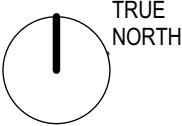




- SUBJECT SITE
- NEIGHBOURING DA
- PARKS
- B BUS STOPS
- T TRAIN STATION
- BUILDINGS
NOTE: ONLY BUILDINGS ON NEIGHBOURING LOTS AND HOSPITAL ARE SHOWN



C	18/11/16	DEVELOPMENT APPLICATION AMENDMENT	CR
B	9/11/16	1	CR
A	9/9/16	UPDATED CODING	CR
		DEVELOPMENT APPLICATION ISSUE	CR
No.	Date	REVISIONS	By

PROJECT DEVELOPER

pamada

ARCHITECT:
Eeles Trelease Pty Ltd architects

PLANNING **33F** Planners

LANDSCAPE ARCHITECT **dila**

Drawn By | CR
Reviewed By | RY/BE
Dwg Date:
CAD File Name |

HARGRAVE APARTMENTS
1-5 HARGRAVE STREET AND 38-40 ORTH STREET, KINGSWOOD
CLIENT : **pamada**
SITE ANALYSIS PLAN
SCALE 1:5000 @ A3

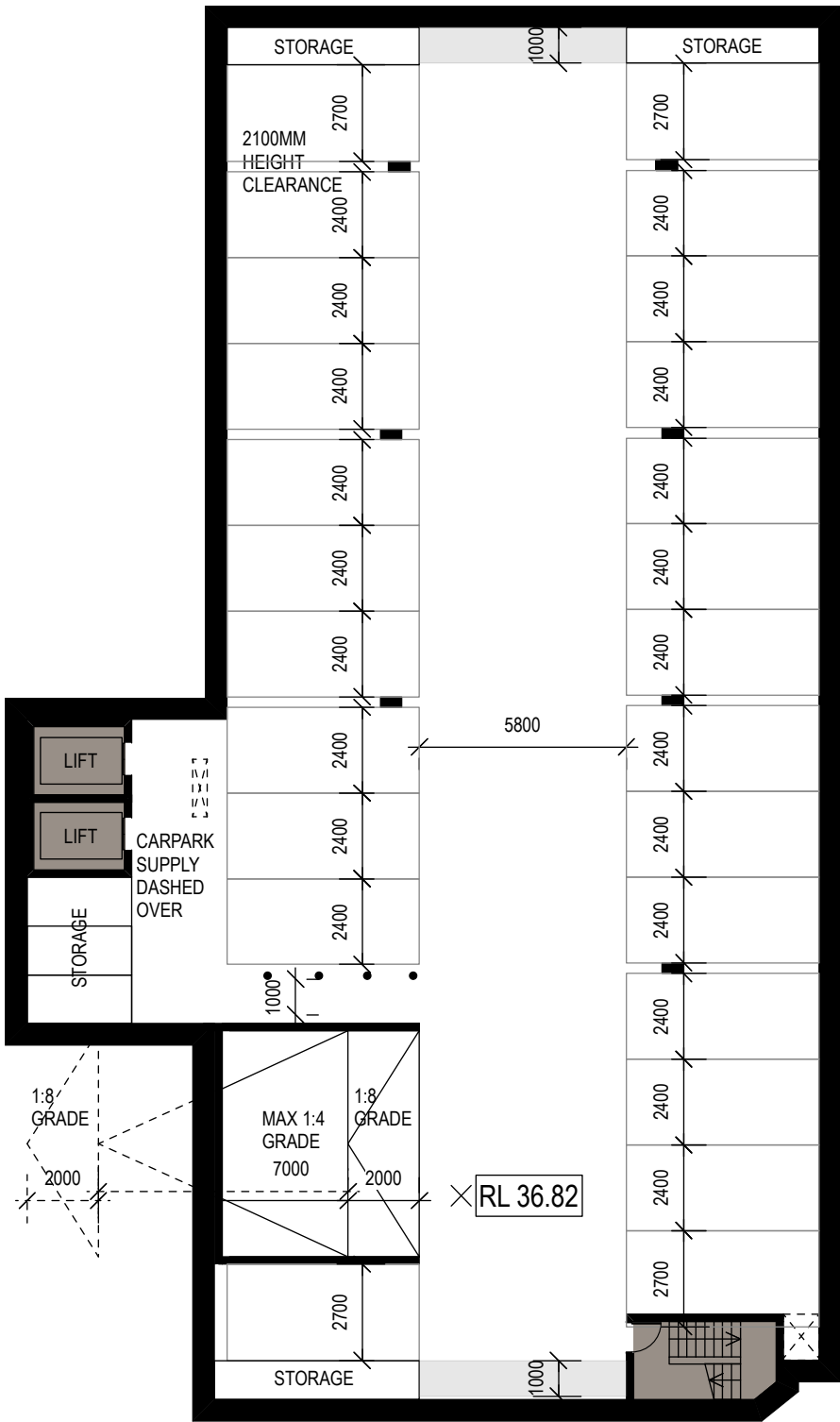
Project No. **1609**
Drawing No. **DA-003 C**
Revision #

BOUNDARY

BOUNDARY

BOUNDARY

BOUNDARY



Nathers specifications

External Walls: AAC 100mm; Reflective Foil: R1.5 insul.; plasterboard (light colour)
Internal Walls:
- Within Units: Plasterboard on studs (no insulation)
- Intertency Walls/corridor: plasterboard; air gap: R1.5 insul.; plasterboard
Windows: Aluminium SG Clear: U = 6.70; SHGC = 0.70 - **SEE TABLE FOR ADDITIONAL REQUIREMENTS**
Roof: Concrete slab 150mm - Drained Tile walking surface - no insulation - Susp. Ceiling under (light colour)-**SEE TABLE FOR UNITS REQUIRING INSUL.**
Ceiling: plasterboard (no insul.)
Floor: Concrete (no insul.) - **SEE TABLE FOR UNITS REQUIRING INSUL.**
Floor Covering: ceramic tiles in wet areas, carpet in beds and timber elsewhere
Downlights: must be sealed
Exhaust Fans: must be sealed

ALL SYSTEMS AND FIXTURES INSTALLED IN ACCORDANCE WITH TYPE AND SPECIFICATION BELOW

CENTRAL ENERGY SYSTEMS	TYPE	SPECIFICATION
LIFT (NO.1)	Gearless traction with V V V F motor	Number of levels (including basement): 10
LIFT (NO.2)	Gearless traction with V V V F motor	Number of levels (including basement): 10
LIFT (NO.3)	Gearless traction with V V V F motor	Number of levels (including basement): 9
LIFT (NO.4)	Gearless traction with V V V F motor	Number of levels (including basement): 9

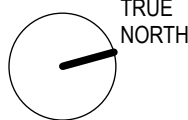
B03

25 RESIDENTIAL (R)

Units	Additional Requirements
1	R2.5 insul. in floor+Aluminium SG High Solar Gain Low-E: U = 5.40; SHGC = 0.58
2	R2.0 insul. in floor
3	R2.0 insul. in floor
4	R2.0 insul. in floor
5	R2.0 insul. in floor +Aluminium DOUBLE GLAZED Air Fill Low Solar Gain low-E -Clear: U = 4.90; SHGC = 0.33
6	R2.0 insul. in floor+Aluminium SG High Solar Gain Low-E: U = 5.40; SHGC = 0.58
7	R2.0 insul. in floor+East Windows: External louvres + Al Thermally Broken DOUBLE Glazed Air Fill TINT-Clear: U = 3.60; SHGC = 0.23 +South Glazing: Al Thermally Broken DOUBLE Glazed Argon Fill High Solar Gain low-E -Clear: U = 2.90; SHGC = 0.51
8	R2.0 insul. in floor+Aluminium DOUBLE Glazed Air Fill High Solar Gain low-E -Clear: U = 4.30; SHGC = 0.53
9	R2.0 insul. in floor over fire stairs and corridor.
42	Aluminium SG Low Solar Gain Low-E: U = 5.60; SHGC = 0.41
49	R2.0 insulation in ceiling below concrete tiled surface.
51	Aluminium SG Low Solar Gain Low-E: U = 5.60; SHGC = 0.41
54	R2.0 insulation in ceiling/roof +Aluminium SG High Solar Gain Low-E: U = 5.40; SHGC = 0.58
55	R2.0 insulation in ceiling/roof +Aluminium SG High Solar Gain Low-E: U = 5.40; SHGC = 0.58
56	R2.0 insulation in ceiling/roof +Aluminium SG High Solar Gain Low-E: U = 5.40; SHGC = 0.58
57	R2.0 insulation in ceiling/roof + Aluminium SG High Solar Gain Low-E: U = 5.40; SHGC = 0.58
58	R2.0 insulation in ceiling/roof
59	R2.0 insulation in ceiling/roof +Aluminium DOUBLE Glazed Air Fill Low Solar Gain low-E -Clear: U = 4.90; SHGC = 0.33
60	R2.0 insulation in ceiling/roof
61	R2.0 insulation in ceiling/roof
63	R2.0 insul. in floor +Aluminium DOUBLE Glazed Air Fill High Solar Gain low-E -Clear: U = 4.30; SHGC = 0.47
64	R2.0 insul. in floor +Aluminium DOUBLE Glazed Air Fill Low Solar Gain low-E -Clear: U = 4.90; SHGC = 0.33
65	R2.0 insul. in floor +Aluminium DOUBLE Glazed Air Fill High Solar Gain low-E -Clear: U = 4.30; SHGC = 0.47
66	R2.0 insul. in floor +Aluminium SG Low Solar Gain Low-E: U = 5.60; SHGC = 0.36
67	R2.0 insul. in floor +Aluminium SG High Solar Gain Low-E: U = 5.40; SHGC = 0.49
68	R2.0 insul. in floor
69	R2.0 insul. in floor +Aluminium DOUBLE Glazed Air Fill High Solar Gain low-E -Clear: U = 4.30; SHGC = 0.47
71	R2.0 insul. in floor
111	R2.0 insulation in ceiling/roof
112	R2.0 insulation in ceiling/roof
115	R2.0 insulation in ceiling/roof +Aluminium DOUBLE Glazed Air Fill High Solar Gain low-E -Clear: U = 4.30; SHGC = 0.47
116	R2.0 insulation in ceiling/roof
117	R2.0 insulation in ceiling/roof
118	R2.0 insulation in ceiling/roof
119	R2.0 insulation in ceiling/roof
120	R2.0 insulation in ceiling/roof
121	R2.0 insulation in ceiling/roof

ALL FLOORS AND WALLS CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS LISTED BELOW:			BOUNDARY		
THERMAL LOADS					
DWELLING NO.	AREA ADJUSTED HEATING LOAD (IN mJ/m ² /yr)	AREA ADJUSTED COOLING LOAD (IN mJ/m ² /yr)			
1	87.7	50.5	28	76.8	47.5
2	79.8	76.9	29	84.5	83.1
3	63.7	75.6	30	47.2	40.7
4	69.3	35.1	31	25.2	30.1
5	82.6	71.7	32	43.1	27.7
6	46.8	73.4	33	72.0	89.5
7	85.3	78.3	34	40.0	48.6
8	78.9	42.9	35	35.5	37.8
9	76.3	38.4	36	70.0	37.8
10	75.2	47.5	37	77.5	47.5
11	82.6	85.7	38	25.5	29.7
12	46.1	41.0	39	25.5	29.8
13	24.3	30.3	40	85.3	82.9
14	42.2	27.9	41	43.5	27.6
15	68.2	87.7	42	70.8	77.6
16	38.8	49.0	43	40.7	48.6
17	34.4	37.9	44	36.0	37.7
18	68.3	39.0	45	70.7	37.6
19	75.8	48.0	46	78.3	46.8
20	83.3	84.6	47	86.3	81.8
21	46.5	40.7	48	42.3	37.6
22	24.6	30.2	49	40.4	35.9
23	35.1	43.1	50	42.3	27.6
24	68.6	90.4	51	63.5	87.2
25	39.3	48.7	52	41.2	48.5
26	34.8	37.9	53	36.5	37.3
27	69.2	38.4	54	77.6	39.2
			55	84.6	49.0
			56	88.0	78.4
			57	75.6	81.1
			58	63.6	31.2
			59	67.2	76.6
			60	62.6	52.7
			61	54.7	45.7
			62		
			63	26.2	69.9
			64	66.1	85.1
			65	77.4	87.5
			66	67.9	89.3
			67	83.0	71.6
			68	86.1	87.5
			69	80.3	81.9
			70	82.0	66.9
			71	80.5	62.0
			72	53.4	34.6
			73	34.9	50.7
			74	59.5	54.4
			75	51.1	51.0
			76	22.5	28.1
			77	41.7	40.1
			78	33.5	32.5
			79	50.9	49.8
			80	87.8	31.0
			81	63.3	31.9
			82	60.1	54.0
			83	56.0	49.9
			84	51.7	50.7
			85	39.1	36.2
			86	65.3	51.4
			87	50.7	38.4
			88	82.0	60.5
			89	63.5	30.6
			90	58.6	31.5
			91	61.0	53.7
			92	56.8	50.0
			93	52.5	50.0
			94	39.6	35.3
			95	66.1	51.2
			96	51.3	38.2
			97	82.7	59.9
			98		
			99	64.2	30.5
			100	59.3	31.7
			101	61.8	53.6
			102	57.5	49.0
			103	54.3	49.9
			104	40.1	34.8
			105	66.7	49.6
			106	51.9	38.5
			107	83.4	60.1
			108	64.8	30.2
			109	59.9	31.7
			110	62.5	53.5
			111	58.1	49.1
			112	72.9	54.5
			113	61.2	43.8
			114	67.3	49.1
			115	52.6	38.0
			116	75.4	48.1
			117	83.0	35.8
			118	79.5	37.2
			119	75.9	55.8
			120	74.7	54.9
			121	86.9	54.4
				72.4	41.3

NOTES
EXTERNAL WALL THICKNESS TO BE
CONFIRMED SUBSEQUENT TO STRUCTURAL
ENGINEER'S ADVICE



No.	Date	REVISIONS	By
D	17/11/16	DEVELOPMENT APPLICATION ISSUE 01	MJ
C	4/10/16	BASIX/NATHERS COMPLIANCE TABLE	AA
A	21/9/16	ADDED	AA
A	9/9/16	UPDATED DA ISSUE	AA
A		DEVELOPMENT APPLICATION ISSUE	AA

PROJECT DEVELOPER

pamada

ARCHITECT:

Eeles Trelease

pty ltd architects

PLANNING

33F Planners

LANDSCAPE ARCHITECT



Drawn By AA

Reviewed By RY/BE

Dwg Date:

CAD File Name

HARGRAVE APARTMENTS

1-5 HARGRAVE STREET AND 38-40 ORTH STREET, KINGSWOOD

CLIENT : pamada

BASEMENT LEVEL THREE PLAN

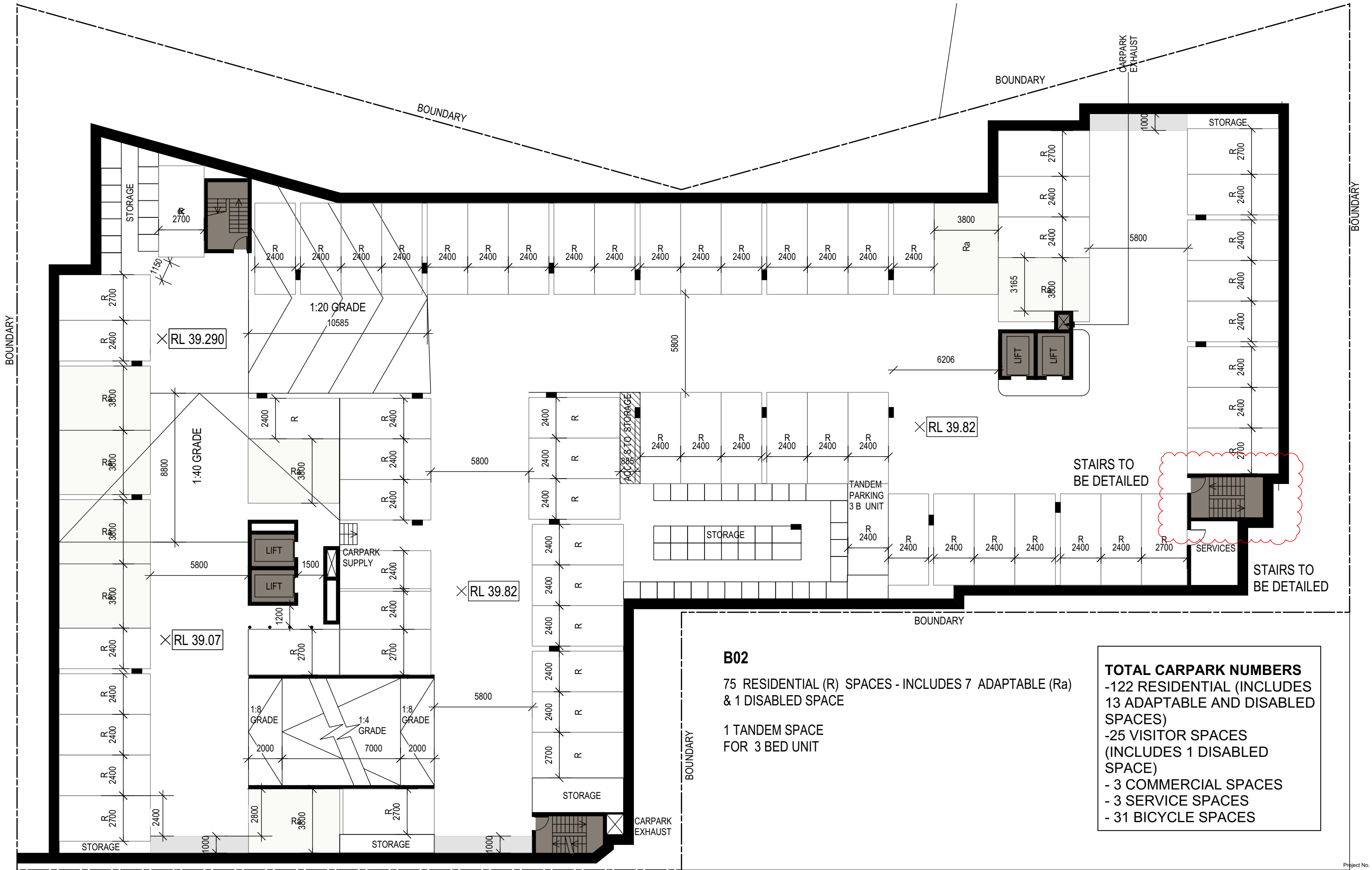
SCALE 1:100 @ A1 1:200 @ A3

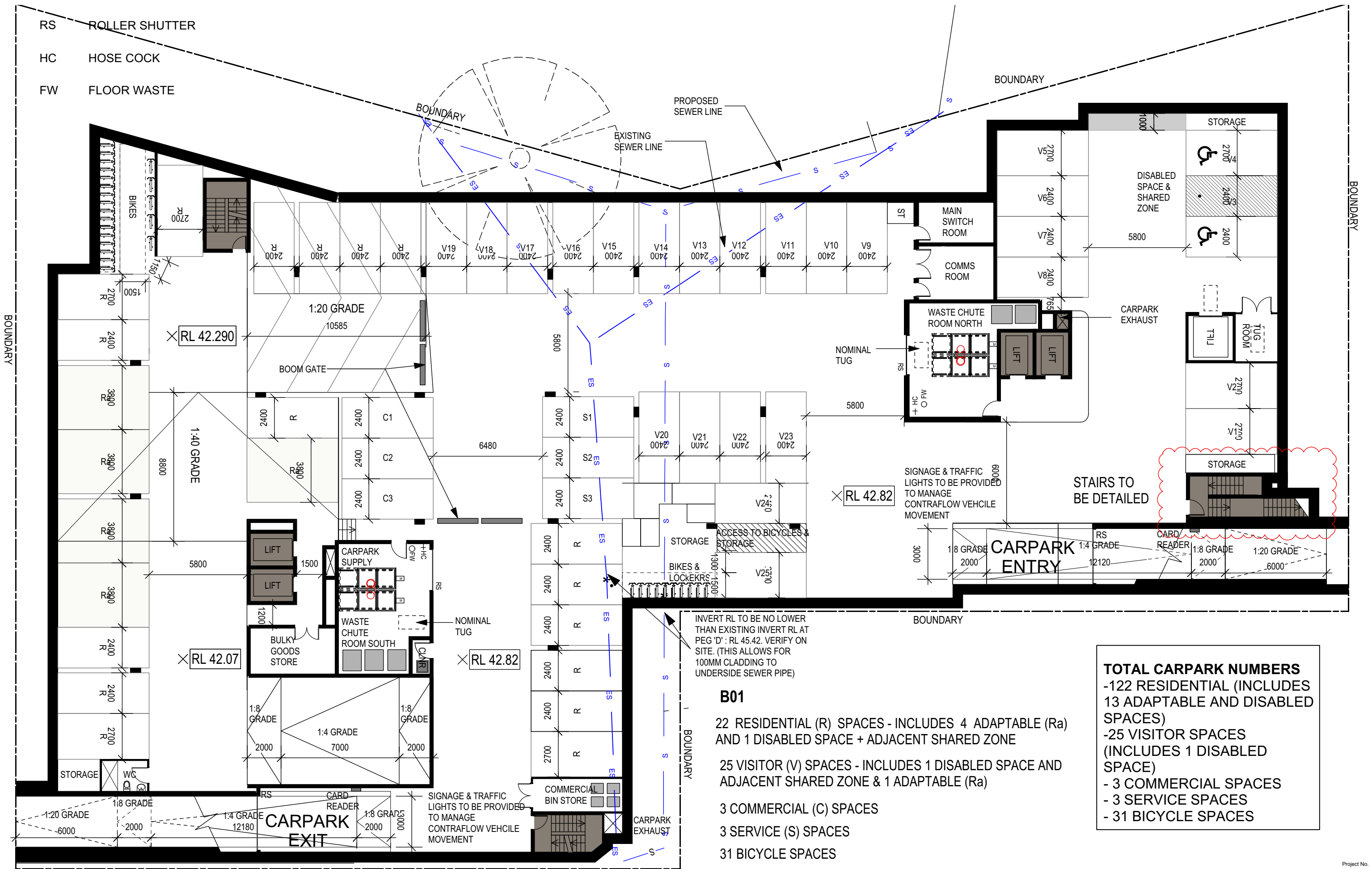
DA-100 D

Project No.

1609

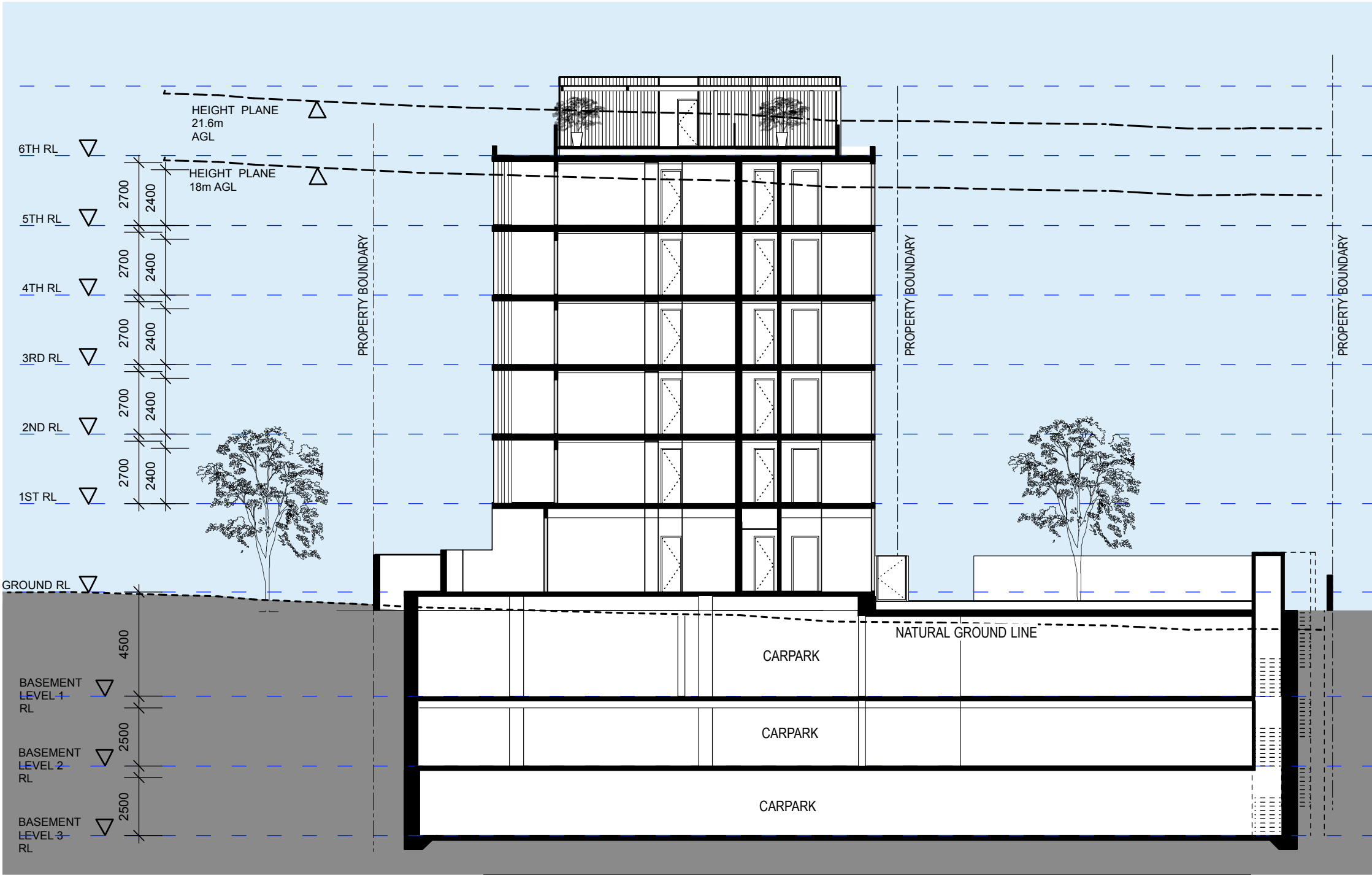
Drawing No. Revision #





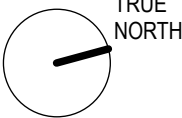


Project No.



NOTE
AGL = HEIGHT ABOVE GROUND LEVEL IN METRES

Proj Date: 18/11/16



LEGEND

- 1 BED APARTMENT
- 2 BED APARTMENT

LV - LIVING
D - DINING
B1 - BEDROOM
B2 - BEDROOM
BT - BATHROOM
L - LAUNDRY
K - KITCHEN
S - STUDY/STORAGE
ST - STORAGE

No.	Date	REVISIONS	By
B	18/11/16	DEVELOPMENT APPLICATION AMENDMENT 01	MJ
A	19/09/16	DEVELOPMENT APPLICATION ISSUE	CR

PROJECT DEVELOPER

pamada

ARCHITECT:
Eeles Trelease pty ltd architects

PLANNING **33F Planners**

LANDSCAPE ARCHITECT **dila**

Drawn By: AA
Reviewed By: RY/BE
Dwg Date:
CAD File Name:

HARGRAVE APARTMENTS
1-5 HARGRAVE STREET AND 38-40 ORTH STREET, KINGSWOOD

Project No.

1609

CLIENT : **pamada**
SECTION BB

Drawing No. **DA-201 B**
Revision #

SCALE 1:100 @ A1 1:200 @ A3



NOTE
AGL = HEIGHT ABOVE GROUND LEVEL IN METRES

TRUE NORTH

LEGEND

- 1 BED APARTMENT
- 2 BED APARTMENT

LV - LIVING
D - DINING
B1 - BEDROOM
B2 - BEDROOM
BT - BATHROOM
L - LAUNDRY
K - KITCHEN
S - STUDY/STORAGE
ST - STORAGE

No.	Date	REVISIONS	By
B	18/11/16	DEVELOPMENT APPLICATION AMENDMENT	CR
A	08/11/16	COUNCIL MEETING	CR

PROJECT DEVELOPER

pamada

ARCHITECT:
Eeles Trelease pty ltd architects

PLANNING **33F** Planners

LANDSCAPE ARCHITECT **dila**

Drawn By CR
Reviewed By RY/BE
Dwg Date:
CAD File Name

HARGRAVE APARTMENTS
1-5 HARGRAVE STREET AND 38-40 ORTH STREET, KINGSWOOD

CLIENT : **pamada**

WEST ELEVATION

SCALE 1:200 @ A3

Project No. **1609**

Drawing No. **DA-300 B**

Revision #



- A - PRE-FINISHED VERTICAL METAL CLADDING
- B - PRE-FINISHED HORIZONTAL METAL CLADDING
- C - SLIDING VERTICAL METAL LOUVRES
- D - VERTICAL LOUVRE FOR SOLAR HEAT AND PRIVACY
- E - GLAZED BALUSTRADE
- F - PAINTED RENDERED MASONRY SPANDREL
- G - POWDERCOATED ALUMINIUM FRAMED GLAZING
- H - COURTYARD WALLS/HORIZONTAL TIMBER SLATS WITH PLANTING BEHIND
- I - CERAMIC EXTERNAL TILES
- J - PAINTED RENDER MASONRY WALLS

NOTE
AGL = HEIGHT ABOVE GROUND LEVEL IN METRES



LEGEND
- 1 BED APARTMENT
- 2 BED APARTMENT

LV - LIVING
D - DINING
B1 - BEDROOM
B2 - BEDROOM
BT - BATHROOM
L - LAUNDRY
K - KITCHEN
S - STUDY/STORAGE
ST - STORAGE

No.	Date	REVISIONS	By
B	18/11/16	DEVELOPMENT APPLICATION AMENDMENT	CR
A	08/11/16	COUNCIL MEETING	CR

PROJECT DEVELOPER

pamada

ARCHITECT:
Eeles Trelease pty ltd architects

PLANNING **33F** Planners

LANDSCAPE ARCHITECT **dila**

Drawn By CR
Reviewed By RY/BE
Dwg Date:
CAD File Name

HARGRAVE APARTMENTS
1-5 HARGRAVE STREET AND 38-40 ORTH STREET, KINGSWOOD

CLIENT : **pamada**

SOUTH ELEVATION

SCALE 1:200 @ A3

DA-301 B

Project No.

1609

Drawing No. Revision #

TOP OF SCREEN/
TOP OF LIFT SHAFT
FFL 70.62

ROOF SLAB 69.12

HEIGHT PLANE 21.6m AGL

6TH FFL 66.12
HEIGHT PLANE 18m AGL

5TH FFL 63.12

4TH FFL 60.12

3RD FFL 57.12

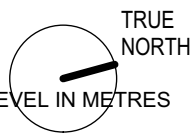
2ND FFL 54.12

1ST FFL 51.12

GROUND FFL 47.32



NOTE
AGL = HEIGHT ABOVE GROUND LEVEL IN METRES



LEGEND

- 1 BED APARTMENT

- 2 BED APARTMENT

LV - LIVING
D - DINING
B1 - BEDROOM
B2 - BEDROOM
BT - BATHROOM
L - LAUNDRY
K - KITCHEN
S - STUDY/STORAGE
ST - STORAGE

No.	Date	REVISIONS	By
B	18/11/16	DEVELOPMENT APPLICATION AMENDMENT	CR
A	19/09/16	DEVELOPMENT APPLICATION ISSUE	CR

PROJECT DEVELOPER

pamada

ARCHITECT:
Eeles Trelease Pty Ltd architects

PLANNING **33F** Planners

LANDSCAPE ARCHITECT **dila**

Drawn By CR
Reviewed By RY/BE
Dwg Date:
CAD File Name

HARGRAVE APARTMENTS
1-5 HARGRAVE STREET AND 38-40 ORTH STREET, KINGSWOOD

CLIENT : **pamada**

NORTH ELEVATION

SCALE 1:200 @ A3

Project No. **1609**

Drawing No. **DA-302 B**

Revision #



NOTE
AGL = HEIGHT ABOVE GROUND LEVEL IN METRES



LEGEND
- 1 BED APARTMENT
- 2 BED APARTMENT

LV - LIVING
D - DINING
B1 - BEDROOM
B2 - BEDROOM
BT - BATHROOM
L - LAUNDRY
K - KITCHEN
S - STUDY/STORAGE
ST - STORAGE

B	18/11/16	DEVELOPMENT APPLICATION AMENDMENT	CR
A	08/11/16	COUNCIL MEETING	CR
No.	Date	REVISIONS	By

PROJECT DEVELOPER

pamada

ARCHITECT:
Eeles Trelease pty ltd architects

PLANNING **33F** Planners

LANDSCAPE ARCHITECT **dila**

Drawn By CR
Reviewed By RY/BE
Dwg Date:
CAD File Name

HARGRAVE APARTMENTS
1-5 HARGRAVE STREET AND 38-40 ORTH STREET, KINGSWOOD

CLIENT : **pamada**

EAST ELEVATION

SCALE 1:200 @ A3

Project No.

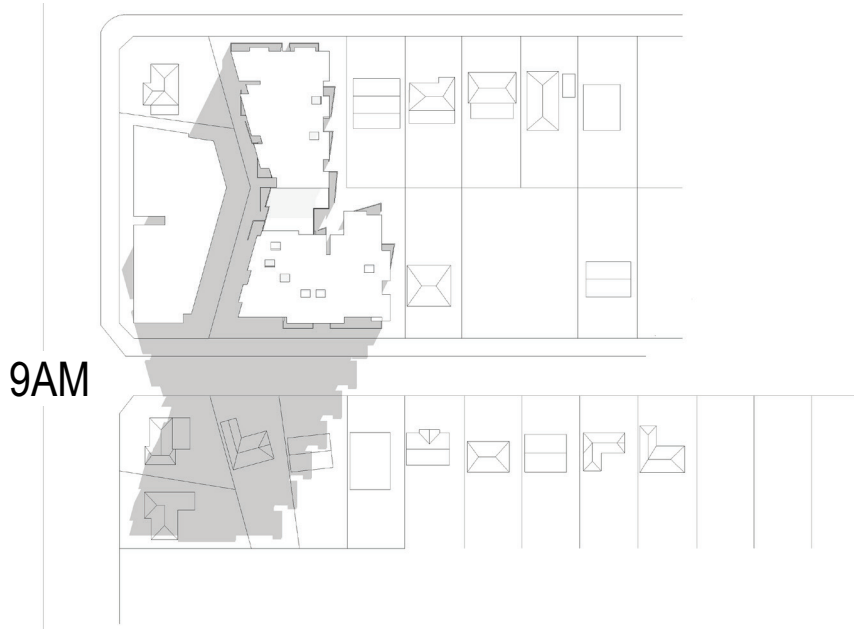
1609

Drawing No. Revision #

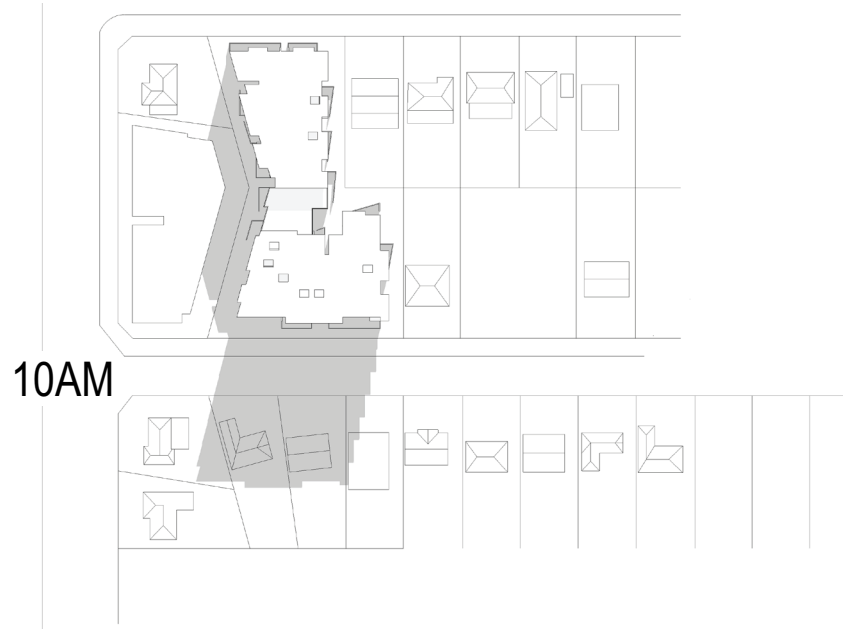
DA-303 B



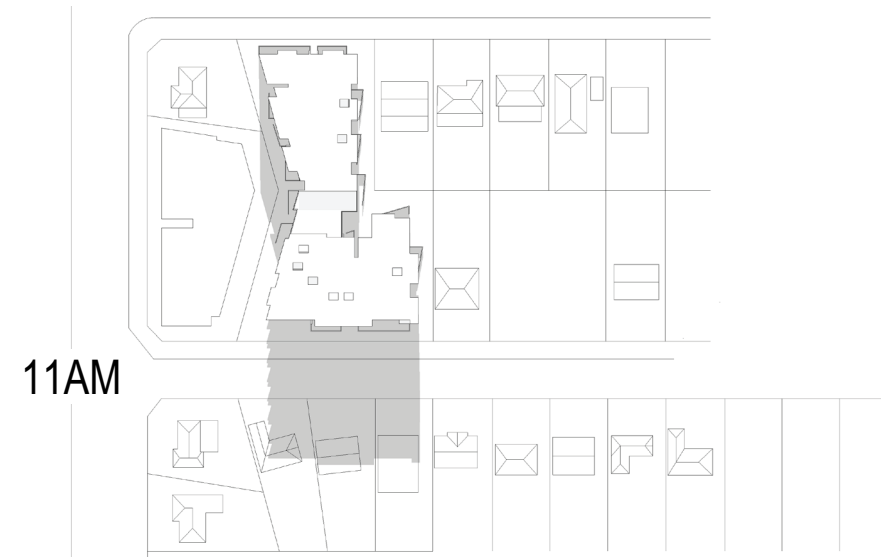
8AM



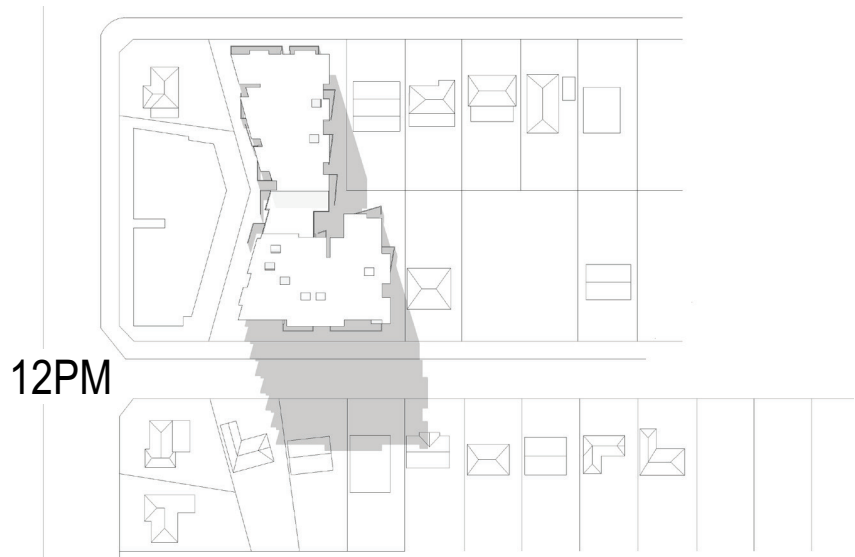
9AM



10AM



11AM



12PM



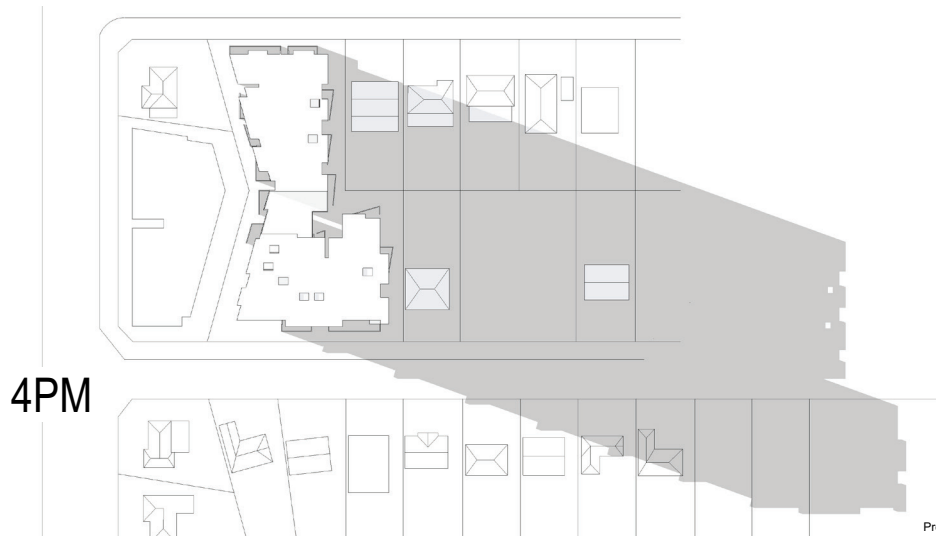
1PM



2PM



3PM



4PM



No.	Date	REVISIONS	By
B	18/11/16	DEVELOPMENT APPLICATION AMENDMENT 1	AA
A	9/9/16	DEVELOPMENT APPLICATION ISSUE	AA

PROJECT DEVELOPER
pamada

ARCHITECT:
Eeles Trelease pty ltd architects
PLANNING **33F** Planners
LANDSCAPE ARCHITECT **dila**

Drawn By AA
Reviewed By RY/BE
Dwg Date:
CAD File Name

HARGRAVE APARTMENTS
1-5 HARGRAVE STREET AND 38-40 ORTH STREET, KINGSWOOD
CLIENT : **pamada**
OVERSHADOWING ANALYSIS - 21 JUNE
SCALE
Project No. 1609
Drawing No. Revision # DA-401 B



The Landscape Architects Pamada Hargrave Apartments brief aims to ensure that the landscape within both the private and public spaces integrates with project architecture, locality characteristics to enhance the livability of the residential environment.

The landscape design philosophy for the private areas is founded on a desire by our team to create an affordable, contemporary living environment that maximises the environmental and spatial potential of the courtyards for residents.

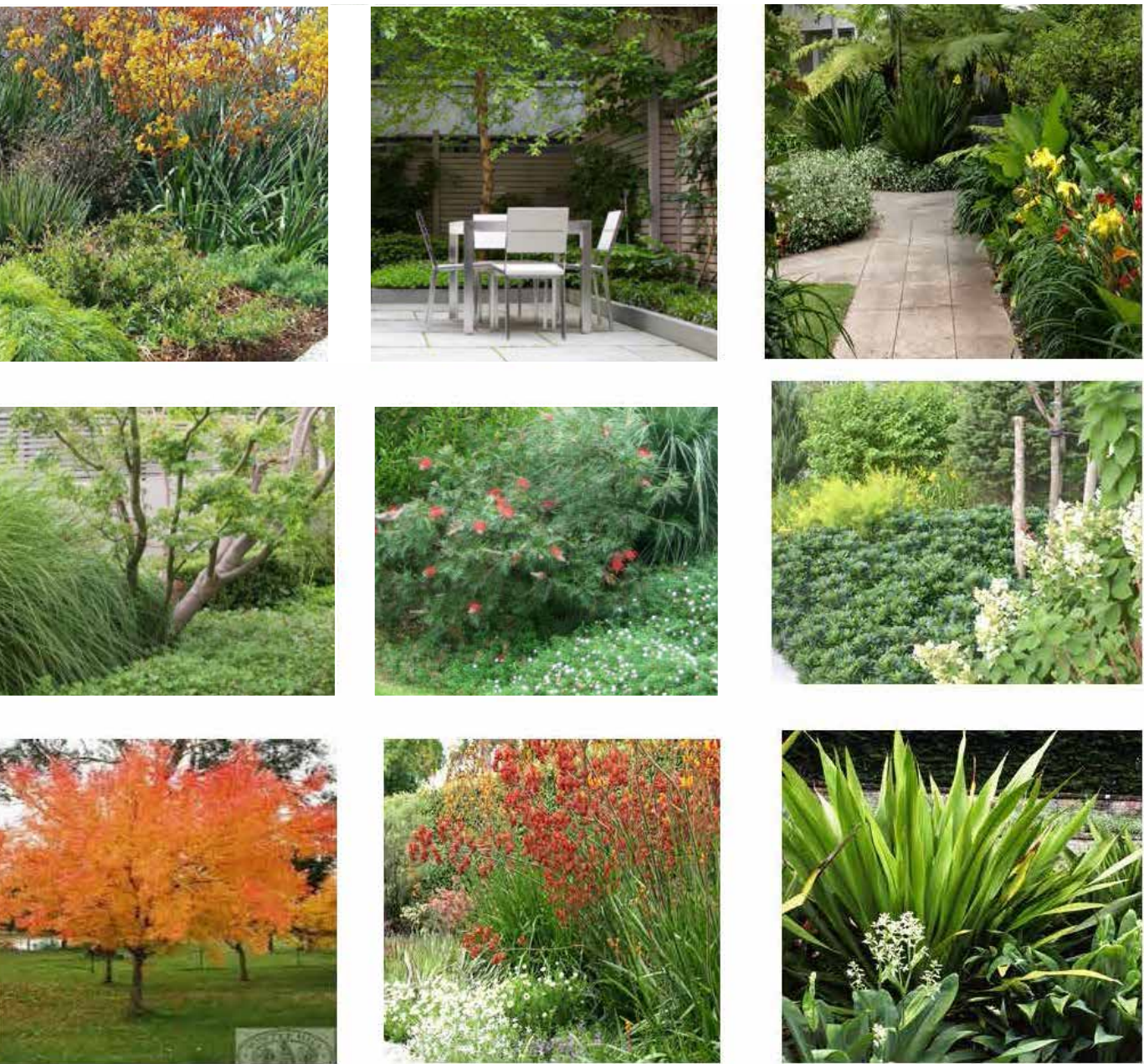
The key objectives are to:

- Enhance the appearance and amenity of development.
- Improve the character of the locality and the streetscape.
- Provide practical low maintenance landscaped outdoor spaces living with "easy care" plant selections compliant with low water requirements
- Provide privacy between adjoining dwellings and private open space.
- Assist in the percolation of rainwater and reduction in stormwater runoff.
- Improve microclimatic conditions for liveability by coordinating the design of external living areas and contribute to urban air quality.
- Provide fauna and flora habitat through native plant selections that will attract them

LANDSCAPE STRATEGY

LEGEND	PLANT SCHEDULE		COMMON NAME	HABIT	NUMBER	SIZE
TREES						
		BACKHOUSIA obtidora	Lemon Scented Myrtle	5 x 3w		75tr
		LAGERSTROEMIA indica	Crepe Myrtle	4 x 3w		75tr
		SAPIUM sebiferum	Chinese Tallowood			
		WATERSONIA floribunda	Weeping Lilly Pilly	8 x 5w		100tr.
		TRISTANIA conferta	Brush Box			
		TREES TO BE REMOVED				
TALL SHRUBS / SCREENING						
		CALLISTEMON viminalis	"Wilderness White" Bottlebrush	2.5 x 2		300mm
		LEPTOSPERMUM patersonii	Lemon Scented Tea Tree	3 x 2		300mm
		PROSTANTHERA ovalifolia	Purple Mint Bush	2 x 1.5		200mm
		SYGIUM leuhamanii "Royal Flame"	Lilly Pilly	2 x 2		300mm
SHRUBS / STRUCTURE PLANTS						
		ACACIA howittii "Honey Bun"	Dwarf Sticky Wattle	1.2 x 1.2		200mm
		BANKSIA spinosa "Giant Candle"	Red Bottlebrush	1 x 1.2		200mm
		BAUERIA rubioides	Native Dog Rose	1 x 1.2		200mm
		CALLISTEMON viminalis "Little John"		1 x 1		200mm
		CALLISTEMON citrinus "White Arzac"		1 x 2		200mm
		COLEONEMA pulchrum	White Breath of Heaven	1.2 x 1.2		200mm
		CUPHEA sessifolia "White"	False Heather	6 x 9		200mm
		LOROPETALUM chinensis "Pink Pearl"	Pink Fringe Flower	1 x 1.2		200mm
		NANDINA domestica "Gulf Stream"	Heavenly Sacred Bamboo	75 x 5		200mm
		RAPHIOLEPIS "Snow Maiden"	Snow Maiden Hawthorn	75 x 6		300mm
ACCENTS & FLOWERING COLOUR						
		ANIGOSANTHOS flavidus	Tall Kangaroo Paw	1 x 6		140mm
		DIETES indoides	Wild Iris			140mm
		DOREANTHES excelsa	Gymea Lily	1.2 x 2		300mm
		HEMEROCALLIS aurantiaca	Day Lily			
GROUND COVER & FERNS						
		ASPLENIUM nidibus	Birds Nest Fern	1.2 x 1.2		300mm
		BLECHNUM cartilagineum	Gristle Fern	9 x 9		140mm
		CALOCHLANEA dubia	False Bracken	9 x 9		140mm
		GREVILLEA obtusifolia	Obtuse Leaved Grevillea	5 x 2		140mm
		SCAEVOLA aemula	Fan Flower	3 x 9		140mm
		TRACHELOSPERMUM jasmynoides	Star Jasmine			140mm
		HEDERA canariensis	Algerian Ivy			
TURF						
		STENOTAPHRUM secundatum	"Palmet Soft Leaved Buffalo Turf			Rolls

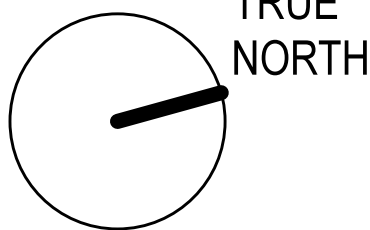
2 PLANT SCHEDULE



3 LANDSCAPE CHARACTER IMAGERY

1 LANDSCAPE PLAN

scale 1:150@A1



LEGEND

No.	Date	REVISIONS	By
B	18/11/16	DEVELOPMENT APPLICATION	MG
A	08/09/16	DEVELOPMENT APPLICATION	MG

PROJECT DEVELOPER

pamada

DESIGN ARCHITECT & URBAN DESIGN:

Eeles Trelease pty ltd
architects

PLANNING

Boston Blyth Fleming Partners

LANDSCAPE ARCHITECT



HARGRAVE APARTMENTS

1-5 HARGRAVE STREET AND 38-40 ORTH STREET, KINGSWOOD

CLIENT: pamada

LANDSCAPE PLAN

1:150@A1

Project No.

1609

Drawing No. Revisor

DA-L001