WALKERBAI CONSULTING

3-5 HELP STREET

ESD REPORT

PROJECT NAME	3-5 HELP STREET CHATSWOOD
PROJECT NUMBER	WBV-009
SITE ADDRESS	3-5 HELP STREET CHATSWOOD
DOCUMENT TITLE	ESD REPORT
DATE	28/01/2025
REASON FOR ISSUE	STAGE SIGNIFICANT DEVELOPMENT APPLICATION (SSDA)
REVISION	V6

PROJECT NAME	3-5 HELP STREET CHATSWOOD
PROJECT NUMBER	WBV-009
SITE ADDRESS	3-5 HELP STREET CHATSWOOD
DOCUMENT TITLE	ESD REPORT
PREPARED FOR	Loftex Chatswood Pty Ltd
PREPARED BY	Patrick Phelan - WalkerBai Consulting Pty Ltd
REVISION	V6
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Table 1 – Document Revision History

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1 SCOPE

1.1 PROJECT DESCRIPTION

The project consists of a mixed use / residential tower located at 3-5 Help St Chatswood. The residential tower has 33 levels (apartments are located on levels 2-33) with communal areas on level 2 and mixed use (commercial) areas on ground and level 1 areas. Basement car parking shall also be provided. The apartments are a mixture of 1,2 and 3 bedroom apartments.

The project will be all electric with provision for all building services to be electrified with the exception of gas cooktops.

1.2 OBJECTIVES OF THE ESD REPORT

WalkerBai Consulting has been engaged to complete this ESD report for the submission of this Stage Significant Development Application (SSDA) with the Department of Planning, Housing and Infrastructure (DPHI). The report highlights the BASIX, Green Star and National Construction Code energy efficiency requirements for the applications. Tables provided throughout the report titled "ESD Specification" detail the specific design and construction ESD requirements incorporated (or to be implemented) to meet the ESD objectives.

1.3 PROJECT REFERENCES

The following documents and references have been used to form the basis of the ESD initiatives and assessments described in this report.

- Drawings and SSDA information (areas and yields) provided by EM BE CE
- BASIX Assessment Tool and associated material https://www.planningportal.nsw.gov.au/development-and-assessment/basix
- Green Star Buildings V1 Submission Guidelines and Green Star Buildings V1 Submission Planner Revision A
- NatHERS Assessor Handbook 2022
- National Construction Code 2022 Volume 1 – Part J
- DPHI development checklist

2 EXECUTIVE SUMMARY

The purpose of this ESD report is to show the proposed initiatives and requirements to meet the ESD targets for the 3-5 Help Street Chatswood development. Furthermore the current design and proposed building form have been assessed using the BASIX, NatHERS, Green Star and National Construction Code Part J requirements where applicable at this stage of the project.

This report also shows the various sustainability opportunities the development will need to consider and incorporate for as the project progresses. This includes general sustainability principles and use of rating tools.

The targets achieved by the ESD initiatives and strategies described in this report are:

- Achievement of the BASIX requirements:
  - Energy 25%
  - Water 40%
  - High level of thermal comfort based on the NatHERS scheme
- Meeting the design requirements for 4 Stars using the Green Star Buildings V1 as a benchmarking scheme
- Meeting and Exceeding the NCC Part J Requirements

Some highlights of the ESD initiatives are listed below (note this is a sample of initiatives and not the full scope of ESD items)

- A minimum 28kW (peak) solar system
- A minimum 5,000 litre capacity rainwater harvesting system
- A high efficiency air cooled VRF air conditioning system
- All electric development with the exception of gas cooktops
- High star ratings for fixtures fittings and appliances with regards to both energy and water
- High level of indoor environment quality via daylight, well designed artificial lighting, natural ventilation and low impact materials
- Utilisation of construction materials to lower environmental impact of the development in comparison to business-as-usual
- A building management system (BMS) with capability of monitoring and controlling systems (such as lighting and ventilation) via timers, motion detection and daylight sensing

Implementation of the initiatives detailed in this report show the development will meet the ESD requirements of DPHI for SSDA.

3 ESD TARGETS FOR SSDA SUBMISSION

3.1 BASIX TARGETS

The BASIX Targets are:

- Energy score of 25%
- Water score of 40%
- High level of thermal comfort based on the NatHERS scheme (pass required)

3.2 GREEN STAR

The Green Star target is to meet the design and construction requirements for 4 Stars using the Green Star Buildings V1 as a benchmarking scheme

3.3 NATIONAL CONSTRUCTION CODE PART J

The requirements of the National Construction Code Part J are to meet the Part J 2022 Volume 1 performance benchmarks. For the commercial component the J1V3 assessment method has been used. For the car parking section, the deemed-to-satisfy provisions are met. And for the residential component, BASIX / NatHERS covers the building fabric requirements.

4 BASIX RESULTS AND REQUIREMENTS

4.1 BASIX RESULTS

The screenshot below shows the results of the BASIX assessment.

Project summary		
Project name	3-5 Help Street _06	
Street address	3-5 HELP STREET CHATSWOOD 2067	
Local Government Area	WILLOUGHBY	
Plan type and plan number	Strata Plan SP52320	
Lot no.	SP134	
Section no.	-	
No. of residential flat buildings	1	
No. of units in residential flat buildings	160	
No. of multi-dwelling houses	0	
No. of single dwelling houses	0	
Project score		
Water	✔ 51	Target 40
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 28	Target 25

4.2 BASIX ASSUMPTIONS / REQUIREMENTS

The following requirements must be implemented as a minimum to meet the BASIX targets and scores associated with the BASIX Certificate lodged with the SSDA submission.

Table 2 : ESD Specification – 1 – BASIX Assumptions and Minimum Requirements

Category / Area	ESD Item	Minimum Requirement (Entry Into BASIX)
Central System	Hot Water System	Electric heat pump – air sourced
Central System	Central Heating and Cooling System	Variable refrigerant volume units with air cooled heat rejection and minimum COP/EER of > 5.5. This system is to serve all conditioned units and commercial spaces
Central System	Lifts	Gearless traction with VVVF motor and regenerative drive
	Alternative Energy System	Minimum 47kW (peak) solar PV system (can be achieved by 108 x 435W panels
	Rainwater Harvesting	15,000 litre system collecting from non-trafficable roof areas (minimum 400m^2 and supplying landscape irrigation
	Common Area Landscaping	Minimum common lawn area 252m^2

Category / Area	ESD Item	Minimum Requirement (Entry Into BASIX)
		Minimum common garden area (excluding lawn area above) 161m^2 Aera of indigenous or low water us species 120m^2
	Other Systems	BMS system for centralised lighting control, control of ventilation and monitoring of energy and water metering systems.
Common Area Services	Ventilation	Car parks to have ventilation supply and exhaust via variable speed drive fans and monitored / controlled via a CO monitor.
	Lighting	All lighting to be LED type. Car park, garage, commercial waste, storage, bike storage, commercial storage and plant rooms to have motion detection control on lighting. All residential lift lobbies (excluding basements) to have both daylight and motion detection control.
Individual Dwellings	Exhaust Systems	Bathrooms and laundries have individual fans ducted to façade or roof interlocked with light. Kitchens have individual fans ducted to façade or roof with manual on/off switch.
	Lighting	All lighting is LED and fittings shall allow LED type globes only.
	Appliances	Electric oven and gas cooktop. Minimum energy star ratings: - Refrigerator – 5 Star (plus well ventilated fridge space - Dishwasher – 4.5 Star - Clothes washer – 5 Star - Clothes dryer – 5 Star Minimum water WELS star ratings: - Shower heads – 3 Star (7.5-9 litres per minute) - Toilets – 4 Star - Kitchen taps – 4 Star - Bathroom taps – 4 Star - Clothes washers – 4 Star - Dishwashers – 4 Star
	Thermal Comfort	Refer to NatHERS section Appendix C.
	Other	Provision of indoor clothes drying lines / racks.

5 GREEN STAR RESULTS AND REQUIREMENTS

5.1 GREEN STAR CREDITS TARGETED

A comprehensive Green Star plan has been developed to meet the design and construction requirements of a 4 Star Green Star rating. The table below shows each credit and the description of the initiative to be implemented to achieve the rating. Note that this does not in any way constitute a formal Green Star rating – which would need to be submitted using evidence across the entire design and construction period post-handover.

Table 3 : ESD Specification – 2 – Green Star Minimum Requirements – 4 Star

Credit	Description of Initiative to Be Implemented
Industry Development	Green Star Accredited Professional has been appointed. Building owner will disclose the cost of sustainable building practices to the Green Building Council of Australia. The building owner will market the building's sustainability achievements.
Responsible Construction	It will be a contract condition the builder has an EMS and EMP. The builder will divert at least 90% of construction and demolition waste from landfill. Sustainability targets for energy, water and waste shall be set for the building by the building owner.
Responsible Structure	Steel and concrete must meet minimum Green Star sustainable material requirements. Designers shall specify steel and concrete can be sized (e.g. columns, slabs) based on the requirements.
Responsible Envelope	Exposed concrete, glass / façade materials and roof must meet minimum Green Star sustainable material requirements. Designers shall specify envelope items based on the requirements.
Light Quality	Lighting and daylight shall meet Green Star targets. Daylight meets targets based on the current design, lighting design shall adhere to Green Star targets using IEEE 1789-2015 – IEEE and nominal CIR index of minimum 85 and illuminance values of no less than hat specified in Table 3.2 of AS/NZS 1680.1:2006, with a maintenance factor method as defined in AS/NZS 1680.4.
Upfront Carbon Emissions	Up front carbon emissions shall be met by sustainable steel and concrete requirements. Management shall also offset (purchase carbon offset) for any demolition works.
Energy Use	Energy use requirements are predicted to be met by the current design (See Appendix B and Appendix C for Part J and NatHERS assessments detailing energy efficiency requirements).

5.2 ATTACHMENT: GREEN STAR PATHWAY

The Green Star pathway using the official Green Star Buildings Submission Planner V1 is attached on the overleaf. It shows the points collation for each credit to meet the 4 Star target.

Submission planner

Summary

Registering from / certified	2020 onwards		
Climate Positive Pathway targeted	No	**Targeted Green Star rating**	4 Star
Minimum expectations met	Yes	**Core points targeted**	15
Credit Achievement points targeted	15	**Leadership points targeted**	0
Exceptional Performance points targeted	0	**Total points targeted**	15

	Credit	Minimum Expectation	Credit Achievement	Exceptional Performance	Total points available	Targeted performance level	Total points targeted	Comments
Responsible					**17**			
1	Industry Development		1		**1**	Credit Achievement	**1**	
2	Responsible Construction	•	1		**1**	Credit Achievement	**1**	
3	Verification and Handover	•	1		**1**	Minimum Expectation	•	
4	Operational Waste	•			**0**	Minimum Expectation	•	
5	Responsible Procurement		1		**1**		**0**	
6	Responsible Structure		3	2	**5**	Credit Achievement	**3**	
7	Responsible Envelope		2	2	**4**	Credit Achievement	**2**	
8	Responsible Systems		1	1	**2**		**0**	
9	Responsible Finishes		1	1	**2**		**0**	
						Total	**7**	
Healthy					**14**			
10	Clean Air	•	2		**2**	Minimum Expectation	•	
11	Light Quality	•	2	2	**4**	Credit Achievement	**2**	
12	Acoustic Comfort	•	2		**2**	Minimum Expectation	•	
13	Exposure to Toxins	•	2		**2**	Minimum Expectation	•	
14	Amenity and Comfort		2		**2**		**0**	
15	Connection to Nature		1	1	**2**		**0**	
						Total	**2**	
Resilient					**8**			
16	Climate Change Resilience	•	1		**1**	Minimum Expectation	•	
17	Operations Resilience		2		**2**		**0**	
18	Community Resilience		1		**1**		**0**	
19	Heat Resilience		1		**1**		**0**	
20	Grid Resilience		3		**3**		**0**	
						Total	**0**	
Positive					**30**			
21	Upfront Carbon Emissions	•	3	3	**6**	Credit Achievement	**3**	
22	Energy Use	•	3	3	**6**	Credit Achievement	**3**	
23	Energy Source	•	3	3	**6**	Minimum Expectation	•	
24	Other Carbon Emissions		2	2	**4**		**0**	
25	Water Use	•	3	3	**6**	Minimum Expectation	•	
26	Life Cycle Impacts		2		**2**		**0**	
						Total	**6**	
Places					**8**			
27	Movement and Place	•	3		**3**	Minimum Expectation	•	
28	Enjoyable Places		2		**2**		**0**	
29	Contribution to Place		2		**2**		**0**	
30	Culture, Heritage and Identity		1		**1**		**0**	
						Total	**0**	
People					**9**			
31	Inclusive Construction Practices	•	1		**1**	Minimum Expectation	•	
32	Indigenous Inclusion		2		**2**		**0**	
33	Procurement and Workforce Inclusion		2	1	**3**		**0**	
34	Design for Inclusion		2	1	**3**		**0**	
						Total	**0**	
Nature					**14**			
35	Impacts to Nature	•	2		**2**	Minimum Expectation	•	
36	Biodiversity Enhancement		2	2	**4**		**0**	
37	Nature Connectivity		2		**2**		**0**	
38	Nature Stewardship		2		**2**		**0**	
39	Waterway Protection		2	2	**4**		**0**	
						Total	**0**	
Leadership					**5**			
40	Market Transformation		5		**5**		**0**	
41	Leadership Challenges				**0**		**0**	
						Total	**0**	

6 APPENDIX A – BASIX CERTIFICATE

The BASIX Certificate submitted for the project is attached on the overleaf.

BASIX® Certificate

Building Sustainability Index www.basix.nsw.gov.au

Multi Dwelling

Certificate number: 1394390M_06

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 10/09/2020 published by the Department. This document is available at www.basix.nsw.gov.au

This certificate is a revision of certificate number 1394390M lodged with the consent authority or certifier on 26 June 2023 with application DA-2023/160.

It is the responsibility of the applicant to verify with the consent authority that the original, or any revised certificate, complies with the requirements of Schedule 1 Clause 2A, 4A or 6A of the Environment Planning and Assessment Regulation 2000

Secretary
Date of issue: Monday, 27 January 2025
To be valid, this certificate must be lodged within 3 months of the date of issue.

NSW GOVERNMENT

Project summary	
Project name	3-5 Help Street _06
Street address	3-5 HELP STREET CHATSWOOD 2067
Local Government Area	WILLOUGHBY
Plan type and plan number	Strata Plan SP52320
Lot no.	SP134
Section no.	-
No. of residential flat buildings	1
No. of units in residential flat buildings	160
No. of multi-dwelling houses	0
No. of single dwelling houses	0

Project score			
Water	✔	51	Target 40
Thermal Comfort	✔	Pass	Target Pass
Energy	✔	28	Target 25

Certificate Prepared by
Name / Company Name: The Trustee for EWEnvironment Trust
ABN (if applicable): 50800554305

Description of project

Project address	
Project name	3-5 Help Street _06
Street address	3-5 HELP STREET CHATSWOOD 2067
Local Government Area	WILLOUGHBY
Plan type and plan number	Strata Plan SP52320
Lot no.	SP134
Section no.	-

Project type	
No. of residential flat buildings	1
No. of units in residential flat buildings	160
No. of multi-dwelling houses	0
No. of single dwelling houses	0

Site details	
Site area (m²)	2290
Roof area (m²)	670
Non-residential floor area (m²)	2345
Residential car spaces	155
Non-residential car spaces	10

Common area landscape	
Common area lawn (m²)	252.00
Common area garden (m²)	161.00
Area of indigenous or low water use species (m²)	120.00

Assessor details and thermal loads	
Assessor number	DMN/12/1407
Certificate number	ABIF82DN0T
Climate zone	56
Ceiling fan in at least one bedroom	No
Ceiling fan in at least one living room orother conditioned area	No

Project score			
Water	✔	51	Target 40
Thermal Comfort	✔	Pass	Target Pass
Energy	✔	28	Target 25

Description of project

The tables below describe the dwellings and common areas within the project

Residential flat buildings - Building1, 160 dwellings, 33 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
10.01	2	90	0	0	0
10.05	2	56	0	0	0
11.03	2	58	0	0	0
12.01	2	90	0	0	0
12.05	2	56	0	0	0
13.03	2	58	0	0	0
14.01	2	90	0	0	0
14.05	2	83	0	0	0
15.04	2	87	0	0	0
16.03	2	86	0	0	0
17.02	2	57	0	0	0
18.01	2	90	0	0	0
18.05	2	83	0	0	0
19.04	2	87	0	0	0
2.03	2	97	0	0	0
20.03	2	86	0	0	0
21.02	2	57	0	0	0
22.01	2	90	0	0	0
22.05	2	83	0	0	0
23.04	2	87	0	0	0
24.03	2	86	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
10.02	2	57	0	0	0
10.06	2	83	0	0	0
11.04	2	50	0	0	0
12.02	2	57	0	0	0
12.06	2	83	0	0	0
13.04	2	50	0	0	0
14.02	2	57	0	0	0
15.01	2	90	0	0	0
15.05	2	83	0	0	0
16.04	2	87	0	0	0
17.03	2	86	0	0	0
18.02	2	57	0	0	0
19.01	2	90	0	0	0
19.05	2	83	0	0	0
2.04	2	52	0	0	0
20.04	2	87	0	0	0
21.03	2	86	0	0	0
22.02	2	57	0	0	0
23.01	2	90	0	0	0
23.05	2	83	0	0	0
24.04	2	87	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
10.03	2	58	0	0	0
11.01	2	90	0	0	0
11.05	2	56	0	0	0
12.03	2	58	0	0	0
13.01	2	90	0	0	0
13.05	2	56	0	0	0
14.03	2	86	0	0	0
15.02	2	57	0	0	0
16.01	2	90	0	0	0
16.05	2	83	0	0	0
17.04	2	87	0	0	0
18.03	2	86	0	0	0
19.02	2	57	0	0	0
2.01	2	92	0	0	0
20.01	2	90	0	0	0
20.05	2	83	0	0	0
21.04	2	87	0	0	0
22.03	2	86	0	0	0
23.02	2	57	0	0	0
24.01	2	90	0	0	0
24.05	2	83	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
10.04	2	50	0	0	0
11.02	2	57	0	0	0
11.06	2	83	0	0	0
12.04	2	50	0	0	0
13.02	2	57	0	0	0
13.06	2	83	0	0	0
14.04	2	87	0	0	0
15.03	2	86	0	0	0
16.02	2	57	0	0	0
17.01	2	90	0	0	0
17.05	2	83	0	0	0
18.04	2	87	0	0	0
19.03	2	86	0	0	0
2.02	2	64	0	0	0
20.02	2	57	0	0	0
21.01	2	90	0	0	0
21.05	2	83	0	0	0
22.04	2	87	0	0	0
23.03	2	86	0	0	0
24.02	2	57	0	0	0
25.01	2	90	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
25.02	2	57	0	0	0
26.01	2	90	0	0	0
27.01	2	90	0	0	0
28.01	2	90	0	0	0
29.01	2	90	0	0	0
3.01	2	92	0	0	0
3.05	2	68	0	0	0
30.03	2	117	0	0	0
31.03	2	117	0	0	0
32.03	2	85	0	0	0
4.01	2	92	0	0	0
4.05	2	68	0	0	0
5.03	2	106	0	0	0
6.01	2	90	0	0	0
6.05	2	59	0	0	0
7.03	2	58	0	0	0
8.01	2	90	0	0	0
8.05	2	56	0	0	0
9.03	2	58	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
25.03	2	86	0	0	0
26.02	2	120	0	0	0
27.02	2	120	0	0	0
28.02	2	120	0	0	0
29.02	2	120	0	0	0
3.02	2	64	0	0	0
3.06	2	91	0	0	0
30.04	2	89	0	0	0
31.04	2	89	0	0	0
33.01	2	119	0	0	0
4.02	2	64	0	0	0
4.06	2	91	0	0	0
5.04	2	61	0	0	0
6.02	2	57	0	0	0
6.06	2	83	0	0	0
7.04	2	50	0	0	0
8.02	2	57	0	0	0
8.06	2	83	0	0	0
9.04	2	50	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
25.04	2	87	0	0	0
26.03	2	117	0	0	0
27.03	2	117	0	0	0
28.03	2	117	0	0	0
29.03	2	117	0	0	0
3.03	2	106	0	0	0
30.01	2	90	0	0	0
31.01	2	90	0	0	0
32.01	2	129	0	0	0
33.02	2	128	0	0	0
4.03	2	106	0	0	0
5.01	2	92	0	0	0
5.05	2	68	0	0	0
6.03	2	58	0	0	0
7.01	2	90	0	0	0
7.05	2	56	0	0	0
8.03	2	58	0	0	0
9.01	2	90	0	0	0
9.05	2	56	0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
25.05	2	83	0	0	0
26.04	2	89	0	0	0
27.04	2	89	0	0	0
28.04	2	89	0	0	0
29.04	2	89	0	0	0
3.04	2	61	0	0	0
30.02	2	120	0	0	0
31.02	2	120	0	0	0
32.02	2	128	0	0	0
33.03	2	85	0	0	0
4.04	2	61	0	0	0
5.02	2	64	0	0	0
5.06	2	91	0	0	0
6.04	2	50	0	0	0
7.02	2	57	0	0	0
7.06	2	83	0	0	0
8.04	2	50	0	0	0
9.02	2	57	0	0	0
9.06	2	83	0	0	0

Description of project

The tables below describe the dwellings and common areas within the project

Common areas of unit building - Building1

Common area	Floor area (m²)
CAR PARK B01 - Commercial	1591.00
Lift car (No. 2)	0.00
CAR PARK B05-Residential	919
Commercial waste - LG	42.00
Plant Carpark supply fan, OSD, WSUD B01	141.00
COMMERCIAL STORAGE B01	48.00
Residential Lift Lobby B02	72.80
Residential Lift Lobby B05	72.80

Common area	Floor area (m²)
Lift car (No. 1)	0.00
CAR PARK B03 - Residential	1900.00
Switch rm SUBSTATION COMMS GAS LG & UG	234.00
Multiple storage rooms on B02,B03,B04,B05	312.00
Fire Tank Room UG + Plant room on Mezz	54.00
Residential lift lobby - all floors	1747.00
Residential Lift Lobby B03	72.80
Lift car (No. 3)	-

Common area	Floor area (m²)
CAR PARK B02 - Residential	1900.00
CAR PARK B04 - Residential	1900.00
Garbage (bulk, grease, Resi) LG & UG	322.00
Plant rm - RW, CW, EXHAUST B01	153.00
RESIDENTIAL BIKE STORAGE B01	71.00
Residential Lift Lobby B01	72.80
Residential Lift Lobby B04	72.80

Schedule of BASIX commitments

1. Commitments for Residential flat buildings - Building1
    - (a) Dwellings
        - (i) Water
        - (ii) Energy
        - (iii) Thermal Comfort
    - (b) Common areas and central systems/facilities
        - (i) Water
        - (ii) Energy

2. Commitments for single dwelling houses

3. Commitments for multi-dwelling houses

4. Commitments for common areas and central systems/facilities for the development (non-building specific)
    - (a) Common areas and central systems/facilities
        - (i) Water
        - (ii) Energy

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carriedout. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

1. Commitments for Residential flat buildings - Building1

(a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✔	✔	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✔	✔
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✔	✔
(e) The applicant must install:			
(aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and		✔	✔
(bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✔	✔
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✔	✔	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✔	
(g) The pool or spa must be located as specified in the table.	✔	✔	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✔	✔	✔

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star (> 4.5 but <= 6 L/min)	4 star	4 star	4 star	-	4 star	4 star	-	-	-	-	-	-	-

	Alternative water source							
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
All dwellings	No alternative water supply	-	-	yes	no	no	-	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✔	✔	✔
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✔	✔
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✔	✔
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✔	✔
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✔	✔	✔

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must:			
(aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and		✔	
(bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✔	
(h) The applicant must install in the dwelling:			
(aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below;		✔	
(bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and		✔	✔
(cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✔	
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✔	

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	Central hot water system (No. 1)	individual fan, ducted to façade or roof	manual on / timer off	individual fan, ducted to façade or roof	manual on / timer off	individual fan, ducted to façade or roof	manual on / timer off

	Cooling		Heating		Artificial lighting						Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or diningroom	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
All dwellings	3-phase airconditioning / EER 3.0 - 3.5	3-phase airconditioning / EER 3.0 - 3.5	3-phase airconditioning / EER > 4.0	3-phase airconditioning / EER > 4.0	2(dedicated)	1(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	yes(dedicated)	0	no

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/ oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	gas cooktop & electric oven	5 star (new rating)	yes	4.5 star	5 star	5 star	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✔		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✔	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✔	✔
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✔	✔	✔
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✔	✔	✔

	Thermal loads	
Dwelling no.	**Area adjusted heating load (in MJ/m²/yr)**	**Area adjusted cooling load (in MJ/m²/yr)**
10.02	42.5	29.1
All other dwellings	19.9	17

(b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✔	✔
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✔	✔	✔
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✔	✔	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✔	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✔	✔
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✔	✔

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	no common facility	no common facility	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Central water tank - rainwater or stormwater (No. 1)	5000.00	To collect run-off from at least: - 400.00 square metres of roof area of buildings in the development - 0.00 square metres of impervious area in the development - 0.00 square metres of garden/lawn area in the development - 0.00 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).	- irrigation of 250.00 square metres of common landscaped area on the site
Fire sprinkler system (No. 1)	-	-	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✔	✔
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✔	✔
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✔	✔	✔

	Common area ventilation system		Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS
CAR PARK B01 - Commercial	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	motion sensors	yes
Lift car (No. 1)	-	-	light-emitting diode	connected to lift call button	yes
CAR PARK B02 - Residential	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	motion sensors	yes
Lift car (No. 2)	-	-	light-emitting diode	connected to lift call button	yes
CAR PARK B03 - Residential	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	motion sensors	yes
CAR PARK B04 - Residential	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	motion sensors	yes
CAR PARK B05-Residential	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	motion sensors	yes
Switch rm SUBSTATION COMMS GAS LG & UG	ventilation (supply + exhaust)	none i.e., continuous	light-emitting diode	manual on / manual off	no
Garbage (bulk, grease, Resi) LG & UG	ventilation exhaust only	-	light-emitting diode	motion sensors	yes
Commercial waste - LG	ventilation exhaust only	-	light-emitting diode	motion sensors	yes
Multiple storage rooms on B02,B03,B04,B05	no mechanical ventilation	-	light-emitting diode	motion sensors	yes
Plant rm - RW, CW, EXHAUST B01	no mechanical ventilation	-	light-emitting diode	motion sensors	yes
Plant Carpark supply fan, OSD, WSUD B01	ventilation exhaust only	none i.e., continuous	light-emitting diode	manual on / manual off	no

	Common area ventilation system		Common area lighting		
Common area	**Ventilation system type**	**Ventilation efficiency measure**	**Primary type of artificial lighting**	**Lighting efficiency measure**	**Lighting control system/ BMS**
Fire Tank Room UG + Plant room on Mezz	no mechanical ventilation	-	light-emitting diode	manual on / manual off	no
RESIDENTIAL BIKE STORAGE B01	no mechanical ventilation	-	light-emitting diode	motion sensors	yes
COMMERCIAL STORAGE B01	no mechanical ventilation	-	light-emitting diode	motion sensors	yes
Residential lift lobby - all floors	air conditioning system	time clock or BMS controlled	light-emitting diode	daylight sensor and motion sensor	yes
Residential Lift Lobby B01	air conditioning system	time clock or BMS controlled	light-emitting diode	zoned switching	yes
Residential Lift Lobby B02	air conditioning system	time clock or BMS controlled	light-emitting diode	zoned switching	yes
Residential Lift Lobby B03	air conditioning system	time clock or BMS controlled	light-emitting diode	zoned switching	yes
Residential Lift Lobby B04	air conditioning system	time clock or BMS controlled	light-emitting diode	zoned switching	yes
Residential Lift Lobby B05	air conditioning system	time clock or BMS controlled	light-emitting diode	zoned switching	yes
Lift car (No. 3)	-	-	light-emitting diode	connected to lift call button	yes

Central energy systems	Type	Specification
Lift (No. 1)	gearless traction with V V V F motor and regenerative drive	Number of levels (including basement): 37
Lift (No. 2)	gearless traction with V V V F motor and regenerative drive	Number of levels (including basement): 37
Lift (No. 3)	gearless traction with V V V F motor and regenerative drive	Number of levels (including basement): 37
Central hot water system (No. 1)	electric heat pump – air sourced	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)
Central cooling system (No. 1)	variable refrigerant volume units	Energy source: electric driven compressor Heat rejection method: air cooled condenser Unit efficiency (min): medium – COP 3.5 – 5.5
Central heating system (No. 1)	variable refrigerant volume units	Energy source: electric driven compressor + air sourced evaporator Unit efficiency medium – COP 3.5 – 5.5

4. Commitments for common areas and central systems/facilities for the development (non-building specific)

(a) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✔	✔
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✔	✔	✔
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✔	✔	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✔	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✔	✔
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✔	✔

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	no common facility	no common facility	no common laundry facility

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✔	✔
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✔	✔
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✔	✔	✔

Central energy systems	Type	Specification
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 28 peak kW
Other	Building management system installed?: yes	-

Notes

1. In these commitments, "applicant" means the person carrying out the development.
2. The applicant must identify each dwelling, building and common area listed in this certificate, on the plans accompanying any development application, and on the plans and specifications accompanying the application for a construction certificate / complying development certificate, for the proposed development, using the same identifying letter or reference as is given to that dwelling, building or common area in this certificate.
3. This note applies if the proposed development involves the erection of a building for both residential and non-residential purposes (or the change of use of a building for both residential and non-residential purposes). Commitments in this certificate which are specified to apply to a "common area" of a building or the development, apply only to that part of the building or development to be used for residential purposes.
4. If this certificate lists a central system as a commitment for a dwelling or building, and that system will also service any other dwelling or building within the development, then that system need only be installed once (even if it is separately listed as a commitment for that other dwelling or building).
5. If a star or other rating is specified in a commitment, this is a minimum rating.
6. All alternative water systems to be installed under these commitments (if any), must be installed in accordance with the requirements of all applicable regulatory authorities. NOTE: NSW Health does not recommend that stormwater, recycled water or private dam water be used to irrigate edible plants which are consumed raw, or that rainwater be used for human consumption in areas with potable water supply.

Legend

1. Commitments identified with a "✔" in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).
2. Commitments identified with a "✔" in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.
3. Commitments identified with a "✔" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an occupation certificate (either interim or final) for a building listed in this certificate, or for any part of such a building, unless it is satisfied that each of the commitments whose fulfilment it is required to monitor in relation to the building or part, has been fulfilled).

7 APPENDIX B – NCC PART J ASSESSMENT

7.1 SUMMARY

The purpose of this section of the report is to show the results of a 2022 National Construction Code (NCC) Part J Energy Efficiency compliance review undertaken by EWE on the 3-5 Help Street Chatswood development.

The information used for this compliance review is based on for SSDA on drawings by EM BE CE. Table 1 below gives a checklist to show compliance with the requirements set out by the NCC.

Table 4 : NCC Checklist

Item	Will be achieved	Required by
For Class 2 Residential – Meet BASIX requirements	✓	National Construction Code 2022
For Class 5 Business Compliance via J1V3	✓	National Construction Code 2022
For Class 6 Comercial Compliance via J1V3	✓	National Construction Code 2022
For Class 7A Car Park - Compliance with Part J – Energy Efficiency deemed-to-satisfy provisions	✓	National Construction Code 2022
For Class 7B Storage - Compliance with Part J – Energy Efficiency deemed-to-satisfy provisions	✓	National Construction Code 2022
For Class 8 Substation - Compliance with Part J – Energy Efficiency deemed-to-satisfy provisions	✓	National Construction Code 2022

7.2 PERFORMANCE REQUIREMENTS - NATIONAL CONSTRUCTION CODE 2022 PART J

There are six class types proposed in the 3-5 Help Street Chatswood development:

- Class 2 - Residential (majority)
- Class 5 - Business
- Class 6 - Commercial
- Class 7A - Car park
- Class 7B – Storage
- Class 8 - Substation

The six class types will comply with the requirements of the National Construction Code. Details of the compliance requirements are shown in the following sections of this report.

7.3 J1V3 ASSESSMENT FOR NON-RESIDENTIAL HABITABLE SPACES (COMMERCIAL COMPONENT)

The purpose of this section of the BCA Part J Report is to show compliance of the proposed 3-5 Help Street Chatswood design for Non-Residential habitable spaces in the building with the energy efficiency requirements of the National Construction Code 2022. This report is for the SSDA process and shows, based on the documentation used in the calculation and associated assumptions, the 3-5 Help Street Chatswood design complies with the requirements.

Compliance has been shown using the Performance Solution - Verification method J1V3.
A Performance Solution is any solution that can meet the Performance Requirements, other than a DtS Solution. A Performance Solution may differ in whole or part from the DtS Provisions, but will still meet the Performance Requirements as long as it can be successfully demonstrated to the Appropriate Authority how this will be achieved. When developing a Performance Solution, one or more of the Assessment Methods contained in the NCC must be used. Assessment Methods are used to determine whether a Performance Solution or DtS Solution complies with the relevant Performance Requirements.

The following Assessment Methods are listed in the NCC and each, or any combination, can be used:

(a) Evidence of Suitability
(b) Verifications Methods
(c) Expert Judgement
(d) Comparison with the DtS Provisions

For the 3-5 Help Street Chatswood – Commercial Component design (b) verification method has been used, specifically theJ1V3 method (NCC pages 339 and 342-354). Computer simulation energy modelling has been undertaken using IES Virtual Environment Software Version 2022. Three models were created and each yielded an annual energy and derived greenhouse gas emission calculation for the purposes of comparison. The figure below shows the calculation requirements for theJ1V3 method with regards to the three models that are required to be produced.

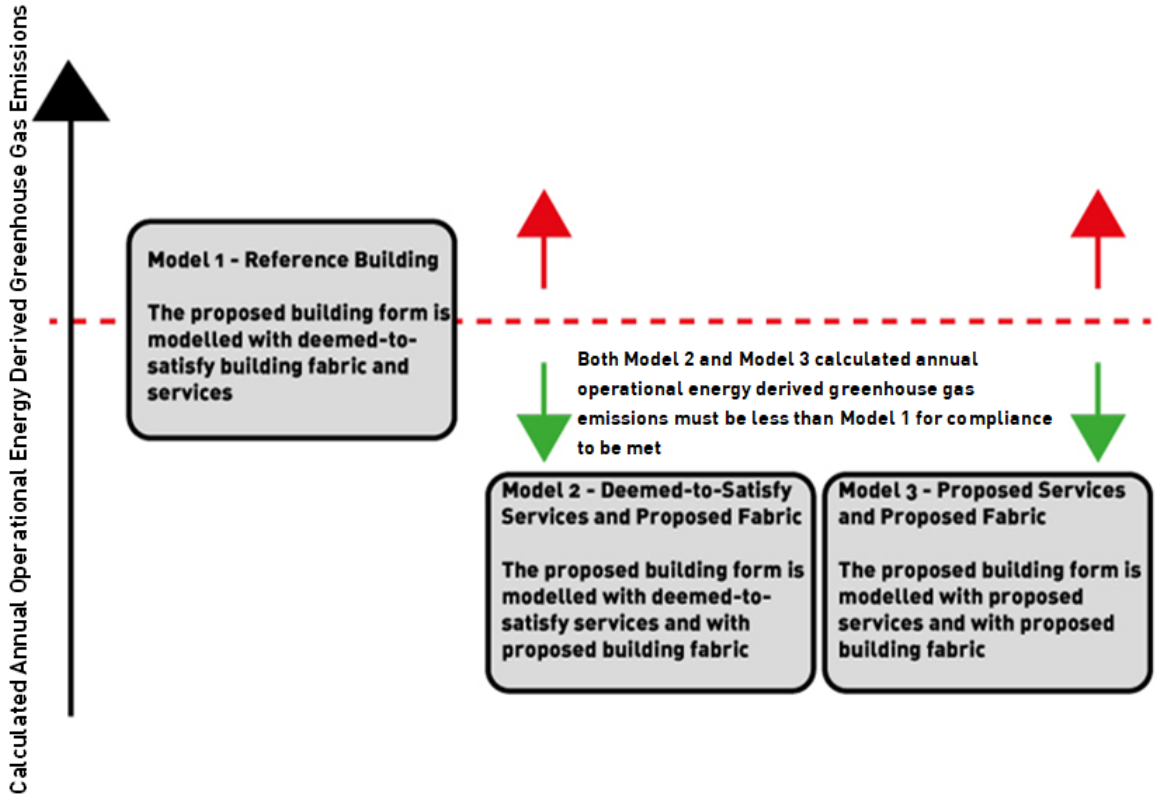


Figure 1 Illustration of the 3 Model Calculation System Required byJ1V3

7.3.1 MODELLING SOFTWARE

Computer simulation energy modelling has been undertaken using IES Virtual Environment Software Version 2022. IES Virtual Environment Energy Modelling software is listed by the Australian Building Codes Board as an acceptable modelling package to perform energy and thermal calculations to show compliance withJ1V3.[1]

Computer simulation modelling is based on idealized assumptions and estimations. Although it is a thorough calculation method, it can never entirely emulate a building's function in practice. This is relevant and needs to be considered should the outcomes of this report be used to estimate future energy consumption or costs.

Information is based on SSDA documentation provided by EM BE CE.

[1] IES VE is listed as an acceptable method in the *BCA Section J Assessment and Verification of Alternative Solution - 2010* – Page 19

7.3.2 RESULTS

Table 1 below shows the calculated annual energy and operational energy derived greenhouse gas emission consumption of the 3-5 Help Street Chatswood - Commercial Component for all three models.

Table 5 : Calculated Energy Consumption for 3 Models

Model	**Calculated Annual Energy Consumption (MWh / annum)**		**Calculated Annual Energy Derived Greenhouse Gas Emissions (kgCO2-e / annum)***	
Model 1 – Deemed-to-Satisfy Building Fabric and Services	232.86	(Reference)	270,768	(Reference)
Model 2 – Deemed-to-Satisfy Services and Proposed Building Fabric	227.93	(Lower than Reference)	265,042	(Lower than Reference)
Model 3 – Proposed Services and Proposed Building Fabric	188.30	(Lower than Reference)	218,959	(Lower than Reference)

*Utilising the greenhouse gas emissions factors from Table 3a on Page 342 of the NCC where electricity is 323kgCO2-e/GJ which converts to 1,162.8kgCO2-e/MWh

As Model 2 and Model 3 have a lower energy consumption and operational energy derived greenhouse gas emissions than Model 1, the design is compliant with the National Construction Code energy efficiency requirements covered by the J1V3 method.

In measuring compliance withJ1V3(a)(ii), when modelled with the building fabric assumptions for the proposed model listed in Appendix A, all occupied zones for the commercial component meet the requirement of PMV between -1 and 1 for 100% of the annual hours of operation of the building.

7.3.3 MODELLING INPUTS AND ASSUMPTIONS

The following table shows the assumptions and inputs for theJ1V3 modelling for the commercial component of the development.

Table 6 : ESD Specification – 3 – Inputs and Assumptions & Minimum Design Requirements for Commercial Levels

Element of Model	**Deemed to Satisfy Model**	**Proposed Model – Minimum Design Requirements (Commercial Levels)**
Walls	External and internal adjacent to conditioned space - Insulation level of entire wall construction R1.5	Concrete walls with R1.5 insulation
Floor	Lowest level concrete slab on ground – no insulation required Suspended concrete slab of conditioned areas with insulation on soffit of car park slab – R2.0	Lowest level concrete slab on ground – no insulation required Suspended concrete slab of conditioned areas with insulation on soffit of car park slab – R2.0 where conditioned space is above (Part of Basement 01 Car Park)
Roof	Entire roof/ceiling construction R3.2 to exposed	Balconies / exposed space above commercial tenancies is R2.0
External Glazing	Refer to deemed-to-satisfy external facade calculator in Section 7.3.4 below	U values 2.5 ; SHGC 0.35
Ceilings	Ceiling tiles	As per deemed-to-satisfy model
Internal Partitions	Plasterboard as detailed in architectural documentation	As per deemed-to-satisfy model
Artificial Lighting	Illumination power densities and usage profile as per deemed-to-satisfy requirements of Part J6 and Specification JV respectively	Illumination power densities as per Ascot Consulting Engineers lighting documentation. Usage profiles as per Part J6 and Specification JV respectively
HVAC System	VRV air conditioning systems The COP for the split system units are 2.8 (deemed to satisfy requirements). Temperature setpoint is 18 degrees Celsius for heating and 25 degrees Celsius for cooling for conditioned spaces with transient occupancy and 21 degrees Celsius for heating and 24 degrees Celsius for cooling for all other conditioned spaces. Air flow rate as required by Part F4	VRV conditioning systems with heat recovery The minimum EER and COP for the split system units are 5.5 for cooling and 5.5 for heating respectively Temperature setpoint is 18 degrees Celsius for heating and 25 degrees Celsius for cooling for conditioned spaces with transient occupancy and 21 degrees Celsius for heating and 24 degrees Celsius for cooling for all other conditioned spaces. Air flow rate as required by Part F4
Solar PV System	Not included for this calculation	Not included for this calculation

HVAC Operation	HVAC usage profile as per Specification JV	As per deemed-to-satisfy model
Location and Weather File	Sydney IWEC.fwt weather file	As per deemed-to-satisfy model
Domestic Hot Water	Not required for this calculation	
Lift Energy	Not required for this calculation	
Infiltration Rate	Pressurised areas have an infiltration rate of 1 air change per hour, non-pressurised areas have an infiltration rate of 1.5 air changes per hour	As per deemed-to-satisfy model
Occupancy	Occupancy heat gains are 75W/person for sensible heat gain and 55W/person for latent heat gain	As per deemed-to-satisfy model
Appliances	Appliance heat gains and usage profile as per Specification JV	As per deemed-to-satisfy model
Information	Drawings and SSDA information provided by EM BE CE	As per deemed-to-satisfy model

7.3.4 FAÇADE CALCULATOR (NOT FOR PRICING OR CONSTRUCTION)

Wall U-Value (W/m².K)	Method 2 Glazing U-Value (W/m².K)	SHGC
0.67	2.3	0.24

7.4 FURTHER NCC PART J REQUIREMENTS

The following sections show the various energy efficiency requirements stipulated by the National Construction Code (NCC) 2022 broken down by the classification (type defined by the NCC) of the development.

7.4.1 CLASS 2 SOLE OCCUPANCY UNITS

J4 Building Fabric

The sole occupancy units must meet clause stipulates that:

For reducing the heating or cooling loads – to be measured by BASIX assessment. Refer to Section 8 of this report.

J5 Sealing

- Must comply with all design and construction requirement stipulated in J5

J6 Air Conditioning and Ventilation Systems

- Comply with J6D2 – air conditioning must be capable of being deactivated

J7 Artificial Lighting

- Comply with J7D3 where lamp power densities within building must be no greater than 5W/m2 and 4W/m2 for a verandah or balcony (these power densities may be increased if control devices are implemented).
- Comply with J7D4 where artificial lighting around the perimeter of a building must be controlled by a daylight sensor or time switch

J8 Hot Water

- Not applicable

J9 Access for Maintenance and Facilities for Monitoring

- Comply with J9 in common areas
- If common areas exceed 500m2 then include energy monitoring in accordance with J8.3

7.4.2 CLASS 5 BUSINESS AND CLASS 6 COMMERCIAL

J4 Building Fabric

- Refer toJ1V3 calculations in Section 7.3.3 of this report

J5 Sealing

- Must comply with all design and construction requirement stipulated in the deemed to satisfy provisions of J5

J6 Air Conditioning and Ventilation Systems

- Comply with J6D2 – air conditioning must be capable of being deactivated

J7 Artificial Lighting

- Comply with J7D3 where lamp power densities must be no greater than 22W/m2 for retail space, 4.5W/m2 for offices and 3W/m2 for toilets and bathrooms
- Comply with J7D4 where artificial lighting around the perimeter of a building must be controlled by a daylight sensor or time switch

J8 Hot Water

- Not applicable

J9 Access for Maintenance and Facilities for Monitoring

- Comply with J9 in common areas
- If common areas exceed 500m2 then include energy monitoring in accordance with J9

7.4.3 A.3 CLASS 7A CAR PARK, CLASS 7B STORAGE AND CLASS 8 SUBSTATION

J4 Building Fabric

- Not applicable

J5 Sealing

- Not applicable

J6 Air Conditioning and Ventilation Systems

- If ventilation and exhaust fans are used they must comply with Parts J6D4

J7 Artificial Lighting

- Comply with J7D3 where lamp power densities within building must be no greater than 24 W/m2 for the entry zone of the car park (first 20m), 6W/m2 for other zones of the car park and nominated power densities for 7B and 8 (either 2W/m2 or 4W/m2 depended on lux levels required).
- Comply with J7D4 where artificial lighting around the perimeter of a building must be controlled by a daylight sensor or time switch

J8 Hot Water

- Not applicable

J9 Access for Maintenance and Facilities for Monitoring

- Not applicable

8 APPENDIX C – NATHERS ASSESSMENT AND GROUP CERTIFICATE

8.1 CLASS 2 DWELLINGS NATHERS RESULTS

As a part of this NCC compliance check, all units were rated using FirstRate5 software. The average house energy rating heating load was 27.7 and cooling load was 16.2 meeting BASIX requirements. The table below shows the list of NatHERS results – heating and cooling loads for each unit.

Table 7 : List of NatHERS Results

Dwelling Number	Heating Load	Cooling Load	Compliant with BASIX Thermal Comfort Requirements
2.01	27.1	17.7	✓
2.02	13.5	16.4	✓
2.03	11.9	13.9	✓
2.04	12.1	13.9	✓
3.01	28.1	17.4	✓
3.02	13.9	16.1	✓
3.03	10.9	14.1	✓
3.04	15.5	12	✓
3.05	13	26.1	✓
3.06	26.5	14.7	✓
4.01	28.5	17.2	✓
4.02	14.2	16.1	✓
4.03	11.2	13.9	✓
4.04	15.9	12.2	✓
4.05	13.4	25.9	✓
4.06	27	14.4	✓
5.01	28.1	17.4	✓
5.02	14.7	15.9	✓
5.03	11.3	13.8	✓
5.04	16.4	11.8	✓
5.05	13.9	25.5	✓
5.06	27.6	13.7	✓
6.01	29.3	15.8	✓
6.02	21.4	20.7	✓
6.03	3.8	18.3	✓
6.04	3.7	18.9	✓

Dwelling Number	Heating Load	Cooling Load	Compliant with BASIX Thermal Comfort Requirements
6.05	14.3	24	✓
6.06	28.1	13.8	✓
7.01	29.5	15.4	✓
7.02	21.7	20.3	✓
7.03	5.4	14.5	✓
7.04	3.7	19.3	✓
7.05	13.5	24.9	✓
7.06	28.4	13.7	✓
8.01	29.7	15.4	✓
8.02	21.9	20.1	✓
8.03	5.6	14.5	✓
8.04	3.2	19.1	✓
8.05	12.7	26.1	✓
8.06	28.7	13.7	✓
9.01	31.3	13.7	✓
9.02	23.6	18.2	✓
9.03	6.7	12.6	✓
9.04	2.7	16.2	✓
9.05	10.5	25.7	✓
9.06	31.3	12	✓
10.01	31.3	13.4	✓
10.02	23.8	18.1	✓
10.03	6.7	12.4	✓
10.04	2.8	16.6	✓
10.05	10.6	25.4	✓
10.06	31.5	12.1	✓
11.01	31.6	13.4	✓
11.02	24	18	✓
11.03	6.9	12.7	✓
11.04	2.9	16	✓
11.05	10.8	25.4	✓
11.06	31.8	12	✓
12.01	31.6	13.5	✓
12.02	23.6	18.2	✓
12.03	6.7	12.6	✓
12.04	2.7	16.2	✓
12.05	10.5	25.7	✓

Dwelling Number	Heating Load	Cooling Load	Compliant with BASIX Thermal Comfort Requirements
12.06	31.3	12	✓
13.01	31.7	13.6	✓
13.02	24.3	17.8	✓
13.03	7	12.6	✓
13.04	3	15.6	✓
13.05	11	25.2	✓
13.06	32.1	11.9	✓
14.01	31.9	13.6	✓
14.02	24.5	17.4	✓
14.03	16.4	10.9	✓
14.04	12.1	22.3	✓
14.05	27.4	15.3	✓
15.01	31.9	13.8	✓
15.02	24.6	17.2	✓
15.03	16.5	10.8	✓
15.04	10.3	27.8	✓
15.05	27.6	15.2	✓
16.01	31.5	13.7	✓
16.02	24.8	17	✓
16.03	16.6	10.7	✓
16.04	9.2	29.1	✓
16.05	27.7	14.8	✓
17.01	30.4	13.9	✓
17.02	24.9	17.2	✓
17.03	16.7	10.7	✓
17.04	9.2	29	✓
17.05	27.8	14.8	✓
18.01	30	13.9	✓
18.02	25	16.9	✓
18.03	16.7	10.6	✓
18.04	9.3	29	✓
18.05	27.9	14.6	✓
19.01	28.7	13.8	✓
19.02	25.1	16.8	✓
19.03	16.8	10.4	✓
19.04	10.2	28	✓
19.05	27.4	15.3	✓

Dwelling Number	Heating Load	Cooling Load	Compliant with BASIX Thermal Comfort Requirements
20.01	28.8	13.9	✓
20.02	25.2	16.9	✓
20.03	16.9	10.4	✓
20.04	9.5	28.5	✓
20.05	27.4	15.3	✓
21.01	25.7	14.2	✓
21.02	25.4	16.9	✓
21.03	17	10.4	✓
21.04	9.6	28.3	✓
21.05	28.3	14.7	✓
22.01	25.5	14.2	✓
22.02	25.5	16.5	✓
22.03	17	10.3	✓
22.04	9.7	28.2	✓
22.05	28.5	14.7	✓
23.01	25.5	14	✓
23.02	25.5	16.2	✓
23.03	17	10.2	✓
23.04	9.7	27.7	✓
23.05	28.5	14.8	✓
24.01	25.7	14.2	✓
24.02	25.6	16.3	✓
24.03	17.1	10.3	✓
24.04	9.8	27.7	✓
24.05	28.6	14.6	✓
25.01	25.8	14	✓
25.02	25.8	16.3	✓
25.03	17.1	10.3	✓
25.04	9.9	27.6	✓
25.05	28.8	14.6	✓
26.01	25.9	14.1	✓
26.02	13.4	11.9	✓
26.03	11.5	27	✓
26.04	28.9	14.4	✓
27.01	25.9	14.1	✓
27.02	13.4	11.8	✓
27.03	11.5	27.0	✓

Dwelling Number	Heating Load	Cooling Load	Compliant with BASIX Thermal Comfort Requirements
27.04	28.9	14.1	✓
28.01	26	13.9	✓
28.02	13.5	11.7	✓
28.03	11.6	26.8	✓
28.04	29.1	14.2	✓
29.01	26.1	14.2	✓
29.02	13.6	11.6	✓
29.03	11.7	26.8	✓
29.04	29.2	14.1	✓
30.01	26.1	13.8	✓
30.02	13.6	11.4	✓
30.03	11.7	26.6	✓
30.04	29.2	14.0	✓
31.01	26.2	13.6	✓
31.02	19.2	11.3	✓
31.03	12.6	26.6	✓
31.04	29.4	13.8	✓
32.01	20.5	16.6	✓
32.02	9.5	28.4	✓
32.03	29.5	13.7	✓
33.01	36.4	16.7	✓
33.02	21.5	29.1	✓
33.03	42.5	14.9	✓
Average	**19.9**	**16.9**	

The table below shows the assumptions made for the base case house energy ratings.

Table 8 : ESD Specification – 4 – House Energy Rating Requirements

Item	**Assumption**
Floor	All floors to dwellings are suspended slab Where balcony above or slab below is exposed to external R2.0 insulation is required Floor coverings are generally carpet for bedrooms, tiles for all other areas
Walls	External walls are concrete with R1.0 insulation
Roof	Where balcony above or slab below is exposed to external R2.0 insulation is required Level 33 roof has is concrete with R3.0 insulation
Windows	Glazing is double glazed with U=3.9 (maximum) and SHGC=0.41 (+ or – 10%) openability for windows is as follows: ▪ 3 stacker sliding door is 60% ▪ 2 stacker sliding door is 40% ▪ All other windows are openable to maximum 10%
Exhaust Fans and Downlights	Exhaust fans are 250mm wide (NatHERS default) Downlight penetrations are 100mm wide (NatHERS default)

Refer to the Attachment on the overleaf for the group certificate.

Nationwide House Energy Rating Scheme — Class 2 summary

NatHERS Certificate No. ABIF82DN0T

Generated on 20 Dec 2024 using FirstRate5 v5.3.2b

Property

Address 3-5 Help Street, Chatswood, NSW, 2067

Lot/DP

NatHERS climate zone

Accredited assessor

Patrick Phelan

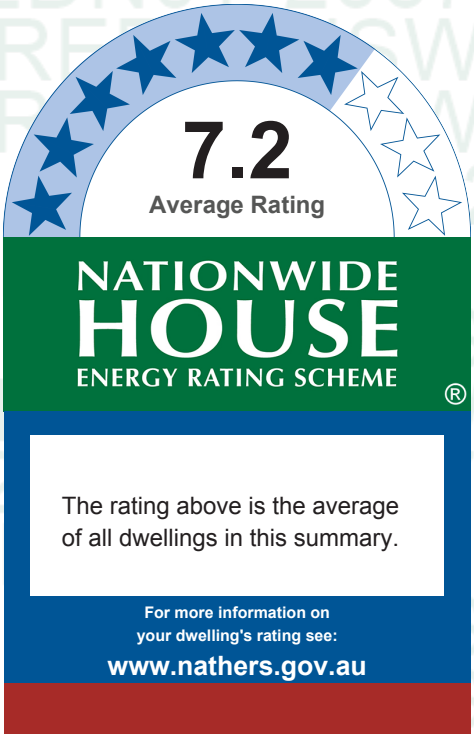
Energy Water and Environment

patrick@ewenvironment.com.au

0402586813

Accreditation No. DMN/12/1407

Assessor Accrediting Organisation Design Matters National



Verification

To verify this certificate, scan the QR code or visit https://www.fr5.com.au/QRCodeLanding?PublicId=ABIF82DN0T&GrpCert=1 When using either link, ensure you are visiting www.fr5.com.au.

Summary of all dwellings

Certificate number and link	Unit number	Heating load (MJ/m²/p.a.)	Cooling load (MJ/m²/p.a.)	Total load (MJ/m²/p.a.)	Star rating
WIRJY5UPAE	10.01	31.3	13.4	44.7	6.5
3EUK9YAZPE	10.02	23.8	18.1	41.9	6.8
2Q7UUZSV9X	10.03	6.7	12.4	19.1	8.6
QLI7YOWCUG	10.04	2.8	16.6	19.4	8.6
9P1J5D8XSP	10.05	10.6	25.4	36.0	7.2
SK2HNFL7Y8	10.06	31.5	12.1	43.6	6.6
M8PNXS5WWU	11.01	31.6	13.4	45.0	6.5

Continued over

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

Summary of and links to all dwellings (continued)

Certificate number and link	Unit number	Heating load (MJ/m²/p.a.)	Cooling load (MJ/m²/p.a.)	Total load (MJ/m²/p.a.)	Star rating
C7FJENYXZR	11.02	24.0	18.0	42.0	6.7
05CUEGSAUS	11.03	6.9	12.7	19.6	8.5
DZOV3B9OWN	11.04	2.9	16.0	18.9	8.6
HLB8NUFTCA	11.05	10.8	25.4	36.2	7.2
QXHHHR55IQ	11.06	31.8	12.0	43.8	6.6
A5CDRNTTPD	12.01	31.6	13.5	45.1	6.4
OKALKP4EGT	12.02	23.6	18.2	41.8	6.8
B87TBQRGNM	12.03	6.7	12.6	19.3	8.6
FDGGNLI7Q9	12.04	2.7	16.2	18.9	8.6
BVE8VGW672	12.05	10.5	25.7	36.2	7.2
X0YYPC8SCB	12.06	31.3	12.0	43.3	6.6
6MFC8KE488	13.01	31.7	13.6	45.3	6.4
H7XGSQ3885	13.02	24.3	17.8	42.1	6.7
3VJVYOOR1K	13.03	7.0	12.6	19.6	8.5
NZ4PDYPCAL	13.04	3.0	15.6	18.6	8.6
C178V0CSG8	13.05	11.0	25.2	36.2	7.2
I9UGHKCUNT	13.06	32.1	11.9	44.0	6.6
V11794YEH7	14.01	31.9	13.6	45.5	6.4
EFEHWF91JM	14.02	24.5	17.4	41.9	6.8
2GGZ5BXT19	14.03	16.4	10.9	27.3	7.9
14TO4MRS8N-02	14.04	12.1	22.3	34.4	7.3
DFAC0K5F9B	14.05	27.4	15.3	42.7	6.7
H0HFHPUCB7	15.01	31.9	13.8	45.7	6.4
HFMHGJWZNJ	15.02	24.6	17.2	41.8	6.8
YQ25JXGD9V	15.03	16.5	10.8	27.3	7.9
GST02AWNGP-01	15.04	10.3	27.8	38.1	7.1
1ORBG7326Q	15.05	27.6	15.2	42.8	6.7
YF10N08M6U	16.01	31.5	13.7	45.2	6.4
JRDP1YVWPF	16.02	24.8	17.0	41.8	6.8
XIS8RJ81ZL	16.03	16.6	10.7	27.3	7.9
3NHS7A03NB	16.04	9.2	29.1	38.3	7.1
CKRWGKLBJR	16.05	27.7	14.8	42.5	6.7
MHM03PX3ID	17.01	30.4	13.9	44.3	6.6
1GXV15JUS0	17.02	24.9	17.2	42.1	6.7
82INDN162G	17.03	16.7	10.7	27.4	7.9
87SH9WBQZR	17.04	9.2	29.0	38.2	7.1
N7UJJ5W64K	17.05	27.8	14.8	42.6	6.7

Continued over

Summary of and links to all dwellings (continued)

Certificate number and link	Unit number	Heating load (MJ/m²/p.a.)	Cooling load (MJ/m²/p.a.)	Total load (MJ/m²/p.a.)	Star rating
B0SSTU88XQ	18.01	30.0	13.9	43.9	6.6
X0BCF4YPVF	18.02	25.0	16.9	41.9	6.8
425BNAH8EI	18.03	16.7	10.6	27.3	7.9
05BRFIO9XP	18.04	9.3	29.0	38.3	7
XC3J4W6REP	18.05	27.9	14.6	42.5	6.7
GHKZQI4RFS	19.01	28.7	13.8	42.5	6.7
M94O02ZT76	19.02	25.1	16.8	41.9	6.8
QZ1GR18WG1	19.03	16.8	10.4	27.2	7.9
EZ4YBTUMA6-01	19.04	10.2	28.0	38.2	7.1
N64FCXHOTB	19.05	27.4	15.3	42.7	6.7
WKNEM4IF06	2.01	27.1	17.7	44.8	6.5
A7OX4AII3S	2.02	13.5	16.4	29.9	7.7
WL140X8RH5	2.03	11.9	13.9	25.8	8
GTMVJJFC8K	2.04	12.1	13.9	26.0	8
7MUH8RPDHZ	20.01	28.8	13.9	42.7	6.7
JIKNOWFFNG	20.02	25.2	16.9	42.1	6.7
HMTATU5WE4	20.03	16.9	10.4	27.3	7.9
UUDF41FW0T	20.04	9.5	28.5	38.0	7.1
ERELXFVQ0P	20.05	27.4	15.3	42.7	6.7
3TD3ABPMUF	21.01	25.7	14.2	39.9	6.9
MEAQZLZPWF	21.02	25.4	16.9	42.3	6.7
OTET49CUZG	21.03	17.0	10.4	27.4	7.9
16UBOE7M56	21.04	9.6	28.3	37.9	7.1
I0L2DBUIWA	21.05	28.3	14.7	43.0	6.7
31QKGJOT9A	22.01	25.5	14.2	39.7	6.9
95XOOQT9CU	22.02	25.5	16.5	42.0	6.8
ONT07YIMP3	22.03	17.0	10.3	27.3	7.9
O37ZN9PJ4E	22.04	9.7	28.2	37.9	7.1
0NN46ND7OX	22.05	28.5	14.7	43.2	6.7
RVGCVPH0NS	23.01	25.5	14.0	39.5	6.9
BCEFWF77BO	23.02	25.5	16.2	41.7	6.8
AKE73AAZ3U	23.03	17.0	10.2	27.2	7.9
UL72L3W4D7	23.04	9.7	27.7	37.4	7.1
PF69WHQJIU	23.05	28.5	14.8	43.3	6.6
PS6270EL42	24.01	25.7	14.2	39.9	6.9
SD3DWLN23F	24.02	25.6	16.3	41.9	6.8

Continued over

Summary of and links to all dwellings (continued)

Certificate number and link	Unit number	Heating load (MJ/m²/p.a.)	Cooling load (MJ/m²/p.a.)	Total load (MJ/m²/p.a.)	Star rating
12QCFOP8GD	24.03	17.1	10.3	27.4	7.9
MNWTRJ2DON	24.04	9.8	27.7	37.5	7.1
U7MPILM2MK	24.05	28.6	14.6	43.2	6.6
3YPC2WC4XT	25.01	25.8	14.0	39.8	6.9
LFF0QFRKVN	25.02	25.8	16.3	42.1	6.7
CWV5KY7T05	25.03	17.1	10.3	27.4	7.9
H8Q5BO1V9D	25.04	9.9	27.6	37.5	7.1
4BG92TK8R8	25.05	28.8	14.6	43.4	6.6
WD2M2ZM7OY	26.01	25.9	14.1	40.0	6.9
IIQAIG7NZX	26.02	13.4	11.9	25.3	8.1
ERDF0DQ0Z1	26.03	11.5	27.0	38.5	7
7MI170MINH	26.04	28.9	14.4	43.3	6.6
4JKZ2GRUU4	27.01	25.9	14.1	40.0	6.9
U8T8T0ELKF	27.02	13.4	11.8	25.2	8.1
0HY7Z7H4LB	27.03	11.5	27.0	38.5	7
V6AFV4HOMU	27.04	28.9	14.1	43.0	6.7
V6G4H92KIG	28.01	26.0	13.9	39.9	6.9
WB8IRXVM95	28.02	13.5	11.7	25.2	8.1
8XITJY7OMY	28.03	11.6	26.8	38.4	7
TZ8ZT4B300	28.04	29.1	14.2	43.3	6.6
E7WEPU72X8	29.01	26.1	14.2	40.3	6.9
J4PRV8XWVS	29.02	13.6	11.6	25.2	8.1
V1VI0BBEDZ	29.03	11.7	26.8	38.5	7
1F0OPYJQEU	29.04	29.2	14.1	43.3	6.6
FQ9PVYHHQF	3.01	28.1	17.4	45.5	6.4
7X7KAV4LTO	3.02	13.9	16.1	30.0	7.7
TPT85JB74M	3.03	10.9	14.1	25.0	8.1
2DP2UEU775	3.04	15.5	12.0	27.5	7.9
TSGLFMWZF9	3.05	13.0	26.1	39.1	6.9
VFE8UZ7AUM	3.06	26.5	14.7	41.2	6.8
HOIIZ0ACRS	30.01	26.1	13.8	39.9	6.9
QYDAMRJH0U	30.02	13.6	11.4	25.0	8.1
7TT516XSD7	30.03	11.7	26.6	38.3	7.1
WWEEPHTNTA	30.04	29.2	14.0	43.2	6.7
B8WVICB0B7	31.01	26.2	13.6	39.8	6.9
71Q21JHPGX	31.02	19.2	11.3	30.5	7.6

Continued over

Summary of and links to all dwellings (continued)

Certificate number and link	Unit number	Heating load (MJ/m²/p.a.)	Cooling load (MJ/m²/p.a.)	Total load (MJ/m²/p.a.)	Star rating
DR9U54T8VF	31.03	12.6	26.6	39.2	6.9
4JU3FBR49V	31.04	29.4	13.8	43.2	6.7
46RFSU6UQ1	32.01	20.5	16.6	37.1	7.1
LH607U9C0O	32.02	9.5	28.4	37.9	7.1
TDE59UP9BY	32.03	29.5	13.7	43.2	6.6
07Z28G93BL	33.01	36.4	16.7	53.1	5.8
78R3418628	33.02	21.5	29.1	50.6	6
95HJF11WG8	33.03	42.5	14.9	57.4	5.5
WL1RNIRALP	4.01	28.5	17.2	45.7	6.4
ZLVIPYO4AV	4.02	14.2	16.1	30.3	7.6
FH4DFIDAB5	4.03	11.2	13.9	25.1	8.1
3BDO1J016Z	4.04	15.9	12.2	28.1	7.8
VUNTU1ZXQD	4.05	13.4	25.9	39.3	6.9
AUAGUPQXME	4.06	27.0	14.4	41.4	6.8
DS8PPSEFZ7	5.01	28.1	17.4	45.5	6.4
HN4WX1HZWA	5.02	14.7	15.9	30.6	7.6
HYD8X053NH	5.03	11.3	13.8	25.1	8.1
U963KIC5DO	5.04	16.4	11.8	28.2	7.8
VSJJ7CUY8J	5.05	13.9	25.5	39.4	6.9
CL551OOA2Z	5.06	27.6	13.7	41.3	6.8
2JCX3Z3CTV	6.01	29.3	15.8	45.1	6.4
ZUUGRYGW9O	6.02	21.4	20.7	42.1	6.7
2SJU04WKDD	6.03	3.8	18.3	22.1	8.3
FGPPRUR22N	6.04	3.7	18.9	22.6	8.3
0ALT70X8GF	6.05	14.3	24.0	38.3	7.1
PPKWBJAS68	6.06	28.1	13.8	41.9	6.8
JQINU6LF0Q	7.01	29.5	15.4	44.9	6.5
NTR9DRCMQU	7.02	21.7	20.3	42.0	6.8
WDN9P11S63	7.03	5.4	14.5	19.9	8.5
21S1CFQIG2	7.04	3.7	19.3	23.0	8.3
JJG0ZPCR5G	7.05	13.5	24.9	38.4	7
ACBP3FCI82	7.06	28.4	13.7	42.1	6.7
IP88D5HTE7	8.01	29.7	15.4	45.1	6.4
OLU8EG6NEP	8.02	21.9	20.1	42.0	6.7
DHJNXPAICD	8.03	5.6	14.5	20.1	8.4
ZJWZ2ZZC86	8.04	3.2	19.1	22.3	8.3

Continued over

Summary of and links to all dwellings (continued)

Certificate number and link	Unit number	Heating load (MJ/m²/p.a.)	Cooling load (MJ/m²/p.a.)	Total load (MJ/m²/p.a.)	Star rating
B3GYLN7XK9	8.05	12.7	26.1	38.8	7
E3I7XWA077	8.06	28.7	13.7	42.4	6.7
681A44T2A6	9.01	31.3	13.7	45.0	6.4
NYUGUNYYUW	9.02	23.6	18.2	41.8	6.8
3M8SYXILK1	9.03	6.7	12.6	19.3	8.6
HREEGQUUDK	9.04	2.7	16.2	18.9	8.6
XEMICT41NZ	9.05	10.5	25.7	36.2	7.2
HS8SET9IMG	9.06	31.3	12.0	43.3	6.6
Average		19.9	16.9	36.8	7.2

Explanatory notes

About this report

This summary rating is the average rating of all NCC Class 2 dwellings in a development. The individual dwellings' ratings are a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate the energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances, or energy production of solar panels. For more details about an individual dwelling's assessment, refer to the individual dwelling's NatHERS Certificate (accessible via link).

Accredited Assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO). AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country.

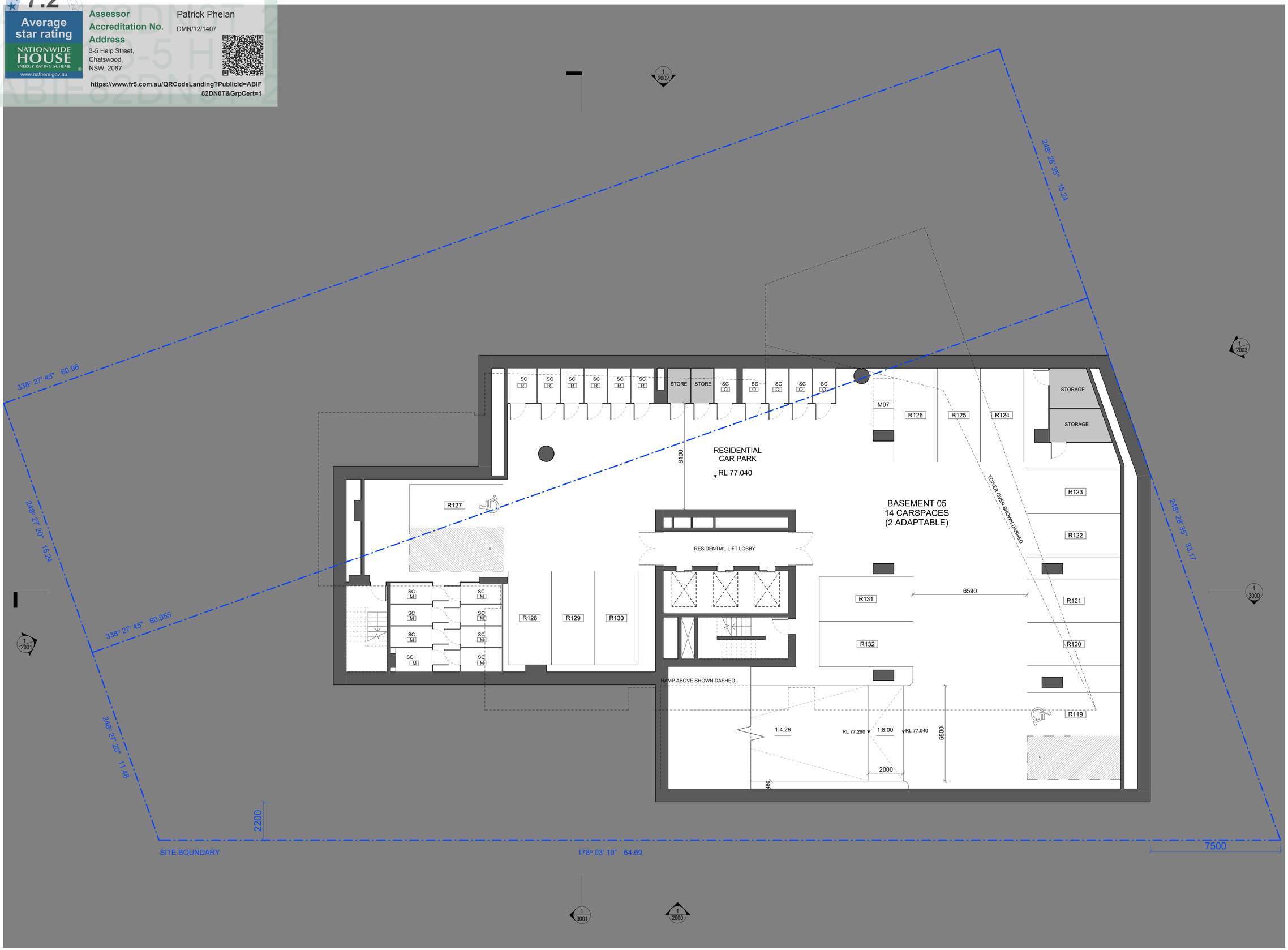
Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

Disclaimer

The format of the NatHERS Certificate was developed by the NatHERS Administrator. However the content, input and creation of the NatHERS Certificate is by the assessor. It is the responsibility of the assessor who prepared this certificate to use NatHERS accredited software correctly and follow the NatHERS Technical Notes to produce a NatHERS Certificate.

9 APPENDIX D – STAMPED DRAWINGS FOR NATHERS

The stamped drawings for NatHERS are attached on the overleaf.



Class 2 summary

ABIF82DN0T 20/12/2024

7.2 Average star rating

NATIONWIDE HOUSE ENERGY RATING SCHEME® www.nathers.gov.au

Assessor Patrick Phelan

Accreditation No. DMN/12/1407

Address 3-5 Help Street, Chatswood, NSW, 2067

https://www.fr5.com.au/QRCodeLanding?PublicId=ABIF82DN0T&GrpCert=1

Iss.	Date	For
A	06.08.2024	Scoping Meeting
B	05.12.2024	For Coordination

Legend

SC Storage cage

General Notes

Verify dimensions on site prior to commencement of work. Check existing RL's on site. Advise Architect of any discrepancies before commencement. Allow for adjustments to suit discrepancies. Comply with relevant authorities requirements. Comply with Building Code of Australia requirements. Comply with relevant Australian Standards for materials and construction practice. Comply with Basix Certificate. Do not scale from drawings.

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Jordan Faeghi
0437 898 661

BG&E | Structure
Vince Betro
0414 814 862

Neuron | Services
Steve Cassells
0401 222 862

Common Grounds | Landscape
Alex Georgouras
0404 626 520

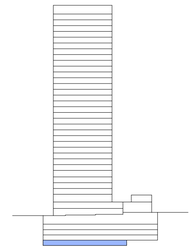
Walkerbai | ESD
Stewart Mann
0407 545 647

Stantec | Civil
Jackson Bramley
0421 193 028

PDC Consultants | Traffic
Ben Midgley
0413 167 797

Design Confidence | BCA / Access
Lindsay Beard
0407 870 612

Key Section



Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
MD	MP	05.12.2024

Drawing
B05 Plan

Drawing No.
1000

Scale 1 : 100 @ A1

Issue B

North

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Scale 1:100 mm

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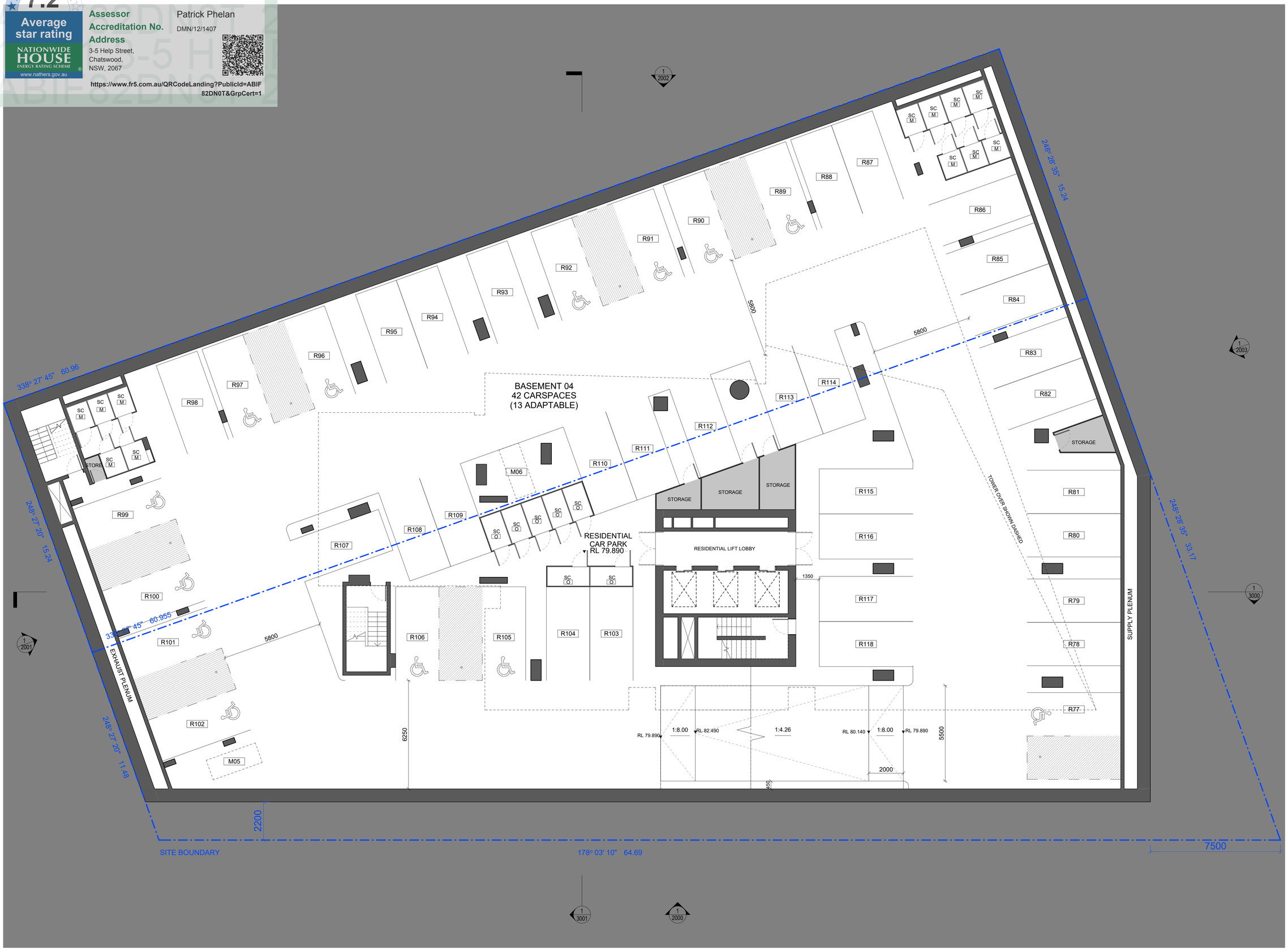
Nominated Architects
Mladen Pmjatovic 7468
Ben Green 7066
Chi Melhem 7754

7.2
Average star rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
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Class 2 summary
ABIF82DN0T 20/12/2024

Assessor Patrick Phelan
Accreditation No. DMN/12/1407
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Iss.	Date	For
A	06.08.2024	Scoping Meeting
B	05.12.2024	For Coordination

Legend
SC Storage cage

General Notes
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BG&E | Structure
Vince Betro
0414 814 862

Neuron | Services
Steve Cassells
0401 222 862

Common Grounds | Landscape
Alex Georgouras
0404 626 520

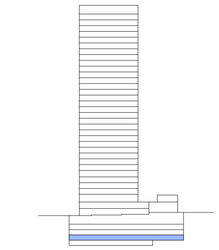
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Stewart Mann
0407 545 647

Stantec | Civil
Jackson Bramley
0421 193 028

PDC Consultants | Traffic
Ben Midgley
0413 167 797

Design Confidence | BCA / Access
Lindsay Beard
0407 870 612

Key Section



Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
B04 Plan

Drawing No.
1001

Scale
1 : 100 @ A1

Issue
B

North

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Scale 1:100 mm

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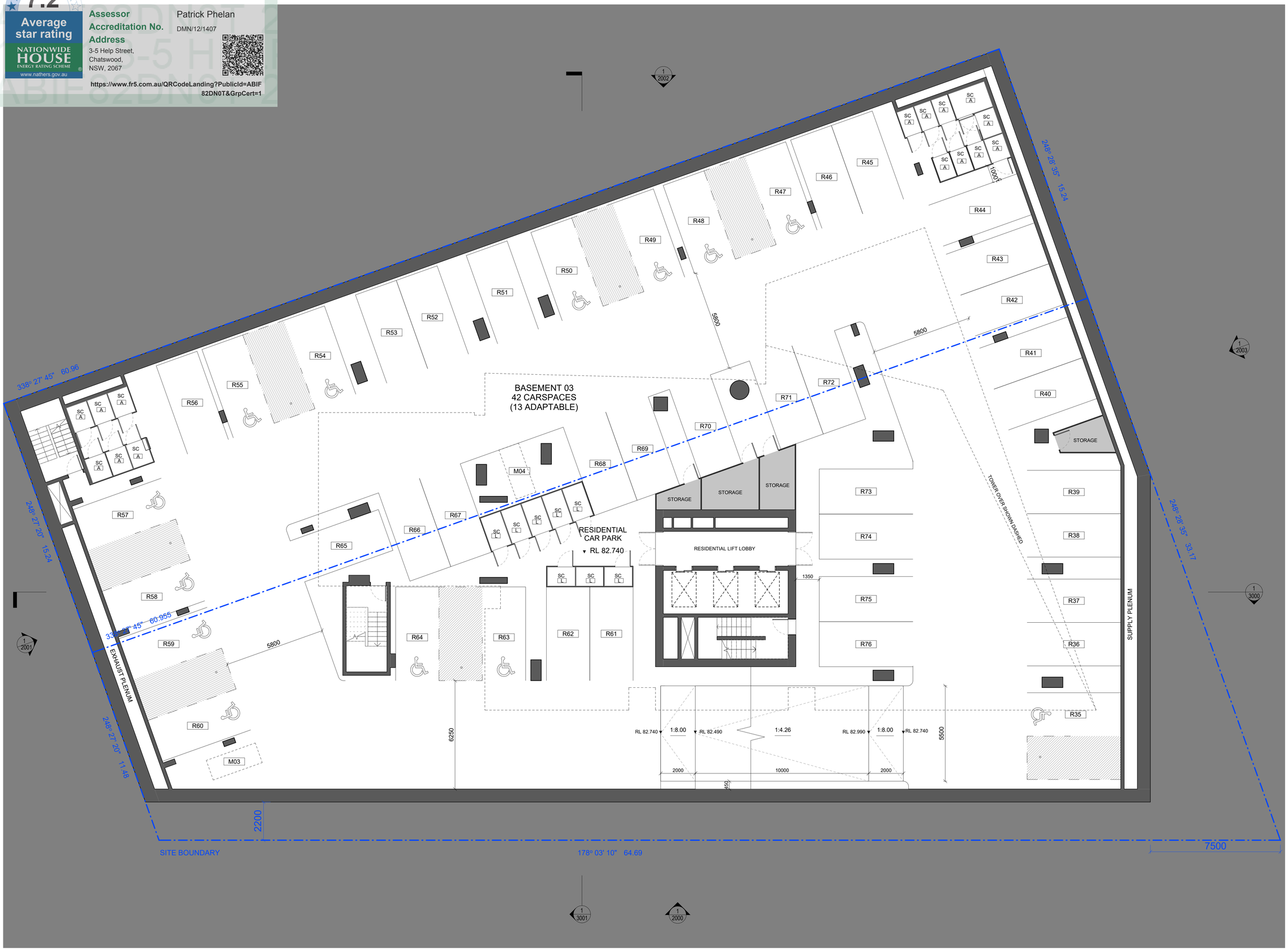
Nominated Architects
Mladen Prnjatovic 7468
Ben Green 7066
Chi Melhem 7754

7.2
Average star rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
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Class 2 summary
ABIF82DN0T 20/12/2024

Assessor Patrick Phelan
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Iss.	Date	For
A	06.08.2024	Scoping Meeting
B	05.12.2024	For Coordination

Legend
SC Storage cage

General Notes
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0414 814 862

Neuron | Services
Steve Cassells
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Common Grounds | Landscape
Alex Georgouras
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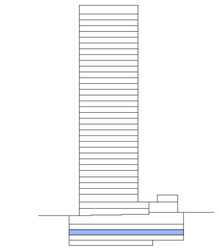
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PDC Consultants | Traffic
Ben Midgley
0413 167 797

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Key Section



Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
B03 Plan

Drawing No.
1002

Scale
1 : 100 @ A1

Issue
B

North

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Scale 1:100 mm

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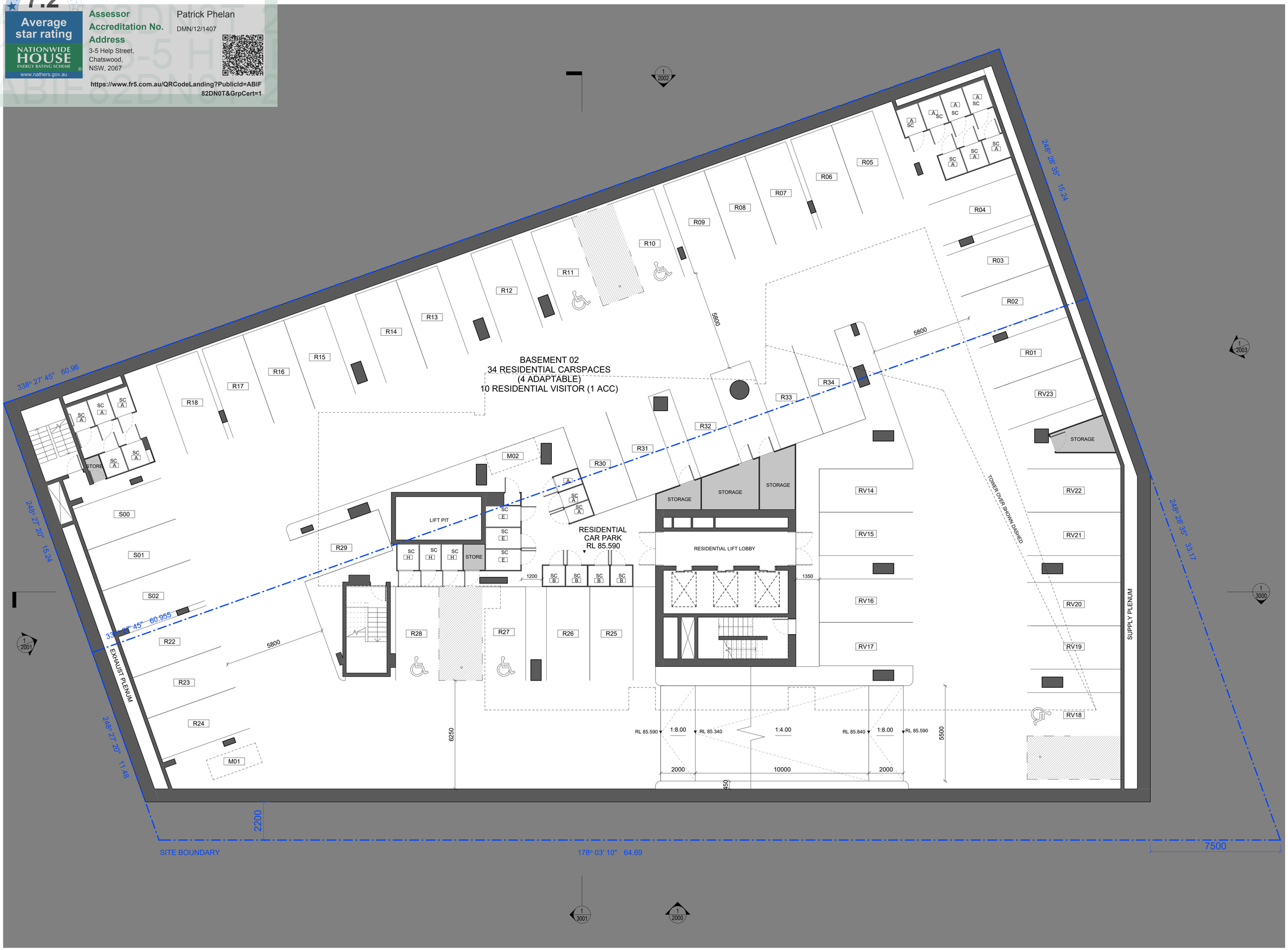
Class 2 summary

ABIF82DN0T 20/12/2024

Assessor Accreditation No. Patrick Phelan
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Address
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Iss.	Date	For
A	06.08.2024	Scoping Meeting
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Legend
SC Storage cage

General Notes
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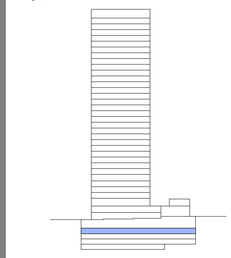
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Jackson Bramley
0421 193 028

PDC Consultants | Traffic
Ben Midgley
0413 167 797

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Key Section



Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
B02 Plan

Drawing No.
1003

Scale
1 : 100 @ A1

Issue
B

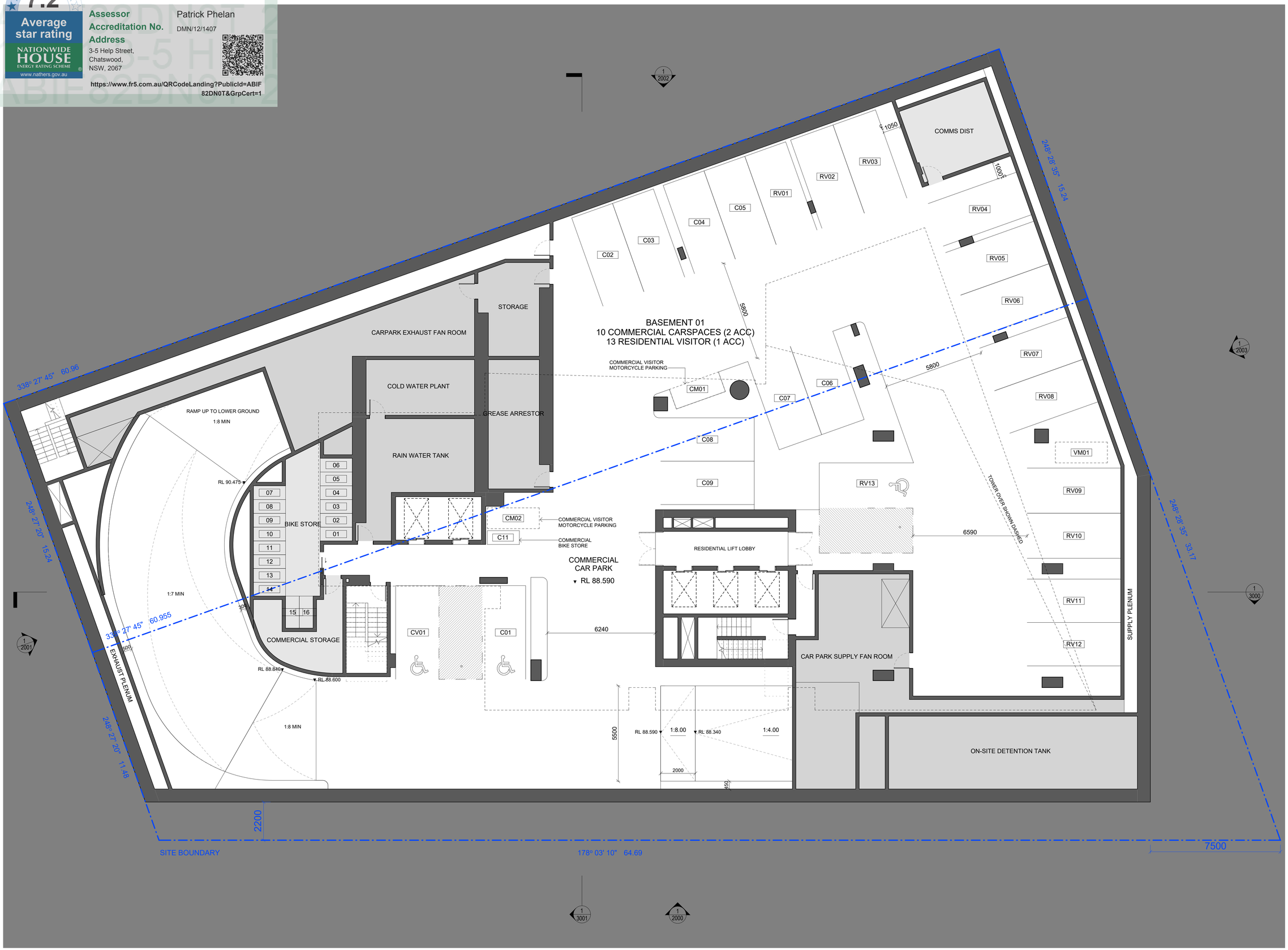
North

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Scale 1:100 mm

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Nominated Architects
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Class 2 summary

ABIF82DN0T 20/12/2024

7.2
Average star rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
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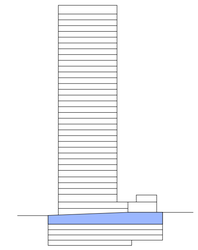
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Jackson Bramley
0421 193 028

PDC Consultants | Traffic
Ben Midgley
0413 167 797

Design Confidence | BCA / Access
Lindsay Beard
0407 870 612

Key Section



Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
B01 Plan

Drawing No.
1004

Scale 1 : 100 @ A1
Issue B

North

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Scale 1:100 mm

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Nominated Architects
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Ben Green 7066
Chi Melhem 7754

7.2
Average star rating
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Class 2 summary
ABIF82DN0T 20/12/2024

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Iss.	Date	For
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Loftex Chatswood Pty. Ltd.
02 8920 0516

Mecone | Planner
Jordan Faeghi
0437 898 661

BG&E | Structure
Vince Betro
0414 814 862

Neuron | Services
Steve Cassells
0401 222 862

Common Grounds | Landscape
Alex Georgouras
0404 626 520

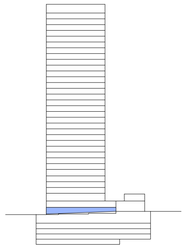
Walkerbai | ESD
Stewart Mann
0407 545 647

Stantec | Civil
Jackson Bramley
0421 193 028

PDC Consultants | Traffic
Ben Midgley
0413 167 797

Design Confidence | BCA / Access
Lindsay Beard
0407 870 612

Key Section



Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
LG Plan

Drawing No.
1010

Scale
1 : 100 @ A1

Issue
B

North

0 1000 2000 3000 4000 5000
Scale 1:100 mm

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Nominated Architects
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Ben Green 7066
Chi Melhem 7754

7.2
Average star rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
www.nathers.gov.au

Class 2 summary
ABIF82DN0T 20/12/2024

Assessor Patrick Phelan
Accreditation No. DMN/12/1407
Address 3-5 Help Street, Chatswood, NSW, 2067

https://www.fr5.com.au/QRCodeLanding?PublicId=ABIF82DN0T&GrpCert=1

28 ANDERSON STREET

HELP STREET

MCINTOSH STREET

CAMBRIDGE LANE

SITE BOUNDARY 178° 03' 10" 64.69

338° 27' 45" 60.96

248° 27' 20" 15.24

3000

338° 27' 45" 60.955

248° 27' 20" 11.48

248° 28' 35" 15.24

3000

248° 28' 35" 33.17

7500

7960

7210

6400

8800

4500

1500

6000

3000

16050 to 1 CAMBRIDGE LANE

WDCP PODIUM SETBACK

TOWER OVER SHOWN DASHED

AWNING OVER SHOWN DASHED

VOID OVER LOADING DOCK

ROLLER DOOR

BOH

BOH

COMMERCIAL

RL 95.000

FIRE TANK ROOM

RL 91.75

COMMERCIAL LOBBY

RL 93.930

COMMERCIAL

RL 94.000

LOADING DOCK

SRV

MRV

RESIDENTIAL WASTE

RL 91.75

RESIDENTIAL LIFT LOBBY

FIRE BOOSTERS

CLEARANCE ZONE FOR BOOSTER ACCESS

MAIL ROOM

FCR

COMMERCIAL

BULKY WASTE

SUBSTATION

COMM WASTE

SWITCHROOM

GAS METER

RL 91.910

RL 91.720

RL 91.836

RL 92.067

RL 92.435

RL 91.91

RL 92.00

RL 92.85

RL 92.30

RL 92.28

RL 92.52

RL 93.00

RL 95.40

RL 95.85

RL 95.24

RL 95.00

RL 94.80

RL 94.62

RL 94.04

RL 93.89

RL 93.66

RL 93.37

RL 93.30

RL 93.09

RL 92.93

RL 92.80

RL 91.66

1 2002

1 2003

1 2001

1 3000

1 3001

1 2000

Iss.	Date	For
A	06.08.2024	Scoping Meeting
B	05.12.2024	For Coordination

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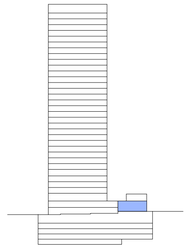
Walkerbai | ESD
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0407 545 647

Stantec | Civil
Jackson Bramley
0421 193 028

PDC Consultants | Traffic
Ben Midgley
0413 167 797

Design Confidence | BCA / Access
Lindsay Beard
0407 870 612

Key Section



Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
UG Plan

Drawing No.
1011

Scale 1 : 100 @ A1
Issue B

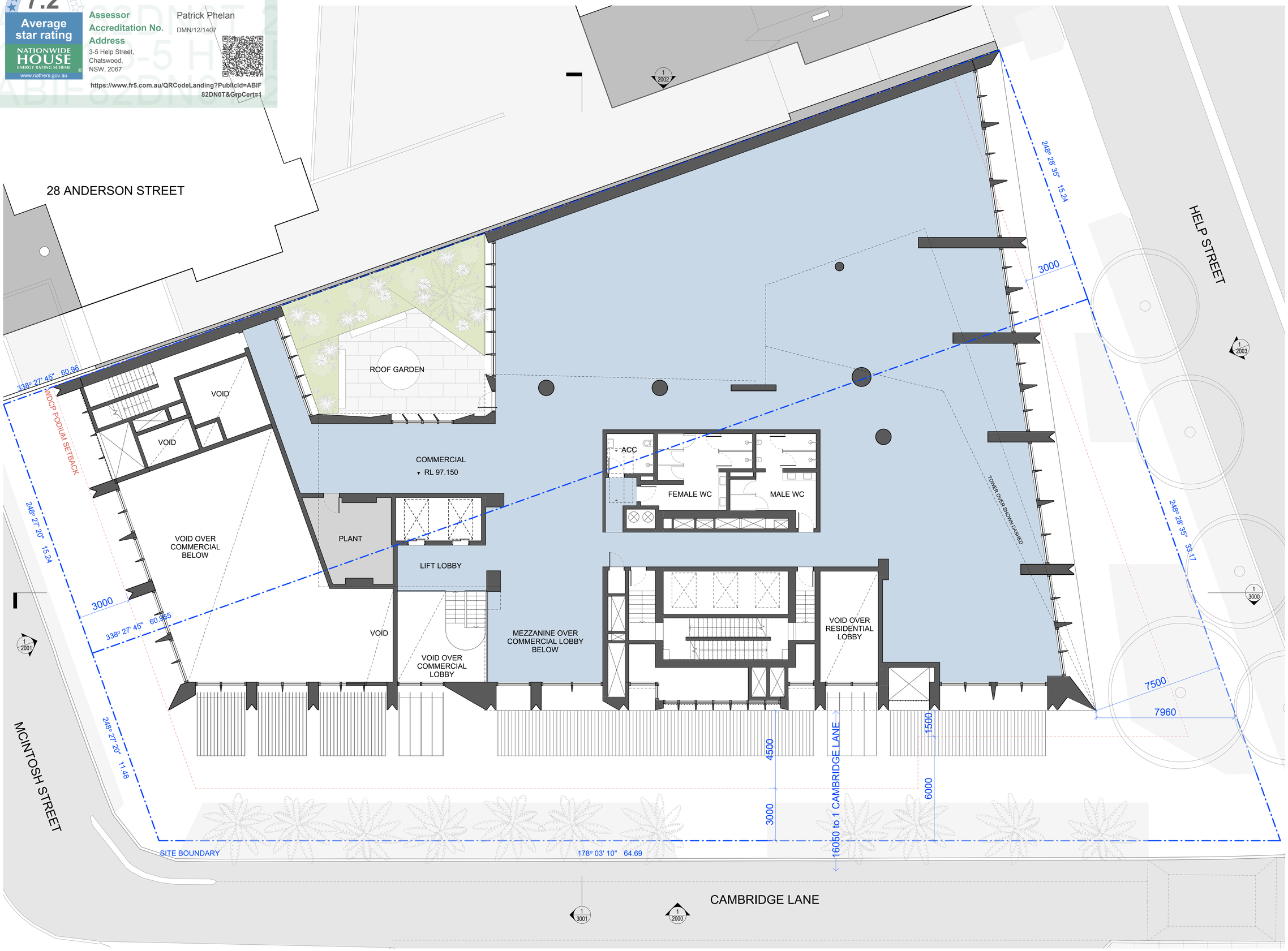
North

0 1000 2000 3000 4000 5000
Scale 1:100 mm

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Nominated Architects
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Ben Green 7066
Chi Melhem 7754



7.2
Average star rating
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Class 2 summary
ABIF82DN0T 20/12/2024

Assessor Patrick Phelan
Accreditation No. DMN/12/1407
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Iss.	Date	For
A	06.08.2024	Scoping Meeting
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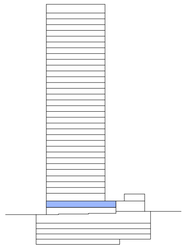
Walkerbai | ESD
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0421 193 028

PDC Consultants | Traffic
Ben Midgley
0413 167 797

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Lindsay Beard
0407 870 612

Key Section



Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
Mezzanine Plan

Drawing No.
1100

Scale 1 : 100 @ A1
Issue B

North

0 1000 2000 3000 4000 5000
Scale 1:100 mm

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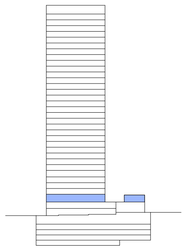
Walkerbai | ESD
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Jackson Bramley
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PDC Consultants | Traffic
Ben Midgley
0413 167 797

Design Confidence | BCA / Access
Lindsay Beard
0407 870 612

Key Section



Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
L01 Plan

Drawing No.
1101

Scale
1 : 100 @ A1

Issue
B

North

0 1000 2000 3000 4000 5000
Scale 1:100 mm

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Class 2 summary

ABIF82DN0T 20/12/2024

7.2 Average star rating

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28 ANDERSON STREET

HELP STREET

MCINTOSH STREET

CAMBRIDGE LANE

SITE BOUNDARY

RESIDENTIAL COMMUNAL GARDEN

RESIDENTIAL PRIVATE GARDEN

FENCE BETWEEN COMMUNAL AND PRIVATE GARDEN SHOWN DASHED

RESIDENTIAL COMMUNAL GARDEN

RESIDENTIAL PRIVATE GARDEN

BALCONY 13 m²

RESIDENTIAL COMMUNAL AREA

COVERED OUTDOOR COMMUNAL AREA

ROOF GARDEN BELOW

LIFT LOBBY ▼RL 104.850

2B 2.03 97 m²

BALCONY 122 m²

BED 02

BED 01

FENCE BETWEEN UNITS SHOWN DASHED

1B 2.04 52 m²

BED 01

BALCONY 14 m²

1B 2.02 64 m²

BED 01

2B 2.01 92 m²

BED 02

BALCONY 13 m²

OPERABLE PRIVACY SCREEN

WDCP TOWER SETBACK

WDCP PODIUM SETBACK

SOLAR LINE

338° 27' 45" 60.96

248° 27' 20" 15.24

3000

7500

338° 27' 45" 60.955

248° 27' 20" 11.48

4500

3000

16050 to 1 CAMBRIDGE LANE

6000

178° 03' 10" 64.69

248° 28' 35" 15.24

3000

7500

4500

3750

248° 28' 35" 33.17

1 2002

1 2003

1 3000

1 2001

1 3001

1 2000

Iss.	Date	For
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BG&E | Structure
Vince Betro
0414 814 862

Neuron | Services
Steve Cassells
0401 222 862

Common Grounds | Landscape
Alex Georgouras
0404 626 520

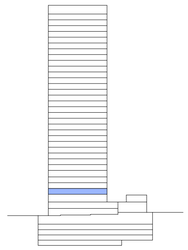
Walkerbai | ESD
Stewart Mann
0407 545 647

Stantec | Civil
Jackson Bramley
0421 193 028

PDC Consultants | Traffic
Ben Midgley
0413 167 797

Design Confidence | BCA / Access
Lindsay Beard
0407 870 612

Key Section



Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
L02 Plan

Drawing No.
1102

Scale 1 : 100 @ A1

Issue B

North

0 1000 2000 3000 4000 5000
Scale 1:100 mm

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Nominated Architects
Mladen Prnjatovic 7468
Ben Green 7065
Chi Melhem 7754

7.2
Average star rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
www.nathers.gov.au

Class 2 summary
ABIF82DN0T 20/12/2024

Assessor Patrick Phelan
Accreditation No. DMN/12/1407
Address 3-5 Help Street, Chatswood, NSW, 2067

https://www.fr5.com.au/QRCodeLanding?PublicId=ABIF82DN0T&GrpCerts=1

28 ANDERSON STREET

HELP STREET

MCINTOSH STREET

CAMBRIDGE LANE

SITE BOUNDARY

WDCP TOWER SETBACK

SOLAR LINE

338° 27' 45" 60.96

248° 27' 20" 15.24

3000

7500

338° 27' 45" 60.955

248° 27' 20" 11.48

4500

3750

248° 28' 35" 15.24

7500

248° 28' 35" 33.17

178° 03' 10" 64.69

7500

1600 to 1 CAMBRIDGE LANE

OPERABLE PRIVACY SCREEN

LIFT LOBBY
▼ RL 108.000

BALCONY 10 m²
1B 3.05 68 m²
BED 01
BALCONY 8 m²
1B 3.04 61 m² (ADAPTABLE)
BED 01
BALCONY 10 m²
2B 3.06 91 m²
BED 02
BED 01
BALCONY 12 m²
2B 3.03 106 m²
BED 02
BED 01
BED 01
BALCONY 8 m²
1B 3.02 64 m²
BED 01
BED 02
2B 3.01 92 m²
BALCONY 13 m²

1 2002
1 2003
1 3000
1 2001
1 3001
1 2000

Iss.	Date	For
A	06.08.2024	Scoping Meeting
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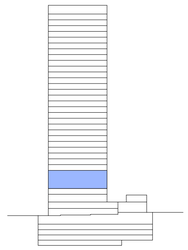
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Key Section



Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
L03-05 Plan

Drawing No.
1103

Scale 1 : 100 @ A1
Issue B

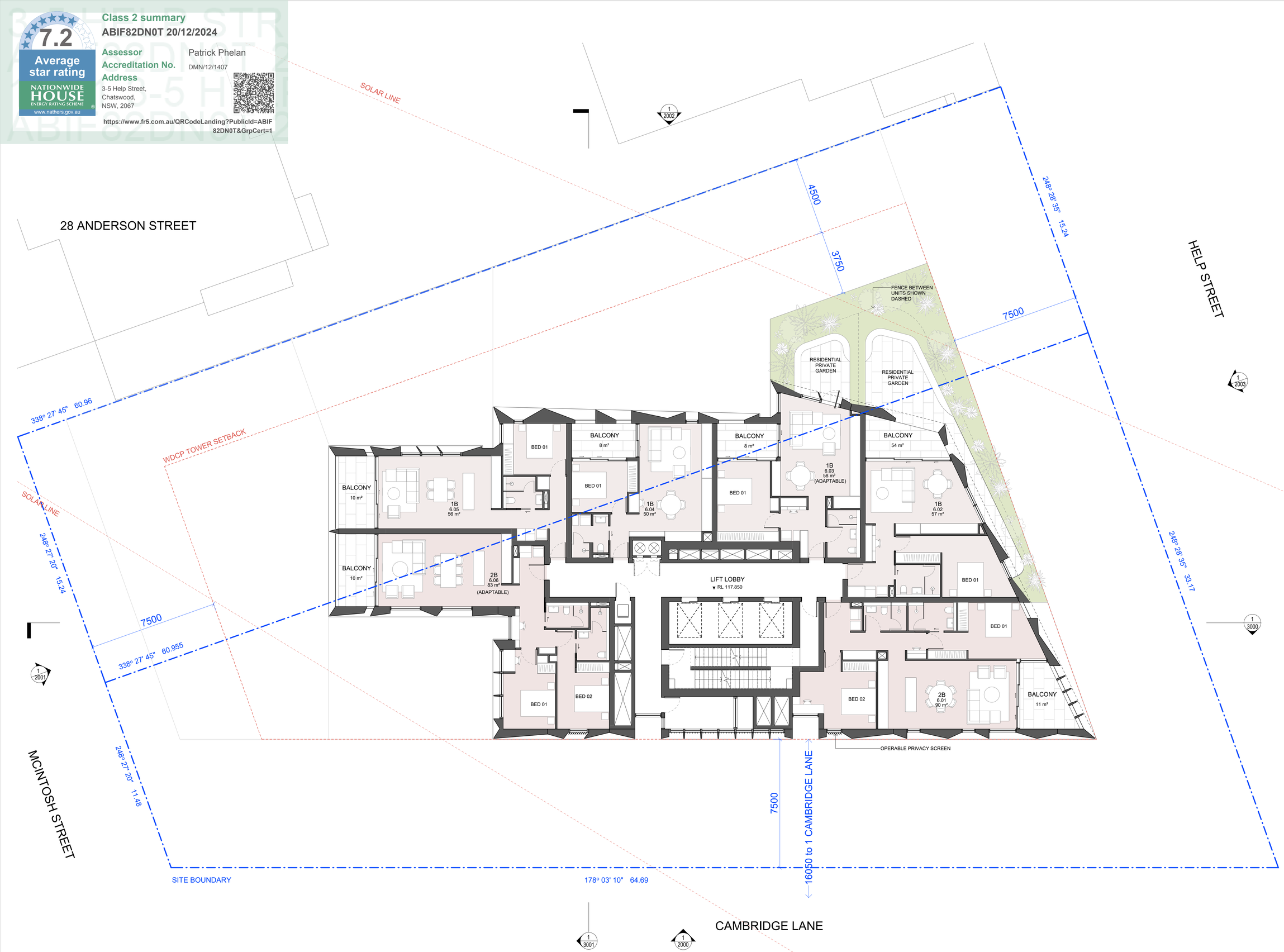
North

0 1000 2000 3000 4000 5000
Scale 1:100 mm

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Nominated Architects
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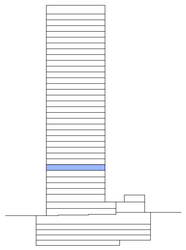
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PDC Consultants | Traffic
Ben Midgley
0413 167 797

Design Confidence | BCA / Access
Lindsay Beard
0407 870 612

Key Section



Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
L06 Plan

Drawing No.
1106

Scale
1 : 100 @ A1

Issue
B

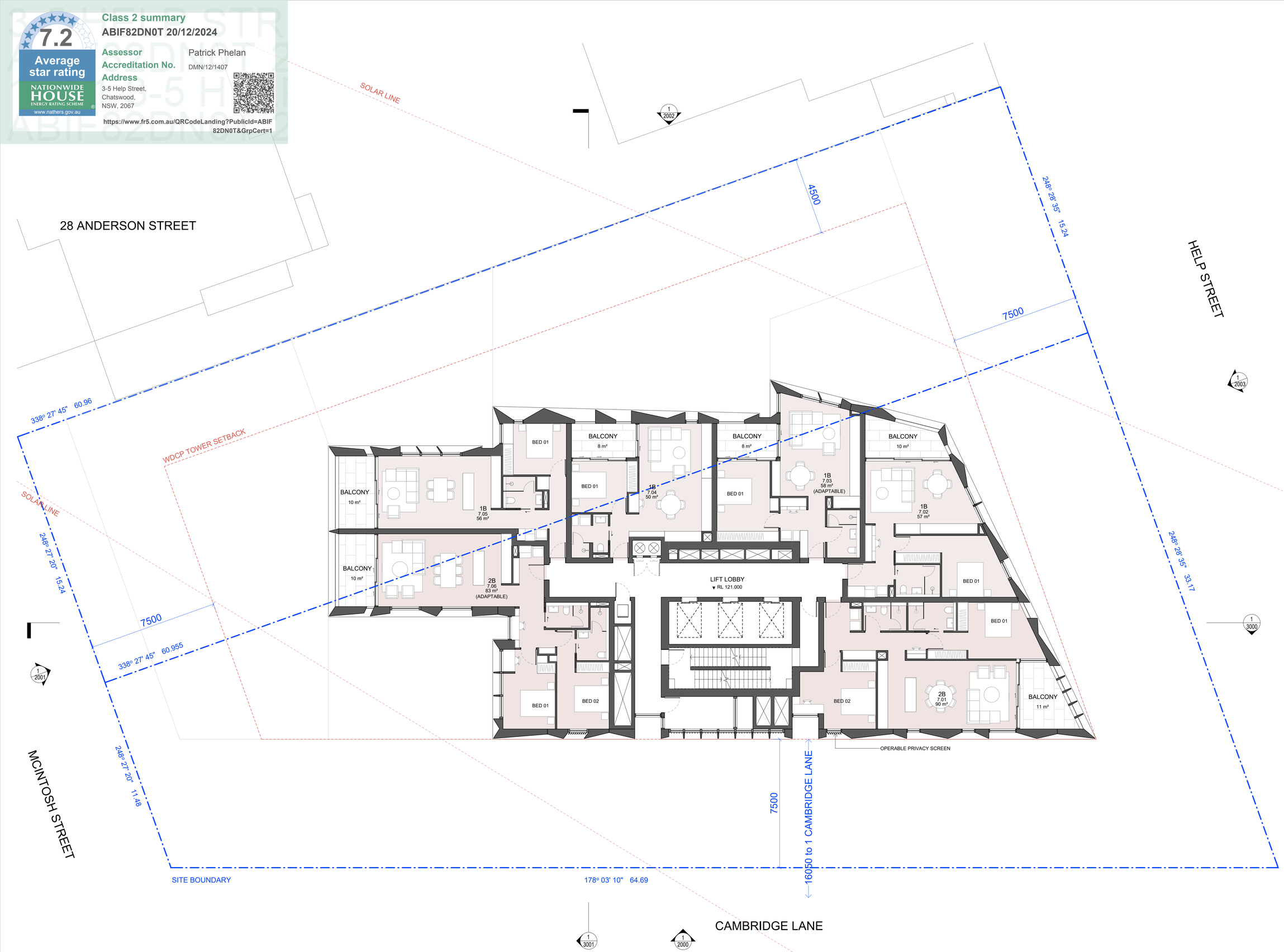
North

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Scale 1:100 mm

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Alex Georgouras
0404 626 520

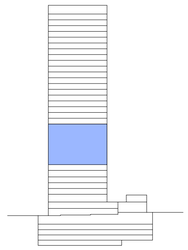
Walkerbai | ESD
Stewart Mann
0407 545 647

Stantec | Civil
Jackson Bramley
0421 193 028

PDC Consultants | Traffic
Ben Midgley
0413 167 797

Design Confidence | BCA / Access
Lindsay Beard
0407 870 612

Key Section



Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
L07-13 Plan

Drawing No.
1107

Scale 1 : 100 @ A1
Issue B
North

0 1000 2000 3000 4000 5000
Scale 1:100 mm

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Suite 3, 414 Bourke Street
Surry Hills, NSW 2010 Australia

Nominated Architects
Mladen Prnjatovic 7468
Ben Green 7066
Chi Melhem 7754



Class 2 summary

ABIF82DN0T 20/12/2024

Assessor Patrick Phelan

Accreditation No. DMN/12/1407

Address
3-5 Help Street,
Chatswood,
NSW, 2067

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Iss.	Date	For
A	06.08.2024	Scoping Meeting
B	05.12.2024	For Coordination

28 ANDERSON STREET

SOLAR LINE

1 2002

4500

248° 28' 35" 15.24

HELP STREET

7500

1 2003

338° 27' 45" 60.96

WDCP TOWER SETBACK

SOLAR LINE

248° 27' 20" 15.24

7500

338° 27' 45" 60.955

1 2001

248° 27' 20" 11.48

MCINTOSH STREET

248° 28' 35" 33.17

1 3000

BALCONY 10 m²
2B 14.04 87 m²
BED 02
BED 01
BED 01
BALCONY 10 m²
BED 02
2B 14.03 86 m²
BALCONY 10 m²
1B 14.02 57 m²
BALCONY 10 m²
2B 14.05 83 m² (ADAPTABLE)
LIFT LOBBY
▼ RL 143.050
BED 01
BED 01
BED 02
BED 01
BED 02
2B 14.01 90 m²
BALCONY 11 m²
OPERABLE PRIVACY SCREEN

7500

160 50 to 1 CAMBRIDGE LANE

SITE BOUNDARY

178° 03' 10" 64.69

1 3001

1 2000

CAMBRIDGE LANE

General Notes
Verify dimensions on site prior to commencement of work. Check existing RL's on site. Advise Architect of any discrepancies before commencement. Allow for adjustments to suit discrepancies. Comply with relevant authorities requirements. Comply with Building Code of Australia requirements. Comply with relevant Australian Standards for materials and construction practice. Comply with Basix Certificate. Do not scale from drawings.

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02 8920 0516

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Jordan Faeghi
0437 898 661

BG&E | Structure
Vince Betro
0414 814 862

Neuron | Services
Steve Cassells
0401 222 862

Common Grounds | Landscape
Alex Georgouras
0404 626 520

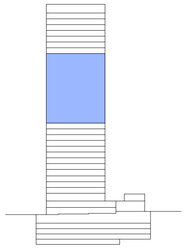
Walkerbai | ESD
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0407 545 647

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Jackson Bramley
0421 193 028

PDC Consultants | Traffic
Ben Midgley
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Design Confidence | BCA / Access
Lindsay Beard
0407 870 612

Key Section



Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
L14 - 25 Plan

Drawing No.
1114

Scale
1 : 100 @ A1

Issue
B

North

0 1000 2000 3000 4000 5000
Scale 1:100 mm

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Chi Melhem 7754



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ABIF82DN0T 20/12/2024

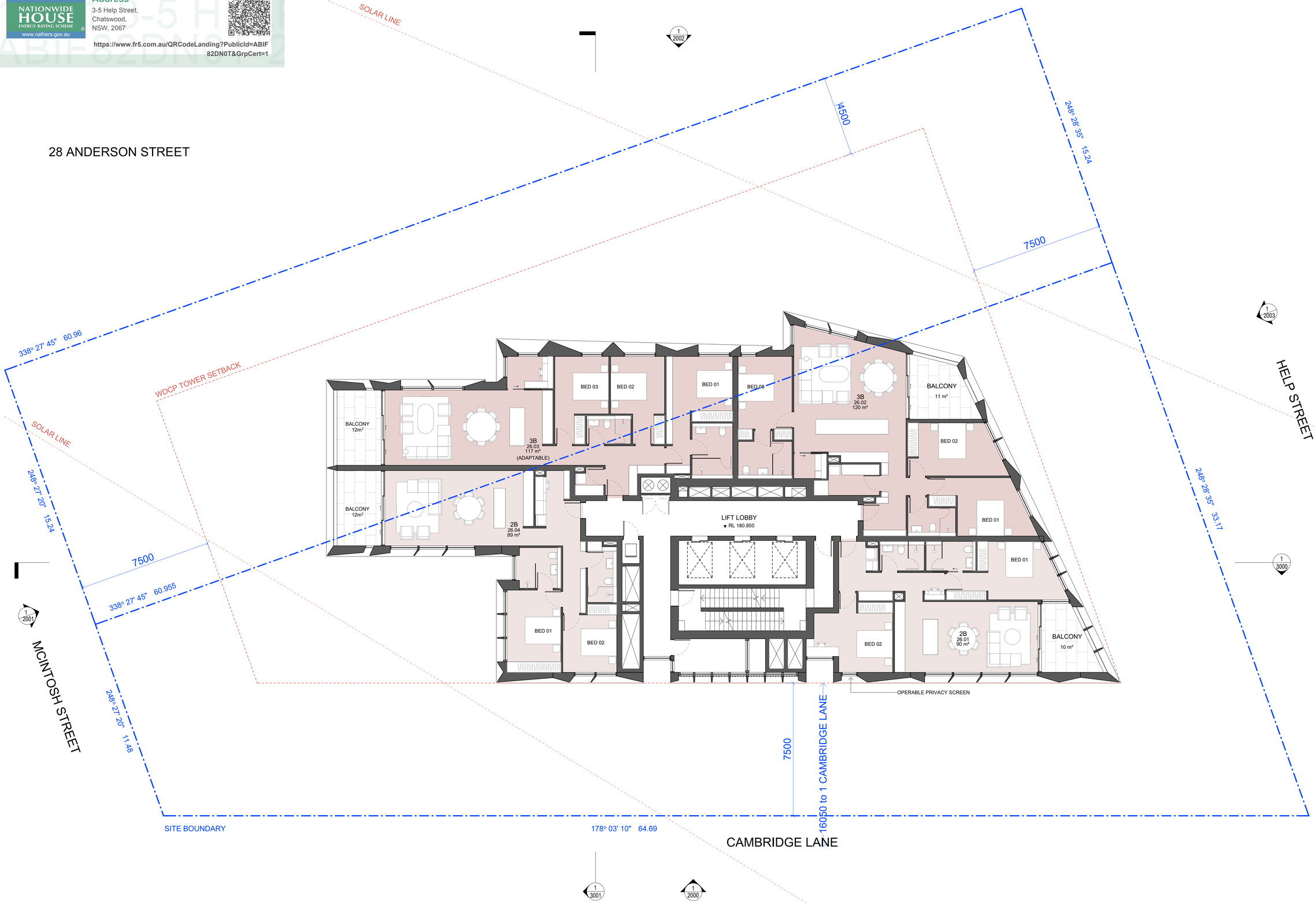
Assessor Patrick Phelan

Accreditation No. DMN/12/1407

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28 ANDERSON STREET



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A	06.08.2024	Scoping Meeting
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BG&E | Structure
Vince Betro
0414 814 862

Neuron | Services
Steve Cassells
0401 222 862

Common Grounds | Landscape
Alex Georgouras
0404 626 520

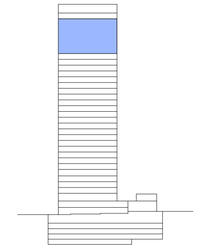
Walkerbai | ESD
Stewart Mann
0407 545 647

Stantec | Civil
Jackson Bramley
0421 193 028

PDC Consultants | Traffic
Ben Midgley
0413 167 797

Design Confidence | BCA / Access
Lindsay Beard
0407 870 612

Key Section



Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
L26 - 31 Plan

Drawing No.
1116

Scale
1 : 100 @ A1

Issue
B

North

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Scale 1:100 mm

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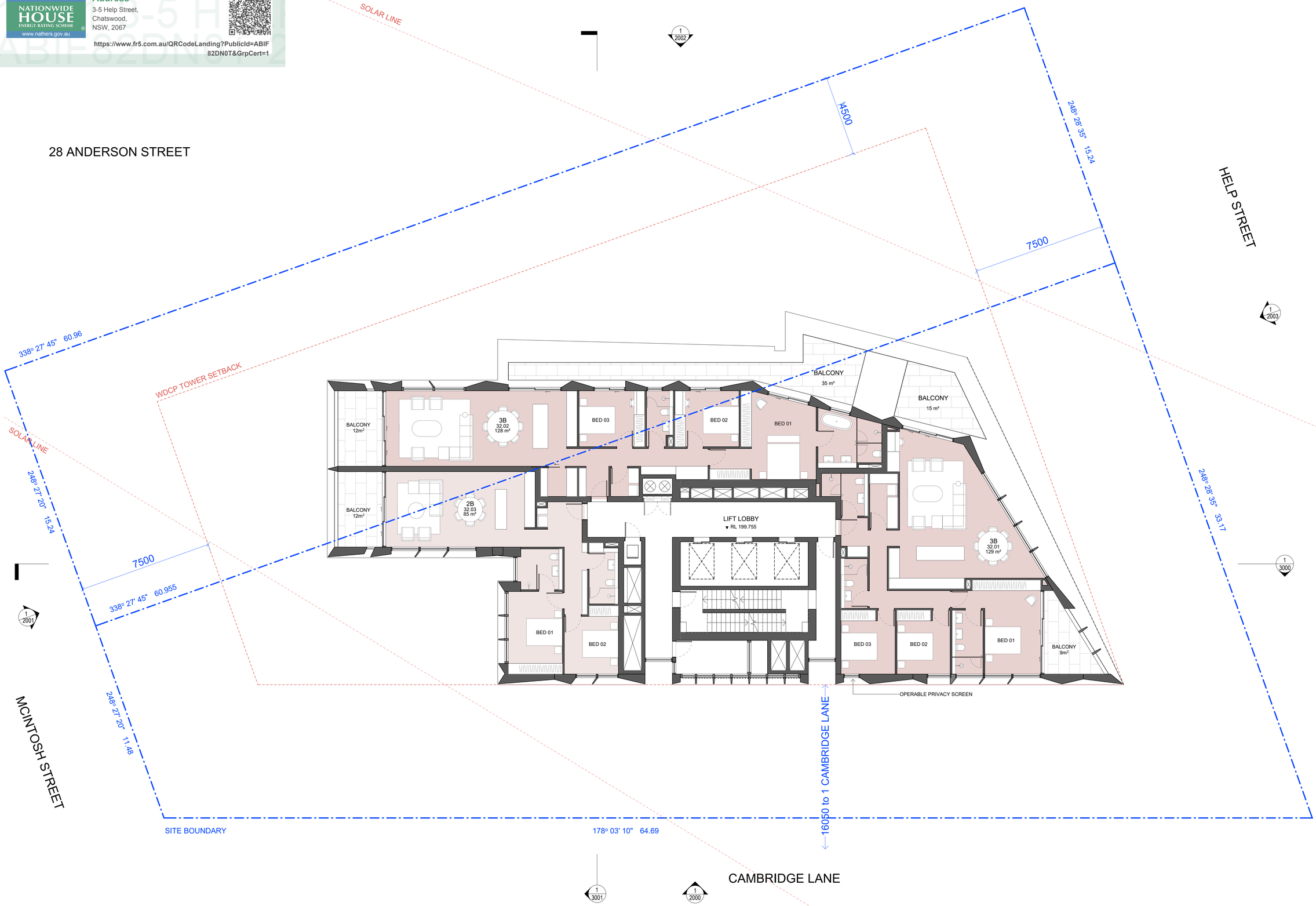
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Ben Green 7066
Chi Melhem 7754

7.2
Average star rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
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Class 2 summary
ABIF82DN0T 20/12/2024
Assessor Patrick Phelan
Accreditation No. DMN/12/1407
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28 ANDERSON STREET



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BG&E | Structure
Vince Betro
0414 814 862

Neuron | Services
Steve Cassells
0401 222 862

Common Grounds | Landscape
Alex Georgouras
0404 626 520

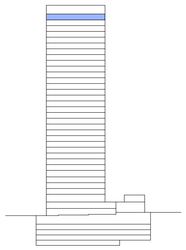
Walkerbai | ESD
Stewart Mann
0407 545 647

Stantec | Civil
Jackson Bramley
0421 193 028

PDC Consultants | Traffic
Ben Midgley
0413 167 797

Design Confidence | BCA / Access
Lindsay Beard
0407 870 612

Key Section



Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
L32 Plan

Drawing No.
1122

Scale
1 : 100 @ A1

Issue
B

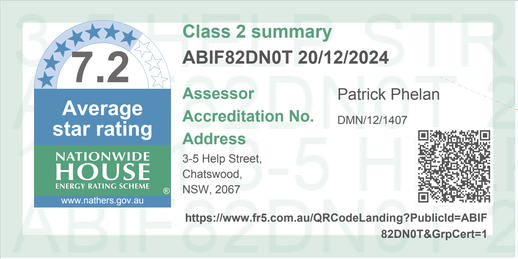
North

0 1000 2000 3000 4000 5000
Scale 1:100 mm

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Nominated Architects
Mladen Prnjatovic 7468
Ben Green 7066
Chi Melhem 7754



Class 2 summary

ABIF82DN0T 20/12/2024

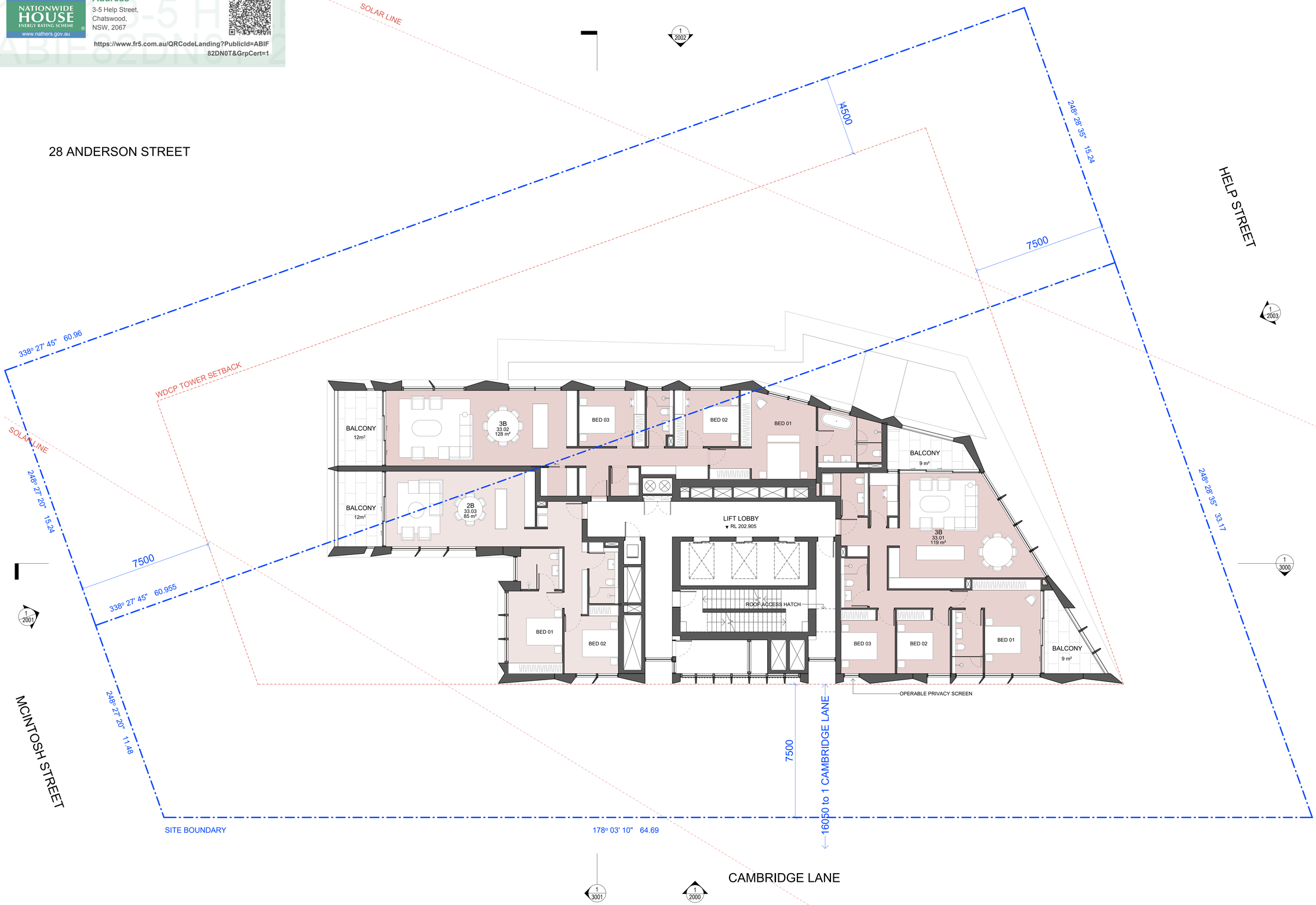
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28 ANDERSON STREET



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Mecone | Planner
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0437 898 661

BG&E | Structure
Vince Betro
0414 814 862

Neuron | Services
Steve Cassells
0401 222 862

Common Grounds | Landscape
Alex Georgouras
0404 626 520

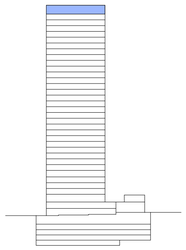
Walkerbai | ESD
Stewart Mann
0407 545 647

Stantec | Civil
Jackson Bramley
0421 193 028

PDC Consultants | Traffic
Ben Midgley
0413 167 797

Design Confidence | BCA / Access
Lindsay Beard
0407 870 612

Key Section



Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
L33 Plan

Drawing No.
1123

Scale 1 : 100 @ A1

Issue B

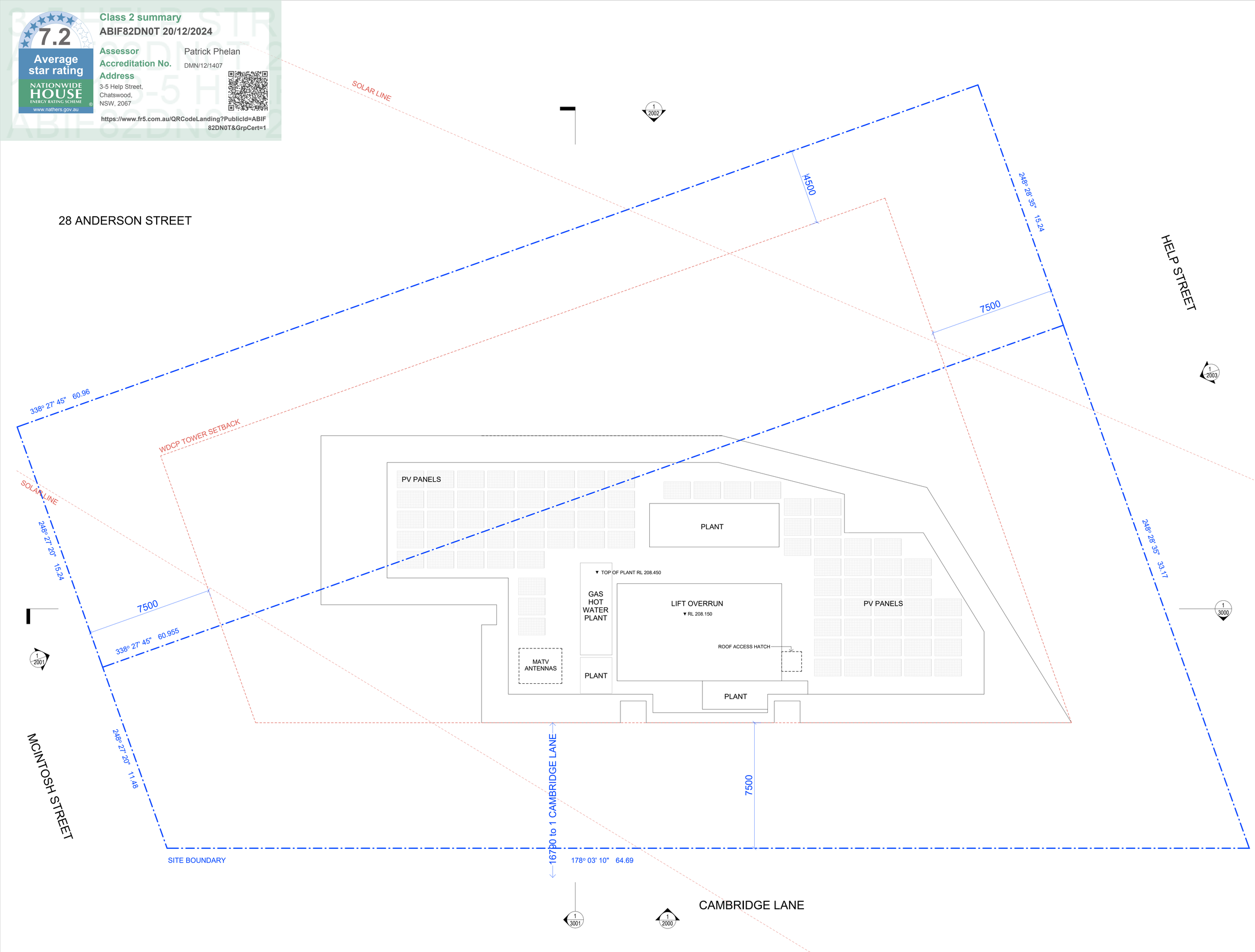
North

0 1000 2000 3000 4000 5000
Scale 1:100 mm

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Nominated Architects
Mladen Prnjatovic 7468
Ben Green 7066
Chi Melhem 7754



28 ANDERSON STREET

Class 2 summary

ABIF82DN0T 20/12/2024

7.2 Average star rating

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Assessor Patrick Phelan

Accreditation No. DMN/12/1407

Address 3-5 Help Street, Chatswood, NSW, 2067

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Jordan Faeghi
0437 898 661

BG&E | Structure
Vince Betro
0414 814 862

Neuron | Services
Steve Cassells
0401 222 862

Common Grounds | Landscape
Alex Georgouras
0404 626 520

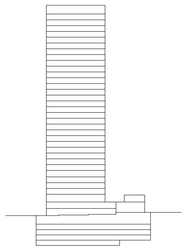
Walkerbai | ESD
Stewart Mann
0407 545 647

Stantec | Civil
Jackson Bramley
0421 193 028

PDC Consultants | Traffic
Ben Midgley
0413 167 797

Design Confidence | BCA / Access
Lindsay Beard
0407 870 612

Key Section



Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
Roof Plan

Drawing No.
1126

Scale
1 : 100 @ A1

Issue
B

North

0 1000 2000 3000 4000 5000
Scale 1:100 mm

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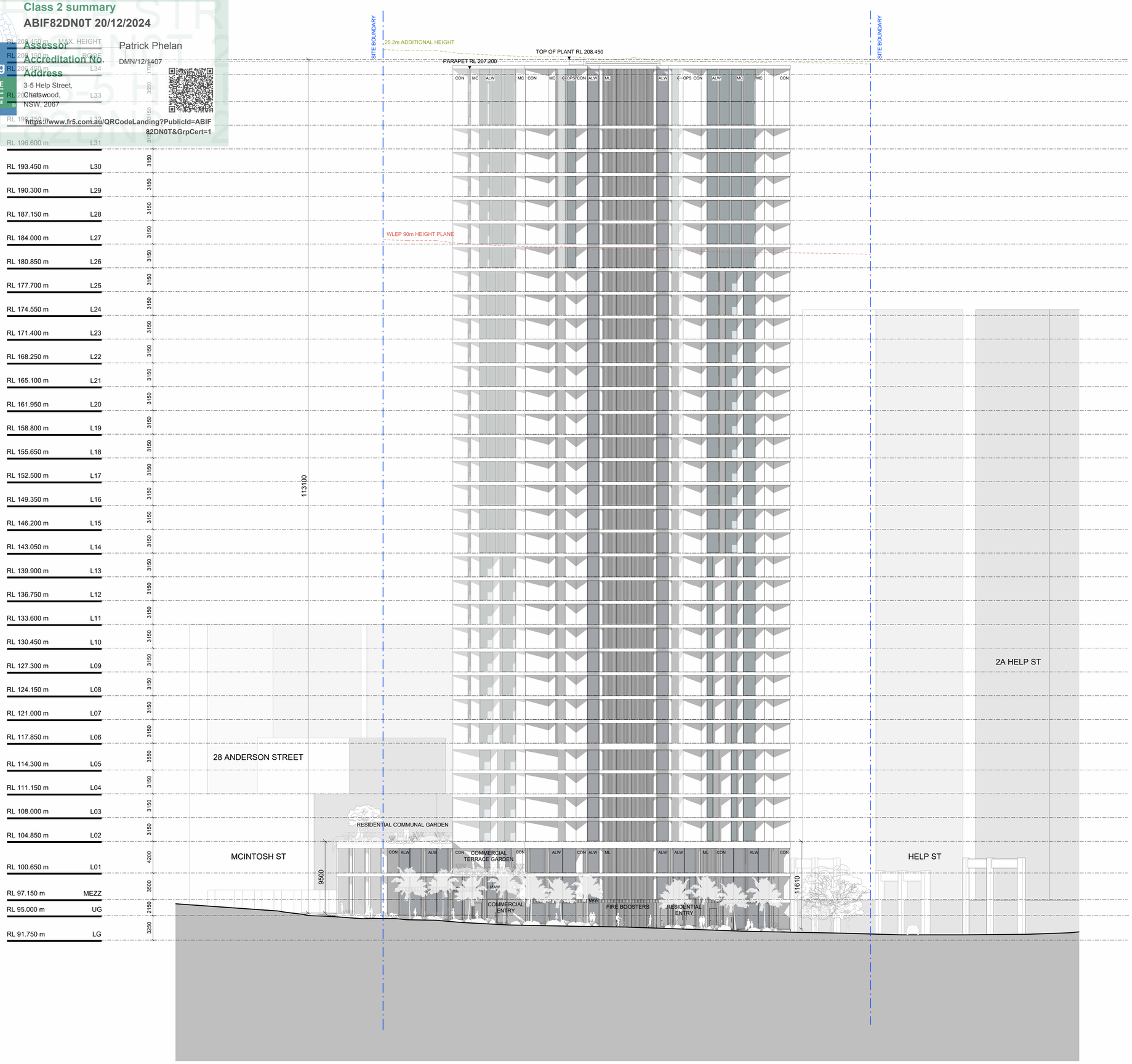
Nominated Architects
Mladen Prnjatovic 7468
Ben Green 7066
Chi Melhem 7754

7.2
Average star rating
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Class 2 summary
ABIF82DN0T 20/12/2024

Assessor
Patrick Phelan
Accreditation No.
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PDC Consultants | Traffic
Ben Midgley
0413 167 797

Design Confidence | BCA / Access
Lindsay Beard
0407 870 612

Legend

ALW	Aluminium framed window
BAL	Balustrade
CON	Concrete
MAW	Metal awning
MC	Metal cladding
ML	Metal louvre
OPS	Operable privacy screen

Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
West Elevation Cambridge Lane

Drawing No.
2000

Scale	Issue
1 : 250 @ A1	B

0 2500 5000 7500 10000 12500 mm

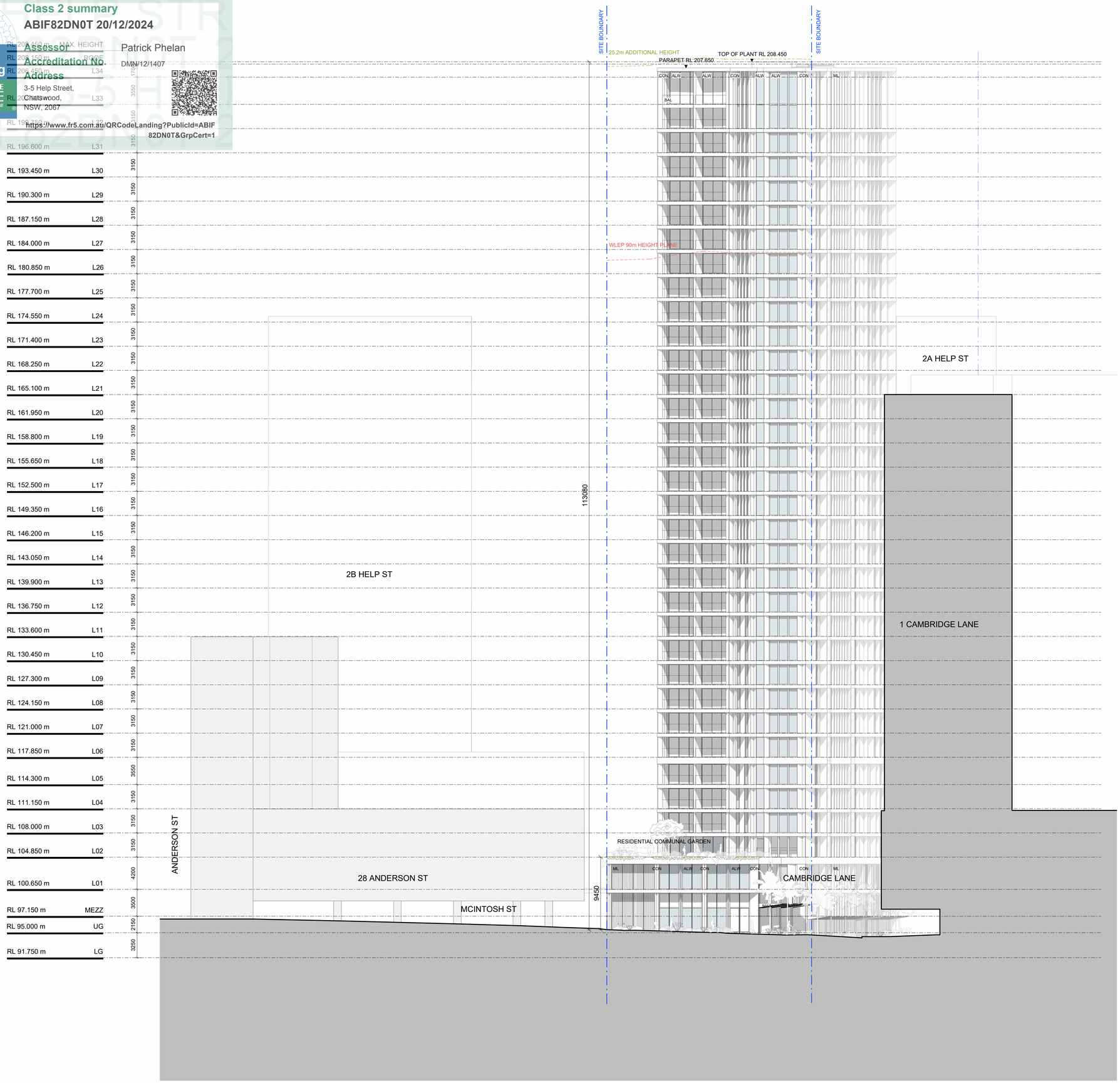
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Ben Green 7066
Chi Melhem 7754

7.2
Average star rating
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Class 2 summary
ABIF82DN0T 20/12/2024
Assessor Patrick Phelan
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0413 167 797

Design Confidence | BCA / Access
Lindsay Beard
0407 870 612

Legend

ALW	Aluminium framed window
BAL	Balustrade
CON	Concrete
MAW	Metal awning
MC	Metal cladding
ML	Metal lourve
OPS	Operable privacy screen

Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
North Elevation Mcintosh Street

Drawing No.
2001

Scale
1 : 250 @ A1

Issue
B

0 2500 5000 7500 10000 12500 mm

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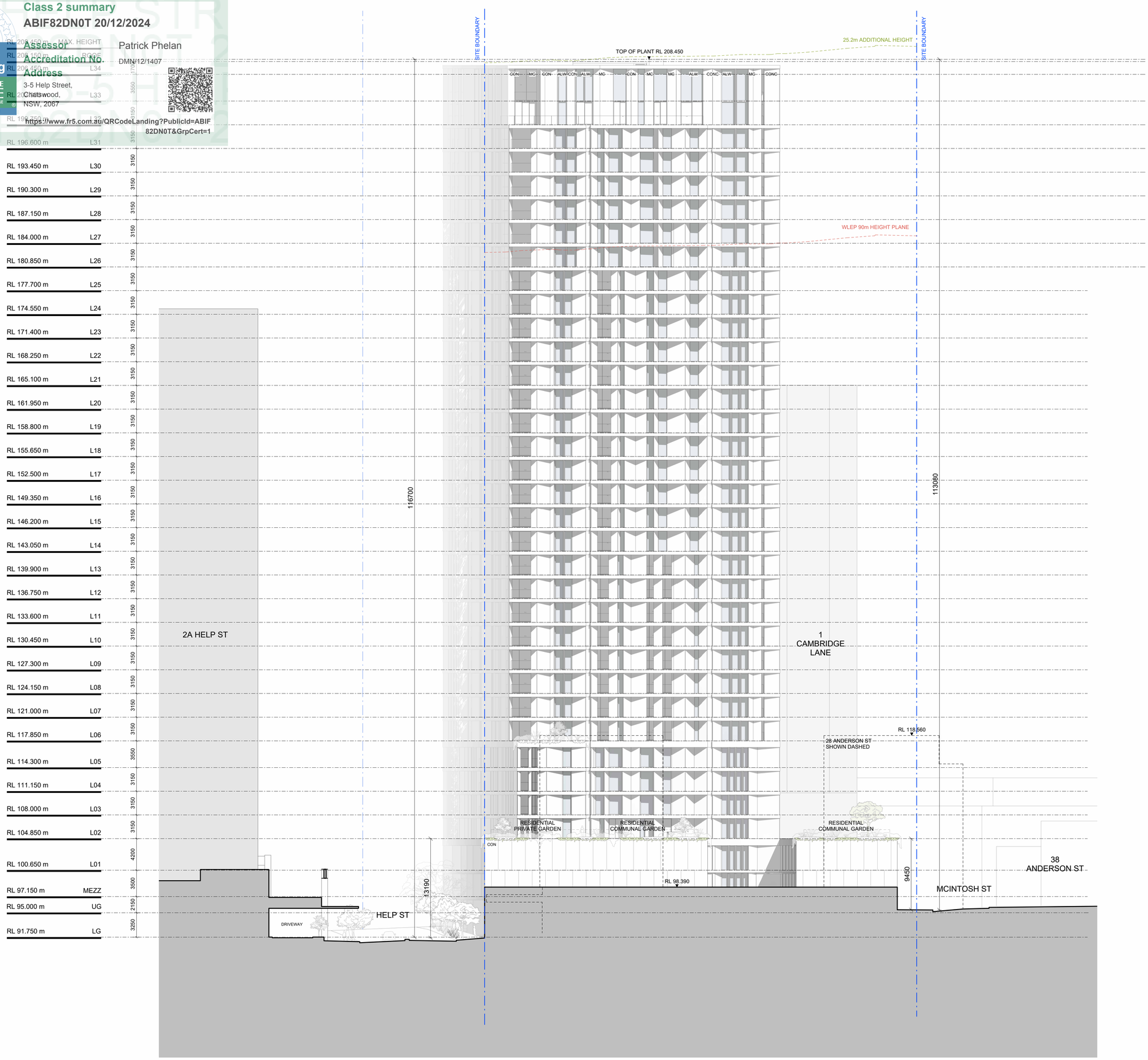
Nominated Architects
Mladen Prnjatovic 7468
Ben Green 7066
Chi Melhem 7754

7.2
Average star rating
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Class 2 summary
ABIF82DN0T 20/12/2024

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Loftex Chatswood Pty. Ltd.
02 8920 0516

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Jordan Faeghi
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Vince Betro
0414 814 862

Neuron | Services
Steve Cassells
0401 222 862

Common Grounds | Landscape
Alex Georgouras
0404 626 520

Walkerbai | ESD
Stewart Mann
0407 545 647

Stantec | Civil
Jackson Bramley
0421 193 028

PDC Consultants | Traffic
Ben Midgley
0413 167 797

Design Confidence | BCA / Access
Lindsay Beard
0407 870 612

Legend

ALW	Aluminium framed window
BAL	Balustrade
CON	Concrete
MAW	Metal awning
MC	Metal cladding
ML	Metal louvre
OPS	Operable privacy screen

Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
East Elevation

Drawing No.
2002

Scale
1 : 250 @ A1

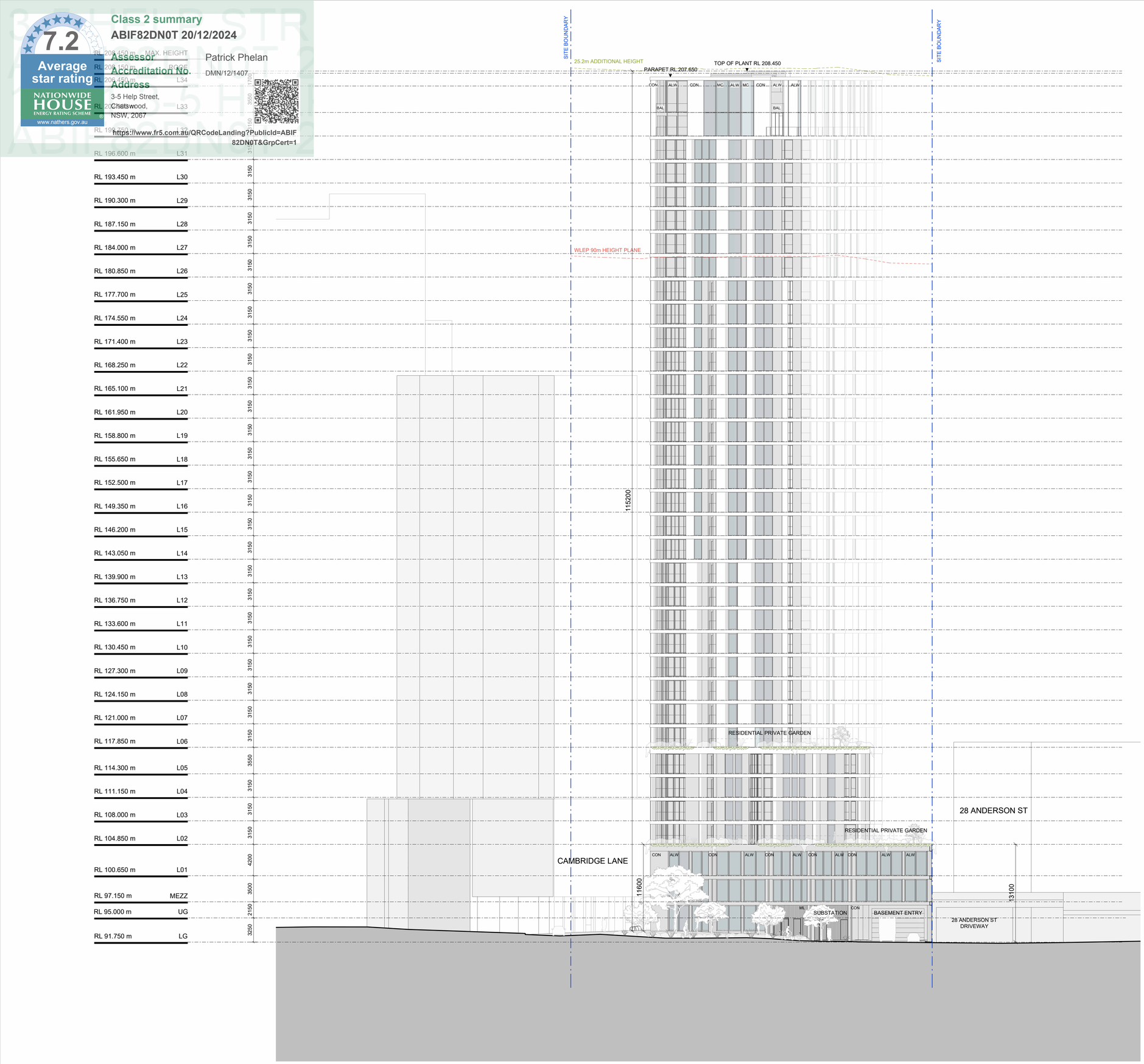
Issue
B

0 2500 5000 7500 10000 12500
mm

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Nominated Architects
Mladen Prnjatovic 7468
Ben Green 7066
Chi Melhem 7754



Iss.	Date	For
A	06.08.2024	Scoping Meeting
B	05.12.2024	For Coordination

General Notes
Verify dimensions on site prior to commencement of work. Check existing RL's on site. Advise Architect of any discrepancies before commencement. Allow for adjustments to suit discrepancies. Comply with relevant authorities requirements. Comply with Building Code of Australia requirements. Comply with relevant Australian Standards for materials and construction practice. Comply with Basix Certificate. Do not scale from drawings.

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Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
South Elevation Help Street

Drawing No.
2003

Scale
1 : 250 @ A1

Issue
B

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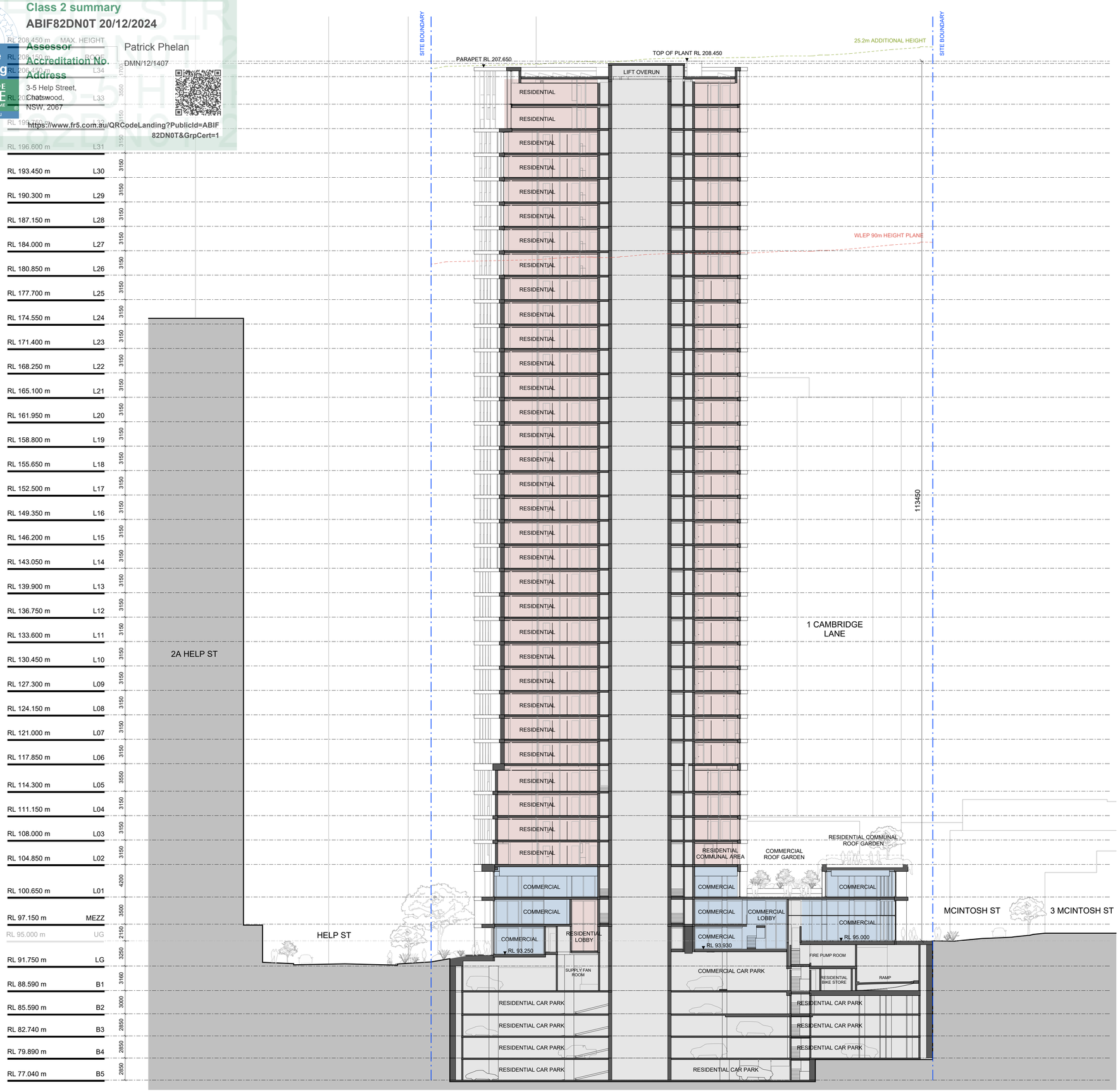
Nominated Architects
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Ben Green 7066
Chi Melhem 7754

7.2
Average star rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
www.nathers.gov.au

Class 2 summary
ABIF82DN0T 20/12/2024

Assessor Patrick Phelan
Accreditation No. DMN/12/1407
Address 3-5 Help Street, Chatswood, NSW, 2067

https://www.fr5.com.au/QRCodeLanding?PublicId=ABIF82DN0T&GrpCert=1



Iss.	Date	For
A	06.08.2024	Scoping Meeting
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Design Confidence | BCA / Access
Lindsay Beard
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Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
Section North-South

Drawing No.
3000

Scale	Issue
1 : 250 @ A1	B

0 2500 5000 7500 10000 12500 mm

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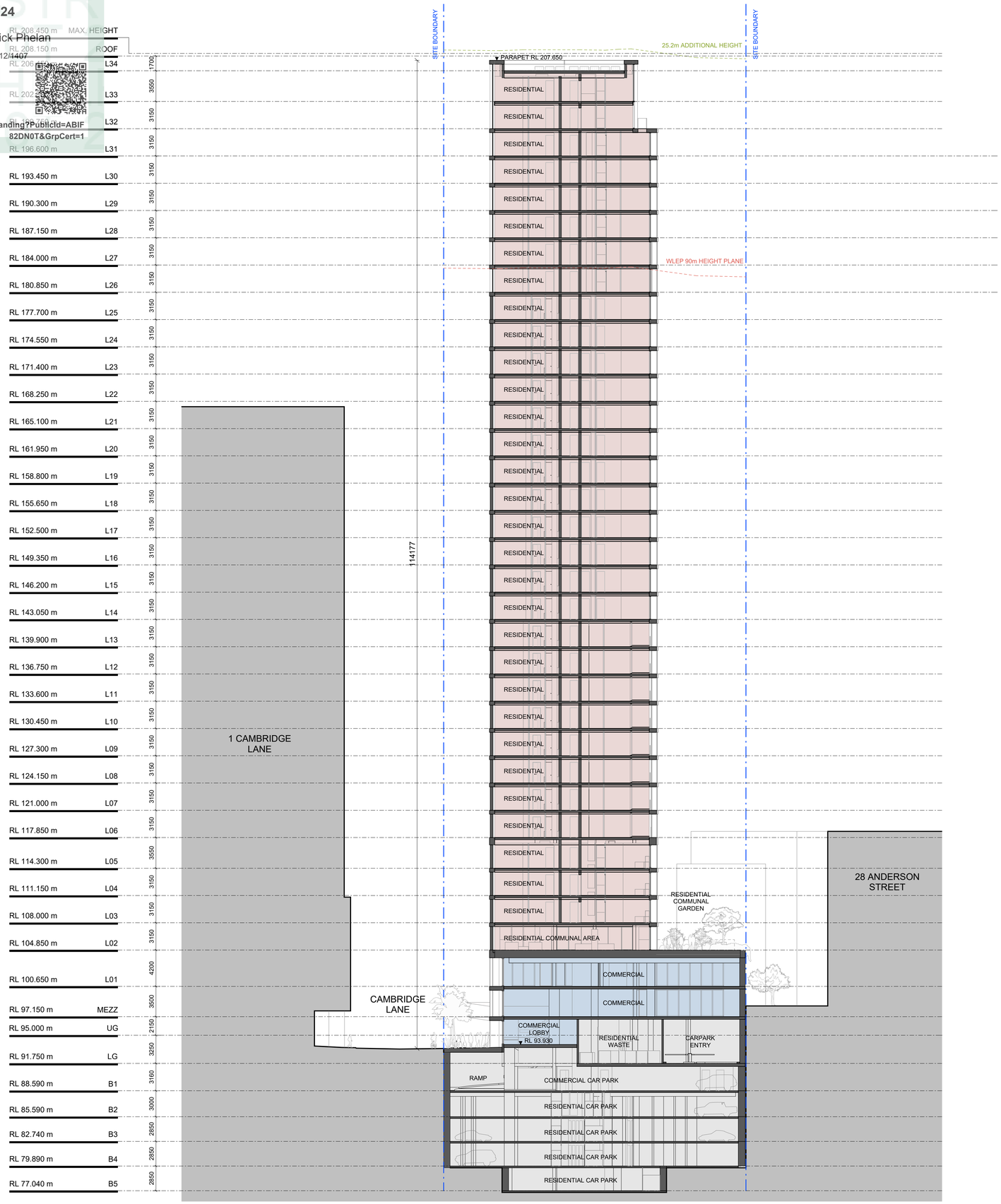
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Class 2 summary
ABIF82DN0T 20/12/2024

Assessor Accreditation No.
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DMN/12/1407

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Ben Midgley
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Lindsay Beard
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Project
Help Street Apartments

Project No.
22023

Address
3-5 Help Street Chatswood

Status
FOR INFORMATION

Drawn	Authorised	Date Issued
SY	MP	05.12.2024

Drawing
Section East-West

Drawing No.
3001

Scale
1 : 250 @ A1

Issue
B

0 2500 5000 7500 10000 12500
mm

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