CLARKE DOWDLE & ASSOCIATES
DEVELOPMENT CONSULTANTS
SURVEYORS • PLANNERS • ECOLOGISTS • BUSHFIRE CONSULTANTS

BUSH FIRE ASSESSMENT REPORT

For the Proposed Development at

22 CICADA GLEN ROAD, INGLESIDE, NSW

(LOT 243 IN DP 752046)

January 2025

PO Box 3122, Umina Beach NSW 2257
Ph: (02) 4344 3553 Fax: (02) 4344 6636
EMAIL: admin@cdasurveys.com.au
WEBSITE: www.cdasurveys.com.au

EXECUTIVE SUMMARY

The Bush Fire Assessment Report for 22 Cicada Glen Road, Ingleside, NSW, evaluates the bushfire risk associated with the proposed construction of a single-occupancy dwelling on the site. This assessment, conducted by Clarke Dowdle & Associates, follows the guidelines of *Planning for Bushfire Protection 2019* (PBP) and AS3959-2018.

The site is located on bushfire-prone land, with a significant portion of its surroundings classified as dry and wet sclerophyll forest and all aspects. The effective slope of the land under the bushfire hazards was assessed, with slopes varying slopes between 0 (flat/Up Slope) to 10 degrees (down slope).

The proposed development will require measures to mitigate the risks associated with the identified Bushfire Attack Level (BAL). The assessment concludes that the site predominantly falls within BAL-FZ (Flame Zone). To address these risks, the entire site will need to be maintained as an Asset Protection Zone (APZ), including tree clearing to meet Inner Protection Area (IPA) standards. Construction must comply with the BAL-FZ requirements of AS3959-2018 or NASH standards, ensuring the use of non-combustible materials and additional protective measures.

The development benefits from existing reticulated water supply and compliant hydrant access, while new utility connections, including gas and electricity, must adhere to PBP standards. Safe access and evacuation will be provided via Cicada Glen Road, and residents are advised to prepare a bushfire survival plan.

This report concludes that the proposed development meets the objectives of *Planning for Bushfire Protection 2019* and provides a pathway for achieving compliance with regulatory requirements. However, due to the BAL-FZ classification and alternate solution provided, the development will require referral to the NSW Rural Fire Service (RFS) for further consideration under Section 4.14 of the *Environmental Planning and Assessment Act 1979*.

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APPENDIX

DOCUMENT TRACKING

Project Location	22 Cicada Glen Road, Ingleside
Date	31/01/25
Prepared by	Ashley Dowdle
Reviewed by	Kristan Dowdle
Approved by	Kristan Dowdle
Status	FINAL
Version	4

1.0 INTRODUCTION

We have attended the above-described property for the purpose of undertaking a Bush Fire Assessment Report (BFAR) in accordance with the guidelines outlined in Planning for Bushfire Protection, 2019 and Addendum to PBP 2019 (PBP), to determine the level of bushfire threat to the site. Northern Beaches Council has provided mapping of Bushfire Prone Areas that identifies areas of bushfire threat. This mapping identifies properties that are in the buffer zone of 100m metres from Category 1 mapped vegetation or 30m from Category 2 & 3 mapped vegetation. All developments occurring on land mapped as bushfire prone are subject to the conditions detailed in the planning document PBP.

The subject site has been mapped as bushfire prone land (See Figure 1); therefore, the purpose of this BFAR is to provide information to Northern Beaches Council to ascertain compliance or otherwise with AS3959-2018 'Construction of Buildings in Bush Fire Prone Areas' and PBP.

This report will provide an independent assessment of the bushfire risk to the proposal, based upon the surrounding site conditions with reference to Section 4.14 of the Environmental Planning and Assessment Act 1979, PBP and AS3959-2018.

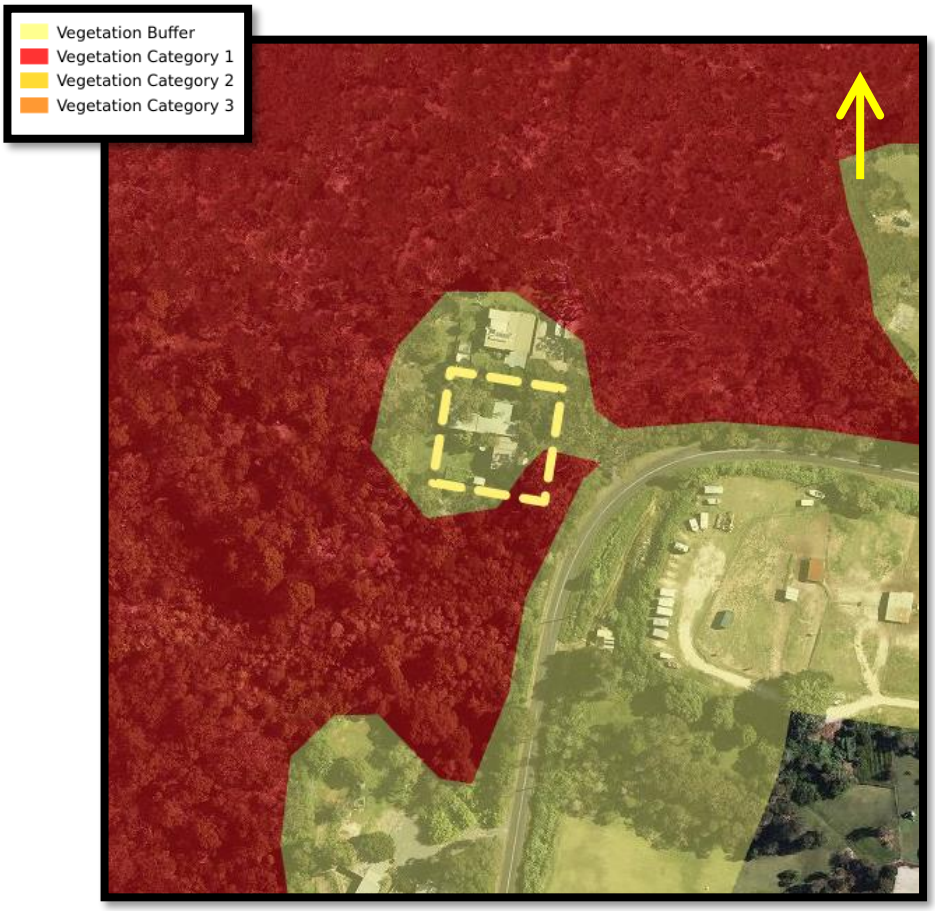


Figure 1: Bushfire Mapping (site boundary in yellow)
Source: Department of Planning, 2025

1.1 Proposed Development

The site is a residential parcel of land that contains an existing dwelling and the proposed development will involve the demolition of the existing dwelling and the subsequent construction of a new single-occupancy dwelling on the site. Figure 2 provides a site plan of the proposal.

The final building plans outlining the size and dimension of the proposed development will accompany the Development Application.

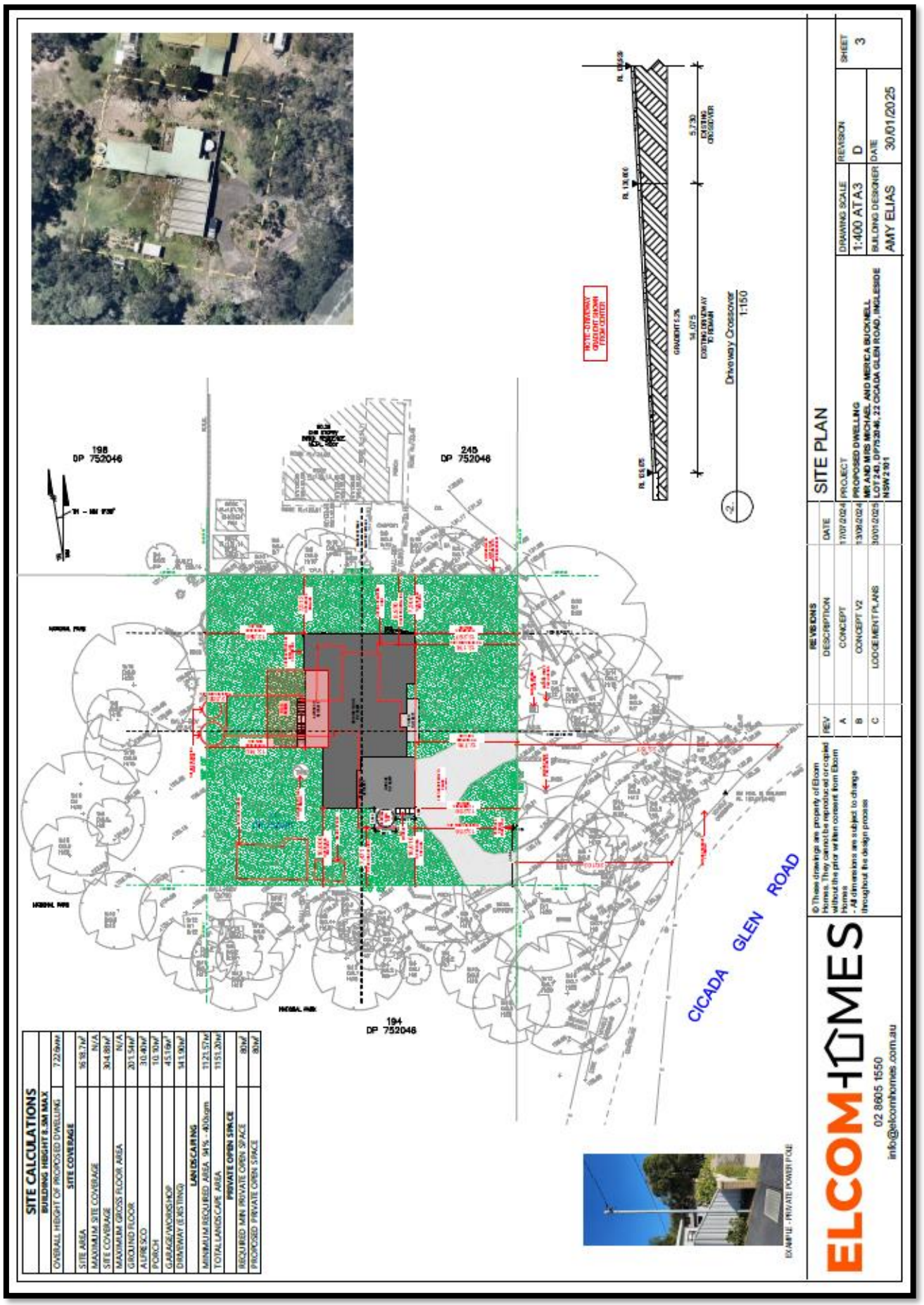


Figure 2: Proposed Development Site Plan

2.0 SITE IDENTIFICATION

The site is located at 22 Cicada Glen Road, Ingleside (Lot 243 DP 752046). The site is in the Local Government Area (LGA) of Northern Beaches Council (Fire Danger Index-100).

The site is a residential parcel of land that contains an existing dwelling on the middle portions of the site and land conditions within the site consist of managed lawns and landscaped gardens.

The site is connected to the town-reticulated supply of water and to the mains electrical grid.

Figure 3: Aerial Photograph of the site (site boundary bordered in blue)
Source: Nearmap, 2025

2.1 Property Access

The subject property has street access to Cicada Glen Road to the east. Persons seeking to egress from the subject property can do so via the proposed access driveway and existing public roads.

The most distant external point of the proposed footprint is <70 metres from a public road supporting the operational use of fire fighting vehicles and therefore the access requirements detailed in Table 7.4a of PBP are not applicable.

2.2 Service Supply

The most distant external point of the proposed dwelling within the site (is < 70 meters from a road suitable for fire fighting vehicles (e.g., hydrants). Therefore, no Static Water Supply (SWS) requirements of PBP apply to this allotment.

The existing overhead electrical supply is available to the subject site.

A search Dial-before-you-dig website indicates that a reticulated gas supply is not available at the site.

2.3 Ecological Constraints

As shown in Figure 4, the eastern portions of the site have been mapped as the Biodiversity Values Map. Portions of these mapped areas will form part of the recommended Asset Protection Zones (APZ) for the proposal, however, no tree/vegetation removal will be required based on their current managed state.

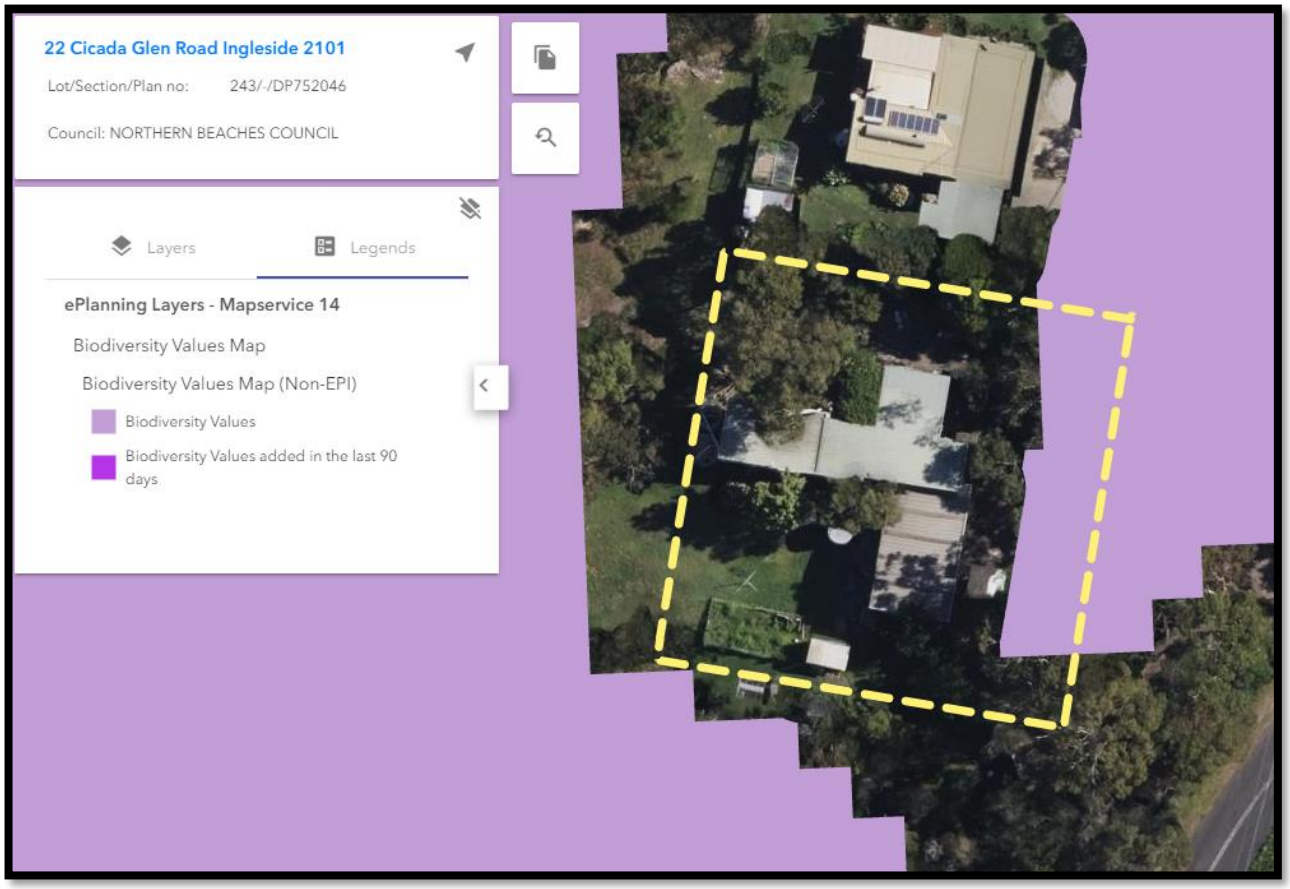


Figure 4: Biodiversity Values Map (site highlighted in yellow)
Source: Department of Planning, 2025

3.0 BUSH FIRE HAZARD ASSESSMENT

3.1 Surrounding Vegetation

In accordance with PBP, the surrounding land features and vegetation found within 140m of the proposed works found on the date of inspection (02/09/24 and 18/11/24) are detailed below (See Figures 5 & 6).

The vegetation mapping has been obtained from the State Vegetation Type Map (SVTM), which was published by the NSW Department of Planning and Environment (DPE).

North, East & West
To the north and west directly adjoining the site and to the east beyond managed lands within the adjoining residential allotment, is vegetation that has been mapped as containing a mixture of *Central Coast Escarpment Moist Forest, Woronora Plateau Heath-Mallee* and *Sydney Coastal Enriched Sandstone Forest.* The predominant vegetation contained on these aspects meets with the Keith (2004) description of a 'dry sclerophyll forest'. In accordance with Appendix 1 in PBP, this vegetation will be assessed as **Forest** as per PBP.

South
To the south and directly adjoining the site, is vegetation that has been mapped as containing a mixture of *Central Coast Escarpment Moist Forest* and *Woronora Plateau Heath-Mallee.* The predominant vegetation contained on these aspects meets with the Keith (2004) description of a 'wet sclerophyll forest'. In accordance with Appendix 1 in PBP, this vegetation will be assessed as **Forest** as per PBP.

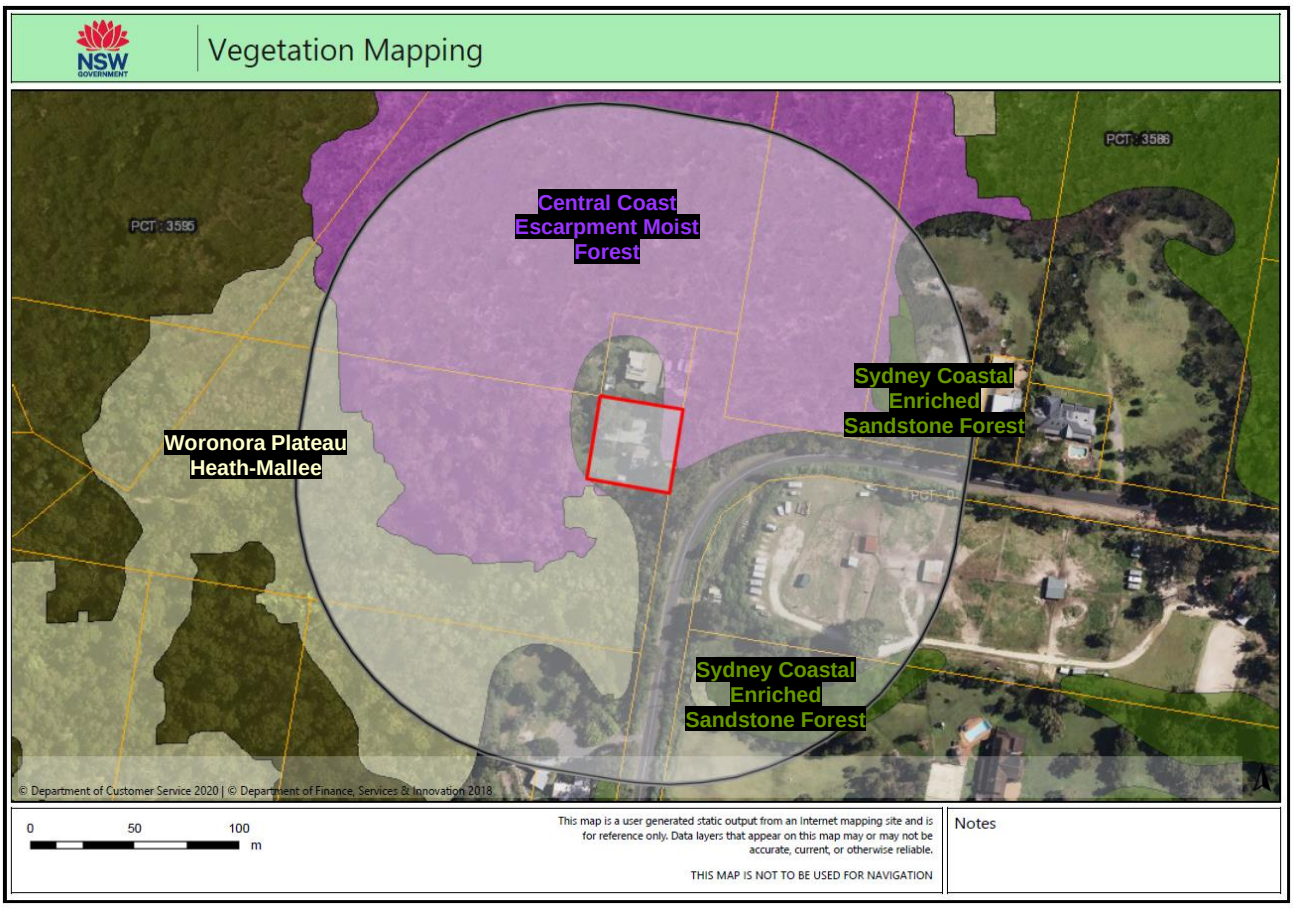


Figure 5: Vegetation Mapping (circle is 140m from the site)
Source: SVTM (DEC), 2025


SW W NW N
295°NW (T) 33°40'3"S, 151°16'31"E ±4m ▲135m
18 Nov 2024, 11:06:32

1.


N NE SE S
90°E (T) 33°40'2"S, 151°16'29"E ±4m ▲133m
18 Nov 2024, 11:11:46

2.


SW W NW N
280°W (T) 33°40'2"S, 151°16'29"E ±4m ▲133m
18 Nov 2024, 11:12:01

3.


SW W NW N
283°W (T) 33°40'4"S, 151°16'30"E ±4m ▲133m
18 Nov 2024, 11:11:00

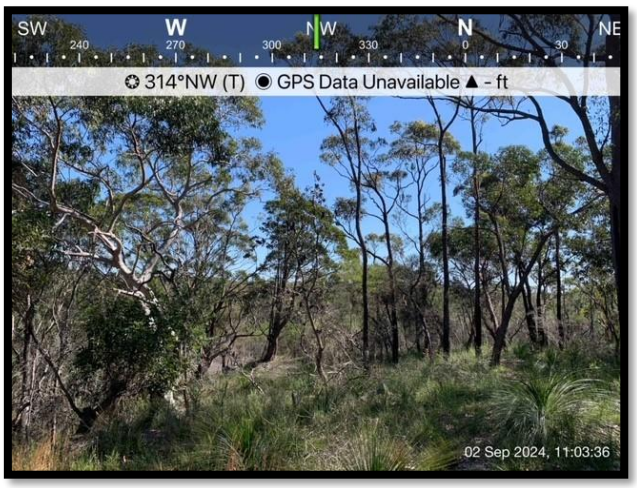
4.


NE E SE S
98°E (T) GPS Data Unavailable ▲ - ft
02 Sep 2024, 10:59:41

5.


N NW N NE E
4°N (T) 33°40'3"S, 151°16'29"E ±4m ▲131m
18 Nov 2024, 11:11:27

6.



7.

8.

Note: See Figure 6 for photograph location and direction.

3.2 Effective Slope

PBP states in A1.5 that the effective slope is;

'The slope of the land under the classified vegetation has a direct influence on the rate of fire spread, the intensity of the fire and the ultimate level of radiant heat flux. The effective slope is the slope of the ground under the hazard (vegetation). It is not the slope between the vegetation and the building (slope located between the asset and vegetation is the site slope).'

Figure 6 provides the topographic and vegetation mapping surrounding the proposal as sourced by NSW Spatial Services (2m contours). The effective slope measured 100m from the proposed development for the hazard facing aspects are;

North & South: **0-5° Down Slope**
East: **Flat/Up Slope**
West: **5-10° Down Slope**

4.0 BUSHFIRE ATTACK LEVEL (BAL) ASSESSMENT

The bushfire risk to property depends on the vegetation type, slope and proximity of vegetation to the proposed development, and can be classified as BAL-LOW, BAL-12.5, BAL-19, BAL-29, BAL-40 and BAL FZ as outlined in AS3959-2018 and PBP. The categories of bushfire attack were determined for the vegetation conditions currently existing on the site and adjacent areas. Following the identification of the bushfire attack category for each aspect, the site will be assessed according to vegetation that presents the highest level of bushfire attack risk. AS3959-2018 provides two methods to determine complying Bushfire Attack Levels, these are; the **Simplified Procedure-Method 1** (deemed-to-satisfy) and **Detailed Method for Determining the Bushfire Attack Level-Method 2** (alternate solution).

The level of bushfire attack then determines the construction standards necessary for the proposed development. These protective construction measures are outlined in Australian Standard AS3959-2018. The BAL required for each of the aspects/facades for the proposed development are summarised in Table 1.

Table 1: Bushfire Attack Assessment

	ASPECT			
	Northern	**Southern**	**Eastern**	**Western**
Vegetation[1] within 100m of development	Forest	Forest	Forest	Forest
Effective Slope of Land	0-5° Down Slope	0-5° Down Slope	Flat/Up Slope	5-10° Down Slope
APZ Required/Setback Provided[2]	~47m	~10m	~18m	~12m
Bushfire Attack Level (BAL)[3]	BAL FZ	BAL FZ	BAL FZ	BAL FZ

Notes for Table 1:

- (1) Refer to Keith (2004), AS 3959-2018 and *PBP*
- (2) Distance to vegetation
- (3) BAL's are in accordance with Table A1.12.5 in PBP
- (4) Larger APZ's are restricted by the existing cliff to the north of the proposed dwelling.

Proposed Dwelling

As detailed in Table 1 and Table A1.12.5 in PBP, based on the current and proposed surrounding conditions, the proposed development will be subject to BAL FZ from the southern and western aspects as per AS3959-2018.

It is noted that developments located within BAL FZ are outside the scope of the NSW variation of the National Construction Code (NCC) deemed-to-satisfy provisions of AS3959-2018 and the NASH Standard. Although Chapter 9 (BAL FZ) of AS 3959 and the NASH Standard have not been adopted, they should still be used as a basis for demonstrating compliance with the performance requirements of the NCC and PBP for construction in the flame zone and a referral to the NSW Rural Fire Service is required.

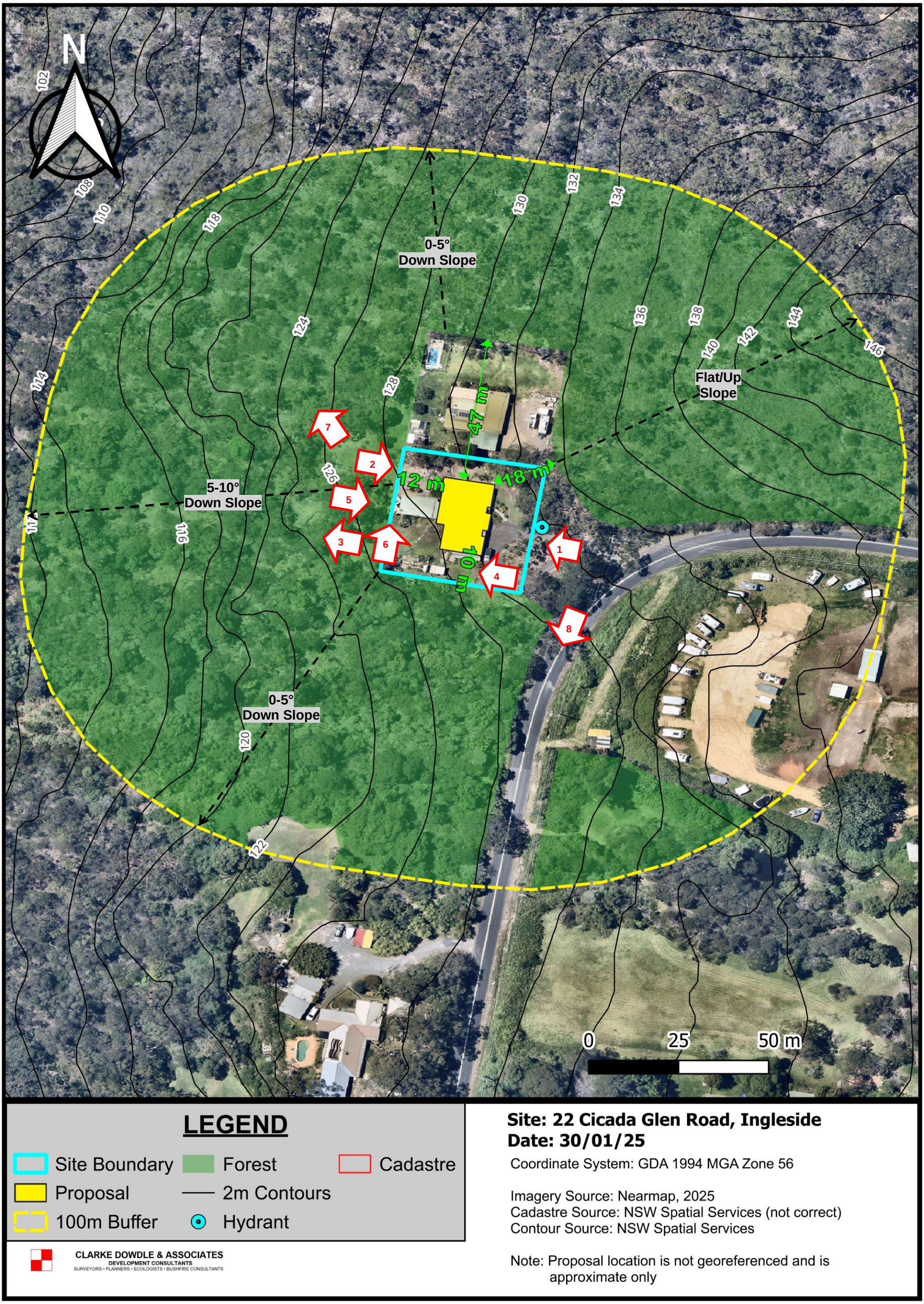


Figure 6: Bushfire Site Plan

5.0 RECOMMENDATIONS

This Bush Fire Assessment Report concluded that the proposed development may comply with the performance criteria for PBP if the proposed acceptable solutions and recommendations are implemented. These items are outlined below.

5.1 Asset Protection Zones

- **The entire site shall be maintained as an APZ for the lifetime of the development.**
- The APZ shall be maintained to meet with the requirements of an Inner Protection Area (IPA) as outlined in Appendix 4 in PBP.

5.1.1 Environmental Considerations

No tree clearing will be required for bushfire protection purposes

5.2 Construction Standards

Proposed Dwelling

- The **proposed dwelling** shall be constructed to comply with **Sections 3 & 9 (BAL FZ)** as per AS3959- 2018 or NASH Standard) *National Standard Steel Framed Construction in Bushfire Areas – 2021* as appropriate and **Section 7.5 in PBP 2019.**

- **Gutters**
  New roofing valleys and guttering should be fitted with a non-combustible leaf protection to stop the accumulation of debris.

Service Pipes

- All exposed piping should be of metal. Pipes of other materials should be buried to a depth of at least 300mm below the finished ground level.

Fencing (if applicable)

- All new fencing shall be constructed in accordance with section 7.6 in PBP.

5.3 Property Access and Evacuation Safety

- Safe access will be provided to the subject property via Cicada Glen Road. This road will serve both as an access point for firefighters and an egress point for residents during a bushfire event.

- It is recommended that the building occupants prepare a bushfire survival plan which addresses the option to leave early prior to bushfire impacting the site. Details on how to prepare this plan are provided by the NSW RFS website (http://www.rfs.nsw.gov.au/file_system/attachments/Attachment_BushFireSurvivalPlan.pdf)

5.4 Water and Utility Services Supply

5.4.1 Water

The site is connected to the reticulated supply of water and new water connection/services shall comply with Table 7.4a of PBP which includes (but is not limited to);

- Taps and fittings should be constructed of metal; and
- The number of taps and/or length of hose should be adequate in number and/or length to supply water to the dwelling;

5.4.2 Gas (if applicable)

New gas connection/services shall comply with Table 7.4a of PBP, which includes (but is not limited to);

- Any gas cylinders or gas connections should be installed and maintained in accordance with Australian Standard AS1596 - *The Storage and Handling of LP Gas* and the requirements of relevant authorities.
- If gas cylinders need to be kept close to the building, the release valves are directed away from the building and at least 2 metres away from any combustible material, so that they do not act as a catalyst to combustion.

5.4.3 Electricity

New electrical connection/services shall comply with Table 7.4a of PBP, which includes (but is not limited to);

- Where possible electrical connection should occur via underground lines
- Where overhead electrical connection lines are proposed lines area installed with short pole spacing and no part of a tree closer to a power line than the distance set out on accordance with the specifications in 'Vegetation Safety Clearance' issued by Energy Australia

6.0 SECTION 4.14(1)(b) CERTIFICATE

BUSHFIRE RISK ASSESSMENT CERTIFICATE ISSUED UNDER 4.14 1(b) OF THE ENVIRONMENTAL PLANNING & ASSESSMENT Act, 1979.

PROPERTY ADDRESS:	22 Cicada Glen Road Ingleside (Lot 243 in DP 752046)
DESCRIPTION OF PROPOSAL:	Construction of a dwelling
PLAN REFERENCE: **(Relied upon for Report Preparation)**	See Figure 1 of this report
BAL RATING	**BAL FZ** (If the BAL rating is **FZ** the application is to be referred to NSW RFS for assessment.)
DOES THE PROPOSAL RELY ON ALTERNATE SOLUTIONS:	**No** (If **YES** the application is to be referred to NSW RFS for assessment.)
REPORT REFERENCE:	GO: 26868
REPORT DATE:	30/01/25
CERTIFICATION NO/ACCREDITED SCHEME:	BPAD15318

I **Kristan Dowdle** of **Clarke Dowdle & Associates** hereby certify, in accordance with Section 4.14 of the *Environmental Planning and Assessment Act 1979*:

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 outlined within this certificate, the proposed development conforms to 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(1)(a) of the *Environmental Planning and Assessment Act 1979 No 203*.

Yours sincerely,

Kristan Dowdle
Bushfire Consultant *BPAD-Certified Practitioner (BPAD 15318*
B.ENV.SC.(Environmental Management)
Grad. Dip. (Design in Bushfire Prone Areas)

BPAD Bushfire Planning & Design Accredited Practitioner Level 2

7.0 SPECIFIC OBJECTIVES FOR INFILL IN PBP

With a combination of bushfire protection measures, the proposal is seen to comply with the aim and objectives of PBP for infill development. The Specific Objectives for infill development and a comment as to how they are achieved by the proposed development is provided below:

Objective 1: "*provide a defendable space to enable unimpeded access for firefighting around the building*".
Asset Protection Zones/defendable spaces have been recommended around the proposal and will be provided to allow for unimpeded access for firefighting around the building. The proposal provides compliance with the objective.

Objective 2: "*provide better bush fire outcomes on a redevelopment site than currently exists, commensurate with the scale of works proposed;*".
The proposed development will be constructed to BAL FZ. The implementation of the compliance with AS3959-2018 (along with the additional bushfire protection measures outlined within this report) compared with the existing dwelling which was constructed without specific adherence to bushfire construction requirements, provides a significantly better bush fire outcome than the existing development and meets with objectives PBP. Therefore, the proposal provides compliance with the objective.

Objective 3 "*design and construct buildings commensurate with the bush fire risk*".
The proposed development will be located in a location subject to potential flame contact therefore will be constructed to BAL FZ under AS3959 to compensate. This level of construction will involve the usage of non-combustible external materials. In addition, additional bushfire protection measures (i.e. water supplies) have been recommended. The proposal provides compliance with the objective.

Objective 4" *provide access, services and landscaping to aid firefighting operations;*".
The site will be provided access, services and landscaping that complies with PBP. The proposal provides compliance with the objective.

Objective 5 "*not impose an increased bush fire management and maintenance responsibility on adjoining landowners*; and
The maintenance of the APZ's within the site will not result in increased bushfire management and maintenance responsibility on adjoining landowners. The proposal provides compliance with the objective.

Objective 6 '*increase the level of bush fire protection to existing dwellings based on the scale of the proposed work and level of bush fire risk'*;
The proposal is for the demolition of the existing dwelling which was constructed without specific adherence to bushfire construction requirements for the subsequent construction of a new dwelling built to BAL FZ and additional bushfire protection measures that will enhance the chances of occupant and building survival.

8.0 CONCLUSION

Clarke Dowdle & Associates were engaged to conduct a Bush Fire Assessment Report upon the property located at 22 Cicada Glen Road, Ingleside, NSW. This original assessment was performed in January 2025 and was conducted in accordance with the procedures and methods recommended in the NSW Rural Fire Service published document '*Planning for Bushfire Protection, 2019'* (PBP).

This report has detailed that the proposed works are subject to BAL FZ and therefore requires referral to the RFS in accordance with section 4.14 of the *Environmental Planning and Assessment Act, 1979*. A suite of bushfire protection measures have been recommended which are seen to meet the aim and objectives of PBP.

The determining authorities and Rural Fire Service may suggest additional measures to be implemented with any planning and construction upon the subject site.

We would be pleased to provide further information on any aspects of this report.

For and on behalf of

Clarke Dowdle and Associates

Ashley Dowdle
Bushfire Consultant
Planning for Bushfire Prone Areas - UTS Short Course

Kristan Dowdle
B. Env. Sc
Grad. Dip Design in Bushfire Prone Areas
BPAD-Certified Practitioner (BPAD15318)
Bushfire Consultant

Disclaimer

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Finally, it is important to note that the measures outlined in the relevant requirements of AS3959-2018 Construction of Buildings in Bushfire-Prone Areas, NASH Standard - Steel Framed Construction in Bushfire Areas 2021, and the construction requirements in Planning for Bushfire Protection 2019 cannot provide a guarantee that a building will survive a bushfire event on every occasion. This is primarily due to factors such as the level of vegetation management, the unpredictable nature and behaviour of fire, and extreme weather conditions. As a result, Clarke Dowdle & Associates disclaims any claims and assumes no liability in the event of any damage, loss of property, or loss of life resulting from a bushfire event.

REFERENCES

- Keith, D. (2004), *Ocean Shores to Desert Dunes.* Department of Environment and Conservation, Sydney

- National Construction Code (2022), Building Codes Australia, *Class 1 and Class 10 Building Housing Provisions Volume 2*

- NSW Rural Fire Service and Department of Planning (2019), *Planning for Bushfire Protection, A guide for Councils, Planners, Fire Authorities and Developers*. NSW Rural Fire Service.

- Roff A, Day M, Thonell J and Denholm B (2022) *NSW State Vegetation Type Map*: Technical Notes, NSW Department of Planning and Environment, Northern Beaches, Australia.

- Schauble, J. (2004). *The Australian Bushfire Safety Guide*. Harper Collins Publishers, Sydney, Australia.

- Standards Australia, (2018), *AS3959 Construction of Buildings in Bushfire-prone Areas*. Standards Australia International

APPENDIX A PBP PERFORMANCE CRITERIA COMPLIANCE

The following table outlines the proposals compliance or otherwise with each of the relevant performance requirements and acceptable solutions provided in Section 7.4 and Table 7.4a of PBP.

	PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
ASSET PROTECTION ZONES	• APZs are provided commensurate with the construction of the building • A defendable space is provided.	• an APZ is provided in accordance with Table A1.12.2 or A1.12.3 in Appendix 1. • APZs are managed in accordance with the requirements of Appendix 4.	The proposal is provided with an APZ/defendable space equating to BAL FZ.
	• APZs are managed and maintained to prevent the spread of a fire to the building.	• APZs are managed in accordance with the requirements of Appendix 4 of PBP.	APZs will provide compliance
	• the APZs is provided in perpetuity. • APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is minimised.	• APZs are wholly within the boundaries of the development site • APZs are wholly within the boundaries of the development site. APZ are located on lands with a slope less than 18 degrees.	Complies APZ's will occur upon lands less than lands with a slope less than 18 degrees.
PROPERTY ACCESS	• firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation	• property access roads are two-wheel drive, all-weather roads.	Cicada Glen Road provides access to the property and provides compliance
	• the capacity of access roads is adequate for firefighting vehicles.	• the capacity of road surfaces and any bridges/ • causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes), bridges and causeways are to clearly indicate load rating.	Cicada Glen Road provides access to the property and provides compliance
	• there is appropriate access to water supply.	• hydrants are provided in accordance with the relevant clauses of AS 2419.1:2021; • There is suitable access for a Category 1 fire appliance to within 4m of the static water supply where no reticulated supply is available.	Cicada Glen Road contains water hydrants that are assumed to provide compliance
	• firefighting vehicles can access the dwelling and exit the property safely.	• at least one alternative property access road is provided for individual dwellings or groups of dwellings that are located more than 200 metres from a public through road; • There are no specific access requirements in an urban area where an unobstructed path (no greater than 70m) is provided between the most distant external part of the proposed dwelling and the nearest part of the public access road (where the road speed limit is not greater than 70kph) that supports the operational use of emergency firefighting vehicles. .	The proposal is located within 70m of Cicada Glen Road and hydrants and therefore no access requirements are applicable

	PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
WATER SUPPLY	• adequate water supplies is provided for firefighting purposes.	• reticulated water is to be provided to the development where available; • a static water and hydrant supply is provided for non-reticulated developments	Reticulated water available
	• water supplies are located at regular intervals; and • the water supply is accessible and reliable for firefighting operations.	• fire hydrant, spacing, design and sizing complies with the relevant clauses of Australian Standard AS 2419.1:2021; • hydrants are not located within any road carriageway; and • reticulated water supply to urban subdivisions uses a ring main system for areas with perimeter roads.	Cicada Glen Road contains water hydrants that are assumed to provide compliance
	• flows and pressure are appropriate	• fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2021.	Cicada Glen Road contains water hydrants that are assumed to provide compliance
	• the integrity of the water supply is maintained.	• all above-ground water service pipes are metal, including and up to any taps; and • above-ground water storage tanks shall be of concrete or metal	Any future development upon the site will be required to comply with this condition
ELECTRICAL SERVICES	• location of electricity services limits the possibility of ignition of surrounding bush land or the fabric of buildings.	• where practicable, electrical transmission lines are underground; • where overhead, electrical transmission lines are proposed as follows: ○ lines are installed with short pole spacing of 30m, unless crossing gullies, gorges or riparian areas; and ○ no part of a tree is closer to a power line than the distance set out in ISSC3 *Guideline for Managing Vegetation Near Power Lines*.	The proposal will be required to comply with this condition
GAS 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 **-** *The storage and handling of LP Gas*, the requirements of relevant authorities, and metal piping is used; • all fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side; • connections to and from gas cylinders are metal; • polymer-sheathed flexible gas supply lines are not used; and • above-ground gas service pipes are metal, including and up to any outlets.	The proposal will be required to comply with this condition

	PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
CONSTRUCTION STANDARDS	• the proposed building can withstand bush fire attack in the form of embers, radiant heat and flame contact.	• BAL is determined in accordance with Tables A1.12.5 to A1.12.7; and • construction provided in accordance with the NCC and as modified by section 7.5 (please see advice on construction in the flame zone).	The proposal will be constructed to Sections 3 & 9 (BAL FZ) of AS3959-2018 and Section 7.5 in PBP 2019
	• proposed fences and gates are designed to minimise the spread of bush fire.	• fencing and gates are constructed in accordance with section 7.6.	The proposal will be required to comply with this condition
	• 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.	The proposal will be required to comply with this condition
LANDSCAPING	landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions.	• compliance with the NSW RFS '*Asset protection zone standards*' (see Appendix 4); • a clear area of low-cut lawn or pavement is maintained adjacent to the house; • fencing is constructed in accordance with section 7.6; and • trees and shrubs are located so that: • the branches will not overhang the roof; • the tree canopy is not continuous; and • any proposed windbreak is located on the elevation from which fires are likely to approach.	The proposal will be required to comply with this condition