# Bushfire Assessment Report

*Proposed:* Manufactured Home Estate

# *At:* 34 Wyndella Road, Lochinvar NSW

Reference Number: 230960

# 6 May 2025

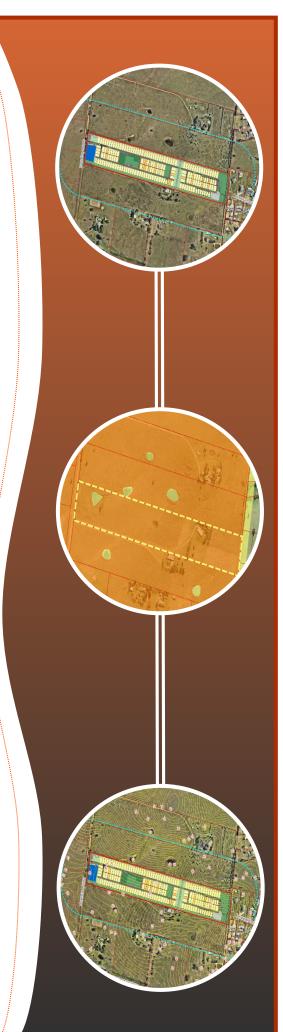


Tel: (02) 9457 6530

PO Box 124 Berowra NSW 2081 ABN 19 057 337 774



www.bushfirehazardsolutions.com.au



### Contents

		<u>Page No.</u>
Copyright and Disclaimer		2
List of	fAbbreviations	3
Execu	utive Summary	4
1.0	Introduction	5
2.0	Legislative Requirements	6
3.0	Purpose of Report	7
4.0	Scope of Report	7
5.0	Compliance Table and Notes	7 - 9
6.0	Aerial view and Site Plan	10 - 11
7.0	Site Assessment	12 - 15
8.0	Bushfire Assessment	16 - 20
9.0	Recommendations	21 - 22
10.0	Conclusion	23 - 24
11.0	Annexure	25
-	List of referenced documents and attachments	
-	Attachments	

#### Copyright:

Where agreed to by Building Code and Bushfire Hazard Solutions Pty. Ltd, this report may only be copied, distributed or forwarded to other parties in its original format. No part of this document including any wording, images, or graphics can be modified, changed or altered in any way without the express permission of Building Code and Bushfire Hazard Solutions Pty. Ltd. (Copyright Act 1968).

Where this document is found to have been used or altered in any way without the express permission of Building Code and Bushfire Hazard Solutions Pty. Ltd. including any wording, images, or graphics, Building Code and Bushfire Hazard Solutions Pty. Ltd. will not be held liable for any incidental or consequential loss or damages, financial or otherwise resulting from the use of the modified document. Building Code and Bushfire Hazard Solutions Pty. Ltd. will if it considers it necessary, seek to advise third parties including authorities of such illegal use or modifications.

#### Legal status:

This report has been prepared as a submission document in support of a Development Application and in instances may rely upon information provided by a number of external sources including Councils, State Government Agencies and it is assumed that the information provided was accurate at the time. This report cannot be relied upon for commencement of works or construction until such time as it has been endorsed or otherwise included within the consent conditions.

Section 4.14 applications (under the Environmental Planning and Assessment Act 1979) and all infill development applications <u>may</u> be referred by Council to the NSW Rural Fire Service for review and concurrence during the DA process. S100B applications under the Rural Fires Act 1997 (subdivisions and Special Fire Protection Purpose Developments), Flame Zone determinations and Alternate Solutions <u>must</u> be referred by Council to the NSW Rural Fire Service for review and receipt of a Bushfire Safety Authority (BSA) or other such recommended conditions from the NSW Rural Fire Service before the consent can be granted.

The onus is on the applicant to cross reference this document with any conditions of consent issued or any requirements supplied by the NSW Rural Fire Service following development approval. BCBHS can review and cross reference these documents however the onus is on the applicant to provide them to us and request this review – Building Code and Bushfire Hazard Solutions Pty. Ltd. is not in a position to track every development approval and we rely upon the applicant to undertake this role as project co-ordinator.

Where any discrepancy between this document and the development approval or the NSW Rural Fire Service requirements is found, the conditions of consent always take precedence until such time as an application to review, amend or vary these conditions is approved.

#### **Disclaimer:**

This report has been prepared with due care and diligence by Building Code and Bushfire Hazard Solutions Pty. Ltd and the statements and opinions contained in this report are given in good faith and in the belief on reasonable grounds that such statements and opinions are correct and not misleading bearing in mind the necessary limitations noted in previous paragraphs.

Further, no responsibility is accepted by Building Code and Bushfire Hazard Solutions Pty. Ltd. or any of its officers or employees for any errors, including errors in data which is supplied by a third party, or which Building Code and Bushfire Hazard Solutions Pty. Ltd. is required to estimate, or omissions howsoever arising in the preparation of this report, provided that this will not absolve Building Code and Bushfire Hazard Solutions Pty. Ltd. from liability arising from an opinion expressed recklessly or in bad faith.

Any representation, statement of opinion, or advice expressed or implied in this document is made in good faith on the basis that Building Code and Bushfire Hazard Solutions Pty. Ltd. employees and / or agents are not liable (whether by reason of negligence, lack of care or any other reason ) to any person, company or their agents for any damage or loss whatsoever which has occurred or may occur in relation to that person taking or not taking (as the case may be) action in respect of any representation, statement or advice referred to above.

	Version Control			
Version	Date	Author	Reviewed by	Details
1	16/01/2024	Ian Tyerman	Stuart McMonnies	Final Report
2	29/04/2025	Stuart McMonnies	lan Tyerman	Update Report
3	06/05/2025	Stuart McMonnies		Client Comments

## List of Abbreviations:

APZ	Asset Protection Zone
AS3959	Australian Standard 3959 'Construction of buildings in bushfire-prone areas – 2018
BAL	Bushfire Attack Level
BPMs	Bushfire Protection Measures
BPLM	Bushfire Prone Land Map
Council	Maitland City Council
DA	Development Application
ELVIS	Elevation and Depth Foundation Spatial Data
EP&A Act	Environmental Planning and Assessment Act - 1979
FRNSW	Fire and Rescue NSW
IPA	Inner Protection Area
NASH	National Association of Steel-framed Housing
NCC	National Construction Code
NP	National Park
NSP	Neighbourhood Safer Place
OPA	Outer Protection Area
PBP	Planning for Bush Fire Protection – 2019 as amended
ROW	Right of Way
RF Act	Rural Fires Act - 1997
RFS	NSW Rural Fire Service
SEPP	State Environmental Planning Policy
SFPP	Special Fire Protection Purpose
SWS	Static Water Supply

#### **Executive Summary:**

This updated Bushfire Assessment Report has been prepared by Stuart McMonnies, Director / Manager Bushfire Section of Building Code & Bushfire Hazard Solutions Pty Ltd who is recognised by the NSW Rural Fire Service (RFS) as qualified in bushfire risk assessment and has been accredited by the Fire Protection Association of Australia as a Level 3 BPAD qualified practitioner (BPAD9400).

This report has been prepared in accordance with Division 2 of Pt 31 of the Uniform Civil Procedure Rules (**UCPR**) and the Expert Witness Code of Conduct in Schedule 7 of the UCPR. I have read the Expert Witness Code of Conduct and agree to be bound by it.

The development application initially lodged sought consent for the establishment of a manufactured home estate comprising of 209 dwelling sites, community building and associated infrastructure.

Building Code & Bushfire Hazard Solutions (**BCBHS**) prepared the Bushfire Assessment Report (ref 230960, dated 16 January 2024) which accompanied the original Development Application. This Bushfire Assessment Report addressed the relevant specifications and requirements of Planning for Bush Fire Protection 2019 (**PBP**).

The New South Wales Rural Fire Service (**NSW RFS**) considered the information submitted with the original Development Application and issued General Terms of Approval, under Division 4.8 of the *Environmental Planning and Assessment Act 1979*, and a Bush Fire Safety Authority (**BFSA**), under section 100B of the *Rural Fires Act 1997*, subject to ten (10) conditions of consent (ref: DA20240226000782-Original-1, dated 8 April 2024).

On 28<sup>th</sup> May 2024, the Applicant filed proceedings with the NSW Land and Environment Court appealing against Maitland City Council's deemed refusal of the Application (Case No 2024/00187067).

Following receipt of Council's Statement of Facts and Contentions, the Applicant has revised its proposed development (**Revised Design**) to respond primarily to visual impact concerns. There were no contentions relating to bushfire.

Below is a summary of the design changes:

- Number of home sites reduced from 209 to 182
- Western Setback: Increased the western setback to 56m
- Eastern Setback: Increased the eastern setback to 60m
- Added Internal Open Space (approx. 1,412 sqm)
- Added provision for a North/South Public Road connection in the future

It is important to note that while the Revised Design has increased the eastern and western setbacks, and overall internal open space area, this land will be managed to the standard of an inner protection area, consistent with condition 1 of the NSW RFS BFSA.

The fundamental parameters of the assessment outlined in the Bushfire Assessment Report (ref 230960, dated 16 January 2024) remain accurate including, size and nature of the identified hazards, general access configuration and location and depth of Asset Protection Zones (**APZs**).

In comparison to the original design the Revised Design provides a better bushfire safety outcome for the development with a reduction in home sites (209 to 182) and increased APZ to the west (>25m to >65m).

It is my opinion that the Revised Design maintains the ability to satisfy the relevant specifications and requirements of PBP and the conditions of consent issued by the NSW RFS (noting plan reference updates are necessary).

### **1.0 Introduction**

The development proposal relates to the construction of a manufactured home estate, comprising of one hundred and eighty two (182) home sites, a community centre and associated infrastructure, at 34 Wyndella Road, Lochinvar. The subject site and comprises of one (1) existing allotment zoned RU2: Rural Landscape.

The subject property has street frontage to Wyndella Road to the west and abuts private rural allotments to all remaining aspects.

The subject site is depicted on Council's Bushfire Prone Land Map as containing Category 3 Vegetation and the Vegetation Buffer and is therefore considered to be bushfire prone land.

As the proposal involves a listed SFPP development on bushfire prone land it is classified as integrated development under section 4.46 of the *Environmental Planning and Assessment Act* 1979. The Development Application subsequently requires a Bushfire Safety Authority from the NSW Rural Fire Service.

The NSW RFS considered the information submitted with the original Development Application and issued General Terms of Approval, under Division 4.8 of the *Environmental Planning and Assessment Act 1979*, and a BFSA, under section 100B of the *Rural Fires Act 1997*, subject to ten (10) conditions of consent (ref: DA20240226000782-Original-1, dated 8 April 2024).

This report has been prepared to address the relevant specifications and requirements of PBP for Special Fire Protection Purpose (SFPP) development.

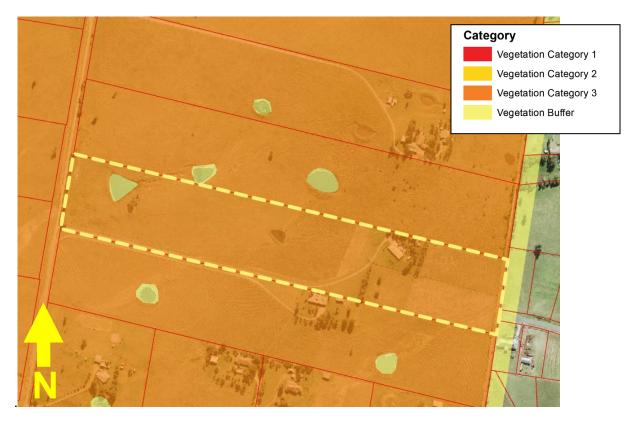


Figure 01: Extract from Maitland City Council's Bushfire Prone Land Map

### 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

#### 2.1 Rural Fires Act 1997

Manufactured home estates are a listed Special Fire Protection Purpose (SFPP) under section 47 of the *Rural Fires Regulation* 2022.

The development must obtain a Bush Fire Safety Authority from the Commissioner of the NSW Rural Fire Service (RFS) in accordance with section 100B of the *Rural Fires Act 1997* 

#### 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 relates to a SFPP development it is subject to s.100B of the *Rural Fires Act* 1997, and is therefore considered to be 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 SFPP use.

#### 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 SFPP 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 6 Special Fire Protection Purpose Developments

### **3.0 Purpose of Report**

The purpose of this Bushfire Assessment Report is to provide the NSW Rural Fire Service and Maitland City Council with an independent bushfire assessment together with appropriate recommended bushfire mitigation measures.

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

#### 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*.

#### **Community Facility:**

	North	East	South	West
Vegetation Structure	Grassland	Managed Land	Grassland	Managed Land
Effective Slope	0 degrees and up	N/A	0 - 5 degrees down	N/A
Required Asset Protection Zone*	36 metres	N/A	40 metres	N/A
Available Asset Protection Zone	>48 metres	>140 metres	>46 metres	>140 metres
Proposed access road /SignificantProposedLandscapeResidential allotments /FeaturesPerimeter Fire Trail		Proposed access roads / Proposed residential allotments	Proposed access roads / Proposed residential allotments / Neighbouring access road	Proposed access roads / Proposed residential allotments
Bushfire Attack Level	BAL 12.5	BAL LOW	BAL 12.5	BAL LOW

\* Determined from Table A1.12.1 of PBP

<u>Dwelling sites:</u>	North	East	South	West
Vegetation Structure	Grassland	Managed Land	Grassland	Grassland
Effective Slope	0 degrees and up	N/A	0 - 5 degrees down	0 - 5 degrees down
Required Asset Protection Zone**	10 metres	N/A	12 metres	12 metres
Available Asset Protection Zone	>10 metres	>140 metres	>12 metres	>65 metres
Significant Landscape Features	Neighbouring allotment	Neighbouring allotment	Neighbouring allotment	Wyndella Road / Proposed 262 Lot Subdivision (DA/2023/415)
Bushfire Attack Level	BAL 29	BAL LOW	BAL 29	BAL LOW
Required Construction Level	BAL 29	BAL 29	BAL 29	BAL 29

\*\* Determined from Table A1.12.2 of PBP

Compliance Summary of Bushfire Protection Measures Assessed				
Bushfire Protection Measure	Acceptable Solution	Performance Solution	Report Section	
Asset Protection Zones & Landscaping			7.03	
Construction Standard	$\boxtimes$		7.03	
Access		$\boxtimes$	7.03	
Services			7.03	
Emergency Management Planning			7.03	

### **Asset Protection Zones Compliance**

Asset Protection Zones for Special Fire Protection Purpose development are determined from Table A1.12.1 of PBP or bushfire design modelling achieving a radiant heat impact of no more than 10kW/m<sup>2</sup> at the closest point of the proposed dwelling sites.

Manufactured homes have the capacity to comply with AS3959 and provided there is a mechanism to ensure future compliance with the corresponding Bushfire Attack Level (BAL) Asset Protection Zones (APZs) which meet  $\leq$ 29kW/m<sup>2</sup> can be applied.

All proposed sites will have a restriction requiring the application of the relevant BAL in accordance with the attached BAL Overlay (see Attachment: 01).

The minimum required APZs were subsequently determined from Table A1.12.2 of PBP.

As the Community Centre has a floor area of >500m2 we have applied the requirements for Places of Public Assembly (s8.3.11). Therefore, the minimum APZs were subsequently determined from Table A1.12.1 of PBP to achieve a maximum radiant heat exposure of 10kW/m<sup>2</sup>.

The proposed sites were found to provide footprints which meet and in most cases exceed the minimum required APZs.

The APZs consist of maintained grounds within the subject property and Wyndella Road.

#### **Construction Level Compliance**

The highest Bushfire Attack Level to the proposed dwelling sites was determined from Table A1.12.5 of PBP.

The future buildings on the proposed dwelling sites are required to comply with the relevant Bushfire Attack Level as shown on the attached Bushfire Attack Level Overlay (Attachment: 01). The highest Bushfire Attack Level applies to the entire building.

## 6.0 Aerial view & Site Plan

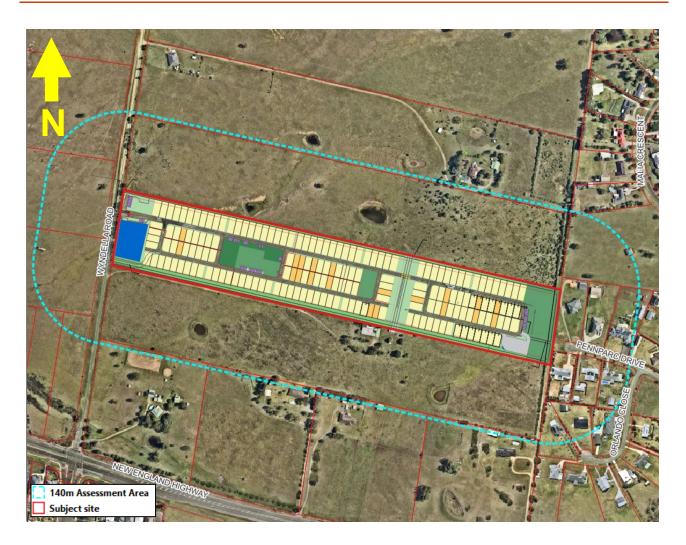


Figure 02: Aerial view of the overall subject site and surrounding area

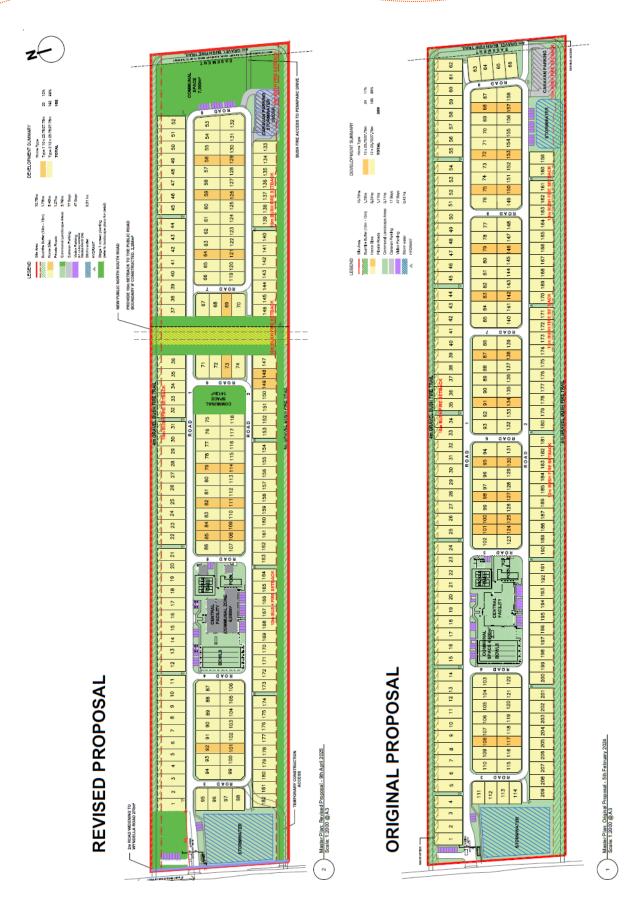


Figure 03: Revised Site Plan and Original Site Plan

### 7.0 Site Assessment

A representative of Building Code & Bushfire Hazard Solutions completed an inspection of the subject site and surrounding area on 21 April 2023.

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

- Aerial imagery of the subject area (NSW Spatial Services);
- 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)
- Pre-DA Advice Summary from NSW Rural Fire Service (RFS PREDA20231005000188)

#### 7.01 Location

The subject site comprises of one (1) existing allotment known as 34 Wyndella Road, Lochinvar and legally identified as Lot 225 DP 246447. The site is currently used for agricultural and grazing purposes.

The subject site is located within Maitland City Council and zoned 'RU2: Rural Landscape' pursuant to *Maitland Local Environmental Plan 2011*.

The subject property has street frontage to Wyndella Road to the west and abuts private rural allotments to all other aspects.

The proposed Community Facility is located centrally within the site.

### 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 site for each aspect as per Keith (2004).

There is no bushfire hazard identified within the 140 metre assessment area.

It is noted that there is an active Development Application under assessment for a 262 Lot residential subdivision to the west of the site (DA/2023/415). As the Development Application to the west is yet to be determined, we have assumed a Grassland hazard to the west.

The vegetation posing a hazard was found to be within neighbouring allotments to the north, south and west.

For the purpose of assessment under 'Planning for Bush Fire Protection' the vegetation posing a hazard to the north, south and west has been determined to be Grassland.

It is understood that the land to the immediate north is owned by St Philip's Christian Education, who intends to lodge a Development Application for a K–12 school. While it is acknowledged this does not influence the current bushfire assessment for this matter, it is worth noting for the potential longer-term bushfire/grassfire context.



Photograph 01: Photograph of the vegetation within neighbouring allotment to the north



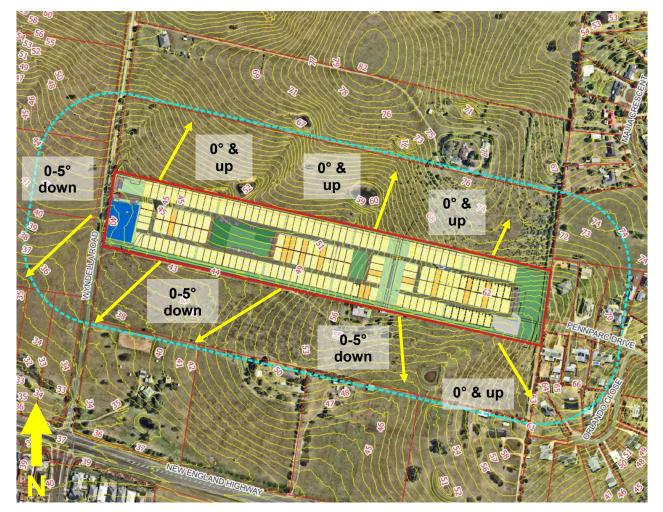
Photograph 02: Photograph of the vegetation within neighbouring allotment to the south

### 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 behaviour was determined from topographic imagery (1 metre contours sourced from ELVIS - Geoscience Australia) to be:



- O degrees and up within the hazard to the north & southeast
- $\sim$  0 5 degrees down slope within the hazard to the south & west

Figure 04: Extract from ELVIS showing 1 metre contours

#### 7.04 Fire Weather

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

In accordance with the NSW Rural Fire Service publication 'NSW Local Government Areas FDI' (2017) Maitland City Council's form part of the Greater Hunter Fire Weather District and attracts an FFDI of 100.

In acknowledging the presence of Grassland hazard in accordance with Table 5.1.4a of PBP a Grassland Fire Danger Index (GFDI) of 130 has been adopted.

#### 7.05 Fire History

Ν

There are areas within NSW which have significant fire history and are recognised as known fire paths. While the fire history is more commonly considered as part of strategic planning (to ensure future development is not exposed to an unacceptable risk), it is useful to consider at a Development Application phase to ensure the land is suitable for development in the context of bushfire risk.

In this instance there are no recorded wildfires located within the subject locality, with the closest recorded wildfire occurring >7.3km to the northwest during the 2019-20 fire season (source NPWS Fire History dataset).

The subject site is therefore <u>not</u> 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.

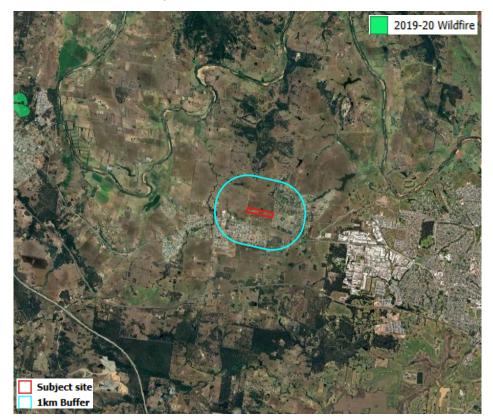


Figure 05: Aerial view of the subject area with previous wildfire history layer (source NPWS Fire History)

### 8.0 Bushfire Assessment

### 8.01 Planning for Bush Fire Protection - 2019

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.

Manufactured home estates are a listed Special Fire Protection Purpose (SFPP) under section 47 of the *Rural Fires Regulation* 2022.

As the proposal involves a listed SFPP development on bushfire prone land it is classified as integrated development under section 4.46 of the *Environmental Planning and Assessment Act* 1979. The Development Application subsequently requires a Bushfire Safety Authority from the NSW Rural Fire Service.

SFPP development is assessed under Chapter 6 'Special Fire Protection Purpose Developments' of *Planning for Bush Fire Protection 2019* (PBP).

The proposal must conform to the aim and objectives detailed in Chapter 1 'Introduction' and the specific objectives and bushfire protection measures detailed in Chapter 6 'Special Fire Protection Purpose Developments' of PBP.

#### 8.02 Specific Objectives

The following table lists the specific objectives for Special Fire Protection Purpose development in accordance with section 6.2 of PBP applicable to the proposal and our comments on compliance or otherwise.

Specific Objective	Comment
minimise levels of radiant heat, localised smoke and ember attack through increased APZ, building design and siting;	The proposal meets and, in most cases exceeds the minimum required Asset Protection Zones.
provide an appropriate operational environment for emergency service personnel during firefighting and emergency management;	The proposed perimeter trail around the site provides appropriate operational environment. This solution has received both preliminary and actual support from the NSW RFS through Pre-DA advice and issued BFSA respectively.
ensure the capacity of existing infrastructure (such as roads and utilities) can accommodate the increase in demand during emergencies as a result of the development; and	New England Highway, which is the main evacuation route, has a dual carriageway of >10 metres exceeding the requirements for perimeter roads as described in Table 6.8b of PBP. The proposal will provide adequate water supply via a hydrant system.
ensure emergency evacuation procedures and management which provides for the special characteristics and needs of occupants.	This assessment includes a recommendation that a Bushfire Emergency Management Plan be prepared.

#### **8.03 Bushfire Protection Measures**

Section 6.8 'Bush fire protection measures' of PBP outlines the specific Bushfire Protection Measures (BPMs) applicable to Special Fire Protection Purpose development, including APZs, Landscaping, Construction, Access, Services & Emergency Management Plan.

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

#### Asset Protection Zones & Landscaping

Asset Protection Zones for new Special Fire Protection Purpose (SFPP) development are determined from Table A1.12.1 of PBP or bushfire design modelling achieving a radiant heat impact of no more than 10kW/m<sup>2</sup> at the closest point of the building.

Particular SFPP developments demonstrate different characteristics which warrant different levels of protection. Section 6.3.2 of PBP lists specific residential-based SFPP uses, including Manufactured homes estates, and prescribes tailored considerations. In this regard the following is applicable to Manufactured home estates:

Manufactured housing can be built to achieve all levels of construction required under the NCC. However, SEPP 36—Manufactured Home Estates does not require a separate development consent for each manufactured home after development consent is given for the estate.

Due to the nature of manufactured home estates, there is no mechanism within the development consent process to ensure that the dwellings will be constructed to the standards applied within AS 3959 or NASH Standard. Therefore, the acceptable solution for manufactured housing is the provision of an APZ which achieves 10kW/ m<sup>2</sup> commensurate with SFPP development in line with Table A1.12.1.

Where evidence can be provided which confirms that dwellings within the manufactured home estate will be constructed to the appropriate construction standards under AS 3959 or NASH Standard, an APZ can be provided which meets 29kW/m<sup>2</sup> in line with Tables A1.12.2 - A1.12.3.

It is proposed to establish a positive covenant / easement to ensure that the future buildings within the new dwelling sites will be constructed to the relevant construction standard under AS3959 or the NASH Standard and therefore APZs can be provided which meet 29kW/m<sup>2</sup>.

The minimum required Asset Protections Zones were therefore determined from Table A1.12.2 of *Planning for Bush Fire Protection 2019* for the dwelling sites.

All proposed dwelling sites will have a restriction requiring the application of the relevant BAL in accordance with A1.12.5 of PBP, (See Attachment: 01).

As the Community Centre has a floor area of >500m2 we have applied the requirements for Places of Public Assembly (s8.3.11). Therefore, the minimum APZs were subsequently determined from Table A1.12.1 of PBP. The proposed building footprint was found to exceed the minimum required APZs.

The APZs consist of maintained grounds within the subject property and Wyndella Road.

All grounds within the subject site will be maintained in accordance with an Inner Protection Area as detailed in Appendix 4 of *Planning for Bush Fire Protection* 2019 and the NSW Rural Fire Service publication 'Standards for Asset Protection Zones'.

I have reviewed the Landscape Development Application prepared by Terras Landscape Architects (job no 15029.5, rev P, dated 05/05/25), and am satisfied it can comply with the requirements for an inner protection area.

#### Construction

It is proposed to establish a positive covenant / easement to ensure that the future buildings within the new dwelling sites will be constructed to the appropriate construction standard under AS3959 or the NASH Standard and therefore APZs can be provided which meet 29kW/m<sup>2</sup>.

The highest Bushfire Attack Level for the community centre was determined from Table A1.12.5 of PBP to be BAL 12.5. Therefore, the community centre will be constructed to Sections 3 & 5 (BAL 12.5) of AS3959 – 2018 and the additional requirements of s7.5 of Planning for Bush Fire Protection.

The future buildings on the proposed dwelling sites are required to comply with the relevant Bushfire Attack Level as shown on the attached Bushfire Attack Level Overlay. The highest Bushfire Attack Level applies to the entire building.

#### Access

The subject site has street frontage to Wyndella Road to the west.

The proposal includes new internal roads inclusive of access to Wyndella Road to the west.

The roads in manufactured home estates are shared pedestrian and vehicle spaces, so it is important that these roads are walkable and accessible. Due to the location and topography of the site, advice from the civil engineer and urban designer indicates that meeting the required grades outlined in the National Construction Code (NCC) for pedestrian routes would be unattainable if a perimeter road were to be provided.

It is proposed in lieu of a full perimeter road, that full perimeter access is provided by a perimeter fire trail with three access points to the site (2 to the west and 1 to the east via the existing electrical easement) with the central non-perimeter road providing a separate access to the site via Wyndella Road to the west. The separate access / egress provides through access for emergency services whilst residents have separate access / egress to the site.

The NSW Rural Fire Service have provided the following Pre-DA advice in relation to the proposed access:

Considering the low bush fire risk posed by grasslands and multiple access points to the site, the proposed provision of a 4 metre wide fire trail along the northern, eastern and southern site boundaries in lieu of a perimeter road is supported in this instance.

Persons seeking to egress the proposed dwelling sites will be able to do so via the proposed road and existing road infrastructure.

The proposed road network is considered adequate, and this report includes recommendations for compliance.

#### Services – Water, electricity & gas

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

The most distant external point of any dwelling site will be within 70 metres of a road which will support a hydrant network 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.

#### **Bushfire Emergency Management Plan**

The intent of the Bushfire Emergency Management Plan measure is to provide suitable emergency and evacuation arrangements for occupants of SFPP developments.

This assessment includes a recommendation that a Bushfire Emergency Management Plan be prepared. This recommendation satisfies the acceptable solutions detailed in Table 6.8d of PBP.

#### 8.04 Aim & Objectives

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

Aim / Objective	Comment
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.	With the inclusion of the recommendations made herein it is of our opinion that the aim of PBP has been satisfied.
(i) afford buildings and their occupants protection from exposure to a bush fire;	The proposed dwelling sites meet and, in most cases, exceed the minimum required APZ.
	It is proposed to establish a positive covenant / easement to ensure that the future buildings will be constructed to the relevant construction standard under AS3959 or the NASH Standard.
	The proposed APZs in conjunction with the application of the corresponding BAL will afford buildings and their occupant's protection from a bush fire.

Objective	Comment
(ii) provide for a defendable space to be located around buildings;	The proposed dwelling sites meet and most cases exceed the minimum required APZ. A suitable defendable space is provided.
(iii) provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to buildings;	The proposed APZs in conjunction with the application of the corresponding BAL will prevent the likely fire spread to future buildings.
(iv) ensure that appropriate operational access and egress for emergency service personnel and occupants is available;	The proposed roads provide direct vehicle access to the proposed dwelling sites and the proposed perimeter Fire Trail provides access to the hazards.
(v) provide for ongoing management and maintenance of bush fire protection measures, (BPMs); and	<ul> <li>The Asset Protection Zones within the subject site are to be maintained in accordance with the NSW Rural Fire Service's document 'Standards for Asset Protection Zones' and Appendix 4 of <i>Planning for Bush Fire Protection</i> 2019.</li> <li>Any new landscaping is to comply with the provisions of Appendix 4 of PBP.</li> </ul>
(vi) ensure that utility services are adequate to meet the needs of firefighters.	The proposed water supply is adequate for the replenishment of attending fire services.

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

### 9.0 Recommendations

It is respectively requested that the NSW Rural Fire Service modify conditions 2, 3 and 7 of the issued General Terms of Approval, under Division 4.8 of the *Environmental Planning and Assessment Act 1979*, and a Bush Fire Safety Authority, under section 100B of the *Rural Fires Act 1997* for this matter (ref: DA20240226000782-Original-1, dated 8 April 2024) to reflect the current plans.

To assist below are the updated conditions inclusive of the current plan references:

**2.** At the issue of a subdivision certificate, if the land immediately to the north and south of the subject site has not been developed and the bush fire hazard removed, a suitably worded instrument(s) pursuant to Section 88B of the *Conveyancing Act 1919* is required to create Asset Protection Zones (APZs) as shown in Appendix 1 of the bush fire report prepared by Bushfire Hazard Solutions (Ref: 230960 dated 29 April 2025) 'Indicative Residential Manufactured Home Estate Bushfire Construction Overlay' (Revision D - 29/04/2025), prohibiting the construction of buildings, other than class 10b structures, within the proposed APZs for a distance of:

- 10 metres wide along the northern boundary of the subject site;
- 12 metres wide along the southern boundary of the site;

The instrument may be lifted upon commencement of any future proposed development on the adjoining land, but only if the bush fire hazard is removed as part of the proposal. The name of the authority empowered to release, vary, or modify the instrument shall be Maitland Council. The APZ must be managed as an inner protection area (IPA) in accordance with the requirements of Appendix 4 of *Planning for Bush Fire Protection 2019*.

When establishing and maintaining an inner protection area the following requirements apply in accordance with the requirements of Appendix 4 of *Planning for Bush Fire Protection 2019*:

- tree canopy cover should be less than 15% at maturity;
- trees at maturity should not touch or overhang the building;
- lower limbs should be removed up to a height of 2 m above the ground;
- tree canopies should be separated by 2 to 5 m;
- preference should be given to smooth-barked and evergreen trees;
- large discontinuities or gaps in the shrubs layer should be provided to slow down or break the progress of fire towards buildings;
- shrubs should not be located under trees;
- shrubs should not form more than 10% ground cover;
- clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of the vegetation;
- grass should be kept mown (as a guide, grass should be kept to no more than 100mm in height); and
- leaves and vegetation debris should be removed regularly.

The name of authority empowered to release, vary or modify any instrument must be Maitland Council.

**3.** At the issue of a subdivision certificate, suitably worded instrument(s) must be created over proposed lots 1-52 and 133-182, pursuant to section 88 of the *Conveyancing Act 1919*. The instruments must require future dwellings to be constructed to the BAL in which the proposed dwelling will be located as shown in Appendix 1 of the bush fire report prepared by Bushfire Hazard Solutions (Ref: 230960 dated 29 April 2025) 'Indicative Residential Manufactured Home Estate Bushfire Construction Overlay' (Revision D - 29/04/2025), in accordance with Australian Standard AS3959-2018 *Construction of buildings in bush fire-prone areas* or NASH Standard (1.7.14 updated) *National Standard Steel Framed Construction in Bushfire Areas – 2014* as appropriate and Section 7.5 of *Planning for Bush Fire Protection 2019*. The name of authority empowered to release, vary or modify the instrument must be Maitland Council.

**7.** The lane identified as 4m Gravel Bush Fire Trail in the document General Arrangement Plan Drawing C04.01 Rev. D for Civil Works prepared by WDG Pty Ltd for Lot 225/DP246447 34 Wyndella Road, Lochinvar (Revision D, dated 30.04.25) must be constructed at a minimum to be consistent with a fire trail as identified in the NSW Rural Fire Service document *Fire Trail Standard 2023* – Version 2.0 and be sign posted to ensure there is no parking in this area.

### **10.0 Conclusion**

The development application initially lodged sought consent for the establishment of a manufactured home estate comprising of 209 home sites, community building and associated infrastructure.

Building Code & Bushfire Hazard Solutions prepared the Bushfire Assessment Report (ref 230960, dated 16 January 2024) which accompanied the original Development Application. This Bushfire Assessment Report addressed the relevant specifications and requirements of Planning for Bush Fire Protection 2019.

The New South Wales Rural Fire Service considered the information submitted with the original Development Application and issued General Terms of Approval, under Division 4.8 of the *Environmental Planning and Assessment Act 1979*, and a Bush Fire Safety Authority, under section 100B of the *Rural Fires Act 1997*, subject to ten (10) conditions of consent (ref: DA20240226000782-Original-1, dated 8 April 2024).

On 28<sup>th</sup> May 2024, the Applicant filed proceedings with the NSW Land and Environment Court appealing against Maitland City Council's deemed refusal of the Application (Case No 2024/00187067).

Following receipt of Council's Statement of Facts and Contentions, the Applicant has revised its proposed development (Revised Design) to respond primarily to visual impact concerns. There were no contentions relating to bushfire.

Below is a summary of the design changes:

- Number of home sites reduced from 209 to 182
- Western Setback: Increased the western setback to 56m
- Eastern Setback: Increased the eastern setback to 60m
- Added Internal Open Space (approx. 1,412 sqm)
- Added provision for a North/South Public Road connection in the future

The fundamental parameters of the assessment outlined in the Bushfire Assessment Report (ref 230960, dated 16 January 2024) remain accurate including, size and nature of the identified hazards, general access configuration and location and depth of Asset Protection Zones.

In comparison to the original design the Revised Design provides a better bushfire safety outcome for the development with a reduction in home sites (209 to 182) and increased APZ to the west (>25m to >65m).

It is my opinion that the Revised Design maintains the ability to satisfy the relevant specifications and requirements of PBP and the conditions of consent issued by the NSW RFS (noting plan reference updates are necessary).

We are therefore in support of the development.

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

Prepared by Building Code & Bushfire Hazard Solutions

•

#### Stuart McMonnies

Director / Manager Bushfire Section G. D. Design in Bushfire Prone Areas. Certificate IV Fire Technology FPA Australia BPAD Level 3 Accredited Practitioner BPAD Accreditation No. BPAD9400



Reviewed by Building Code & Bushfire Hazard Solutions

**Ian Tyerman** Senior Bushfire Consultant Graduate Certificate in Bushfire Protection Planning for Bushfire Prone Areas - UTS Sydney FPA Australia BPAD Level 2 Accredited Practitioner BPAD Accreditation No. BPAD30356



#### 11.0 Annexure 01

#### List of Referenced Documents

Australian Building Codes Board (2022). *National Construction Code Volume One - Building Code of Australia*. ABCB

Australian Building Codes Board (2022). *National Construction Code Volume Two - Building Code of Australia*. ABCB

bda architecture (2023). *Masterplan* (Project No 545000, Drawing No SK.01, Issue R, Date 20/03/2025)

*ELVIS* -Elevation *-Foundation Spatial Data*. Elevation.fsdf.org.au. Available at: http://elevation.fsdf.org.au/

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

NSW Department of Planning and Environment (2019). *Planning Portal*. Accessed at: https://www.planningportal.nsw.gov.au/

NSW Rural Fire Service (2019). *Planning for Bush Fire Protection. A Guide for Councils, Planners, Fire Authorities and Developers.* 

Rural Fire Service NSW (2005). NSW Fire Trail Standards (Version 2.0, November 2023)

Rural Fire Service NSW (2005). Standards for Asset Protection Zones

Standards Australia (2018). AS3959:2018 Construction of buildings in bushfire-prone areas.

Standards Australia (2014). AS/NZS 1596 The storage and handling of LP Gas

Acknowledgements to:

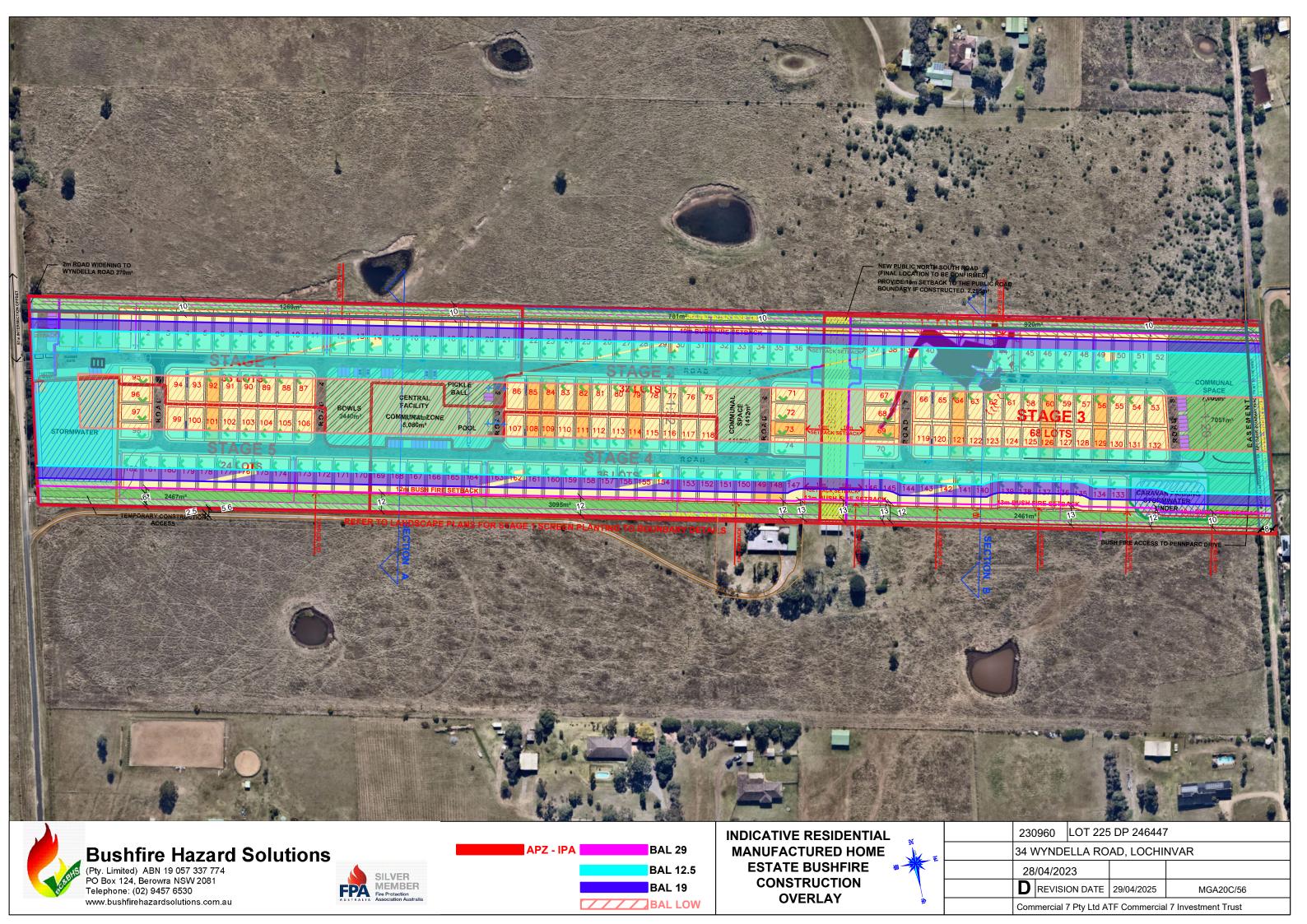
Geoscience Australia Nearmap NSW ePlanning Portal NSW State Vegetation Type Map

#### Attachments

Attachment 01:

Bushfire Attack Level Overlay

Attachment 02: RFS Pre-DA advice





## **PRE-DA ADVICE SUMMARY**

Applicant:	lan Tyerman, Bu	uilding Code & Bushfire Hazard Solutions
Subject:	34 Wyndella Ro RFS PRE-DA20	ad, Lochinvar, NSW 2321 0231005000188
Details of the Pro	oposal	
SFPP		New manufactured home estate
Residential	subdivision	
Cother		
Bush Fire Protec	tion Issues Disc	ussed
$\Box$ Application and	d/or Interpretation	of sections of Planning for Bush Fire Protection
Performance B	ased Solutions	
Qualitative	Analysis	Provision of fire trail in lieu of a perimeter road acknowledging the low risk nature of site.
Quantitativ	e Analysis	
Proposed Redundancies		
C Strategic Bush	Fire Study	
$\Box$ Non compliance	ces in relation to B	sush Fire Protection Measures
🗆 Hazard Ass	essment	
🗆 Asset Prote	ction Zones	
Access		Absence of perimeter road.
Construction	n Standards	
Services		
Emergency Evacuation		
Documentation		
Preliminary	Bush Fire Risk	Indicative Manufactured Home Estate APZ Over Lay prepared by Bushfire

Preliminary Bush Fire Risk Assessment	Code & Bushfire Hazard Solutions (dated: 04/10/2023, revision E and referenced: 230960)
Concept/Detailed Drawings	Master Plan – Option C prepared by BDA architecture (dated: 3/10/2023, issue E and project number 54500).

1 of 2

Other Documents

#### **Pre DA Advice**

- Considering the low bush fire risk posed by grasslands and multiple access points to the site, the proposed provision of a 4 metre wide fire trail along the northern, eastern and southern site boundaries in lieu of a perimeter road is supported in this instance.
- Please note that the pre DA advice is not intended to provide pre approval of bush fire risk assessment to support a development application. The aim of the service is to identify any potential issues in relation to bush fire risk assessment before a formal development application is lodged. The advice issued is preliminary in nature and no detailed assessment of the site or development is undertaken at this stage. The service is not to be used for the purpose of submitting revised information/bush fire engineering brief for further review of the original advice.

#### Disclaimer

RFS advice is based on information provided and policy and legislative requirements applicable at the time. The advice should be copied into, or referenced in, any subsequent development application.

All efforts are made to identify issues of relevance and likely concern with the preliminary proposal. However, the comments and views in this document are based only on the plans and information submitted for preliminary assessment and discussion at the pre-DA meeting. You are advised that: -

- > The views expressed may vary once detailed plans and information are submitted and formally assessed in the development application process, or as a result of issues contained in submissions by interested parties;
- > Given the complexity of issues often involved and the limited time for full assessment, no guarantee is given that every issue of relevance will be identified;
- > Amending any aspect of the proposal could result in changes which would create a different set of impacts from the original plans and therefore make this advice invalid; and,
- > The Pre-DA advice given does not bind Council officers, the elected Council members, or other parties to the DA process.

Submitted by:

Approved by:

Surbhi Chhabra Development Assessment and Planning Coordinator Planning and Environment Services (East) Built and Natural Environment Kalpana Varghese Supervisor, Development Assessment and Planning Planning and Environment Services (East) Built and Natural Environment

Date: 30 October 2023