

Bush Fire Assessment Report

Proposed: Residential Subdivision

At: Anambah Urban Release Area - DA 1

Reference Number: 250631

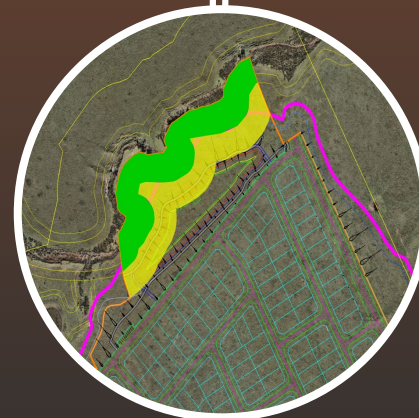
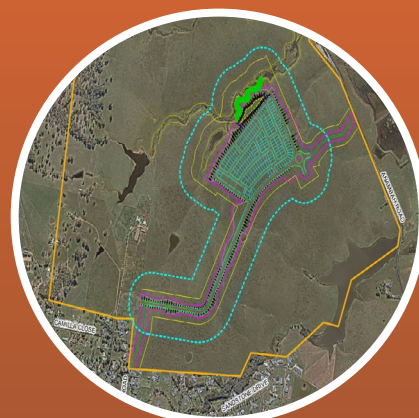
26 May 2025



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Version Control				
Version	Date	Author	Reviewed by	Details
1	26/05/2025	Andrew Muirhead	Stuart McMonnies	Draft Report
2	4/06/2025	Stuart McMonnies		Final Report

List of Abbreviations:

APZ	Asset Protection Zone
AS3959	Australian Standard 3959 – 2018 as amended
BAL	Bushfire Attack Level
BPMs	Bushfire Protection Measures
BPLM	Bushfire Prone Land Map
Council	Maitland City Council
DA	Development Application
EP&A Act	<i>Environmental Planning and Assessment Act - 1979</i>
ESD	Ecologically Sustainable Development
FRNSW	Fire and Rescue NSW
IPA	Inner Protection Area
NCC	National Construction Code
NP	National Park
NSP	Neighbourhood Safer Place
OPA	Outer Protection Area
PBP	<i>Planning for Bush Fire Protection – 2019</i>
ROW	Right of Way
RF Act	<i>Rural Fires Act - 1997</i>
RFS	NSW Rural Fire Service
SEPP	State Environmental Planning Policy
SFPP	Special Fire Protection Purpose
SWS	Static Water Supply

1.0 Introduction

The proposal consists of an extension to the lead in road from the west with the creation (over four stages) of 173 standard residential lots and 2 super lots (for future subdivision), with a new public road and active movement network (including one perimeter road) along with associated works including bulk earthworks, stormwater management, vegetation riparian zones, bushfire management, landscaping, pathways, utilities and other typical subdivision works. Two temporary secondary accesses (gated to public road boundary) are proposed (to River Road and to Anambah Road) and temporary APZ applied around the perimeter of the subdivision pending future progressive development applications.

The subject site is located centrally within the Anambah Urban Release Area (AURA), abutting future residential stages to all aspects.

Properties considered to be affected by possible bushfire impact are determined from the local Bushfire Prone Land Map as prepared by Council and or the Rural Fire Service. Maitland City Council's Bushfire Prone Land Map identifies the overall property as containing Category 1 and 2 Vegetation and the Vegetation Buffer, and therefore the subject site is considered 'bushfire prone land' (See Figure 01).

The development relates to the subdivision of bushfire prone land which can be lawfully used for residential purposes and is therefore classified as integrated development under section 4.46 of the *Environmental Planning and Assessment Act* 1979. The development is captured under section 100B of the *Rural Fires Act* 1997 and must obtain a Bush Fire Safety Authority from the Commissioner of the NSW Rural Fire Service.

All property development within bushfire affected areas is subject to the relevant specifications and requirements detailed in Planning for Bush Fire Protection - 2019 (PBP).

This report has assessed the subject site and proposal against the aim and objectives detailed in Chapter 1 'Introduction' and specific objectives and bushfire protection measures detailed in Chapter 5 'Residential and Rural Residential Subdivisions' of PBP.

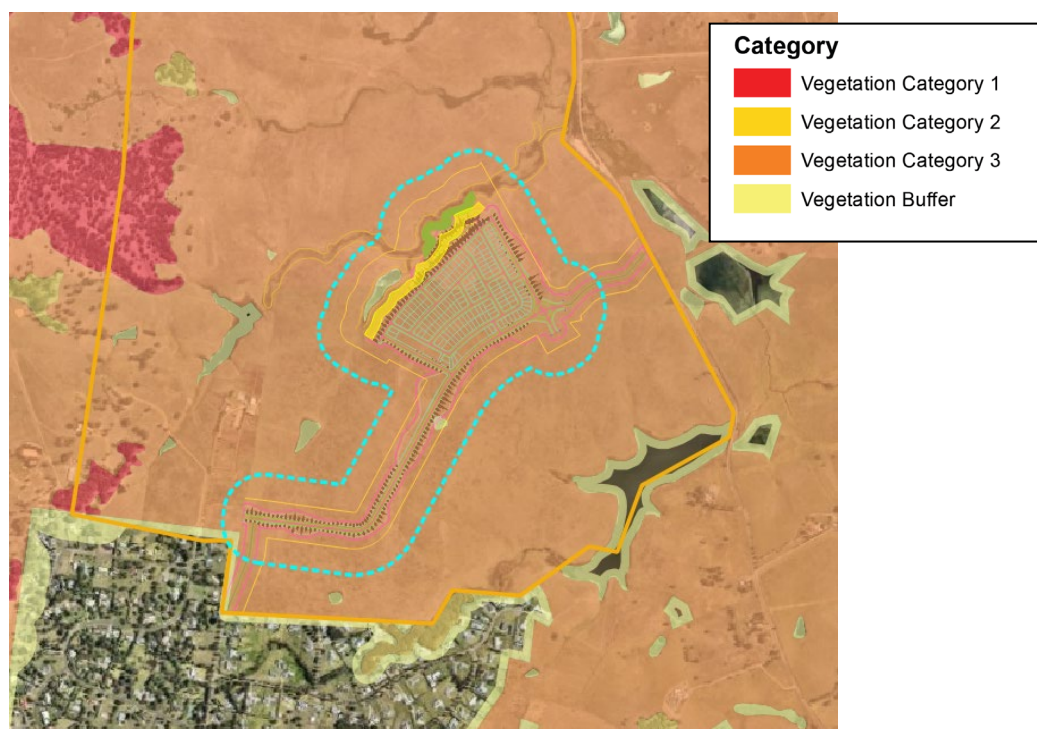


Figure 01: Extract from Maitland City Council's Bushfire Prone Land Map

2.0 Legislative Requirements

The site is subject to the following legislative provisions as it relates to bushfire planning and protection:

- *Environmental Planning & Assessment Act 1979*
- *Rural Fires Act 1997*
- *Rural Fires Regulation 2022*
- *Planning for Bush Fire Protection 2019*

2.1 Rural Fires Act 1997

The subdivision of bushfire prone land which can be lawfully used for residential purposes is captured by section 100b of the *Rural Fires Act 1997*.

The development must obtain a Bush Fire Safety Authority from the Commissioner of the NSW Rural Fire Service (RFS).

2.2 Environmental Planning & Assessment Act 1979

Section 10.3 requires councils, where a Bush Fire Risk Management Plan applies, to record a bush fire prone land map after consulting with the Commissioner of the NSW Rural Fire Service (NSW RFS). The Commissioner will designate lands to be bush fire prone within an area and, when satisfied that the lands have been recorded on a map, certify the map as the Bush Fire Prone Land map.

As the proposal is subject to s.100B of the *Rural Fires Act* 1997, it is integrated development in accordance with s.4.46. This means that the proposed development requires authorisation in respect of bush fire safety because of the subdivision of the land that is proposed to be lawfully used for residential purposes.

2.3 Rural Fires Regulation 2022

Section 45 sets out the relevant matters that must be considered when assessing a bushfire safety authority and includes an assessment of the proposal against Planning for Bush Fire Protection.

2.4 Planning for Bush Fire Protection

As the subject site is identified as being bushfire prone and the proposed development involves a residential subdivision the proposal is subject to the application of the relevant specifications and requirements of Planning for Bush Fire Protection.

The proposal is required to demonstrate that it achieves compliance with the following elements of PBP:

- Chapter 1 - Aim and Objectives
- Chapter 5 – Residential and Rural Residential Subdivisions

3.0 Purpose of Report

The purpose of this Bushfire Assessment Report is to provide the Rural Fire Service and Council with an independent bushfire assessment together with appropriate recommendations for both new development and bushfire mitigation measures considered necessary having regard to being within a designated 'bushfire prone' area.

The recommendations contained within this report may assist in forming the basis of any specific conditions and/or bushfire mitigation measures that Council and/or the NSW Rural Fire Service may elect to place within any consent conditions issued for the subject Development Application.

4.0 Scope of this Report

The scope of this report is limited to providing a bushfire assessment and recommendations for the subject property. Where reference has been made to the surrounding lands, this report does not purport to directly assess those lands; rather it may discuss bushfire impact and/or progression through those lands and possible bushfire impact to the subject property.

5.0 Compliance Tables & Notes

The following table sets out the project's compliance with *Planning for Bush Fire Protection – 2019*

	North (Riparian)	East	South	West
Vegetation Structure	Forested Wetlands	Grassland	Grassland	Grassland
Effective Slope	0 – 5 degrees down	0 – 5 degrees down	0 – 5 degrees down	0 – 5 degrees down
Required Asset Protection Zone	12 metres	12 metres	12 metres	12 metres
Available Asset Protection Zone	>15.5 metres	50 metres*	50 metres*	50 metres*
Available Separation Distance	>70 metres	50 metres*	50 metres*	50 metres*

* Temporary APZs to be applied until future stages are delivered.

Compliance Summary of Bushfire Protection Measures			
Bushfire Protection Measure (s5 PBP)	Acceptable Solution	Performance Solution	Report Section
Asset Protection Zones	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.03
Building Construction	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.03
Access	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	8.03
Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.03

Asset Protection Zones

The proposed allotments, exceed the minimum required APZs in accordance with Table A1.12.2 of PBP. The minimum required APZs comprise of proposed roads (being paved carriageway and parking and verge on the residential side).

Temporary APZs have been applied to the east, south and west and along the access road and emergency access tracks. These temporary APZs will be extinguished at the time future stages are delivered.

Construction Level

No new dwellings are proposed as part of this application.

An independent assessment will be required under s4.14 of the *Environmental Planning and Assessment Act 1997* at the time of any future application for the construction of a new dwelling within the proposed new allotments.

6.0 Aerial view and Subdivision Plan

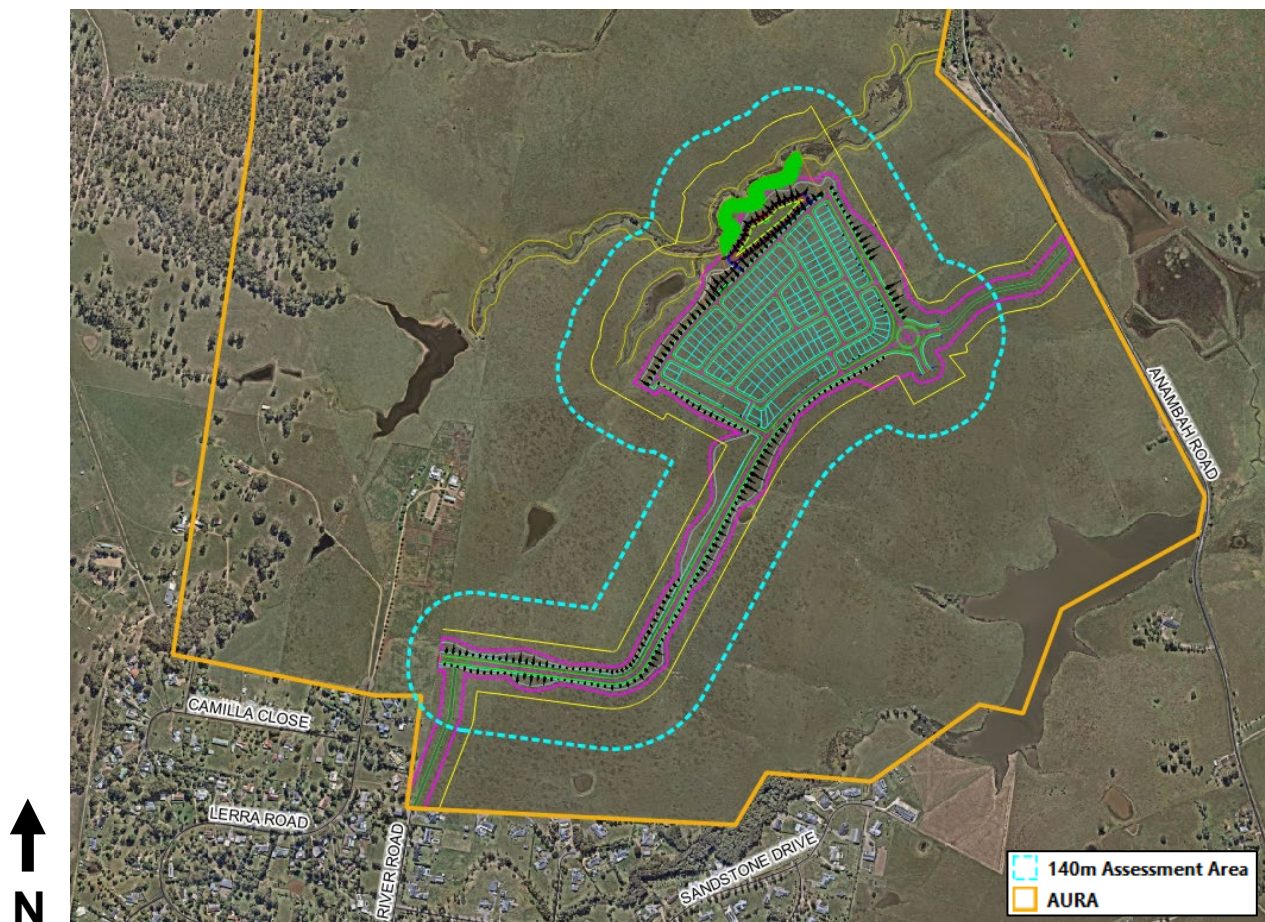


Figure 02: Aerial view of the subject area C/- Nearnmap – April 2025



7.0 Site Assessment

A site inspection has been undertaken by representatives of Bushfire Hazard Solutions.

Additionally, the following external data sources have been relied upon for the site assessment:

- Aerial imagery of the subject area (NSW Spatial Services & Nearmap);
- 1 metre contour mapping of the subject area (Elevation and Depth Foundation Spatial Data – Geoscience Australia)
- NSW Planning Portal Spatial Viewer
- Vegetation mapping (NSW Vegetation)
- NSW Bush Fire Prone Land (NSW Rural Fire Service)

7.01 Location

The subject site is located centrally within the Anambah Urban Release Area (**AURA**), abutting future residential stages to all aspects.

AURA is approximately 490 hectares in size and is bound to the north and west by rural land, east by Anambah Road and south by Windella rural residential estate and rural lands.

AURA is characterised by the following:

- It is currently primarily occupied by beef cattle grazing and pasture improvement/cropping operations, including DB20 landholdings.
- It immediately adjoins the Windella rural residential estate to the south and southwest. This land generally comprises of hardstand area, water bodies and managed land.
- It adjoins Anambah Road to the east, and beyond that by private rural allotments (also grazed) and the Hunter River Floodplain.

AURA is zoned R1 General Residential, C4: Environmental Living, E1: Local Centre, RE1: Public Recreation, RU2: Rural Landscape and R5: Large Lot Residential pursuant to the *Maitland Local Environmental Plan 2011*.

AURA sits within the Anambah-Branxton Regionally Significant Growth Area, in the western corridor of Maitland Local Government Area. AURA consists of largely cleared agricultural lands surrounded to the east and further north by the Hunter River Floodplain with highly degraded watercourses, across multiple ownerships.

Rezoned in December 2020 initially to support delivery of around 3000-3500 dwellings, more recent infrastructure strategies (including approved water and sewer servicing strategies) have identified a potential to support up to 4200-4400 dwellings, along with a neighbourhood centre and open space and recreation areas.

Infrastructure sequencing, including lead in infrastructure, has logically supported development generally proceeding from the south towards the north, with full development of AURA anticipated over 15-20 year time horizon, over multiple precincts and stages.

Under full development, AURA is anticipated to have multiple connection locations to the external road network, supported by a primary internal trunk road network. Internally, degraded watercourses will be responsibly rehabilitated and bushfire protection measures will be integrated into the post development landscape and neighbourhoods.

The NSW RFS in their review of the AURA planning proposal (PP) raised no objection, noting the two following items:

When determining minimum lot sizes for future subdivisions, dual occupancies and multi-dwelling housing on bushfire prone land, consideration is to be given to the provision of asset protection zones within property boundaries.

The future construction of public roads and utility services will need to comply with the relevant guidelines when located on bush fire prone land.

Figure 04 shows the location of AURA in the context of surrounding localities and the existing external road network. Figure 05 shows the draft AURA Overall Plan previously publicly exhibited by Maitland Council during the PP process. This illustrates the intention for ultimate road connections being a western road link (to the west) and two connections to Anambah Road (to the east), noting the specific location of those connections are subject to detailed planning. Planning for AURA had also anticipated connection to River Road (to the south) for limited access purposes.

The proposal will connect to a new public road (separate proposal by the proponent) west through to Wyndella Road.

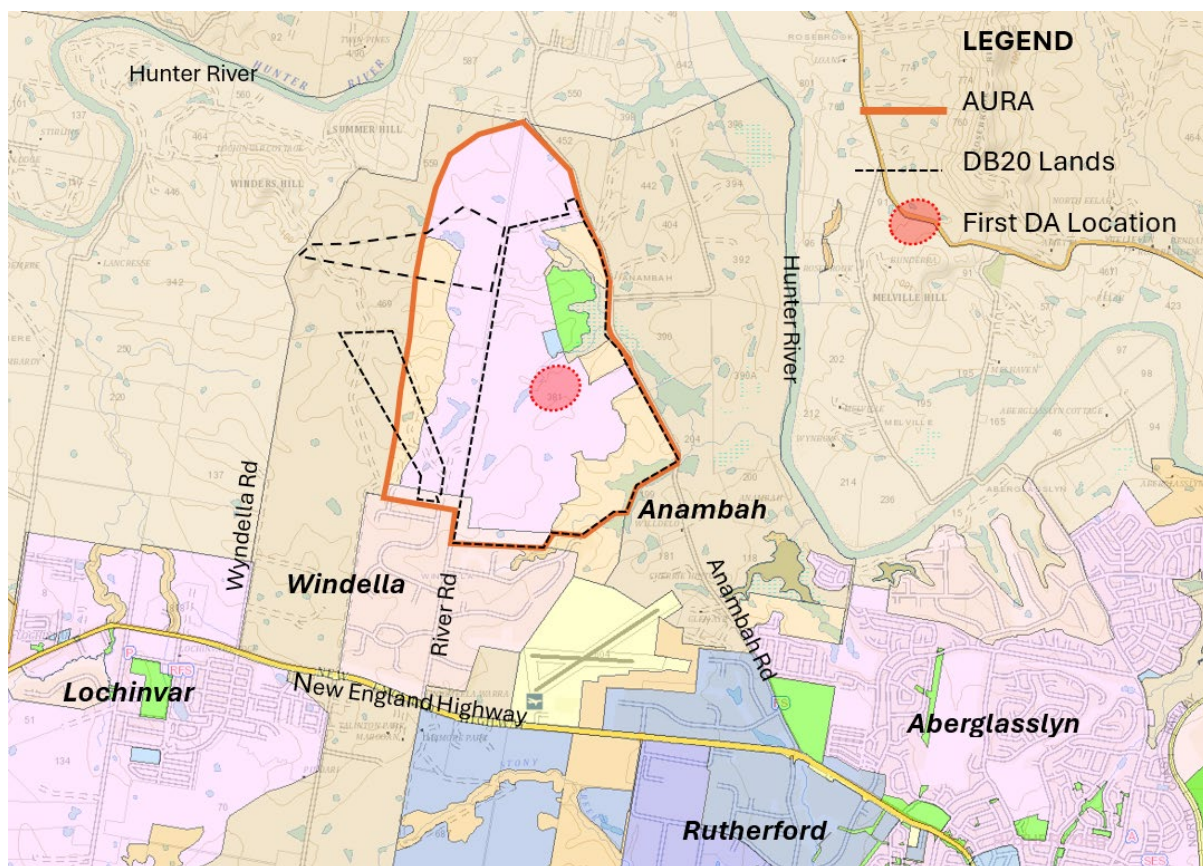


Figure 04: Location of AURA, land zonings and existing road network

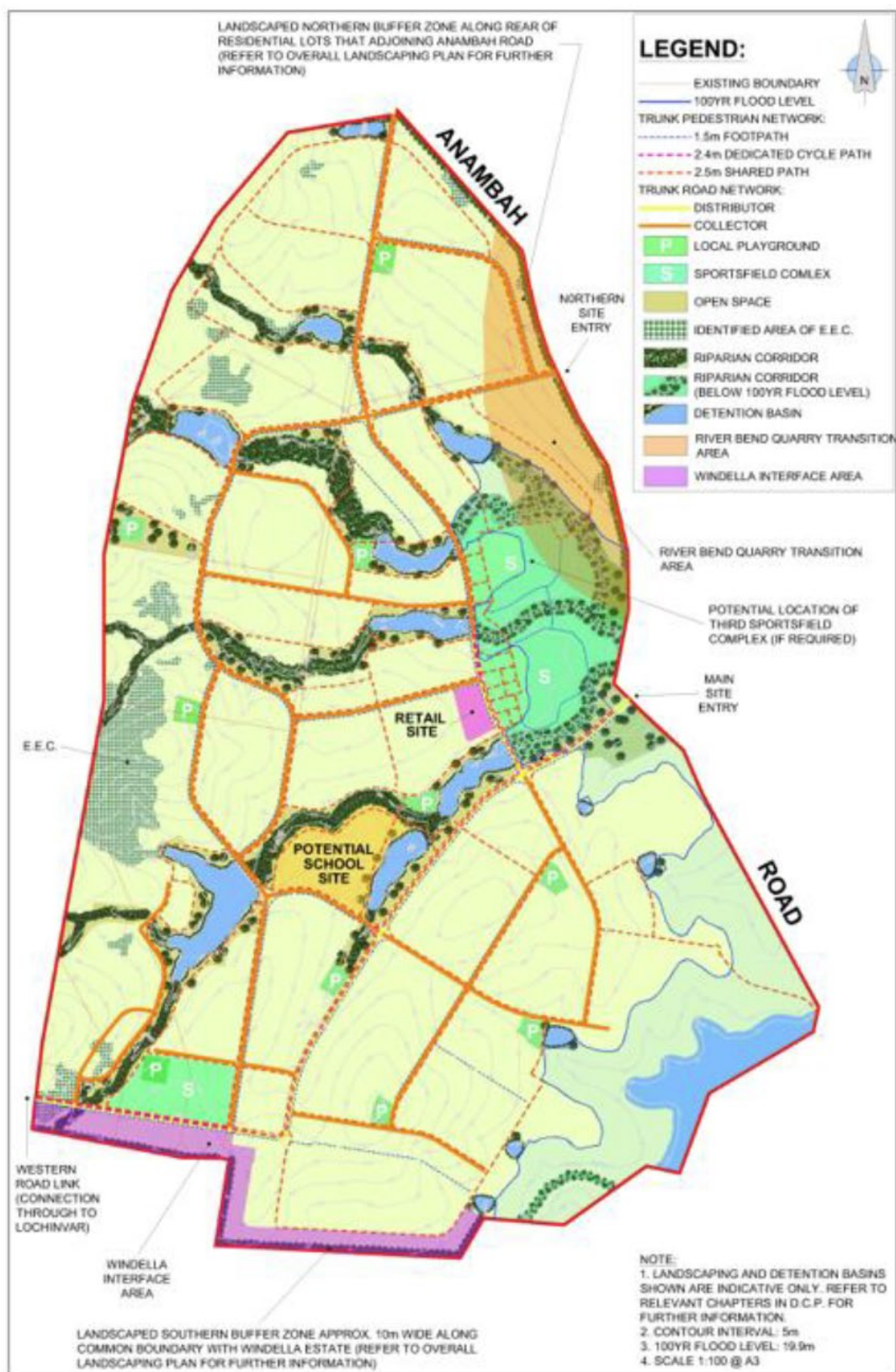


Figure 05: Extract of the historical draft AURA Overall Plan (Overall Plan)

7.02 Vegetation

In accordance with Appendix 1 'Site Assessment Methodology' of PBP we have undertaken an assessment of all vegetation formations within 140 metres of the development for each aspect as per Keith (2004).

As part of this bushfire assessment process consideration has been given to all existing vegetation within neighbouring allotments.

Historically the primary use of AURA and DB20 Pty Ltd landholdings has been for agriculture purposes, including the breeding and raising of livestock and cropping/pasture improvement. These farming practices and other anthropological disturbances have resulted in degraded or highly fragmented vegetation.

In this regard the vegetation identified as posing a potential hazard is the Vegetated Riparian Zone to the north. The Vegetated Riparian Zone (VRZ) within DA 1 was found to be just over 1 hectare in size which will include a break on either end for future extension to the 3m wide cyclist network (west) and future extension to the public road network (eastern end, for future connection northwards). The target Plant Community Type for the proposed VRZ in the Proposal is Lower North Riverflat Eucalypt-Paperbark Forest (4042) which attract a vegetation class of Coastal Floodplain Wetlands and a formation of Forested Wetlands (MJD Environmental, 2025).

It is acknowledged that there is a landscaped area between the identified Forested Wetlands hazard and the proposed perimeter road. This landscape area will comprise of a stormwater detention basin (planted with macrophytes and reeds), turf areas, cycle and footpaths, spaced trees and groundcover plantings.

The Forested Wetlands hazard has been deemed the highest hazard to this aspect, when considering a potential Freshwater Wetlands (Basin) or Grassland (groundcover planting) threat. This landscape area does not form part of the minimum required Asset Protection Zone from the Forested Wetlands hazard, with this comprising of the proposed perimeter road (being paved carriageway and parking and verge on the residential side).

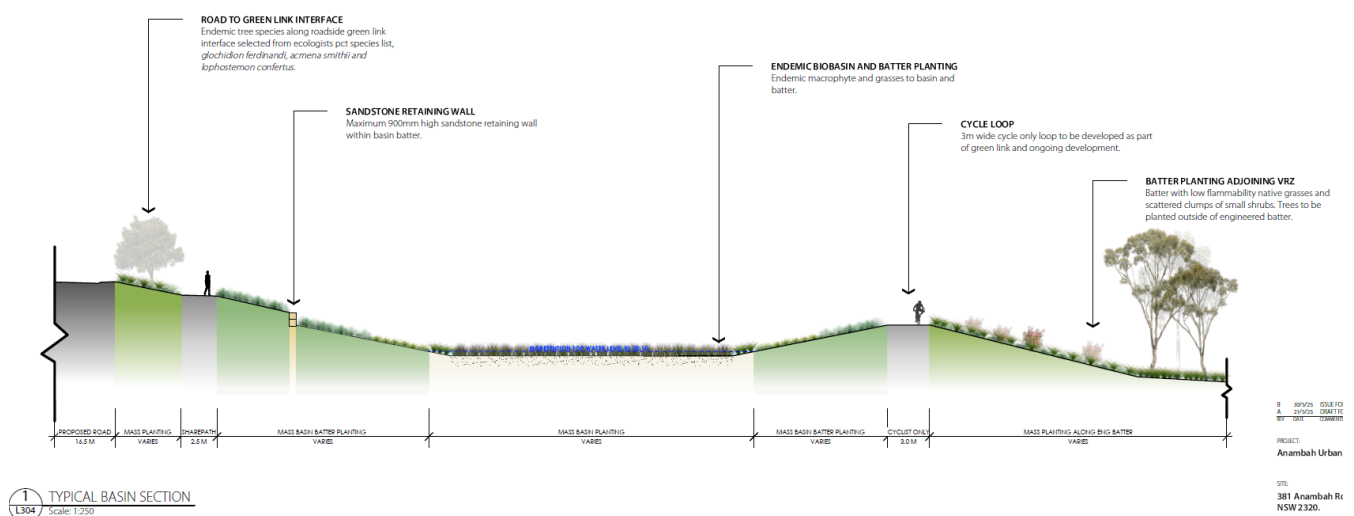


Figure 06: Extract of the Typical Basin Section (Terras, 2025)

The predominate vegetation identified as posing a potential bushfire / grassfire threat was found to be the pastures within the DB20 landholdings. This threat is proposed to be comprehensively mitigated with the implementation of temporary 50 metre Asset Protection Zones around the entirety of the DA 1 boundary including the section of new road included in the Proposal within DB20 Pty Ltd landholdings.

These temporary APZs will be extinguished at the time future stages are delivered.

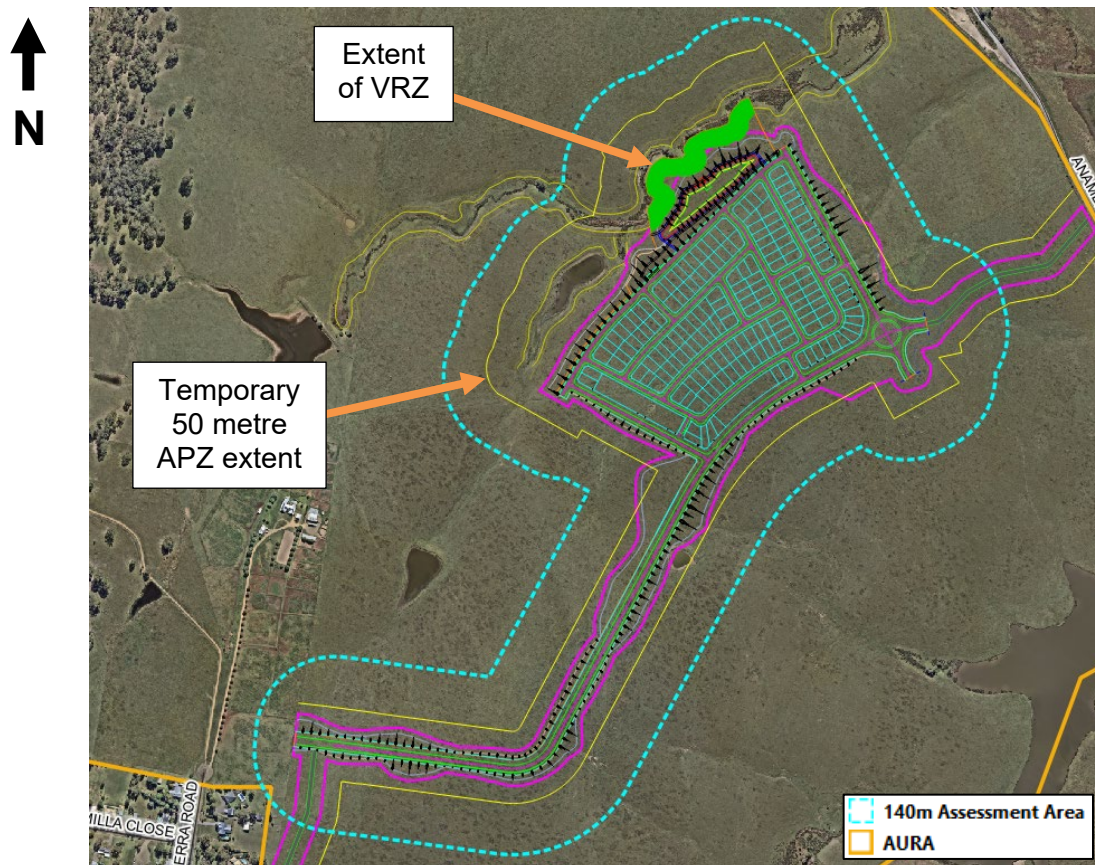


Figure 07: Aerial image overlaid with vegetation assessment

7.03 Slope and Topography

The slope of the land under the classified vegetation has a direct influence on the forward rate of spread, fire intensity and radiant heat exposure. The effective slope is considered to be the slope under the classified vegetation which will most significantly influence bushfire behaviour toward the development site.

In accordance with A1.4 'Determine slope' of PBP the slope assessment is to be derived from the most detailed contour data available.

The slope that would **most significantly** influence bushfire impact was determined onsite using an inclinometer and verified from topographic imagery to be:

- 0 - 5 degrees down slope within the hazard to all aspects

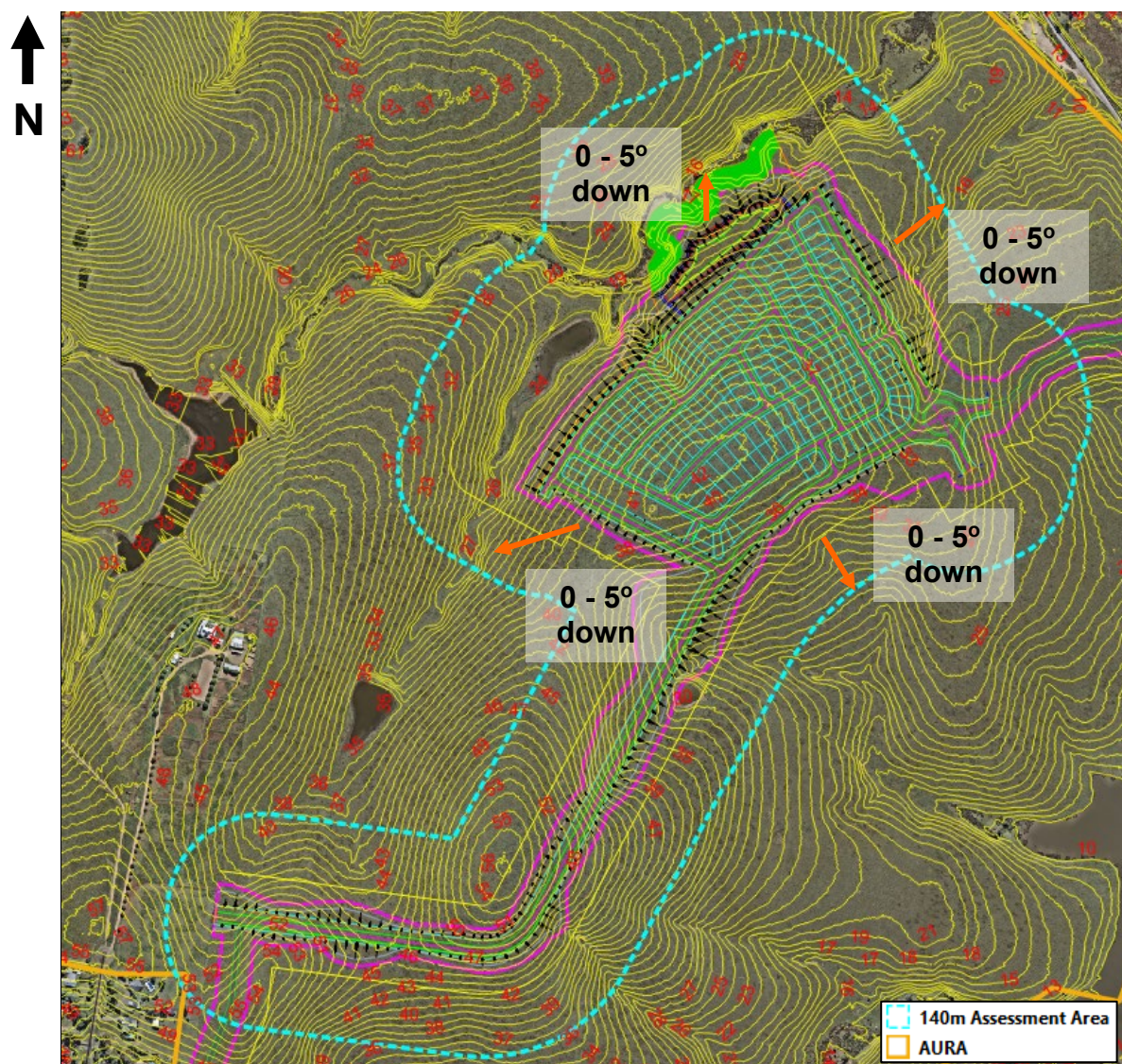


Figure 08: Extract from ELVIS - Geoscience Australia - 1m contours

7.04 Fire Weather

All development which attracts an Asset Protection Zone under PBP requires the identification of the relevant Fire Danger Index (FDI). The FDI required to be used for development assessment purposes is based on the local government boundaries, being Maitland City Council in this instance.

In accordance with the NSW Rural Fire Service publication 'NSW Local Government Areas FDI' (2017) Maitland City Council forms part of the Greater Hunter Fire Weather District and attracts an FFDI of 100. As there is a presence of a Grassland hazard in accordance with Table 5.1.4a of PBP a Grassland Fire Danger Index of 130 has been applied.

7.05 Fire History

There are areas within NSW that have significant fire history and are recognised as known fire paths. In a planning context it is important to identify these locations and ensure incompatible development is not proposed.

In this instance the closest recorded wildfires were found to be located >8.7 kilometres to the south of the subject stage (source NPWS Fire History dataset). This fire occurred in the 2002-03 fire season.

The closest recorded wildfire to the northwest (being that associated with prevailing weather conditions in this area) was found to be located >14.5 kilometres from the Proposal (Figure 09).

AURA and the Proposal is therefore not considered to be within a known fire path. Furthermore, in consideration of the previous bushfire history the likelihood of a bushfire occurring within the immediate area is considered unlikely.



Figure 09: Aerial view of the subject area with previous wildfire history layer
 Subject site (thick red outline) and 1km buffer (blue dotted line)
 (source NPWS Fire History)

8.0 Bushfire Protection Measures

8.01 Planning for Bush Fire Protection - 2019

Planning for Bush Fire Protection – 2019 (PBP) is applicable to development located on land determined as being 'bushfire prone' in accordance with the local Bushfire Prone Land Map.

Bushfire prone land are defined as those areas;

- *containing or within 100m of Category 1 Vegetation; or*
- *containing or within 30m of Category 2 or 3 Vegetation.*

Properties considered to be affected by possible bushfire impact are determined from the local Bushfire Prone Land Map as prepared by Council and or the Rural Fire Service. Maitland City Council's Bushfire Prone Land Map identifies the subject site as containing Category 1 and 2 Vegetation and therefore is considered 'bushfire prone land'.

The subject development relates to the subdivision of bushfire prone land which can be lawfully used for residential purposes and is therefore classified as integrated development under section 4.46 of the *Environmental Planning and Assessment Act 1979*. The development is captured under section 100B of the *Rural Fires Act 1997* and must obtain a Bush Fire Safety Authority from the Commissioner of the NSW Rural Fire Service.

In accordance with the submission requirements for a Bush Fire Safety Authority as detailed in clause 45 of the *Rural Fires Regulation 2022* an assessment of the extent to which the proposed development conforms with or deviates from *Planning for Bush Fire Protection (PBP)* is required.

The application of PBP requires satisfactory demonstration of the aim and objectives and the specific objectives and bushfire protection measures relevant to the type of development.

In this instance the proposal relates to a residential subdivision and therefore in addition to the aim and objectives detailed in Chapter 1 'Introduction' the proposal must satisfy the specific objectives and bushfire protection measures detailed in Chapter 5 'Residential and Rural Residential Subdivisions' of PBP.

8.02 Specific Objectives

The following table lists the specific objectives for residential and rural residential subdivisions with a dwelling entitlement in accordance with section 5.2 of PBP and our comments of the proposal compliance or otherwise.

Specific Objective	Comment
<i>minimise perimeters of the subdivision exposed to the bush fire hazard (hourglass shapes, which maximise perimeters and create bottlenecks should be avoided);</i>	The proposal exceeds the minimum required APZs and no new lots will have a direct interface to the hazard.

Specific Objective	Comment
<i>minimise vegetated corridors that permit the passage of bush fire towards buildings;</i>	There is only one proposed vegetated (rehabilitated riparian) corridor within the subject site, which is a requirement under the Water Management Act. The potential bushfire threat has been adequately addressed.
<i>provide for the siting of future dwellings away from ridge-tops and steep slopes, within saddles and narrow ridge crests;</i>	The available building envelopes are not located on a ridge-top and exceed the minimum required APZs as determined from table A1.12.2 of PBP.
<i>ensure that APZs between a bush fire hazard and future dwellings are effectively designed to address the relevant bush fire attack mechanisms;</i>	The proposed APZs exceed the minimum required APZs in accordance with A1.12.2 of PBP.
<i>ensure the ongoing maintenance of APZs;</i>	It is expected that the property management within the proposed allotments will be enforced by way of a condition of consent, similar to recommendation 1 of this report, as part of this development process. This will ensure ongoing management of the site.
<i>provide adequate access from all properties to the wider road network for residents and emergency services;</i>	The existing surrounding public roads are 5.5 – 7 metres wide achieving or exceeding the non-perimeter road requirements within PBP. The existing road network is adequate for residents and emergency services.
<i>provide access to hazard vegetation to facilitate bush fire mitigation works and fire suppression;</i>	The existing road network provides adequate access to the hazard to facilitate bushfire mitigation works and fire suppression in the broader landscape.
<i>ensure the provision of an adequate supply of water and other services to facilitate effective firefighting.</i>	The proposed water supply along the road network will be adequate to service firefighting vehicles.

8.03 Bushfire Protection Measures

Section 5.3 'Bush fire protection measures' of PBP outlines the specific Bushfire Protection Measures (BPMs) applicable to residential and rural residential subdivisions, including APZs, Access and Services.

The following section addresses each BPM and the proposals compliance or otherwise.

Asset Protection Zones & Landscaping

An Asset Protection Zone (APZ) is an area between the development (in this instance building envelopes) and the identified bushfire hazards. It is also an area where the fuels are maintained to a minimum to prevent the spread of fire between a hazard and an asset.

The width of the APZs is determined by the vegetation structure of the identified hazard, Fire Danger Index, effective slope and the type of development (residential development or Special Fire Protection Purpose).

APZs for new residential subdivisions are determined from Table A1.12.2 of PBP or bushfire design modelling achieving a radiant heat impact of no more than 29kW/m² at the closest point of the indicative building envelope.

The minimum APZs are 12 metres to the north, east, south and west in accordance with Table A1.12.2 of PBP.

The available APZs were found to be >15.5 metres to the north and >50 metres (temporary) to all other aspects, exceeding the minimum required APZ.

The minimum required APZs comprise of proposed roads (being paved carriageway and parking and verge on the residential side).

Temporary APZs have been applied to the east, south and west and along the access road and emergency access tracks. These temporary APZs will be extinguished at the time future stages are delivered.

There is a landscaped area between the identified Forested Wetlands hazard and the proposed perimeter road. This landscape area will comprise of a stormwater detention basin (planted with macrophytes and reeds), turf areas, cycle and footpaths, spaced trees and groundcover plantings. This landscape areas does not form part of the minimum required APZ, but does provide a >70m separation to the assessed hazard (refer to Figure 10).

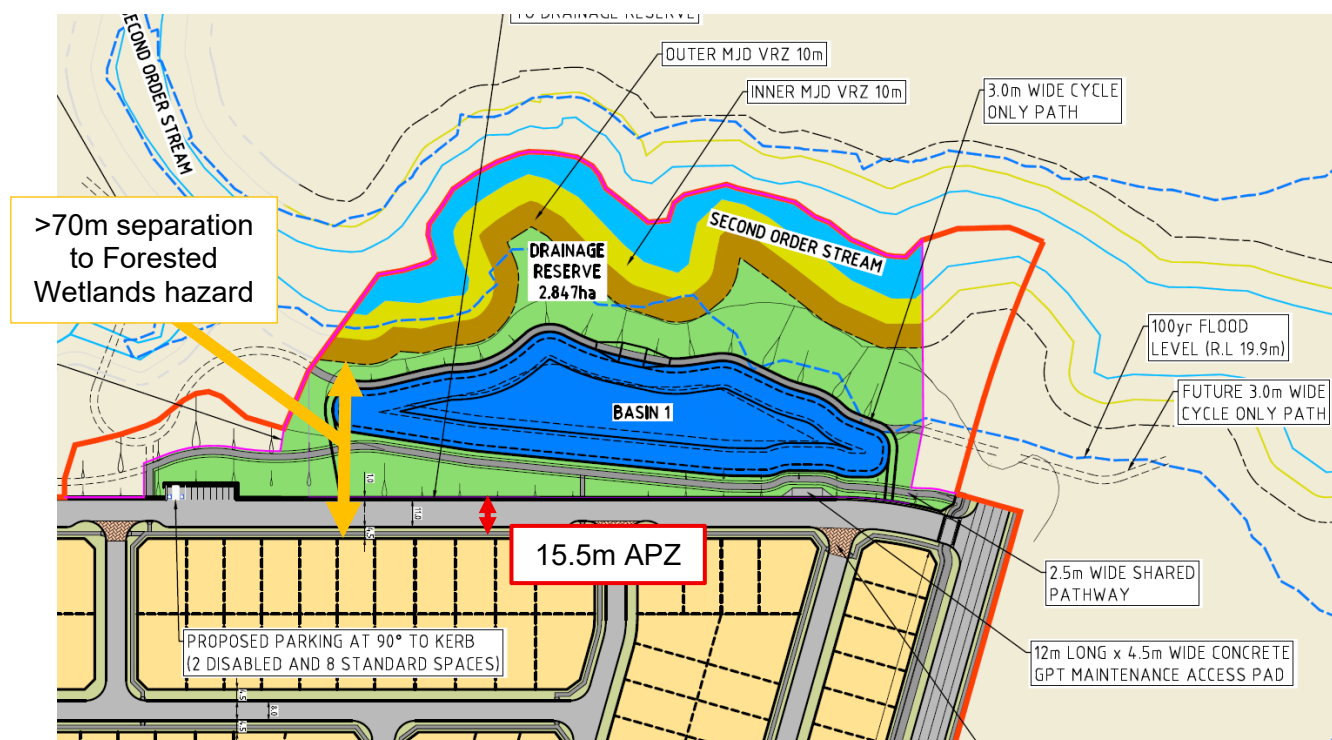


Figure 10: Extract from the DA1 – Lot Layout Plan (GCA Engineering Solutions, 2025) with

Access

Access & Suppression

Access for attending fire services to undertake early suppression is a key factor in whether a fire has the opportunity to develop into a quasi-steady state at which point the opportunity to control / extinguish the fire becomes far more challenging.

Where good access is available it provides opportunity to control / extinguish a fire in its growth phase before developing further and consequently becoming more difficult to conduct direct attacks.

The proposed access design includes a single unobstructed new public road connection to Wyndella Road to the southwest via the lead in road. This road has a variety of urban and rural typical cross sections. Where outside AURA and not adjoining urban development, it provides a minimum 7 metre carriageway, with additional shoulders. Where inside AURA (and adjoining future urban development), it provides a minimum 7m carriageway plus designated parking lanes either side. These carriageways exceed the minimum carriageway requirements for Non-Perimeter Roads and will ensure two-way unobstructed access.

The proposed internal roads include a Perimeter Road adjacent the VRZ that can be consistent with the Acceptable Solutions detailed in Table 5.3b of PBP. The roads along the north-eastern and south-western boundaries of the Proposal boundary which provide direct access to the Perimeter Road will, provide a minimum 11 metre carriageway (including parking) and, comply with the Non-Perimeter Road requirements detailed in Table 5.3b of PBP to ensure clear access to the interface will be available for attending fire services.

While the permanent lead in road accessing the Proposal is not reasonably considered susceptible to being compromised, the Proposal also includes two (2) alternate emergency secondary access points, the first to the east onto Anambah Road and the other to the south to River Road.

These emergency secondary accesses will be two way, have an all-weather surface and be suitable for fire fighting appliances and 2 wheel drive cars. It is proposed that these access points will be gated at the edge of the River Road and Anambah Road reserves and standard NSW RFS Fire Trail padlocks provided. A 50 metre temporary APZ, where within DB20 landholdings, as shown in Figure 08, can be applied to these accesses as part of the additional measure.

In the highly unlikely event that a large scale bushfire evacuation is needed these access routes will provide egress opportunities in three (3) different directions. Conversely these access routes will provide attending fire services greater access opportunity.

Permanent unobstructed connections will be made generally consistent with the draft Anambah Overall Plan (Figure 09) as the overall AURA progresses.

The balance of the proposed roads in the Proposal will be located >100 metres from any future Category 1 Vegetation and >30 metres from any grassland hazard or future Category 2 Vegetation (i.e. proposed VRZs) and therefore not on land considered to be on 'bushfire prone' land post development (refer to Figure 12).

One of the general principles underlying PBP is that protection measures are governed by the degree of threat posed to a development.

As the proposed Perimeter Road and accessing roads as described above can satisfy the minimum requirements for Public Roads as detailed in section 5.3.2 of PBP it is requested that the balance of the roads, which is outside the buffer as shown on Figure 10, be excluded from the parking restrictions described in section 5.3.2 of PBP.

This approach, while not being common does present itself on large scale subdivisions, including URAs, and has been approved by the NSW Rural Fire Service in the past. The scale of the Proposal in our opinion warrants this approach.

In consideration of the risk posed to the Proposal, the proposed access arrangements, in conjunction with the additional measures discussed herein, including application of 50m temporary APZs over lands which remain in DB20 landholding, will provide safe operational access to structures and water supply for emergency services, while residents are seeking to evacuate from an area.

Pre-DA advice was sought from the NSW RFS on the above performance solution, and we are still awaiting a response.

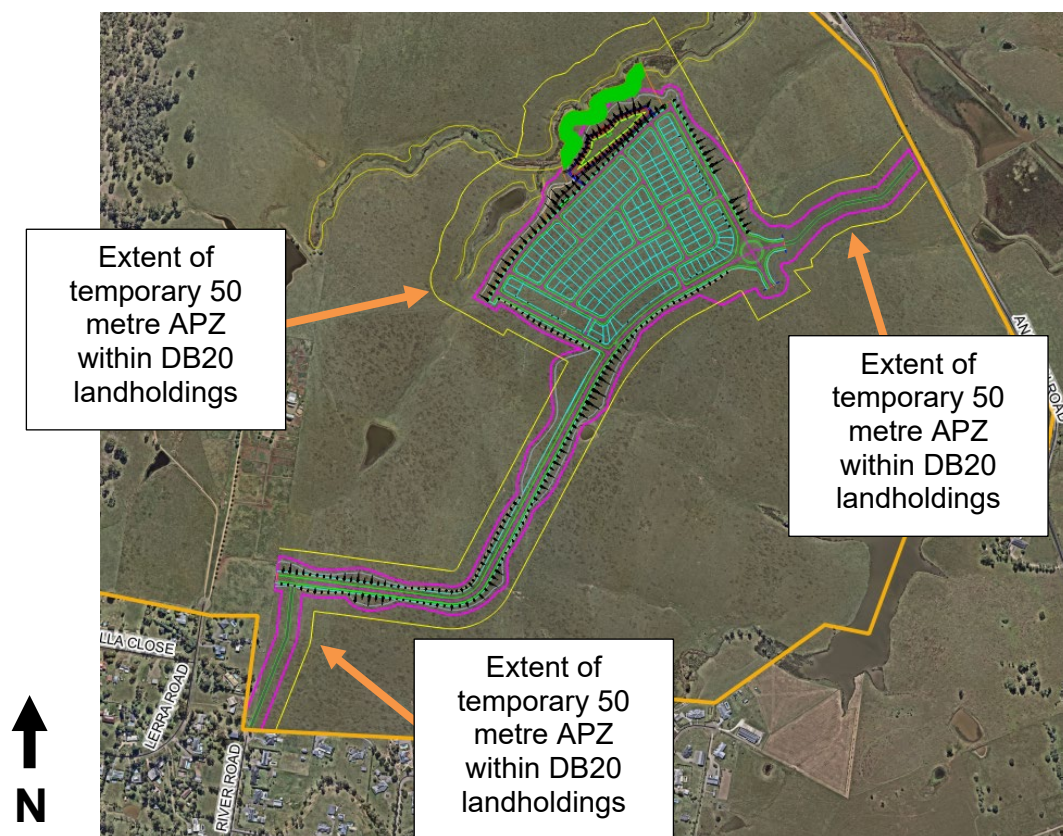


Figure 11: Design showing the APZs of the temporary roads

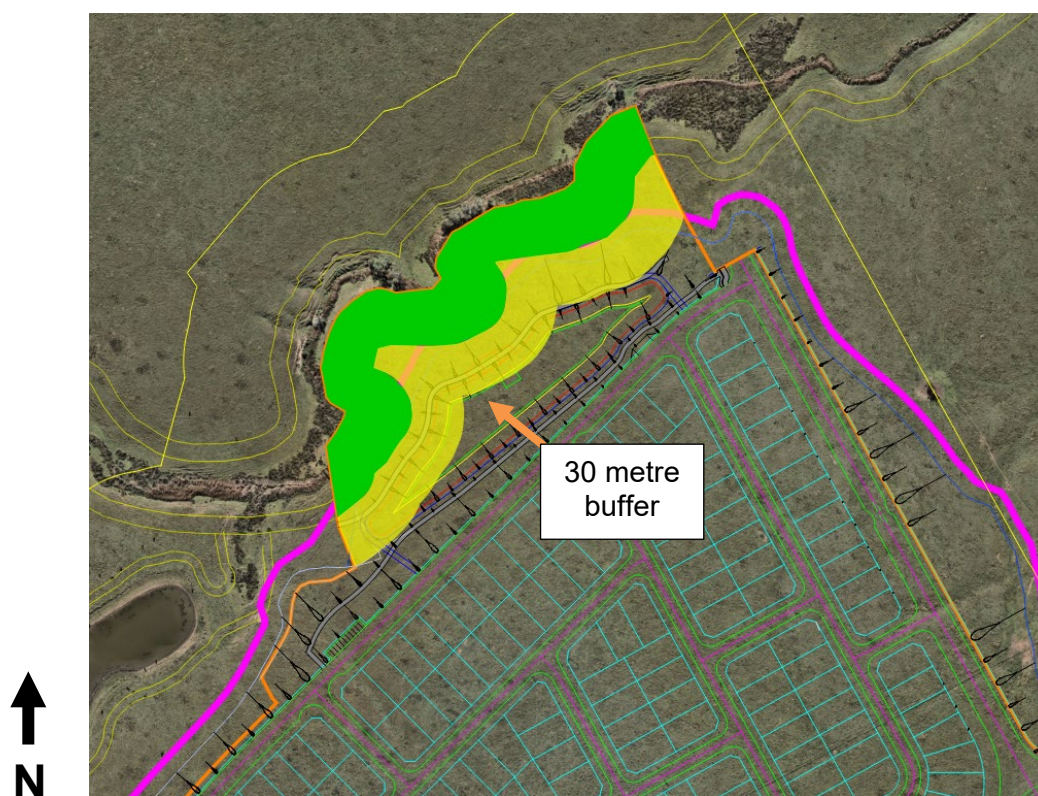


Figure 12: Post development Bush Fire Prone Lands Map

Services – Water, electricity & gas

The hydrant system will be extended along the new internal roads to service the proposed residential allotments. The sizing, spacing and pressures of this system must comply with AS2419.1-2021.

The most distant external point of any future dwelling will be within 70 metres of a hydrant which and therefore satisfies the relevant acceptable solutions detailed in Table 5.3c.

In consideration of the available water supply the hydrant network will be adequate for the replenishment of attending fire services.

Recommendations will be included to ensure compliance with the electricity and gas services requirements.

Building Construction

No new dwellings are proposed as part of this application.

An independent assessment will be required under s4.14 of the *Environmental Planning and Assessment Act* 1997 at the time of any future application for the construction of a new dwelling within the proposed allotments.

8.04 Aim & Objectives of PBP

The following table details the aim and objectives of *Planning for Bush Fire Protection 2019* and the proposals ability to comply.

Aim / Objective	Comment
<p>The aim of PBP is to provide for the protection of human life and minimise impacts on property from the threat of bush fire, while having due regard to development potential, site characteristics and protection of the environment.</p>	<p>With the inclusion of the recommendations made herein it is of our opinion that the aim of PBP has been satisfied.</p>
<p>(i) afford buildings and their occupants protection from exposure to a bush fire;</p>	<p>The APZs exceed the minimum required and will afford future occupants protection from the exposure to a bushfire.</p>
<p>(ii) provide for a defensible space to be located around buildings;</p>	<p>An ample defensible space around the building envelopes is provided.</p>
<p>(iii) provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to buildings;</p>	<p>The APZs exceed the minimum required.</p> <p>The separation will afford occupants protection from the exposure to a bushfire and will prevent the likely spread to buildings.</p>
<p>(iv) ensure that appropriate operational access and egress for emergency service personnel and occupants is available;</p>	<p>We are of the opinion that appropriate operational access and egress for emergency service personnel and occupants will be available.</p>
<p>(v) provide for ongoing management and maintenance of bush fire protection measures, (BPMs); and</p>	<p>It is expected that the property management within the proposed allotments will be enforced by way of a condition of consent, similar to recommendation 1 of this report, as part of this development process.</p>
<p>(vi) ensure that utility services are adequate to meet the needs of firefighters.</p>	<p>The proposed water supply is adequate for attending firefighters.</p>

It is therefore of our opinion that the proposal can satisfactorily comply with the aim and objectives of *Planning for Bush Fire Protection 2019*.

8.05 Submission Detail

Section 45 of the *Rural Fires Regulation 2022* identifies various items which must be addressed and included within an application for a Bush Fire Safety Authority. The following table outlines these items and includes a corresponding response.

Submission Detail	Response
<i>(a) a description (including the address) of the property on which the development the subject of the application is proposed to be carried out,</i>	See section 7.01
<i>(b) a classification of the vegetation on and surrounding the property (out to a distance of 140 metres from the boundaries of the property) in accordance with the system for classification of vegetation contained in Planning for Bush Fire Protection,</i>	See section 7.02
<i>(c) an assessment of the slope of the land on and surrounding the property (out to a distance of 100 metres from the boundaries of the property),</i>	See section 7.03
<i>(d) identification of any significant environmental features on the property,</i>	Refer to the Flora and Fauna Report
<i>(e) the details of any threatened species or threatened ecological community under the Biodiversity Conservation Act 2016 that is known to the applicant to exist on the property,</i>	Refer to the Flora and Fauna Report
<i>(f) the details and location of any Aboriginal object (within the meaning of the National Parks and Wildlife Act 1974) or Aboriginal place (within the meaning of that Act) that is known to the applicant to be situated on the property,</i>	None known within site
<i>(g) a bush fire assessment for the proposed development (including the methodology used in the assessment) that addresses the following matters—</i>	See section 8.0
<i>(i) the extent to which the development is to provide for setbacks, including asset protection zones,</i>	See section 8.03
<i>(ii) the siting and adequacy of water supplies for fire fighting,</i>	See section 8.03
<i>(iii) the capacity of public roads in the vicinity to handle increased volumes of traffic in the event of a bush fire emergency,</i>	See section 8.03
<i>(iv) whether or not public roads in the vicinity that link with the fire trail network have two-way access,</i>	No fire trails within the site
<i>(v) the adequacy of arrangements for access to and egress from the development site for the purposes of an emergency response,</i>	See section 8.03
<i>(vi) the adequacy of bush fire maintenance plans and fire emergency procedures for the development site,</i>	There are currently no bush fire maintenance plans or emergency procedures for the development site.

Submission Detail	Response
<i>(vii) the construction standards to be used for building elements in the development,</i>	See section 8.03
<i>(viii) the adequacy of sprinkler systems and other fire protection measures to be incorporated into the development,</i>	<p>There is no existing bushfire sprinkler system, nor is one proposed.</p> <p>See section 8.03 for all bushfire protection measures</p>
<i>(ix) any registered fire trails on the property,</i>	There are no registered fire trails within the subject site.

9.0 Recommendations

The following recommendations are provided as the minimum necessary for compliance with *Planning for Bush Fire Protection* – 2019. Additional recommendations are provided to supplement these minimum requirements where considered necessary.

Asset Protection Zones

1. At this issue of subdivision certificate and in perpetuity all grounds within the residential allotments shall be maintained in accordance with an Asset Protection Zone (Inner Protection Area) as detailed in the NSW Rural Fire Service's document 'Standards for Asset Protection Zones' and Appendix 4 of *Planning for Bush Fire Protection* 2019.
2. Temporary Asset Protection Zones must be provided between each stage of the proposal until such time the adjacent stage is developed and the hazard removed. The temporary APZs are to be provided on DB20 landholdings as shown on the Anambah – DA1 Extent of Works Plan prepared by GCA Engineering Solutions (project no 22311C, dwg no E01, rev 5, dated 03.06.2025).

Services (where applicable)

Water:

3. That the new hydrant system is to comply with the requirements detailed in Table 5.3c of *Planning for Bush Fire Protection* 2019, specifically:
 - fire hydrant spacing, design and sizing comply with the relevant clauses of AS 2419.1:2021;
 - hydrants are not located within any road carriageway;
 - fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2021.
 - all above-ground water service pipes external to the building are metal, including and up to any taps.
 - fire hose reels are constructed in accordance with AS/NZS 1221:1997 Fire hose reels, and installed in accordance with the relevant clauses of AS 2441:2005 Installation of fire hose reels.

Electricity:

4. Any new electrical services must comply with section 5.3.3 of *Planning for Bush Fire Protection* 2019, specifically:
 - where practicable, electrical transmission lines are underground.
 - where overhead electrical transmission lines are proposed:
 - lines are installed with short pole spacing (30 metres), 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 Management Vegetation Near Power Lines*.

Gas:

5. Any new gas services must comply with section 5.3.3 of Planning for Bush Fire Protection 2019, specifically:
 - 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.

Access

6. That at the issue of subdivision certificate for any residential lot, the new public road through to Wyndella Road is available.
7. That all roads shall comply with the General Access requirements detailed in Table 5.3b of PBP, specifically:
 - property access roads are two-wheel drive, all-weather roads;
 - traffic management devices are constructed to not prohibit access by emergency services vehicles;
 - maximum grades for sealed roads do not exceed 15 degrees and an average grade of not more than 10 degrees or other gradient specified by road design standards, whichever is the lesser gradient;
 - the capacity of perimeter and non-perimeter road surfaces and any bridges/causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes); bridges/ causeways are to clearly indicate load rating.
 - hydrants are located outside of parking reserves and road carriageways to ensure accessibility to reticulated water for fire suppression;
 - hydrants are provided in accordance with the relevant clauses of AS 2419.1:2021 - Fire hydrant installations System design, installation and commissioning;

Note: The parking restrictions shall not apply to the sections of road that are not located on 'bushfire prone' land (i.e. within 30m of a bushfire hazard (VRZ) as per Figure 12 of this report).

8. That proposed Perimeter Roads shall comply with the requirements for Perimeter Roads as detailed in Table 5.3b of PBP, specifically:

- are two-way sealed roads;
- minimum 8m carriageway width kerb to kerb;
- parking is provided outside of the carriageway width; hydrants are located clear of parking areas;
- are through roads, and these are linked to the internal road system at an interval of no greater than 500m;
- curves of roads have a minimum inner radius of 6m;
- the maximum grade road is 15 degrees and average grade of not more than 10 degrees;
- the road crossfall does not exceed 3 degrees; and
- a minimum vertical clearance of 4m to any overhanging obstructions, including tree branches, is provided.

Note: The parking restrictions shall not apply to the sections of road that are not located on 'bushfire prone' land (i.e. within 30m of a bushfire hazard (VRZ) as per Figure 12 of this report).

9. That all other proposed roads shall comply with the requirements for Non-Perimeter Roads as detailed in Table 5.3b of PBP, specifically:

- minimum 5.5m carriageway width kerb to kerb;
- parking is provided outside of the carriageway width;
- curves of roads have a minimum inner radius of 6m;
- the road crossfall does not exceed 3 degrees; and
- a minimum vertical clearance of 4m to any overhanging obstructions, including tree branches, is provided.

Note: The parking restrictions shall not apply to the sections of road that are not located on 'bushfire prone' land (i.e. within 30m of a bushfire hazard (VRZ) as per Figure 12 of this report).

10. That the emergency access shall comply with the following requirements for Non-perimeter Roads as detailed in Table 5.3b of *Planning for Bush Fire Protection* 2019, specifically:

- property access roads are two-wheel drive, all-weather roads;
- traffic management devices are constructed to not prohibit access by emergency services vehicles;
- maximum grades for sealed roads do not exceed 15 degrees and an average grade of not more than 10 degrees or other gradient specified by road design standards, whichever is the lesser gradient;
- where kerb and guttering is provided on perimeter roads, roll top kerbing should be used to the hazard side of the road;

- the capacity of perimeter and non-perimeter road surfaces and any bridges/causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes); bridges/ causeways are to clearly indicate load rating.
- minimum 5.5m carriageway width kerb to kerb;
- parking is provided outside of the carriageway width;
- curves of roads have a minimum inner radius of 6m;
- the road crossfall does not exceed 3 degrees; and
- a minimum vertical clearance of 4m to any overhanging obstructions, including tree branches, is provided.

11. Temporary dead ends in accordance with Appendix 3 of PBP be provided between stages.
12. That any gate installed on the proposed emergency access be double locked with a standard NSW RFS Fire Trail lock and one accessible for residents.

10.0 Conclusion

The proposal consists of an extension to the lead in road from the west with the creation (over four stages) of 173 standard residential lots and 2 super lots (for future subdivision), with a new public road and active movement network (including one perimeter road) along with associated works including bulk earthworks, stormwater management, vegetation riparian zones, bushfire management, landscaping, pathways, utilities and other typical subdivision works. Two temporary secondary accesses (gated to public road boundary) are proposed (to River Road and to Anambah Road) and temporary APZ applied around the perimeter of the subdivision pending future progressive development applications.

The proposal is captured under section 100B of the *Rural Fires Act 1997*.

In accordance with the submission requirements for a Bush Fire Safety Authority as detailed in section 45 of the *Rural Fires Regulation 2022* an assessment of the extent to which the proposed development conforms with or deviates from *Planning for Bush Fire Protection* (PBP) is required.

In accordance with the bushfire safety measures contained in this report, and consideration of the site specific bushfire risk assessment it is our opinion that when combined, they will provide a reasonable and satisfactory level of bushfire protection to the subject development.

We are therefore in support of the application.

Should you have any enquiries regarding this project please contact me at our office.

Prepared by
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11.0 Annexure 01

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Acknowledgements to:

Geoscience Australia
Nearmap
Street-directory.com.au

Attachments

N/A