BASIX REPORT

12-24 STANLEY STREET KOGARAH

WD979-02F01(REV1)- BASIX REPORT

7 MAY 2018

Prepared for:

Kogarah 048 Service Pty Ltd Atf Kogarah 048 Trust

Suite 4001, Level 40, Australia Square, 264 George Street Sydney NSW 2000

WINDTECH Consultants Pty Ltd ABN 72 050 574 037
Head Office: 607 Forest Road, Bexley, NSW 2207, Australia
P +61 2 9503 0300 **E** reception@windtechglobal.com **W** www.windtechconsult.com

Sydney | Abu Dhabi | Hong Kong | London | Melbourne | Mumbai | New York | Singapore

DOCUMENT CONTROL

Date	Revision History	Issued Revision	Prepared By (initials)	Instructed By (initials)	Reviewed & Authorised by (initials)
May 3, 2018	Initial	0	MY/MH/TH	TH	TH
May 7, 2018	Finalised	1	MY/MH/TH	TH	TH

The work presented in this document was carried out in accordance with the Windtech Consultants Quality Assurance System, which is based on International Standard ISO 9001.

This document is issued subject to review and authorisation by the Team Leader noted by the initials printed in the last column above. If no initials appear, this document shall be considered as preliminary or draft only and no reliance shall be placed upon it other than for information to be verified later.

This document is prepared for our Client's particular requirements which are based on a specific brief with limitations as agreed to with the Client. It is not intended for and should not be relied upon by a third party and no responsibility is undertaken to any third party without prior consent provided by Windtech Consultants Pty Ltd. This report should not be reproduced, presented or reviewed except in full. Prior to passing on to a third party, the Client is to fully inform the third party of the specific brief and limitations associated with the commission.

CONTENTS

1 INTRODUCTION

This study investigates the estimated thermal comfort and water and energy usage of the various residential developments of the proposed development located at 12-24 Stanley Street Kogarah. The assessment is carried out using online BASIX and BERS Pro Thermal Performance assessment tool. This assessment is based on the latest architectural drawings prepared by Scott Carver, received May 2018.

2 ANALYSIS

A BASIX assessment is split into three sections; Water, Thermal Comfort and Energy. Each section measures the efficiency of the development in these areas. For the Water and Energy sections, the development is given a score based on the efficiency. BASIX sets a minimum score in these areas that the development must satisfy. The Thermal Performance section of the BASIX assessment requires a BERS Pro simulation to be undertaken. BASIX sets requirements on the maximum heating and cooling loads for each residential apartment of the development. The results of this are rated in BASIX as either a pass or fail.

2.1 WATER USAGE

The water usage of the development is measured based on the area of gardens/lawn and the number and efficiency of permanent fixtures within the development (such as showerheads, taps and toilets). The development is given a rating, with BASIX requiring a minimum rating of 40% to pass this section.

2.2 THERMAL COMFORT

The thermal comfort of the development is measured using the BERS Pro Thermal Performance assessment tool. This gives an expected level of energy consumption (expressed in Mega Joules used per square metre per annum) for the heating and cooling loads.

The thermal comfort of the development can be improved by using higher performance building materials (such as performance glazing) and/or insulation materials. BASIX sets a maximum heating and cooling load that the development is to achieve. This is given as a weighted average heating and cooling load for the entire development, ***and*** for each individual dwelling to achieve.

2.3 ENERGY USAGE

The energy section of the BASIX assessment measures the energy efficiency of the development based on the efficiency of the fixed appliances to be used. This includes the hot water system, air-conditioning system, exhaust fans, lighting and the cook top/oven. If a pool is to be included in the proposal then the efficiency measure of the pool heater and the pool pump is also required. The development is given a rating, with BASIX requiring a minimum rating of 25% to pass this section.

3 RESULTS OF THE BASIX ASSESSMENT

3.1 WATER

The target score in BASIX to achieve water usage compliance is **40%**. The minimum water score is achieved with the inclusion of the following:

- A Rainwater tank with a volume capacity of least 5,000L capacity is to be included. Water is to be provided from at least 700m^2 of the roof area. Water from the tank is to be used for all public landscaping (460m^2) within the development site.
- At least 200m^2 of the public landscaping (486m^2) is to be of an indigenous or low water use species.
- The fire sprinkler test water for the car park and building fire sprinkler systems are to be contained in a closed system.
- All showerheads within each residential dwelling of the proposed development should have a water efficiency rating of at least 3.0 Stars (>6.0 but <=7.5L/min).
- All toilets within each residential dwelling of the proposed development are to have a water efficiency rating of at least 5.0 Stars.
- All kitchen taps within each residential dwelling is to have a water efficiency rating of at least 5.0 Stars.
- All bathroom taps within each residential dwelling is to have a water efficiency rating of at least 5.0 Stars.

3.2 Thermal Comfort

The BERS Pro assessments take into account the following fundamental aspects of energy efficient design:

- The orientation and size of the walls.
- The location, proportion and type of windows and doors, and any internal or external coverings to them.
- The materials and colours of the exterior of the building.
- Internal floor, wall and ceiling materials.
- Cross ventilation.
- Provision of any insulation in walls, roof or ceiling.
- Overshadowing to walls and windows from eaves, other parts of the development and neighbours.
- The topography and climate of the area around the proposed development.

In BASIX, the required weighted averaged maximum heating and cooling loads of the **entire** proposed development are **40.0 MJ/m^2/year for heating** and **26.0 MJ/m^2/year for cooling** and **for each individual dwelling** a maximum heating and cooling load of **45.4 MJ/m^2/year for heating** and **29.5 MJ/m^2/year for cooling**. The required heating and cooling loads for the individual residential dwelling are indicated in Tables 3a to 3c. Note that the overall weighted average heating and cooling loads are significantly harder to achieve than the individual unit requirements.

3.2.1 *Initial Results*

The following construction materials were initially selected for the assessment. Note that the materials described are not prescriptive. The construction materials used on the subject development should be selected to have similar performance characteristics as the ones detailed below so as not to effect the overall thermal performance rating of each apartment. The U-value and Solar Heat Gain Coefficient (SHGC) for the glazing is also indicated.

- The wall construction of each residential dwelling are indicated in Table 1a below:

Table 1a Wall Systems for each Residential Dwelling

Envelope Wall	Wall Construction	Insulation
External (between outdoor environment and dwelling)	Concrete block lined with plasterboard	R1.5 wall insulation
Party (between dwelling and dwelling)	Concrete block lined with plasterboard l	No initial insulation proposed
Lobby (between lobby and dwelling)	Concrete block lined with plasterboard	R1.5 wall insulation

Envelope Wall	Wall Construction	Insulation
Staircore/Lift (between staircore/lift and dwelling)	Concrete block lined with plasterboard	R1.5 wall insulation
Carpark (between carpark and dwelling)	Concrete block lined with plasterboard	R1.5 wall insulation
Plant, Garbage, Service Rooms etc. (between plant, garbage, service rooms and dwelling)	Concrete block lined with plasterboard	R1.5 wall insulation
Internal (internal walls within the dwelling)	Plasterboard on Studs	No initial insulation proposed

- The floor coverings will be tiles in the living areas, bathrooms, ensuite, kitchen and laundry and carpet within the bedrooms. The floors will be concrete slabs. No initial insulation has been proposed for the floors.
- The ceilings will be concrete above plasterboard with no initial insulation proposed.
- The roof will be concrete with no initial insulation proposed.
- Draught seals are to be installed to the windows and doors.
- The initial glazing systems will have the following properties: U-value = 6.7, SHGC = 0.57 for Group A system types and U-value = 6.7, SHGC = 0.70 for Group B system types as indicated in Table 1b below. This typically represents a standard single-glazed clear glazing system set within standard aluminium frames.

Table 1b Glazed System Grouping

Group A	Group B
Awning Window	Double Hung Window
Bifold Door	Fixed Window
Bifold Window	Louvre Window
Entry Door	Sliding Window
Casement Window	Sliding door
French Door	Stacker door
Tilt'n'Turn Window	
Hinged Door	

- No ceiling penetration due to recessed luminaries and vents, exhaust fans etc. has been assumed as the lighting plan is not available.

The climate zone selected for analysis was Climate Zone 56. The result of the analysis, indicated in Table 3, indicate that several of the residential dwellings within the proposed development will not satisfy the individual thermal requirements of BASIX. Hence treatment is required to some of the residential dwellings of the development.

3.2.2 *Results with Treatments*

Further analysis of the proposed development resulted in some recommended treatments to achieve the BASIX requirements for thermal performance. The recommended treatments are listed in the Table 2 below:

Table 2 Recommended Treatments

Unit Number	Glass Thermal Specification	Wall Insulation in the envelope wall (to air, lobby, stair/ liftcore, unconditioned spaces (plant, shafts etc.). (R-value)	Ceiling Insulation to areas with outdoor air/ unconditioned spaces etc. above. (R-value)	Floor Insulation to areas above outdoor air/ carpark/ unconditioned spaces etc. (R-value)
G02, G03, G04	• Group A: U-value = 6.70, SHGC = 0.57 • Group B: U-value = 6.70, SHGC = 0.70	1.5	2.5	0.5
301, 302, 303, 304, 906, 1001, 1002, 1003	• Group A: U-value = 6.70, SHGC = 0.57 • Group B: U-value = 6.70, SHGC = 0.70	1.5	2.5	-
104, 401, 402	• Group A: U-value = 6.70, SHGC = 0.57 • Group B: U-value = 6.70, SHGC = 0.70	1.5	-	1
G08, G09	• Group A: U-value = 6.70, SHGC = 0.57 • Group B: U-value = 6.70, SHGC = 0.70	1.5	-	0.5
101, 102, 103, 202, 203, 204, 208, 209, 210, 211, 403, 405, 406, 501, 502, 503, 505, 506, 601, 602, 603, 605, 606, 701, 702, 703, 705, 706, 801, 802, 803, 805, 806, 901, 902, 903	• Group A: U-value = 6.70, SHGC = 0.57 • Group B: U-value = 6.70, SHGC = 0.70	1.5	-	-
G05, G06, G07	• Group A: U-value = 5.40, SHGC = 0.49 • Group B: U-value = 5.40, SHGC = 0.58	1.5	2.5	0.5

Unit Number	Glass Thermal Specification	Wall Insulation in the envelope wall (to air, lobby, stair/ liftcore, unconditioned spaces (plant, shafts etc.). (R-value)	Ceiling Insulation to areas with outdoor air/ unconditioned spaces etc. above. (R-value)	Floor Insulation to areas above outdoor air/ carpark/ unconditioned spaces etc. (R-value)
205, 207, 904, 905	• Group A: U-value = 5.40, SHGC = 0.49 • Group B: U-value = 5.40, SHGC = 0.58	1.5	2.5	-
404	• Group A: U-value = 5.40, SHGC = 0.49 • Group B: U-value = 5.40, SHGC = 0.58	1.5	-	1
G10	• Group A: U-value = 5.40, SHGC = 0.49 • Group B: U-value = 5.40, SHGC = 0.58	1.5	-	0.5
206, 504, 604, 704, 804	• Group A: U-value = 5.40, SHGC = 0.49 • Group B: U-value = 5.40, SHGC = 0.58	1.5	-	-
1006	• Group A: U-value = 4.80, SHGC = 0.51 • Group B: U-value = 4.80, SHGC = 0.59	1.5	2.5	-
410	• Group A: U-value = 4.80, SHGC = 0.51 • Group B: U-value = 4.80, SHGC = 0.59	1.5	-	1.5
510, 610, 710, 810, 910	• Group A: U-value = 4.80, SHGC = 0.51 • Group B: U-value = 4.80, SHGC = 0.59	1.5	-	-
907	• Group A: U-value = 4.30, SHGC = 0.47 • Group B: U-value = 4.30, SHGC = 0.53	2.0	2.5	-

Unit Number	Glass Thermal Specification	Wall Insulation in the envelope wall (to air, lobby, stair/ liftcore, unconditioned spaces (plant, shafts etc.). (R-value)	Ceiling Insulation to areas with outdoor air/ unconditioned spaces etc. above. (R-value)	Floor Insulation to areas above outdoor air/ carpark/ unconditioned spaces etc. (R-value)
G13, G14, G15, G16	• Group A: U-value = 4.30, SHGC = 0.47 • Group B: U-value = 4.30, SHGC = 0.53	1.5	2.5	1
G01	• Group A: U-value = 4.30, SHGC = 0.47 • Group B: U-value = 4.30, SHGC = 0.53	1.5	2.5	0.5
215, 305, 306, 307, 1004, 1005	• Group A: U-value = 4.30, SHGC = 0.47 • Group B: U-value = 4.30, SHGC = 0.53	1.5	2.5	-
408	• Group A: U-value = 4.30, SHGC = 0.47 • Group B: U-value = 4.30, SHGC = 0.53	1.5	-	1.5
105, 407, 409, G11, G12	• Group A: U-value = 4.30, SHGC = 0.47 • Group B: U-value = 4.30, SHGC = 0.53	1.5	-	1
106, 107, 201, 212, 213, 214, 216, 217, 218, 507, 508, 509, 607, 608, 609, 707, 708, 709, 807, 808, 809, 908, 909	• Group A: U-value = 4.30, SHGC = 0.47 • Group B: U-value = 4.30, SHGC = 0.53	1.5	-	-

The glazing types selected for the windows of the proposed development should at least satisfy the required performance data listed in this report. Reducing the amount of glazing in each unit is expected to significantly increase the thermal performance of each unit. Higher performing glass types than those listed in this report are also acceptable. That is, alternative glazing systems or specifications may be used if their U value is lower, and the SHGC value is less than +/-10% than the U and SHGC values of the product specified above.

With these treatments in place the weighted average maximum heating and cooling loads are **33.8 MJ/m2/year for heating** and **18.9 MJ/m2/year for cooling**.

The BASIX requirements for the weighted averaged maximum heating and cooling loads of the entire proposed development are **40.0 MJ/m2/year for heating** and **26.0 MJ/m2/year for cooling**. Hence, with the recommended treatments listed above, the proposed development will satisfy the thermal performance requirements of BASIX.

Table 3 BERS Thermal Performance Results

Unit Number	BASIX Requirements (MJ/m2/year)		Final Results (MJ/m2/year) (with treatments)	
	Heating	Cooling	Heating	Cooling
101	45.4	29.5	30.1	9.9
102	45.4	29.5	33.6	22.0
103	45.4	29.5	11.6	26.3
104	45.4	29.5	39.1	18.0
105	45.4	29.5	43.4	16.2
106	45.4	29.5	36.8	19.8
107	45.4	29.5	36.3	16.7
201	45.4	29.5	23.8	20.9
202	45.4	29.5	6.0	23.7
203	45.4	29.5	9.2	23.9
204	45.4	29.5	21.6	22.3
205	45.4	29.5	11.1	25.2
206	45.4	29.5	13.7	14.1
207	45.4	29.5	24.9	22.3
208	45.4	29.5	31.2	9.8
209	45.4	29.5	34.0	21.3
210	45.4	29.5	11.6	25.7
211	45.4	29.5	25.1	21.6
212	45.4	29.5	39.1	18.4
213	45.4	29.5	37.8	18.4
214	45.4	29.5	37.0	15.6
215	45.4	29.5	43.1	18.0
216	45.4	29.5	38.5	8.6
217	45.4	29.5	23.7	11.2
218	45.4	29.5	34.4	21.4
301	45.4	29.5	31.5	11.0
302	45.4	29.5	40.1	23.5
303	45.4	29.5	18.9	25.9
304	45.4	29.5	30.2	23.8
305	45.4	29.5	41.3	21.3
306	45.4	29.5	42.0	20.6
307	45.4	29.5	40.2	17.2
401	45.4	29.5	25.1	22.2
402	45.4	29.5	7.6	23.4

Unit Number	BASIX Requirements (MJ/m2/year)		Final Results (MJ/m2/year) (with treatments)	
	Heating	Cooling	Heating	Cooling
403	45.4	29.5	39.9	25.3
404	45.4	29.5	36.3	24.1
405	45.4	29.5	31.2	13.1
406	45.4	29.5	38.0	12.5
407	45.4	29.5	42.4	21.0
408	45.4	29.5	42.2	21.3
409	45.4	29.5	43.3	25.0
410	45.4	29.5	39.9	11.7
501	45.4	29.5	37.3	11.2
502	45.4	29.5	17.1	16.5
503	45.4	29.5	43.6	14.5
504	45.4	29.5	37.6	22.7
505	45.4	29.5	30.6	13.1
506	45.4	29.5	26.5	12.0
507	45.4	29.5	43.2	20.8
508	45.4	29.5	39.3	16.5
509	45.4	29.5	41.7	17.9
510	45.4	29.5	34.7	20.4
601	45.4	29.5	37.8	11.4
602	45.4	29.5	17.3	16.3
603	45.4	29.5	41.8	14.5
604	45.4	29.5	35.9	22.3
605	45.4	29.5	30.5	13.4
606	45.4	29.5	26.7	12.1
607	45.4	29.5	43.9	20.4
608	45.4	29.5	39.8	16.2
609	45.4	29.5	42.5	17.4
610	45.4	29.5	35.1	20.4
701	45.4	29.5	38.2	11.2
702	45.4	29.5	17.5	16.3
703	45.4	29.5	40.4	14.6
704	45.4	29.5	34.1	21.5
705	45.4	29.5	30.6	13.4
706	45.4	29.5	26.9	12.3
707	45.4	29.5	44.0	19.7
708	45.4	29.5	39.8	15.8
709	45.4	29.5	39.3	17.5
710	45.4	29.5	35.2	20.3
801	45.4	29.5	38.5	11.2
802	45.4	29.5	17.7	16.2

Unit Number	BASIX Requirements (MJ/m2/year)		Final Results (MJ/m2/year) (with treatments)	
	Heating	Cooling	Heating	Cooling
803	45.4	29.5	29.4	15.2
804	45.4	29.5	32.8	21.2
805	45.4	29.5	30.6	13.2
806	45.4	29.5	26.7	12.8
807	45.4	29.5	43.9	19.9
808	45.4	29.5	39.2	15.8
809	45.4	29.5	39.1	17.6
810	45.4	29.5	34.7	20.8
901	45.4	29.5	38.2	11.8
902	45.4	29.5	32.2	27.5
903	45.4	29.5	29.7	15.0
904	45.4	29.5	34.8	12.6
905	45.4	29.5	44.7	14.2
906	45.4	29.5	31.4	12.4
907	45.4	29.5	43.1	20.9
908	45.4	29.5	39.4	20.3
909	45.4	29.5	37.3	16.2
910	45.4	29.5	31.9	21.7
G01	45.4	29.5	16.7	22.6
G02	45.4	29.5	11.1	28.2
G03	45.4	29.5	8.0	27.1
G04	45.4	29.5	21.0	22.3
G05	45.4	29.5	13.1	24.7
G06	45.4	29.5	13.9	27.1
G07	45.4	29.5	27.1	21.7
G08	45.4	29.5	41.2	11.2
G09	45.4	29.5	41.4	18.4
G10	45.4	29.5	27.9	16.1
G11	45.4	29.5	41.1	20.0
G12	45.4	29.5	41.1	14.5
G13	45.4	29.5	38.2	17.6
G14	45.4	29.5	41.0	7.1
G15	45.4	29.5	34.4	8.7
G16	45.4	29.5	41.5	20.4
1001	45.4	29.5	43.6	11.5
1002	45.4	29.5	7.8	27.9
1003	45.4	29.5	33.2	19.6
1004	45.4	29.5	38.7	25.4
1005	45.4	29.5	40.5	16.1
1006	45.4	29.5	39.0	17.7

3.3 Energy

The target score in BASIX to achieve energy usage compliance is 25% for the subject development. The minimum energy score is achieved with the inclusion of the following:

3.3.1 Central Systems

- The central hot water systems are to be gas fired boiler system. All piping (internal and external to ringmain and supply riser) for the hot water systems are to include R1.00 (~38mm) insulation.
- The lift system in the development is to be gearless traction with VVVF motor.

3.3.2 Common Areas

The BASIX requirements for the ventilation and lighting systems within the various common areas are listed in Tables 6 and 7 below:

Table 6 Ventilation Systems

Common Area	Ventilation System Type	Efficiency Measure
Enclosed Carparks	Ventilation (supply + exhaust)	Carbon monoxide monitor + VSD fan
Carpark Entry Ramp & Loading	No mechanical ventilation	-
Garbage and Bulky Waste rooms	Ventilation exhaust only	-
Main Switch and Telecommunications Rooms	Ventilation supply only	Thermostatically controlled
Various Plant Rooms	No mechanical ventilation	-
Ground Floor Lobbies	No mechanical ventilation	-
Tower Lobbies	No mechanical ventilation	-

Table 7 Lighting Systems

Common Area	Primary Lighting System	Efficiency Measure
Lift Cars	Fluorescent	Connected to lift call button
Enclosed Carparks	Fluorescent	Time Clocks & Motion Sensors
Carpark Entry Ramp & Loading	Fluorescent	Time Clocks & Motion Sensors
Garbage and Bulky Waste rooms	Fluorescent	Manual switch on/off
Main Switch and Telecommunications Rooms	Fluorescent	Manual switch on/off
Various Plant Rooms	Fluorescent	Manual switch on/off
Ground Floor Lobbies	Fluorescent	Time Clocks & Motion Sensors
Tower Lobbies	Fluorescent	Time Clocks & Motion Sensors

3.3.3 Dwellings

- The bathroom exhaust fans of all residential dwellings are individual fans, ducted to façade/roof and interlocked to light.
- The kitchen exhaust fans are individual fans ducted to façade/roof and are to be controlled by manual on/off switches.
- The laundry exhaust fans of all residential dwellings are individual fans, ducted to façade/roof controlled by manual on/off switches.
- Three-phase air conditioning systems are to be installed within each residential dwelling for the living room and bedroom areas. The system is to have a minimum EER rating of at least 3.5 for cooling and heating.
- The bedrooms, living room, kitchen, bathroom, laundry and hallways within each residential dwelling of the proposed development will be primarily lit by fluorescent or LED lamps (i.e. at least 80% of the light fittings in the room). Dedicated fluorescent or LED fittings are to be installed.
- A gas cooktop and electric oven will be installed within each residential dwelling for the kitchen in the development.
- A clothes dryer will be installed within each residential dwelling for the kitchen. The system is to have a minimum star rating of at least 1.5.

Note that if any of the above systems are to be substituted by less efficient systems, an update to the BASIX certificate would also be required.

4 CONCLUSION

A BASIX assessment of the proposed development located at 12-24 Stanley Street Kogarah has been carried out. The results of the assessment indicate that the development will satisfy the requirements of BASIX if all of the items outlined in this report are carried out.

The certified architectural drawings, multi-dwelling certificate and BASIX certificate are attached in the following appendices of this report.

APPENDIX A - BASIX CERTIFICATE

BASIX® Certificate

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

Multi Dwelling

Certificate number: 924426M

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 06/10/2017 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary
Date of issue: Monday, 07 May 2018
To be valid, this certificate must be lodged within 3 months of the date of issue.

NSW GOVERNMENT Planning & Environment

Project summary	
Project name	12-24 Stanley Street Kogarah
Street address	12-24 Stanley Street Kogarah 2217
Local Government Area	Georges River Council
Plan type and plan number	deposited 1397
Lot no.	55-56
Section no.	-
No. of residential flat buildings	1
No. of units in residential flat buildings	114
No. of multi-dwelling houses	0
No. of single dwelling houses	0

Project score		
Water	✔ 40	Target 40
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 26	Target 25

Certificate Prepared by
Name / Company Name: Windtech Consultants
ABN (if applicable): 72050574037

Description of project

Project address	
Project name	12-24 Stanley Street Kogarah
Street address	12-24 Stanley Street Kogarah 2217
Local Government Area	Georges River Council
Plan type and plan number	deposited 1397
Lot no.	55-56
Section no.	-

Project type	
No. of residential flat buildings	1
No. of units in residential flat buildings	114
No. of multi-dwelling houses	0
No. of single dwelling houses	0

Site details	
Site area (m²)	2450
Roof area (m²)	715
Non-residential floor area (m²)	-
Residential car spaces	158
Non-residential car spaces	17

Common area landscape	
Common area lawn (m²)	0.0
Common area garden (m²)	460.0
Area of indigenous or low water use species (m²)	200.0

Assessor details	
Assessor number	20887
Certificate number	0002717760
Climate zone	56

Project score		
Water	✔ 40	Target 40
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 26	Target 25

Description of project

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

Residential flat buildings - Building1, 114 dwellings, 11 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m^2)	Unconditioned floor area (m^2)	Area of garden & lawn (m^2)	Indigenous species (min area m^2)
101	1	70.1	0.0	0.0	0.0
105	2	72.0	0.0	0.0	0.0
202	1	69.3	0.0	0.0	0.0
206	1	62.8	0.0	0.0	0.0
210	2	75.7	0.0	0.0	0.0
214	2	74.9	0.0	0.0	0.0
218	1	57.7	0.0	0.0	0.0
304	3	96.0	0.0	0.0	0.0
401	3	99.3	0.0	0.0	0.0
405	2	68.7	0.0	0.0	0.0
409	2	68.6	0.0	0.0	0.0
503	1	50.6	0.0	0.0	0.0
507	2	81.6	0.0	0.0	0.0
601	3	99.3	0.0	0.0	0.0
605	2	68.7	0.0	0.0	0.0
609	2	68.9	0.0	0.0	0.0
703	1	50.6	0.0	0.0	0.0
707	2	81.6	0.0	0.0	0.0
102	2	88.9	0.0	0.0	0.0
106	2	73.1	0.0	0.0	0.0
203	1	69.2	0.0	0.0	0.0
207	1	53.1	0.0	0.0	0.0
211	3	97.1	0.0	0.0	0.0
215	2	80.3	0.0	0.0	0.0
301	2	69.1	0.0	0.0	0.0
305	2	70.4	0.0	0.0	0.0
402	1	55.1	0.0	0.0	0.0
406	3	93.7	0.0	0.0	0.0
410	2	80.8	0.0	0.0	0.0
504	2	75.2	0.0	0.0	0.0
508	2	80.8	0.0	0.0	0.0
602	1	57.4	0.0	0.0	0.0
606	3	93.7	0.0	0.0	0.0
610	2	80.8	0.0	0.0	0.0
704	2	75.2	0.0	0.0	0.0
708	2	80.8	0.0	0.0	0.0
103	2	75.7	0.0	0.0	0.0
107	2	74.9	0.0	0.0	0.0
204	1	69.6	0.0	0.0	0.0
208	2	70.1	0.0	0.0	0.0
212	2	72.0	0.0	0.0	0.0
216	1	59.3	0.0	0.0	0.0
302	2	86.8	0.0	0.0	0.0
306	2	71.6	0.0	0.0	0.0
403	1	49.3	0.0	0.0	0.0
407	2	81.6	0.0	0.0	0.0
501	3	99.3	0.0	0.0	0.0
505	2	68.7	0.0	0.0	0.0
509	2	68.9	0.0	0.0	0.0
603	1	50.6	0.0	0.0	0.0
607	2	81.6	0.0	0.0	0.0
701	3	99.3	0.0	0.0	0.0
705	2	68.7	0.0	0.0	0.0
709	2	68.9	0.0	0.0	0.0
104	3	96.8	0.0	0.0	0.0
201	2	81.5	0.0	0.0	0.0
205	1	52.9	0.0	0.0	0.0
209	2	88.9	0.0	0.0	0.0
213	2	73.1	0.0	0.0	0.0
217	1	50.2	0.0	0.0	0.0
303	2	72.3	0.0	0.0	0.0
307	2	72.9	0.0	0.0	0.0
404	2	75.2	0.0	0.0	0.0
408	2	81.9	0.0	0.0	0.0
502	1	57.4	0.0	0.0	0.0
506	3	93.7	0.0	0.0	0.0
510	2	80.8	0.0	0.0	0.0
604	2	75.2	0.0	0.0	0.0
608	2	80.8	0.0	0.0	0.0
702	1	57.4	0.0	0.0	0.0
706	3	93.7	0.0	0.0	0.0
710	2	80.8	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m^2)	Unconditioned floor area (m^2)	Area of garden & lawn (m^2)	Indigenous species (min area m^2)
801	3	99.3	0.0	0.0	0.0
805	2	68.7	0.0	0.0	0.0
809	2	68.9	0.0	0.0	0.0
903	1	50.6	0.0	0.0	0.0
907	2	81.6	0.0	0.0	0.0
G01	1	63.3	0.0	1.0	0.0
G05	1	52.9	0.0	1.0	0.0
G09	2	88.9	0.0	0.0	0.0
G13	2	80.8	0.0	1.0	0.0
1001	3	99.3	0.0	0.0	0.0
1005	2	68.9	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m^2)	Unconditioned floor area (m^2)	Area of garden & lawn (m^2)	Indigenous species (min area m^2)
802	1	57.4	0.0	0.0	0.0
806	3	93.7	0.0	0.0	0.0
810	2	80.8	0.0	0.0	0.0
904	2	74.5	0.0	0.0	0.0
908	2	80.8	0.0	0.0	0.0
G02	1	69.3	0.0	1.0	0.0
G06	1	70.4	0.0	1.0	0.0
G10	2	81.9	0.0	0.0	0.0
G14	1	57.9	0.0	1.0	0.0
1002	2	81.1	0.0	0.0	0.0
1006	2	80.8	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m^2)	Unconditioned floor area (m^2)	Area of garden & lawn (m^2)	Indigenous species (min area m^2)
803	1	50.6	0.0	0.0	0.0
807	2	81.6	0.0	0.0	0.0
901	3	99.3	0.0	0.0	0.0
905	2	68.7	0.0	0.0	0.0
909	2	68.9	0.0	0.0	0.0
G03	1	68.3	0.0	1.0	0.0
G07	1	58.6	0.0	1.0	0.0
G11	2	72.5	0.0	0.0	0.0
G15	1	56.4	0.0	1.0	0.0
1003	3	102.7	0.0	0.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m^2)	Unconditioned floor area (m^2)	Area of garden & lawn (m^2)	Indigenous species (min area m^2)
804	2	75.2	0.0	0.0	0.0
808	2	80.8	0.0	0.0	0.0
902	1	55.5	0.0	0.0	0.0
906	3	93.7	0.0	0.0	0.0
910	2	80.8	0.0	0.0	0.0
G04	1	69.6	0.0	1.0	0.0
G08	2	71.3	0.0	3.0	0.0
G12	2	75.0	0.0	3.0	0.0
G16	1	62.2	0.0	1.0	0.0
1004	2	80.7	0.0	0.0	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)
Lift car (No.1)	-
GL Plant	29.0
Tower Lobbies	511.0

Common area	Floor area (m²)
Lift car (No.2)	-
GL Entry Lobby	61.0

Common area	Floor area (m²)
GL Main Switch/Comms Room	22.0
Ground Floor Lobbies	62.0

Common areas of the development (non-building specific)

Common area	Floor area (m²)
Basement Carparks	7560.0
B1 Bulky Goods Waste	15.0

Common area	Floor area (m²)
Carpark Entry and Loading	140.0
B2 Potable Water Pumping Plant	5.0

Common area	Floor area (m²)
B1 Garbage Rooms	50.0
B2 Fire Water Pumping Plant	10.0

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 multi-dwelling houses

3. Commitments for single dwelling houses

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

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. 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 (> 6 but <= 7.5 L/min)	5 star	5 star	5 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
None	-	-	-	-	-	-	-	-

(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.		✔	✔

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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.	✔	✔	✔
(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 1	individual fan, ducted to façade or roof	interlocked to light	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/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 dining rooms	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
104, 211, 304, 401, 406, 501, 506, 601, 606, 701, 706, 801, 806, 901, 906, 1001, 1003	3-phase airconditioning EER 3.5 - 4.0	3-phase airconditioning EER 3.5 - 4.0	3-phase airconditioning EER 3.5 - 4.0	3-phase airconditioning EER 3.5 - 4.0	3 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	yes

	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 dining rooms	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
101, 202, 203, 204, 205, 206, 207, 216, 217, 218, 402, 403, 502, 503, 602, 603, 702, 703, 802, 803, 902, 903, G01, G02, G03, G04, G05, G06, G07, G14, G15, G16	3-phase airconditioning EER 3.5 - 4.0	3-phase airconditioning EER 3.5 - 4.0	3-phase airconditioning EER 3.5 - 4.0	3-phase airconditioning EER 3.5 - 4.0	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	yes
All other dwellings	3-phase airconditioning EER 3.5 - 4.0	3-phase airconditioning EER 3.5 - 4.0	3-phase airconditioning EER 3.5 - 4.0	3-phase airconditioning EER 3.5 - 4.0	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	yes

	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	-	-	-	-	1.5 star	-	-

(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)**
101	30.1	9.9
102	33.6	22.0
103	11.6	26.3
104	39.1	18.0
105	43.4	16.2
106	36.8	19.8
107	36.3	16.7
201	23.8	20.9
202	6.0	23.7
203	9.2	23.9
204	21.6	22.3
205	11.1	25.2
206	13.7	14.1
207	24.9	22.3
208	31.2	9.8
209	34.0	21.3
210	11.6	25.7
211	25.1	21.6
212	39.1	18.4
213	37.8	18.4
214	37.0	15.6
215	43.1	18.0
216	38.5	8.6
217	23.7	11.2
218	34.4	21.4
301	31.5	11.0
302	40.1	23.5

	Thermal loads	
Dwelling no.	**Area adjusted heating load (in mJ/m²/yr)**	**Area adjusted cooling load (in mJ/m²/yr)**
303	18.9	25.9
304	30.2	23.8
305	41.3	21.3
306	42.0	20.6
307	40.2	17.2
401	25.1	22.2
402	7.6	23.4
403	39.9	25.3
404	36.3	24.1
405	31.2	13.1
406	38.0	12.5
407	42.4	21.0
408	42.2	21.3
409	43.3	25.0
410	39.9	11.7
501	37.3	11.2
502	17.1	16.5
503	43.6	14.5
504	37.6	22.7
505	30.6	13.1
506	26.5	12.0
507	43.2	20.8
508	39.3	16.5
509	41.7	17.9
510	34.7	20.4
601	37.8	11.4
602	17.3	16.3

	Thermal loads	
Dwelling no.	**Area adjusted heating load (in mJ/m²/yr)**	**Area adjusted cooling load (in mJ/m²/yr)**
603	41.8	14.5
604	35.9	22.3
605	30.5	13.4
606	26.7	12.1
607	43.9	20.4
608	39.8	16.2
609	42.5	17.4
610	35.1	20.4
701	38.2	11.2
702	17.5	16.3
703	40.4	14.6
704	34.1	21.5
705	30.6	13.4
706	26.9	12.3
707	44.0	19.7
708	39.8	15.8
709	39.3	17.5
710	35.2	20.3
801	38.5	11.2
802	17.7	16.2
803	29.4	15.2
804	32.8	21.2
805	30.6	13.2
806	26.7	12.8
807	43.9	19.9
808	39.2	15.8
809	39.1	17.6

	Thermal loads	
Dwelling no.	**Area adjusted heating load (in mJ/m²/yr)**	**Area adjusted cooling load (in mJ/m²/yr)**
810	34.7	20.8
901	38.2	11.8
902	32.2	27.5
903	29.7	15.0
904	34.8	12.6
905	44.7	14.2
906	31.4	12.4
907	43.1	20.9
908	39.4	20.3
909	37.3	16.2
910	31.9	21.7
G01	16.7	22.6
G02	11.1	28.2
G03	8.0	27.1
G04	21.0	22.3
G05	13.1	24.7
G06	13.9	27.1
G07	27.1	21.7
G08	41.2	11.2
G09	41.4	18.4
G10	27.9	16.1
G11	41.1	20.0
G12	41.1	14.5
G13	38.2	17.6
G14	41.0	7.1
G15	34.4	8.7
G16	41.5	20.4

	Thermal loads	
Dwelling no.	**Area adjusted heating load (in mJ/m²/yr)**	**Area adjusted cooling load (in mJ/m²/yr)**
1001	43.6	11.5
1002	7.8	27.9
1003	33.2	19.6
1004	38.7	25.4
1005	40.5	16.1
All other dwellings	39.0	17.7

(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...)
Fire sprinkler system (No. 1)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

(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.		✔	✔

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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
Lift car (No.1)	-	-	fluorescent	connected to lift call button	No
Lift car (No.2)	-	-	fluorescent	connected to lift call button	No
GL Main Switch/Comms Room	ventilation supply only	thermostatically controlled	fluorescent	manual on / manual off	No
GL Plant	no mechanical ventilation	-	fluorescent	manual on / manual off	No
GL Entry Lobby	no mechanical ventilation	-	fluorescent	time clock and motion sensors	No
Ground Floor Lobbies	no mechanical ventilation	-	fluorescent	time clock and motion sensors	No
Tower Lobbies	no mechanical ventilation	-	fluorescent	time clock and motion sensors	No

Central energy systems	Type	Specification
Central hot water system (No. 1)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 15
Lift (No. 2)	gearless traction with V V V F motor	Number of levels (including basement): 15

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

(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)	5000.0	To collect run-off from at least: - 700.0 square metres of roof area of buildings in the development - 0.0 square metres of impervious area in the development - 0.0 square metres of garden/lawn area in the development - 0.0 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 460.0 square metres of common landscaped area on the site

Central systems	Size	Configuration	Connection (to allow for...)
Fire sprinkler system (No. 2)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-
Fire sprinkler system (No. 3)	-	So that fire sprinkler test water is contained within the fire sprinkler system for re-use, rather than disposed.	-

(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
Basement Carparks	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	time clock and motion sensors	No
Carpark Entry and Loading	no mechanical ventilation	-	fluorescent	time clock and motion sensors	No
B1 Garbage Rooms	ventilation exhaust only	-	fluorescent	manual on / manual off	No
B1 Bulky Goods Waste	ventilation exhaust only	-	fluorescent	manual on / manual off	No
B2 Potable Water Pumping Plant	no mechanical ventilation	-	fluorescent	manual on / manual off	No
B2 Fire Water Pumping Plant	no mechanical ventilation	-	fluorescent	manual on / manual off	No

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).

APPENDIX B - MULTI-DWELLING CERTIFICATE

Nationwide House Energy Rating Scheme* — Class 2 summary

Certificate number: **0002717760** Certificate Date: **07 May 2018** ★Average Star rating: **6.1**

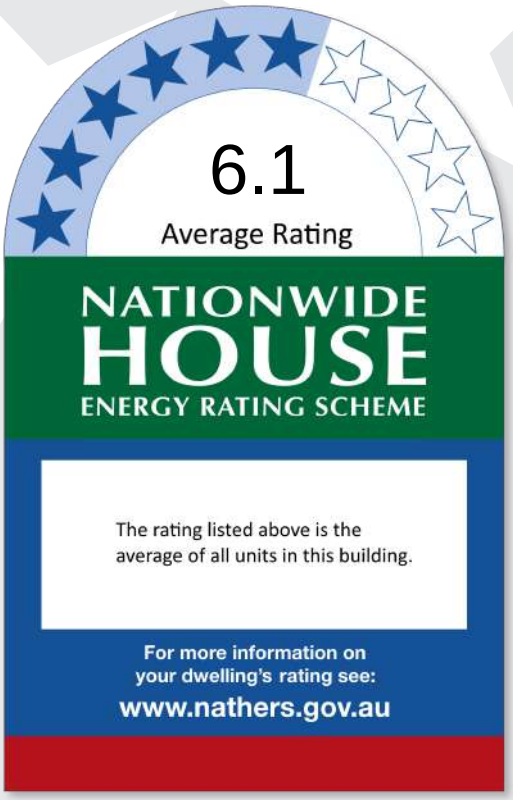
Assessor details

Accreditation number:	**20887**
Name:	**Trong Huynh**
Organisation:	**Windtech Consultants PTY LTD**
Email:	**Thien@windtechglobal.com**
Phone:	**(02) 9503 0300**
Declaration of interest:	**None**
Software:	**BERS Pro v4.3.0.2b (3.13)**
AAO:	**ABSA**

Dwelling details

Street:	**Stanley Street**
Suburb:	**Kogarah**
State:	**NSW**
Postcode:	**2217**

Scan to access this certificate online and confirm this is valid.



Summary of all dwellings

Certificate Details

Certificate number	Unit number	Heating load	Cooling load	Total load	Star Rating
0002713675-01	101	30.1	9.9	40.0	6.9
0002713709-01	102	33.6	22.0	55.5	5.7
0002713717-01	103	11.6	26.4	38.0	7.1
0002713725-02	104	39.1	18.0	57.1	5.6
0002713733-01	105	43.4	16.2	59.6	5.4
0002713303-01	106	36.8	19.8	56.6	5.7
0002713378-01	107	36.3	16.7	53.0	5.9
0002713428-01	201	23.8	20.9	44.7	6.5
0002712560-01	202	6.0	23.7	29.7	7.7
0002712578-01	203	9.2	23.9	33.1	7.4
0002712586-01	204	21.6	22.3	43.9	6.6
0002712594-01	205	11.1	25.2	36.3	7.2
0002712602-01	206	13.7	14.1	27.9	7.9
0002712610-01	207	24.9	22.3	47.3	6.4
0002712628-01	208	31.2	9.8	40.9	6.9

* Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments. For more details see www.nathers.gov.au

Summary of all dwellings continued

Certificate Details

Certificate number	Unit number	Heating load	Cooling load	Total load	Star Rating
0002712636-01	209	34.0	21.3	55.2	5.7
0002712644-01	210	11.6	25.7	37.3	7.2
0002712651-02	211	25.1	21.6	46.7	6.4
0002712669	212	39.1	18.4	57.4	5.6
0002712677	213	37.8	18.4	56.2	5.7
0002712685	214	37.0	15.6	52.6	5.9
0002712156	215	43.1	18.0	61.1	5.4
0002712164	216	38.5	8.6	47.1	6.4
0002712180	217	23.7	11.2	34.9	7.3
0002712206	218	34.4	21.4	55.8	5.7
0002712230	301	31.5	11.0	42.5	6.8
0002712248	302	40.1	23.5	63.6	5.2
0002712271	303	18.9	25.9	44.8	6.5
0002712289-02	304	30.2	23.8	54.0	5.8
0002712305	305	41.3	21.3	62.6	5.3
0002712339	306	42.0	20.6	62.7	5.3
0002712354	307	40.2	17.2	57.4	5.6
0002712370	401	25.1	22.2	47.2	6.4
0002712396	402	7.6	23.4	31.0	7.6
0002712412	403	39.9	25.3	65.2	5.1
0002712438	404	36.3	24.1	60.4	5.4
0002712453	405	31.2	13.1	44.3	6.6
0002712461	406	38.0	12.5	50.4	6.1
0002712487	407	42.4	21.0	63.4	5.2
0002712503	408	42.2	21.3	63.5	5.2
0002712529	409	43.3	25.0	68.4	4.9
0002712149	410	39.9	11.7	51.7	5.9
0002712172	501	37.3	11.2	48.4	6.3
0002712198	502	17.1	16.5	33.6	7.4
0002712214	503	43.6	14.5	58.2	5.4
0002712222	504	37.6	22.7	60.4	5.4
0002712255	505	30.6	13.1	43.7	6.7
0002712263	506	26.5	12.0	38.5	7.1
0002712297	507	43.2	20.8	63.9	5.2
0002712313	508	39.3	16.5	55.8	5.7
0002712321	509	41.7	17.9	59.6	5.4
0002712347	510	34.7	20.4	55.2	5.8
0002712362	601	37.8	11.4	49.1	6.2
0002712388	602	17.3	16.3	33.6	7.4
0002712404	603	41.8	14.5	56.3	5.7
0002712420	604	35.9	22.3	58.2	5.4
0002712446	605	30.5	13.4	43.9	6.6
0002712479	606	26.7	12.1	38.8	7

Summary of all dwellings continued

Certificate Details

Certificate number	Unit number	Heating load	Cooling load	Total load	Star Rating
0002712495	607	43.9	20.4	64.2	5.2
0002712511	608	39.8	16.2	56.0	5.7
0002712537	609	42.5	17.4	59.9	5.4
0002712693	610	35.1	20.4	55.5	5.7
0002712727	701	38.2	11.2	49.4	6.2
0002712750	702	17.5	16.3	33.8	7.4
0002712792	703	40.4	14.6	55.0	5.8
0002712834	704	34.1	21.5	55.6	5.7
0002712867	705	30.6	13.4	44.0	6.6
0002712891	706	26.9	12.3	39.2	6.9
0002712925	707	44.0	19.7	63.7	5.2
0002712958	708	39.8	15.8	55.6	5.7
0002712982	709	39.3	17.5	56.8	5.6
0002713014	710	35.2	20.3	55.5	5.7
0002713030	801	38.5	11.2	49.7	6.2
0002713071	802	17.7	16.2	33.9	7.4
0002713097	803	29.4	15.2	44.6	6.6
0002713113	804	32.8	21.2	54.0	5.8
0002713139	805	30.6	13.2	43.8	6.6
0002713154	806	26.7	12.8	39.5	6.9
0002713170	807	43.9	19.9	63.8	5.2
0002713204	808	39.2	15.8	55.0	5.8
0002713220	809	39.1	17.6	56.7	5.6
0002712719	810	34.7	20.8	55.5	5.7
0002712743	901	38.2	11.8	50.0	6.1
0002712776	902	32.2	27.5	59.7	5.4
0002712800	903	29.7	15.0	44.7	6.5
0002712826	904	34.8	12.6	47.4	6.3
0002712859	905	44.7	14.2	58.9	5.4
0002712883	906	31.4	12.4	43.8	6.6
0002712917	907	43.1	20.9	64.0	5.2
0002712941	908	39.4	20.3	59.7	5.4
0002712974	909	37.3	16.2	53.5	5.9
0002713006	910	31.9	21.7	53.7	5.9
0002713048-01	1001	43.6	11.5	55.1	5.8
0002713089-01	1002	7.8	27.9	35.7	7.3
0002713105-01	1003	33.2	19.6	52.8	5.9
0002713121-01	1004	38.7	25.4	64.0	5.2
0002713147-01	1005	40.5	16.1	56.7	5.6
0002713162-01	1006	39.0	17.7	56.7	5.6
0002708956-02	G01	16.7	22.6	39.3	6.9
0002713188-01	G02	11.1	28.2	39.4	6.9
0002713212-01	G03	8.0	27.1	35.1	7.3

Summary of all dwellings continued

Certificate Details

Certificate number	Unit number	Heating load	Cooling load	Total load	Star Rating
0002713238-01	G04	21.0	22.3	43.3	6.7
0002712701-01	G05	13.1	24.7	37.9	7.1
0002712735-01	G06	13.9	27.1	41.0	6.9
0002712768-01	G07	27.1	21.7	48.8	6.2
0002712784-01	G08	41.2	11.2	52.4	5.9
0002712818-01	G09	41.4	18.4	59.9	5.4
0002712842-01	G10	27.9	16.1	44.0	6.6
0002712875-01	G11	41.1	20.0	61.1	5.4
0002712909-01	G12	41.1	14.5	55.5	5.7
0002712933-01	G13	38.2	17.6	55.7	5.7
0002712966-01	G14	41.0	7.1	48.1	6.3
0002712990-01	G15	34.4	8.7	43.1	6.7
0002713022-01	G16	41.5	20.4	61.9	5.3

APPENDIX C - CERTIFIED ARCHITECTURAL DRAWINGS

[Status] DA ISSUE
[Nom. Architect] HON DIEC /9232
[File]
[Print Date] 7/05/2018 1:43:57 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18

BASIX Thermal Comfort Specification

Building Element	Material	Insulation
Envelope Wall (To outdoor air, lobbies, stair/ liftcore, unconditioned spaces etc.)	Concrete Block	R1.5, R2.0*
Internal Wall	Plasterboard on studs	None
Roof	Concrete	None
Ceiling	Concrete above Plasterboard	None, R2.5*
Floor	Concrete Slab	None, R0.5, R1.0, R1.5*
Floor Coverings	Tiles to Living, Wet Areas, Other internal areas Carpet to Bedrooms Timber/Tiles to Kitchens	N/A
Windows	Group A Glazed Systems: U-value = 6.7, SHGC = 0.70, U-value = 5.4, SHGC = 0.49, U-value = 4.80, SHGC = 0.51, U-value = 4.30, SHGC = 0.47* Group B Glazed Systems: U-value = 6.7, SHGC = 0.57, U-value = 5.4, SHGC = 0.58, U-value = 4.80, SHGC = 0.59, U-value = 4.30, SHGC = 0.53*	N/A

A +/- 10% variance in the SHGC value, and satisfying the U-value or lower is allowable.

Draught seals to all external windows and doors, no ceiling penetrations due to recessed luminaries, vents, exhaust fans etc.

Note: *Please refer to the BASIX Report for the individual insulation requirements of each residential dwelling

SHEET LIST

Sheet Name	Sheet Number
COVER PAGE	AD-DA000
LOCATION PLAN	AD-DA001
DEMOLITION PLAN	AD-DA002
SITE PLAN/ SITE ANALYSIS PLAN	AD-DA003
BASEMENT 4	AD-DA100
BASEMENT 3	AD-DA101
BASEMENT 2	AD-DA102
BASEMENT 1	AD-DA103
GROUND FLOOR PLAN	AD-DA104
LEVEL 01	AD-DA105
LEVEL 02	AD-DA106
LEVEL 03	AD-DA107
LEVEL 04	AD-DA108
LEVEL 05	AD-DA109
LEVEL 06	AD-DA110
LEVEL 07	AD-DA111
LEVEL 08	AD-DA112
LEVEL 09	AD-DA113
LEVEL 10	AD-DA114
LEVEL 11	AD-DA115
NORTH ELEVATION - STANLEY STREET	AD-DA201
SOUTH ELEVATION - STANLEY LANE	AD-DA202
EAST ELEVATION	AD-DA203
WEST ELEVATION	AD-DA204
STREETSCAPE ELEVATION - STANLEY STREET	AD-DA205
STREETSCAPE ELEVATION - STANLEY LANE	AD-DA206
LONG SECTION	AD-DA221
SHORT SECTION	AD-DA222
SKY BRIDGE SECTIONS	AD-DA225
RAMP SECTIONS	AD-DA250
VEHICLE ENTRY RAMP PLANS	AD-DA251
SUN EYE VIEW ISO	AD-DA901
SHADOW PLAN - WINTER SOLSTICE	AD-DA902
SHADOW PLAN - SUMMER SOLSTICE	AD-DA903
SHADOW ISO - DCP ENVELOPE	AD-DA907
SHADOW ISO - PROPOSED	AD-DA908
PRE AND POST ADAPTABLE LAYOUT - SHEET 1	AD-DA920
PRE AND POST ADAPTABLE LAYOUT - SHEET 2	AD-DA921
VENTILATION COMPLIANCE - SHEET 1	AD-DA950
VENTILATION COMPLIANCE - SHEET 2	AD-DA951
SOLAR COMPLIANCE - SHEET 1	AD-DA952
SOLAR COMPLIANCE - SHEET 2	AD-DA953
GFA PLANS - SHEET 1	AD-DA954
GFA PLANS - SHEET 2	AD-DA955
SCHEDULE OF EXTERNAL FINISHES	AD-DA960
ARTIST IMPRESSION - STANLEY STREET	AD-DA970
ARTIST IMPRESSION - STANLEY LANE	AD-DA971

ABSA
Australian Building Sustainability Association

Accreditation Period	2018-2019
Assessor Name	Trong Thien Huynh
Assessor Number	20887
Assessor Signature	

HERS Assessments completed within the accreditation period are part of the ABSA quality audit system

This Accredited Assessor is qualified to use NatHERS Accredited Software and has agreed to follow an Assessor Code of Practice

6.1
Average star rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
www.nathers.gov.au

Certificate no.: 0002717760
Assessor Name: Trong Huynh
Accreditation no.: 20887
Certificate date: 07 May 2018
Dwelling Address:
Stanley Street
Kogarah, NSW
2217
www.nathers.gov.au

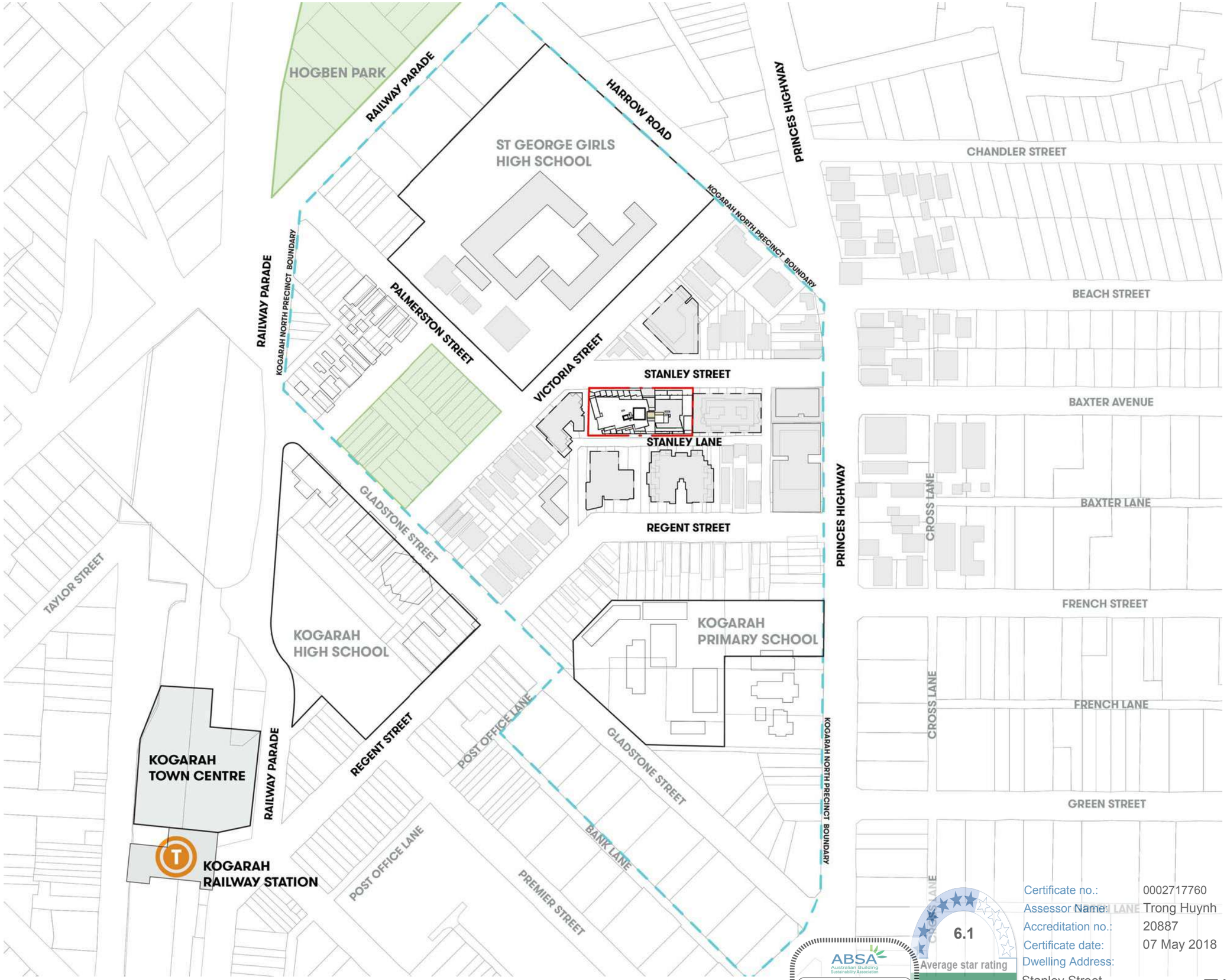
scott carver

Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.
au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH
[Client] POLY [AUSTRALIA] PTY LTD
[Scale]

[Ref] 20170107
[Dwg No] AD-DA000
[Rev] 2

COVER PAGE



[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	4/05/2018 10:19:43 PM

History

[Rev#]	[Description]	[Date]
1	ISSUED FOR DA	04/05/18

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH

[Client] POLY [AUSTRALIA] PTY LTD

[Scale] 1 : 1500 @ A3

ABSA Australian Building Sustainability Association
Accreditation Period 2018-2019
Assessor Name Trong Thien Huynh
Assessor Number 20887
Assessor Signature
HERS Assessments completed within the accreditation period are part of the ABSA quality audit system
This Accredited Assessor is licensed to use NatHERS Accredited Software and has agreed to follow an Assessor Code of Practice

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

Certificate no.: 0002717760
Assessor Name: Trong Huynh
Accreditation no.: 20887
Certificate date: 07 May 2018
Dwelling Address:
Stanley Street
Kogarah, NSW
2217

www.nathers.gov.au

[Ref] 2017

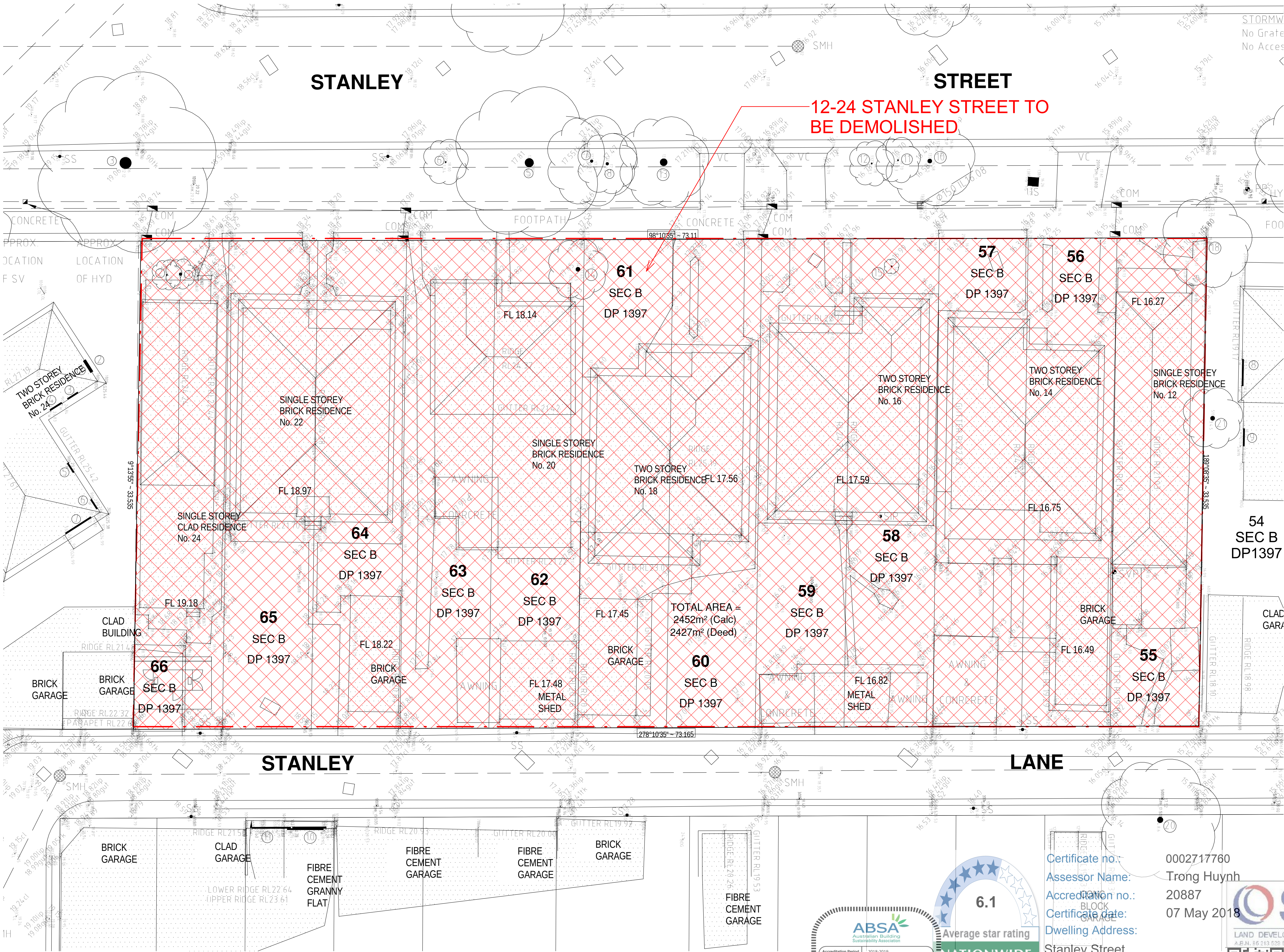
[Dwg No] AD-DA001 [Rev] 1

LOCATION PLAN

[Status] DA ISSUE
[Nom. Architect] HON DIEC /9232
[File]
[Print Date] 7/05/2018 1:43:46 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18



Certificate no.: 0002717760
Assessor Name: Trong Huynh
Accreditation no.: 20887
Certificate date: 07 May 2018
Dwelling Address: Stanley Street Kogarah, NSW 2217

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

SDG LAND DEVELOPMENT SOLUTIONS
Suite 1 3 Railway Street BAULKHAM HILLS 2153
P.O.Box 2572 NORTH PARRAMATTA 1750
t: (02) 9630 7955
e: office@sdg.net.au
w: www.sdg.net.au

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au
+61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH
[Client] POLY [AUSTRALIA] PTY LTD

0 2.5 7.5 10 12.5
[Scale] 1 : 250 @ A3

[Ref] 2017...

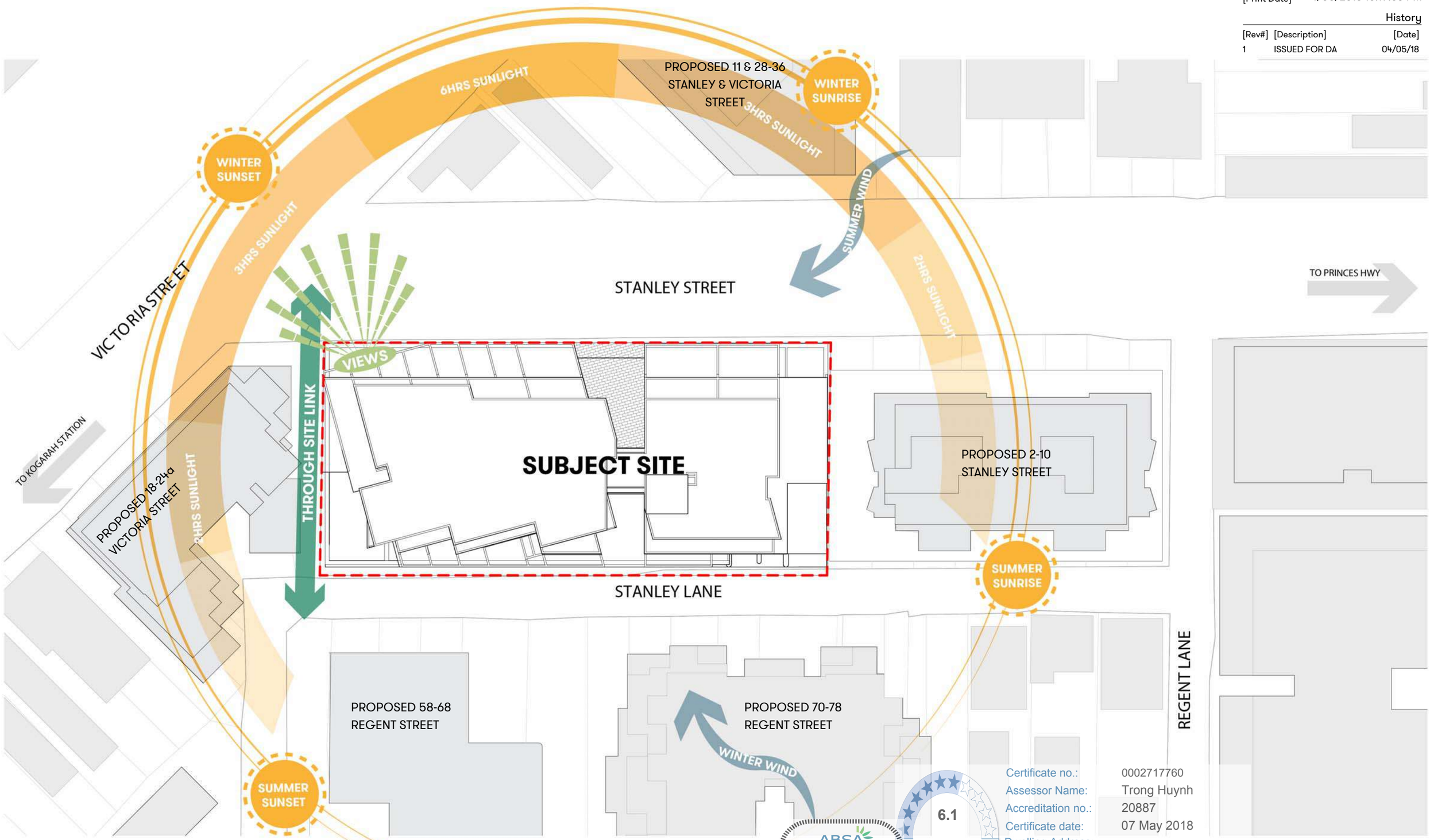
DEMOLITION PLAN

[Dwg No] AD-DA002 [Rev] 2

[Status] DA ISSUE
[Nom. Architect] HON DIEC /9232
[File]
[Print Date] 4/05/2018 10:19:03 PM

History

[Rev#]	[Description]	[Date]
1	ISSUED FOR DA	04/05/18



Certificate no.: 0002717760
Assessor Name: Trong Huynh
Accreditation no.: 20887
Certificate date: 07 May 2018
Dwelling Address:
Stanley Street
Kogarah, NSW
2217

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

www.nathers.gov.au

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH
[Client] POLY [AUSTRALIA] PTY LTD

0 5 10 15 20 25
[Scale] @ A3

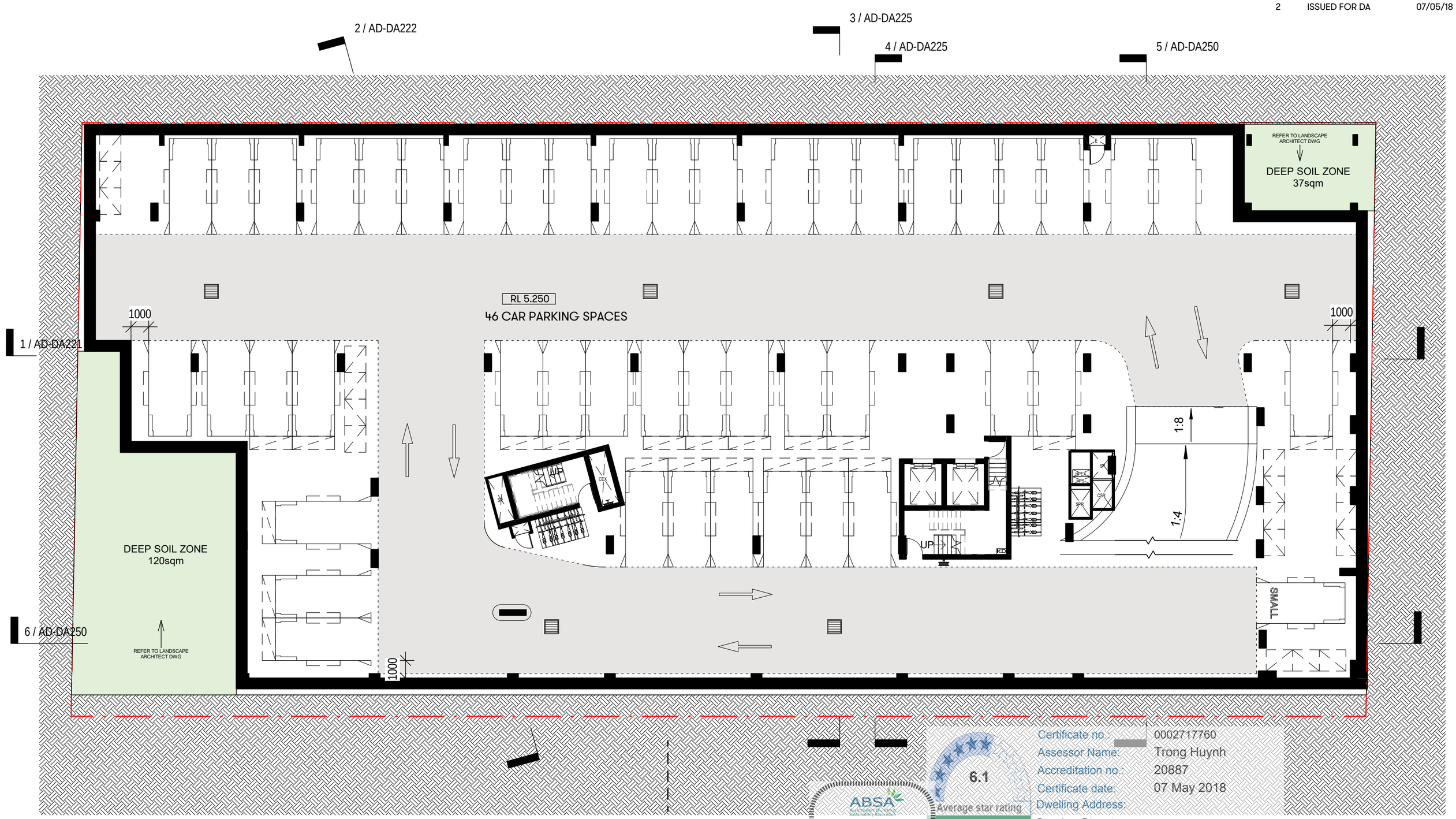
[Ref] 2017 [Dwg No] AD-DA003 [Rev] 1

SITE ANALYSIS PLAN

[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	7/05/2018 2:19:02 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18



Certificate no.: 0002717760
Assessor Name: Trong Huynh
Accreditation no.: 20887
Certificate date: 07 May 2018
Dwelling Address: Stanley Street Kogarah, NSW 2217

6.1 Average star rating

www.nathers.gov.au

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH
[Client] POLY [AUSTRALIA] PTY LTD

0 2 [Scale] 1 : 200 @ A3

[Ref] 2017

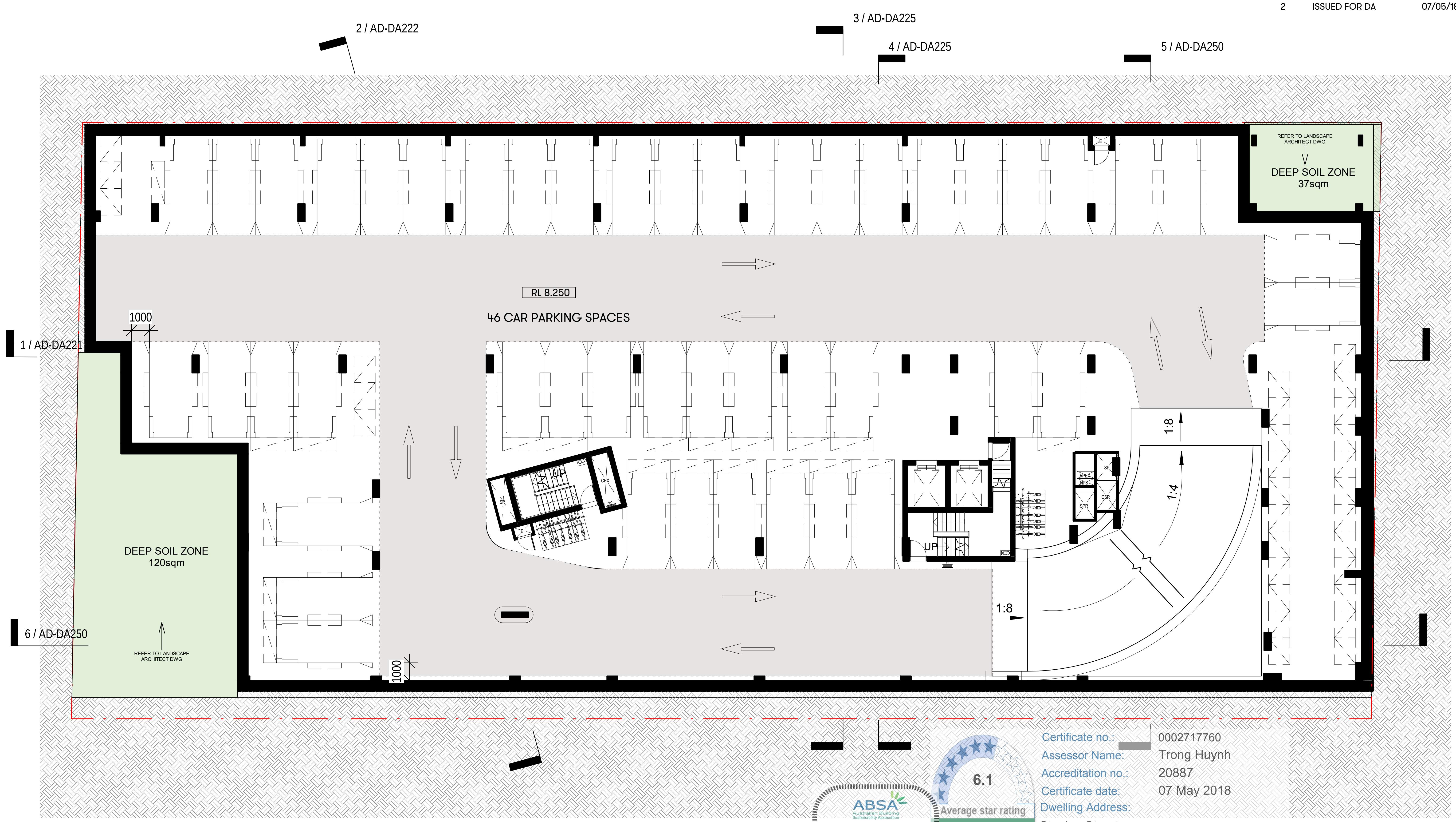
[Dwg No] AD-DA100 [Rev] 2

BASEMENT 4

[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	7/05/2018 2:18:59 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18



Certificate no.: 0002717760
Assessor Name: Trong Huynh
Accreditation no.: 20887
Certificate date: 07 May 2018
Dwelling Address: Stanley Street Kogarah, NSW 2217

6.1 Average star rating

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

ABSA Australian Building Sustainability Association

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au
+61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH

[Client] POLY [AUSTRALIA] PTY LTD

[Scale] 1 : 200 @ A3

[Ref] 2017...

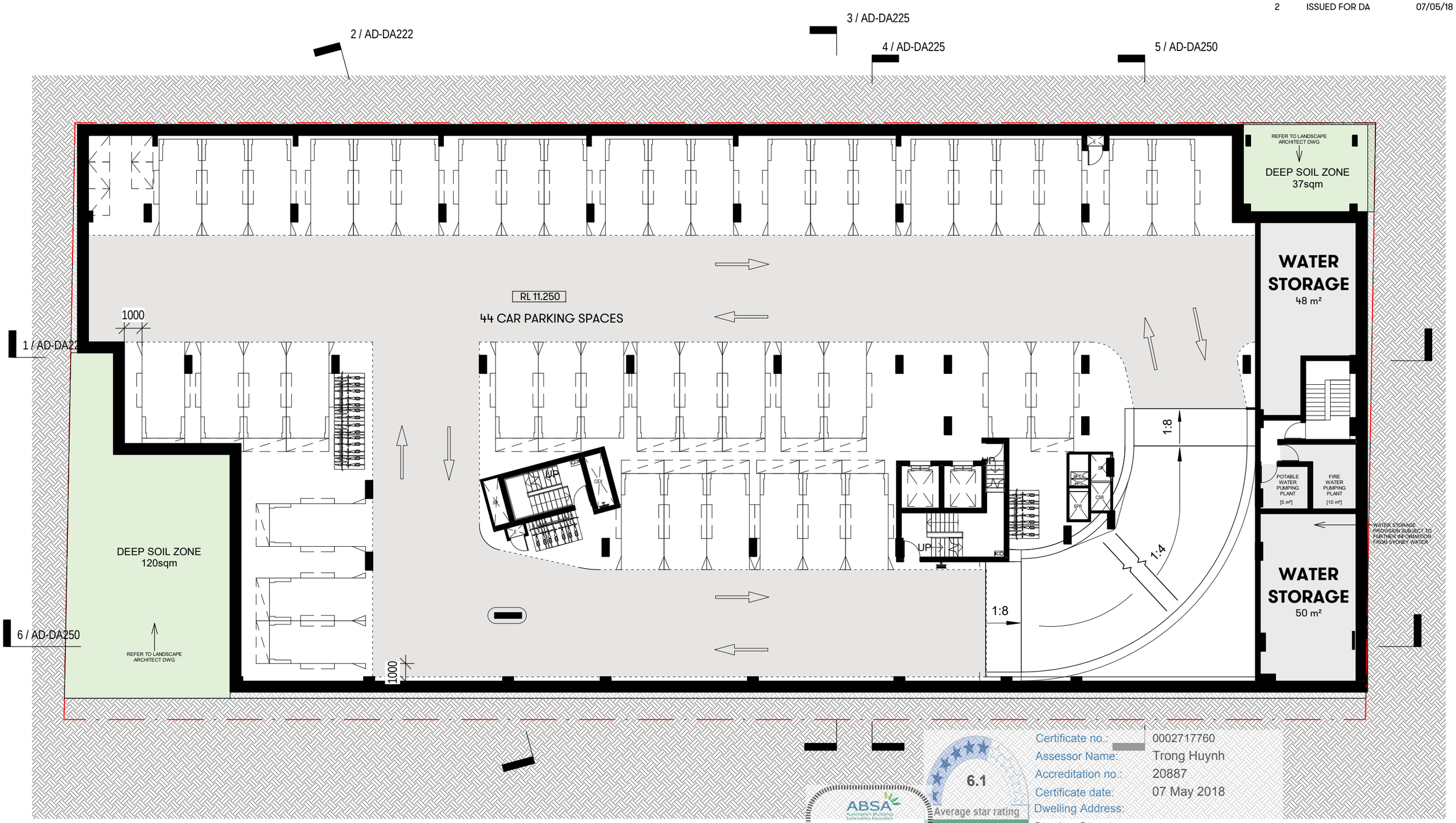
BASEMENT 3

[Dwg No] AD-DA101 [Rev] 2

[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	7/05/2018 2:18:55 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18



scott carver

Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH

[Client] POLY [AUSTRALIA] PTY LTD

0 2

[Scale] 1:200 @ A3

ABSA Australasian Buildings Sustainability Association

Accreditation Period	2018-2019
Assessor Name	Trong Thien Huynh
Assessor Number	20887
Assessor Signature	

HERS Assessments completed within the accreditation period are part of the ABSA quality audit systems

This Accredited Assessor is licensed to use NatHERS Accredited Software and has agreed to follow an Assessor Code of Practice

6.1 Average star rating

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

Certificate no.:	0002717760
Assessor Name:	Trong Huynh
Accreditation no.:	20887
Certificate date:	07 May 2018
Dwelling Address:	Stanley Street Kogarah, NSW 2217

www.nathers.gov.au

[Ref] 2017

[Dwg No] AD-DA102 [Rev] 2

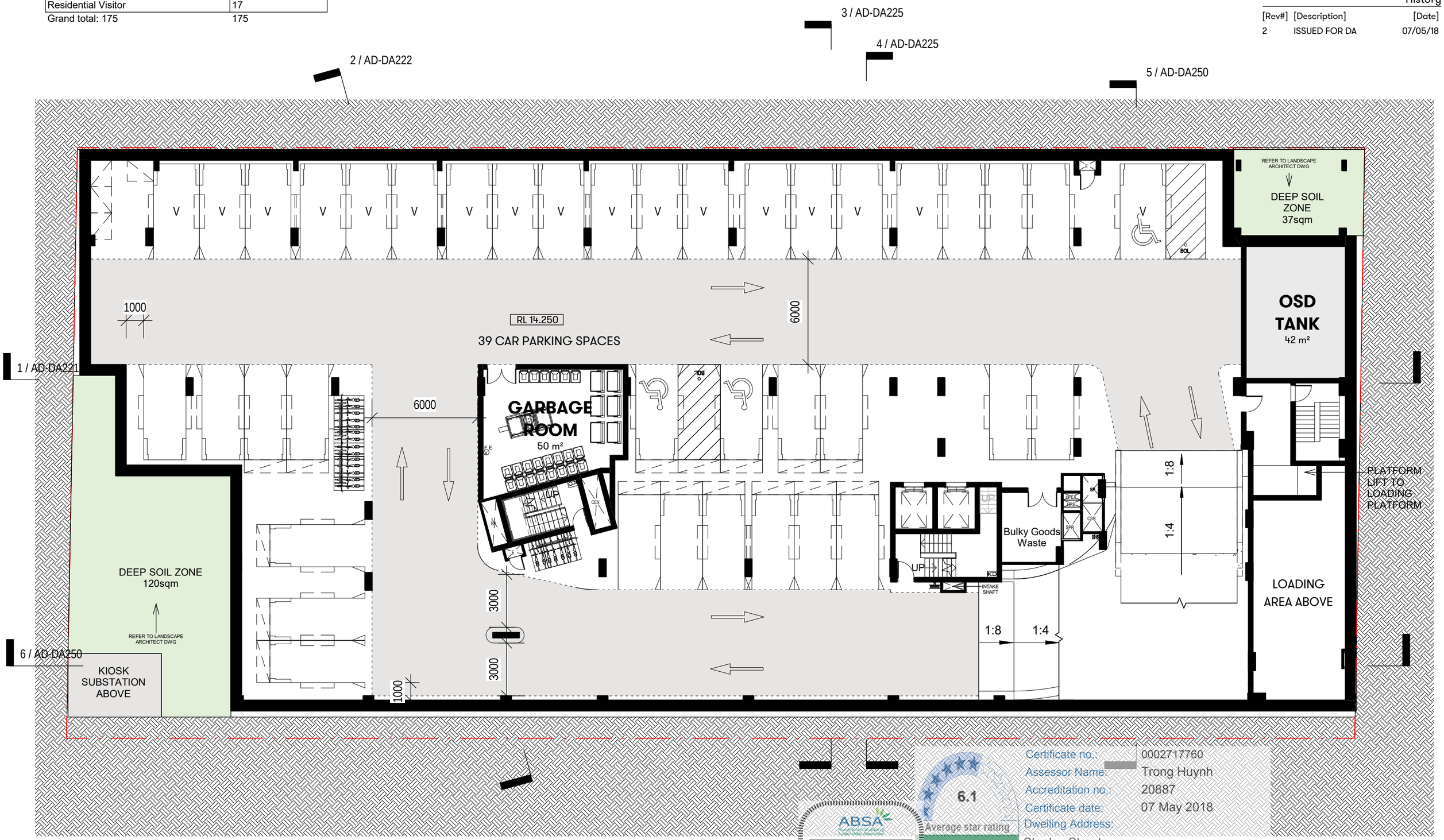
BASEMENT 2

PARKING MIX	
PARKING TYPE	NUMBER
Accessible	3
Residential Car Space	155
Residential Visitor	17
Grand total: 175	175

[Status] DA ISSUE
[Nom. Architect] HON DIEC /9232
[File]
[Print Date] 7/05/2018 2:18:52 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18



6.1 Average star rating

Certificate no.: 0002717760
Assessor Name: Trong Huynh
Accreditation no.: 20887
Certificate date: 07 May 2018
Dwelling Address: Stanley Street Kogarah, NSW 2217

www.nathers.gov.au

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH
[Client] POLY [AUSTRALIA] PTY LTD

[Scale] 1 : 200 @ A3

[Ref] 2017

[Dwg No] AD-DA103 [Rev] 2

BASEMENT 1

[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	7/05/2018 2:07:43 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18

STANLEY STREET

2 / AD-DA222 · 3 / AD-DA225 · 4 / AD-DA225 · 5 / AD-DA250

1B G.01 70 m² · 1B G.02 76 m² · 1B G.03 76 m² · 1B G.04 76 m² · 1B G.05 64 m² · 1B G.06 69 m² · 1B G.07 66 m² · 2B G.08 76 m² · 2B G.09 96 m² · 2B G.10 90 m²

1 AD-DA201

RL 18.893 BOUNDARY · RL 17.960 · RL 17.730 · RL 17.270 · RL 17.000 · RL 16.531 · RL 15.881

REFER TO LANDSCAPE ARCHITECT DWG

RL 17.250 UP · UP · UP · UP · UP

5000

EXT:15 m² · EXT:15 m² · EXT:18 m² · EXT:19 m² · EXT:17 m² · EXT:17 m² · EXT:15 m² · EXT:37 m² · EXT:35 m² · EXT:47 m²

DEEP SOIL ZONE 37sqm RL 16.150 5450

1000

BOUNDARY

FBV

PLANT 29 m² RL 17.250

850

4 AD-DA204 · 3 AD-DA203

1 / AD-DA221

18-24 VICTORIA AVE NEIGHBOURING THROUGH-SITE LINK

RL 17.250

ENTRY LOBBY RL 17.250

STAIR PRESSURE RISER ABOVE

MAIN SWITCH ROOM · TELECOMMUNICATIONS ROOM [22 m²]

PLATFORM LIFT

BIN HOLDING AREA

RL 19.050 · RL 19.050

VOID OVER CARPARK ENTRY

RL 16.050

LOADING

NEIGHBOURING BUILDING BUILT TO BOUNDARY

2-10 STANLEY STREET

GARDEN

STAIR PRESSURE RISER ABOVE

INTAKE SHAFT

DEEP SOIL ZONE 120sqm

REFER TO LANDSCAPE ARCHITECT DWG

6 / AD-DA250

KIOSK

BOUNDARY

1200mm LANE WIDENING DEDICATION

1200

EXT:15 m² · EXT:15 m² · EXT:15 m² · EXT:16 m² · EXT:22 m² · EXT:24 m²

6000 · 1:20

3100

SEWER VENT

RL 18.069 · RL 17.869 · RL 17.721 · RL 17.251 · RL 17.000 · RL 16.773 · RL 16.526 · RL 16.040 · RL 16.022 · RL 16.295

RL 18.655 · RL 17.750 · RL 16.965

1B G.16 73 m² · 1B G.15 69 m² · 1B G.14 69 m² · 2B G.13 81 m² · 2 AD-DA202 · 2B G.12 79 m² · 2B G.11 79 m²

C/L OF LANE

STANLEY LANE

CAR PARK ENTRY

6.1 Average star rating

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

ABSA Australian Building Sustainability Association

Accreditation Period	2018-2019
Assessor Name	Trong Thien Huynh
Assessor Number	20887
Assessor Signature	

HERS Assessments completed within the accreditation period are part of quality assurance system

The accredited Assessor is licensed to use NatHERS Accredited Software and has agreed to follow an Assessor Code of Practice

Certificate no.:	0002717760
Assessor Name:	Trong Huynh
Accreditation no.:	20887
Certificate date:	07 May 2018
Dwelling Address:	Stanley Street Kogarah, NSW 2217

www.nathers.gov.au

0 2 4 6 8 10

[Scale] 1:200 @ A3

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH

[Client] POLY [AUSTRALIA] PTY LTD

GROUND FLOOR PLAN

[Ref] 2017 [Dwg No] AD-DA104 [Rev] 2

[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	7/05/2018 2:07:19 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18

STANLEY STREET

2 / AD-DA222

3 / AD-DA225

5 / AD-DA250

1 AD-DA201

4 / AD-DA225

2B 1.01 76 m²

2B 1.02 96 m²

2B 1.03 84 m²

3B 1.04 101 m²

5150

LINE OF 5m SETBACK

4 AD-DA204

1 / AD-DA221

18-24 VICTORIA AVE

NEIGHBOURING THROUGH-SITE LINK

VOID

EXT:10 m²

EXT:15 m²

EXT:12 m²

3 AD-DA203

NEIGHBOURING BUILDING BUILT TO BOUNDARY

2-10 STANLEY STREET

RL 20.400

4780

EXT:14 m²

EXT:10 m²

6 / AD-DA250

LINE OF 6m SETBACK FROM C/L OF LANE

1200mm LANE WIDENING DEDICATION

2 AD-DA202

2B 1.07 79 m²

2B 1.06 80 m²

2B 1.05 79 m²

STANLEY LANE

C/L OF LANE

6.1 Average star rating

NATIONWIDE HOUSE ENERGY RATING SCHEME

www.nathers.gov.au

Certificate no.: 0002717760
Assessor Name: Trong Huynh
Accreditation no.: 20887
Certificate date: 07 May 2018
Dwelling Address: Stanley Street Kogarah, NSW 2217

www.nathers.gov.au

0 2 6 8 10

[Scale] 1 : 200 @ A3

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH

[Client] POLY [AUSTRALIA] PTY LTD

[Ref] 2017

[Dwg No] AD-DA105 [Rev] 2

LEVEL 01

[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	7/05/2018 2:06:54 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18

STANLEY STREET

2 / AD-DA222

3 / AD-DA225

1 / AD-DA201

4 / AD-DA225

2B	1B	1B	1B	1B	1B	1B	2B	2B	2B	3B
2.01	2.02	2.03	2.04	2.05	2.06	2.07	2.08	2.09	2.10	2.11
84 m²	70 m²	70 m²	70 m²	58 m²	61 m²	59 m²	76 m²	96 m²	84 m²	101 m²

LINE OF 5m SETBACK

4 / AD-DA204

1 / AD-DA221

18-24 VICTORIA AVE

NEIGHBOURING THROUGH-SITE LINK

4780

11420

LINE OF 6m SETBACK FROM C/L OF LANE

1200mm LANE WIDENING DEDICATION

C/L OF LANE

EXT:8 m² EXT:8 m² EXT:8 m² EXT:8 m² EXT:8 m² EXT:8 m² EXT:8 m² EXT:10 m²

EXT:8 m² EXT:8 m² EXT:8 m² EXT:16 m² EXT:10 m²

PLANTER BOX

RL 23.350

PLANTER BOX

EXT:10 m² EXT:15 m² EXT:12 m²

EXT:14 m² EXT:14 m²

3 / AD-DA203

NEIGHBOURING BUILDING BUILT TO BOUNDARY

2-10 STANLEY STREET

1B	1B	1B	2B	2B	2B
2.18	2.17	2.16	2.15	2.14	2.13
65 m²	62 m²	65 m²	77 m²	79 m²	80 m²

2 / AD-DA202

STANLEY LANE

2B 2.12 79 m²

0 2 4 6 8 10

[Scale] 1 : 200 @ A3

Certificate no.: 0002717760
Assessor Name: Trong Huynh
Accreditation no.: 20887
Certificate date: 07 May 2018
Dwelling Address: Stanley Street Kogarah, NSW 2217

6.1 Average star rating

www.nathers.gov.au

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH
[Client] POLY [AUSTRALIA] PTY LTD

[Ref] 2017

[Dwg No] AD-DA106 [Rev] 2

LEVEL 02

[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	7/05/2018 2:06:30 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18

STANLEY STREET

2 / AD-DA222

3 / AD-DA225

1 / AD-DA201

4 / AD-DA225

2B 3.01 76 m²

2B 3.02 96 m²

2B 3.03 84 m²

3B 3.04 101 m²

LINE OF 5m SETBACK

4 / AD-DA204

1 / AD-DA221

18-24 VICTORIA AVE

NEIGHBOURING THROUGH-SITE LINK

VOID

EXT:10 m²

EXT:15 m²

EXT:12 m²

PLANTER BOX

RL 26.400

PLANTER BOX

4780

11420

EXT:10 m²

EXT:14 m²

EXT:14 m²

3 / AD-DA203

NEIGHBOURING BUILDING BUILT TO BOUNDARY

2-10 STANLEY STREET

LINE OF 6m SETBACK FROM C/L OF LANE

1200mm LANE WIDENING DEDICATION

2 / AD-DA202

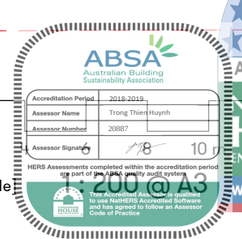
2B 3.07 79 m²

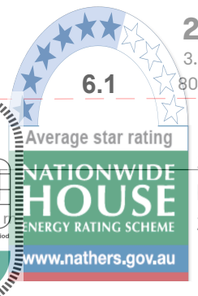
STANLEY LANE

C/L OF LANE

2B 3.06 80 m²

2B 3.05 79 m²





Certificate no.: 0002717760
Assessor Name: Trong Huynh
Accreditation no.: 20887
Certificate date: 07 May 2018
Dwelling Address:
Stanley Street
Kogarah, NSW
2217

www.nathers.gov.au

0 2 4 6 8 10 m

[Scale] 1:200 @ A3

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH

[Client] POLY [AUSTRALIA] PTY LTD

LEVEL 03

[Ref] 2017 [Dwg No] AD-DA107 [Rev] 2

[Status] DA ISSUE
[Nom. Architect] HON DIEC /9232
[File]
[Print Date] 7/05/2018 2:06:12 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18


STANLEY STREET
2 / AD-DA222
3 / AD-DA225
1
AD-DA201
4 / AD-DA225
3B
4.01
105 m²
1B
4.02
57 m²
1B (A)
4.03
53 m²
2B
4.04
80 m²
2B (A)
4.05
75 m²
3B
4.06
103 m²
LINE OF 6m SETBACK
LINE OF 5m SETBACK
EXT:15 m²
EXT:10 m²
EXT:27 m²
EXT:30 m²
EXT:37 m²
EXT:36 m²
4
AD-DA204
1 / AD-DA221
3
AD-DA203
PEBBLES PAVING
PEBBLES PAVING
18-24 VICTORIA AVE
2-10 STANLEY STREET
PLANTER BOX
RL 29.450
PLANTER BOX
UP
UP
EXT:10 m²
EXT:16 m²
EXT:26 m²
EXT:30 m²
EXT:53 m²
LINE OF 6m SETBACK FROM C/L OF LANE
1200mm LANE WIDENING DEDICATION
2
AD-DA202
2B
4.10
87 m²
2B
4.09
73 m²
2B
4.08
84 m²
STANLEY LANE
C/L OF LANE
LINE OF 6m SETBACK

Certificate no.: 0002717760
Assessor Name: Trong Huynh
Accreditation no.: 20887
Certificate date: 07 May 2018
Dwelling Address:
Stanley Street
Kogarah, NSW
2217

6.1
Average star rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
www.nathers.gov.au

ABSA Australian Building Sustainability Association

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au
+61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH
[Client] POLY [AUSTRALIA] PTY LTD

[Scale] 1 : 200 @ A3

LEVEL 04
[Ref] 2017
[Dwg No] AD-DA108 [Rev] 2

[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	7/05/2018 2:05:55 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18

STANLEY STREET

2 / AD-DA222

3 / AD-DA225

4 / AD-DA225

1 AD-DA201

LINE OF 6m SETBACK

LINE OF 8m SETBACK

6050

3B 5.01 105 m²

1B 5.02 59 m²

1B (A) 5.03 53 m²

2B 5.04 81 m²

2B (A) 5.05 74 m²

3B 5.06 103 m²

4 AD-DA204

1 / AD-DA221

18-24 VICTORIA AVE

EXT:12 m²

EXT:8 m²

EXT:8 m²

EXT:10 m²

EXT:10 m²

EXT:10 m²

EXT:10 m²

EXT:10 m²

EXT:12 m²

EXT:10 m²

PLANTER BOX

PLANTER BOX

RL 32.600

7260

8910

3 AD-DA203

2-10 STANLEY STREET

OPAQUE GLAZING

OPAQUE GLAZING

OPAQUE GLAZING

OPAQUE GLAZING

LINE OF 9m SETBACK FROM C/L OF LANE

1200mm LANE WIDENING DEDICATION

C/L OF LANE

2B 5.10 87 m²

2B 5.09 75 m²

2 AD-DA202

2B 5.08 85 m²

STANLEY LANE

2B 5.07 90 m²

LINE OF 6m SETBACK

6.1 Average star rating

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

Certificate no.: 0002717760
Assessor Name: Trong Huynh
Accreditation no.: 20887
Certificate date: 07 May 2018
Dwelling Address: Stanley Street Kogarah, NSW 2217

www.nathers.gov.au

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH

[Client] POLY [AUSTRALIA] PTY LTD

0 2 6 8 10

[Scale] 1: 200 @ A3

[Ref] 2017

[Dwg No] AD-DA109 [Rev] 2

LEVEL 05

[Status] DA ISSUE
[Nom. Architect] HON DIEC /9232
[File]
[Print Date] 7/05/2018 2:05:43 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18

STANLEY STREET
2 / AD-DA222
3 / AD-DA225
1 AD-DA201
4 / AD-DA225
3B 6.01 105 m²
1B 6.02 59 m²
6050
1B(A) 6.03 53 m²
2B 6.04 81 m²
2B(A) 6.05 74 m²
3B 6.06 103 m²
LINE OF 6m SETBACK
LINE OF 8m SETBACK
4 AD-DA204
1 / AD-DA221
18-24 VICTORIA AVE
EXT:12 m²
EXT:8 m²
EXT:8 m²
EXT:10 m²
EXT:10 m²
EXT:12 m²
7260
3 AD-DA203
PLANTER BOX
RL 35.650
UP
8910
2-10 STANLEY STREET
EXT:10 m²
PLANTER BOX
EXT:10 m²
EXT:10 m²
EXT:10 m²
LINE OF 9m SETBACK FROM C/L OF LANE
OPAQUE GLAZING
1200mm LANE WIDENING DEDICATION
2B 6.10 87 m²
2B 6.09 74 m²
2 AD-DA202
2B 6.08 85 m²
STANLEY LANE
2B 6.07 90 m²
C/L OF LANE
LINE OF 6m SETBACK

Certificate no.: 0002717760
Assessor Name: Trong Huynh
Accreditation no.: 20887
Certificate date: 07 May 2018
Dwelling Address:
Stanley Street
Kogarah, NSW
2217
6.1 Average star rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
www.nathers.gov.au

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au
+61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH
[Client] POLY [AUSTRALIA] PTY LTD

0 2 8 10
[Scale] 1 : 200 @ A3

LEVEL 06
[Ref] 2017...
[Dwg No] AD-DA110 [Rev] 2

[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	7/05/2018 2:05:36 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18

Certificate no.: 0002717760
Assessor Name: Trong Huynh
Accreditation no.: 20887
Certificate date: 07 May 2018
Dwelling Address:
Stanley Street
Kogarah, NSW
2217

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

ABSA Australian Building Sustainability Association

0 2 8 10
[Scale] 1 : 200 @ A3

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au
+61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH
[Client] POLY [AUSTRALIA] PTY LTD

LEVEL 07
[Ref] 2017 [Dwg No] AD-DA111 [Rev] 2

[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	7/05/2018 2:05:28 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18

Certificate no.:	0002717760
Assessor Name:	Trong Huynh
Accreditation no.:	20887
Certificate date:	07 May 2018
Dwelling Address:	Stanley Street Kogarah, NSW 2217

6.1
Average star rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
www.nathers.gov.au

ABSA Australian Building Sustainability Association

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au
+61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH

[Client] POLY [AUSTRALIA] PTY LTD

0 2 8 10 [Scale] 1 : 200 @ A3

[Ref] 2017

LEVEL 08

[Dwg No] AD-DA112 [Rev] 2

[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	7/05/2018 2:05:20 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18

STANLEY STREET

2 / AD-DA222

1 AD-DA201

3 / AD-DA225

4 / AD-DA225

3B 9.01 105 m²

1B 9.02 59 m²

1B (A) 9.03 53 m²

2B 9.04 81 m²

2B (A) 9.05 74 m²

3B 9.06 103 m²

LINE OF 6m SETBACK

6050

LINE OF 8m SETBACK

4 AD-DA204

1 / AD-DA221

EXT:12 m² EXT:8 m² EXT:8 m² EXT:10 m² EXT:10 m² EXT:12 m²

7260

3 AD-DA203

PLANTER BOX

RL 44.800

PLANTER BOX

8910

18-24 VICTORIA AVE

2-10 STANLEY STREET

EXT:10 m² EXT:10 m² EXT:10 m² EXT:10 m²

LINE OF 9m SETBACK FROM C/L OF LANE

OPAQUE GLAZING OPAQUE GLAZING OPAQUE GLAZING OPAQUE GLAZING

1200mm LANE WIDENING DEDICATION

2B 9.10 87 m²

2B 9.09 74 m²

2 AD-DA202

2B 9.08 84 m²

STANLEY LANE

2B 9.07 90 m²

LINE OF 6m SETBACK

C/L OF LANE

0 2

[Scale] 1:200 @ A3

ABSA Australian Building Sustainability Association

Accreditation Period	2018-2019
Assessor Name	Trong Thien Huynh
Assessor Number	20887
Assessor Signature	

HERS Assessments completed within the accreditation period are part of the ABSA quality audit system

Accredited Assessor authorised to use NatHERS Accredited Software and has agreed to follow an Assessor Code of Practice

6.1 Average star rating

NATIONWIDE HOUSE ENERGY RATING SCHEME

www.nathers.gov.au

Certificate no.:	0002717760
Assessor Name:	Trong Huynh
Accreditation no.:	20887
Certificate date:	07 May 2018
Dwelling Address:	Stanley Street Kogarah, NSW 2217

www.nathers.gov.au

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH

[Client] POLY [AUSTRALIA] PTY LTD

[Ref] 2017

[Dwg No] AD-DA113 [Rev] 2

LEVEL 09

[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	7/05/2018 2:05:12 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18

STANLEY STREET
2 / AD-DA222
3 / AD-DA225
4 / AD-DA225
1 AD-DA201
3B 10.01 105 m²
2B 10.02 85 m²
3B 10.03 112 m²
6050
LINE OF 6m SETBACK
LINE OF 8m SETBACK
4 AD-DA204
1 / AD-DA221
18-24 VICTORIA AVE
EXT:12 m²
EXT:10 m²
EXT:12 m²
PLANTER BOX
LANDSCAPE ROOFTOP - REFER TO LANDSCAPE ARCHITECT DWG
LINE OF ROOF FEATURE ABOVE
COMMUNAL ROOF GARDEN 344m2
ROOFTOP PERGOLA ABOVE
RL 47.850
HOT WATER PLANT
UP
PLANTER BOX
3 AD-DA203
2-10 STANLEY STREET
EXT:10 m²
EXT:10 m²
EXT:10 m²
LINE OF 9m SETBACK FROM C/L OF LANE
OPAQUE GLAZING
1200mm LANE WIDENING DEDICATION
2B 10.06 87 m²
2B 10.05 74 m²
2 AD-DA202
2B 10.04 84 m²
STANLEY LANE
C/L OF LANE
LINE OF 6m SETBACK

Certificate no.:	0002717760
Assessor Name:	Trong Huynh
Accreditation no.:	20887
Certificate date:	07 May 2018
Dwelling Address:	Stanley Street Kogarah, NSW 2217

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

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au
+61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH

[Client] POLY [AUSTRALIA] PTY LTD

[Scale] 1 : 200 @ A3

LEVEL 10

[Ref] 2017... [Dwg No] AD-DA114 [Rev] 2

[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	7/05/2018 2:05:04 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18

STANLEY STREET

2 / AD-DA222

3 / AD-DA225

1 AD-DA201

4 / AD-DA225

LINE OF 6m SETBACK

LINE OF 8m SETBACK

4 AD-DA204

1 / AD-DA221

3 AD-DA203

ANTENNA AND SATELLITE DISH

SPR

RL 50.800

COOLING TOWER

CWR

LADDER FROM LEVEL 10 TO ROOF

CEX

SP

18-24 VICTORIA AVE

2-10 STANLEY STREET

LINE OF 9m SETBACK

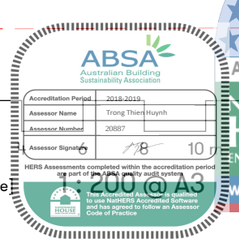
1200mm LANE WIDENING DEDICATION

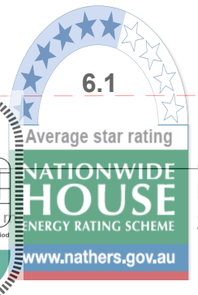
2 AD-DA202

STANLEY LANE

C/L OF LANE

LINE OF 6m SETBACK





Certificate no.: 0002717760
Assessor Name: Trong Huynh
Accreditation no.: 20887
Certificate date: 07 May 2018
Dwelling Address:
Stanley Street
Kogarah, NSW
2217

www.nathers.gov.au

scott_carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH

[Client] POLY [AUSTRALIA] PTY LTD

0 2

[Scale] 1:200 @ A3

[Ref] 2017

[Dwg No] AD-DA115 [Rev] 2

LEVEL 11

LEGEND - MATERIAL FINISHES

Keynote Text

LIGHT GREY CONCRETE

COLOURED COMPOSITE TIMEBER

BEAUSTRADE

SLAND

[Status] DA ISSUE

[Nom. Architect] HON DIEC /9232

[File]

[Print Date] 7/05/2018 1:56:17 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH

[Client] POLY [AUSTRALIA] PTY LTD

0 2 4 6 8 10 m

[Scale] 1 : 250 @ A3

NORTH ELEVATION - STANLEY STREET

[Ref] 20170107 [Dwg No] AD-DA201 [Rev] 2

LEGEND - MATERIAL FINISHES

Keynote Text

LIGHT GREY CONCRETE

COLOURED COMPOSITE TIMEBER

BEAUSTRADE

S AND

[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	7/05/2018 1:39:18 PM

History

[Rev#]	[Description]	[Date]
1	ISSUED FOR DA	04/05/18

PROPOSED 18-24a VICTORIA STREET

SITE BOUNDARY

PROPOSED NEIGHBOURING THROUGH SITE LINK

PRIVACY SCREENS

10 STOREYS RL 51.900

PRIVACY SCREENS

PRIVACY SCREENS

EXTERNAL GARDEN SKY BRIDGE

RL 51.950

PRIVACY SCREENS

9 STOREYS RL 48.850

33 METRE LEP HEIGHT CONTROL PLANE

SITE BOUNDARY

PROPOSED 2-10 STANLEY STREET

LEVEL 13 RL 57.850
LEVEL 12 RL 53.850
LEVEL 11 RL 50.800
LEVEL 10 RL 47.750
LEVEL 9 RL 44.700
LEVEL 8 RL 41.650
LEVEL 7 RL 38.600
LEVEL 6 RL 35.550
LEVEL 5 RL 32.500
LEVEL 4 RL 29.450
LEVEL 3 RL 26.400
LEVEL 2 RL 23.350
LEVEL 1 RL 20.300
GROUND FLOOR RL 17.250
BASEMENT 1 RL 14.250

RESIDENTIAL ENTRANCE

CAR PARK ENTRY

LOADING ENTRY

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.
au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH

[Client] POLY [AUSTRALIA] PTY LTD

0 2 4 6 8 10 m

[Scale] 1 : 250 @ A3

SOUTH ELEVATION - STANLEY LANE

[Ref] 20170107 [Dwg No] AD-DA202 [Rev] 1

PROPOSED 58-68
REGENT STREET

PROPOSED 70-78
REGENT STREET

SITE BOUNDARY

RL 53.800

9 STOREYS
RL 48.850

STANLEY LANE

STANLEY STREET

PROPOSED 11 & 28-36
STANLEY & VICTORIA STREET

1001

2001

1002

3002

1001

LEVEL 12
RL 53.850

LEVEL 11
RL 50.800

LEVEL 10
RL 47.750

LEVEL 9
RL 44.700

LEVEL 8
RL 41.650

LEVEL 7
RL 38.600

LEVEL 6
RL 35.550

LEVEL 5
RL 32.500

LEVEL 4
RL 29.450

LEVEL 3
RL 26.400

LEVEL 2
RL 23.350

LEVEL 1
RL 20.300

GROUND FLOOR
RL 17.250

LEGEND - MATERIAL FINISHES

Keynote Text

LIGHT GREY CONCRETE

COLOURED COMPOSITE TIMEBER

BEAUSTRADE

S AND

Certificate no.: 0002717760
Assessor Name: Tong Huynh
Accreditation no.: 20887
Certified: 07 May 2018

Average star rating 6.1

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

[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	7/05/2018 1:09:12 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH
[Client] POLY [AUSTRALIA] PTY LTD

0 2 4 6 8 10 m
[Scale] 1 : 250 @ A3

EAST ELEVATION

[Ref] 20170107 [Dwg No] AD-DA203 [Rev] 2

LEGEND - MATERIAL FINISHES

Keynote Text

LIGHT GREY CONCRETE

COLOURED COMPOSITE TIMEBER

BEAUSTRADE

SAND

1001

2001

1002

PROPOSED 11 & 28-36
STANLEY &
VICTORIA STREET

SITE BOUNDARY

10 STOREYS
RL 51.950

SITE BOUNDARY

PROPOSED 58-68
REGENT STREET

STANLEY STREET

STANLEY LANE

EXISTING
DETACHED DWELLING

LEVEL 13
RL 57.850

LEVEL 12
RL 53.850

LEVEL 11
RL 50.800

LEVEL 10
RL 47.750

LEVEL 9
RL 44.700

LEVEL 8
RL 41.650

LEVEL 7
RL 38.600

LEVEL 6
RL 35.550

LEVEL 5
RL 32.500

LEVEL 4
RL 29.450

LEVEL 3
RL 26.400

LEVEL 2
RL 23.350

LEVEL 1
RL 20.300

GROUND FLOOR
RL 17.250

[Status] DA ISSUE
[Nom. Architect] HON DIEC /9232
[File]
[Print Date] 7/05/2018 1:08:38 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH
[Client] POLY [AUSTRALIA] PTY LTD

0 2 4 6 8 10 m
[Scale] 1 : 250 @ A3

WEST ELEVATION
[Ref] 20170107 [Dwg No] AD-DA204 [Rev] 2

0002717760
Trong Huynh
20887
07 May 2018

Certificate no.:
Assessor Name:
Accreditation no.:
Certified

[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	4/05/2018 8:38:19 PM

History

[Rev#]	[Description]	[Date]
1	ISSUED FOR DA	04/05/18

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au
+61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH
[Client] POLY [AUSTRALIA] PTY LTD

0 5 10 15 20 25 m
[Scale] 1 : 500 @ A3

STREETSCAPE ELEVATION - STANLEY STREET

[Ref] 20170107 [Dwg No] AD-DA205 [Rev] 1

Certificate no.: 0002717760
Assessor Name: Trong Huynh
Accreditation no.: 20887
Certified: 07 May 2018

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

[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	4/05/2018 8:37:34 PM

History

[Rev#]	[Description]	[Date]
1	ISSUED FOR DA	04/05/18

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH
[Client] POLY [AUSTRALIA] PTY LTD

0 5 10 15 20 25 m
[Scale] 1 : 500 @ A3

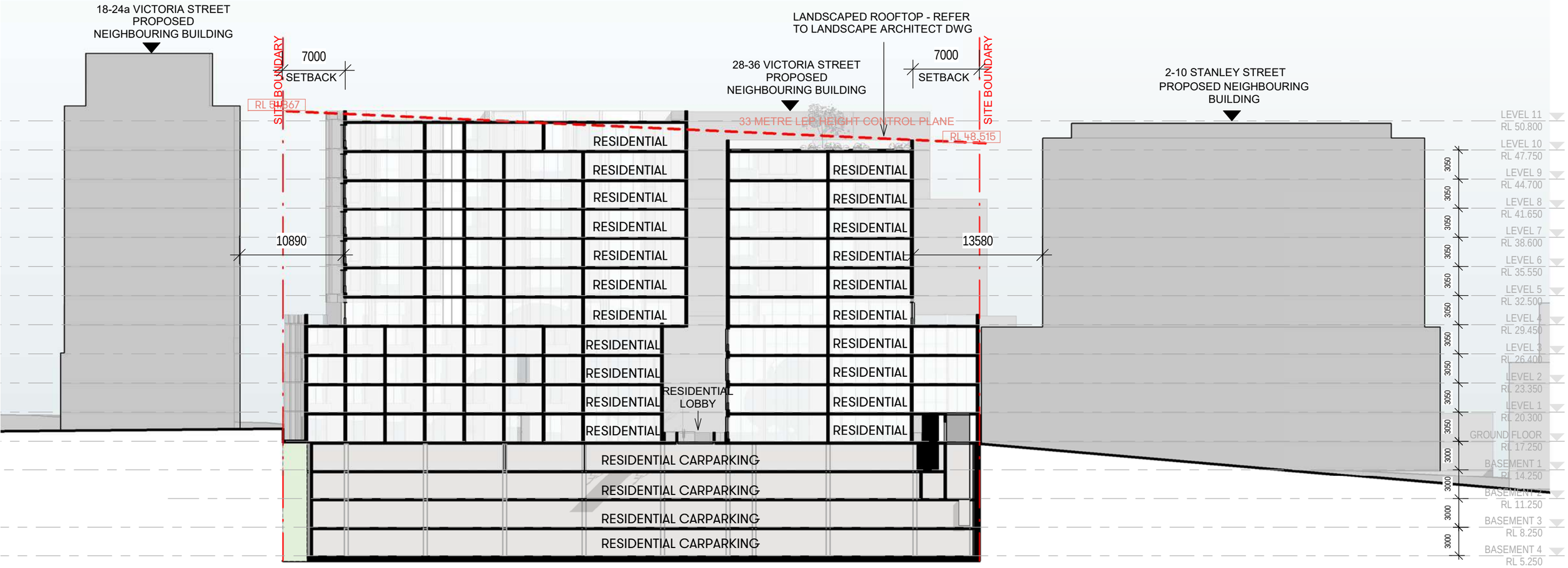
STREETSCAPE ELEVATION - STANLEY LANE

[Ref] 20170107 [Dwg No] AD-DA206 [Rev] 1

[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	7/05/2018 1:37:41 PM

History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18



Certificate no.:	0002717760
Assessor Name:	Trong Huynh
Accreditation no.:	20887
Certificate date:	07 May 2018
Dwelling Address:	Stanley Street Kogarah, NSW 2217

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

www.nathers.gov.au

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH
[Client] POLY [AUSTRALIA] PTY LTD

0 2 [Scale] @ A3

[Ref] 2017

[Dwg No] AD-DA221 [Rev] 2

LONG SECTION

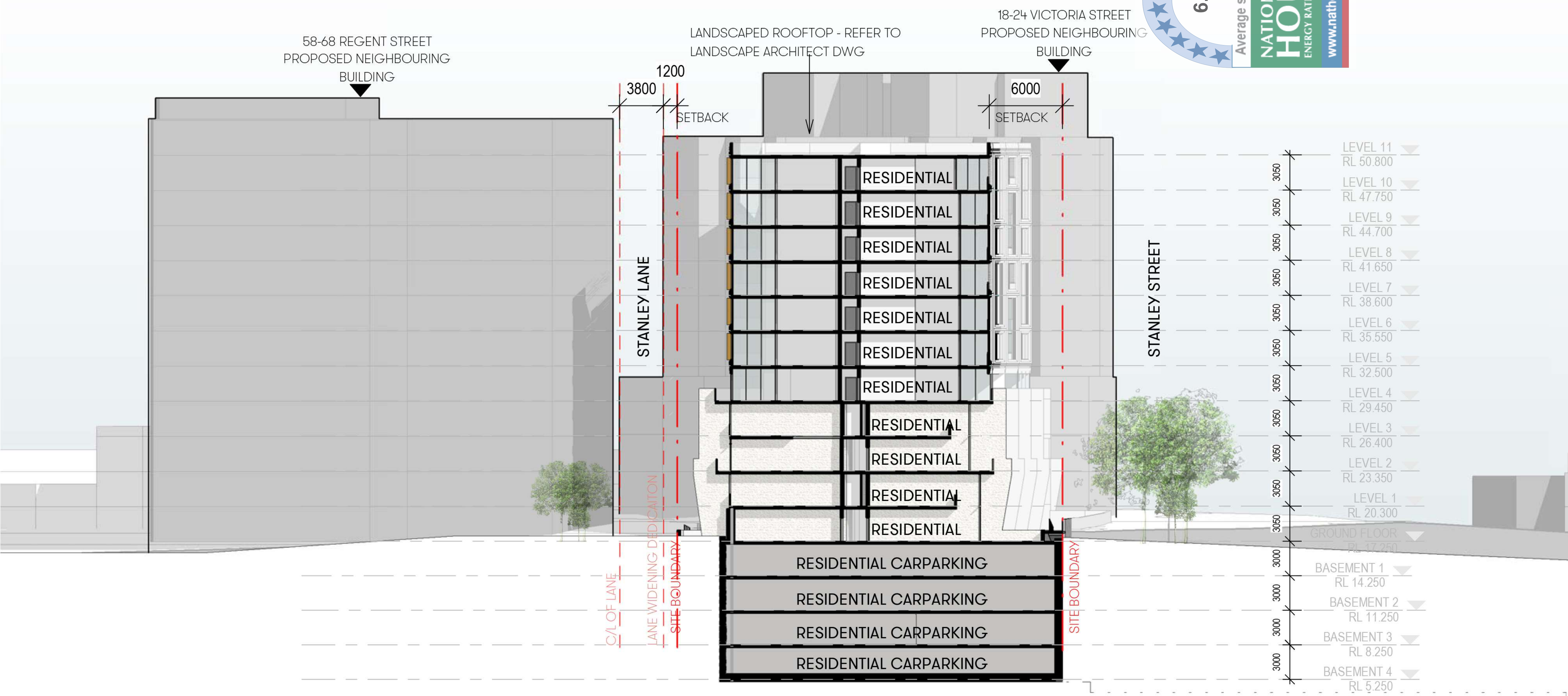
[Status] DA ISSUE
[Nom. Architect] HON DIEC /9232
[File]
[Print Date] 4/05/2018 8:23:44 PM

History

[Rev#]	[Description]	[Date]
1	ISSUED FOR DA	04/05/18

Certificate no.: 0002717760
Assessor Name: Trong Huynh
Accreditation no.: 20887
Certificate date: 07 May 2018

Average star rating 6.1
NATIONWIDE HOUSE ENERGY RATING SCHEME
www.nathers.gov.au



scott carver

Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH
[Client] POLY [AUSTRALIA] PTY LTD

0 2.5 5 7.5 10 12.5 m
[Scale] 1 : 400 @ A3

SHORT SECTION
[Ref] 20170107 [Dwg No] AD-DA222 [Rev] 1

LEGEND - MATERIAL FINISHES

Key Value	Keynote Text
1001	LIGHT GREY CONCRETE
1002	CONCRETE
2001	WESTERN RED CEDAR / COLOURED COMPOSITE TIMEBER
3001	CLEAR GLAZING
3002	OBSCURE GLAZING
4002	BALUSTRADE
4004	UPSTAND

[Status] DA ISSUE
[Nom. Architect] HON DIEC /9232
[File]
[Print Date] 7/05/2018 1:08:11 PM

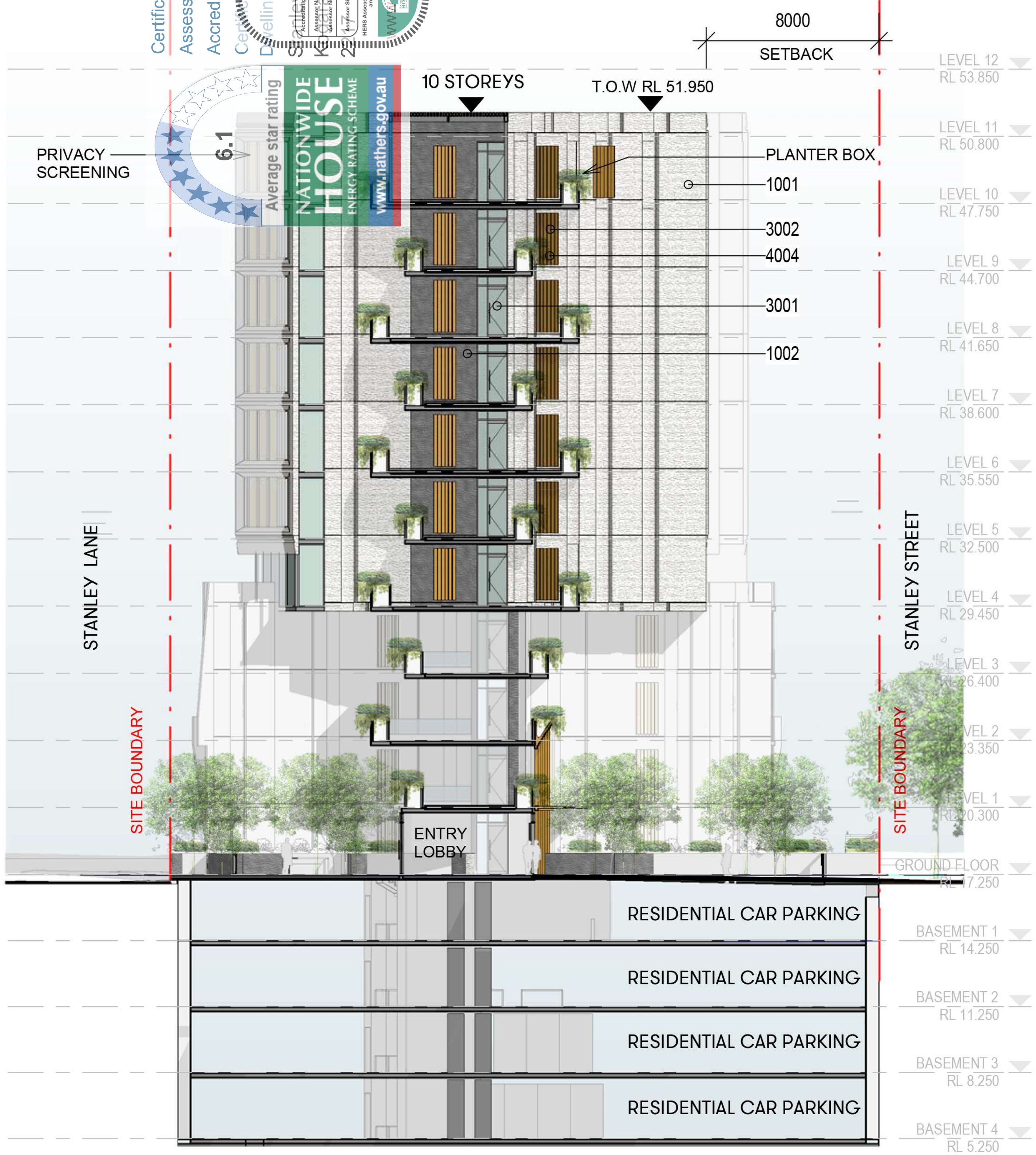
History

[Rev#]	[Description]	[Date]
2	ISSUED FOR DA	07/05/18

Certificate no.: 0002717760
Assessor Name: Trong Huynh
Accreditation no.: 20887
Certificate date: 07 May 2018

NATIONWIDE HOUSE ENERGY RATING SCHEME
www.nathers.gov.au
Average star rating 6.1
ABSA

BREEZEWAY - EAST SECTION



BREEZEWAY - WEST SECTION

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au
+61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH
[Client] POLY [AUSTRALIA] PTY LTD

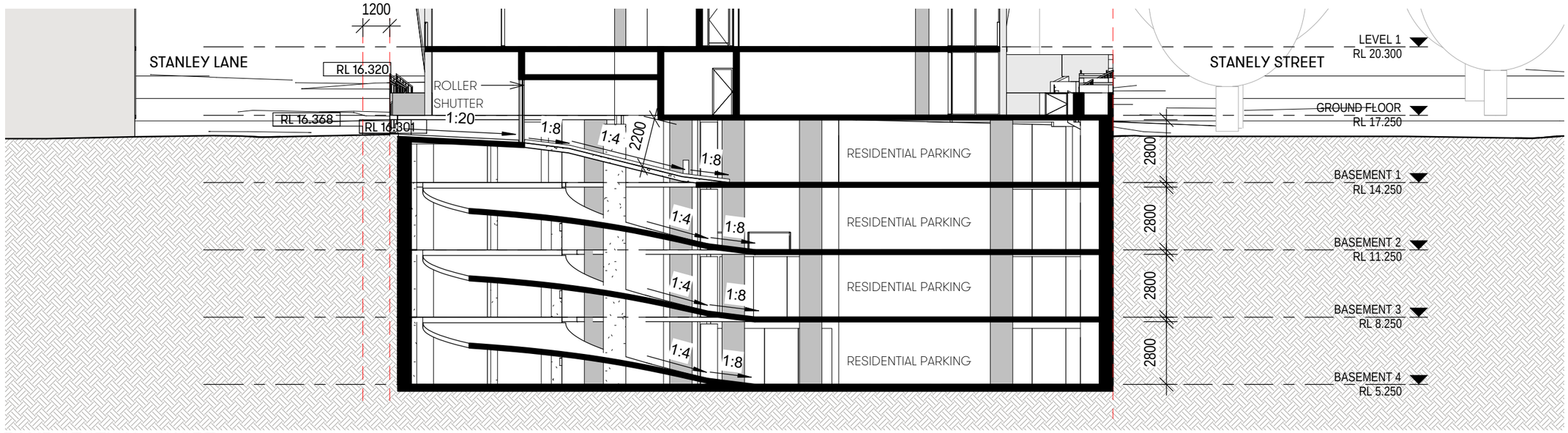
0 2.5 5 7.5 10 12.5 m
[Scale] 1 : 250 @ A3

SKY BRIDGE SECTIONS
[Ref] 20170107 [Dwg No] AD-DA225 [Rev] 2

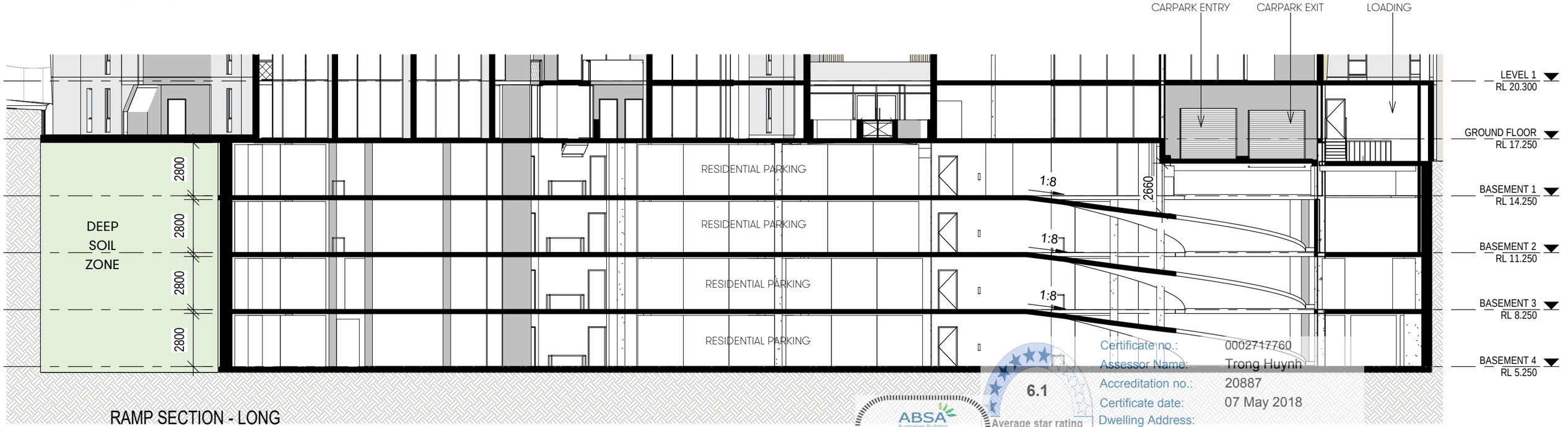
[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	4/05/2018 8:21:08 PM

History

[Rev#]	[Description]	[Date]
1	ISSUED FOR DA	04/05/18



RAMP SECTION - SHORT



RAMP SECTION - LONG

Certificate no.: 0002717760
Assessor Name: Trong Huynh
Accreditation no.: 20887
Certificate date: 07 May 2018
Dwelling Address:
Stanley Street
Kogarah, NSW
2217

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

ABSA Australian Building Sustainability Association
Accreditation Period: 2018-2019
Assessor Name: Trong Thien Huynh
Assessor Number: 20887
Assessor Signature:
HERS Assessments completed within the accreditation period are part of the ABSA quality audit system
Trong Thien Huynh is accredited to use NatHERS Accredited Software and has agreed to follow an Assessor Code of Practice

www.nathers.gov.au

[Ref] 2017-113

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au +61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH
[Client] POLY [AUSTRALIA] PTY LTD

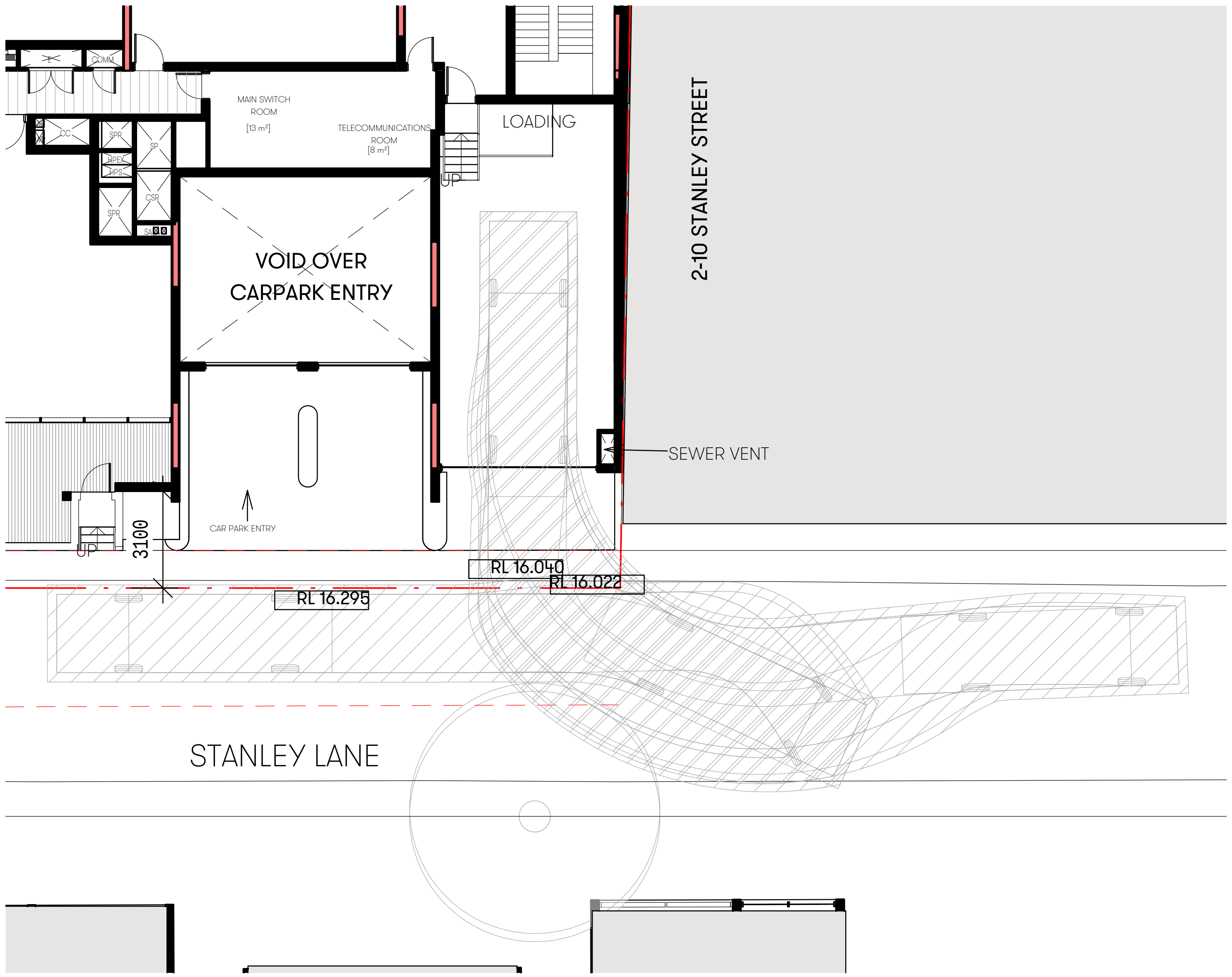
0 2.5 5 10 12.5
[Scale] 1 : 200 @ A3

RAMP SECTIONS
[Dwg No] AD-DA250 [Rev] 1

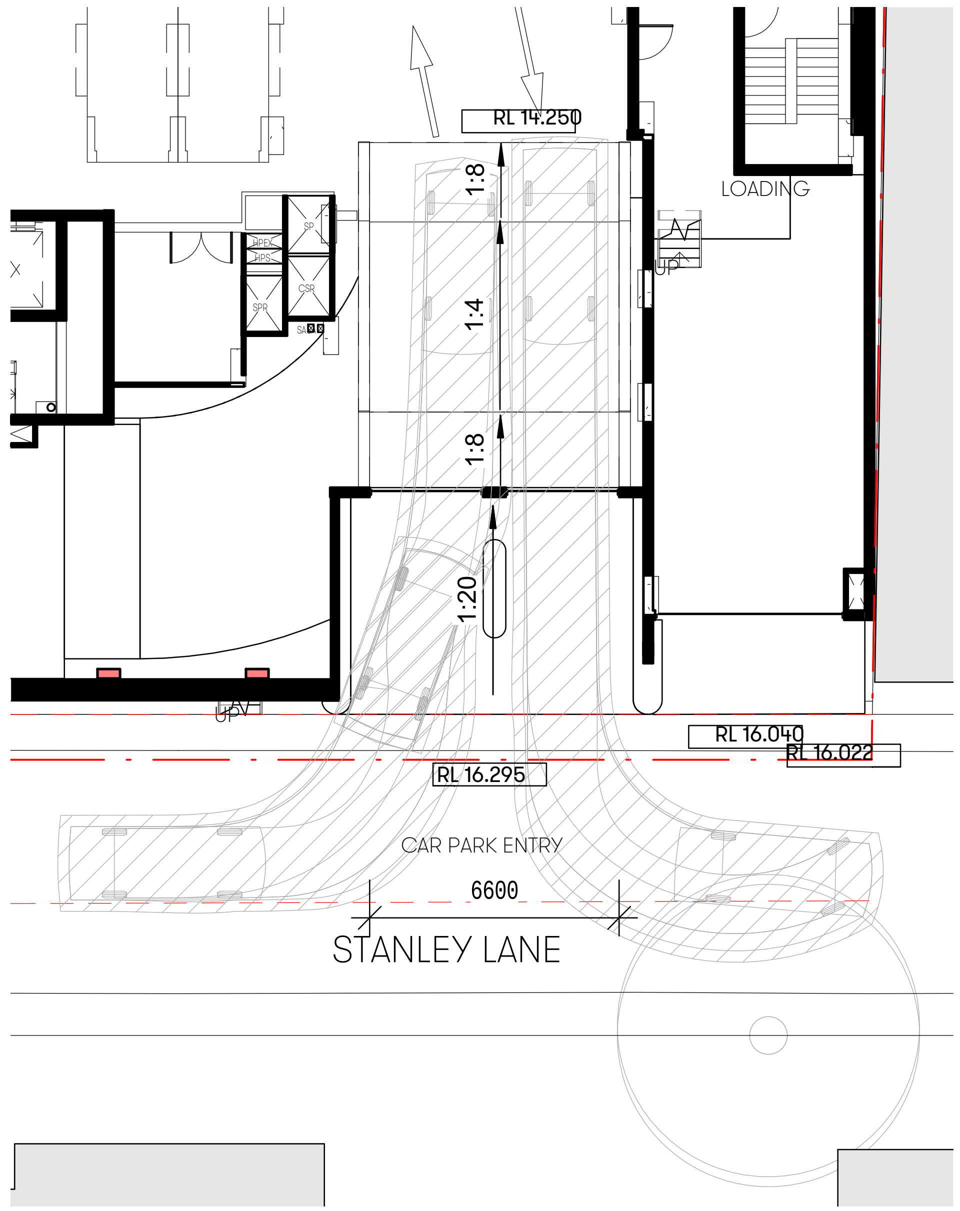
[Status]	DA ISSUE
[Nom. Architect]	HON DIEC /9232
[File]	
[Print Date]	4/05/2018 8:20:47 PM

History

[Rev#]	[Description]	[Date]
1	ISSUED FOR DA	04/05/18



LOADING ENTRY



RESIDENTIAL ENTRY

6.1
Average star rating
NATIONWIDE HOUSE
ENERGY RATING SCHEME
www.nathers.gov.au

Certificate no.:	0002717760
Assessor Name:	Trong Huynh
Accreditation no.:	20887
Certificate date:	07 May 2018
Dwelling Address:	Stanley Street Kogarah, NSW 2217

www.nathers.gov.au

scott carver
Level One, One Chifley Square
Sydney NSW 2000 Australia
www.scottcarver.com.au
+61 2 9957 3988

[Project] 12-24 STANLEY STREET, KOGARAH

[Client] POLY [AUSTRALIA] PTY LTD

0 2 10

[Scale] 1 : 200 @ A3

VE... ENTRY RAMP PLANS

[Ref] 2017...

[Dwg No] AD-DA251 [Rev] 1