

# **BUSH FIRE ATTACK LEVEL (BAL) CERTIFICATE**

Determined in accordance with Planning for Bushfire Protection 2019

This Certificate has been issued by a person accredited by the Fire Protection Association of Australia under the Bushfire Planning and Design (BPAD) Accreditation Scheme (NSW); being a recognised consultant by the New South Wales Rural Fire Service (RFS). The certificate details the conclusions of the bushfire attack level assessment undertaken by the Accredited Practitioner. All enquires related to the information and conclusions presented in this report must be made to the BPAD Accredited Practitioner.

Property Description					
Address Details	Street No	Street Name	Lot /DP		
	464	Cessnock Road	2/ 456946		
	Suburb	State	Postcode		
	Gillieston Heights	NSW	2321		
Local Government Area	Cessnock City Council				
Fire Danger Index	100				
Main BCA Class of building	1a				
Description of the building or works	Infill				

### **Determined Bushfire Attack Level**

**BAL-LOW** 

The BAL for the proposed development has been determined as **BAL-LOW** in accordance with Table A1.12.5 contained in Planning for Bushfire Protection 2019. The determination was based on the bushfire hazard assessment finding the nearest bushfire hazard being greater than 100m from the proposed development. All land within 100m of the development will be managed as an Asset Protection Zone.

This BAL Certificate is valid for 12 months from the date of this letter.

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level Certificate stated above in accordance with the requirements of Planning for Bushfire Protection 2019.

Stuart Greville Accredited Bushfire Practitioner BPAD - 26202

Date of Issue: 2 May 2022

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Stuart@bfpa.com.au



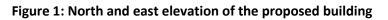


### Proposed Development

Development consent is sought for the construction of Class 1a building that will be temporarily used as a sales office and cafe to support the sale of residential lots within Precinct 1A and 1B of the Kurri Regrowth development.

PC FFL44.8 SPF SPF SUN AWNING FFL41.7 North Elevation SCALE 1:100 @ A3 PC SPF FFL44.8 FFL41.7 East Elevation SCALE 1:100 @ A3

A full set of the drawings are contained in Attachment A.



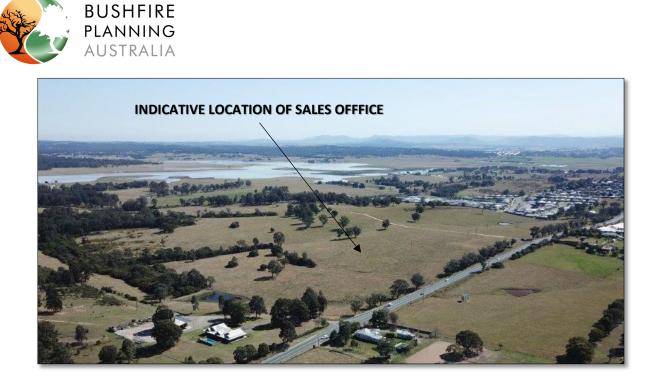


Plate 1: The proposed development will be constructed within Stage 1 of Precinct 1A

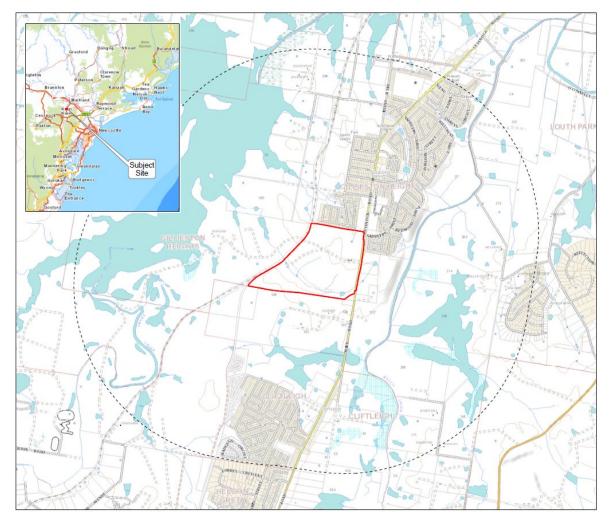


Figure 2: Site Plan

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BUSHFIRE PLANNING AUSTRALIA

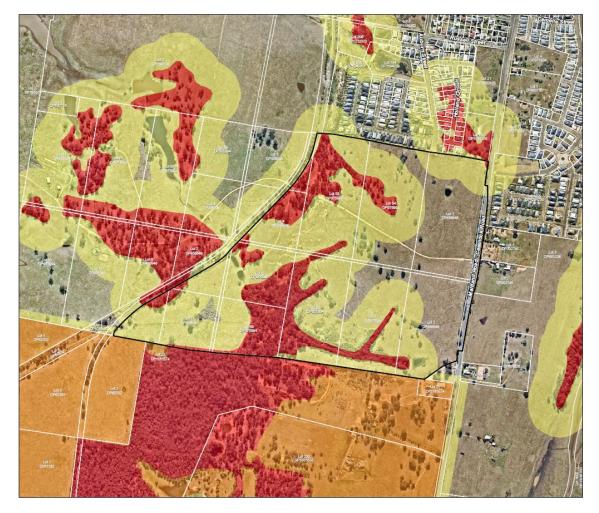


Figure 3: Aerial Photograph (Nearmap 30<sup>th</sup> June 2020)



### Site Assessment

A site assessment has previously been completed as part of the Bushfire Assessment Report prepared by BPA for the Regrowth: Kurri Kurri project (2158 dated 9 February 2022). The site assessment was completed in accordance with the Site Assessment Methodology outlined in Appendix 1 of Planning for Bushfire Protection 2019 (PBP 2019). The site assessment was reviewed to consider the slope and vegetation was assessed within the site and up to 140m surrounding the site and is contained in **Figure 4**. As the proposed development is surrounded by the broader residential subdivision, all vegetation within at least 140m of the site will be cleared and eventually developed as a residential neighbourhood.

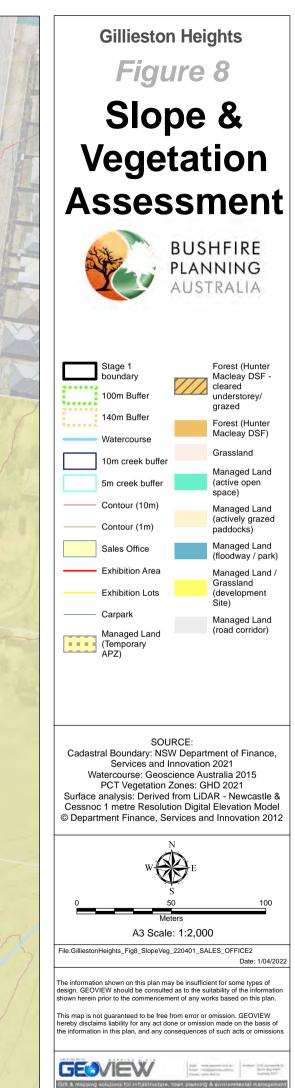
Whilst the vegetation currently surrounding the site is confirmed to be a mixture of exotic and native pasture grasses, the Proponent is committed to managing all vegetation within 140m of the site slashed and maintained to ensure the grass does not exceed 100mm in height.

### **BAL Assessment**

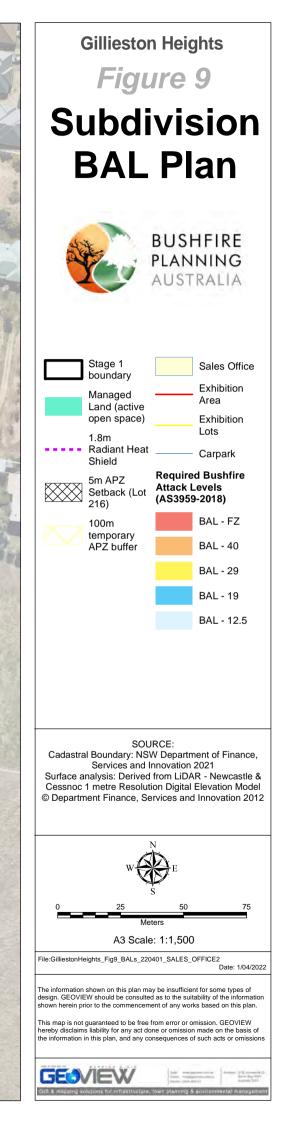
As all land within 100m of the subject site (and dwelling) will be managed as an APZ, there is insufficient risk to warrant specific bushfire construction requirements, based on the low threat vegetation surrounding the site up to 100m. The BAL rating for the proposed development is therefore determined as **BAL-LOW** (as shown in **Figure 5**).

Tables 1 and 2 confirms the development is able to satisfy the relevant sections of PBP 2019.











### Table 1 SEPP (Exempt and Complying Development Codes) 2008 – Clause 3.4 Complying development on bushfire prone land

	3.4	Complying development on bush fire prone land	Complies	
3.4 (2)	the f	mplying development under this code is carried out on bush fire prone land, ollowing development standards also apply in addition to any other elopment standards:		
	(a)	repealed		
	(b)	The lot on which the development is to be carried out must have direct access to a public road or a road vested in or maintained by the council, and	$\checkmark$	
	(c)	The dwelling house must be able to be connected to mains electricity.	$\checkmark$	
	(d)	If reticulated or bottled gas is installed and maintained on the lot: (i) It must be installed and maintained in accordance with AS/NZS 1596:2008, <i>The storage and handling of LP Gas;</i> and	Able to comply	
		<ul> <li>The storage and handling of any LP gas on the lot must comply requirements of the relevant authorities (metal piping must be used).</li> </ul>	,	
	(e)	<ul> <li>Any gas cylinders on the lot that are within 10m of any dwelling house:</li> <li>(i) Have the release valves directed away from the dwelling house, and</li> </ul>	Able to comply	
		<ul><li>(ii) Be enclosed on the hazard side of the installation, and</li><li>(iii) Have a metal connections to and from the cylinder,</li></ul>		
	(f)	There are no polymer sheathed flexible gas supply lines to gas meters adjacent to the dwelling.	Able to comply	
	(g)	<ul> <li>If the development is carried out on a lot in Zone RU5, there must be:</li> <li>(i) A reticulated water supply connection to the lot and a fire hydrant within 60m of any part of the development, or</li> <li>(ii) A 10,000 L capacity water tank on the lot,</li> </ul>	N/A Zone R2 – Low Density Residential	
	(h)	If the development is carried out on a lot in any other zone other than ZoneRU5, there must be:(i)A reticulated water supply connection to the lot, and(ii)A fire hydrant within 60m of any part of the development,	$\checkmark$	
	(i)	The development confirms to the specifications and requirements of <i>Planning for Bush Fire Protection</i> that are relevant to the development.	$\checkmark$	
			See Table 2	



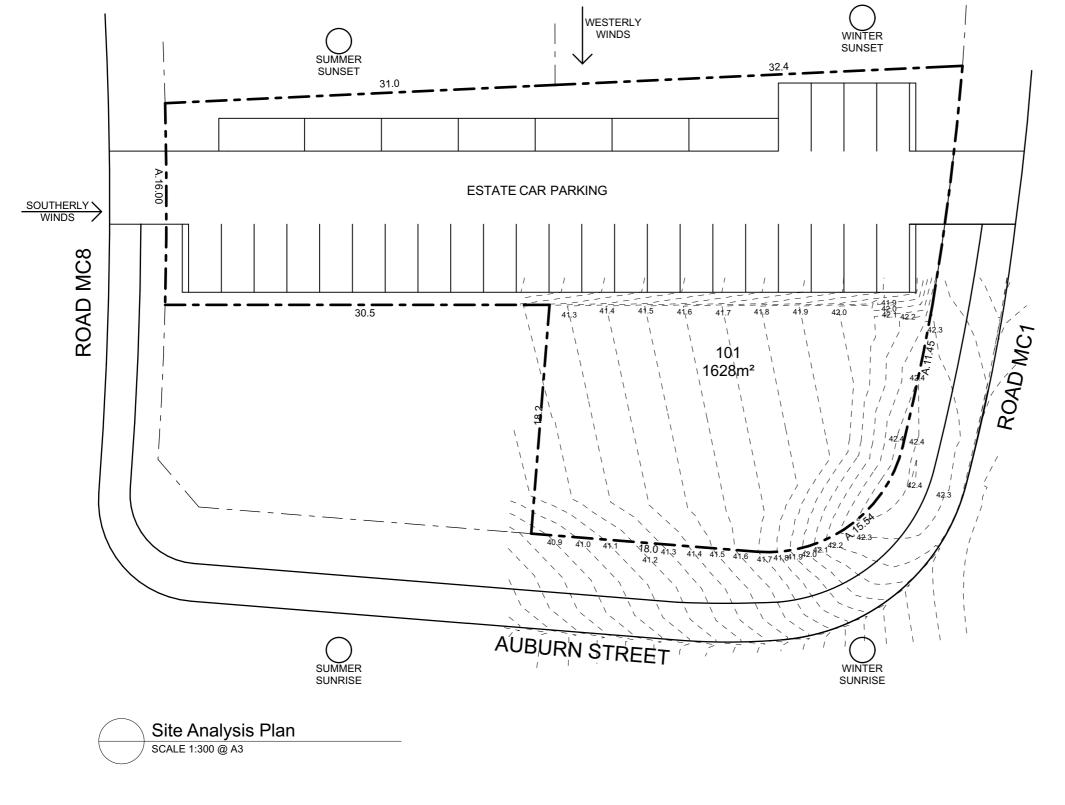
## Table 2 Performance Criteria and Acceptable Solutions bush fire protection measures for InfillDevelopment (Chapter 7 PBP 2019)

Performance Criteria	Acceptable Solutions	Complies	Comment
Asset Protection Zones:			
<ul> <li>APZs are provided commensurate with the construction of the building.</li> <li>A defendable space is provided.</li> <li>APZs are managed and maintained to prevent the spread of a fire towards the building.</li> <li>The APZ is provided in perpetuity.</li> <li>APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is minimised.</li> </ul>		•	All vegetation within 100m of the proposed development will be managed in accordance with the requirements of an APZ; per Appendix 4 of PBP 2019.
<ul> <li>Access Requirements</li> <li>Firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation.</li> <li>The capacity of access roads is adequate fire firefighting vehicles.</li> <li>There is appropriate access to water supply.</li> <li>Firefighting vehicles can access the dwelling and exit safely.</li> </ul>	<ul> <li>Property access roads are two-wheel drive, all-weathers</li> <li>The capacity of road surfaces and any bridges/ causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes); bridge and causeways are to clearly indicate load ratings, and</li> <li>Hydrants are provided in accordance with AS2419:2005</li> <li>There is suitable access for a category 1 fire appliance to within 4m of the static water supply where no reticulated supply is available</li> <li>A minimum vertical clearance of 4m to any overhanging obstructions, including tree branches</li> </ul>	✓	The proposed building is provided with a direct street frontage to a public, two-way, all weather road.
<ul> <li>Water Supplies</li> <li>An adequate water supply is provided for firefighting purposes.</li> <li>Water supplies are located at regular intervals.</li> <li>The water supply is accessible and reliable for firefighting operations.</li> <li>Flows and pressures are appropriate.</li> </ul>	<ul> <li>Reticulated water is to be provided to the development, where available</li> <li>A static water supply is provided where no reticulated water is available</li> <li>Fire hydrant spacing, design and sizing comply with AS2419.1:2005; and</li> <li>Hydrants are not located within any road carriageway; and</li> <li>Reticulated water supply to urban subdivisions uses a ring main</li> </ul>	✓	The lot is connected to a compliant reticulated water supply

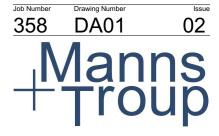




	Performance Criteria		Acceptable Solutions	Complies	Comment
·	The integrity of the water supply is maintained.		system for areas with perimeter roads		
·	A static water supply is provided for firefighting purposed in areas where reticulated water is		Fire hydrant flows and pressures comply with Table 2.2 and AS2419.1:2005.		
	not available.	>	All above ground water service pipes are metal, including and up to any taps.		
Ele	ectricity Services				
•	Location of electricity services limits the possibility of ignition of surrounding bush land or the fabric of buildings.	f	Where practicable; electrical transmission lines are underground.	$\checkmark$	The lot is connected to a compliant underground electrical supply.
Ga □	Is Services Location and design of gas services will not lead to ignition of surrounding bushland or the fabric of buildings.	>	Reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities, and metal piping is used.	$\checkmark$	The lot is connected to a compliant gas supply.
Co	Instruction Standards	>	BAL is determined in accordance		
•	The proposed building can withstand bush fire attack in	ĺ	with Tables A1.12.5 to A1.12.7.		
	the form of embers, radiant heat and flame contact.	>	Construction provided in accordance with the NCC as modified by section 7.5.		The BAL for the dwelling has been determined as <b>BAL-LOW.</b>
•	Proposed fences and gates are designed to minimise the spread of bush fire.	>	Fencing and gates are constructed in accordance with section 7.6.	V	There is insufficient risk to warrant additional construction requirements.
ŀ	Proposed Class 10a buildings are designed to minimise the spread of bush fire	>	Class 10a buildings are constructed in accordance with section 8.3.2.		
La	ndscaping	>	Compliance with the NSW RFS		
•	Landscaping is designed and managed to minimise flame		'Asset protection zone standards' (see Appendix 4)		
	contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions.	>	A clear area of low-cut lawn or pavement is maintained adjacent to the house		
		>	Fencing and retaining walls are constructed in accordance with Section 7.6	Able to	All landscaping is the responsibility
		>	Trees and shrubs are planted such that:	comply	of the landowner.
		0	The branches will not overhang the roof		
		0	The tree canopy is not continuous		
		0	If proposed, a windbreak, is located on the elevation from which fires are likely to approach.		







Site Analaysis - Demolition Plan

Project Regrowth Kurri Sales / Site Office Drawing Title

Client McCloy Group



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01 For Information







**Overall Site Plan** 

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LANDSCAPING





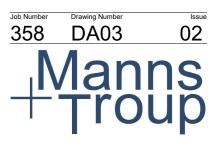
BF BATTEN FENCE - 1800 HIGH COLORBOND FENCE - 1800 HIGH CF

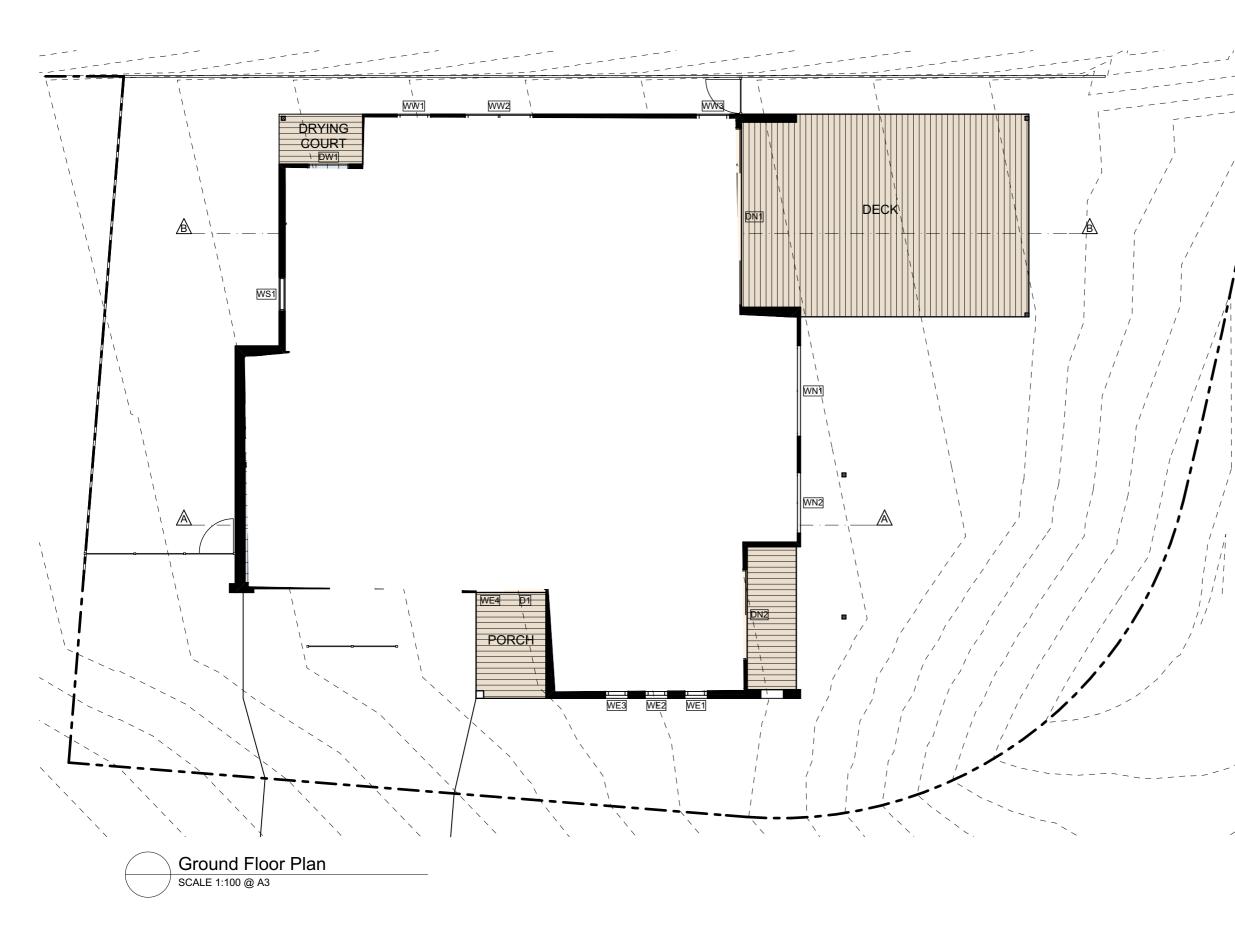
Dimensions between the boundary & lightweight clad walls are for DA purposes only and to the face of the cladding. These dimensions ARE NOT construction dimensions.

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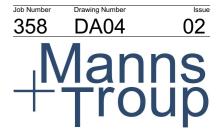
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Site Plan









Ground Floor Plan

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11

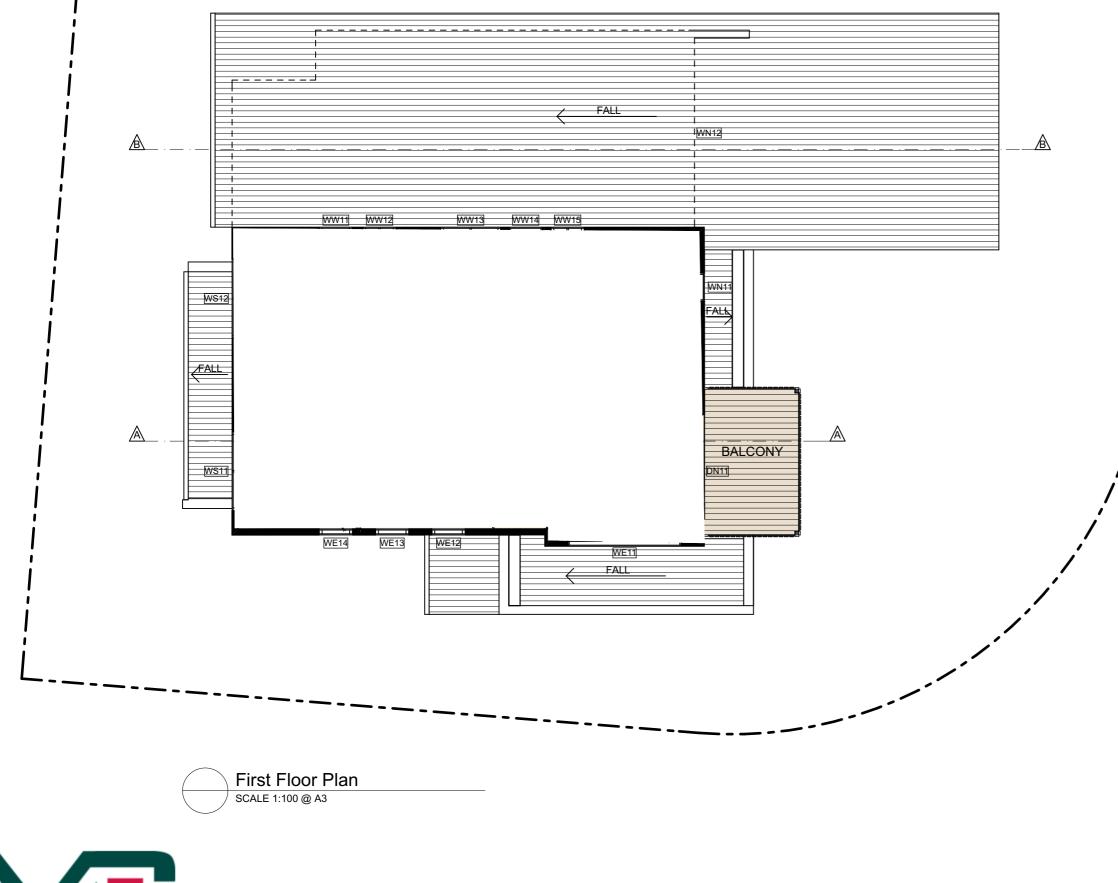


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First Floor Plan

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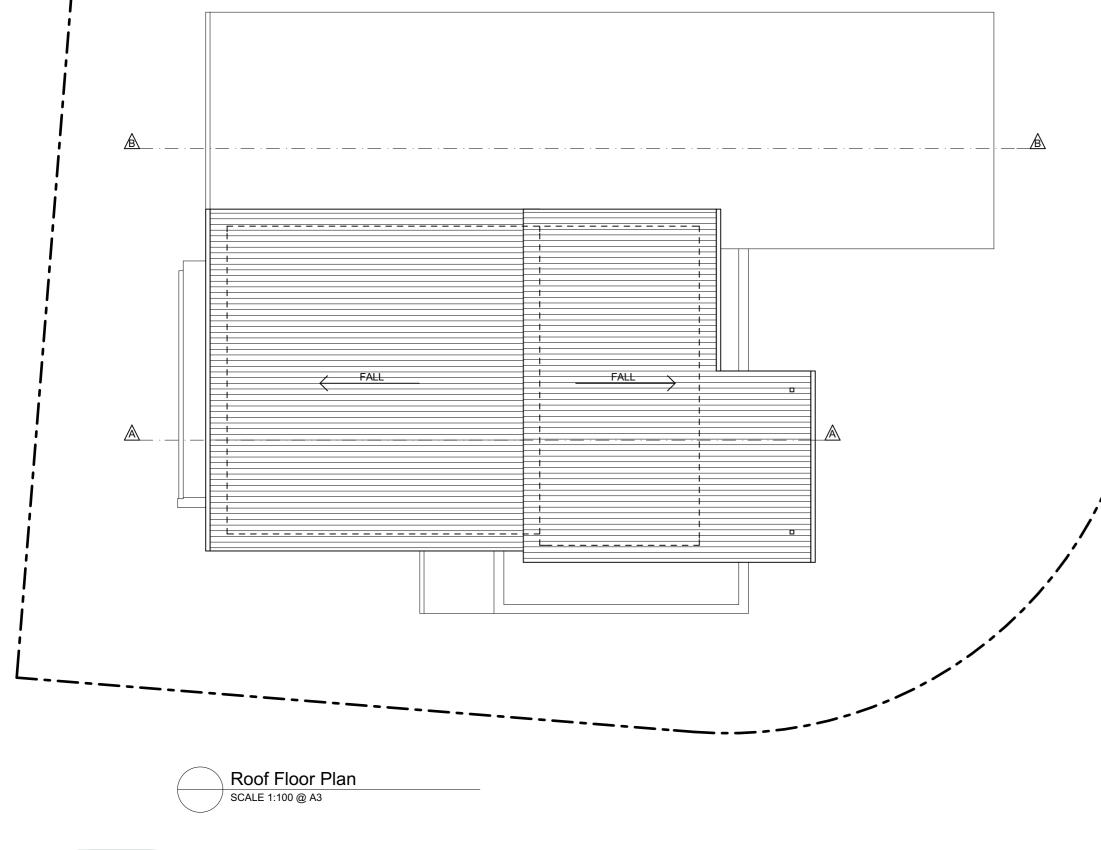


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### Roof Plan

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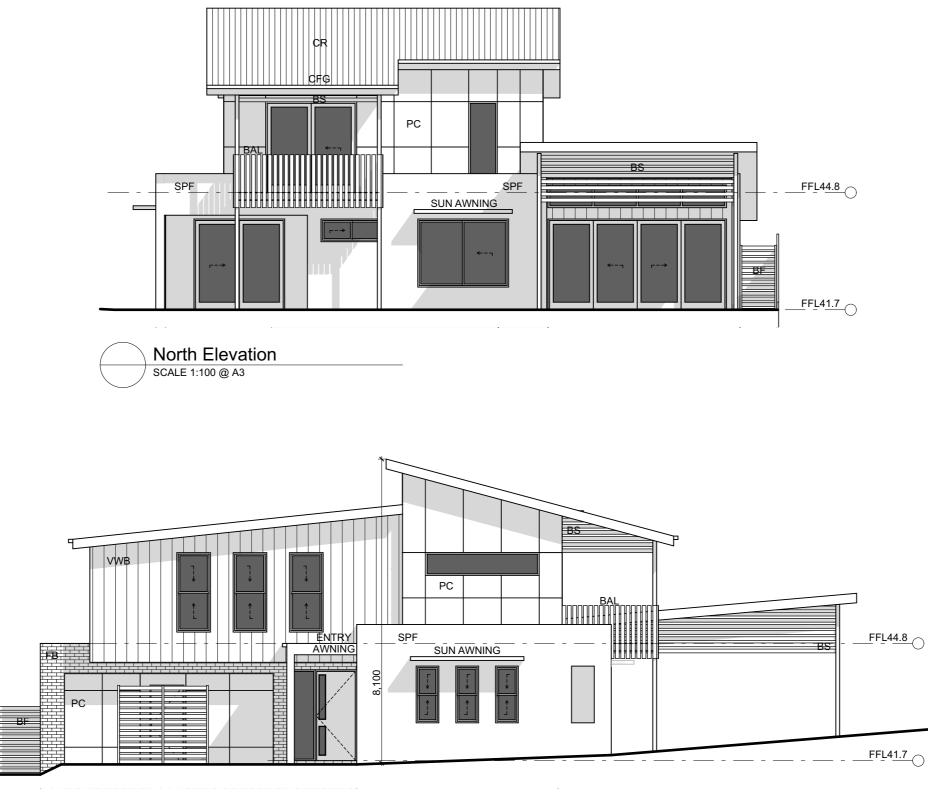


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Elevations

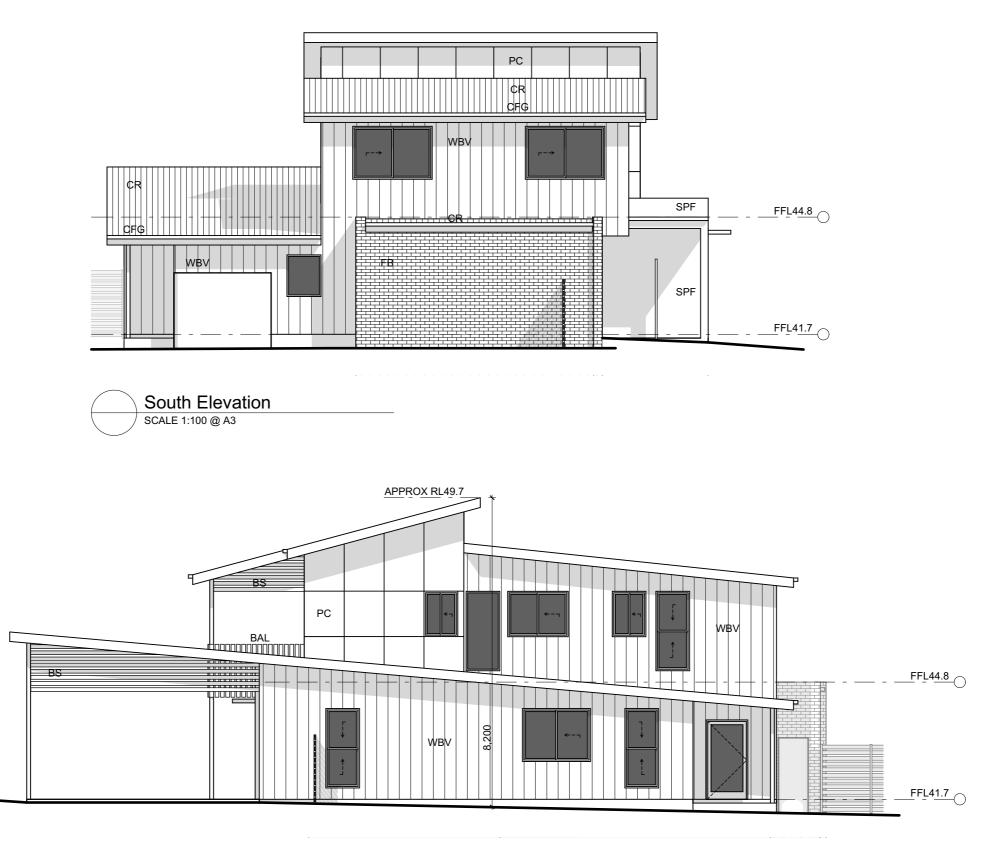
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BAL BALUSTRADE BF BATTEN FENCE BS BATTEN SCREEN CFG COLORBOND FASCIA & GUTTER CR COLORBOND ROOF FACE BRICK PANELISED CLADDING FB PC SPF SMOOTH PAINTED FINISH WBV WEATHERBOARDS VERTICAL

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Elevations

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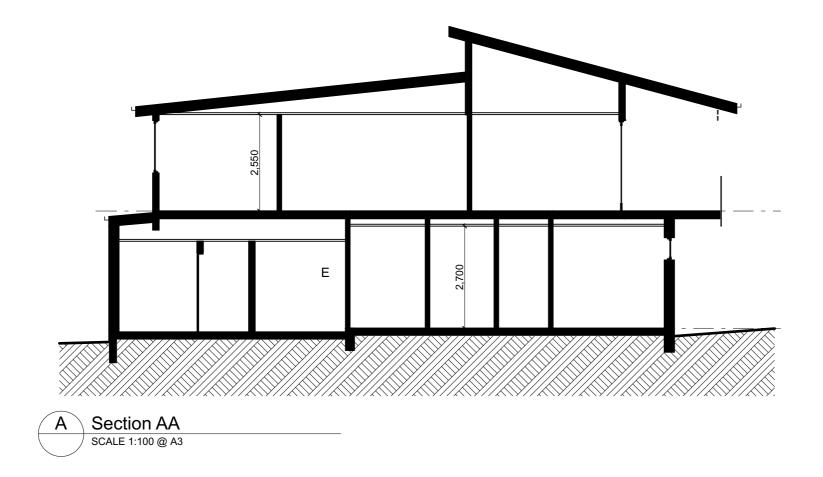
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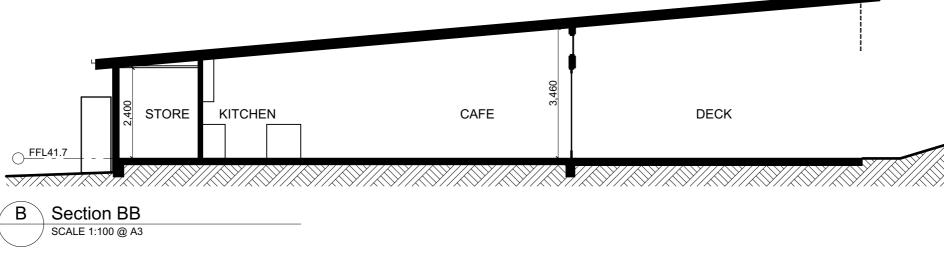
BAL BALUSTRADE BF BATTEN FENCE BS BATTEN SCREEN CFG COLORBOND FASCIA & GUTTER CR COLORBOND ROOF FACE BRICK PANELISED CLADDING FB PC SPF SMOOTH PAINTED FINISH WBV WEATHERBOARDS VERTICAL

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Sections

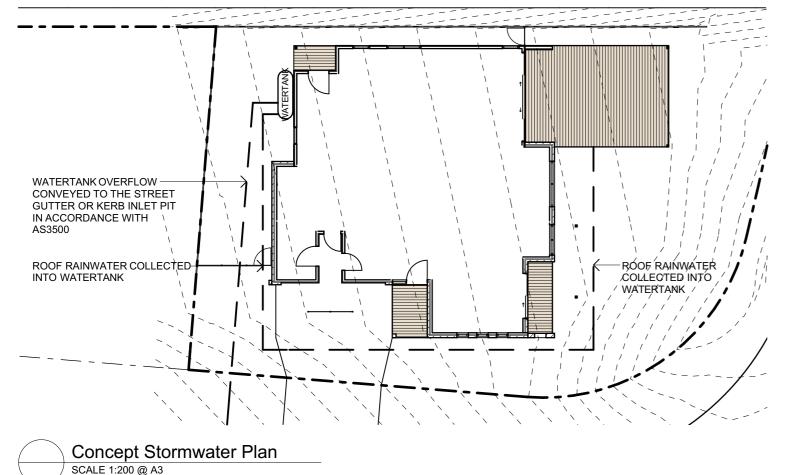
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### BASIX REQUIREMENTS

### WATER

- Showerheads with a minimum rating of 4 star (> 6 but <= 7.5 L/
- Toilet flushing system with a minimum rating of 4 star in each to
- Taps with a minimum rating of 4 star in the kitchen in the develo
- · Basin taps with a minimum rating of 4 star in each bathroom in
- Watertank with a min. size 3000L

· Watertank to connect to all toilets, a cold water tap that supplies

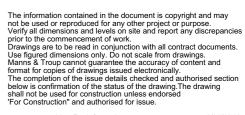
#### ENERGY

- Brick Veneer Walls have insulation with an R-value of at least 1.
- External Framed Walls have insulation with an R-value of at lea construction);
- All ceilings have ceiling insulation 3.5 (up)
- All roofs have foil/sarking
- Roof colour medium (solar absorptance 0.475-0.70)

#### THERMAL COMFORT

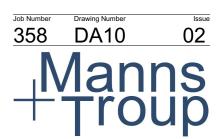
- Hot Water System: Gas Instantaneous 5 Star
- Heating & Cooling: Ducted A/C
- Ventilation: Bathroom, Kitchen & Laundry: individual fan, ducted control: manual switch on/off
- Lighting: All lights fluorescent or light emitting diode (LED)
- Cooktop & Oven: gas cooktop & electric oven
- Refrigerator space in the development so that it is "well ventilate definitions.
- Fixed outdoor clothes drying line provided.
- Min. 1.5kw PV system
- Glazing min. performance U-Value 5.6, SHGC 0.369 0.451





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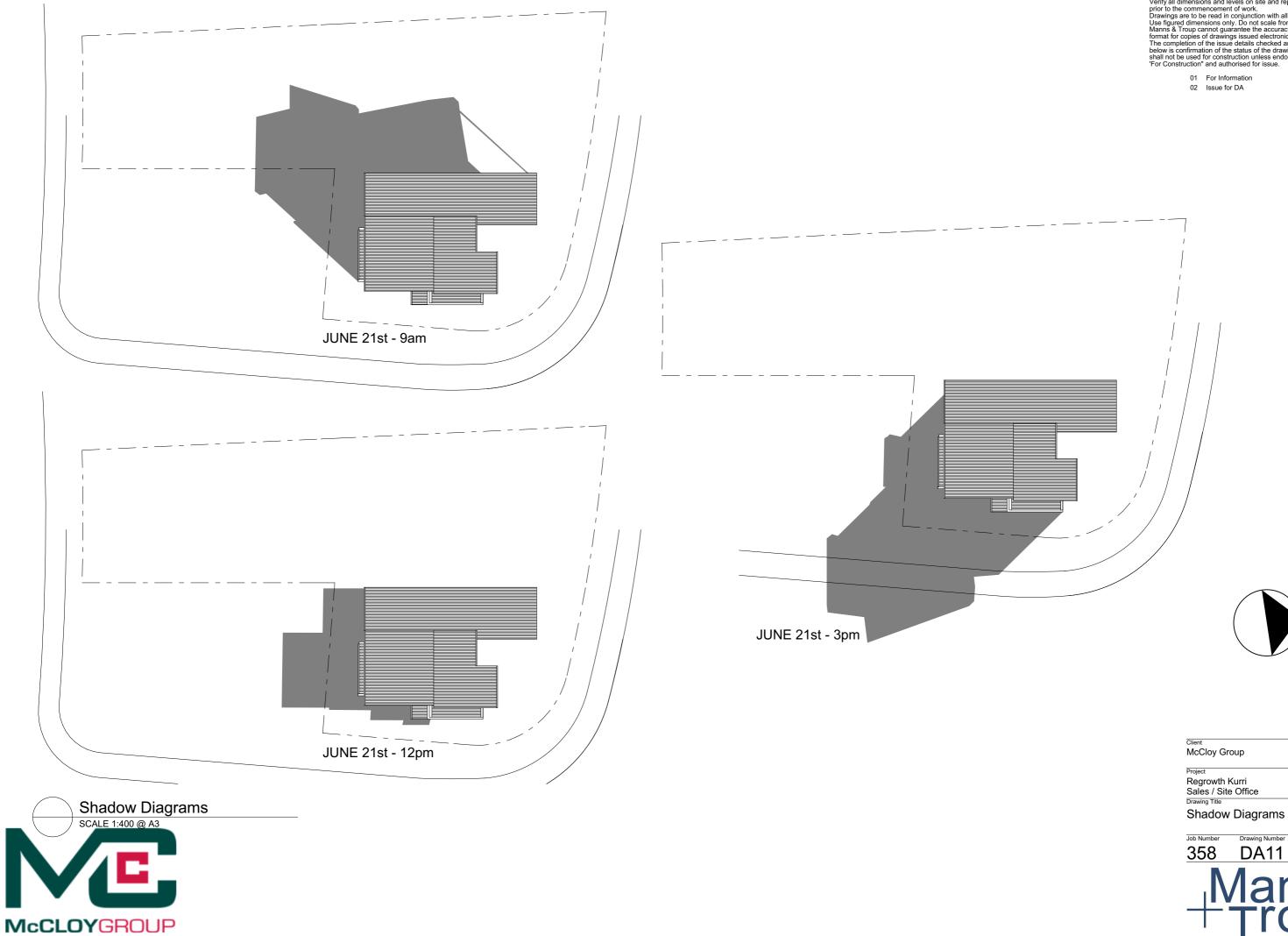
min) in all showers in the de ilet in the development. opment. the development.	evelopment.
s each clothes washer & at l	east one outdoor tap
.86 (or 2.40 including constr st 2.00 (or 2.40 including	ruction);
l to façade or roof; Operatio	n
ed", as defined in the BASIX	K
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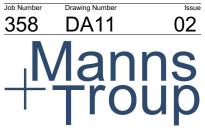


Concept Stormwater Plan

Drawing Title









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Job Number	Drawing Number	Issue
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