# development application

991

Project: **SENIORS LIVING** 

Client: ARMADA AVALON PTY LTD
Site: 27-29 NORTH AVALON ROAD,

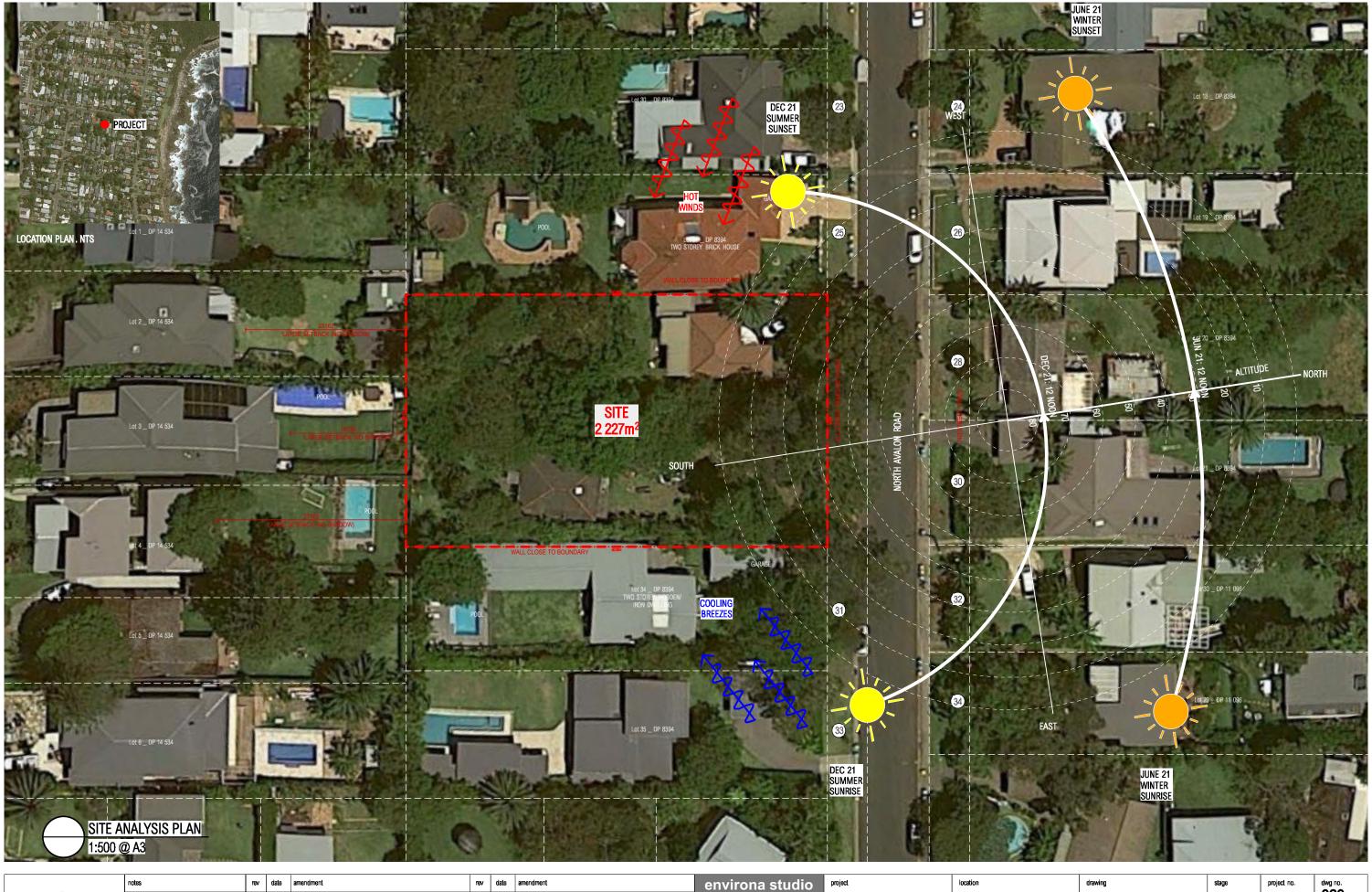
**AVALON BEACH** 

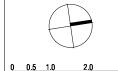
Stage: **DEVELOPMENT APPLICATION** 

Date: **3-Oct-19** 

DWG	DRAWING TITLE	ISSUE
	LANDSCAPE ARCHITECT	
LP-00	EXISTING TREE PLAN	С
LP-01	LANDSCAPE PLAN	С
LP-02	LANDSCAPE ELEVATIONS	С
LP-03	LANDSCAPE DETAILS	С
	CIVIL ENGINEER	
D01	SEDIMENT + EROSION CONTROL PLAN	В
D02	SEDIMENT + EROSION CONTROL DETAILS	В
D03	level 1 Stormwater drainage plan	В
D04	LEVEL 2 STORMWATER DRAINAGE PLAN	В
D05	UPPER ROOF STORMWATER PLAN	В
D06	stormwater dainage notes	В
D07	STORMWATER DAINAGE DETAILS	В
	SURVEYOR	
14535	SITE SURVEY	С

DWG	DRAWING TITLE	ISSUE
000	PRE CONSTRUCTION INFORMATION	
020	SITE ANALYSIS PLAN 1:500	L
030	SITE PLAN 1:500	L
040	EXISTING/ DEMOLITION PLAN 1:200	L
100	GENERAL ASSEMBLY PLANS	
101	LEVEL 1 FLOOR PLAN 1:200	L
102	LEVEL 2 FLOOR PLAN 1:200	L
110	ROOF PLAN 1 1:200	L
120	SECTION AA + BB 1:200	L
130	NORTH + EAST ELEVATION 1:200	L
131	SOUTH + WEST ELEVATION 1:200	L
133	NORTH + SOUTH INTERNAL ELEVATION 1:200	L
200	SCHEDULES	<u> </u>
210	materials + finishes schedule	L
211	terms + abbreviations summary	L
220	CONSTRUCTION WASTE MANAGEMENT PLAN	L
900	NON-CONSTRUCTION INFORMATION	
901	3D PERSPECTIVE SHEET 1	L
910	SHADOW DIAGRAMS - JUNE 21	L
911	Shadow diagrams - Sept 23	L
912	SHADOW DIAGRAMS - DEC 21	L
913	SOLAR ACCESS STUDY-LIVING ROOM GLAZING - SHEET 1	L
914	SOLAR ACCESS STUDY-LIVING ROOM GLAZING - SHEET 2	L
915	SOLAR ACCESS STUDY-LIVING ROOM GLAZING - SHEET 3	L
916	SOLAR ACCESS STUDY-PRIVATE OPEN SPACE - SHEET 1	L
917	SOLAR ACCESS STUDY-PRIVATE OPEN SPACE - SHEET 2	L
919	SOLAR ACCESS STUDY SUMMARY	L
930	BASIX COMMITMENTS	L
960	BUS ROUTE PLAN	L
980	area Calculation Summary - Sheet 1	L
981	AREA CALCULATION SUMMARY - SHEET 2	L





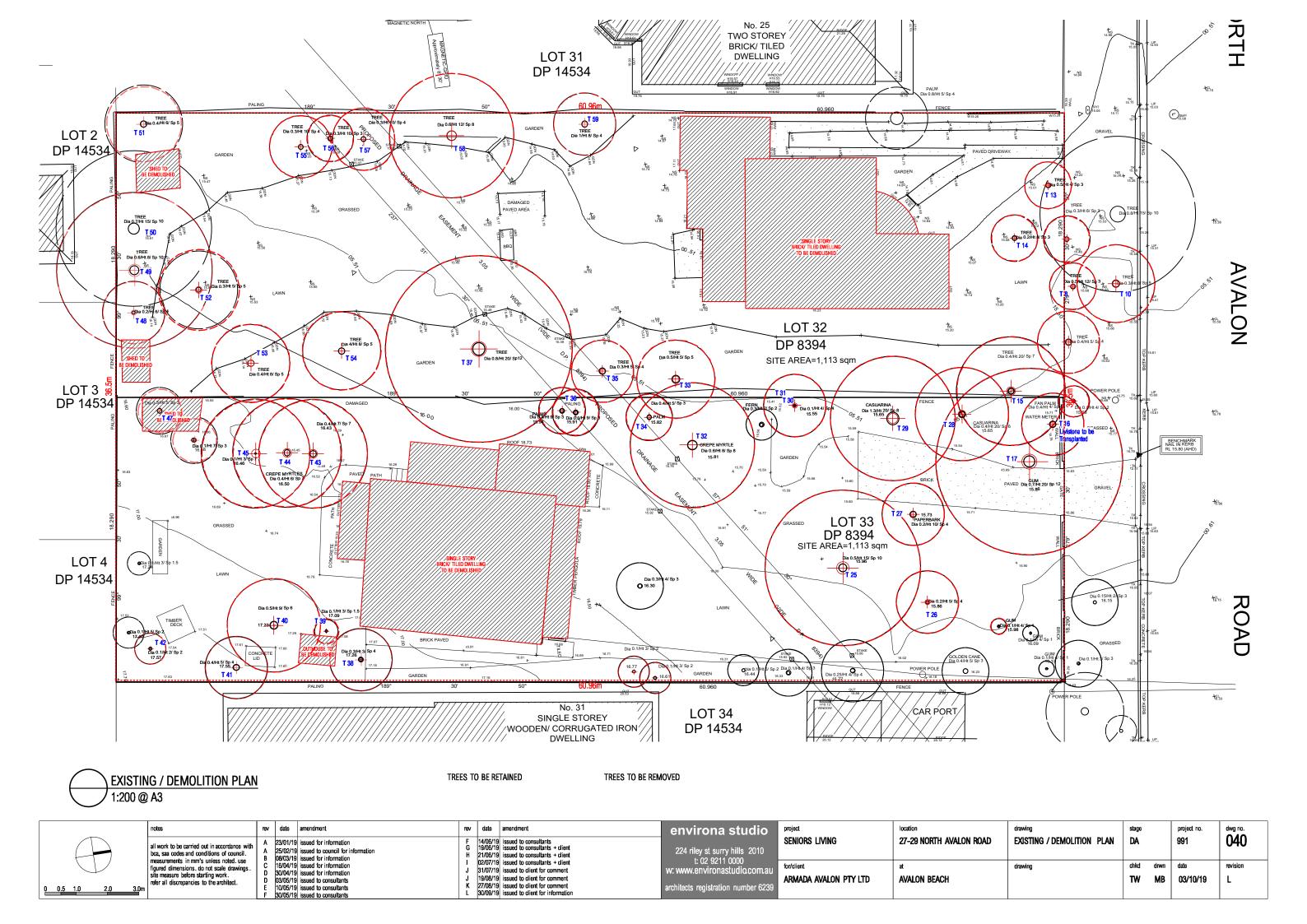
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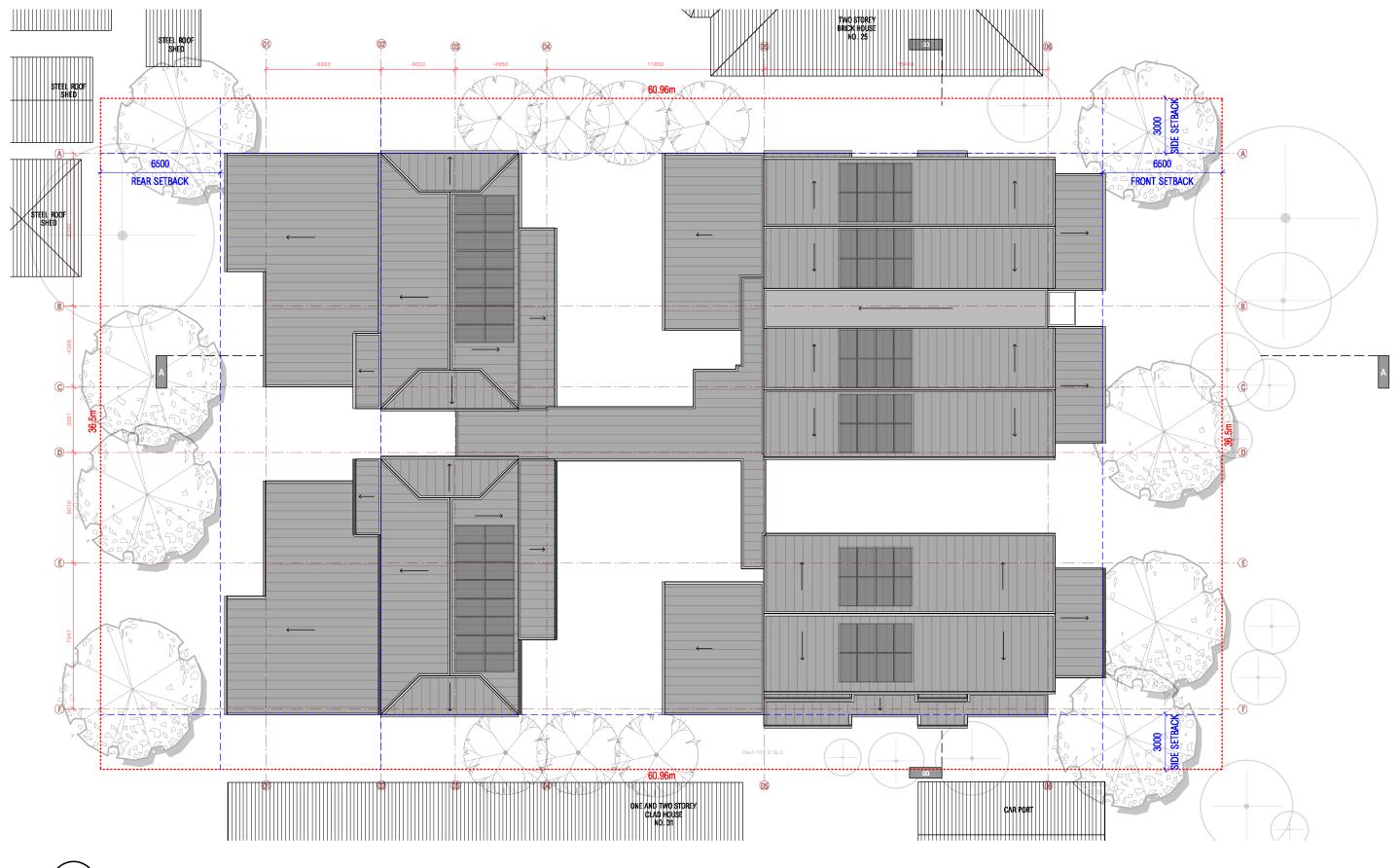
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B 08/03/19 issued for information
C 16/04/19 issued for information
D 30/04/19 issued for information
D 03/05/19 issued for information
E 10/05/19 issued to consultants
F 30/05/19 issued to consultants

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G 19/06/19 issued to consultants + client
H 21/06/19 issued to consultants + client
I 02/07/19 issued to consultants + client
J 31/07/19 issued to client for comment
J 19/08/19 issued to client for comment
K 27/08/19 issued to client for comment
L 30/09/19 issued to client for comment

224 riley st surry hills 2010 t: 02 9211 0000 v: www.environastudio.com.au

project SENIORS LIVING	location 27-29 NORTH AVALON ROAD	drawing SITE ANALYSIS PLAN	stage DA		project no. 991	dwg no. <b>020</b>
for/client	at	drawing	chkd	drwn	date	revision
armada avalon PTY LTD	AVALON BEACH		TW	MB	03/10/19	L

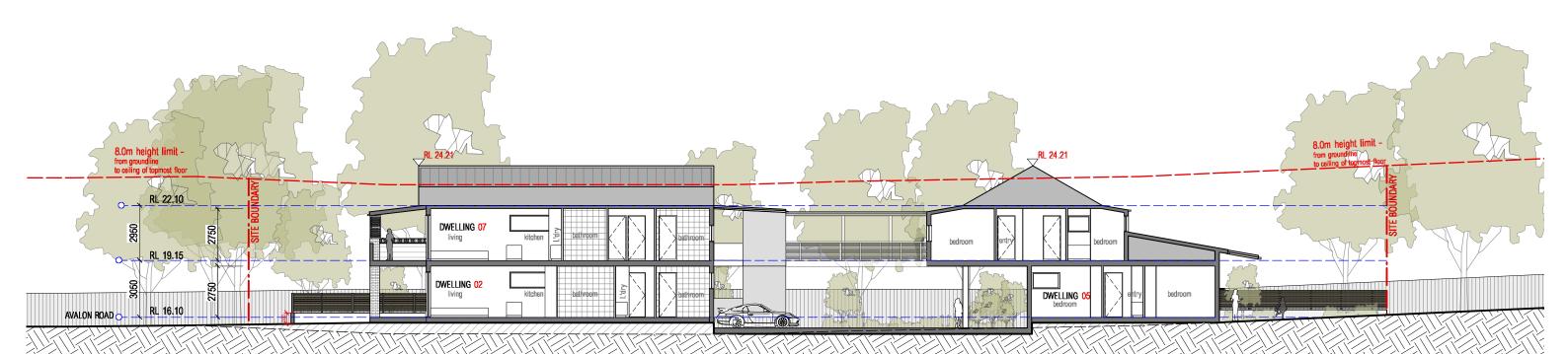




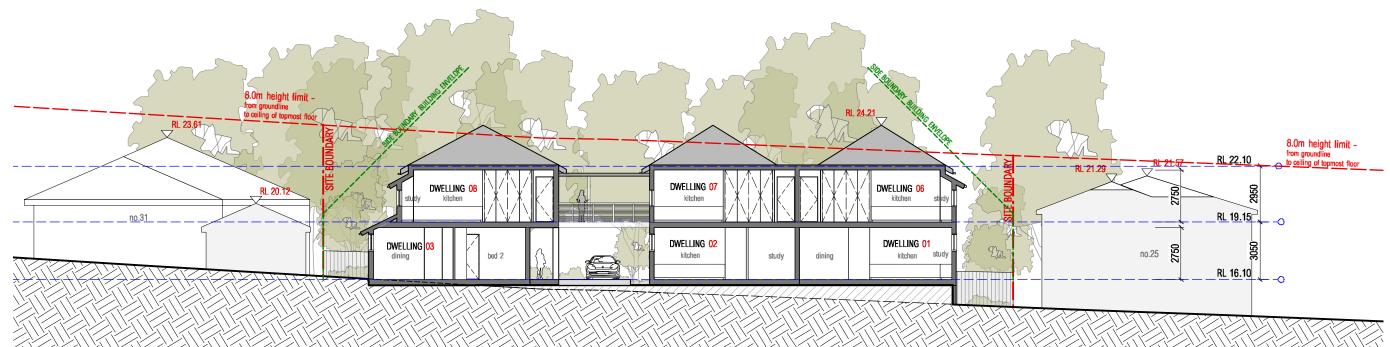


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project SENIORS LIVING	location 27–29 NORTH AVALON ROAD	drawing ROOF LEVEL	stage DA		project no. 991	dwg no. 110
for/client	at	drawing	chkd	drwn	date	revision
ARMADA AVALON PTY LTD	AVALON BEACH	PLAN	TW	MB	03/10/19	L





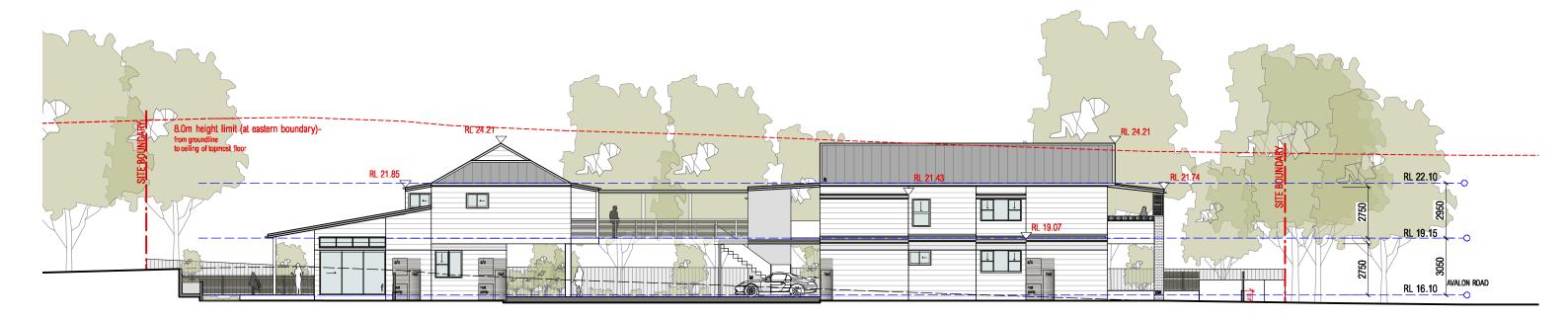


# 02 SECTION BB 1:200 @ A3

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NORTH ELEVATION 1:200 @ A3





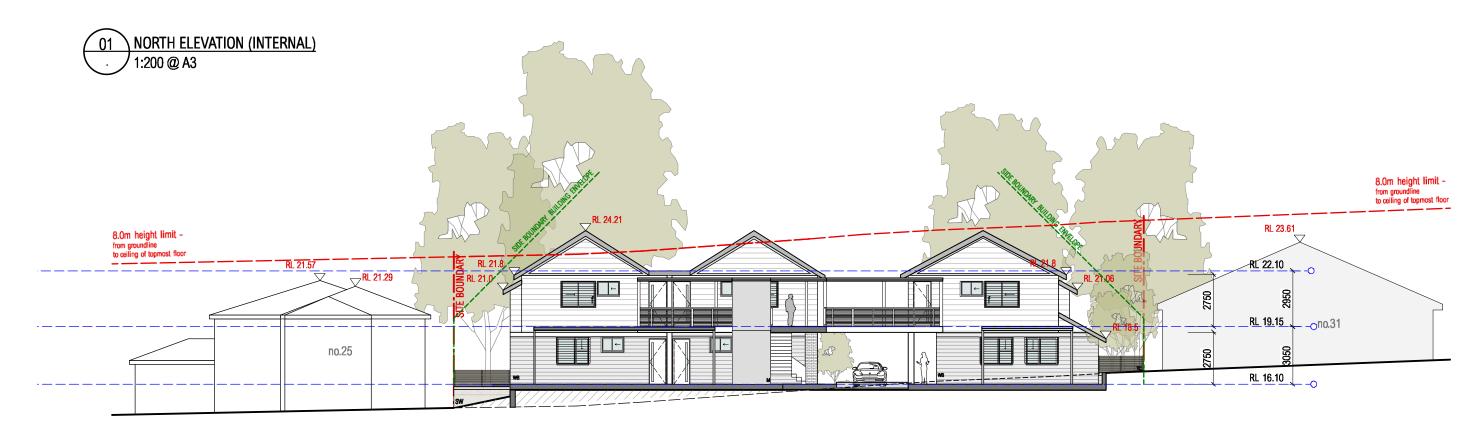
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	bca, saa codes and conditions of council.	23/01/19 issued for information 25/02/19 issued to council for information 08/03/19 issued for information	G 1	9/06/19	issued to consultants issued to consultants + client issued to consultants + client	224 riley st surry hills 2010	SENIORS LIVING	27-29 NORTH AVALON ROAD	NORTH + EAST	DA		991	130
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	measurements in mm's unless noted, use figured dimensions, do not scale drawings. Site measure before starting work, refer all discrepancies to the architect.	16/04/19 issued for information 30/04/19 issued for information 03/05/19 issued to consultants	J 31/07/19	9 issued to consultants + client 9 issued to client for comment 9 issued to client for comment	t: 02 9211 0000 w: www.environastudio.com.au	for/client  ARMADA AVALON PTY LTD	at AVALON BEACH	drawing ELEVATIONS	chkd drwn		revision L
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02 SOUTH ELEVATION (INTERNAL) 1:200 @ A3

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	all work to be carried out in accordance with bca, saa codes and conditions of council.	A	23/01/19 issued for information 25/02/19 issued to council for information 08/03/19 issued for information	G	19/06/1	9 issued to consultants 9 issued to consultants + client 9 issued to consultants + client	224 riley st surry hills 2010	SENIORS LIVING	27-29 NORTH AVALON ROAD	(INTERNAL)	DA		991	133
	measurements in mm's unless noted. use figured dimensions, do not scale drawings.	С	16/04/19 issued for information 30/04/19 issued for information			9 issued to consultants + client 9 issued to client for comment	t: 02 9211 0000 w: www.environastudio.com.au	for/client	at	drawing	chkd	drwn	date	revision
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EXTERNAL ITEMS	MATERIAL	COLOUR CODE (NAME)	LEGEND Abreviation	EXTERNAL ITEMS	MATERIAL	COLOUR CODE (NAME)	LEGEND ABREVIATION
external walls	BARRIMAH STONE WALLING	ECO OUTDOOR	sw	DECKING + FENCING	TIMBER CLAD	"SPOTTED GUM"	TC
external walls	WEATHERBOARD	"WHITE"	WB	DECKING	MODWOOD	NATURAL GRAIN COLLECTION- BLACK BEAN/ JARRAH/ SILVER GUM	MD
external feature Wall	COLORBOND	MONUMENT	М	EXTERNAL PAVING DRIVEWAY	BEAUFORD SANDSTONE	"FLOOR TILE ECO OUTDOOR"	BS
METALWORK , GUTTERS Dowpipes , Awning	COLORBOND STEEL	"SURF MIST"	G	METALWORKS ROOFING	COLORBOND STEEL	"Shale Grey"	R
BALLUSTRADES	TIMBER	'WHITE'	В	DOOR FRAMES + WINDOW FRAMES + FIXED SCREENS	Powder Coated Aluminium	'WHITE'	D

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bca, saa codes and conditions of council.	23/01/19 issued for information 25/02/19 issued to council for information 08/03/19 issued for information	G 19/06/19 H 21/06/19	issued to consultants issued to consultants + client issued to consultants + client	224 riley st surry hills 2010	SENIORS LIVING	27-29 NORTH AVALON ROAD	MATERIALS AND FINISHES	DA	991	210
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### TERMS AND ABBREVIATIONS

follows:

WRC

AFS As further specified **RWR** Block / Brickwork - Bagged BWR Block / Brickwork - Rendered BCA Building Code of Australia BC Bright Chrome CCA Copper/Chrome/Arsenate treated timber CCR Corrugated Colorbond Roofing CCW Corrugated Colorbond Wall Sheeting CFC Compressed Fibre Cement sheet CIS Concrete in situ CT Ceramic Tiles cts Centres DΡ Downpipe EPS Expanded Polystyrene (insulation) Fixed glass FB Face brickwork FC Fibre Cement (painted sheets) Fibre Cement Rendered (Harditex) FCR FFL Finished floor level GB Glass blockwork \GP0 General Power Outlet HW Hardwood HDG Hot Dipped Galvanised HDPE High Density Polyethylene (piping) HPP Hebel Power Panel HSF Hebel Sound Floor HTP Harditex cladding HWS Hot water service Glass Louvres (in windows) LFC Linoleum floor covering **LSOP** Light Oil Solvent Preservative = 'Gold' Treated timber LVL Laminated Veneer Lumber MDF Medium density fibreboard = customwood MGP Machine Graded Pine framing (Wall/Roof) МІ Manufacturer's instructions NIC Not in Contract OFC Off form concrete PB Plasterboard PCC Pre cast concrete PFC Parallel Flange Channel PRF Pirelli rubber floori covering PS Provisional Sum PTB Particle Board RFL Reflective foil laminate RHS Rectangular hollow section RP Radiata Pine S+I Supply and Install SC Satin Chrome SHS Square Hollow section SS Stainless Steel T+G Tongue and grooved (flooring/walling) TBA To be advised TR Towel rail TRH Tiolet roll holderz Π Terracotta Tile UB Universal Beam UC Universal Column UNO Unless noted otherwise VOS Verify on site VR

Western Red Cedar (timber)

Abbreviations used on the drawings and in the specifications and schedules are as

All work as shown in the drawings and schedule, including all necessary work even if not drawn or scheduled. Refer all queries and discrepancies to the architects. All measurements in mm unless noted otherwise. Standard of Work and Regulations All work to be carried out in accordance with: Building Code of Australia 2016 AS Codes · Conditions of Council Conditions of service supply authorities · All relevant Australian Standards including, but not limited to the standards listed below. Site Survey Provide registered surveyor report at bearer + joist stage. **Demolition and Recycled Material** Demolition in accordance with Metro. Waste Board Guide. Site management No building activities on Council land. Establish sediment controls as required by all aurthorities Earthworks and excavation All work to be carried out in accordance with the following: BCA Part 3.1.1 Australian Standard AS2870 Stormwater Disposal All work to be carried out in accordance with the following: BCA Part 3.1.2 and BCA Part 3.5.2 Australian Standard AS/NZ3500.3.2 Termite Protection All work to be carried out in accordance with the following: BCA Part 3.1.3 Termite protection in accordance AS3660.1 Footings, Slab Design and Retaining Walls All work to be carried out in accordance with the engineer's drawings and specifications and the following. BCA Part 3.2 Australian Standard AS2870 Masonry Construction All work to be carried out in accordance with the following: BCA Part 3.3 Australian Standard AS3700 Structural Steel Framing All work to be carried out in accordance with the engineer's drawings and specifications and the following: BCA Part 3.4.2 Australian Standard AS1250 and AS3623 Timber Framing All work to be carried out in accordance with the following: BCA Part 3.4.3 Australian Standard AS1684 All timber to be from sustainable sources as follows: plantation and/or recycled timbers, the framing shall be in plantation Radiata Pine or NZ Douglas Fir, all structural timer shall be plantation grown glue laminated timber and all flooring shall be from recycled timber or bamboo T+G flooring. Roof Cladding All work to be carried out in accordance with the following: BCA Part 3.5.1. Australian Standard AS1562.1

Windows and Doors and Installation of Glazing All work to be carried out in accordance with the following: BCA Part 3.6, Australian Standard AS1288 or AS2047. External Windows and Doors All work to be carried out in accordance with the following: BCA Part 3.5.4 and BCA Part 3.6. Australian Standard AS 2047. Ventilation and Exhaust Fans All work to be carried out in accordance with: BCA Part 2.4. BCA Part 3.8.5 Australian Standard AS1668.2 Construction of Roof, Walls and Floor All work to be carried out in accordance with the following: BCA Part 3.5, BCA Part 3.12 Hot Water Supply System All work to be carried out in accordance with the BCA Part 3.12.5, Australian Standard AS/NZS 3500.4 9section 8) or cl. 3.38 of AS/NZ 3500.5. Fire Separation All work to be carried out in accordance with the following: BCA Part 3.7.1 Smoke Alarms All work to be carried out in accordance with the BCA Part 3.7.2, and Australian Standard AS 3786 Building Fabric Thermal Insulation All work to be carried out in accordance with the following: BCA NSW Clause 2.3.1 Australian Standard AS/NZS4859.1 BASIX compliance

Sound Insulation

BCA Part 3.8.6

Waterproofing of Wet Areas

Facilities (Health and Amenity)

Australian Standard AS 1668.2

Australian Standard AS 3500

following:

following:

following:

Hydraulics

BCA Part 3.8.3

All work to be carried out in accordance with the

All work to be carried out in accordance with the

BCA Part 3.8.1, and Australian Standard AS3740

All work to be carried out in accordance with the

Hot water service pipes shall be provided with

insulation in accordance with BCA Part 3.12.1

Bedroom requirements other obstruction. Electrical requirements horizontally from internal corners. level of at least 300 lux. Laundry / Linen cupd to clothes line is to be provided. adjustable shelving

- At least 1 linen cupboard is to be provides as 600mm minimum width and

- Bathroom must have shower as per AS1428.1 without a hob, waterproofed to AS 3740, floor falls to waste, walls reinforced to accommodate grabrails / folding seat in the future, taps to be lever or capstan with single outlet, taps to be easily reached from shower entry, wall cabinet that is sufficiently illuminated, and a double general power outlet beside the mirror.

no lip at the doorway. Recess the concrete slab at wet areas if required for compliance

Kitchen fittings must be provided as per Clause 4.5 of AS 4299:

a work surface of 800mm length at the same height and

All stairways, ramps and pathways to comply with AS1428.1

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Gutters and downpipes

Australian Standard AS3500.3.2.

BCA Part 3.5.2,

Wall Cladding

BCA Part 3.5.3

All work to be carried out in accordance with the following:

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project SENIORS LIVING	location 27–29 NORTH AVALON ROAD	drawing TERMS AND ABBREVIATIONS + SPECIFICATION SEPP SENIORS	stage DA		project no. 991	dwg no. 211
for/client	at	drawing	chkd	drwn	date	revision
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## SPECIFICATION FOR SEPP SENIORS

### External works

- Units on ground floor level and lift area to be linked by an AS1428.1 compliant accessible path to the adjoining road.
- Pathway lighting to be Glare free for pedestrians and dwelling and must provide at least 20 lux at ground level.
- Letterboxes must be provided on a hard-standing area, lockable and have wheelchair circulation (1550mm diameter) and linked via an accessible path as per AS1428.1
- There should be no step to the main entry door, entry to external verandah that contain clothes line and between path from street to the verandah. A max threshold of 35mm is permitted where a threshold ramp is provided.
- A garbage storage area must be provided in an accessible location. Provide 1550mm circulation spaces in front of bins

## Doorway requirements

- Main entry door, door to courtyards, main accessible bathroom, laundry to be 850mm clear (920mm door leaf) with door circulation spaces as per AS1428.1. All other doors to have 850mm clear opening with scope of provision of door circulation in the future.

-Door handles and hardware for all doors must be provided in accordance with AS 4299 with single hand operation, lever style, operation located between 900-100mm above FFL and all external doors to be keyed alike.

- Main bedroom to have size of gueen bed with 1.200mm wide at the foot of the bed, and 1,000mm wide beside the bed between it and the wall, wardrobe or any

- Bedroom must have a telephone outlet next to the bed on the side closest to the door and a general power outlet beside the telephone outlet.
- Bedroom must have wiring to allow a potential illumination level of at least 300
- Switches and power points must be provided in accordance with AS 4299 with switches located between 900-1000mm and in line with door handles, (Rocker action / toggle / push pad switches with 35mm width are preferred) and GPOs to be at least 600mm above FFL (1000mm preferred) and not less than 500mm
- Living room, must have a telephone adjacent to a general power outlet and Living and dining room must have wiring to allow a potential illumination
- Laundry must have the provision for the installation of an automatic washing machine and a clothes dryer, a slip-resistant floor surface and an accessible path

### Main hathmorn

- Bathroom must be Slip-resistant floor surface
- All tiled areas such as bathrooms, kitchen, and laundries to be such that there is

- 800mm wide work surface which is adjustable or a replaceable as a unit at variable heights within range of 750mm to 850mm above FFL in between the wall oven and cookton.
- Tap set with capstan or lever handles with the taps or operating handles to be located 300mm from front of the sink,
- Cooktops with front or side controls with raised crossbars, isolating switch and
- Wall oven located next to adjustable height work bench minimum 800mm

## WASTE MANAGEMENT PLAN

PROJECT:

MULTI RESIDENTIAL 27-29 NORTH AVALON ROAD, AVALON BEACH NORTHERN BEACHES COUNCIL ADDRESS:

COUNCIL:

DATE: 14-May-19

MATERIALS	SOURCE	Volume cum	EST. QUAN Area sqm	TITY weight tonne	ONSITE RECYCLING	OFF SITE RECYCLING	OFF SITE DISPOSAL
DEMOLITION STAGE Green waste	Trees shrubs removed		21.00		All small branches and leaves chipped for mulch.	Mulch to garden recyclers. Large trunks recycled for timber salvage.	
Bricks	existing building	21.00			Some bricks retained and set aside for reuse.	Broken bricks stored for collection to crushing,	
Concrete blocks	existing building	0.00			Some blocks set aside for reuse.	Broken bricks sent to collection for crushing to road base at Waste Transfer Station.	
Concrete	existing building		262.00		Nil	Slabs/footings broken up on site, stored for collection for crushing as road base.	To Waste Transfer Station that recycles building waste.
Timber framing	existing building	4.50			Denail useful pieces and set aside for reuse.	Unused large pieces recycled for timber salvage.	To Waste Transfer Station as land fill.
Timber cladding	existing building	0.00			Denail useful pieces and set aside for reuse.	Nil	To Waste Transfer Station as land fill.
FC cladding	existing building		30.00		Nil	Material broken up on site, stored separately for collection to crushing.	To Waste Transfer Station that recycles FC building waste.
Asbestos sheet	existing building	nil			Nil	Nil	Removal in accordance with Workcover requirements to Land Fill site.
Plasterboard	existing building		50.00		Nil	Binned separately for recycling by Boral Plasterboard	Nil
Roofing: tiles	existing building		187.00		Some tiles set aside for reuse.	Broken tiles stored for collection to crushing to road base at Waste Transfer Station.	Nil
Roofing: Tin	existing building				Some sheets retained and set aside for reuse.	Unusable sheets stored for recycling at Mini MII steel plant by BHP/equiv.	Nil
Insulation	existing building	2.00			Set aside for reuse.		Nil
Metal piping etc	existing building			0.002	Nil	Non ferrous metals binned separately for recycling.	
PVC piping	existing building	nil			Nil		Removal to Land Fill site.
Tiles + pavers	existing building		0.00		Some tiles set aside for reuse.	Broken tiles stored for collection to crushing to road base at Waste Transfer Station.	Nil
Stone	existing building		6.00		set aside useful stone for reuse in landscaping.		
EXCAVATION STAGE							
Top soil		20.00			Top soil stored on site for use in landscaped gardens.		
Sand/clay/shale		0.00			Sand/clay stored on site for use as backfill where volumes allow.		Balance sent to authorised land fill site.
Rock		nil			Stored on site for use as backfill where volumes allow.		Balance sent to authorised land fill site.
CONSTRUCTION STAGE							
Bricks		1.00			Offcut bricks retained, crushed and used for drainage fill.	Excess broken blocks stored for collection to crushing.	
Concrete blocks		1.00			Offcut bricks retained, crushed and used for drainage fill.	Broken blocks sent to collection for crushing to road base at Waste Transfer Station.	
Concrete		1.00			Excess concrete poured into moulds on site for garden pavers.	Nil	Nil
Timber framing		2.00			Useful pieces set aside for reuse.	Unused large pieces recycled into store by builder.	Nil
Timber cladding		nil			Useful pieces set aside for reuse.	Unused large pieces recycled into store by builder.	Nil
FC cladding		1.00			Nil	$\label{thm:material} \textit{Material broken up on site}, \textit{stored separately for collection to crushing}.$	To Waste Transfer Station that recycles FC building waste.
Plasterboard		1.00			Nil	Binned separately for recycling by Boral Plasterboard	Nil
Roofing: tiles			nil		Full tiles stored on site as spares	Broken tiles stored for collection to crushing to road base at Waste Transfer Station.	Nil
Roofing: Steel			nil		Sheets ordered cut to size to minimise waste	Offcut sheets stored for recycling at Mini MII steel plant by BHP/equiv.	Nil
Insulation			10.00		Nil	Unused returned to manufacturer/store by builder.	Nil
Metal piping etc				0.001	Nil	Non ferrous metals binned separately for recycling.	
PVC piping		nil			Nil		Removal to Land Fill site.
Tiles + pavers		0.80			Full tiles set aside as spares.	Cut tiles stored for collection to crushing to road base at Waste Transfer Station.	Nil
Misc packaging, fixings glues etc		0.50			Timber packaging sorted for reuse as above.		Removal to Land Fill site.

notes	rev	date amendment	rev	date	arnendment	environa studio
all work to be carried out in accordance with bca, saa codes and conditions of council. measurements in rmm's unless noted, use figured dimensions, do not scale drawings, site measure before starting work, refer all discrepancies to the architect.	A : B C D : D E	23/01/19 issued for information 25/02/19 issued to council for information 08/03/19 issued for information 16/04/19 issued for information 30/04/19 issued for information 30/04/19 issued to consultants 10/05/19 issued to consultants 10/05/19 issued to consultants	G H I J K	19/06/19 21/06/19 02/07/19 31/07/19 19/08/19 27/08/19	lissued to consultants lissued to consultants + client lissued to consultants + client lissued to consultants + client lissued to client for comment	224 riley st surry hills 2010 t: 02 9211 0000 w: www.environastudio.com.au architects registration number 6239

project SENIORS LIVING	location 27-29 NORTH AVALON ROAD	drawing CONSTRUCTION WASTE MANAGEMENT PLAN	stage DA		project no. 991	dwg no. <b>220</b>
for/client	at	drawing	chkd	drwn	date	revision
armada avalon PTY LTD	AVALON BEACH		TW	МВ	03/10/19	L









notes		rev	date	amendment
bea, sa maasu figured site me	rk to be carried out in accordance with as codes and conditions of council. urements in mm's unless noted. use d dimensions. do not scale drawings. easure before starting work. all discrepancies to the architect.	A B C D D	25/02/19 08/03/19 16/04/19 30/04/19 03/05/19 10/05/19	issued for information issued to council for informatio issued for information issued for information issued for information issued to consultants issued to consultants issued to consultants

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F 14/06/19 issued to consultants
G 19/06/19 issued to consultants + client
H 21/06/19 issued to consultants + client
I 02/07/19 issued to consultants + client
J 31/07/19 issued to client for comment
J 19/08/19 issued to client for comment
K 27/08/19 issued to client for comment
L 30/09/19 issued to client for comment

environa studio 224 riley st surry hills 2010 t: 02 9211 0000

project SENIORS LIVING	location 27-29 NORTH AVALON ROAD	drawing SHEET 1	stage DA		project no. 991	dwg no. <b>901</b>	
for/client	at	drawing	chkd	drwn	date	revision	
ARMADA AVALON PTY LTD	AVALON BEACH	PERSPECTIVES	TW	МВ	03/10/19	L	



june 21 3pm additional shadow generated by the proposed development

	notes rev	date arnendment	rev	date amendment	environa studio	project	location	drawing	stage	project no.	dwg no.
	bca, saa codes and conditions of council.	23/01/19 issued for information 25/02/19 issued to council for information 09/03/19 issued for information	G H	14/06/19 issued to consultants 19/06/19 issued to consultants + client 21/06/19 issued to consultants + client	224 riley st surry hills 2010	SENIORS LIVING	27-29 NORTH AVALON ROAD	JUNE 21st	DA	991	910
	figured dimensions, do not scale drawings.  Site measure before starting work.	15/04/19 issued for information 30/04/19 issued for information 03/05/19 issued to consultants	J	02/07/19  issued to consultants + client 31/07/19  issued to client for comment 19/08/19  issued to client for comment	t: 02 9211 0000 w: www.environastudio.com.au	for/client ARMADA AVALON PTY LTD	at AVALON BEACH	drawing SHADOW DIAGRAMS	chkd drwr	date 03/10/19	revision L
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september 23 additional shadow generated by the proposed development

notes	rev	date amendment	rev	date arnendment	environa studio	project	location	drawing	stage		project no.	dwg no.
all work to be carried out in accordance with bca, saa codes and conditions of council.	Α	23/01/19 issued for information 25/02/19 issued to council for information 08/03/19 issued for information	G H	14/06/19 issued to consultants 19/06/19 issued to consultants + client 21/06/19 issued to consultants + client	224 riley st surry hills 2010	SENIORS LIVING	27-29 NORTH AVALON ROAD	SEPT 23rd	DA		991	911
measurements in mm's unless noted. use figured dimensions. do not scale drawings. site measure before starting work.	С	16/04/19 issued for information 30/04/19 issued for information	J	02/07/19 issued to consultants + client 31/07/19 issued to client for comment	t: 02 9211 0000 w: www.environastudio.com.au	for/client	at	drawing		drwn	date	revision
refer all discrepancies to the architect.	Ε	03/05/19 issued to consultants 10/05/19 issued to consultants 30/05/19 issued to consultants	K	19/08/19 issued to client for comment 27/08/19 issued to client for comment 30/09/19 issued to client for information	architects registration number 6239	armada avalon PTY LTD	AVALON BEACH	SHADOW DIAGRAMS	TW	МВ	03/10/19	L

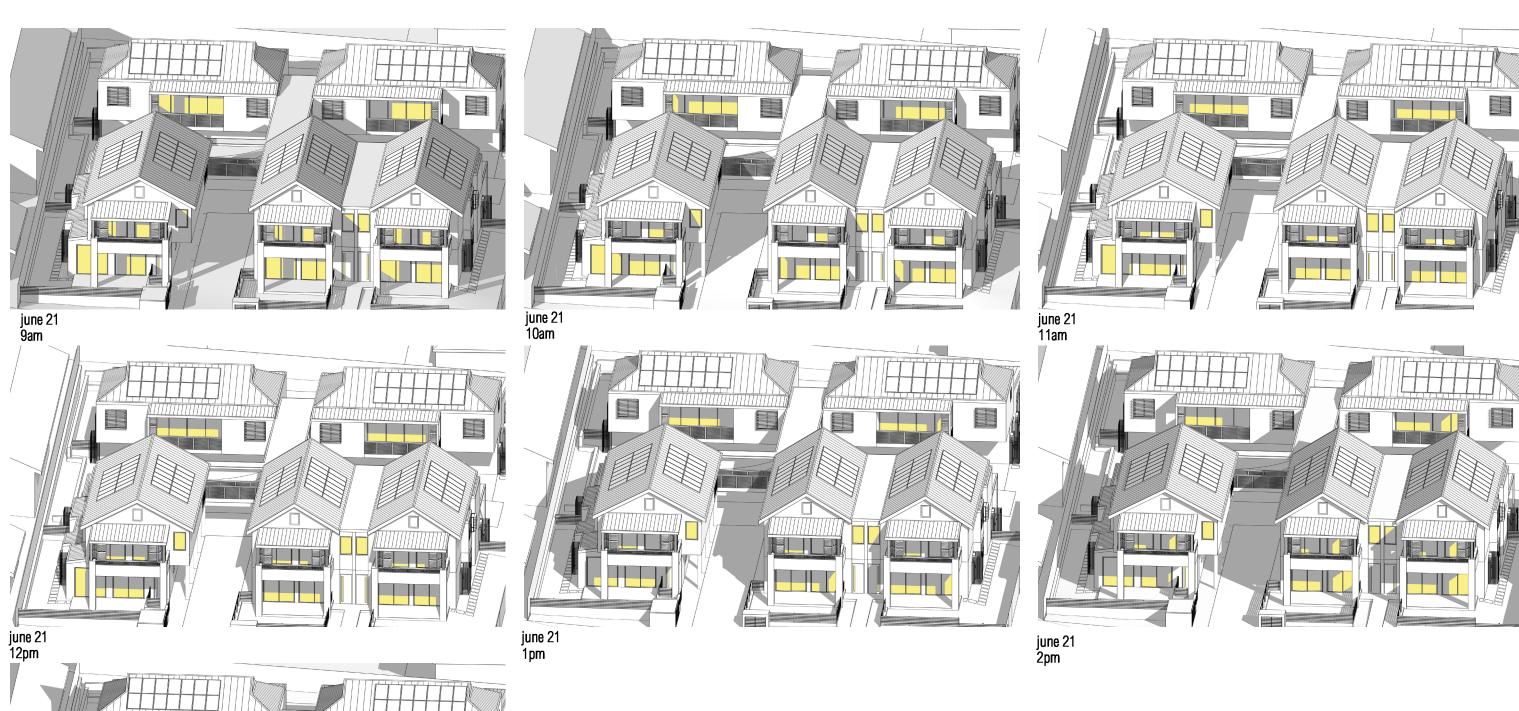


december 21 3pm



additional shadow generated by the proposed development

	notes	rev	date amendment	rev	date	amendment	environa studio	project	location	drawing	stage	projec		dwg no.
	all work to be carried out in accordance with bca, saa codes and conditions of council.	Α	23/01/19 issued for information 25/02/19 issued to council for information 08/03/19 issued for information	G H	19/06/19 21/06/19	issued to consultants issued to consultants + client issued to consultants + client	224 riley st surry hills 2010	SENIORS LIVING	27-29 NORTH AVALON ROAD	DEC 21st	DA	991		912
	measurements in mm's unless noted, use figured dimensions, do not scale drawings, site measure before starting work.	С	30/04/19 issued for information	J	31/07/19	issued to consultants + client issued to client for comment	t: 02 9211 0000 w: www.environastudio.com.au	for/client	at	drawing	chkd	drwn date		revision
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june 21 3pm

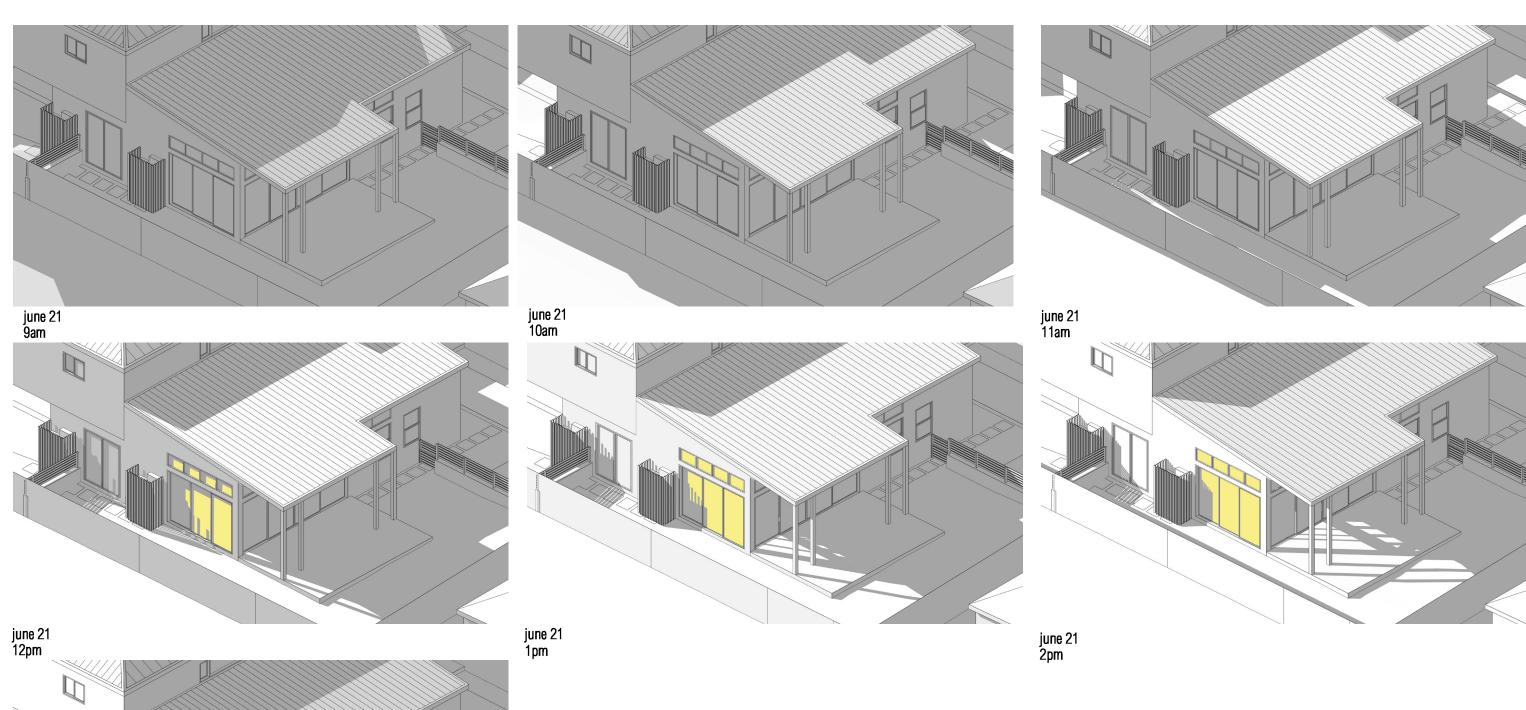
notes	rev	date amendment	rev	date	amendment	environa studio	project	location	drawing	stage		project no.	dwg no.
all work to be carried out in accordance with bca, saa codes and conditions of council.	Α	23/01/19 issued for information 25/02/19 issued to council for information 08/03/19 issued for information	G H	19/06/19 21/06/19	issued to consultants issued to consultants + client issued to consultants + client	224 riley st surry hills 2010	SENIORS LIVING	27-29 NORTH AVALON ROAD	LIVING SPACE SHEET 1	DA		991	913
measurements in mm's unless noted. use figured dimensions. do not scale drawings . site measure before starting work. refer all discrepancies to the architect.	C D D E	16/04/19 issued for information 30/04/19 issued for information 03/05/19 issued to consultants 10/05/19 issued to consultants 30/05/19 issued to consultants	J J K	31/07/19 19/08/19 27/08/19	issued to consultants + client issued to client for comment issued to client for comment issued to client for comment issued to client for information	t: 02 9211 0000 w: www.environastudio.com.au architects registration number 6239	for/client ARMADA AVALON PTY LTD	at AVALON BEACH	drawing SOLAR ACCESS STUDY	chkd TW	drwn MB	date 03/10/19	revision L



june 21 3pm

\*shadow diagrams generated by 3D model using sketchup pro 18'. All diagrams have been certified by the registered architect.

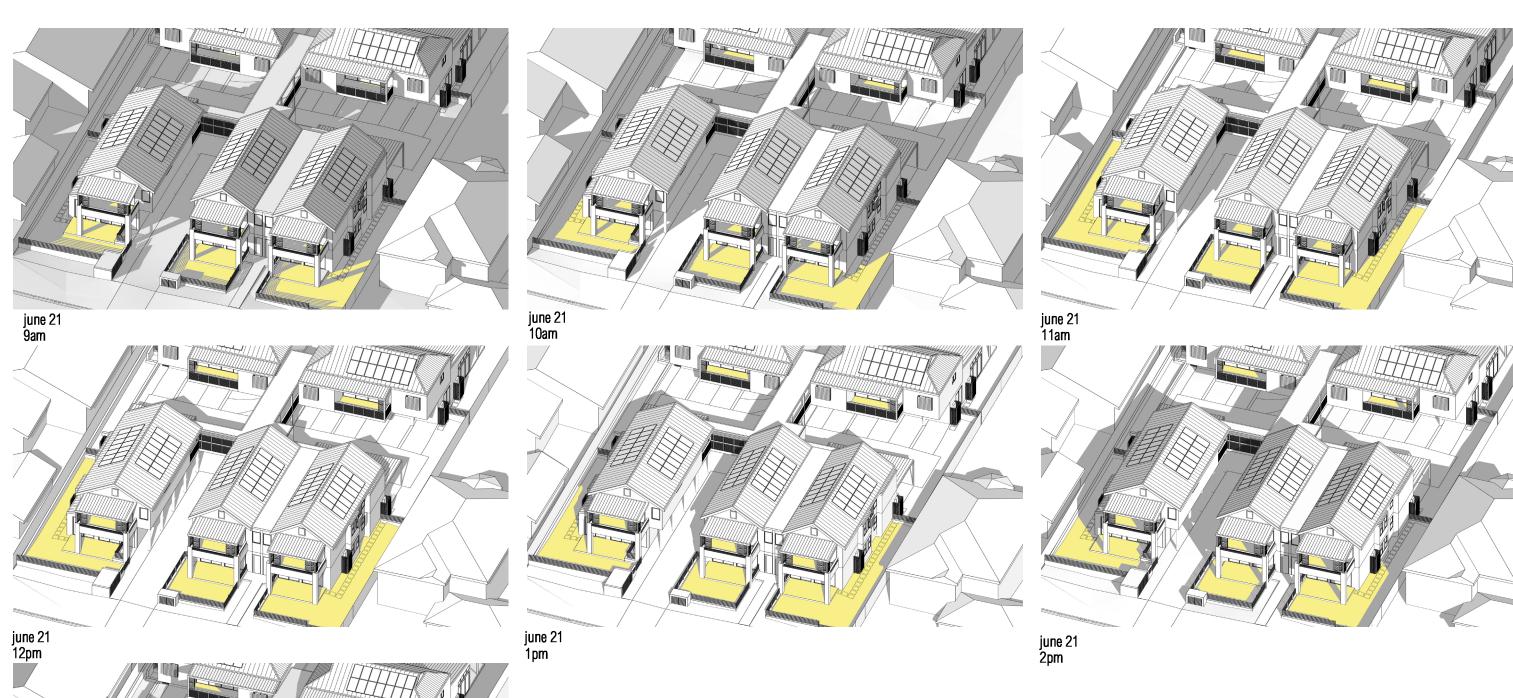
notes	rev date	amendment			amendment	environa studio	project	location	drawing	stage		project no.	dwg no.
all work to be carried out in accordance with bca, saa codes and conditions of council .  measurements in mm's unless noted use	A 25/02/1	9 issued for information 9 issued to council for information 9 issued for information	G H	19/06/19 21/06/19	issued to consultants issued to consultants + client issued to consultants + client	224 riley st surry hills 2010 t: 02 9211 0000	SENIORS LIVING	27-29 NORTH AVALON ROAD	LIVING SPACE SHEET 2	DA		991	914
figured dimensions. do not scale drawings . site measure before starting work. refer all discrepancies to the architect.	C 16/04/1 D 30/04/1	9 issued for information 9 issued for information 9 issued to consultants	J	31/07/19 19/08/19	issued to consultants + client issued to client for comment issued to client for comment	w: www.environastudio.com.au	for/client  ARMADA AVALON PTY LTD	at AVALON BEACH	drawing SOLAR ACCESS STUDY	chkd TW	drwn MB	date 03/10/19	revision L
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june 21 3pm	

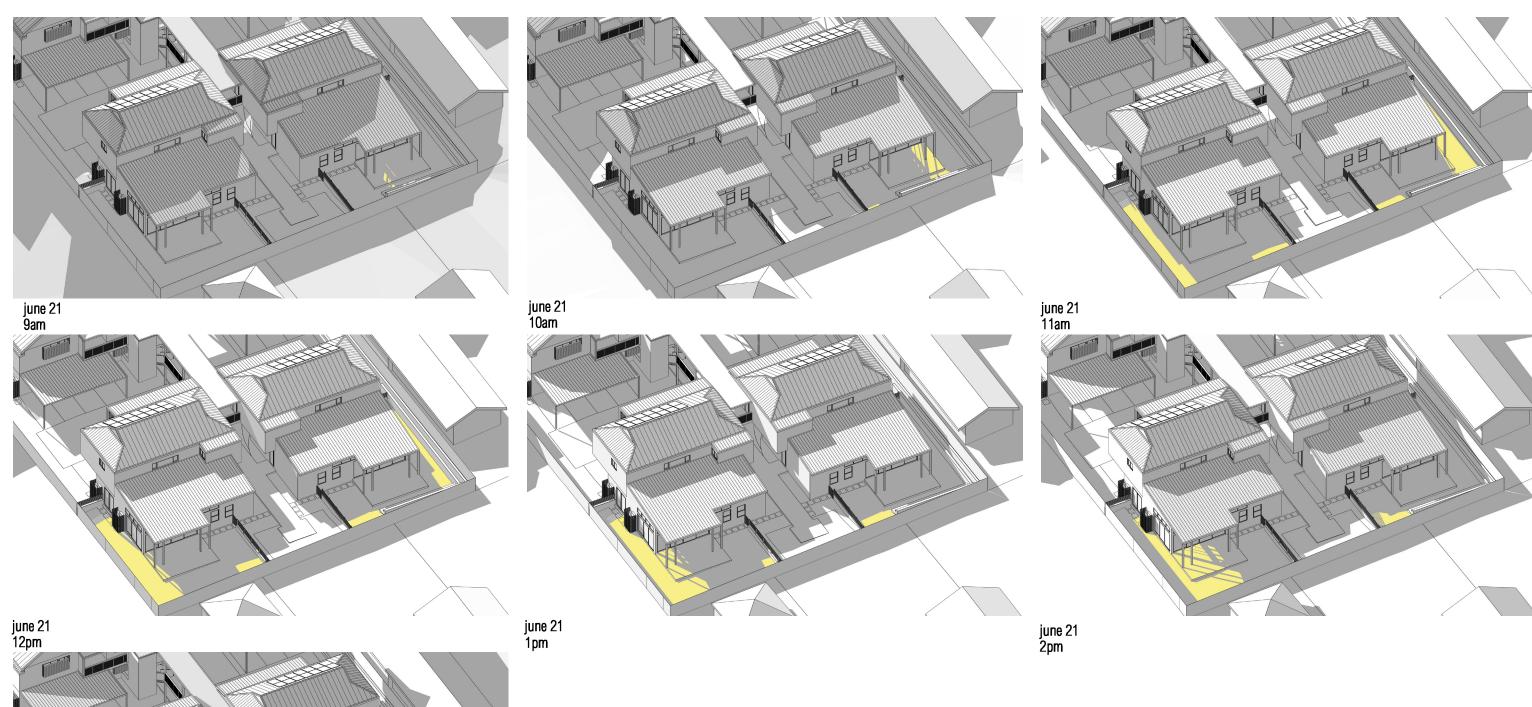
\*shadow diagrams generated by 3D model using sketchup pro 18'. All diagrams have been certified by the registered architect.

	notes	rev	date amendment rev	ev	date amendment	environa studio	project	location	drawing	stage		project no.	dwg no.
	all work to be carried out in accordance with bca, saa codes and conditions of council.	Α	25/02/19 issued to council for information  08/03/19 issued for information  H	G 11 H 2	14/06/19 issued to consultants 19/06/19 issued to consultants + client 11/06/19 issued to consultants + client	224 riley st surry hills 2010	SENIORS LIVING	27-29 NORTH AVALON ROAD	LIVING SPACE SHEET 3	DA		991	915
	measurements in mm's unless noted use figured dimensions, do not scale drawings, site measure before starting work, refer all discrepancies to the architect.	C D D	16/04/19  issued for information           30/04/19  issued for information           03/05/19  issued to consultants	J 3	12/07/19 issued to consultants + client 11/07/19 issued to client for comment 19/08/19 issued to client for comment	t: 02 9211 0000 w: www.environastudio.com.au	for/client  ARMADA AVALON PTY LTD	at AVALON BEACH	drawing SOLAR ACCESS STUDY	chkd TW	drwn MB	date 03/10/19	revision L
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june 21 3pm

notes	rev	date amendment	rev	date	amendment	environa studio	project	location	drawing	stage	project		dwg no.
all work to be carried out in accordance with bca, saa codes and conditions of council.	Α	23/01/19 issued for information 25/02/19 issued to council for information 08/03/19 issued for information	G H	19/06/19 21/06/19	issued to consultants issued to consultants + client issued to consultants + client	224 riley st surry hills 2010	SENIORS LIVING	27-29 NORTH AVALON ROAD	PRIVATE OPEN SPACE SHEET 1	DA	991		916
measurements in mm's unless noted. use figured dimensions. do not scale drawings . site measure before starting work. refer all discrepancies to the architect.	C D D E	16/04/19 issued for information 30/04/19 issued for information 03/05/19 issued to consultants 10/05/19 issued to consultants 30/05/19 issued to consultants	J J K	31/07/19 19/08/19 27/08/19	issued to consultants + client issued to client for comment issued to client for comment issued to client for comment issued to client for information	t: 02 9211 0000 w: www.environastudio.com.au architects registration number 6239	for/client ARMADA AVALON PTY LTD	at AVALON BEACH	drawing SOLAR ACCESS STUDY	chkd TW	drwn date MB 03/1	0/19	revision L



june 21 3pm

\*shadow diagrams generated by 3D model using sketchup pro 18'. All diagrams have been certified by the registered architect.

notes	rev	date amendment	rev	date	amendment	environa studio	project	location	drawing	stage		project no.	dwg no.
all work to be carried out in accordance with bca, sae codes and conditions of council.	Α	23/01/19 issued for information 25/02/19 issued to council for information 08/03/19 issued for information	G	19/06/19 21/06/19	issued to consultants issued to consultants + client issued to consultants + client	224 riley st surry hills 2010	SENIORS LIVING	27-29 NORTH AVALON ROAD	PRIVATE OPEN SPACE SHEET 2	DA		991	917
measurements in mm's unless noted. use figured dimensions, do not scale drawings . site measure before starting work.  o 0.5 1.0 2.0 3.0m	C D	16/04/19 issued for information 30/04/19 issued for information 03/05/19 issued to consultants 10/05/19 issued to consultants	J J	31/07/1 19/08/1 27/08/1	al issued to consultants + client blissued to client for comment blissued to client for comment blissued to client for comment blissued to client for information	t: 02 9211 0000 w: www.environastudio.com.au architects registration number 6239	for/client ARMADA AVALON PTY LTD	at AVALON BEACH	drawing SOLAR ACCESS STUDY	chkd TW	drwn MB	date 03/10/19	revision L

living room glazing	Jun-21 9am	10am	11am	12pm	1pm	2pm	3pm		minimum 3 hours
unit 1	yes	yes	yes	yes	yes	yes	yes	6 hours	yes
unit 2	yes	yes	yes	yes	yes	yes	yes	6 hours	yes
unit 3	yes	yes	yes	yes	yes	yes	yes	6 hours	yes
unit 4	yes	yes	yes	no	no	no	no	2 hours	no
unit 5	no	no	no	yes	yes	yes	yes	3 hours	yes
unit 6	yes	yes	yes	yes	yes	yes	yes	6 hours	yes
unit 7	yes	yes	yes	yes	yes	yes	yes	6 hours	yes
unit 8	yes	yes	yes	yes	yes	yes	yes	6 hours	yes
unit 9	yes	yes	yes	yes	yes	yes	yes	6 hours	yes
unit 10	yes	yes	yes	yes	yes	yes	yes	6 hours	yes
									09/10 (90%)

09/10 (90%) of all proposed units in this development will receive more than 3 hours of solar access onto their living room windows in mid winter (june 21)

private open space	Jun-21 9am	10am	11am	12pm	1pm	2pm	3pm		minimum 3 hours
unit 1	yes	yes	yes	yes	yes	yes	yes	6 hours	yes
unit 2	yes	yes	yes	yes	yes	yes	yes	6 hours	yes
unit 3	yes	yes	yes	yes	yes	yes	yes	6 hours	yes
unit 4	no	yes	yes	yes	yes	yes	yes	5 hours	yes
unit 5	no	no	yes	yes	yes	yes	yes	4 hours	yes
unit 6	yes	yes	yes	yes	yes	yes	yes	6 hours	yes
unit 7	yes	yes	yes	yes	yes	yes	yes	6 hours	yes
unit 8	yes	yes	yes	yes	yes	yes	yes	6 hours	yes
unit 9	no	yes	yes	yes	yes	yes	yes	5 hours	yes
unit 10	no	yes	yes	yes	yes	yes	yes	5 hours	yes
									10/10 (100%)

10/10 (100%) of all proposed units in this development will receive more than 3 hours of solar access onto their private open spaces in mid winter (june 21)

notes	re	date	te amendment	rev	date	amendment	GIIVII OIIA SLUUIO	project	location	drawing	stage		project no.	dwg no.
all work to be carried out in accordant bca, saa codes and conditions of cou	cil. A	25/02	11/19 issued for information 12/19 issued to council for information 13/19 issued for information	G H	19/06/19 21/06/19	issued to consultants issued to consultants + client issued to consultants + client	224 riley st surry hills 2010	SENIORS LIVING	27-29 NORTH AVALON ROAD	SUMMARY	DA		991	919
measurements in mm's unless noted. figured dimensions. do not scale draw site measure before starting work.		16/04 30/04	A/19 issued for information A/19 issued for information	J	31/07/19	issued to consultants + client issued to client for comment issued to client for comment	w: www.environastudio.com.au	for/client ARMADA AVALON PTY LTD	at AVALON BEACH	drawing SOLAR ACCESS STUDY	GINU		date	revision
0 0.5 1.0 2.0 3.0m	E F	10/05	15/19 issued to consultants 15/19 issued to consultants 15/19 issued to consultants	K	27/08/19		architects registration number 6239	ARMADA AVALUN PIT LID	AVALUN DEACH	SULAR ACCESS STUDY	144	МВ	03/10/19	

	BASIX thermal comfort inclusions – 27-29 North Avalon Road
Floors	Concrete slab on ground to ground level, no insulation required.
	Framed floor between levels, no insulation required.
Walls	External walls Level 1:
	Cavity brick work with cavity insulation R1.0
	External walls Level 2:
	EPS panel system (min, 60mm) with R2.0 cavity batt insulation (Minimum R <sub>total system value</sub> 3.94)
	External colour
	Default colour modelled
	Walls with-in dwellings:
	Plasterboard on studs, no insulation required
	Party walls Level 1:
	Cavity brick work with cavity, no insulation required.
	Party walls Level 2:
	Double stud walls lined with plasterboard, no insulation required.
Windows	Aluminium framed, low-e single glazing to units 04, 05 and 08 only
	U-value: 4.80 (equal to or lower than) SHGC: 0.59 (±10%)
	Aluminium framed single clear glazing elsewhere:
	Group A – awning windows
	U-value: 6.70 (equal to or lower than) SHGC: 0.57 (±10%)
	Group B – sliding doors/windows + fixed glazing
	U-value: 6.70 (equal to or lower than) SHGC: 0.70 (±10%)
	Given values are AFRC total window system values (glass and frame)
Ceilings	Plasterboard ceiling with R3.0 insulation (insulation only value) where roof above (R4.0 ceiling insulation to unit 04 only)
Cellings	Sealed LED downlights at a maximum of one every 2.5m2
Roof	Metal roof with foil backed blanket (Ru1.3 and Rd1.3)
Noor	External colour
	Light (0.475>SA)
Floor Coverings	Tiles to wet areas; carpet to bedrooms; timber elsewhere.
Rainwater tank	8,000L rainwater tank
Namwater tank	Collecting from 850m <sup>2</sup> of roof area
	Connected to the irrigation system of common and private landscape.
Hat water costem	BASIX energy inclusions  Individual electric heat number (air sourced) = 21.25 STCs
Hot water system	Individual electric heat pumps (air sourced) – 31-35 STCs
Alternative energy	Photovoltaic system with a minimum output of 2kW

	notes	ev	date amendment	rev	date	amendment	environa studio	project		drawing	stage		project no.	dwg no.
	all work to be carried out in accordance with bca, saa codes and conditions of council. measurements in mm's unless noted, use	A 2	23/01/19 issued for information 25/02/19 issued to council for information 08/03/19 issued for information	G H	19/06/1 21/06/1	sissued to consultants sissued to consultants + client sissued to consultants + client	224 riley st surry hills 2010 t: 02 9211 0000	SENIORS LIVING	27-29 NORTH AVALON ROAD	BASIX COMMITMENTS	DA		991	930
	figured dimensions. do not scale drawings. site measure before starting work. refer all discrepancies to the architect.	C 1 D 3 D 0	16/04/19 issued for information 30/04/19 issued for information 03/05/19 issued to consultants	J	31/07/1 19/08/1	issued to client for comment	w: www.environastudio.com.au	for/client  ARMADA AVALON PTY LTD	at AVALON BEACH	drawing	chkd TW	drwn MB	date 03/10/19	revision L
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bca, saa	k to be carried out in accordance with a codes and conditions of council.	A 25/0	0/19 issued to council for information	19/06/1	9 issued to consultants 9 issued to consultants + client 9 issued to consultants + client	224 riley st surry hills 2010	SENIORS LIVING	27-29 NORTH AVALON ROAD	BUS ROUTE PLAN	DA		991	960
figured o	rements in mm's unless noted, use dimensions, do not scale drawings, asure before starting work.	C 16/0	1/19 issued for information	31/07/19	9 issued to consultants + client 9 issued to client for comment	w: www.environastudio.com.au	for/client	at	drawing	chkd	drwn	date	revision
	I discrepancies to the architect.	E 10/0		27/08/1	9 issued to client for comment 9 issued to client for comment 9 issued to client for information	architects registration number 6239	ARMADA AVALON PTY LTD	AVALON BEACH		TW	МВ	03/10/19	<b>L</b>