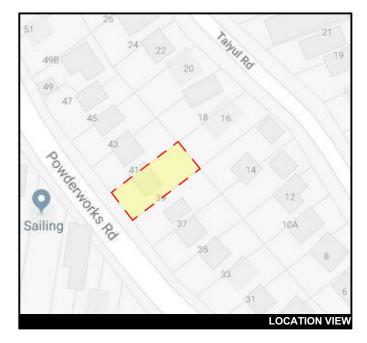
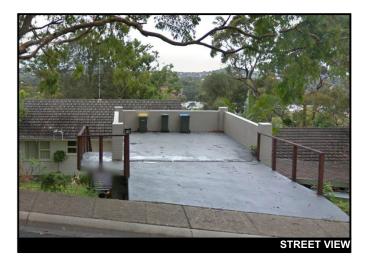


	REV.	DATE	COMMENTS	DRWN	NOTES This drawing is the copyright of Action Plans and not be LEGEND		CLIENT	DRAWING
ACTION PLANS m: 0426 957 518 e:operations@actionplans.com.au w: www.actionplans.com.au	A	19/12/2018	INITIAL DESIGN PLAN	DLR	altered, reproduced or transmitted in any form or by any	LANDSCAPE	ALEX & CATHERINE	DA0 <sup>2</sup>
	В	22/01/2019	REVISED DESIGN PLANS	DLR	Action Plans.	HARDSCAPE	BROWN	DAU
	с	08/02/19	REVISED DESIGN PLANS	DLR	are to be used only. The Builder/Contractor shall check and verify all levels and		PROJECT ADDRESS	DATE
					dimensions on site prior to commencement of any work, creation of shop drawings, or fabrication of components.		41 POWDERWORKS	Monday, 1
					All errors and omissions are to be verified by the Builder/Contractor and referred to the designer prior to the commencement of works.		ROAD, NORTH NARRABEEN	2019

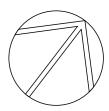






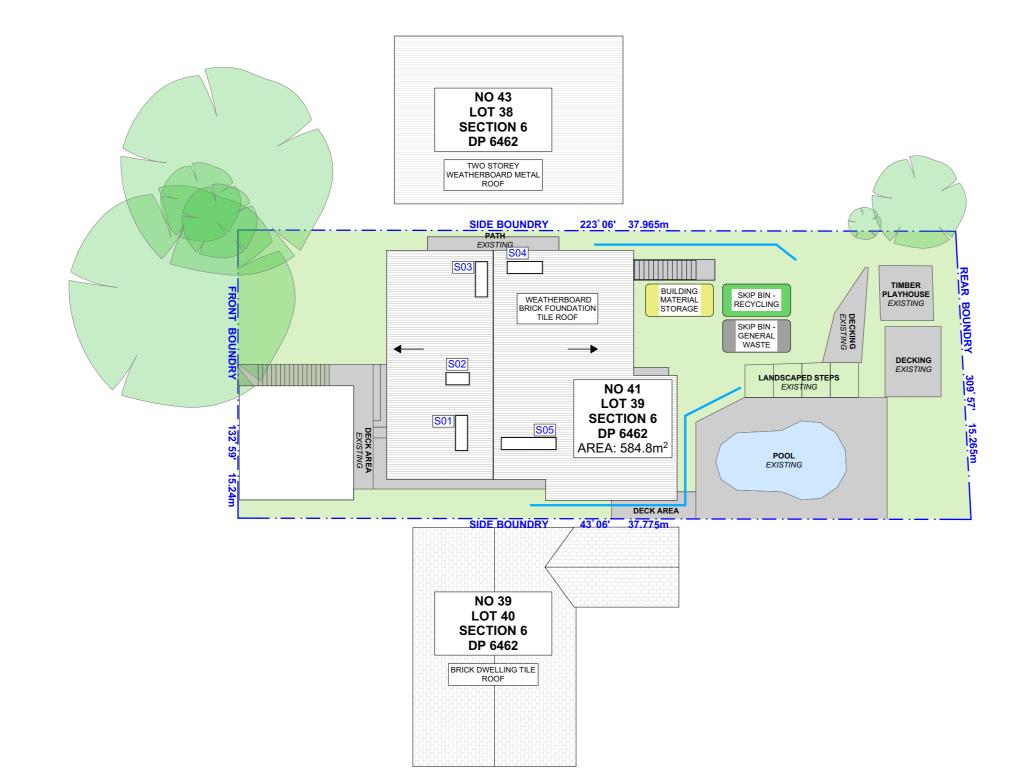
ving no. **.01** 

DRAWING NAME



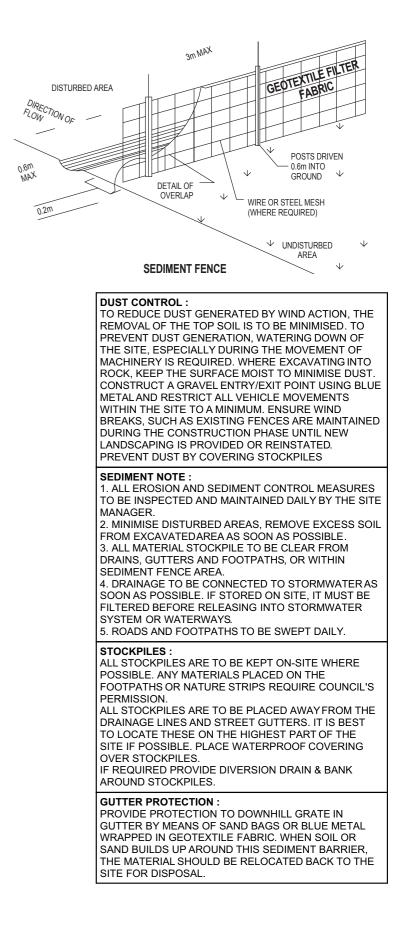
ay, 18 March

SCALE 1:200 @A3



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ACTION PLANS	A	19/12/2018	INITIAL DESIGN PLAN		altered, reproduced or transmitted in any form or by any means in part or in whole with the written permission of		ALEX & CATHERINE	DA02
	В	22/01/2019	REVISED DESIGN PLANS	DLR	Action Plans. Do not scale measure from drawings. Figured dimensions		BROWN	DAUZ
m: 0426 957 518	с	08/02/19	REVISED DESIGN PLANS	DLR	are to be used only. The Builder/Contractor shall check and verify all levels and		PROJECT ADDRESS	DATE
e:operations@actionplans.com.au w: www.actionplans.com.au					mensions on site prior to commencement of any work, eation of shop drawings, or fabrication of components.	FALL	41 POWDERWORKS	Monday, 18 Ma
					All errors and omissions are to be verified by the Builder/Contractor and referred to the designer prior to the commencement of works.		ROAD, NORTH	2019

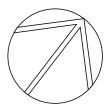
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NO.

DRAWING NAME

SITE / ROOF / SEDIMENT EROSION / WASTE MANAGEMENT PLAN



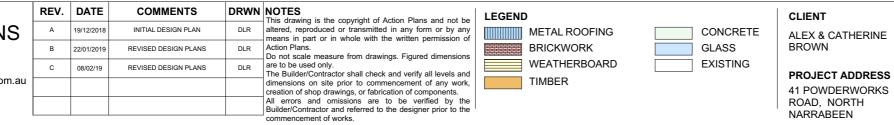
March

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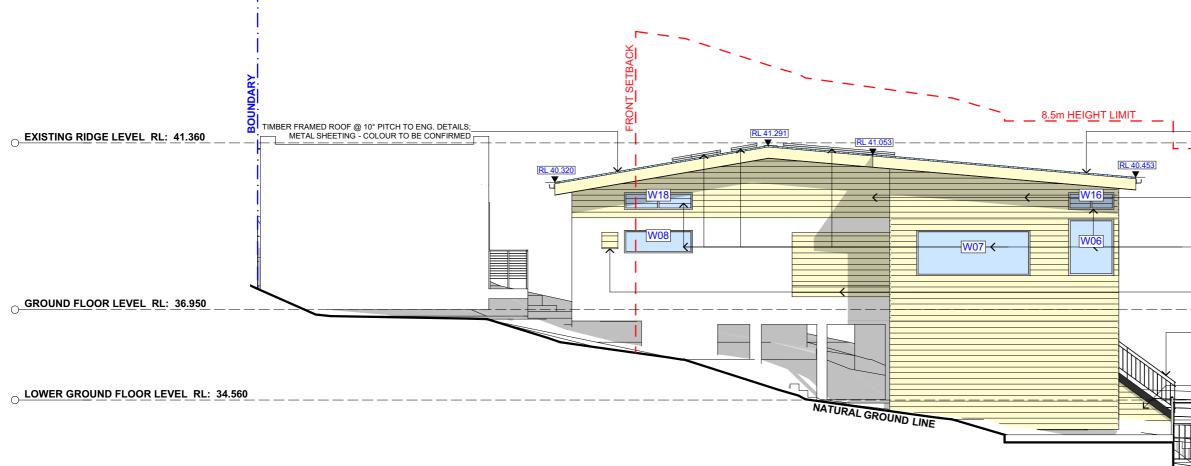
NORTH / EAST ELEVATION

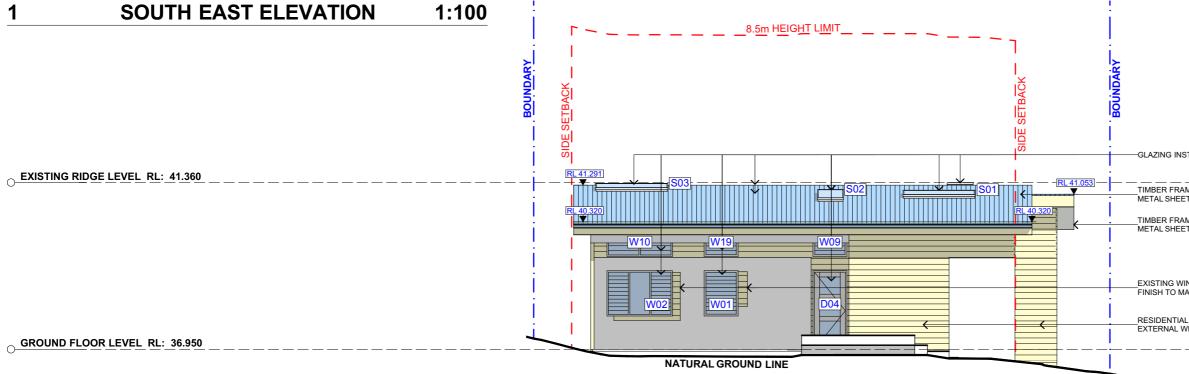
Monday, 18 March

DATE

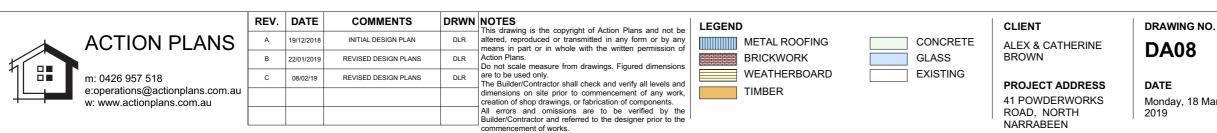
2019

SCALE 1:100 @A3





#### SOUTH WEST ELEVATION 1:100 2



TIMBER FRAMED ROOF @ 5° PITCH TO ENG. DETAILS; METAL SHEETING - COLOUR TO BE CONFIRMED	
RESIDENTIAL TIMBER FRAMED CONSTRUCTION TO AS 1684; EXTERNAL WEATHERBOARD CLADDING	REAR SETBACK
GLAZING INSTALLATION TO AS 1288	REAR S
EXISTING WINDOW TO BE FILLED AND MADE GOOD; FINISH TO MATCH EXISTING WALL	 
STAIRS TO COMPLY WITH NCC STANDARDS	
UNDER STAIR GARDEN SHED	   +:

-GLAZING INSTALLATION TO AS 1288

TIMBER FRAMED ROOF @ 10° PITCH TO ENG. DETAILS; METAL SHEETING - COLOUR TO BE CONFIRMED

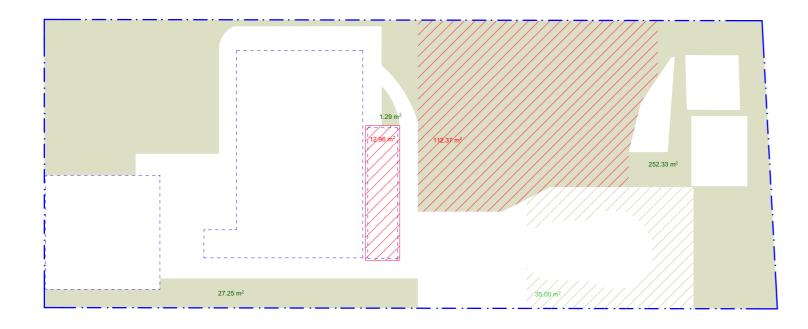
\_TIMBER FRAMED ROOF @ 5° PITCH TO ENG. DETAILS; METAL SHEETING - COLOUR TO BE CONFIRMED

EXISTING WINDOW TO BE FILLED AND MADE GOOD; FINISH TO MATCH EXISTING WALL

RESIDENTIAL TIMBER FRAMED CONSTRUCTION TO AS 1684; EXTERNAL WEATHERBOARD CLADDING

DRAWING NAME SOUTH / WEST ELEVATION

SCALE 1:100 @A3



1:200

## **AREA CALCULATION**

SITE AREA:	584.8m <sup>2</sup>	
EXISTING LANDSCAPE AREA:	48.02%	(280.87m <sup>2</sup> )
EXISTING 6% IMPERVIOUS ALLOWANCE:	6%	(35m <sup>2</sup> )
TOTAL LANDSCAPED AREA:	54.02%	(315.87m <sup>2</sup> )
PROPOSED LANDSCAPE AREA:	46.19%	(270.14m <sup>2</sup> )
PROPOSED 6% IMPERVIOUS ALLOWANCE:	6%	(35m <sup>2</sup> )
TOTAL LANDSCAPED AREA:	52.19%	(305.14m <sup>2</sup> )
EXISTING PRIVATE OPEN SPACE: PROPOSED PRIVATE OPEN SPACE:	125.33m 95.8m²	2



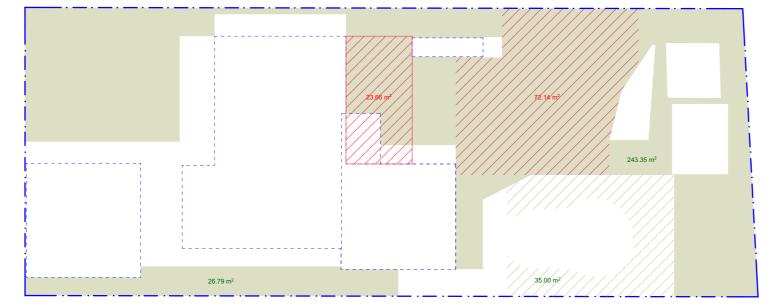
EXTERNAL WEATHERBOARD CLADDING -COLOUR TO BE CONFIRMED BY CLIENT



FIXED SKYLIGHT WINDOWS BY VELUX

## PROPOSED AREA CALCULATIONS 1:200 2

		REV.	DATE	COMMENTS	DRWN	NOTES This drawing is the copyright of Action Plans and not be	LEGEND	CLIENT	DRAWING NO
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		В	22/01/2019	REVISED DESIGN PLANS	DLR	Action Plans. Do not scale measure from drawings. Figured dimensions		BROWN	DAIU
	m: 0426 957 518	с	08/02/19	REVISED DESIGN PLANS	DLR	are to be used only. The Builder/Contractor shall check and verify all levels and		PROJECT ADDRESS	DATE
	e:operations@actionplans.com.au w: www.actionplans.com.au					dimensions on site prior to commencement of any work, creation of shop drawings, or fabrication of components. All errors and omissions are to be verified by the Builder/Contractor and referred to the designer prior to the	PRIVATE OPEN SPACE	41 POWDERWORKS ROAD, NORTH	Monday, 18 N 2019
		L				commencement of works.		NARRABEEN	



**EXISTING AREA CALCULATIONS** 

1



ALUMINIUM FRAMED WINDOWS BY STEGBAR



ALUMINIUM FRAMED DOORS BY STEGBAR

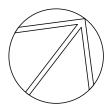


METAL SHEET ROOFING -COLOUR TO BE CONFIRMED BY CLIENT

RAWING NO.

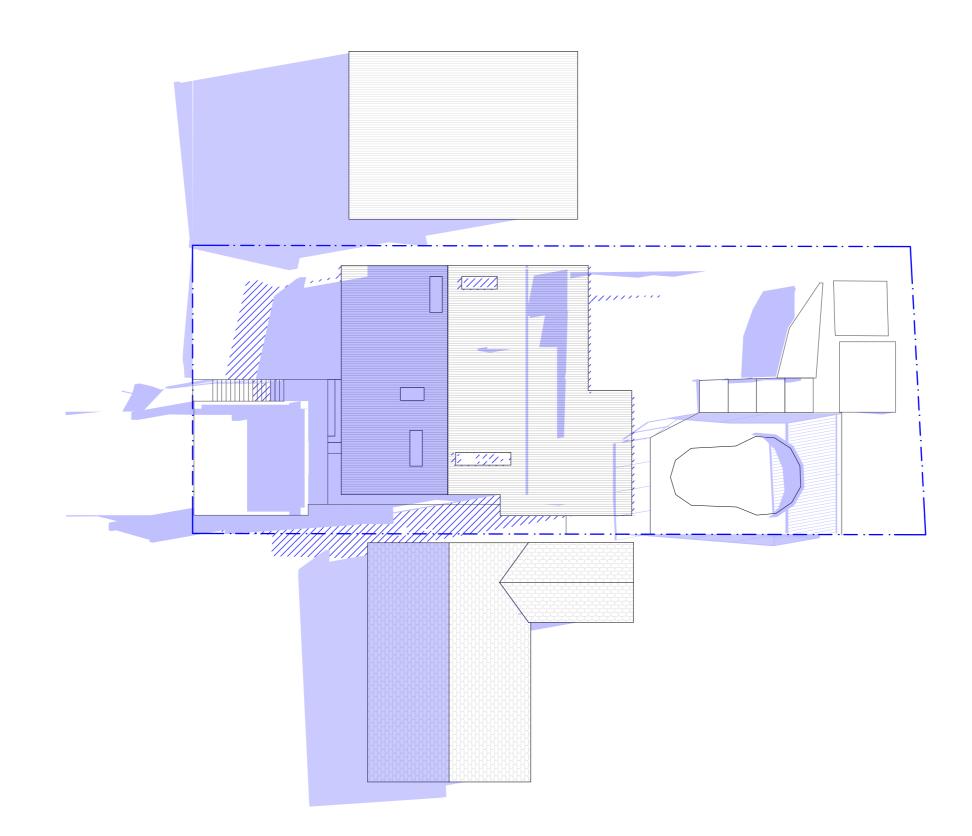
#### DRAWING NAME

AREA CALCULATIONS / SAMPLE BOARD



onday, 18 March

SCALE 1:200 @A3



			REV.	DATE	COMMENTS	DRWN	NOTES This drawing is the copyright of Action Plans and not be	LEGEND		CLIENT	DRAWING NO
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t.			в	22/01/2019	REVISED DESIGN PLANS	DLR	Action Plans. Do not scale measure from drawings. Figured dimensions		PROPOSED SHADOWS	BROWN	DATI
1		m: 0426 957 518	с	08/02/19	REVISED DESIGN PLANS	DLR	are to be used only. The Builder/Contractor shall check and verify all levels and			PROJECT ADDRESS	DATE
┦└──╊━━┛	e:operations@actionplans.com.au w: www.actionplans.com.au					dimensions on site prior to commencement of any work, creation of shop drawings, or fabrication of components. All errors and omissions are to be verified by the Builder/Contractor and referred to the designer prior to the commencement of works.		41 POWDERWORKS ROAD, NORTH NARRABEEN	Monday, 18 M 2019		

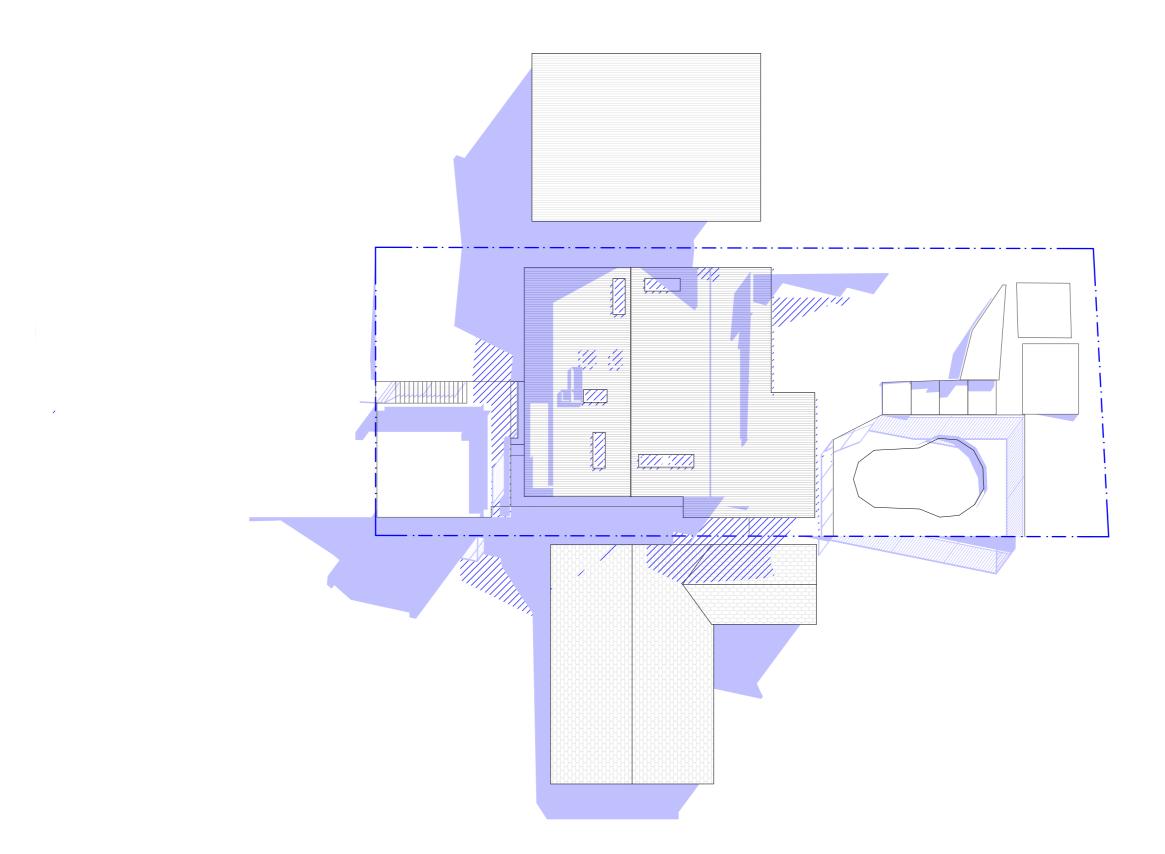
VING NO.

DRAWING NAME WINTER SOLSTICE 9 AM



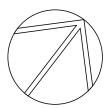


ay, 18 March



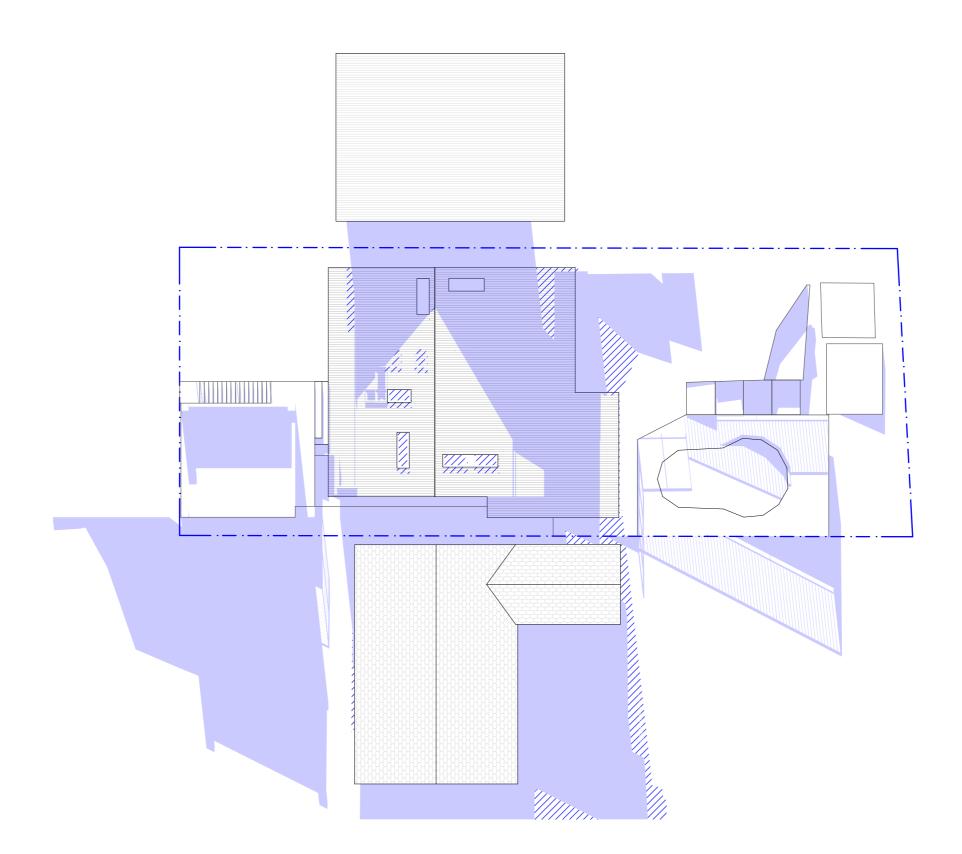
		REV.	DATE	COMMENTS	DRWN	I NOTES This drawing is the copyright of Action Plans and not be	LEGEND		CLIENT	DRAWING
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		в	22/01/2019	REVISED DESIGN PLANS	DLR	Action Plans. Do not scale measure from drawings. Figured dimensions		PROPOSED SHADOWS	BROWN	DAIZ
	m: 0426 957 518	с	08/02/19	REVISED DESIGN PLANS	DLR	are to be used only. The Builder/Contractor shall check and verify all levels and			PROJECT ADDRESS	DATE
╷└═╤┲━┛┛	e:operations@actionplans.com.au w: www.actionplans.com.au					dimensions on site prior to commencement of any work, creation of shop drawings, or fabrication of components.			41 POWDERWORKS	Monday, 1
						All errors and omissions are to be verified by the Builder/Contractor and referred to the designer prior to the			ROAD, NORTH	2019
	l l	L				commencement of works.			NARRABEEN	

ing no. 12 DRAWING NAME WINTER SOLSTICE 12 PM



, 18 March

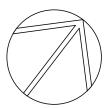
**SCALE** 1:200 @A3



		REV.	DATE	COMMENTS	DRW	NOTES This drawing is the copyright of Action Plans and not be	CLIENT	DRAWIN
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		В	22/01/2019	REVISED DESIGN PLANS	DLR	Action Plans. Do not scale measure from drawings. Figured dimensions	BROWN	DAI
	m: 0426 957 518 e:operations@actionplans.com.au w: www.actionplans.com.au	с	08/02/19	REVISED DESIGN PLANS	DLR	are to be used only. The Builder/Contractor shall check and verify all levels and dimensions on site prior to commencement of any work, creation of shop drawings, or fabrication of components. All errors and omissions are to be verified by the	PROJECT ADDRESS 41 POWDERWORKS ROAD, NORTH	DATE Monday, 2019
						commencement of works.	NARRABEEN	2019

wing no. **\13**  DRAWING NAME WINTER SOLSTICE 3 PM





ay, 18 March

# **BASIX**<sup>°</sup>Certificate

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

### Alterations and Additions

Certificate number: A342664

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 Alterations and Additions Definitions" dated 06/10/2017 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary Date of issue: Wednesday, 13, March 2019 To be valid, this certificate must be lodged within 3 months of the date of issue.



Project address				
Project name	41 Powderworks Road, North Narrabeen			
Street address	41 Powderworks Street North Narrabeen 2101			
Local Government Area	Northern Beaches Council			
Plan type and number	Deposited Plan 6462			
Lot number	39			
Section number	6			
Project type				
Dwelling type	Separate dwelling house			
Type of alteration and addition	My renovation work is valued at \$50,000 or more and does not include a pool (and/or spa).			

#### Certificate Prepared by (please complete before submitting to Council or PCA)

Name / Company Name: Action Plans

ABN (if applicable): 17118297587

Fixtures and systems	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Lighting			•
The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.		~	~
Fixtures	1		
The applicant must ensure new or altered showerheads have a flow rate no greater than 9 litres per minute or a 3 star water rating.		$\checkmark$	$\checkmark$
The applicant must ensure new or altered toilets have a flow rate no greater than 4 litres per average flush or a minimum 3 star water rating.		$\checkmark$	$\checkmark$
The applicant must ensure new or altered taps have a flow rate no greater than 9 litres per minute or minimum 3 star water rating.		$\checkmark$	

σ

esi

Construction			Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check	
Insulation requirements						
The applicant must construct the new or altered the table below, except that a) additional insula is not required for parts of altered construction	~	~	~			
Construction	Additional insulation required (R-value)					
suspended floor with enclosed subfloor: framed (R0.7).	R0.60 (down) (or R1.30 including construction)					
floor above existing dwelling or building.	or above existing dwelling or building. nil					
external wall: framed (weatherboard, fibro, metal clad)						
flat ceiling, flat roof: framed	ceiling: R3.00 (up), roof: foil/sarking	medium (solar absorptance 0.475 - 0.70)				

#### Glazing requirements

#### Windows and glazed doors

The applicant must install the windows, glazed doors and shading devices, in accordance with Relevant overshadowing specifications must be satisfied for each window and glazed door.

The following requirements must also be satisfied in relation to each window and glazed door:

Each window or glazed door with standard aluminium or timber frames and single clear or tone have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the tak must be calculated in accordance with National Fenestration Rating Council (NFRC) condition

Each window or glazed door with improved frames, or pyrolytic low-e glass, or clear/air gap/cle have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the tab must be calculated in accordance with National Fenestration Rating Council (NFRC) condition only. Alternative systems with complying U-value and SHGC may be substituted.

For projections described in millimetres, the leading edge of each eave, pergola, verandah, ba above the head of the window or glazed door and no more than 2400 mm above the sill.

For projections described as a ratio, the ratio of the projection from the wall to the height above least that shown in the table below.

Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient

Pergolas with fixed battens must have battens parallel to the window or glazed door above wh shades a perpendicular window. The spacing between battens must not be more than 50 mm.

Overshadowing buildings or vegetation must be of the height and distance from the centre and specified in the 'overshadowing' column in the table below.

#### Windows and glazed doors glazing requirements

Window / door	Orientation		Overshad	dowing	Shading device
no.		glass inc. frame (m2)	Height (m)	Distance (m)	
W1	SW	1.08	0	0	eave/verandah/pergola/balcony >=450 mm

Glazing requirements									Certifier Check
Window / door	Orientation	Area of	Overshadowing		Shading device	Frame and glass type			
no.		glass inc. frame (m2)	Height (m)	Distance (m)					
W2	SW	2.08	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W3	NE	0.66	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W4	NW	1.8	0	0	eave/verandah/pergola/balcony >=600 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W5	NE	7.5	0	0	projection/height above sill ratio >=0.23	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
W6	SE	1.8	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W7	SW	3.6	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W8	SW	1.08	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W9	SW	0.4	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W10	SW	0.77	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W11	NE	1.18	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W12	NE	0.4	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W13	NW	1.32	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W14	NW	0.53	0	0	projection/height above sill ratio >=0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			

		REV.	DATE	COMMENTS	DRWN	NOTES This drawing is the copyright of Action Plans and not be	LEGEND	CLIENT	DRAWING NO
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		в	22/01/2019	REVISED DESIGN PLANS	DLR				
		с	08/02/19	REVISED DESIGN PLANS	DLR			PROJECT ADDRESS	DATE
								41 POWDERWORKS ROAD, NORTH	Monday, 18 Ma 2019
						Builder/Contractor and referred to the designer prior to the commencement of works.		NARRABEEN	2013

	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
the specifications listed in the table below.	$\checkmark$	$\checkmark$	$\checkmark$
		$\checkmark$	$\checkmark$
ed glass may either match the description, or, ble below. Total system U-values and SHGCs Is.		$\checkmark$	~
ear glazing, or toned/air gap/clear glazing must ble below. Total system U-values and SHGCs is. The description is provided for information		~	~
alcony or awning must be no more than 500 mm	$\checkmark$	$\checkmark$	$\checkmark$
e the window or glazed door sill must be at	$\checkmark$	$\checkmark$	$\checkmark$
nt of less than 0.35.		$\checkmark$	$\checkmark$
ich they are situated, unless the pergola also		$\checkmark$	$\checkmark$
d the base of the window and glazed door, as	$\checkmark$	$\checkmark$	$\checkmark$
Frame and glass type			
Trane and grass type			
standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			

NG NO.

#### DRAWING NAME

BASIX COMMITMENTS

Glazing requirements								Show on CC/CDC Plans & specs	Certifier Check
Window / door no.	Orientation	Area of glass inc. frame (m2)	Oversha Height (m)	dowing Distance (m)	Shading device	Frame and glass type			
W15	NE	2.22	0	0	projection/height above sill ratio >=0.43	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W16	SE	0.53	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W17	NE	0.49	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W18	SE	0.8	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
W19	SW	0.4	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D01	NW	7.48	1.5	5.7	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
D02	NE	7.74	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
D03	NE	1.68	0	0	eave/verandah/pergola/balcony >=450 mm	improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46)			
D04	SW	1.87	0	0	eave/verandah/pergola/balcony >=450 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D05	NE	6.38	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D06	NE	2.16	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			
D07	NW	6.26	0	0	eave/verandah/pergola/balcony >=900 mm	standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)			

Certifie Check Glazing requirements Show on DA Plans Show on CC/CDC Plans & The applicant must install the skylights in accordance with the specifications listed in the table below.  $\checkmark$  $\checkmark$  $\checkmark$ The following requirements must also be satisfied in relation to each skylight:  $\checkmark$  $\checkmark$ Each skylight may either match the description, or, have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in  $\checkmark$  $\checkmark$ the table below. External awnings and louvres must fully shade the skylight above which they are situated when fully drawn or closed.  $\checkmark$  $\checkmark$ Skylights glazing requirements Area of glazing inc. frame (m2) Skylight number Frame and glass type Shading device S1 1.24 external adjustable awning or blind aluminium, moulded plastic single clear, (or U-value: 6.21. SHGC: 0.808) S2 aluminium, moulded plastic single clear, (or U-value: 0.84 no shading 6.21, SHGC: 0.808) S3 1.24 external adjustable awning or blind aluminium, moulded plastic single clear, (or U-value: 6.21, SHGC: 0.808) S4 1.24 aluminium, moulded plastic single clear, (or U-value: 6.21, SHGC: 0.808) external adjustable awning or blind S5 1.95 external adjustable awning or blind aluminium, moulded plastic single clear, (or U-value: 6.21, SHGC: 0.808)

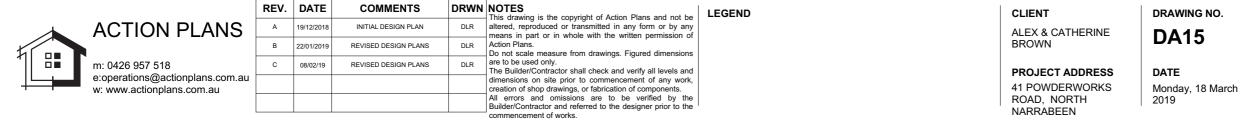
#### Legend

#### In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a "v" 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).

Commitments identified with a "v" in the "Show on CC/CDC plans & specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.

Commitments identified with a "v" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate for the development may be issued.



DRAWING NAME BASIX COMMITMENTS

SCALE 1:1.43 @A3