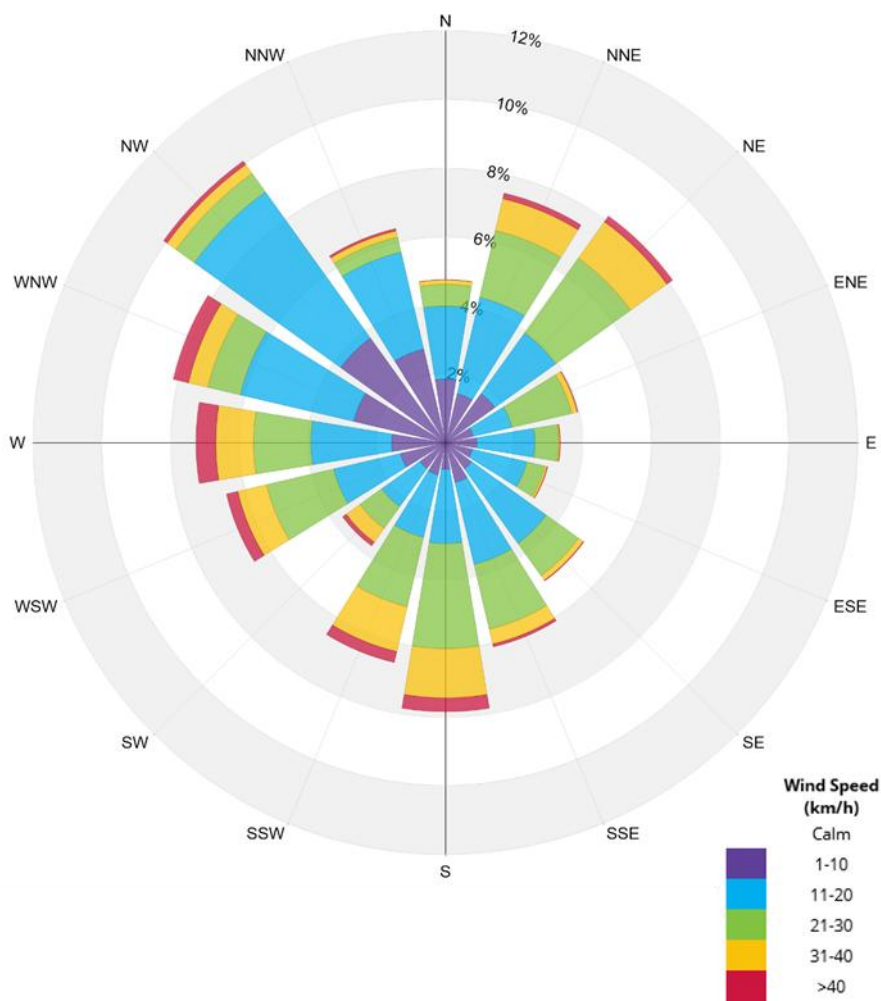


Figure 1: Directional Distribution of Winds Recorded at Sydney International Airport (2013 - 2022)

To facilitate analysis, annual winds were further broken down into two seasons, as illustrated in Figure 2 on the next page. The seasonal wind roses show winds with high frequency from the west-southwest through northwest sectors during winter, while northeasterly and southerly winds dominate during the summer months. Strong winds of mean speed greater than 30 km/h (measured at the airport at an anemometer height of 10 m) occur 12.7% in the winter and 12.3% in the summer.



Figure 2: Directional Distribution of Winds for Summer and Winter Season (Winds Blowing From) Sydney International Airport (2013 - 2022)

4 NATURAL VENTILATION STRATEGIES

The ability of the site to harness natural ventilation will be dependent on the exposure of the external openings on the building's facade to the prevailing winds, as well as the type of natural ventilation strategy employed.

Wind driven natural ventilation takes advantage of the local wind conditions to drive air through the internal spaces of residences. The internal air flow is driven by a pressure differential across the openings, with air moving from high pressure to low pressure openings, as noted in Figure 3. Therefore, it is important to understand the pressure distribution around a built form as well as the prevailing wind direction(s) to assist in the positioning of opening locations. This will allow for wind pressure driven natural ventilation will be achieved in accordance with the ADG. Figure 4 provides a simplified plan and section view of a wind pressure field around a built form for a given wind direction. Note that thermal driven buoyancy ventilation would act in addition to this wind driven flow path.

Objective 4B-2 of the ADG notes that natural ventilation for single-aspect apartments can have primary windows augmented with plenums and light wells; however, they are generally not suitable for natural cross ventilation as they are typically located on the same building aspect. However, natural cross ventilation can be achieved by locating the plenum in a significantly different pressure region, i.e. on the opposite or an orthogonal building aspect, as per Section 4B of the ADG.

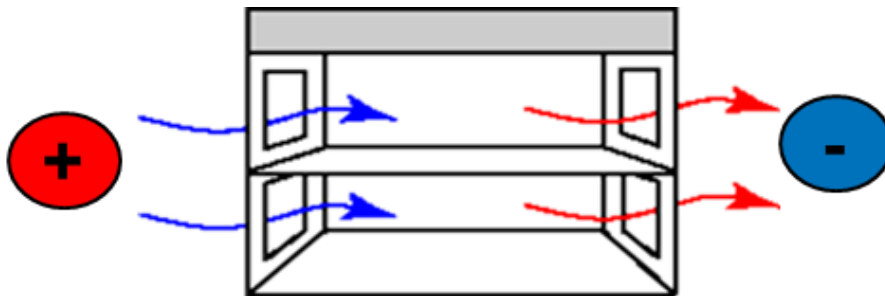


Figure 3: Pressure-driven Natural Ventilation

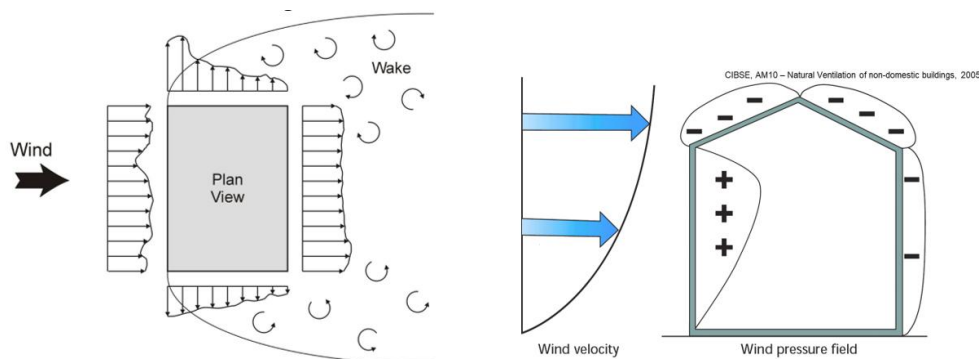


Figure 4: Pressure Distribution Around a Building for a Given Wind Direction: Plan (left) and Section (right)



5 NATURAL VENTILATION RESULTS

An assessment has been undertaken of the drawings provided by the architect (shown in Appendix A) of all apartments located within the first 9 storeys of the proposed development for natural cross ventilation in accordance with the ADG:

- Site 7: Proposed Level 2 to Proposed Level 9
- Site 17: Proposed Level 2 to Proposed Level 9
- Site 18: Proposed Level 3 to Proposed Level 9

This assessment was based on a desktop review of the architectural drawings of the proposed development and its surrounding context, combined with the meteorological data for Sydney.

Based on our review, **60.5% (124/205)** of residential apartments on the first 9 storeys are naturally cross-ventilated. This count includes apartments for which CFD simulations were undertaken to confirm availability of natural cross-ventilation (See Section 6). A summary of the assessment results is provided in Tables 3-5. Refer to Appendix A for the detailed markups of the natural cross ventilation assessment.

Table 3: Natural Cross Ventilation Summary of the First 9 Levels in Site 7

Building	Apartment Number	Naturally Cross Ventilated
Site 7	Levels 2-5	
	70201 – 70501	Yes
	70202 – 70502	Yes
	70203 – 70503	No
	70204 – 70504	No ¹
	70205 – 70505	Yes ¹
	70206 – 70506	Yes
	70207 – 70507	No
	70208 – 70508	Yes ¹
	Level 6	
	70601	Yes
	70602	Yes
	70603	No
	70604	No
	70605	Yes ¹
	70606	Yes
	70607	Yes
	Levels 7-10	
	70701 – 71001	Yes
	70702 – 71002	Yes
	70703 – 71003	No
	70704 – 71004	Yes
	70705 – 71005	No
	70706 – 71006	No
	70707 – 71007	No
	70708 – 71008	No
	70709 – 71009	No
	70710 – 71010	Yes
70711 – 71011	Yes	
70712 – 70912	Yes	
70713 – 70913	Yes ¹	

¹These units have been modelled in CFD to verify availability of natural ventilation under prevailing winds (see Section 6).

Table 4: Natural Cross Ventilation Summary of the First 9 Levels in Site 17

Building	Apartment Number	Naturally Cross Ventilated
Site 17	Levels 2-5	
	170201 – 170501	No
	170202 – 170502	Yes
	170203 – 170503	Yes ¹
	170204 – 170504	Yes
	170205 – 170505	No ¹
	170206 – 170506	No
	170207 – 170507	No
	170208 – 170508	Yes
	170209 – 170509	No
	170210 – 170510	Yes
	170211 – 170511	No
	Level 6	
	170601	Yes ¹
	170602	Yes
	170603	Yes
	170604	No
	170605	No
	170606	Yes
	170607	Yes
	Levels 7-10	
	170701 – 170901	Yes
	170702 – 170902	Yes
	170703 – 170903	Yes
	170704 – 170904	Yes
	170705 – 170905	No
	170706 – 170906	No
	170707 – 170907	No
	170708 – 170908	Yes
	170709 – 170909	Yes

¹These units have been modelled in CFD to verify availability of natural ventilation under prevailing winds (see Section 6).



Table 5: Natural Cross Ventilation Summary of the First 9 Levels in Site 18

Building	Apartment Number	Naturally Cross Ventilated
Site 18	Levels 3-11	
	180301 – 180901	Yes
	180302 – 180902	Yes
	180303 – 180903	No
	180304 – 180904	No
	180305 – 180905	Yes
	180306 – 180906	Yes
	180307 – 180907	Yes ¹

¹These units have been modelled in CFD to verify availability of natural ventilation under prevailing winds (see Section 6).

6 PRELIMINARY CFD STUDY

In support of the ADG assessment presented in Section 5, RWDI conducted steady-state CFD modelling of selected representative apartments to investigate the viability of natural ventilation under the prevailing winds. These apartments which comprise single aspect apartments are identified as having the potential to achieve natural ventilation flow rates on par with the deemed-to-satisfy or dual-aspect apartments given the exposure to prevailing winds and openings which are located in significantly different pressure regions due to façade articulation.

6.1 CFD Simulated Apartments

Figures 6 and 7 show the 3D models of the simulated apartments. The models were constructed based on the floor plans and 3D architectural models provided by FK Australia and Plus Studio up to 5 December 2025. The simulated single-aspect apartments which have been identified as having the potential for effective natural ventilation are:

- Site 7: Units 70204, 70205, 70208 and 70713,
- Site 17: Units 170203, 170205 and 170601, and
- Site 18: Unit 180307.

In addition to the above-mentioned single-aspect apartments, several ADG-compliant or corner apartments were also selected to be included in the simulation model for benchmarking. The simulated deemed-to-satisfy apartments are:

- Site 7: Units 70201, 70202, 70206 and 70701,
- Site 17: Units 170204, 170208, 170602 and 170607, and
- Site 18: Units 180301 and 180306.

The simulated models were simplified to include only the necessary buildings (including future Stages 4 and 5 of the Green Square Town Centre) most likely to influence local wind flows in and around the proposed site. Landscaping, along with smaller architectural and accessory features on the surrounding buildings were excluded from the model. Local topographic variations, if present, were modelled to account for the changes in the wind speeds that can occur due to larger variations of topography.

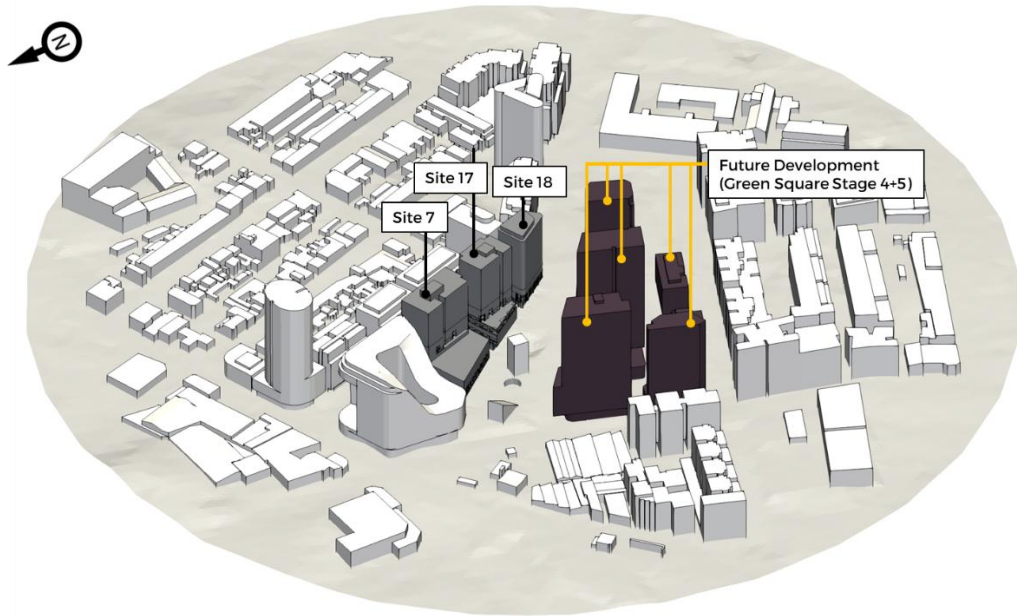


Figure 6: Isometric View of the Computational Domain

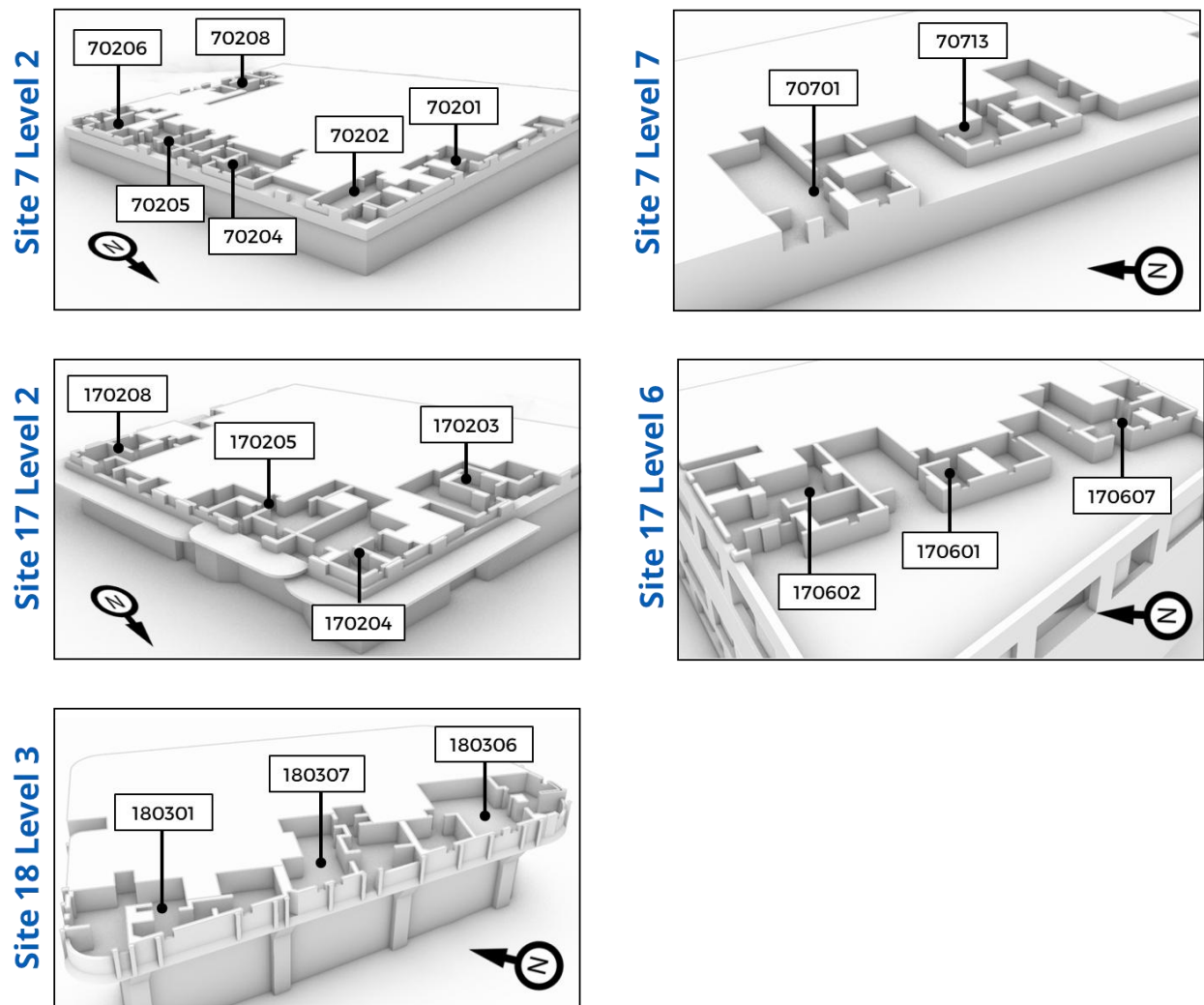


Figure 7: Perspective View of the Apartments Simulated (The models were clipped for better illustration of internal configuration of the apartments)

6.2 Methodology and Assumptions

Computational fluid dynamics (CFD) is a numerical modelling technique for simulating wind flows in complex environments. For urban wind modelling, CFD techniques are used to generate a virtual wind tunnel where flows around the site, surroundings and within the study buildings/apartments are simulated at full scale. The computational domain that covers the site and surroundings is divided into millions of small cells where calculations are performed, which allows for the “mapping” of the wind conditions across the entire study domain. CFD excels as a tool for urban wind modelling for providing early design advice, resolving complex flow physics, comparing designs and site scenarios and helping diagnose problematic wind condition.

A summary of the methodology used in this assessment is provided below:

1. CFD wind simulations were conducted for the prevailing northeasterly (NE) and southerly (S) winds.
2. The average net flow rates through each selected apartment were extracted directly from the simulation results.
3. Since the ADG does not provide a quantitative metric or criteria for natural cross ventilation, we have compared the predicted flow rates in the single-aspect apartments to the ADG-compliant apartments. This allowed for an assessment of the natural ventilation performance of the potential apartments and whether the flow rates are on par with the compliant apartments.
4. Apart from the comparison between the single-aspect and corner apartments, reference was also made to AS 1668.4 in understanding of the natural ventilation flow rates required for maintaining air quality. Using the calculation framework presented in CIBSE Guide A: Section 4.2.1.1 (which is referenced by AS 1668.4), the minimum ventilation rate for the proposed apartments was determined to be 46 L/s, with assumptions of 2 occupants per bedroom.
5. The assessed apartments were deemed to have merit for natural ventilation if the predicted flow rates were comparable to the ADG compliant apartments and/or exceeded the minimum performance requirements in terms of air quality as specified in AS 1668.4.

The CFD simulations were conducted with the following assumptions:

- Only the prevailing NE and S winds at the 50th percentile wind speeds were simulated.
- The awning windows were modelled with an equivalent area that accounts for the aerodynamic performance of an awning window that opens not more than 125mm with an insect screen (per NCC requirements).
- All window and sliding door openings within the studied apartments were assumed to be fully open to maximise airflow across the space.
- Flow was assumed to be steady state and incompressible, thus transient features of the flow were not captured.
- Effects of buoyancy and temperature variations were neglected.
- Turbulence was modelled using Reynolds-Averaged Navier Stokes (RANS) model with realizable k-epsilon turbulence model.

6.3 CFD Results

Figure 8 shows the CFD predicted wind speed results within the studied single-aspect apartments under the simulated prevailing wind directions. Table 6 presents a summary of the assessment. Detailed results of the predicted flow rates for each apartment type are provided in Appendix B.

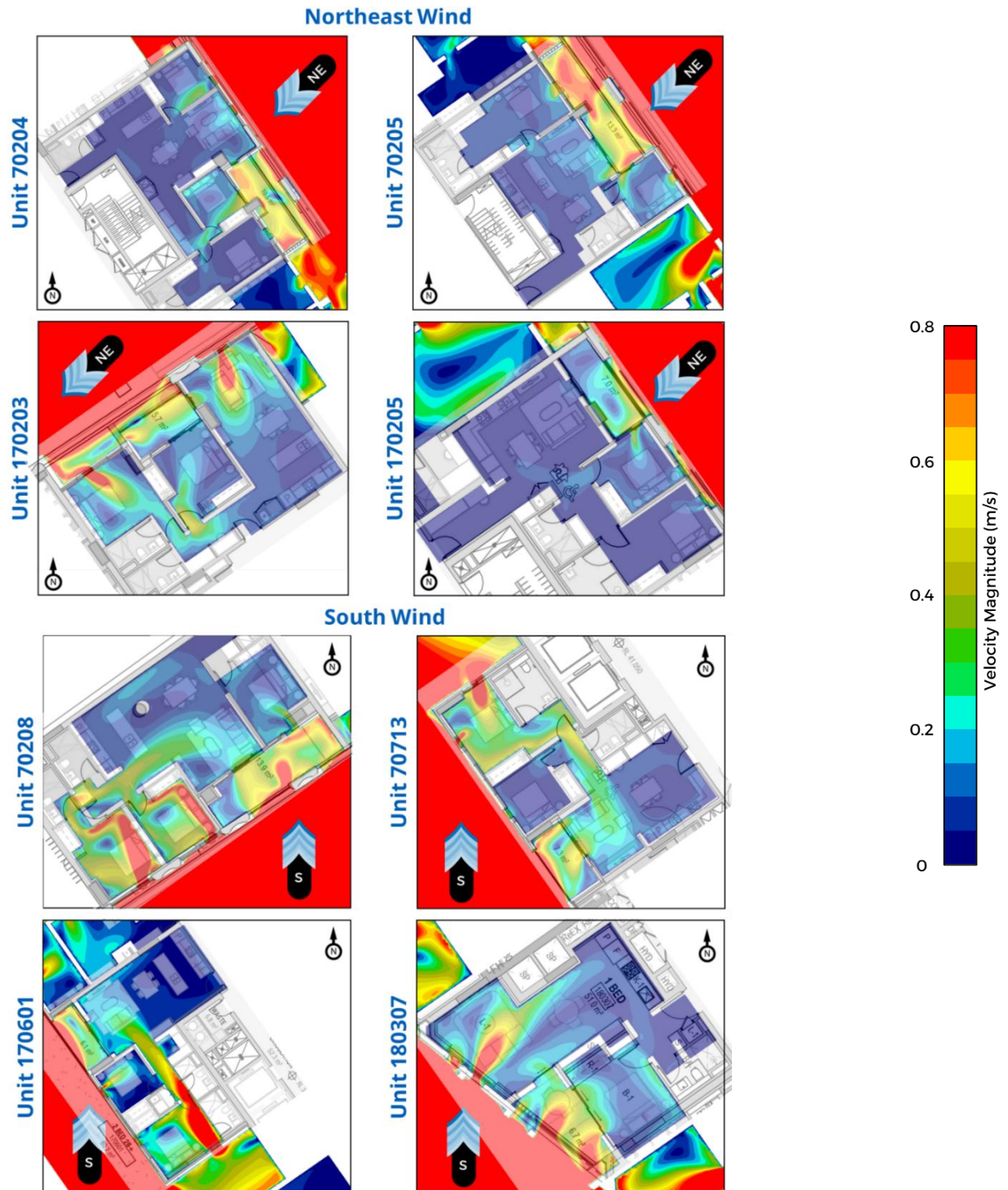


Figure 8: Velocity Contour at Approximately 1.5 m Above Finished Floor Level Under Northeast Wind (top) and Northwest Wind (bottom). Contours are overlaid on top of the Floor Plans for Clarity.

Table 6: Summary of CFD Results

Apartment Number	Predicted Flow Rate Exceeded Corner Apartments Under Similar Prevailing Winds	Predicted Flow Rate Exceeded Minimum Ventilation Rate per AS1668.4	Air Flow Path Passes Through All Habitable Rooms	Has Merit for Natural Ventilation
70204	No	Yes	No	No
70205	Yes	N/A	Yes	Yes
70208	Yes	N/A	Yes	Yes
70713	Yes	N/A	Yes	Yes
170203	Yes	N/A	Yes	Yes
170205	No	Yes	No	No
170601	No	Yes	Yes	Yes
180307	Yes	N/A	Yes	Yes

Based on the CFD results, RWDI can make the following observations/commentary:

- Under the median wind speeds of the prevailing NE and S winds, the predicted average volumetric flow rates in 5 out of the 8 simulated apartments exceeded the minimum performance of an ADG-compliant apartment under similar wind conditions. This was due to the locations of the openings in significantly different pressure regions with respect to the prevailing winds which were predicted to drive effective flow rate through these apartments.
- While the predicted flow rate through apartment 170601 was slightly lower than the corner apartments under the south wind (refer to Appendix B), the value was significantly higher than the minimum ventilation rate stipulated per AS1668.4 as well as the majority of the other studied single aspect apartments. Furthermore, given the locations of the openings, the CFD results showed that the apartment design maximised the number of habitable rooms that allowed air flow to pass through. This is in line with ADG's Design Guidance under Objective 4B-3, thus is counted towards the ADG assessment.
- It should be noted that not all wind conditions will be able to provide the same level of flow rate. Other speeds and directions (especially those where the apartment openings are in the lee, or downwind, of the building massing) will provide less, or potentially negligible ventilation benefits. In order to quantify the performance of natural ventilation under multiple wind directions (i.e., non-prevailing winds), a more detailed assessment would be required by conducting a statistical hourly analysis over longer term local climate record.
- It is important to understand that this was a simplified assessment conducted under specific wind and geometric conditions. The presence of louvres/screens, gusts, mechanical and stack effect-driven airflows, furniture, and interior door operation will influence these findings in ways that would require a more detailed level of analysis to quantify.

In summary, 6 out of the 8 simulated apartment designs were predicted to be naturally cross ventilated under the predominant northeasterly and southerly winds. Detailed modelling could be undertaken during Detailed Design based on wind tunnel pressure measurements to confirm the annual natural ventilation performance of these units.



7 GENERAL STATEMENT OF LIMITATIONS

This report entitled *Green Square Stage 3- SSDA Natural Ventilation Design Review & Preliminary CFD Study* was prepared by RWDI Australia Pty Ltd ("RWDI") for Mirvac ("Client"). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein ("proposed development"). The conclusions and recommendations contained in this report are based on the information available to RWDI when this report was prepared.

Because the contents of this report may not reflect the final design of the proposed development or subsequent changes made after the date of this report, RWDI recommends that it be retained by the Client during the final stages of the project to verify that the results and recommendations provided in this report have been correctly interpreted in the final design of the proposed development.

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

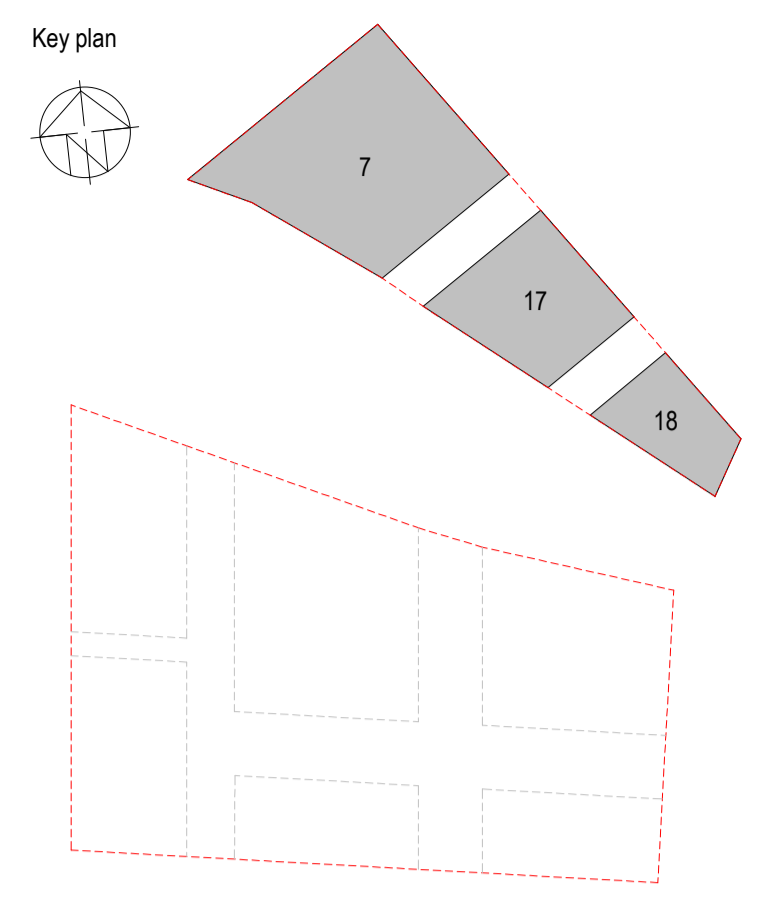
Finally, it is imperative that the Client and/or any party relying on the conclusions and recommendations in this report carefully review the stated assumptions contained herein and understand the different factors which may impact the conclusions and recommendations provided.

A large decorative graphic on the left side of the page, featuring a blue triangle at the top left corner, a white curved line, and a large light gray semi-circular shape that dominates the left half of the page.

APPENDIX A

CAR PARKING SCHEDULE			
LEVEL	RESIDENTIAL		TOTAL
	STANDARD	ACCESSIBLE	
LEVEL 2	13	4	17
LEVEL 3	19	0	19
LEVEL 4	19	0	19
LEVEL 5	25	0	25
TOTALS	76	4	80

MOTORCYCLE PARKING SCHEDULE	
LEVEL	TOTAL
LEVEL 2	1
LEVEL 3	1
LEVEL 4	1
LEVEL 5	1
TOTAL	4



NOTES
DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. SEEK CLARIFICATION OF INCONSISTENCIES / CONFLICTS.



- Naturally cross ventilated per ADG (Corner apartment)
- Has merit of being naturally ventilated (based on CFD study)

DATE	REV	ISSUED FOR DEVELOPMENT APPLICATION
16/12/2025	A	ISSUED FOR DEVELOPMENT APPLICATION
		amendment
* For previous versions refer to Document Control History		

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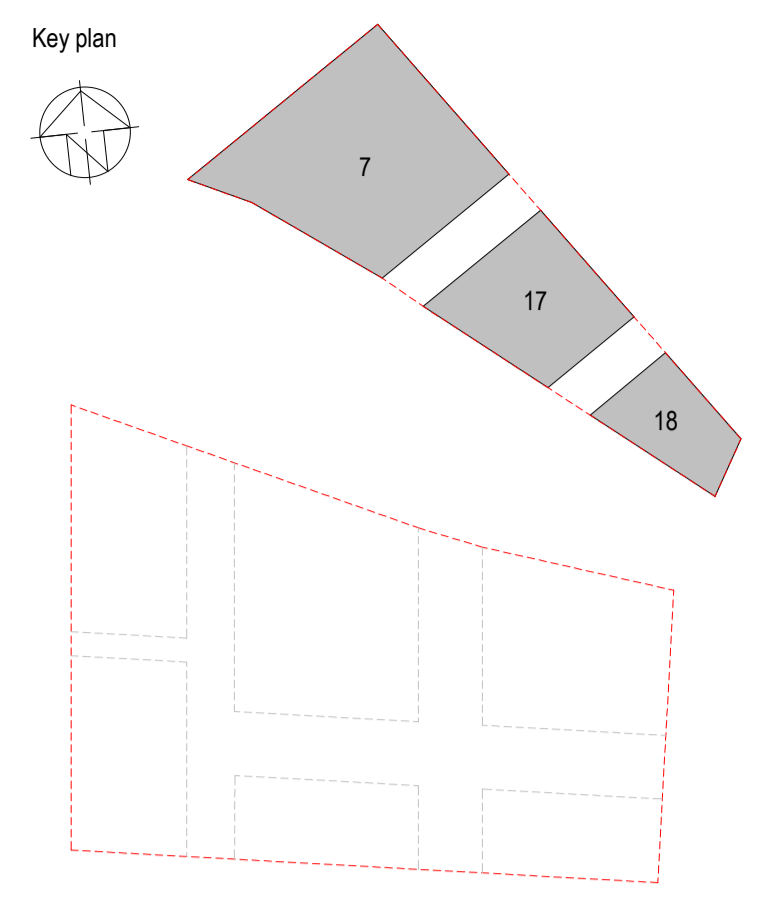
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CAR PARKING SCHEDULE			
LEVEL	RESIDENTIAL		TOTAL
	STANDARD	ACCESSIBLE	
LEVEL 2	13	4	17
LEVEL 3	19	0	19
LEVEL 4	19	0	19
LEVEL 5	25	0	25
TOTALS	76	4	80

MOTORCYCLE PARKING SCHEDULE	
LEVEL	TOTAL
LEVEL 2	1
LEVEL 3	1
LEVEL 4	1
LEVEL 5	1
TOTAL	4



NOTES
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- Naturally cross ventilated per ADG (Corner apartment)
- Has merit of being naturally ventilated (based on CFD study)

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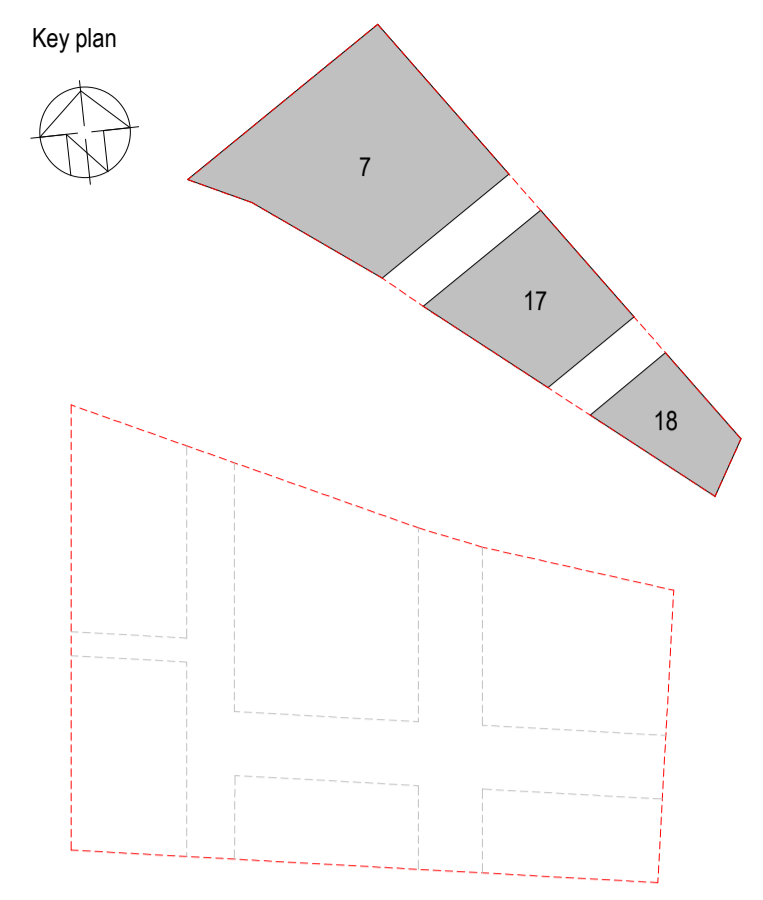
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CAR PARKING SCHEDULE			
LEVEL	RESIDENTIAL		TOTAL
	STANDARD	ACCESSIBLE	
LEVEL 2	13	4	17
LEVEL 3	19	0	19
LEVEL 4	19	0	19
LEVEL 5	25	0	25
TOTALS	76	4	80

MOTORCYCLE PARKING SCHEDULE	
LEVEL	TOTAL
LEVEL 2	1
LEVEL 3	1
LEVEL 4	1
LEVEL 5	1
TOTAL	4



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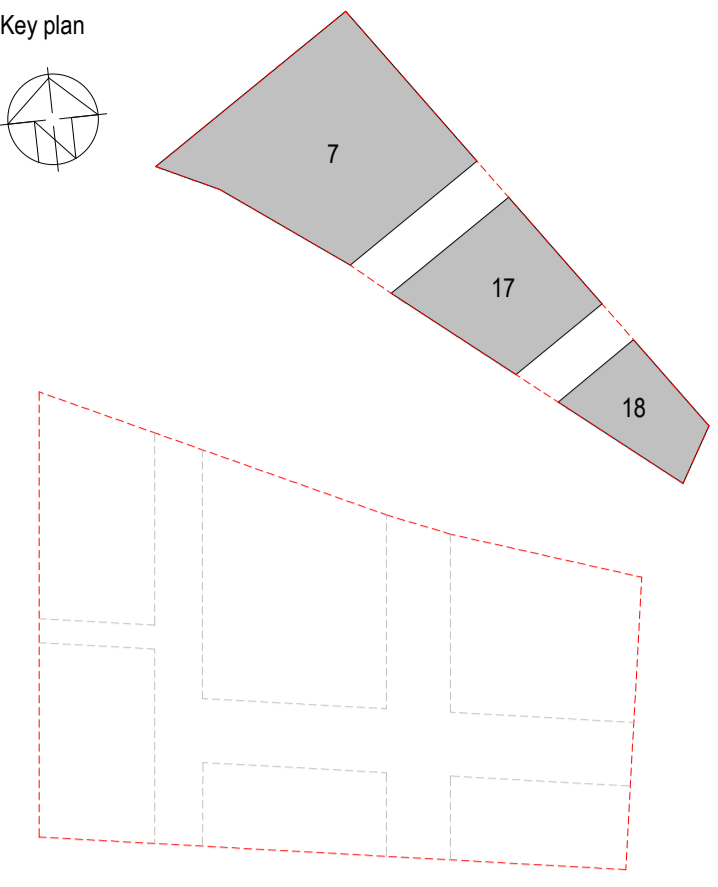
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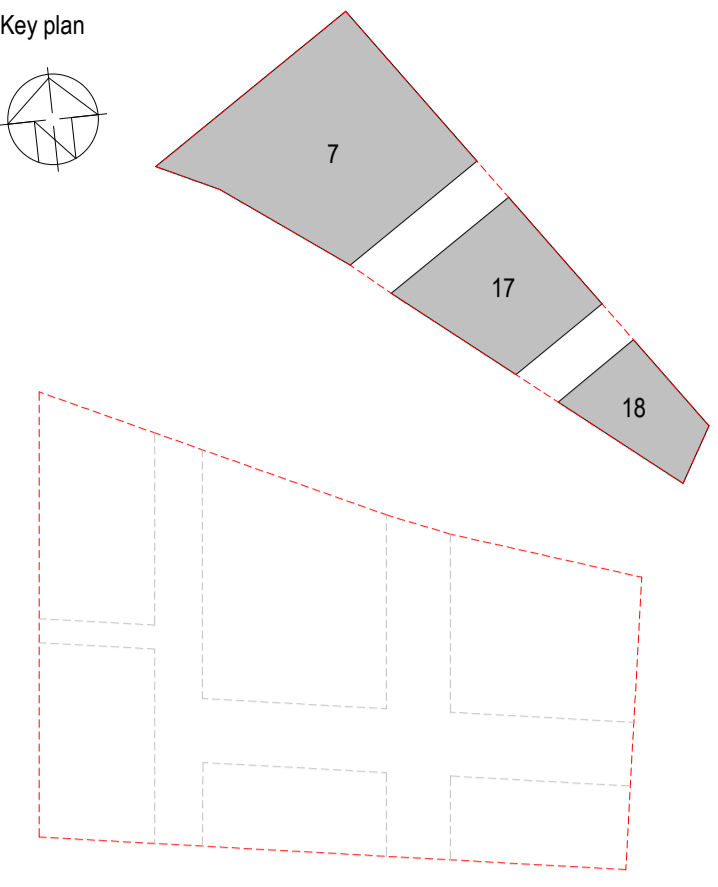
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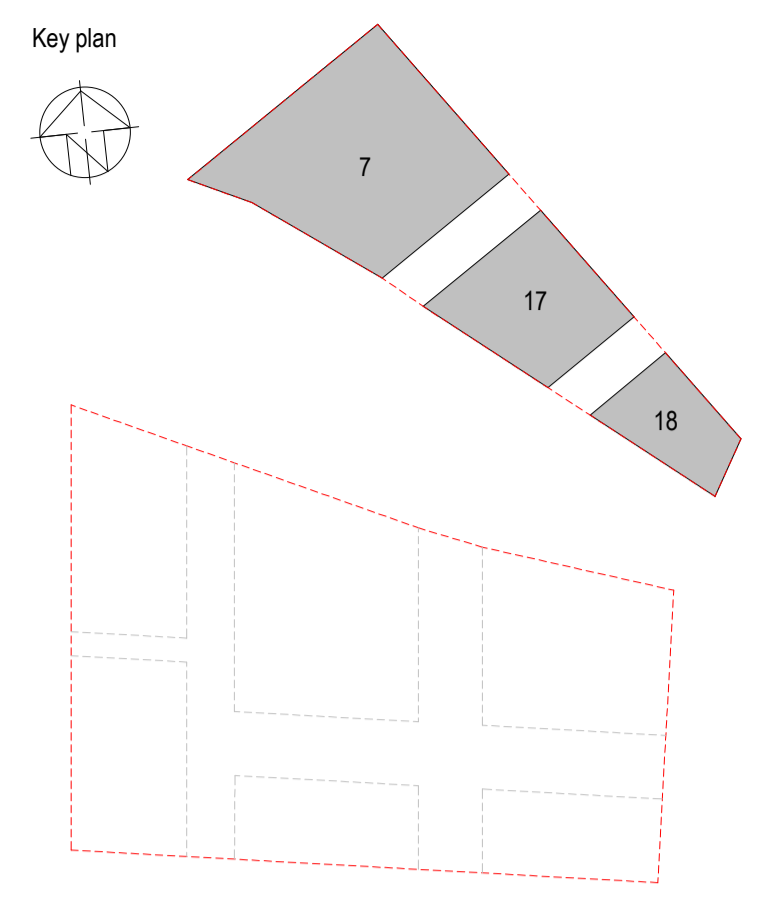
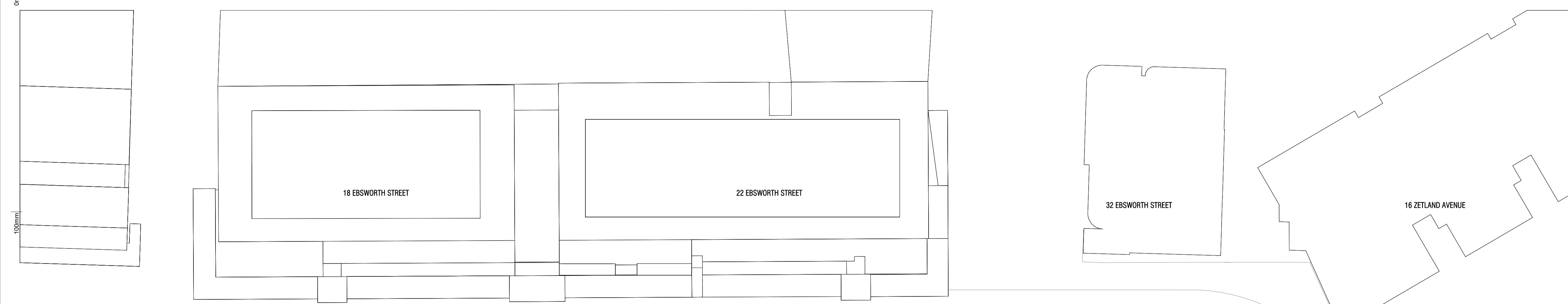
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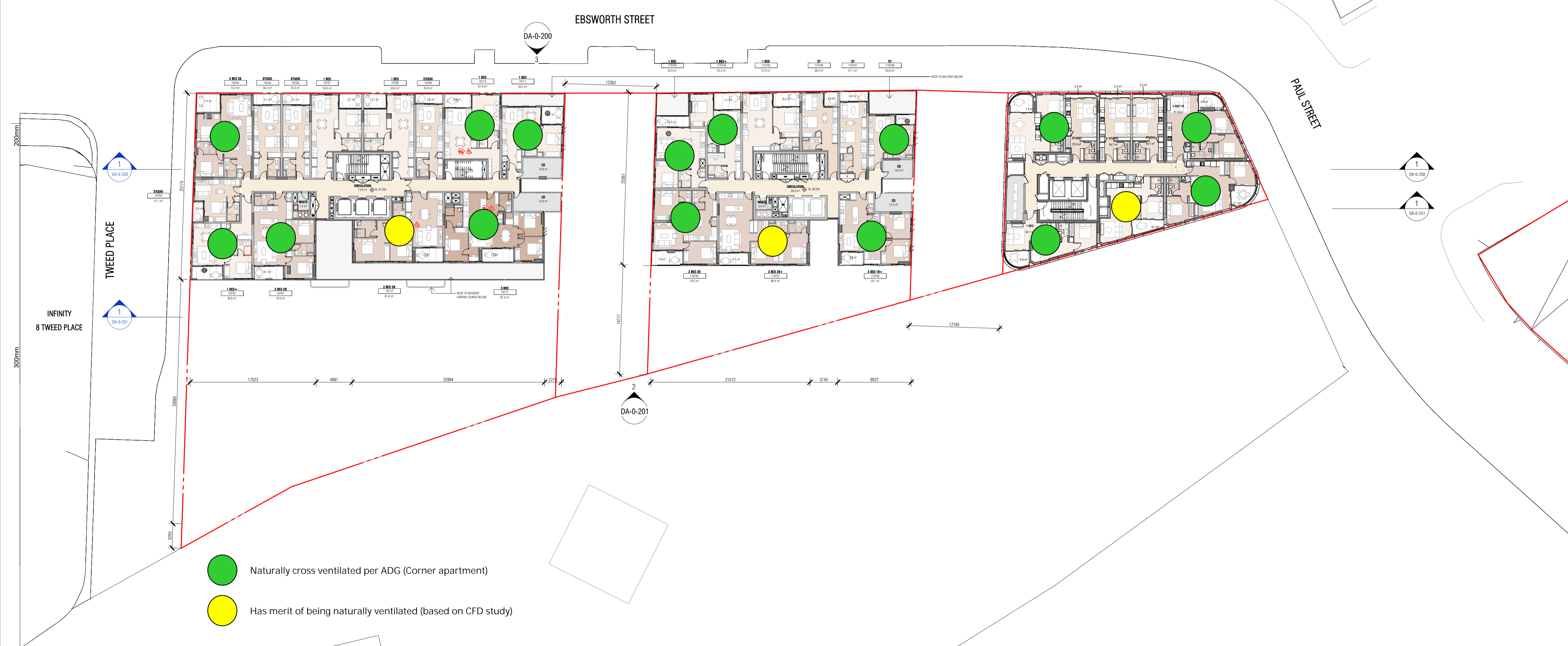
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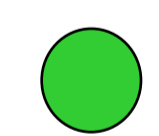
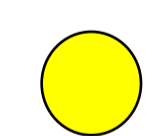
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A large decorative graphic on the left side of the page. It features a blue triangular shape in the top-left corner, a white curved line separating it from a large, light gray semi-circular area that dominates the left and center of the page.

APPENDIX B

APPENDIX B: SIMULATION RESULTS

The simulation results for the selected apartments are tabulated in Table A1.

Table A1: Flow rate results from CFD simulations under prevailing northeastern and southern winds

Apartment Number	Apartment Type	Prevailing Wind	Predicted Average Flow Rate (L/s) under prevailing wind
70201	Dual-aspect apartments	NE	864
70202		NE	1368
70206		NE	1970
70701		S	1936
170204		NE	1492
170208		NE	2708
170602		S	2329
170607		S	1140
180301		S	2650
180306		S	4823
70204	Single-aspect apartments	NE	639
70205		NE	875
70208		S	1519
70713		S	1555
170203		NE	905
170205		NE	241
170601		S	893
180307		S	1381