




Reference number 4972

Member of the Fire Protection Association of Australia

## **Lot 1, DP 1177671, 100 Wakehurst Parkway, Elanora Heights, NSW 2101.**

Thursday, 13 March 2025

Prepared by:	Matthew Willis <i>BPAD – Level 3 Certified Practitioner</i> Certification No: BPD-PA 09337		13/03/2025
Can this proposal comply with AS3959-2018 (inc section 7.5, 7.5.1, 7.5.2, 7.5.3, 7.5.4 (where applicable) of the Rural Fire Services document Planning for Bushfire Protection 2019)?	Yes		
What is the recommended AS 3959-2018 level of compliance?	BAL-12.5		
Is referral to the RFS required?	No		
Can this development comply with the requirements of PBP?	Yes		
Plans by "Bungalow Homes" (Appendix 1) dated.	15/1/2025		

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## Bushfire Planning Services

15 Parkcrest Place

Kenthurst NSW 2156

02 96543228

0428408577

[mattw@bushfireconsultants.com.au](mailto:mattw@bushfireconsultants.com.au)

# Bushfire Risk Assessment

**Thursday, 13 March 2025**

### Contact

Bethany Conner  
Bungalow Homes  
Po Box 215  
Collaroy NSW 2097  
9984 8950

### Subject Property

Lot 1, DP 1177671  
100 Wakehurst Parkway  
Elanora Heights NSW 2101

*Document tracking.*

Date	Reason for change	Author

## **BUSHFIRE RISK ASSESSMENT CERTIFICATE**

**THIS FORM IS TO BE COMPLETED BY A RECOGNISED CONSULTANT IN BUSHFIRE RISK ASSESSMENT IN ACCORDANCE WITH SECTION 4.14 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT.**

Property Address	Lot 1, DP 1177671, number 100 Wakehurst Parkway Elanora Heights
Description of the Proposal	Construction of a detached secondary dwelling
Plan Reference	15/1/2025
BAL Rating	BAL-12.5
Does the Proposal Rely on Alternate Solutions?	<b>No</b>

**I, Matthew Willis of Bushfire Planning Services Pty Ltd** have carried out a bushfire risk assessment on the above-mentioned proposal and property. A detailed Bushfire Assessment Report is attached which includes the submission requirements set out in Planning for Bushfire Protection 2019 together with recommendations as to how the relevant Specifications and requirements are to be achieved.

I hereby advise, in accordance with Section 4.14 of the Environmental Planning and Assessment Act 1979 No 203:

1. That I am a person recognised by the NSW Rural Fire Service as a qualified consultant in bushfire risk assessment; and
2. That subject to the recommendations contained in the attached Bushfire Risk Assessment Report the proposed development conforms to the relevant specifications and requirements\*

\*The relevant specifications and requirements being specifications and requirements of the document entitled Planning for Bush Fire Protection prepared by the NSW Rural Fire Service in co-operation with the Department of Planning and any other document as prescribed by Section 4.14 of the Environmental Planning and Assessment Act 1979 No 203.

I am aware that the Bushfire Assessment Report, prepared for the above-mentioned site is to be submitted in support of a development application for this site and will be relied upon by Northern Beaches Council as the basis for ensuring that the bushfire risk management aspects of the proposed development have been addressed in accordance with Planning for Bushfire Protection 2019.

<b>REPORT REFERENCE</b>	Thursday, 13 March 2025
<b>REPORT DATE</b>	Thursday, 13 March 2025
<b>CERTIFICATION NO/ACCREDITED SCHEME</b>	FPAA BPAD A BPD-PA 09337

### **Attachments:**

- Bushfire Risk Assessment Report
- Recommendations

**SIGNATURE:** ---  ----- **DATE:** -----Thursday, 13 March 2025

## Contents.

1	Executive Summary.	5
2	General.	6
3	Block Description.	6
4	Vegetation.	8
5	Known constraints on subject block.	10
6	Slope.	10
7	Utilities.	11
7.1	Water.	11
7.2	Electricity	11
7.3	Gas	11
8	Access/Egress.	11
9	Compliance with Planning for Bushfire Protection setbacks.	12
10	Siting.	12
11	Construction and design.	13
12	Utilities.	13
12.1	Water.	13
12.2	Electricity and Gas.	14
13	Asset Protection Zone (APZ).	14
14	Landscaping.	14
15	Constraints on the subject block.	15
16	Access/Egress.	15
17	Compliance or non compliance with the specifications and requirements for bushfire protection measures.	16
18	Conclusions.	16
19	References.	18
20	Appendix 1 - Plans .	19

# 1 Executive Summary.

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Bushfire Planning Services has been requested by Bethany Conner from Bungalow Homes to supply a bushfire compliance report on lot 1, DP 1177671, 100 Wakehurst Parkway, Elanora Heights.

The works proposed for the subject lot are for the construction of a detached secondary dwelling, see attached plans for details.

As this proposal includes the creation of a secondary dwelling within an existing allotment and therefore increases the occupancy level of the lot the RFS will consider this proposal as if it were a subdivision.

This proposal should be assessed under section 4.14 of the EP&A act and is considered to be 'infill' development as described in Planning for Bushfire Protection however the RFS will assess certain parts of this proposal as if it were submitted under section 100b of the Rural Fires Act, in particular the proposals ability to achieve a Bushfire Attack Level (BAL) of BAL 29 or less.

The calculations and assumptions outlined in this report show that the development will be required to comply with the construction requirements of AS 3959-2009 BAL-12.5 and the Rural Fire Services requirements contained within section 7.5 of Planning for Bushfire Protection on any new external works.

This construction level is within the BAL threshold required by the RFS and as such should gain their support for the proposal's approval. All other aspects of the proposal can or do already comply with the normal bushfire requirements for the approval of a building in a bushfire prone area.

The subject lot is on the northern side of Wakehurst Parkway and at its closest point to the hazard the proposed new work has a separation distance to the south of approximately 67m.

The vegetation that is considered to be the hazard to this proposal is situated on land that slopes down slope away from the property at an angle of approximately 2.49°.

For the purposes of this assessment this vegetation is considered to be Forested Wetlands.

The remaining vegetation within the study area is contained within the boundaries of established allotments and is managed land and of low threat to this proposal.

The calculations and assumptions outlined in this report show that the development will be required to comply with the construction requirements of AS 3959-2018 BAL-12.5 and any additional construction requirements contained within section 7.5, 7.5.1, 7.5.2, 7.5.3, 7.5.4 (where applicable) of the Rural Fire Services document Planning for Bushfire Protection 2019.

The following table is a summary of the pertinent findings of this assessment.

Aspect	North	East	South	West
<b>Vegetation type</b>	Managed land	Managed land	Forested Wetland	Managed land
<b>Slope</b>	N/A	N/A	0-5 degrees downslope	N/A
<b>Setback within lot 1</b>	N/A	N/A	51m	N/A
<b>Setback outside lot 1</b>	N/A	N/A	16m	N/A
<b>Total setback</b>	N/A	N/A	67m	N/A
<b>Bal level</b>	N/A	N/A	BAL-12.5	N/A
<p><i>Note: The above table is a summary of the significant variables used to determine the highest BAL for this proposal. THIS TABLE IS NOT INTENDED FOR CONSTRUCTION! Only the highest BAL level is shown, aspects marked as N/A will still have a BAL. Refer to section 11 for construction requirements for these other aspects.</i></p>				

## 2 General.

This proposal relates to the construction of a detached secondary dwelling on the subject lot and its ability to comply with the rules and regulations for building in a bushfire prone area.

The methodology used on this report is based on Planning for Bushfire Protection 2019 (PBP) as published by the New South Wales Rural Fire Service.

Any wording that appears in *blue italics* is quotes from Planning for Bushfire Protection 2019. Some of the measurements used in this report have been taken from aerial photographs and as such are approximate only.

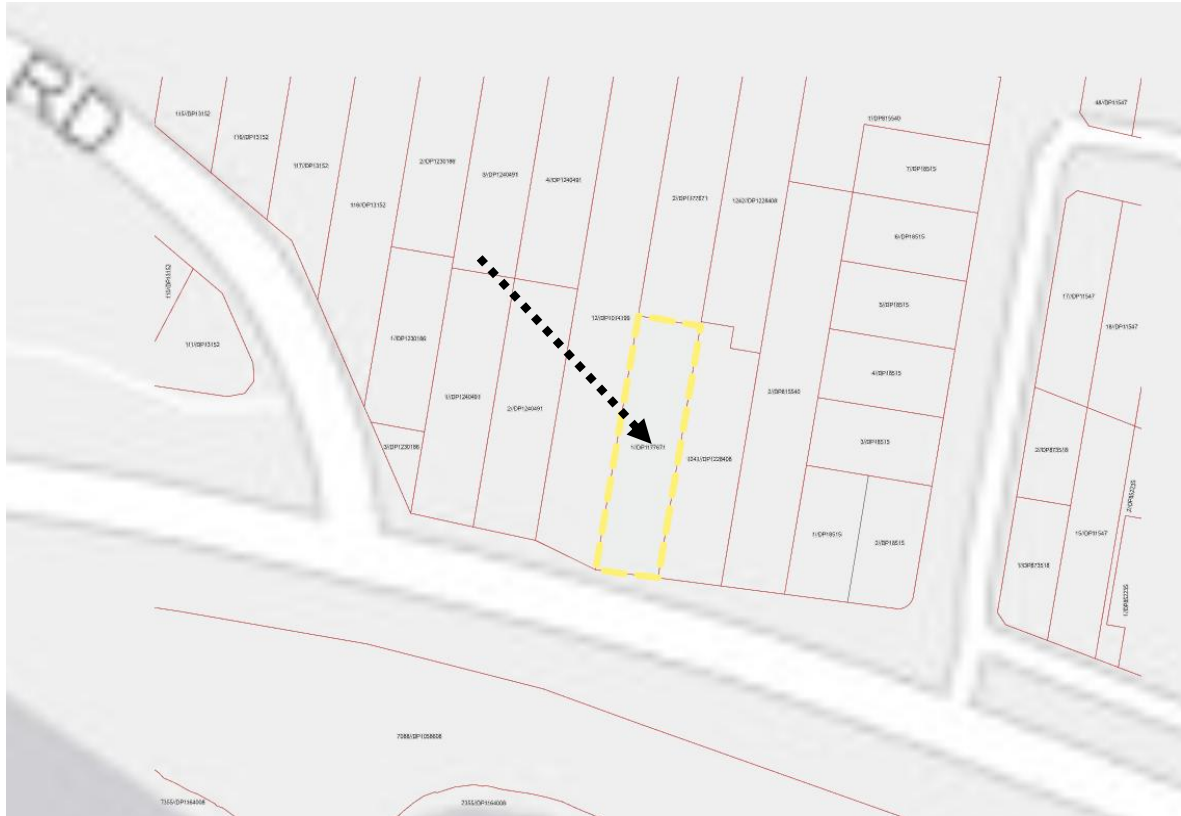
## 3 Block Description.

The subject block is situated on the northern side of Wakehurst Parkway in an established area of Elanora Heights.

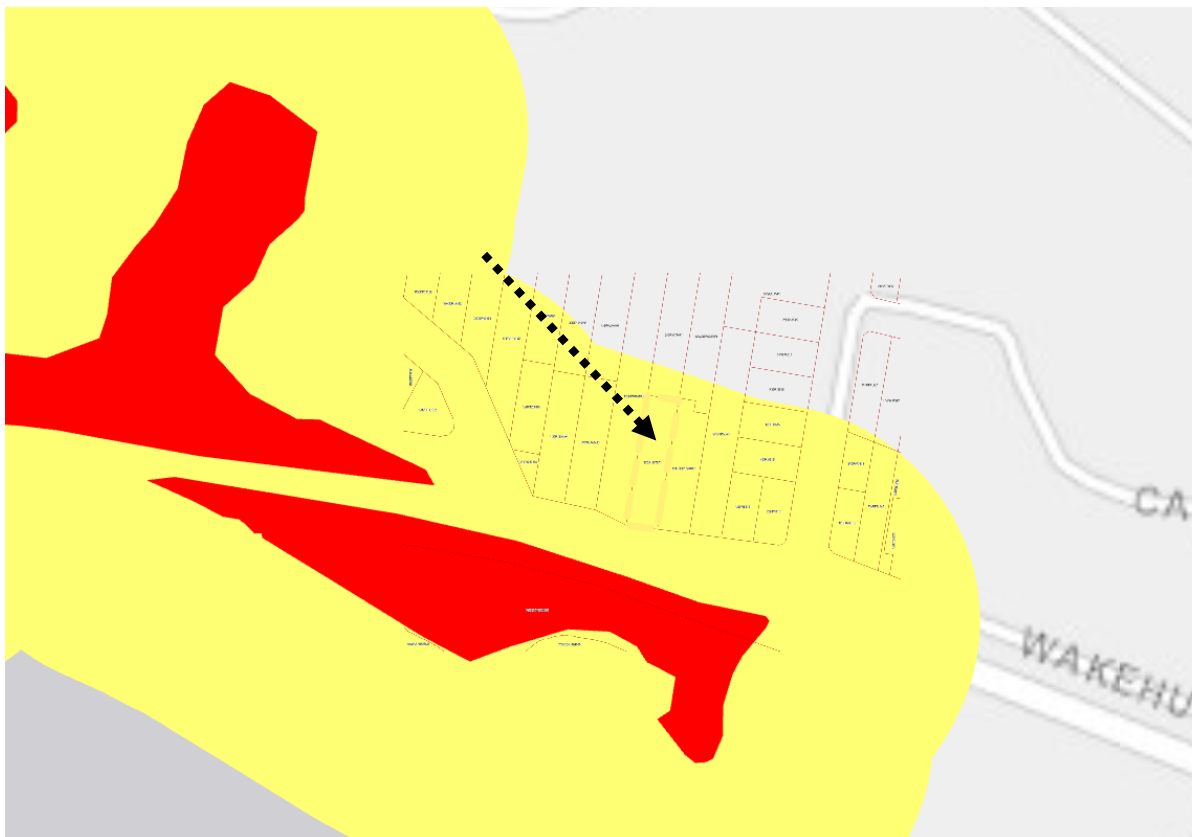
The lot currently contains a multi-level class 1 dwelling.

The lands surrounding the proposed site on the subject lot to a distance of at least 67m contain existing development or land that is otherwise not considered to be a significant bushfire hazard.

- Lot; 1
- DP; 1177671.
- LGA; Northern Beaches.
- Area; 935.5m<sup>2</sup>.
- Address; 100 Wakehurst Parkway, Elanora Heights.



*Map 1 shows the cadastral layout around the subject lot.*



*Map 2 is an extract from the councils' bushfire prone land map. The map shows lot 1 to be within the buffer zone of category 1 bushfire vegetation.*



## 4 Vegetation.

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The study area for the vegetation is 140m surrounding the subject block.

The vegetation within the study area for this development is considered to be largely managed land.

The major potential hazard to this development is the vegetation within an area of undeveloped land to the south.

For the purpose of this assessment and compliance with Planning for Bushfire Protection this area of undeveloped land is considered to be Forested Wetlands and is the hazard to this proposal.



*Photo 1 - An overview of the vegetation within the general area.*

*This area has been left intentionally blank.*





*Photo 2 is a closer view of the vegetation in the area.*

Table 1 outlines the vegetation orientation and distance from the development area.

Aspect	North	East	South	West
<b>Vegetation type</b>	Managed land	Managed land	Forested Wetland	Managed land
<b>Setback within lot 1</b>	N/A	N/A	51m	N/A
<b>Off-site setback</b>	N/A	N/A	16m	N/A
<b>Total setback</b>	N/A	N/A	67m	N/A

*Table 1 - Any aspect marked with "N/A" in the table above indicates that it is considered there is none or only a secondary hazard in that direction.*

*This area has been left intentionally blank.*



## 5 Known constraints on subject block.

I have not been informed or know of any places of cultural or environmental significance within the boundaries of the subject block.

Given the nature of the surrounding land it is considered highly unlikely that anything of significance will be affected by this development.

## 6 Slope.

The slope of the land beneath the hazard that is most likely to influence bushfire behaviour has been calculated by topographical map analysis to a distance of 100m from the subject lot.

An extract of the topographical map for the area is shown below and the relevant slope analysis is shown in Table 2.



Table 2 shows the slope beneath the hazard.

Aspect	North	East	South	West
Slope	N/A	N/A	0-5 degrees downslope	N/A

*Table 2 - Any aspect marked with "N/A" in the table above indicates that it is considered there is no hazard in that direction.*



## Analysis of development and recommendation.

### 9 Compliance with Planning for Bushfire Protection setbacks.

Based on the development design, vegetation classification, effective slope estimates and setback distance already outlined in this report the subject development will be required to comply with the deemed to satisfy construction requirements of AS 3959-2018 BAL-12.5 and the RFS requirements on all fire prone aspects.

The following table is an extract from table A1.12.5 of Planning for Bushfire Protection 2019. This table is used to calculate the BAL for a proposal in an area with an FDI of 100.

The variables that have already been outlined in this assessment are highlighted in red with the highest BAL highlighted in yellow.

0-5 DEGREES DOWNSLOPE	Keith Vegetation Formation	BUSHFIRE ATTACK LEVEL (BAL)				
		BAL-FZ	BAL-40	BAL-29	BAL-19	BAL-12.5
	Arid-Shrublands (acacia and chenopod)	< 5	5 -< 7	7 -< 11	11 -< 16	16 -< 100
	Forest (wet and dry sclerophyll) including Coastal Swamp Forest, Pine Plantations and Sub-Alpine Woodland	< 22	22 -< 29	29 -< 40	40 -< 54	54 -< 100
	Forested Wetland (excluding Coastal Swamp Forest)	< 9	9 -< 12	12 -< 18	18 -< 26	26 -< 100
	Freshwater Wetlands	< 4	4 -< 6	6 -< 8	8 -< 12	12 -< 100
	Grassland	< 9	9 -< 12	12 -< 17	17 -< 25	25 -< 50
	Grassy and Semi-Arid Woodland (including Mallee)	< 12	12 -< 16	16 -< 23	23 -< 32	32 -< 100
	Rainforest	< 11	11 -< 14	14 -< 21	21 -< 29	29 -< 100
	Short Heath	< 8	8 -< 10	10 -< 15	15 -< 22	22 -< 100
	Tall Heath	< 13	13 -< 18	18 -< 26	26 -< 36	36 -< 100

For the purpose of this assessment the southern aspect has been chosen as the most potentially hazardous aspect due to the effective slope, potential run of fire and the prevailing fire weather of the area.

### 10 Siting.

The current site provides adequate separation between the proposed building and surrounding vegetation for a compliant structure to be built.

#### Recommendation;

Nil.

## 11 Construction and design.

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All new work is to be undertaken in accordance with the relevant requirements of the NCC and AS3959 2018. The following recommendations are a minimum level of construction. Constructing the proposal to a higher level than that recommended is allowable under AS3959.

### Recommendation; all new work.

1. New construction shall comply with the requirements of section 3 of Australian Standard AS3959-2018 "Construction of buildings in bush fire-prone areas" and,
2. New construction shall also comply with the requirements of BAL-12.5 Australian Standard AS3959-2018 "Construction of buildings in bush fire-prone areas" or NASH Standard "National Standard Steel Framed Construction in Bushfire Areas" and any additional construction requirements contained within section 7.5, 7.5.1, 7.5.2, 7.5.3, 7.5.4 (where applicable) of the Rural Fire Services document Planning for Bushfire Protection 2019.
3. New roofing valleys and guttering should be fitted with a non-combustible leaf protection to stop the accumulation of debris.

*AS-3959 2018 is available as PDF from;*

[https://infostore.saiglobal.com/en-au/standards/as-3959-2018-122340\\_saig\\_as\\_as\\_2685241/](https://infostore.saiglobal.com/en-au/standards/as-3959-2018-122340_saig_as_as_2685241/)

## 12 Utilities.

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### 12.1 Water.

The subject lot will be connected to a reticulated water supply however the nearest hydrant point is beyond the maximum allowable distance for the furthest part of the proposal. As a result, a Static Water Supply (SWS) is required to be established and maintained on site to the following specifications.

4. A 5,000 L water supply is to be made available for firefighting purposes and be constructed in accordance with the following features.
  - A connection for firefighting purposes is located within the IPA or non-hazard side and away from the structure; 65mm Storz outlet with a ball valve is fitted to the outlet;
  - Ball valve and pipes are adequate for water flow and are metal;
  - Supply pipes from tank to ball valve have the same bore size to ensure flow volume;
  - Above-ground tanks are manufactured from concrete or metal;
  - Raised tanks have their stands constructed from non-combustible material or bush fire-resisting timber (see Appendix F of AS 3959);
  - Unobstructed access can be provided at all times;
  - Tanks on the hazard side of a building are provided with adequate shielding for the protection of firefighters;



- All exposed water pipes external to the building are metal, including any fittings;
- A pump is to be provided with a minimum 5hp or 3kW petrol or diesel-powered pump, and are shielded against bush fire attack; any hose and reel for firefighting connected to the pump shall be 19mm internal diameter; and
- If fitted, fire hose reels are constructed in accordance with AS/NZS 1221:1997 and installed in accordance with the relevant clauses of AS 2441:2005.
- A 'SWS' marker shall be obtained from the local NSW Rural Fire Service and positioned for ease of identification by brigade personnel and other users of the SWS. In this regard:
  - a) Markers must be fixed in a suitable location so as to be highly visible; and
  - b) Markers should be positioned adjacent to the most appropriate access for the static water supply.

## 12.2 Electricity and Gas.

### Recommendation;

5. Any new electricity or gas connections are to comply with the requirements of table 7.4a of Planning for Bushfire Protection.

## 13 Asset Protection Zone (APZ).

The Asset Protection Zone is *“An area surrounding a development managed to reduce the bushfire hazard to an acceptable level. The width of an APZ will vary with slope, vegetation and construction level”*.

### Recommendation;

6. At the commencement of building works and in perpetuity the entire property shall be managed as an Asset Protection Zone in accordance with the requirements of Planning for Bushfire Protection, the RFS document Standards for Asset Protection Zones and in a manner that does not create a bushfire hazard to the property.

## 14 Landscaping.

### Recommendation;

7. Any new fencing is to be constructed in accordance with section 7.6 of Planning for Bushfire Protection 2019.
8. Any new landscaping to the site is to comply with the principles of Appendix 4 and section 3.7 of Planning for Bush Fire Protection 2019. In this regard the following landscaping principles are, where applicable, to be incorporated into the development<sup>1</sup>:

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<sup>1</sup>Refer to referenced documents for a complete description.

- Suitable impervious areas being provided immediately surrounding the building such as courtyards, paths and driveways;
- Grassed areas/mowed lawns/ or ground cover plantings being provided in close proximity to the building;
- Restrict planting in the immediate vicinity of the building which may over time and if not properly maintained come in contact with the building;
- Maximum tree cover should be less than 30%, and maximum shrub cover less than 20%;
- Planting should not provide a continuous canopy to the building (i.e. trees or shrubs should be isolated or located in small clusters);
- When considering landscape species consideration needs to be given to estimated size of the plant at maturity;
- Avoid species with rough fibrous bark, or which retain/shed bark in long strips or retain dead material in their canopies;
- Use smooth bark species of trees species which generally do not carry a fire up the bark into the crown;
- Avoid planting of deciduous species that may increase fuel at surface/ ground level (i.e. leaf litter);
- Avoid climbing species to walls and pergolas;
- Locate combustible materials such as woodchips/mulch, flammable fuel stores away from the building;
- Locate combustible structures such as garden sheds, pergolas and materials such timber garden furniture way from the building; and
- Use of low flammability vegetation species.

## 15 Constraints on the subject block.

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None known.

Recommendation;

Nil

## 16 Access/Egress.

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All roads in the area are considered to be capable of handling emergency service vehicles. Access from the roadway onto the property is also considered to be adequate for firefighting purposes.

Recommendation

Nil

## 17 Compliance or non compliance with the specifications and requirements for bushfire protection measures.

<b>APZ</b> A defensible space is provided onsite. An APZ is provided and maintained for the life of the development.	Achievable with the implementation of the recommendations in section 13
<b>SITING AND DESIGN:</b> Buildings are sited and designed to minimise the risk of bush fire attack.	Achievable with the implementation of the recommendations in section 10
<b>CONSTRUCTION STANDARDS:</b> It is demonstrated that the proposed building can withstand bush fire attack in the form of wind, smoke, embers, radiant heat and flame contact.	Achievable with the implementation of the recommendations in section 11
<b>ACCESS</b> Safe, operational access is provided (and maintained) for emergency services personnel in suppressing a bush fire while residents are seeking to relocate, in advance of a bush fire, (satisfying the intent and performance criteria for access roads in sections 4.1.3 and 4.2.7).	Achievable with the implementation of the recommendations in section 16
<b>WATER AND UTILITY SERVICES:</b> <ul style="list-style-type: none"> <li>adequate water and electricity services are provided for firefighting operations</li> <li>Gas and electricity services are located so as not to contribute to the risk of fire to a building.</li> </ul>	Achievable with the implementation of the recommendations in section 12
<b>LANDSCAPING:</b> <ul style="list-style-type: none"> <li>it is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind driven embers to cause Ignitions.</li> </ul>	Achievable with the implementation of the recommendations in section 14

## 18 Conclusions.

Based on the above report and with the implementation of the recommendation contained within this report the consent authority should determine that this development can comply with the requirements of AS 3959-2018 and 'Planning for Bushfire Protection' guidelines.

The recommendations contained within this report are to be implemented in their entirety. Changing one aspect may have an adverse effect on the rest of the recommendations.

Bushfires are affected by many external influences such as climactic conditions, vegetation type, moisture content of the fuel, slope of the land and human intervention to name a few and are difficult to predict.

This report does not intend to provide a guarantee that the subject property will survive if a bushfire should impact the surrounding area. The purpose of this report is to show the developments level of compliance or in some cases non-compliance with the New South Wales legislation regarding building in bushfire prone areas.

Where non-compliance is found measures will be suggested that should make the building less susceptible to the various attack mechanisms of a bushfire and comply with the performance requirements of the Building Code of Australia.

The opinions expressed in this report are based on the writers' experience and interpretation of the relevant guidelines and standards. Notwithstanding the above, these guidelines and standards are open to interpretation. All care has been taken to ensure that the opinions expressed in this report are consistent with past successful outcomes.

Some of the information used in the compilation of this assessment has been provided by the proponent or the proponent's representatives. While we believe this information to be true and have accepted the information in good faith however this company or its representatives will not accept any responsibility if the provided information is determined to be incorrect.

This document is to assist the consenting authorities with their assessment of this proposal. The recommendations contained in this assessment reflect the normal conditions that are typically applied by the consent authority for a proposal such as this however the conditions of consent for the proposal will be supplied by the certifying authority on approval of the development and may not necessarily be the same as the recommendations of this assessment.

The recommendations in this assessment are for planning guidance only, construction details and compliance with all building requirements are the responsibility of the Architect/Designer, Builder and Certifier.

To avoid confusion, unless specifically referenced by the consenting authority, it is strongly recommended that once this proposal has been approved that this document is no longer referenced and that only the official conditions of consent as reflected in documentation by the certifying body are used for construction guidance.

If any further clarification is required for this report, please do not hesitate to contact me using the details above.

Yours Sincerely



**Matthew Willis**  
*Grad Dip Planning for Bushfire Prone Areas*  
*Bushfire Planning Services Pty Limited*

## 19 References.

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- *Australian Building Codes Board (2019). National Construction Code Volume One - Building Code of Australia. ABCB*
- *Australian Building Codes Board (2019). National Construction Code Volume two - Building Code of Australia. ABCB.*
- *Keith, D.A. (2004). Ocean Shores to Desert Dunes: The Native Vegetation of New South Wales and the ACT. NSW Department of Environment and Conservation.*
- *National Association of Steel Framed Housing (2014). "Steel Framed Construction in Bush Fire Areas. NASH*
- *Ramsay, C and Rudolph, L (2003) "Landscape and Building Design for Bush fire Areas". CSIRO Publishing, Collingwood.*
- *Resources and Energy NSW (2016). ISSC 3 Guide for the Managing Vegetation in the Vicinity of Electrical Assets. NSW Government*
- *Rural Fire Service NSW (2005) "Standards for Asset Protection Zones"*
- *Standards Australia (2018). "AS 3959, Construction of buildings in bush fire prone areas".*
- *Standards Australia (2018). "AS/NZS 1530.8.1 Methods for fire tests on building materials, components and structures - Tests on elements of construction for buildings exposed to simulated bush fire attack - Radiant heat and small flaming sources".*
- *Standards Australia (2018). "AS/NZS 1530.8.2 Methods for fire tests on building materials, components and structures - Tests on elements of construction for buildings exposed to simulated bush fire attack - Large flaming sources".*
- *Standards Australia (2014). "AS/NZS 1596 The storage and handling of LP Gas".*



## 20 Appendix 1 - Plans .

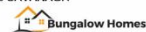
ADDRESS 100 WAKEHURST PARKWAY ELANORA HEIGHTS

### RESIDENCE



#### SHEET LIST (A)

SHEET NUMBER	SHEET NAME	ISSUE
A 0	COVER PAGE	B
A 1	NOTES	B
A 2	SITE AND ROOF PLAN	B
A 3	GROUND FLOOR PLAN	B
A 4	ELEVATIONS AND SECTION	B
A 5	AREA CALCULATIONS	B
A 6	BASIX COMMITMENTS	B

<b>GENERAL NOTES</b> All dimensions are to be confirmed on site by the builder/subcontractor; any inconsistencies must be reported to the Designer before commencement of any work. No Survey has been made on the boundaries, all bearings, distances and areas have been taken from the contour survey plan. A Survey must be carried out to confirm the exact boundary locations. No construction work shall commence until a site survey confirming the site boundaries has been completed. The contractor is to ensure that the boundary setbacks are confirmed and used. The boundary setbacks take precedence over all other dimensions. The Survey work must be performed by a registered Surveyor. In the event of encountering any discrepancies on these drawings, specification or subsequent instructions issued, the Builder/Subcontractor shall contact the designer before proceeding further with any work. All construction, control joints and expansion joints in the wall, floors, other locations shall be in strict accordance with the Structural Engineering details. No joints or breaks other than specified, are allowed without written permission from the Engineer. Measurements for the fabrication of secondary components such as, windows, doors, internal frames, structural steel components and the like, are not to be taken from these documents. Measurements must be taken on site to suit the work as constructed. All structural components shall be in strict accordance to details and specifications as prepared by a structural engineer. All existing structures need to be examined for structural adequacy, and it is the Contractor's responsibility to ensure that a certificate of structural adequacy is available prior to the start of any work.	drawn: EU date: 15/01/25 issue: A description: ISSUE FOR DA	project: PROPOSED CONSTRUCTION OF A GRANNY FLAT AT 100 WAKEHURST PARKWAY ELANORA HEIGHTS NSW 2101 LOT 1~DP1177671	 6/7 Parkes Street, Parramatta NSW 2150 www.rkdesigns.com.au admin@rkdesigns.com.au 02 9633 4797 mob: 041 659 200 369 spaces designed for life
	client: RICK AND RACHEL CAVANAGH 	true north: drawing: COVER PAGE project no: 25-02 date: 15/01/25 sheet no: A 0 scale @: A3 issue: B checked: ?	

## GENERAL NOTES

ALL ASPECTS OF CONSTRUCTION ARE TO COMPLY WITH THE APPLICABLE PERFORMANCE REQUIREMENTS OF THE NCC 2022 AND THE HOUSING PROVISIONS

ALL DIMENSIONS ARE TO BE CONFIRMED ON SITE BY THE BUILDER/SUBCONTRACTOR. ANY INCONGRUENCE MUST BE REPORTED TO THE DESIGNER BEFORE COMMENCEMENT OF ANY WORK

NO SURVEY HAS BEEN MADE ON THE BOUNDARIES. ALL BEARINGS, DISTANCES AND AREAS HAVE BEEN TAKEN FROM THE CONTOUR SURVEY PLAN. A SURVEY MUST BE CARRIED OUT TO CONFIRM THE EXACT BOUNDARY LOCATIONS

NO CONSTRUCTION WORK SHALL COMMENCE UNTIL A SITE SURVEY CONFIRMING THE SITE BOUNDARIES HAS BEEN COMPLETED. THE CONTRACTOR IS TO ENSURE THAT THE BOUNDARY SETBACKS ARE CONFIRMED AND USED, THE BOUNDARY SETBACKS TAKE PRECEDENCE OVER ALL OTHER DIMENSIONS. THE SURVEY WORK MUST BE PERFORMED BY A REGISTERED SURVEYOR

IN THE EVENT OF ENCOUNTERING ANY DISCREPANCIES ON THESE DRAWINGS, SPECIFICATION OR SUBSEQUENT INSTRUCTIONS ISSUED, THE BUILDER/SUBCONTRACTOR SHALL CONTACT THE DESIGNER BEFORE PROCEEDING FURTHER WITH ANY WORK

ALL CONSTRUCTION, CONTROL JOINTS AND EXPANSION JOINTS IN THE WALL, FLOORS, OTHER LOCATIONS SHALL BE IN STRICT ACCORDANCE WITH THE STRUCTURAL ENGINEERING DETAILS. NO JOINTS OR BREAKS OTHER THAN SPECIFIED, ARE ALLOWED WITHOUT WRITTEN PERMISSION FROM THE ENGINEER

MEASUREMENTS FOR THE FABRICATION OF SECONDARY COMPONENTS SUCH AS, WINDOWS, DOORS, INTERNAL FRAMES, STRUCTURAL STEEL COMPONENTS AND THE LIKE, ARE NOT TO BE TAKEN FROM THESE DOCUMENTS. MEASUREMENTS MUST BE TAKEN ON SITE TO SUIT THE WORK AS CONSTRUCTED

ALL STRUCTURAL COMPONENTS SHALL BE IN STRICT ACCORDANCE TO DETAILS AND SPECIFICATIONS AS PREPARED BY A STRUCTURAL ENGINEER

ALL EXISTING STRUCTURES NEED TO BE EXAMINED FOR STRUCTURAL ADEQUACY, AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT A CERTIFICATE OF STRUCTURAL ADEQUACY IS AVAILABLE PRIOR TO THE START OF ANY WORK

HARD WIRED PHOTO-ELECTRIC SMOKE ALARMS TO BE INSTALLED IN ACCORDANCE WITH CLAUSE 9.5.4 OF THE HOUSING PROVISIONS 2022 & AS 3786

FINISHED FLOOR LEVELS MAY VARY (+/- 50MM) FROM THOSE INDICATED  
ON PLAN, DUE TO SITE CLEARING, DEMOLITION, CONTOUR INCONSISTENCIES ETC

GARAGES, RAMPS AND DRIVEWAY PROFILES ARE TO COMPLY WITH AUSTRALIAN STANDARDS AS 2890

ANY STRUCTURE SHOWN AS EXEMPT DEVELOPMENT IS TO BE WORKED OUT ON SITE, CONTRACTOR TO ENSURE THE CONSTRUCTION IS DONE IN ACCORDANCE TO THE EXEMPT DEVELOPMENT CONTROLS IN FULL PRIOR TO CONSTRUCTING

NO WORKS ARE TO BE CARRIED OUT OVER AN EASEMENT. NO WORKS ARE TO BE CARRIED OUT OVER COUNCIL PROPERTY WITHOUT PRIOR COUNCIL APPROVAL

TERMITE MANAGEMENT MUST BE CARRIED OUT IN ACCORDANCE WITH NCC 2022 PART 3.4 OF THE HOUSING PROVISIONS AND THE RELEVANT GUIDELINES SET OUT IN THE AUSTRALIAN STANDARDS AS3660.1 TERMITE MANAGEMENT

EXHAUST SYSTEMS INSTALLED IN THE KITCHEN, BATHROOMS, LAUNDRY OR SANITARY COMPARTMENTS MUST DISCHARGE DIRECTLY VIA A SHAFT OR DUCT TO OUTDOOR AIR AND COMPLY WITH THE MINIMUM FLOW RATES AS PER CLAUSE 10.8.2 OF THE HOUSING PROVISIONS 2022

BULKHEADS TO BE INSTALLED IN ACCORDANCE WITH RELEVANT NCC REQUIREMENTS. LOCATIONS OF BULKHEADS TO BE CONFIRMED ON SITE BY THE BUILDER ON SITE

WATERPROOF WALLS & FLOORS OF ALL WET AREAS AS PER THE NCC/BCA REQUIREMENTS

CONTRACTOR IS TO ENSURE THAT ANY SHARED WALLS ARE FIRE RATED IN ACCORDANCE WITH CLAUSE 9.3.1 OF THE HOUSING PROVISIONS 2022, HAVE NO PENETRATIONS AND A SOUND SEPARATION AS PER CLAUSE 10.7.1 OF THE HOUSING PROVISIONS 2022

PROVIDE FLASHING AT ALL ROOF & WALL JUNCTIONS AND ENSURE WATER TIGHT CONNECTIONS

IF AIR CONDITIONING IS TO BE PROVIDED, ALLOW FOR THE AIR CONDITIONING TO BE CONCEALED IN THE CEILING, THE ROOF AND IN DUCTS. AIR CONDITIONING IS TO BE AS PER THE AIR CONDITIONING CONSULTANTS DETAILS AND THE BASIX CERTIFICATE REQUIREMENTS

## WINDOWS AND DOORS

THE CONTRACTOR MUST ALLOW FOR ALL LABOUR AND MATERIALS NECESSARY FOR THE SUPPLY AND INSTALLATION OF ALL WINDOWS AND DOORS INDICATED THROUGHOUT THE PROPOSED BUILDING. HE MUST ALSO ALLOW FOR THE PREPARATION OF A DETAILED WINDOW AND DOOR SCHEDULE THAT PROVIDES DETAIL INFORMATION AS TO THE TYPE, NUMBER AND CONFIGURATION OF EACH AND EVERY DOOR AND WINDOW FOR THE APPROVAL OF THE OWNERS BEFORE ORDERING AND OF THE DOORS AND WINDOWS. THIS DETAIL SCHEDULE IS NOT PART OF THE CONSTRUCTION CERTIFICATE DOCUMENTATION AND MUST BE ALLOWED FOR BY THE CONTRACTOR IN THE TENDER PRICE. ALL WINDOW AND DOOR DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING THESE ITEMS

ALL WINDOWS ARE TO COMPLY WITH CLAUSE 11.3.7 OF THE HOUSING PROVISIONS 2022 PROTECTION OF OPENABLE WINDOWS

WINDOW AND DOOR HEIGHTS ON ELEVATIONS ARE APPROXIMATE ONLY AND MAY VARY ON SITE

## FLOOR WASTES TO BALCONIES

THE CONTRACTOR IS TO ALLOW FOR FLOOR WASTES TO BE PROVIDED TO EACH AND EVERY BALCONY (IRRESPECTIVE OF WHETHER THEY ARE INDICATED IN THE CONSULTANTS DRAWINGS OR NOT. THESE FLOOR WASTES ARE TO BE CONNECTED TO STORMWATER GRATES PVC AND THEN TO DOWNPIPES LOCATED DIRECTLY IN ONE INTERNAL CORNER OF EACH AND EVERY BALCONY. CONFIRM THE LOCATIONS OF THESE DOWNPIPES WITH THE OWNERS. THE CONTRACTOR MUST ALLOW FOR ALL ASSOCIATED WORKS (SUCH A CONNECTION TO BE STORMWATER LINES AND THE LIKE) THAT IS REQUIRED IN ORDER FOR ALL SUCH FLOOR WASTES TO ADEQUATELY DRAIN EACH AND EVERY BALCONY

## BASEMENT NOTES

CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL SERVICES ARE COORDINATED WITH THE STRUCTURAL ELEMENTS IN ORDER TO ACHIEVE A MINIMUM CLEARANCE OF 2200MM THROUGHOUT THE BASEMENT CAR PARK AREA, ON THE DRIVEWAY AND IN ALL THE CAR SPACES

ALL OFF-STREET PARKING FACILITIES INCLUDING DRIVEWAY WIDTHS, RAMP GRADES, AISLE WIDTHS, TURNING PATHS, SIGHT DISTANCES AND PARKING BAY SIZES MUST CONFORM TO CURRENT AUSTRALIAN STANDARDS AS 2890.1 AND AS 2890.2-2002

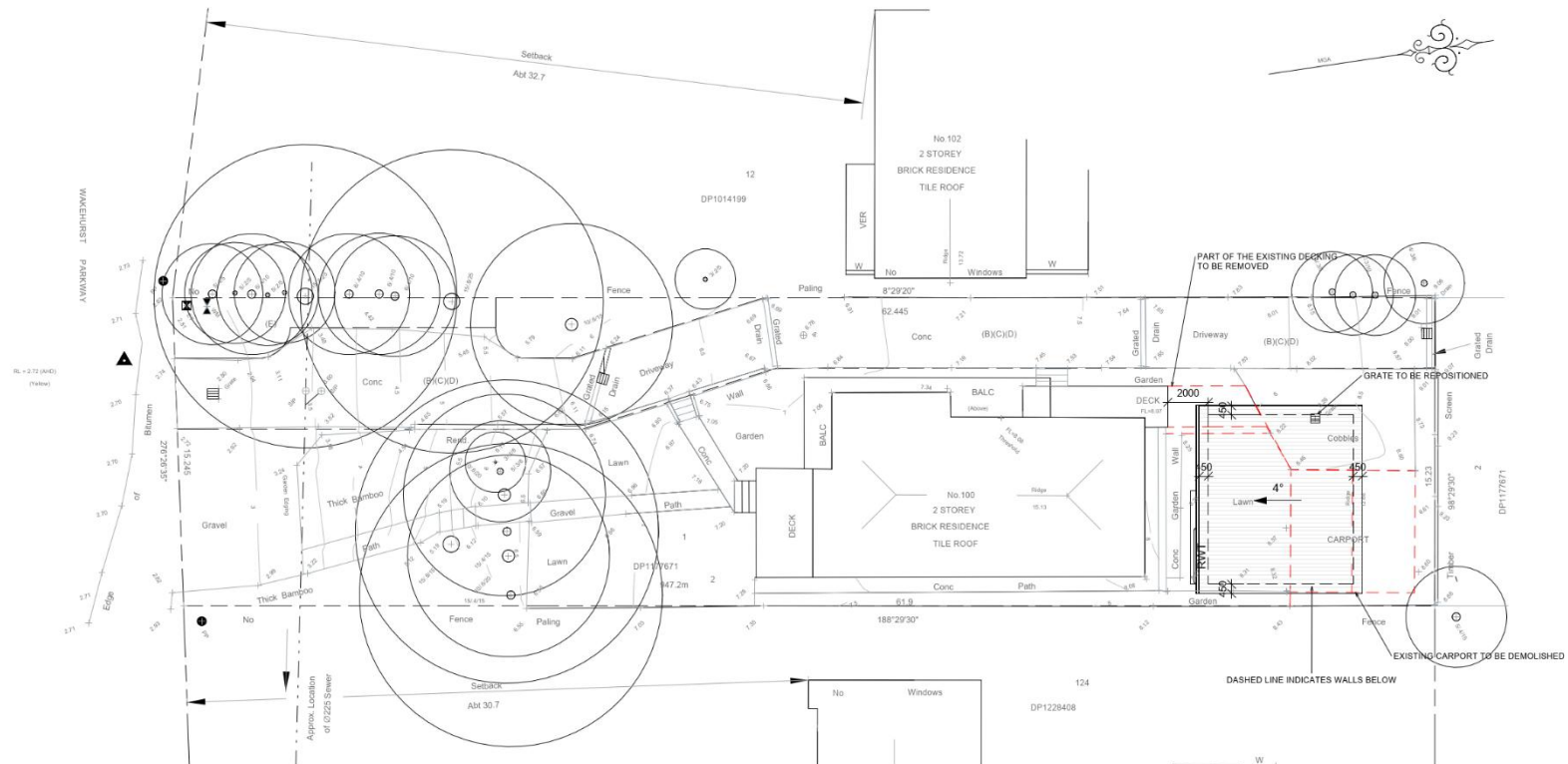
COORDINATE DRIVEWAY AND SLAB DIMENSIONS SO THAT THERE IS A MINIMUM HEAD CLEARANCE BELOW BEAMS AND MECHANICAL DUCTS OF 2200MM

PROVIDE 100MM MINIMUM AGRICULTURAL PIPE WITH A FILTER STOCKING AROUND PERIMETER OF THE BUILDING AND CONNECT TO STORMWATER LINES AS PER THE STORMWATER ENG DETAILS AND SYDNEY WATER REQUIREMENTS

## LIFT NOTES

CONTRACTOR MUST ENSURE THAT THE ACCESS LIFT COMPLIES WITH THE REQUIREMENTS OF AS1735.12. THE LIFT SHAFT IS TO BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE MANUFACTURERS AND STRUCTURAL ENG DETAIL. THE CONTRACTOR MUST LIAISE WITH THE LIFT MANUFACTURERS AND ALLOW FOR THE ITEMS TO BE PROVIDED BY OTHER CONTRACTORS AS REQUIRED IN THE "WORK BY OTHERS" THE LIFT SHAFT AND PIT ARE TO BE WATERPROOFED AS PER THE ARCHITECTURAL SPECIFICATION AND MANUFACTURERS REQUIREMENTS

<b>GENERAL NOTES</b> All dimensions are to be confirmed on site by the builders/subcontractor; any incongruities must be reported to the Designer before commencement of any work. No survey has been made on the boundaries, all bearings, distances and areas have been taken from the contour survey plan. A survey must be carried out to confirm the exact boundary locations. No construction work shall commence until a site survey confirming the site boundaries has been completed. The contractor is to ensure that the boundary setbacks are confirmed and used; the boundary setbacks take precedence over all other dimensions. The survey work must be performed by a registered surveyor. In the event of encountering any discrepancies on these drawings, specification or subsequent instructions issued, the Builder/Subcontractor shall contact the designer before proceeding further with any work. All construction, control joints and expansion joints in the wall, floors, other locations shall be in strict accordance with the Structural Engineering details. No joints or breaks other than specified, are allowed without written permission from the Engineer. Measurements for the fabrication of secondary components such as, windows, doors, internal frames, structural steel components and the like, are not to be taken from these documents. Measurements must be taken on site to suit the work as constructed. All structural components shall be in strict accordance to details and specifications as prepared by a structural engineer. All existing structures need to be examined for structural adequacy, and it is the Contractor's responsibility to ensure that a certificate of structural adequacy is available prior to the start of any work.				drawn: EU date: 15/01/25 issue: A description: ISSUE FOR DA	project: PROPOSED CONSTRUCTION OF A GRANNY FLAT AT 100 WAKEHURST PARKWAY ELANORA HEIGHTS NSW 2101 LOT 1/-DP1177671	6/7 Parkes Street, Parramatta NSW 2150 www.rkdesigns.com.au admin@rkdesigns.com.au 02 9633 4797 abn: 68 659 200 389 spaces designed for life	<b>RK</b> DESIGNS
client: RICK AND RACHEL CAVANAGH true north: drawing: NOTES project no: 25-02 date: 15/01/25 sheet no: A 1 scale: @ A3 issue: B checked: ?				Bungalow Homes			



**PRELIMINARY**  
**DO NOT USE FOR CONSTRUCTION**

1

## SITE AND ROOF PLAN

1 : 200



**GENERAL NOTES**  
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EU	21/02/25	B	ISSUE FOR DA

project  
**PROPOSED CONSTRUCTION OF A GRANNY FLAT AT 100 WAKEHURST PARKWAY ELANORA HEIGHTS NSW 2101 LOT 11/DP1177671**

client  
**RICK AND RACHEL CAVANAGH**

drawn  
**Bungalow Homes**

**bdac**  
ACCREDITED  
BUILDING DESIGNER

6/7 Parkes Street,  
Parramatta NSW 2150  
www.rkdesigns.com.au  
admin@rkdesigns.com.au  
02 9633 4797  
abn. 68 659 200 389  
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**RK**  
DESIGNS



drawing  
**SITE AND ROOF PLAN**

project no  
25-02

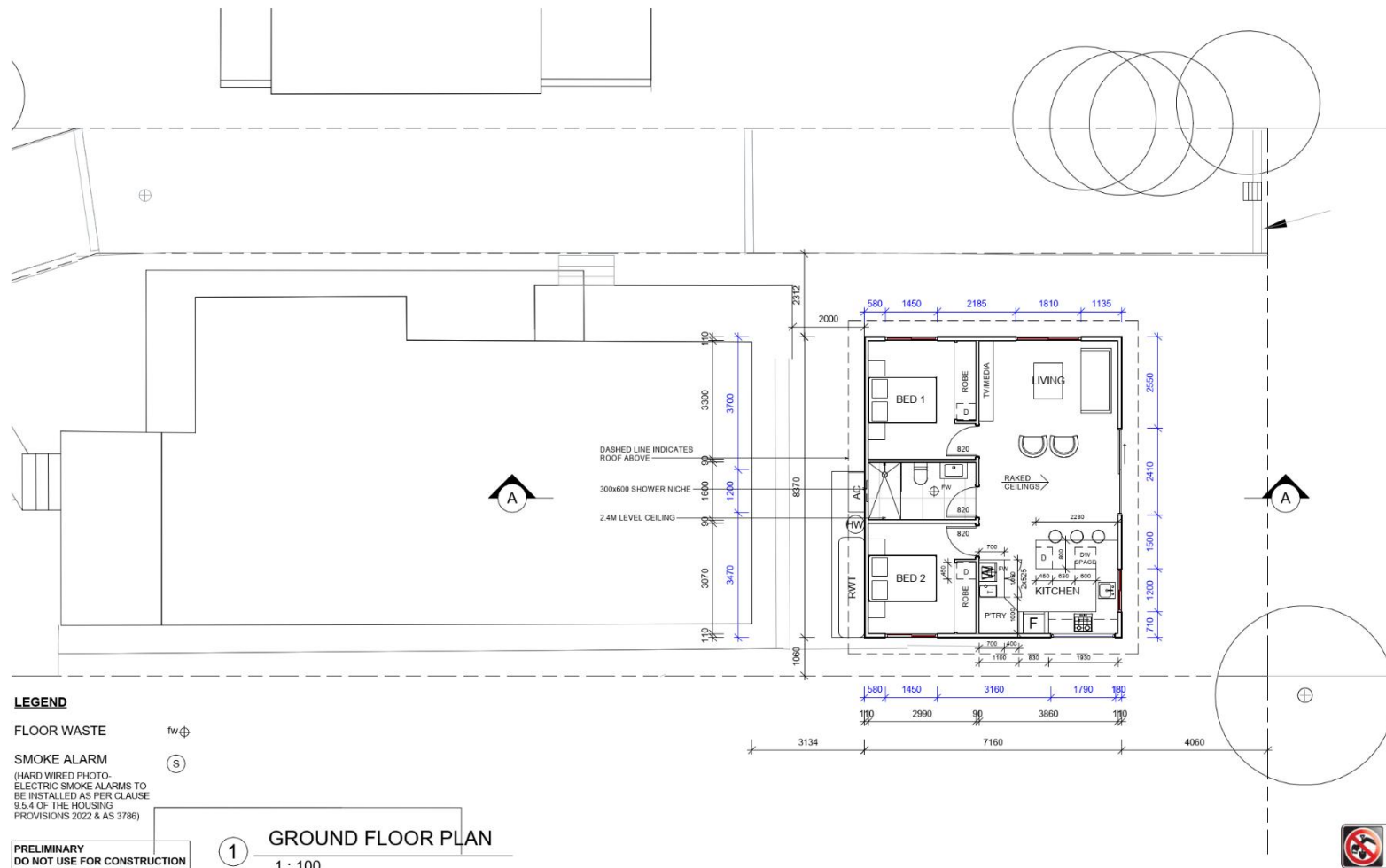
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EU	15/01/25	A	ISSUE FOR DA
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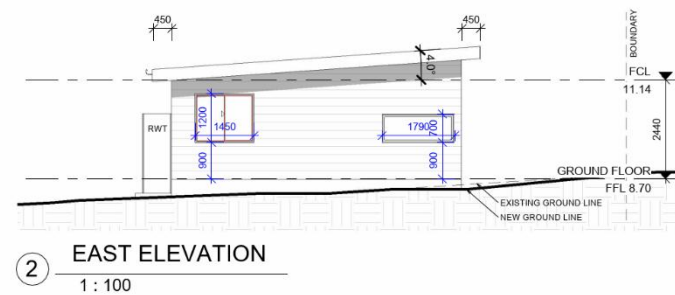
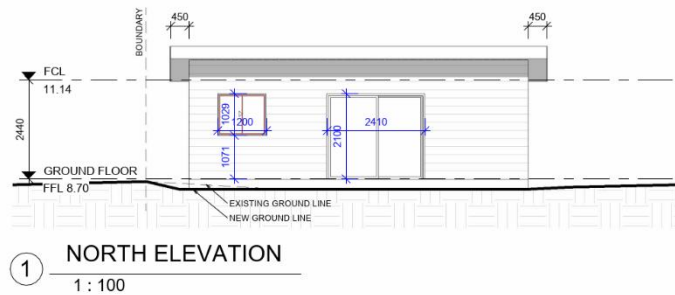
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EU	15/01/25	A	ISSUE FOR DA
EU	21/02/25	B	ISSUE FOR DA

project	PROPOSED CONSTRUCTION OF A GRANNY FLAT AT 100 WAKEHURST PARKWAY ELANORA HEIGHTS NSW 2101 LOT 1/-DP1177671
client	RICK AND RACHEL CAVANAGH
drawn	GROUND FLOOR PLAN
project no	25-02
date	15/01/25
sheet no	A3
scale	@ A3
issue	B
checked	?

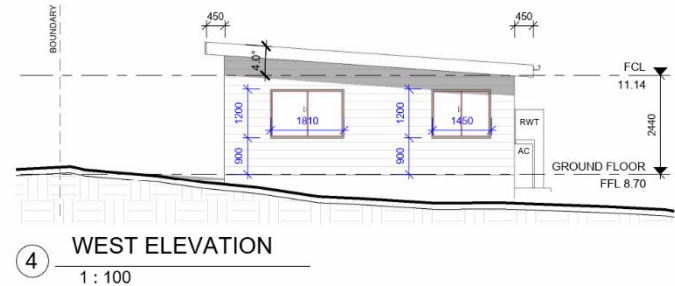
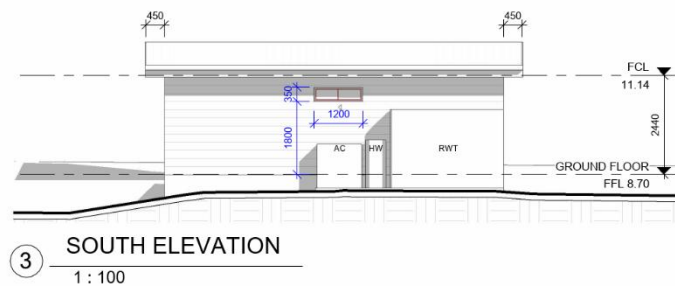
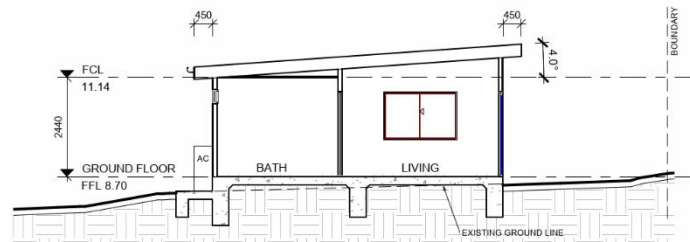
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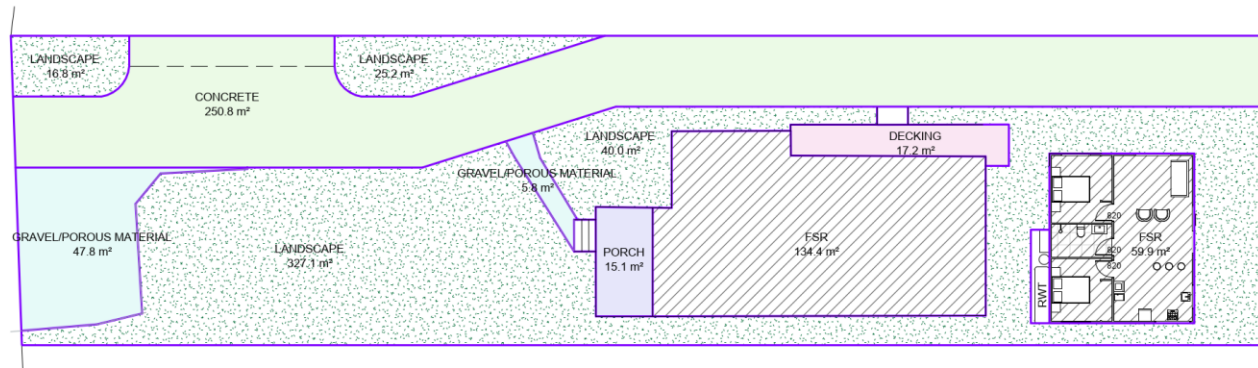


5 SECTION A-A  
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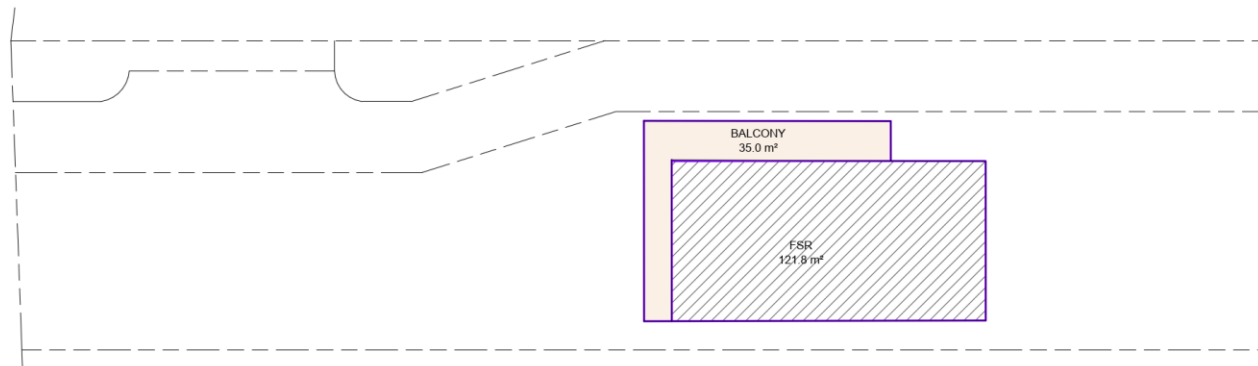
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	EU	15/01/25	A	ISSUE FOR DA			
client <b>RICK AND RACHEL CAVANAGH</b> 	project no	date	sheet no	scale @ A3	issue	checked	
	25-02	15/01/25	A4	1 : 100	B	?	





**AREA CALCULATION**  
SITE AREA = 947.2 sqm  
EXISTING FLOOR AREA = 256.2 sqm  
PROPOSED GRANNY FLAT AREA = 59.9 sqm  
**MINIMUM LANDSCAPED AREA**  
60% OF LOT AREA  
MINIMUM LANDSCAPE AREA REQUIRED = 568.32 sqm  
PROPOSED LANDSCAPE = 409.1 sqm (NOT COMPLIES)

1 **GROUND FLOOR**  
1 : 200



2 **FIRST FLOOR**  
1 : 200

**AREA CALCULATIONS SCHEDULE**

NAME	LEVEL	COUNT	TOTAL
BALCONY	FIRST FLOOR	1	35.0 m²
BALCONY: 1			35.0 m²
CONCRETE	GROUND FLOOR	1	250.8 m²
CONCRETE: 1			250.8 m²
DECKING	GROUND FLOOR	1	17.2 m²
DECKING: 1			17.2 m²
FSR	GROUND FLOOR	2	194.3 m²
FSR	FIRST FLOOR	1	121.8 m²
FSR: 3			316.1 m²
GRAVEL/POROUS MATERIAL	Not Placed	1	0.0 m²
GRAVEL/POROUS MATERIAL	GROUND FLOOR	2	53.6 m²
GRAVEL/POROUS MATERIAL: 3			53.6 m²
LANDSCAPE	GROUND FLOOR	4	409.1 m²
LANDSCAPE: 4			409.1 m²
PORCH	GROUND FLOOR	1	15.1 m²
PORCH: 1			15.1 m²

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**project**  
PROPOSED CONSTRUCTION OF A GRANNY FLAT AT 100 WAKEHURST PARKWAY ELANORA HEIGHTS NSW 2101 LOT 11/DP1177671

**client**  
RICK AND RACHEL CAVANAGH

**drawn**  
true north

**AREA CALCULATIONS**  
project no: 25-02  
date: 15/01/25  
sheet no: A5  
scale @ A3: 1 : 200  
issue: B  
checked: ?

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