



BUSH FIRE ASSESSMENT

Staged Development of a Home Makers Centre
(15 Specialised Retail Premises), Gymnasium and
Torrens Title Subdivision (1 Lot into 4) & new
road

SITE Lot 1 DP1228883, 202 Bushland Drive, Taree

BY AJA Developments Pty Ltd

DATE May 2025

PREPARED BY
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Revision Schedule

Revision Number	Date	Description	Staff
A	17 April 2025	Draft, Issue to Client	TS
B	29 May 2025	Final, Issued to Client	TS

Certification

As the author of this Bush Fire Assessment Report, I certify this report provides the detailed information required by the NSW Rural Fire Service under Clause 44 of the Rural Fires Regulation 2013 and Appendix 2 of Planning for Bushfire Protection 2019 for the purposes of an application for a bush fire safety authority under section 100B(4) of the Rural Fires Act 1997.

It has been prepared with all reasonable skill, care and diligence. This report recognises that no property or lives can be guaranteed to survive a bushfire attack. The report determines the manners in which the risk of bushfire attack can be minimised in accordance with the applicable legislation.

Terrance Stafford
Accredited Bushfire Practitioner
BPAD-61310 (NSW, Level 2)

Date: 17 April 2025



Disclaimer

This report was prepared in accordance with the scope of works set out in the contract between King & Campbell Pty Ltd and the Client. To the best of King & Campbell Pty Ltd's knowledge, the proposal presented herein accurately reflects the Client's intentions when the report was printed. However, it is recognised that conditions of approval at time of consent, post development application modification of the proposals design, and the influence of unanticipated future events may modify the outcomes described in this report.

King & Campbell Pty Ltd used information and documentation provided by external persons, companies and authorities. Whilst checks were completed by King & Campbell Pty Ltd to ensure that this information and/or documentation was accurate, it has been taken on good faith and has not been independently verified. It is therefore advised that all information and conclusions presented in this report apply to the subject land at the time of assessment, and the subject proposal only.

This report is based on the site conditions surveyed at the time the document was prepared. The assessment of the bushfire threat made in this report is made in good faith based on the information available to King & Campbell Pty Ltd at the time. The recommendations contained in this report are considered to be minimum standards and they do not guarantee that a building or assets will not be damaged in a bushfire. In the making of these comments and recommendations, it should be understood that the focus of this document is to minimise the threat and impact of a bushfire.

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Section 1

Introduction

1.1 Introduction

This Bush Fire Assessment has been prepared on behalf of AJA Developments Pty Ltd for the purposes of accompanying a Development Application which is seeking development consent for the staged development of a Home Makers Centre consisting of 15 Specialised Retail Premises, Gymnasium, 492 parking spaces, new entry road, Torrens Title subdivision (1 lot into 4), vacant industrial allotment, a drainage basin (public reserve) and business identification signage upon Lot 1 DP1228883, 202 Bushland Drive, Taree (Site).

This subject site is mapped as bushfire prone land including Category 1 bushfire prone vegetation. The mapped vegetation within the Site has recently been removed as a part of works undertaken in accordance with an industrial subdivision granted under DA2023/0800.

The site is however, mapped as bushfire prone land and bushfire has been a key consideration in the design process. The proposed industrial subdivision and specialised retail premises development is designated as "other" development in Planning for Bushfire Protection 2019 (PBP). As "other" development, a key issue for the proposal will therefore be meeting the Aims and Objectives of PBP.

Under s4.14 (1)(b) of the Environmental Planning and Assessment Act 1979, as the consent authority, Mid-Coast Council can issue development consent if it has been provided with a certificate by a person who is recognised by the NSW RFS as a qualified consultant in bush fire risk assessment stating that the development conforms to the relevant specifications and requirements of PBP.

It is noted that pursuant to Clause 46(h) of the Rural Fires Regulation, 2022 the proposed development does not have a requirement for the issuing of a Bush Fire Safety Authority by the NSW Rural Fire Service and, accordingly, the proposed development is not integrated development for the purposes of Clause 100B of the Environmental Planning and Assessment Act, 1979.

This assessment has been prepared by Terrance Stafford (Registered Town Planner & Bushfire Specialist, Level 2 FPAA BPAD-A Certified Practitioner No. BPAD61310) who is recognised by the RFS as qualified in bushfire risk assessment and has been accredited by the Fire Protection Association of Australia as a suitably qualified consultant to assess development proposals.

This assessment demonstrates that the bushfire risk to the site, proposed subdivision and specialised retail premises is manageable and in accordance with the NSW Rural Fire Services publication PBP determines the bushfire protection measures applicable to the site and proposed development.

1.2 Legislative Framework

As stated above, the Site is mapped as 'bushfire prone land' (see Figure 3) for the purposes of Section 10.3 of the Environmental Planning and Assessment Act, 1979 (EPA Act) and the legislative requirements for development on bushfire prone lands are therefore applicable.

The Site has been previously used for infrastructure purposes associated with the rail line on the southern boundary and is zoned E4 General Industrial. The Site has recently been cleared, with the vegetation within the Site removed pursuant to the consent granted by Mid Coast Council under DA2023/0800. The bushfire prone land mapping therefore does not accurately reflect the existing Site conditions.

Regardless of the above, all development on 'designated' (or mapped) bushfire prone land must consider and

comply with PBP. However, "other" development has considerable flexibility, and it is noted that this proposal is for industrial subdivision and specialised retail premises (commercial development).

As "other" development, the industrial subdivision and commercial development is addressed through demonstrating compliance with the Aims and Objectives of PBP.

Under Section 4.14 of the Environmental Planning and Assessment Act the consent authority (Mid-Coast Council (MCC)) may grant development consent where the consent authority:

- (b) has been provided with a certificate by a person who is recognised by the NSW Rural Fire Service as a qualified consultant in bush fire risk assessment stating the development conforms to the relevant specifications and requirements.

This bush fire assessment is the certificate required "stating the development conforms to the relevant specifications and requirements".

In addition to the subdivision of the land, building works are also proposed under this application. Therefore, the relevant provisions of the National Construction Code (NCC) apply and require consideration.

Specialised Retail Premises are considered Class 6 buildings under the NCC. The NCC does not provide for any bushfire specific performance requirements for these particular classes of building. As such, the Australian Standard for Construction of Buildings in Bushfire Prone Areas (AS 3959) and the NASH Standard are not considered as a set of 'deemed to satisfy' provisions. However, compliance with AS 3959 and NASH is considered to meet the aims and objectives of PBP.

It is noted that pursuant to Clause 46(h) of the Rural Fires Regulation, 2022 the proposed development does not have a requirement for the issuing of a Bush Fire Safety Authority by the NSW Rural Fire Service and, accordingly, the proposed development is not integrated development for the purposes of Clause 100B of the Environmental Planning and Assessment Act, 1979.

Section 8.3.1 of PBP applies to buildings of Class 5-8 under the NCC and states '...whilst bush fire is not captured in the NCC for Class 5-8 buildings, the following objectives will be applied in relation to access, water, supply and services, and emergency and evacuation planning:

- to provide safe access to/from the public road system for firefighters providing property protection during a bush fire and for occupant egress for evacuation;
- to provide suitable emergency and evacuation (and relocation) arrangements for occupants of the development;
- to provide adequate services of water for the protection of buildings during and after the passage of bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building; and
- provide for the storage of hazardous materials away from the hazard wherever possible.

The general fire safety construction provisions of the NCC are taken as acceptable solutions however construction requirements for bushfire protection will need to be considered on a case-by-case basis' (p.76). As such, AS 3959 and the NASH Standard are not considered as a set of 'deemed to satisfy' provisions, however, compliance with AS 3959 and NASH should be considered when meeting the aims and objectives of NSW Rural Fire Service, PBP.

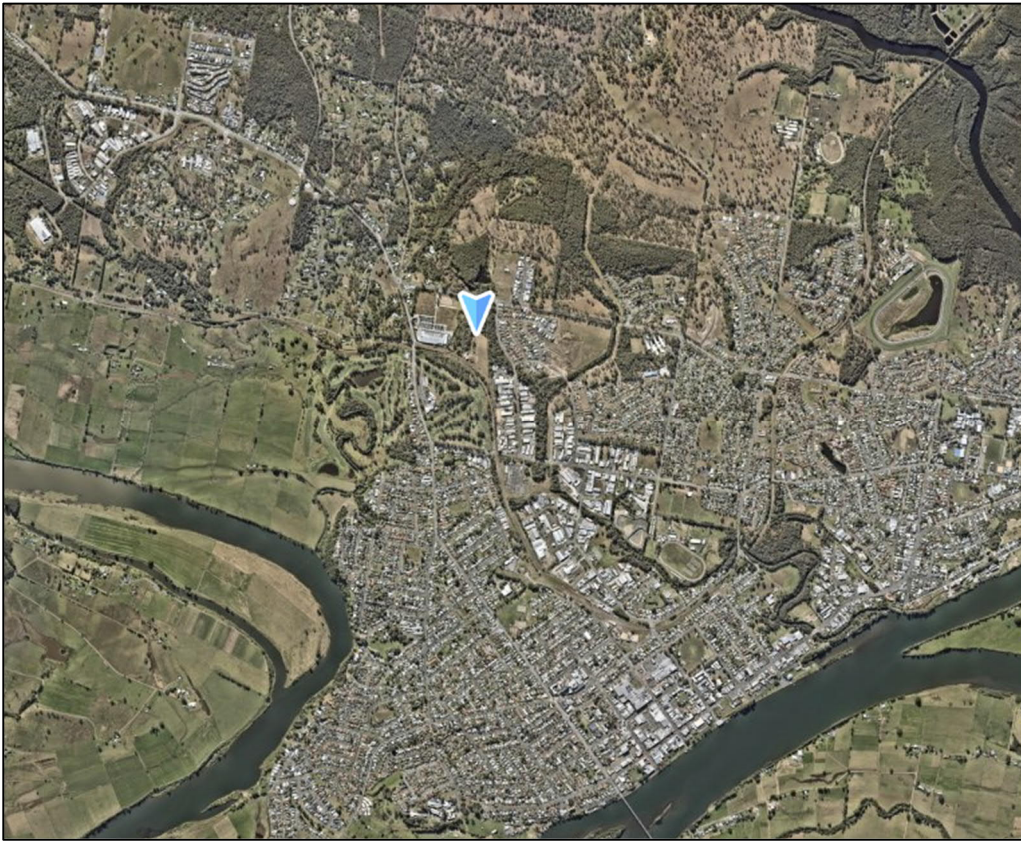


Figure 1 - Location of Site (Blue Arrow) in broader context (Source: Nearmap)



Figure 2 - Aerial image of Site (yellow outline) (Source: Nearmap)

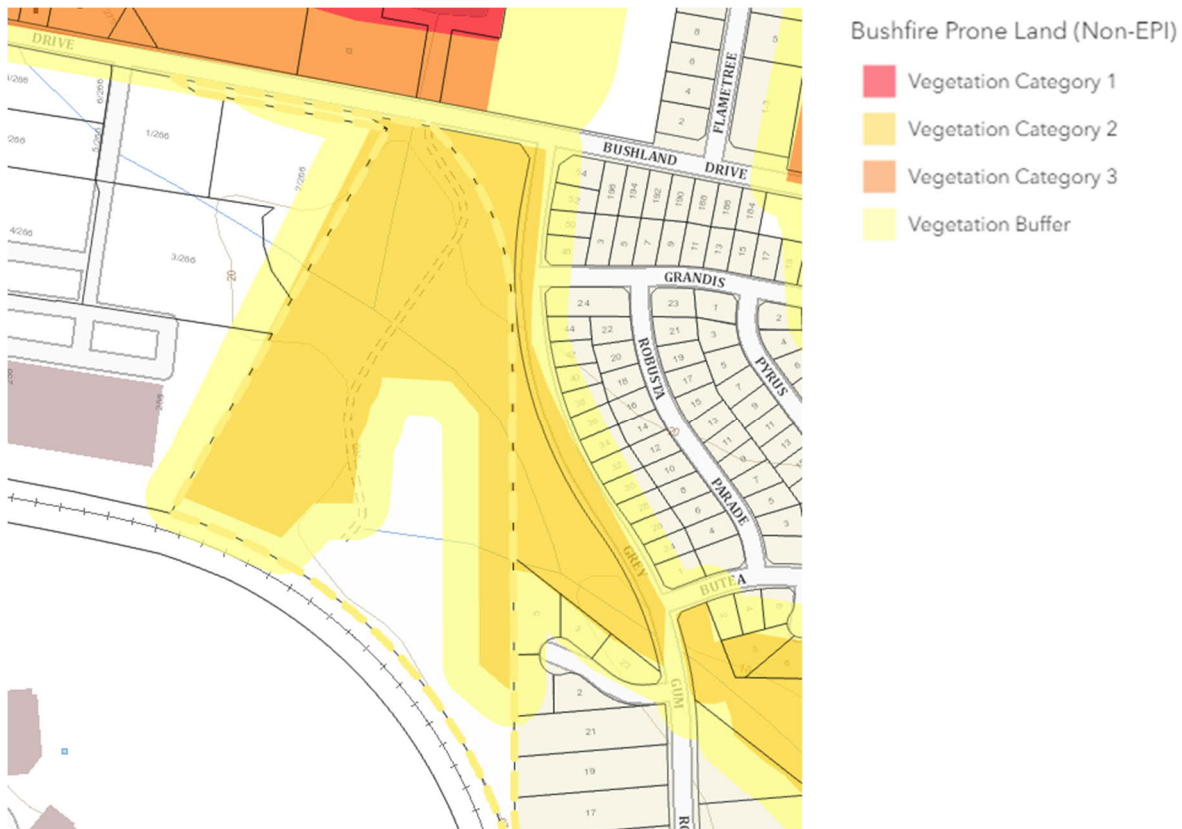


Figure 3 – Excerpt of the bushfire prone land mapping showing the subject site, edged broken yellow (ePlanning Spatial Viewer).

1.3 Purpose of Report

The purpose of this Bush Fire Assessment Report is to provide the Council with an independent bush fire assessment together with appropriate recommendations for the building construction and bushfire protection measures considered necessary for the proposed works within a designated bush fire prone land area.

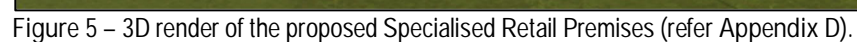
The recommendations contained within this report may assist in forming the basis of any specific construction conditions and/or bush fire protection measures that the Council and or NSW Rural Fire Service may seek to enforce through General Terms of Approval, or recommended consent conditions.

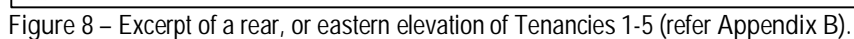
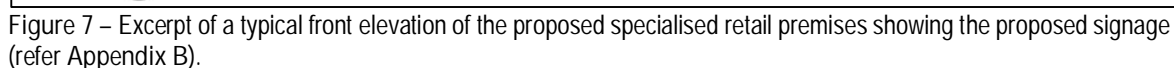
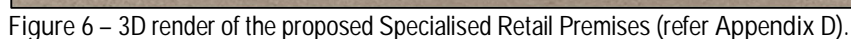
1.4 The Proposal

The landowner, AJA Developments Pty Ltd, is seeking development consent for the staged development of a Home Makers Centre consisting of 15 Specialised Retail Premises, Gymnasium, 492 parking spaces, new entry road, Torrens Title subdivision (1 lot into 4), vacant industrial allotment (proposed Lot 2), a drainage basin (public reserve) and business identification signage upon Lot 1 DP1228883, 202 Bushland Drive, Taree (Site).

There is no residential building component associated with the proposed development (i.e., no managers residence).

The proposed development is detailed in Figures 5 through 8. Refer also to the architectural plans included as Appendix A.





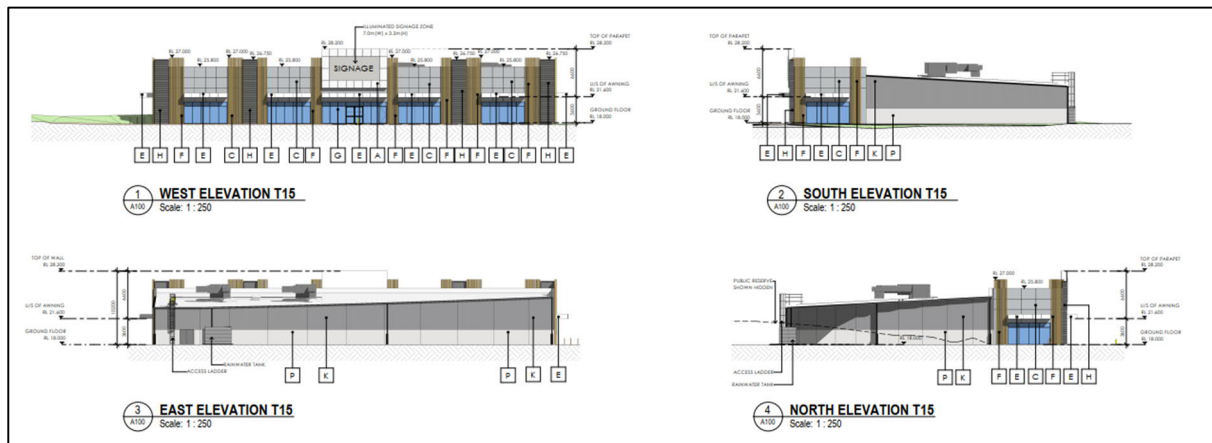


Figure 9 – Excerpt of the various elevations of Tenancy 15, gymnasium (refer Appendix B).

Section 2

Bushfire Hazard Assessment

A detailed site inspection has been undertaken of the subject site by the author of this assessment in September 2024. In addition to the collected site data this assessment has also relied upon:

- Aerial imagery of the subject area (NSW Spatial Services, Nearmap),
- Contour mapping of the subject area (Mecone Mosaic),
- Detail survey of the Site (Appendix B),
- NSW Planning Portal Spatial Viewer (Department of Planning, Infrastructure and Housing), and
- Vegetation mapping (SEED).

An assessment of the slopes and vegetation present on the site and surrounding lands has been carried out in accordance with the provisions of Appendix 1 of PBP.

2.1 The Site's Location and Site Description

The site, being Lot 1 DP1228883 & Lot 1 DP 430627, 202 Bushland Drive (Appendix A), Taree, has an area of 8.65ha, is irregular in shape (almost triangular), with the southern boundary adjoining the North Coast Railway as it curves southward (from west to east) towards the Taree Town Centre. The Site from the southern boundary tapers inwards (narrowing) towards the northern boundary adjacent Bushland Drive. The western boundary is adjacent to Bunnings and other vacant employment lands. The eastern boundary is in part, adjacent to industrial development to the south, and for the northern part adjacent to a public reserve that separates the Site from Grey Gum Road and residential development.

Figure 1 provides an image of the Site in context to its broader surrounds, whilst Figure 2 provides a detailed aerial view of the Site.

As outlined in Section 2.2 the Site has been granted permission to be cleared, with all vegetation within the E4 zoned portion of the Site recently removed. Refer to Error! Reference source not found.. The site is currently cleared land with vegetation remaining only along the mapped watercourses.

The Site is zoned part E4 General Industrial and part C2 Environmental Conservation under the GT LEP

Photos of the site and surrounding lands are included as Figure 10 through Figure 15.

Access to the site is currently available via a gravel access driveway off Bushland Drive.



Figure 10 – Looking west from the Site towards Bunnings Warehouse.



Figure 13 – Looking north from the southern portion of the site towards Bushland Drive.



Figure 11 – Looking north-west from the Site, across the managed grassland to the E3 zoned land north of Bunnings.



Figure 14 – Looking west at the existing buildings within the site.



Figure 12 – Looking west towards Bunnings from within the Site (refer Appendix D).



Figure 15 – Looking east from Bunnings car park across the Site.



Figure 16 – View of the vegetation in the Bushland Drive road reserve just west of the existing and proposed entry driveway.



Figure 18 – View of the vacant industrial land to the north-west of the Site.



Figure 17 – View of the vegetation in the Grey Gum Road reserve, looking south-west towards the Site.



Figure 19 – View east of the Site from the vacant industrial land to the north of Bunnings.



Figure 20 - Aerial image of the cleared Site, looking north-east. Vegetation approved for removal dashed red.



Figure 21 - Aerial image of the cleared Site, looking south. Vegetation approved for removal dashed red.



Figure 22 - Aerial image of the cleared Site, looking south-west. Vegetation approved for removal dashed red.

2.2 Site History

The Site is not currently occupied. The Site, however, contains dilapidated workshop and depot buildings formerly used by Rail Corporation NSW (Railcorp), refer to Figure 14.

The Site was historically owned by the Rail Corporation of NSW (Railcorp) whom utilised the land as a Maintenance Workshop and Depot from circa 1977 to 2012. Railcorp disposed of the Site via private sale on 30 November 2021.

On 11 November 2024 Council granted development consent under DA2023/0800 to works within the site including:

- New access road (13m wide formed section inside 23m wide reservation) and new intersection and works within Bushland Drive which included new line marking for BAR treatment,
- Comprehensive stormwater management system including the construction of a stormwater detention basin and redirection of the existing piped culvert,
- Vegetation management works within the land zoned C2 Environmental Conservation and dedication of this land as a public reserve,
- Extension of essential infrastructure to the site and provision of internal infrastructure to service each of the proposed allotments including water, sewer, electricity and telecommunications,
- Completion of bulk earthworks and removal of all vegetation from within the site, and
- Torrens Title subdivision of the land into 12 industrial allotments.

An excerpt of the approved Industrial Subdivision is provided in Figure 23.

DA2023/0800 has been physically commenced via the receipt of the Controlled Activity Approval (ref CAA-2025-10058), the surveying and marking of the trees to be retained, surveying of the C2 zone boundary as well as vegetation removal from the majority of the Site (refer Error! Reference source not found. and Figures 10 through 15).

There are no indications of recent bushfire activity on the subject site and on immediately adjoining and adjacent land.



Figure 23 – Excerpt of the industrial subdivision approved under DA 2023/0800 (HDD).

2.3 Environmental Values

The subject site is not mapped as having biodiversity values subject to the provisions of the Biodiversity Conservation Act 2016, nor is it mapped as being within a riparian corridor or as subject to any mapped coastal wetlands or littoral rainforest, or their buffer. Further, vegetation within the Site has recently been removed pursuant to DA2023/0800, and as detailed in Figure 20 the site is predominately clear of vegetation with only

that existing in the C2 zoned land remaining.

The site is not mapped as Koala habitat or as being flood prone land.

No ecological assessment has been prepared as a part of this assessment. Previous ecological assessments for the site have been reviewed and considered as a part of this application. This includes the Biodiversity Development Assessment Report (BDAR) prepared by Boyds Bay Group (July 2024, reference 4116) and the Vegetation Management Plan prepared by Biodiversity Australia (April 2025, reference ENS6698).

Whilst both were prepared prior to the Site being cleared, it is noted that the vegetation within the C2 zoned land was described as Plant Community Type (PCT) 3249, being Northern Bloodwood-Ironbark Moist Grassy Forest. Refer to the area hatched orange in Figure 26. An area of non-native grassland was also identified on Site and is hatched blue.

The site is not mapped as having any Aboriginal or non-Aboriginal heritage values. Refer to the AHIMS search included in Appendix C.

2.4 Slope Assessment

Slope is a major factor to consider when assessing the bushfire risk for the proposed industrial lots which are the subject of this report.

The slopes affecting the proposed industrial subdivision were measured using a Suunto PC Clinometer.

The effective slope influencing fire behaviour approaching the Site has been assessed in accordance with the methodology specified within PBP. This is conducted by measuring the worst-case scenario slope where the vegetation occurs over a 100m transect measured outwards from the development boundary or the proposed uses. The slopes out from the site are generally flat or upslope as detailed in Figure 24 and Figure 25.

The Site is located at the bottom of three separate ridges with land to the north, west and south all rising upslope. Bunnings, on land directly adjoining to the west is elevated by 2m or more above the existing ground levels within the site being located within the start of the ridge which peaks west of the intersection of Bushland Drive and Wingham Road.

Similarly, land to the north slopes up to a peak approximately 20m higher than the site to the north-east of the termination of Evaron Drive.

The vacant industrial land to the west of the northern portion of the site is relatively flat as is the residential land to the east of Grey Gum Drive.

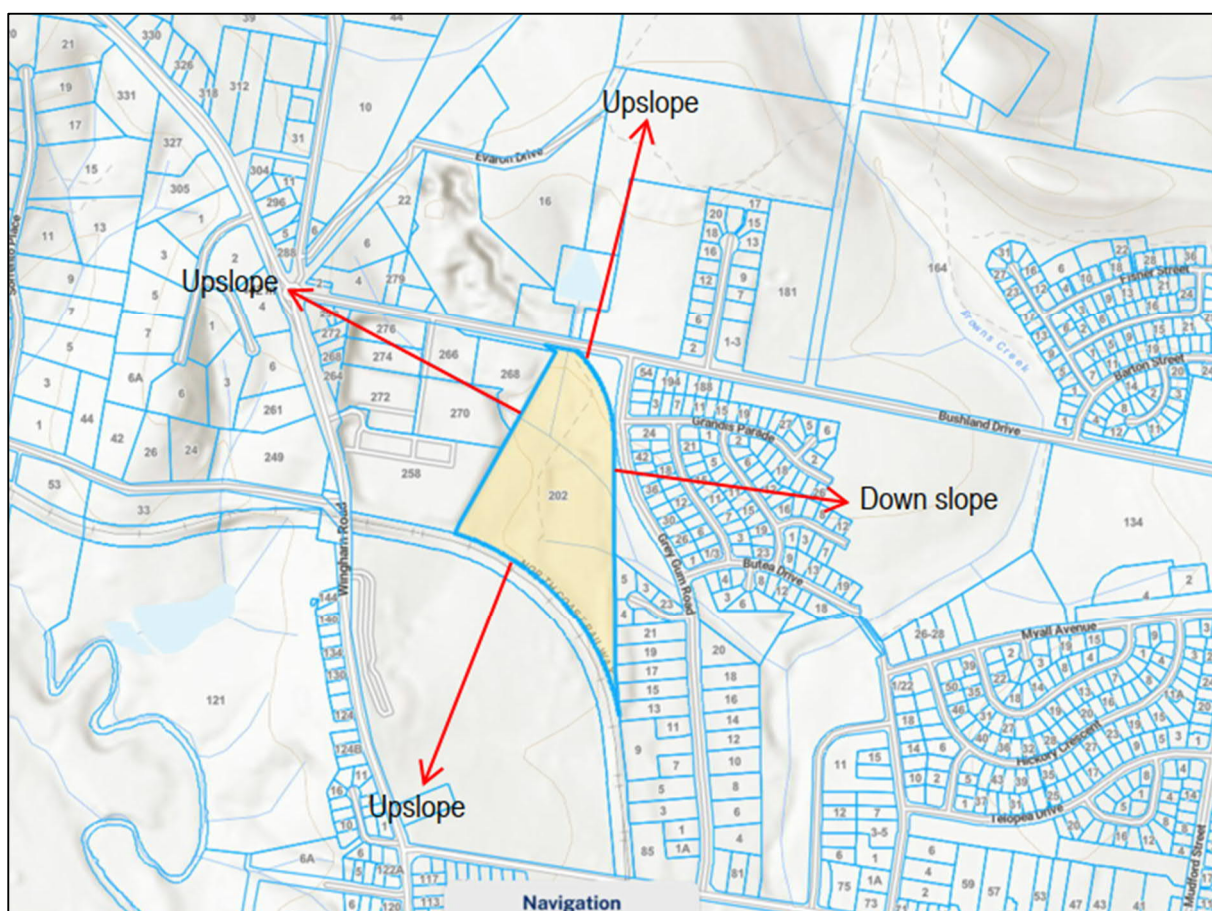


Figure 24: Assessment of the slope of the surrounding lands (edited from Six Maps).



Figure 25: Assessment of the slope of the site and surrounding lands (edited from Six Maps).

A summary of the slope characteristics surrounding the proposed dwelling's location are detailed in the following table:

Table 1 – Slope Assessment		
Hazard Aspect	Slope (degrees)	Upslope / Flat or Downslope
North-east	1 ^o - 2 ^o	Upslope
East	3 ^o - 4 ^o	Downslope
South-east	1 ^o - 2 ^o	Downslope
South	3 ^o	Upslope

*Note: In accordance with PBP all upslope vegetation is considered to be 0°.



Figure 26 – Excerpt of the vegetation mapping from the VMP prepared by Biodiversity Australia (April 2025).

2.5 Hazard Vegetation

An assessment of the bushfire hazard is necessary to determine the application of bushfire protection measures such as Asset Protection Zone (APZ) locations and dimensions and future building levels. The vegetation formations (bushfire fuels) and the topography (effective slope) combine to create the bushfire threat that may affect bushfire behaviour at the site, and which determine the Bushfire Attack Levels (BAL) and the required planning and building response of PBP.

The bushfire prone land mapping states that there is Category 2 and buffer bushfire hazard vegetation located within the Site with similar vegetation to the south-east and Category 1 and 3 vegetation on the northern side of Bushland Drive. The bushfire prone mapping of the site and surrounding lands is detailed in Figure 3.

The Site has recently been cleared, with the vegetation within the Site removed pursuant to the consent granted by Mid Coast Council under DA2023/0800. The bushfire prone land mapping therefore does not accurately reflect the existing Site conditions. Refer to Error! Reference source not found.. As such, there is no bush fire hazard vegetation currently present within the Site. The predominant bushfire threat stems from the vegetation within the C2 zoned portion of the Site running along the eastern and north-eastern edge of the site and that vegetation present on the northern side of Bushland Drive. This vegetation has an approximate area of 3ha, including 1.5ha within the C2 zoned portion of the Site. The width of this vegetation varies from 20m to a maximum of 100m, just north of Caesia Place.

2.6 Vegetation Assessment

The vegetation on site and the surrounding land was assessed over a distance of 140m from the subject site.

The vegetation formations were classified using the system adopted as per Keith (2004) and in accordance with Appendix 1 of Planning for Bushfire Protection 2019.

Where a mix of vegetation types exist, the type providing the greater hazard is said to predominate.

2.6.1 Vegetation within the site

As detailed in Figure 20, the Site is currently cleared of vegetation with the only vegetation remaining being that within the C2 zoned portion of the Site, along the northern and eastern edge. This vegetation has a width of approximately 20m widening out to around 100m and based on the approved Vegetation Management Plans aim to revegetate the entire C2 zoned area which extends from the Sites south-eastern corner to the proposed entry road in the north.

The site itself is predominately cleared of native vegetation consisting of bare earth with patches of modified, managed grass (noting that the vegetation along the mapped watercourses has also been granted for removal and will occur as a part of the previously approved civil works, refer area dashed red in Figure 20).

The maintained vegetation within the C2 zoned land has been identified by the ecologists as Plant Community Type (PCT) 3249, being Northern Bloodwood-Ironbark Moist Grassy Forest. Refer to the area hatched orange in Figure 26. This vegetation has been given a conservative classification of Forest vegetation.

An area of managed non-native grassland was also identified on Site and is hatched blue. As demonstrated in Figure 20 this area remains as managed non-native grass.

2.6.2 Vegetation on adjoining land

As detailed in Figure 26, the vegetation within the C2 zoned portion of the site extends to the east and consists of the same PCT, being Northern Bloodwood-Ironbark Moist Grassy Forest. There is a small area of unclassified vegetation to the south-east, towards the existing industrial area, however, recognising that this vegetation is sought to be revegetated in a similar manner to the existing forest vegetation, it too has been conservatively considered as forest vegetation.

To the south, the Site is separated from the Taree golf course by the North Coast rail line. This land is not mapped as a bushfire threat and has been considered managed land owing to the managed understorey present beneath the mapped Northern Bloodwood-Ironbark Moist Grassy Forest.

To the west, the Site is adjoined by the existing Bunnings Warehouse and vacant industrial land. A stormwater basin servicing Bunnings and the industrial land is also present to the west of the site.

The land to the north of Bushland Drive is zoned R1 General Residential. This land is however, occupied by vegetation mapped as Wet Sclerophyll Forests (Grassy sub-formation) or PCT 3244 being Lower North Spotted Gum-Mahogany-Ironbark Sheltered Forest. The Site is separated from this vegetation by Bushland Drive (30m wide) and a generous front setback.

To the east, beyond the Grey Gum Drive roadside vegetation exists either industrial or residential lands which are managed land devoid of native vegetation.

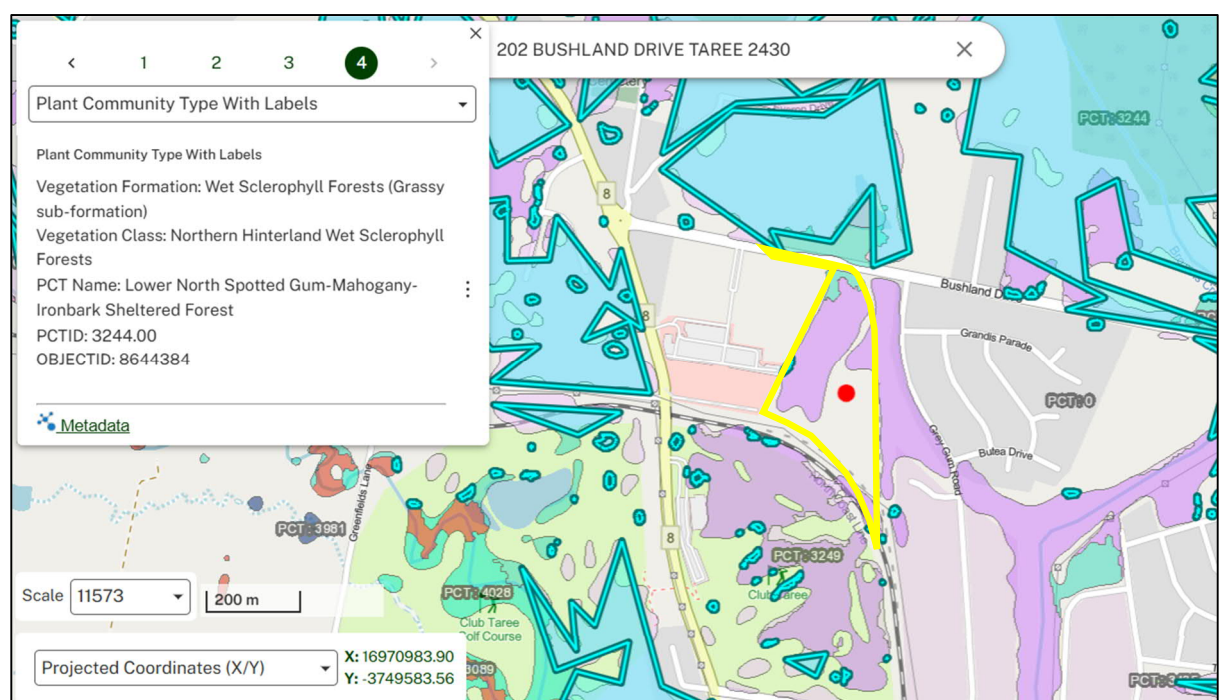


Figure 27: Mapped vegetation types on the surrounding land (SEED, NSW Government).

A site inspection confirmed that the mapped vegetation is generally consistent with that present on the site. It is noted however, that the significant weeds were present, including Lantana.

Table 2 – Summary of Hazard Vegetation Characteristics (Within 140m of the proposed dwelling)		
Hazard Aspect	Vegetation Description	Vegetation Classification (Keith, 2004)
North-east	Remnant Northern Bloodwood-Ironbark Moist Grassy Forest for a distance of 75m.	Forest
East	Remnant Northern Bloodwood-Ironbark Moist Grassy Forest for a distance of 20m.	Forest
South-east	Remnant Northern Bloodwood-Ironbark Moist Grassy Forest for a distance of 100m.	Forest
South	Remnant patches of Northern Bloodwood-Ironbark Moist Grassy Forest with managed understory within the Taree Golf Course.	Forest
West	Managed Land (Bunnings building and associated car park or vacant industrial land consisting of managed grass).	Managed

2.7 Fire Danger Index

The fire weather for the subject site is assumed on the worst-case scenario. In accordance with NSW Rural Fire Services publication Planning for Bushfire Protection, 2019, NSW Rural Fire Service, NSW Local Government Areas FDI, May 2017 and Table 2.1 of AS 3959 - 2018, the fire weather for the site is based upon the 1:50 year fire weather scenario and has a Fire Danger Index (FDI) of 80.

Section 3

Bushfire Threat Reduction Measures

The following section has been prepared considering the proposed development with respect to the requirements of the Rural Fires Act 1997, Rural Fires Regulation 2022 and the NSW Rural Fire Services publication Planning for Bushfire Protection 2019.

3.1 Planning for Bushfire Protection 2019

3.1.1 Asset Protection Zones

To ensure that the aims and objectives of NSW Rural Fire Services publication PBP are achieved for the proposed subdivision and construction of new specialised retail premises within the subject land, an Asset Protection Zone (APZ) between the asset (building) and the hazard should be provided.

PBP provides that a defensible space is;

An area adjoining an asset that is managed to reduce combustible elements and is free from constructed impediments. It is a safe working environment in which active firefighting can be undertaken to defend the structure, before and after the passage of a bush fire.

The APZ can include roads or properties managed to be consistent with APZ standards set out in RFS document Standards for Asset Protection Zones. The APZ provides a fuel-reduced, physical separation between buildings and bush fire hazards is a key element in the suite of bush fire measures and dictates the type of construction necessary to mitigate bushfire attack.

Whilst each bushfire event is different, fire spreads by responding to changes in fuel, terrain, and weather conditions. Therefore, based on landscape conditions and fire history, potential fire behaviour can be determined.

It is generally anticipated that a potential fire within the locality and surroundings would spread more quickly and have the potential for higher intensities when burning under the influence of northerly winds, particularly during warmer summer months.

Based upon the information contained within Sections 2 of this report, it is considered that climatic conditions are at times conducive to supporting bushfire, with the subject site being located adjacent to areas of vegetation which provide for fuel loads which are sufficient to support and promote bushfires. In this regard the most likely bushfire risk scenario would be a fire moving from the north towards the south under northerly wind conditions within the vegetation contained within various areas of hazard vegetation which are located on land to the north and east of the subject site.

It is however, noted that the presence of the Bushland Drive and Grey Gum Drive road corridors to the north, east and the managed land to the west of the subject site provides for significant disconnection to landscape scale fire conditions and as such bushfire activity adjacent to the subject site would be more consistent with smaller localized bushfire events and, as such, the modes of bushfire attack associated with any bushfire event would be expected to be significantly reduced from the landscape scale events assumed by PBP.

It is also noted that the narrow width of the hazard vegetation in the northern and eastern aspects of the Site would support the likelihood of reduced fire impacts on any future industrial development within the Site.

There is also bushfire potential to the south of the Site the scattered and managed vegetation within the golf course. However, the impacts of fire would be expected to be significantly reduced due to the landscape conditions in these aspects in particular the presence of upslope topographic conditions and the presence of developed residential and industrial lots on the land adjoining.

As per the Aim and objectives of PBP Section 1.1 (p.10) the proposed development needs to provide for defensible space and appropriate separation between hazard and buildings in a way that facilitates ongoing management. Whilst it is recognised that there are no specific provisions for Class 6 buildings (refer Section 8.3.1 of PBP) it is expected that the separation distance is typically required to be outside direct flame contact (i.e., Bushfire Attack Level (BAL) Flame Zone, or BAL-FZ).

The following separation distances are proposed:

- Tenancy 15 (Proposed Lot 1): 4m
- Tenancies 1-4 (Proposed Lot 3): 17.5m
- Tenancy 5 (Proposed Lot 3): 27.5m
- Tenancy 16 (Proposed Lot 3): 35m
- Tenancies 6-14 (Proposed Lot 3): >95m
- Proposed Lot 2 (Vacant): 17.5m

Using the provisions of PBP, specifically Table A1.12.6, which is for residential subdivisions, it is noted that a minimum setback of 15m is required for the proposed buildings to be outside of BAL-FZ. Tenancies 1-14, 16 and the vacant Lot 2 achieve this through the spatial separation and inclusion of a perimeter access or service road.

Tenancy 15 setback seeks to provide a 4m setback and using the residential subdivision provisions of Table A1.12.6 would therefore be within BAL-FZ.

However, in considering Section 8.3.10 Commercial and Industrial Development of PBP, for applications such as this with no residential component, satisfying the aims and objectives of PBP should therefore be achieved, with no requirement for a BAL to be identified. The following comments are therefore made with respect to the aims and objectives:

- The Proposed Tenancy 15 affords occupants protection from exposure to bushfire by orientating the frontage and openings away from the hazard. Limiting openings to fire and egress emergency exits only. Further, the proposed use of non-combustible materials including precast concrete panel and corrugated metal cladding construction finishes to these elevations is considered to provide adequate fire protection to the building.
- A 4m wide defensible space will be provided around the hazard side of the building, ensuring a level of protection is afforded to the building. Recommendations on the maintenance of this area are included within this assessment report.

Reference to Clause C2D2 and Specification 5 of the NCC provides that a 3m separation distance to a fire source is required for firefighting activities and is generally accepted by the NSW Fire Brigade as being sufficient to allow for firefighting in relation to smaller industrial buildings, (<2000m² in floor area – Type C construction).

- This building is separated from the other buildings within the development by distance (approximately

80m) and both public and private roads. The chance of fire spreading between buildings is therefore considered low.

- Appropriate operational access and egress for emergency services is afforded to the building via the proposed car park and defensible space around the building.
- Recommendations for conditions which can be added to any consent granted have been included within which, if implemented, will allow for the on-going management and maintenance of the proposed building, and
- Recommendations are proposed to ensure utility services, particularly gas bottles (noting reticulated gas supply is not available within Taree), are stored on the non-hazard side of the building. Which in this case is the south-western elevation of the building.

3.1.2 Asset Protection Zone Management

In accordance with the provisions of PFBP 2019, APZ's must be managed in accordance with the provisions of Appendix 4. PFBP 2019 divides APZ's into:

- Inner Protection Areas (IPA's) which aim to reduce the impact of direct flame contact and radiant heat on the development and act as a defensible space, and
- Outer Protection Areas (OPA's) which are located between the IPA and the unmanaged vegetation. It is an area where there is maintenance of the understorey and some separation in the canopy with an aim to reducing fuel to decrease the intensity of an oncoming fire.

3.1.3 Operational Access and Egress

The site is accessible via Bushland Drive and the proposed new road which will be a sealed all weather public road constructed to Mid Coast Council engineering standards. The proposed road has been designed to terminate in a level roundabout before entering the development site.

Each of the proposed allotments will have frontage to the proposed public road.

Proposed Lot 3, which will include the Specialised Retail Premises also seeks to include a perimeter service road (7m width) which will be of all-weather surface and has been designed to accommodate large vehicles and will therefore be suitable for firefighting vehicles.

The proposed car park also seeks to provide an 8m wide main entry access driveway with all other lanes having 7m width. The proposed internal access widths therefore exceed the minimum 4m carriage width. There are also no identified constrictions, and a circular access pattern is proposed ensuring vehicles, including firefighting vehicles, can access and exit in a forward's direction.

No vegetation will overhang any of the proposed roads or internal access driveways or service lanes.

It is considered that the proposed access arrangements are acceptable for the proposed industrial subdivision and specialised retail premises, having regard to the nature, construction and extent of the existing public road infrastructure which is present and that proposed. Acceptable standards of access will therefore be available for existing and future buildings within Proposed Lot 2.

The proposal is therefore considered compliant with the access objectives of PBP.

3.1.4 Services

Adequate water supplies will be provided to each of the proposed allotments to ensure protection of buildings during and after the passage of a bush fire. Hydrants will be required throughout the development to enable ready access to water supply for firefighting purposes. It is, however, noted that the determination of a guaranteed water supply to the development on each proposed lot is to be made by the water supply authority where mains water supply is available.

Electricity supply is available in the locality and will be accessible to each of the proposed industrial lots. All electrical services will be provided underground within the proposed development.

No reticulated gas supply is available within the Mid Coast Local Government Area.

The provision of services to the future development of Proposed Lot 2 will be subject to compliance with the relevant requirements of PBP and assessed at the time of application.

The proposal is therefore considered compliant with the service and utilities objectives of PBP.

3.1.5 Landscaping

Landscaping is a major cause of fire spreading to buildings, and therefore any landscaping proposed in conjunction with the future development of each proposed lot will need consideration when planning, to produce gardens that do not contribute to the spread of a bushfire.

When planning any future landscaping surrounding any future development on each of the proposed lots, consideration should be given to the following:

- The choice of vegetation – consideration should be given to the flammability of the plant and the relation of their location to their flammability and ongoing maintenance to remove flammable fuels.
- Trees as windbreaks/firebreaks – Trees in the landscaping can be used as windbreaks and also firebreaks by trapping embers and flying debris.
- Vegetation management – Maintain a garden that does not contribute to the spread of bushfire.
- Maintenance of property – Maintenance of the property is an important factor in the prevention of losses from bushfire.

PBP contains standards that are applicable to the provision and maintenance of landscaping. It is noted that the provision of landscaping as part of the design and construction of the proposed industrial subdivision is subject to compliance with the relevant provisions of Appendix 4 of PBP.

Compliance with Appendix 4 of PBP will satisfy the intent of the bush fire protection measures that are applicable to the provision of landscaping associated with the future development of each lot within the proposed industrial subdivision.

3.1.6 Emergency Evacuation & Management

Whilst the emergency management provisions of Chapter 6 of PBP are not specifically relevant to the proposed development, it is noted that the bushfire threat management performance objectives which apply to industrial and commercial development includes the following:

- To provide suitable emergency and evacuation (and relocation) arrangements for occupants of the

development.

Given the size of the site and the shielding afforded by the proposed buildings from the bushfire prone vegetation to the north and east, it is considered that an emergency evacuation and management plan should be developed and implemented for each of the proposed allotments.

In this regard, it is considered that the proposed road and cul-de-sac provide opportunities for relocation during a fire event within 300m of all proposed buildings, and Proposed Lot 2.

It is also noted that the bushfire threat management performance objectives which apply to industrial and commercial development includes the following:

- Consideration of storage of hazardous materials away from the hazard wherever possible.

In this regard, it is recommended, where possible, that the storage of hazardous materials, including gas, be stored on the non-hazard side of the buildings (i.e., not along the eastern elevations of Tenancies 1-5, 15 or 16 and not along the northern elevation of Tenancy 15).

It is considered that the design of the proposed specialised retail premises provides opportunities to minimize any risks associated with the storage of hazardous materials if relevant to any future use of the proposed tenancies, including internal storage where compliant with relevant standards.

3.2 AS 3959: Construction of Buildings in Bushfire Prone Areas

The 'Deemed-to-Satisfy' provisions for building construction requirements are detailed in AS 3959-2018 Construction of Buildings in Bushfire Prone Areas, however, in NSW the relevant Bushfire Attack Level (BAL) and construction requirements must be determined in accordance with Appendix 1 of PBP (in particular Table A1.12.6), rather than in accordance with Section 2 of AS 3959 - 2018.

Notwithstanding the above, the construction requirements of AS3959 – 2018 will not be specifically relevant to the development within each of the proposed industrial lots, as these provisions are not considered to be applicable by virtue of the assumed (in the case of proposed Lot 2) and proposed uses of building infrastructure, (not being a residential/accommodation or Special Fire Protection Purpose development), and the likely NCC classifications as Class 5 – 8 and 9b buildings.

In this regard it is noted that the application of Part G5, (Construction Requirements in Bushfire Prone Areas), of the NCC in NSW only applies to:

- a Class 2 or 3 building,
- a Class 4 part of a building,
- a Class 9 building that is a Special Fire Protection Purpose, or
- a Class 10a building or deck associated with a building referred to above.

Accordingly, the determination of BAL's, in accordance with Appendix 1 of PBP and AS3959 – 2018 is not relevant to the proposed development or future development of the proposed industrial Lot 2, as compliance with Part G5 of the NCC and, hence, AS3959 – 2018 are not mandatory in this instance.

In this regard the proposed specialised retail buildings are Class 6, the gymnasium a Class 9b and the future buildings within the proposed industrial Lot 2 will be required to comply with the relevant fire safety requirements of the NCC which can be accepted for bushfire compliance purposes where the aims and objectives of PBP are met. The general fire safety construction provisions of the NCC are taken as acceptable solutions where

industrial developments are undertaken within proposed Lot 2 and accordingly the requirements of Appendix 1 of PBP and AS3959 – 2018 may not be applicable to the future industrial buildings constructed within.

In consideration of the above, the design and construction of future buildings within proposed Lot 2 will need to be the subject of a lot specific bushfire hazard assessment based upon the nature and extent of the future specific development proposal for the proposed lot.

In this regard, the relevant fire safety requirements of the NCC can be accepted for bushfire compliance purposes where the aim and objectives of PBP are met (refer to Section 3.1.1).

Section 4

Summary of Requirements

In reviewing the information provided within this assessment and the proposed industrial subdivision and specialised retail premises plan enclosed as Appendix A, the following requirements are recommended to ensure compliance with the Rural Fires Act 1997, Rural Fires Regulation 2022 and Planning for Bushfire Protection 2019:

- All vegetation within the Proposed allotments are to be created and maintained to the standards which are applicable to Inner Protection Areas.
- The design and construction of the proposed road and car park aisles are to comply with the property access road standards provided for in Section 5.3.2 of Planning for Bushfire Protection, 2019.
- Water and other services are to be provided in accordance with the requirements of Section 5.3.3 of Planning for Bushfire Protection, 2019.

In this regard, water supplies shall be located at regular intervals. Fire hydrant, spacing, design and sizing shall comply with the relevant clauses of Australian Standard AS 2419.1:2005. Hydrants are not located within any road carriageway.

Fire hydrant flows and pressures shall comply with the relevant clauses of AS 2419.1:2005.

- The provision of gas to the proposed buildings (where installed) must comply with the following in accordance with Table 5.3c / Table 7.4a of Planning for Bush Fire Protection 2019:
 - a) bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities, and metal piping is used,
 - b) all fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side (the hazard side in this instance is the north and east to Tenancy 15 and east to Tenancies 1-5 and 16),
 - c) connections to and from gas cylinders are metal,
 - d) polymer-sheathed flexible gas supply lines are not used, and
 - e) above-ground gas service pipes are metal, including and up to any outlets.
- An Emergency and Evacuation Plan, incorporating bushfire evacuation is to be prepared for each of the proposed allotments prior to their occupation.
- Any new building(s) constructed within the proposed Lot 2 shall be the subject of a separate, specific bushfire assessment to ensure construction in accordance with the provisions of AS 3959 – Construction of Buildings in Bushfire Prone Areas,
- The area between proposed Tenancy 15 and the vegetation within the C2 zoned land shall be maintained as an Inner Protection Area with a minimum width of 3m to remain clear at all times.

Based upon the completed site inspection and the assessment of the proposed subdivision against the relevant provisions of PfBP 2019 and AS 3959, it has been determined that the proposed development can occur in the

manner proposed, subject to the implementation of the recommendations outlined above.

Any further development of these lots (excluding internal fit-out and occupation works) will require additional assessment and may require further protection measures to reduce the potential impacts of a bushfire on both the building and its occupants.

Compliance with the recommendations above are considered to significantly improve the chances of a building within the development site surviving a bushfire. However, it should be noted that compliance with the above does not guarantee survival of a building. Bushfires are influenced by a variety of weather, climatic and other anthropogenic events and, by their very nature, are unpredictable. It is therefore the responsibility of the current and future landowners to ensure that the recommendations are implemented and maintained in perpetuity.