

Bushfire Assessment

156-166 Rickard Road, Leppington
SSD-84430209
Mixed-use Residential Precinct

Prepared for
Rickard 88 Development Pty Ltd

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Glossary

This section defines those core terms and concepts which are adopted throughout the body of this report.

Term	Definition
Asset Protection Zone (APZ)	A fuel-reduced area surrounding a built asset or structure which provides a buffer zone between a bushfire hazard and an asset. The APZ includes a defensible space within which firefighting operations can be carried out. The size of the required APZ varies with slope, vegetation and FFDI.
Bushfire	A general term used to describe fire in vegetation, includes grass fire.
Bushfire attack mechanisms	The various ways in which a bushfire can impact upon people and property and cause loss or damage. These mechanisms include flame contact, radiant heat exposure, ember attack, fire wind and smoke.
Bushfire Attack Level (BAL)	A means of measuring the severity of a building's potential exposure to ember attack, radiant heat, and direct flame contact. The BAL is used as the basis for establishing the requirements for construction to improve protection of building elements and to articulate bushfire risk.
Bushfire Design Requirements	A separate (Attachment 17) design document to assist the master planning with requirements and specifications to provide compliance with PBP 2019.
Bushfire prone land (BPL)	An area of land that can support a bushfire or is likely to be subject to bushfire attack, as designated on a bushfire prone land map.
Bushfire Hazard	Any vegetation that has the potential to threaten lives, property, or the environment.

Bushfire Strategic Study (SBS)	Provides the opportunity to assess whether new development is appropriate in the bushfire hazard context.
Bushfire Threat	Potential bushfire exposure of an asset due to the proximity and type of a hazard and the slope on which the hazard is situated.
Hazard	A hazard is any source of potential harm or a situation with a potential to cause loss. A hazard is therefore the source of risk.
Likelihood	The chance of an event occurring. Likelihood may be represented as a statistical probability (such as an annual exceedance probability), or whether this is not possible, it can be represented qualitatively using measures such as 'likely', 'possible' and 'rare'.
Managed land	Land that has vegetation removed or maintained to a level that limits the spread and impact of bushfire. This may include developed land (residential, commercial, or industrial), roads, golf course fairways, playgrounds, sports fields, vineyards, orchards, cultivated ornamental gardens and commercial nurseries. Most common will be gardens and lawns within curtilage of buildings. These areas are managed to meet the requirements of an APZ.
Mitigation	The lessening or minimizing of the adverse impacts of a bushfire event. The adverse impacts of bushfire cannot be prevented fully, but their scale or severity can be substantially lessened by various strategies and actions. Mitigation measures include engineering techniques, retrofitting and hazard-resistant construction as well as on ground works to manage fuel and separate assets from bushland.
Planning for Bushfire Protection 2019 (PBP 2019)	NSW Rural Fire Service publication effective from 1 March 2020 which is applicable to all new development on bushfire prone land in NSW.

Resilience	The ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management. UNDRR 2017
Risk	The degree of risk presented by that interaction will depend on the likelihood and consequence of the bushfire occurring. Risk may be defined as the chance of something happening, in a specified period of time that will have an impact on objectives. It is measured in terms of consequences and likelihood.
Risk assessment	A systematic process of evaluating the potential risks that may be involved in a projected activity or undertaking, having regard to factors of likelihood, consequence, vulnerability, and tolerability.
Risk-based land use planning	The strategic consideration of natural hazard risk and mitigation in informing strategic land use planning activities.

Executive Summary

This Bushfire Assessment has been prepared by Blackash Bushfire Consulting on behalf of Rickard 88 Development Pty Ltd (the Applicant) to address the project-specific Secretary's Environmental Assessment Requirements (SEARs) issued the proposed State Significant Development Application (SSDA) SSD-84430209. The development is located at 156-166 Rickard Road, Leppington (the Site) and is located within the South West Growth Area (SWGA) within the Camden Local Government Area (LGA).

The proposed development seeks to deliver a mixed-use residential precinct within Leppington Town Centre, referred to as the 'Residential Core'. The Residential Core Precinct will deliver a range of housing typologies in the form of build-to-rent, residential flat buildings and affordable housing units, as well as serviced apartments. This will unlock a total of 1,206 dwellings, comprising 1017 residential apartments and 189 affordable housing units for Leppington Town Centre.

The site is identified on the Bush Fire Prone Land Map as being affected only by a mapped bushfire buffer associated with an isolated pocket of Category 2 vegetation located west of Rickard Road. The site is otherwise surrounded by managed land and existing/planned urban development, resulting in a low bushfire risk profile, with the primary credible exposure mechanism being ember attack and limited radiant heat potential from the small vegetated pocket to the west.

In response to the relevant SEARs requirement for bushfire risk, this assessment identifies the bushfire constraints and confirms the proposal can achieve the necessary bushfire protection outcomes consistent with *Planning for Bush Fire Protection 2019* (PBP 2019). In particular, the development can be supported by APZ provision that maintains radiant heat exposure below 29 kW/m², and the site benefits from robust access and egress via the existing and planned urban road network with a low likelihood of isolation during a bushfire event. Reticulated water and essential utilities can be provided to support firefighting and life safety outcomes.

On this basis, the SSDA and concurrent rezoning request are supportable from a bushfire planning perspective, subject to detailed design documentation and conditions of consent implementing the bushfire protection measures identified in this assessment.

1. Introduction

Blackash Bushfire Consulting has been engaged by Rickard 88 Development Pty Ltd to prepare a Bushfire Assessment in support of the SSDA and concurrent rezoning for land at 156–166 Rickard Road, Leppington (Camden Local Government Area), being Lot 37 DP 8979 (166 Rickard Road) and Lot 38A DP 8979 (156 Rickard Road).

The site is mapped as being bushfire prone and, as such, the rezoning must address Ministerial Direction 4.3 – *Planning for Bush Fire Protection* and demonstrate consistency with *Planning for Bush Fire Protection 2019* (PBP 2019) published by the NSW Rural Fire Service (NSW RFS). This assessment has been prepared to support the SSDA and the concurrent rezoning component to confirm the land is suitable for the intended urban outcome in the context of bushfire risk, and for the proposed development.

I Corey Shackleton, confirm this Bushfire Assessment addresses the requirement of SEAR No. 84430209 and relevant State and local legislation, policies, and guidelines including *Planning for Bush Fire Protection 2019*. I further confirm that none of the information contained in the Bushfire Assessment is false or misleading.



SEARs Item	Report Reference
If the development is on mapped bush fire prone land, or a bush/grass fire threat is identified on or adjoining the site, provide a bush fire assessment that details proposed bush fire protection measures and demonstrates compliance with Planning for Bush Fire Protection.	All

2. Project Description

The proposed development seeks to deliver a mixed-use residential precinct within Leppington Town Centre, referred to as the 'Residential Core'. The Residential Core Precinct will deliver a range of housing typologies in the form of build-to-rent, residential flat buildings and affordable housing units, as well as serviced apartments. This will unlock a total of 1,206 dwellings, comprising 1017 residential apartments and 189 affordable housing units for Leppington Town Centre. Specifically, the SSDA seeks consent for:

- Delivery of site preparation works across the site, including demolition, vegetation removal, subdivision and internal road network,
- Delivery of public domain and open space works which contributes to the broader Leppington Town Centre open space network, and

- Construction of nine (9) buildings, comprising of built-to-rent, affordable housing and serviced apartments in Blocks 1-5 and associated parking.

This assessment addresses the strategic bushfire considerations relevant to the rezoning and confirms that, the proposed development is capable of accommodating the intended urban outcome while achieving PBP 2019 objectives.

3. Rezoning Summary (Controls)

The proposed development is supported by concurrent rezoning application to seek amendments to Appendix 5 Camden Growth Centres Precinct Plan within the State Environmental Planning Policy (Precincts – Western Parkland City) 2021 pursuant to the concurrent rezoning process through the Housing Delivery Authority (HDA) planning pathway. This concurrent rezoning will provide the rezoning and variations to development standards required to facilitate the delivery of the Residential Core Precinct and Leppington Town Centre, generally in accordance with the Leppington Town Centre State-Assessed Rezoning Proposal (SARP).

4. Site Context

The subject land is located at 156–166 Rickard Road, Leppington within the Leppington Town Centre and is accessed from Rickard Road. While Leppington Town Centre extends across both the Camden and Liverpool local government areas, the subject site is located entirely within the Camden LGA.

The site comprises Lot 37 DP 8979 (166 Rickard Road) and Lot 38A DP 8979 (156 Rickard Road) and is approximately 4.3 hectares in area with approximately 180 metres frontage to Rickard Road. The topography is relatively level and generally falls from the south-west to the north-east.

The site is cleared and currently occupied with 2 dwellings.



Legend

Watercourse

Subject Land



Date: 6/03/2026

0 0.25 0.5

Kilometers

Coordinate System: GDA2020 MGA Zone 56

Imagery: © Nearmap

Figure 1: Location

BUSHFIRE CONSULTING



5. Compliance Approach

The design of the site meets the deemed to satisfy requirements of PBP 2019. No alternative solutions or performance-based assessment have been undertaken or relied upon for any part of this assessment.

The strategic planning process provides the opportunity to determine if the site complies with the legislative requirements pertaining to safety and potential risk to life and the capability of the site to comply with various bushfire objectives. This report uses a conservative approach that demonstrates the proposal can meet the legislative and planning requirements. The fundamental issue being tested in this rezoning application, is the determination of the suitability of the site for rezoning considering bushfire safety and then to ensure the proposed development to complies with PBP 2019.

In a bushfire context, strategic land use planning must ensure that future land uses are in appropriate locations to minimise the risk to life and property from bushfire attack. The broad principles which apply to the analysis, and which are demonstrated in this report are¹:

- ensuring land is suitable for development in the context of bushfire risk and broader environmental impacts
- ensuring new development on BPL will comply with the minimum requirements of PBP 2019
- minimising reliance on performance-based solutions
- providing adequate infrastructure associated with emergency evacuation and firefighting operations
- facilitating appropriate ongoing land management practices.

This report will demonstrate that the SSDA and concurrent rezoning affords utilisation of the site for the proposed land uses which are able to meet PBP 2019.

The bushfire assessment has been prepared in coordination with the Architectural and landscape design. All bushfire requirements have been met and integrated into the design.

¹ Planning for Bushfire Protection 2019 p. 34

6. Strategic Planning for Bushfires

Land use planning is widely recognised as an important measure for limiting future vulnerabilities and losses in areas of new development and a critical element for building disaster resilient communities.

The physical design and layout of communities and settlements are central to the many functions that sustain the social, economic and environmental support systems for the community. Land use planning provides the opportunity to manage new growth and residual risk resulting from new development by complying with legislation and standards, limiting or modifying the location of new development and influencing its layout. This can limit both the impacts of new development on natural systems, ecosystem services and hazards and the flow on impacts on the existing community, as well as limiting the impacts that natural hazards can have on new development and its users.

The strategic planning system is particularly important in contributing to the creation of resilient, safe and sustainable communities that are in keeping with the policy and intent of government.

The *National Strategy for Disaster Resilience* (2011)² recognises that strategic planning is essential in creating safer and sustainable communities. In keeping with the policy and intent of government at all levels. Priority outcomes of Section 3.6 include:

- *All levels of decision making in land use planning and building control systems take into account information on risks to the social, built, economic and natural environments.*

This assessment has been completed having regard to the following Commonwealth documents:

- *National Strategy for Disaster Resilience* (2011)
- *Land Use Planning for Disaster Resilient Communities* (2020)
- *National Disaster Risk Reduction Framework* (2018)

Comprehensive consideration of bushfires and risks in the NSW planning system needs sound understanding of the landscape context and risks, as well as clarity on risk management principles and on the approach to strategic planning and development controls that will

² NSDR <https://www.homeaffairs.gov.au/emergency/files/national-strategy-disaster-resilience.pdf>

adequately mitigate identified risks. Where there are competing policy objectives, such as biodiversity conservation and fuel reduction, an agreed methodology or guidance is critical.

As such, planning decisions must be based on the best available evidence and rigorous merits-based assessment to ensure that new development - people, homes and businesses are not exposed to unacceptable risk from bushfire. The framework provided within PBP 2019 provides the minimum requirements for new development within bushfire prone areas.

Improved land use planning decisions and building controls for developments in bushfire prone areas are intrinsic to an integrated approach to the fire management in NSW. The application of legislation, policy, and guidelines provides one of the most effective means of bushfire planning to ensure future developments are resilient and capable of protecting life.

The importance of sound land use planning has been recognised in most significant bushfire inquiries, including Natural Disasters in Australia which noted that land use planning that considers natural hazard risks is the single most important mitigation measure in preventing future disaster losses in areas of new development, and that planning, and development controls must be effective, to ensure that inappropriate developments do not occur³.

This report focuses on disaster resilience which means planners, hazard leaders, emergency managers and other built environment professionals can contribute to:

- understanding and anticipating bushfire risks before they happen and developing more resilient land use and built form tailored to address bushfire risks
- minimising the increase in risks to people and disruptions to social and economic functions when a disaster strikes by ensuring compliance with state requirements for new development in Bushfire Prone Areas

This report recognises the balanced approach provided within NSW for new development in Bush Fire Prone Areas that recognises the need to protect human life, provide safe operating environment for fire and emergency services while having due regard to the environmental impacts, development potential of land and the need to cater for growing populations is provided in this assessment.

³ Ellis, S et al (2004) National Inquiry on Bushfire Mitigation and Management (p.92)

7. Legislative Framework

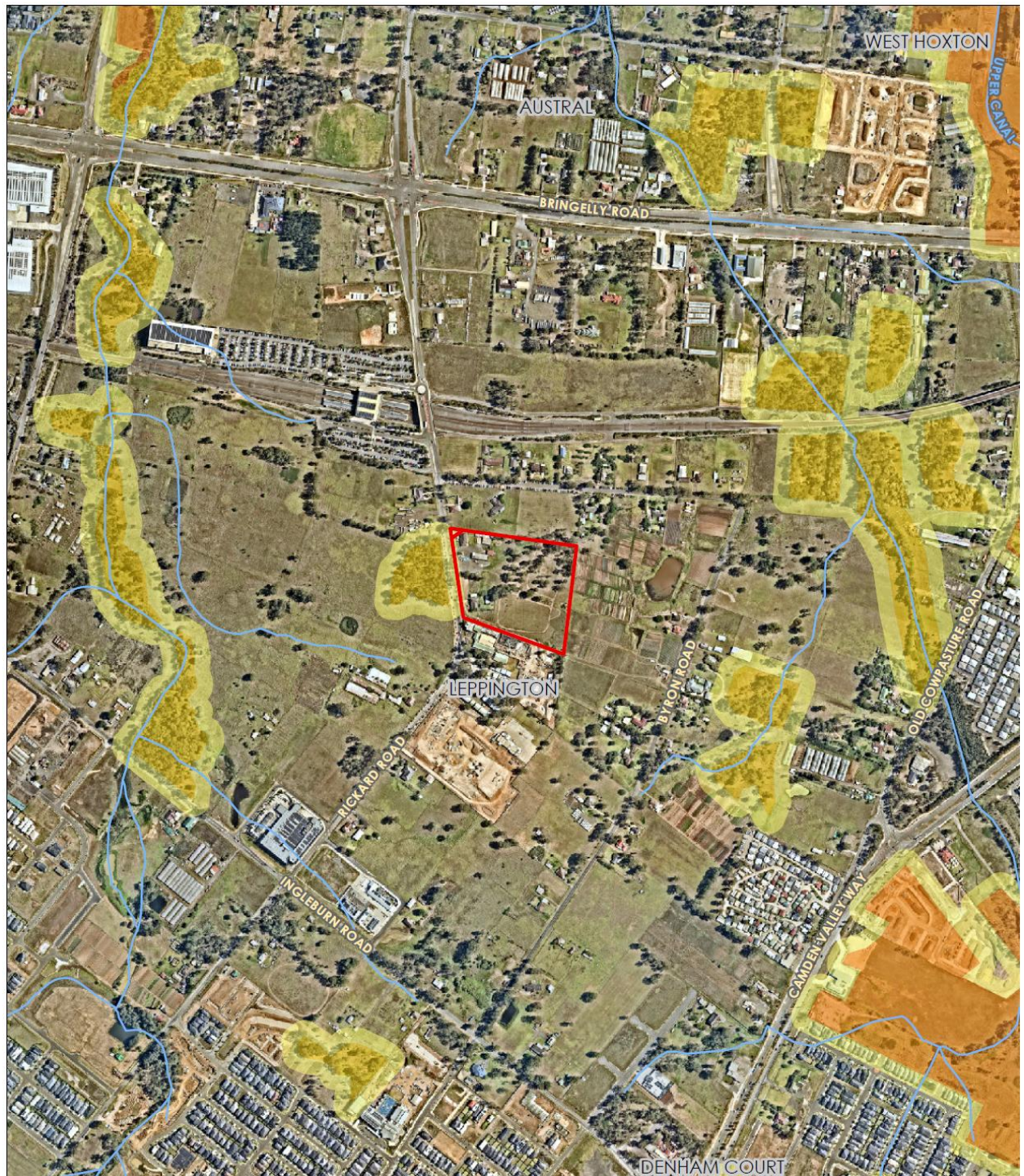
The landuse planning framework relates to landuse planning and bushfire in NSW is embedded in the EP&A Act, the *Rural Fires Act 1997* (RF Act), *Rural Fires Regulation 2013* (RFR) which is articulated through PBP 2019.

The study area is identified as being within 'bushfire prone land' (see Figure 3) for the purposes of Section 10.3 of the EPA Act and the legislative requirements for development on BPL are applicable.

Bushfire Prone Land Maps (BPLM) provide a trigger for the development assessment provisions and consideration of sites that are bushfire prone. BPL is land that has been identified by council, which can support a bushfire or is subject to bushfire attack. The BPLM are prepared by local council and certified by the Commissioner of the NSW RFS.

BPLM map vegetation hazards and provide a suitable buffer distance from that vegetation. They are an indication of potential bushfire attack only and are not a risk assessment of land.

Camden Council's Bush Fire Prone Land Map (BPLM) indicates the site is affected only by the mapped bushfire buffer associated with a small area of Category 2 (lower risk) vegetation located to the west, on the opposite side of Rickard Road. No other mapped bush fire prone land categories are shown as affecting the site.



Legend

Watercourse

Subject Land

Bushfire Prone Land

Vegetation Buffer

Vegetation Category 2

Vegetation Category 3

DKGIS

Date: 24/02/2026

0 250 500

Meters

Coordinate System: GDA2020 MGA Zone 56

Imagery: © Nearmap

Figure 3: Bushfire Prone Land Map

8. Ministerial Direction 4.3 Planning for Bushfire Protection

The EPA Act sets out the laws under which planning in NSW takes place. The main parts of the EPA Act that relate to development assessment and approval are Part 3 (Planning Instruments) and Part 4 (Development Assessment).

EPA Act Section 9.1 provides for the Planning Minister to direct councils to apply certain standards (detailed in the Direction) when preparing Rezoning for consideration. These Directions cover a range of practice areas and carry legislative weight. Planning Direction 4.3 Planning for Bush Fire Protection (Appendix 3) states that:

This direction applies to all local government areas when a relevant planning authority prepares a planning proposal that will affect, or is in proximity to, land mapped as bushfire prone land.

Importantly, a Rezoning must:

- (a) have regard to Planning for Bush Fire Protection 2019;*
- (b) introduce controls that avoid placing inappropriate developments in hazardous areas; and*
- (c) ensure that bushfire hazard reduction is not prohibited within the APZ.*

This assessment is provided to demonstrate that the SSDA and concurrent rezoning component has had regard to PBP 2019, avoids inappropriate development in bushfire hazard areas, and does not preclude hazard reduction within the APZ, consistent with Ministerial Direction 4.3.

EPIs are statutory plans made under Part 3 of the EP&A Act that guide development and land use. These plans include State Environmental Planning Policies (SEPPs) and Local Environmental Plans (LEPs). LEPs zone land and provide controls for a suitable range of permissible uses to be confirmed through the SSDA detailed design documentation and secured via conditions of consent.

9. Planning for Bush Fire Protection 2019

The specific objective of this assessment is to assess the proposed development with the strategic assessment considerations in Chapter 4 of PBP 2019. PBP 2019 provides the required considerations in addressing Ministerial Direction 4.3.

The rezoning outcome aligns with the strategic objective to deliver affordable housing supply, while demonstrating compliance with Ministerial Direction 4.3 and the requirements of PBP 2019 whilst also balancing other requirements such as access, amenity, ecology, and the like.

The assessment provides the opportunity to assess whether new development is appropriate in the bushfire hazard context at a strategic or landscape scale. It also provides the ability to assess the strategic implications of future development for bushfire mitigation and management. The assessment must first demonstrate the proposal complies with the overall Aim and Objectives of the document.

All new development on bushfire prone land must comply with PBP. The aim of PBP 2019 (p. 10) is:

to provide for the protection of human life and minimise impacts on property from the threat of bushfire, while having due regard to development potential, site characteristics and protection of the environment.

The objectives (PBP 2019 p. 10) are to:

- *Afford buildings and their occupants protection from exposure to a bushfire*
- *Provide for a defendable space to be located around buildings*
- *Provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to buildings*
- *Ensure that appropriate operational access and egress for emergency service personnel and occupants is available*
- *Provide for ongoing management and maintenance of Bushfire Protection Measures; and*
- *Ensure that utility services are adequate to meet the needs of firefighters*

Chapter 4 of PBP 2019 articulates the regulatory framework for Rezoning in NSW, along with a series of assessment considerations that are required before a determination can be made regarding a Rezoning.

PBP 2019 Section 4.2 (in part, p. 34):

A Strategic Bush Fire Study must include, as a minimum, the components in Table 4.2.1.

Once these strategic issues have been addressed, an assessment of whether the proposal can comply with this document should be carried out. If the strategic issues cannot be resolved, then the proposal cannot comply with PBP and will not be supported by the NSW RFS.

Strategic planning must address the level of detail required for the SSDA and concurrent rezoning, without necessarily providing final construction-ready plans for every built-form element. The purpose is to demonstrate, at this stage, that the proposal can achieve compliant bushfire outcomes, with detailed implementation confirmed through the SSDA design documentation and secured via conditions of consent.

10. Strategic Planning Compliance

PBP 2019 requires that rezonings in bushfire prone areas require the preparation of an assessment. For strategic level assessment, this requirement relies on the application demonstrating it is possible to provide complying asset protection zones (APZ) for the proposed development, and that roads and services (water, electricity and gas) will meet PBP 2019.

This assessment is effectively an SBS, providing a strategic level assessment, requiring a balance between providing sufficient information to determine the suitability of the site, but also addressing the detail through the detailed assessment and conditions of consent for the SSDA, consistent with PBP 2019 requirements. In relation to rezonings, PBP 2019 (p. 19) notes that:

The most important objective for strategic planning is to identify whether new development is appropriate subject to the identified bushfire risk on a landscape scale. An assessment of proposed land uses and potential for development to impact on existing infrastructure is also a key element of the strategic planning process in bushfire prone areas. Land use planning policies can be introduced to limit the number of people exposed to unacceptable risk.

Once development has been assessed as being appropriate in its bush fire prone context, it will need to be capable of complying with PBP. The ability of proposed land uses and associated future developments to comply with PBP will be assessed

at the strategic planning stage. The expectation will be that the development will be able to comply with PBP at the DA stage.

The design team has considered and responded to the bushfire requirements within PBP 2019. In a bushfire context, the design team has provided a Rezoning that ensures future development is in appropriate locations to minimise the risk to life and property from bushfire attack and the proposed development complies with PBP 2019.

The design team has incorporated the broad principles PBP 2019 (p. 34) for strategic planning into the Rezoning which apply to the risk assessment of an area which includes:

- *ensuring land is suitable for development in the context of bushfire risk*
- *ensuring new development on BPL will comply with PBP*
- *minimising reliance on performance-based solutions*
- *providing adequate infrastructure associated with emergency evacuation and firefighting operations*
- *facilitating appropriate ongoing land management practices.*

PBP 2019 also outlines exclusion of inappropriate development in bushfire prone areas which includes:

- *the development area is exposed to a high bushfire risk and should be avoided*
- *the development is likely to be difficult to evacuate during a bushfire due to its siting in the landscape, access limitations, fire history and/or size and scale*
- *the development will adversely effect other bushfire protection strategies or place existing development at increased risk*
- *the development is within an area of high bushfire risk where density of existing development may cause evacuation issues for both existing and new occupants*
- *the development has environmental constraints to the area which cannot be overcome.*

PBP 2019 requires that the SBS must include, as a minimum, the components identified in Table 4.2.1 of PBP 2019 – Bushfire Strategic Study (p.35) as shown in Figure 4.

Strategic planning for the SSDA and concurrent rezoning must provide sufficient detail to demonstrate that the proposal can achieve compliant bushfire outcomes, without requiring fully finalised, construction-ready plans for every built-form element. The purpose at this stage is to establish the strategic merit and an appropriate planning framework for the concurrent

rezoning component, with detailed design, servicing and final compliance confirmed through the SSDA design documentation and secured via conditions of consent (and, where applicable, any subsequent Stage).

This approach aligns with the SSDA pathway, where the focus is on confirming the suitability of the site for the proposed land uses and identifying key planning principles—such as land use mix, urban structure, infrastructure needs, environmental constraints, and bushfire risk. Detailed matters such as built form, access arrangements, landscaping, staging, and site-specific compliance with development controls will be addressed through the SSDA detailed assessment / conditions of consent.

By taking this approach, the SSDA and concurrent rezoning component establish the strategic framework and demonstrate bushfire feasibility, while allowing detailed design refinement to be confirmed through SSDA documentation and secured by conditions of consent (and, where applicable, any subsequent stage). This staged planning framework provides certainty around land use permissibility and strategic alignment, without pre-empting or constraining the detailed design and assessment processes that are more appropriately undertaken at a later stage.

11. General Obligations

All owners and land managers (both public and private) have a duty to prevent the occurrence and spread of bushfires on or from their land. This duty is legislated under Section 63 of the RFA.

Local risk mitigation is coordinated through Bushfire Risk Management Plans (BRMP). These guide programs to implement specific treatments. Treatments may include such things as hazard reduction burning, establishing and maintaining APZ, grazing, preparing pre-incident plans, establishing and maintaining fire trails and community engagement. These may be applied to public and private landowners and as notified steps carry the legislative weight of Section 63.

ISSUE	DETAIL	ASSESSMENT CONSIDERATIONS
Bush fire landscape assessment	A bush fire landscape assessment considers the likelihood of a bush fire, its potential severity and intensity and the potential impact on life and property in the context of the broader surrounding landscape.	➤ The bush fire hazard in the surrounding area, including: ➤ Vegetation ➤ Topography ➤ Weather ➤ The potential fire behaviour that might be generated based on the above; ➤ Any history of bush fire in the area; ➤ Potential fire runs into the site and the intensity of such fire runs; and ➤ The difficulty in accessing and suppressing a fire, the continuity of bush fire hazards or the fragmentation of landscape fuels and the complexity of the associated terrain.
Land use assessment	The land use assessment will identify the most appropriate locations within the masterplan area or site layout for the proposed land uses.	➤ The risk profile of different areas of the development layout based on the above landscape study; ➤ The proposed land use zones and permitted uses; ➤ The most appropriate siting of different land uses based on risk profiles within the site (i.e. not locating development on ridge tops, SFPP development to be located in lower risk areas of the site); and ➤ The impact of the siting of these uses on APZ provision.
Access and egress	A study of the existing and proposed road networks both within and external to the masterplan area or site layout.	➤ The capacity for the proposed road network to deal with evacuating residents and responding emergency services, based on the existing and proposed community profile; ➤ The location of key access routes and direction of travel; and ➤ The potential for development to be isolated in the event of a bush fire.
Emergency services	An assessment of the future impact of new development on emergency services.	➤ Consideration of the increase in demand for emergency services responding to a bush fire emergency including the need for new stations/brigades; and ➤ Impact on the ability of emergency services to carry out fire suppression in a bush fire emergency.
Infrastructure	An assessment of the issues associated with infrastructure and utilities.	➤ The ability of the reticulated water system to deal with a major bush fire event in terms of pressures, flows, and spacing of hydrants; and ➤ Life safety issues associated with fire and proximity to high voltage power lines, natural gas supply lines etc.
Adjoining land	The impact of new development on adjoining landowners and their ability to undertake bush fire management.	➤ Consideration of the implications of a change in land use on adjoining land including increased pressure on BPMs through the implementation of Bush Fire Management Plans.

Figure 4: Requirements of a Bush Fire Strategic Study (PBP 2019 p. 35)

12. Bushfire Landscape Assessment

The bushfire landscape assessment considers the likelihood of a bushfire, its potential severity and intensity and the potential impact on life and property in the context of the broader surrounding landscape. The broader landscape and the potential size or scale of a bushfire has been a key design response by the project team throughout the preparation of the Rezoning.

12.1. Bushfire Hazard

PBP 2019 provides a methodology to determine the bushfire threat and commensurate size of any Asset Protection Zone (APZ) that may be required to offset possible bushfire attack. These elements include the potential hazardous landscape that may affect the site and the effective slope within that hazardous vegetation. For new residential development, the APZ requirements are based on providing practical building envelopes that keep radiant heat levels below 29kW/m².

The following assessment is prepared in accordance with Section 100B of the RFA, Section 44 of the *Rural Fires Regulation 2013* (RFR) and PBP 2019. This assessment is based on the following resources:

- Planning for Bush Fire Protection (RFS, 2019);
- Camden Council Bush Fire Prone Land Map;
- Aerial mapping; and
- Detailed GIS and Site analysis.

The methodology used in this assessment is in accordance with PBP 2019 (p.80) and is outlined in the following sections.

12.2. Fire Danger Weather District

PBP 2019 requires a credible worst case bushfire weather scenario at a 1:50 year bushfire weather event. The Camden LGA is in the Greater Sydney Fire Weather District in NSW and has a FFDI of 100. The relevant acceptable solution for a residential development in PBP 2019 is provided by Table A1.12.2 (p. 90).

12.3. Vegetation Assessment

Vegetation is the fundamental physical component of determining the bushfire behaviour. Vegetation, in broad terms provides the available fuel to be consumed by a bushfire. Fuel load and arrangement represent a considerable component in dictating to a large degree

the behaviour of fire in terms of intensity, rate of spread and flame height, and typically relates to dead plant material less than 6mm thick, and live plant material thinner than 3mm.

Vegetation type, density and arrangement can further influence fire behaviour and intensity. Vertical and horizontal continuity is also a significant element. Thus, vegetation forms a key consideration within this report. The vegetation provides a basis for the determination for bushfire intensity mapping.

The vegetation assessment has been completed in accordance with PBP 2019. The predominant Vegetation is classified by structure or formation using the system adopted by David Keith (2004) and by the general description using PBP 2019.

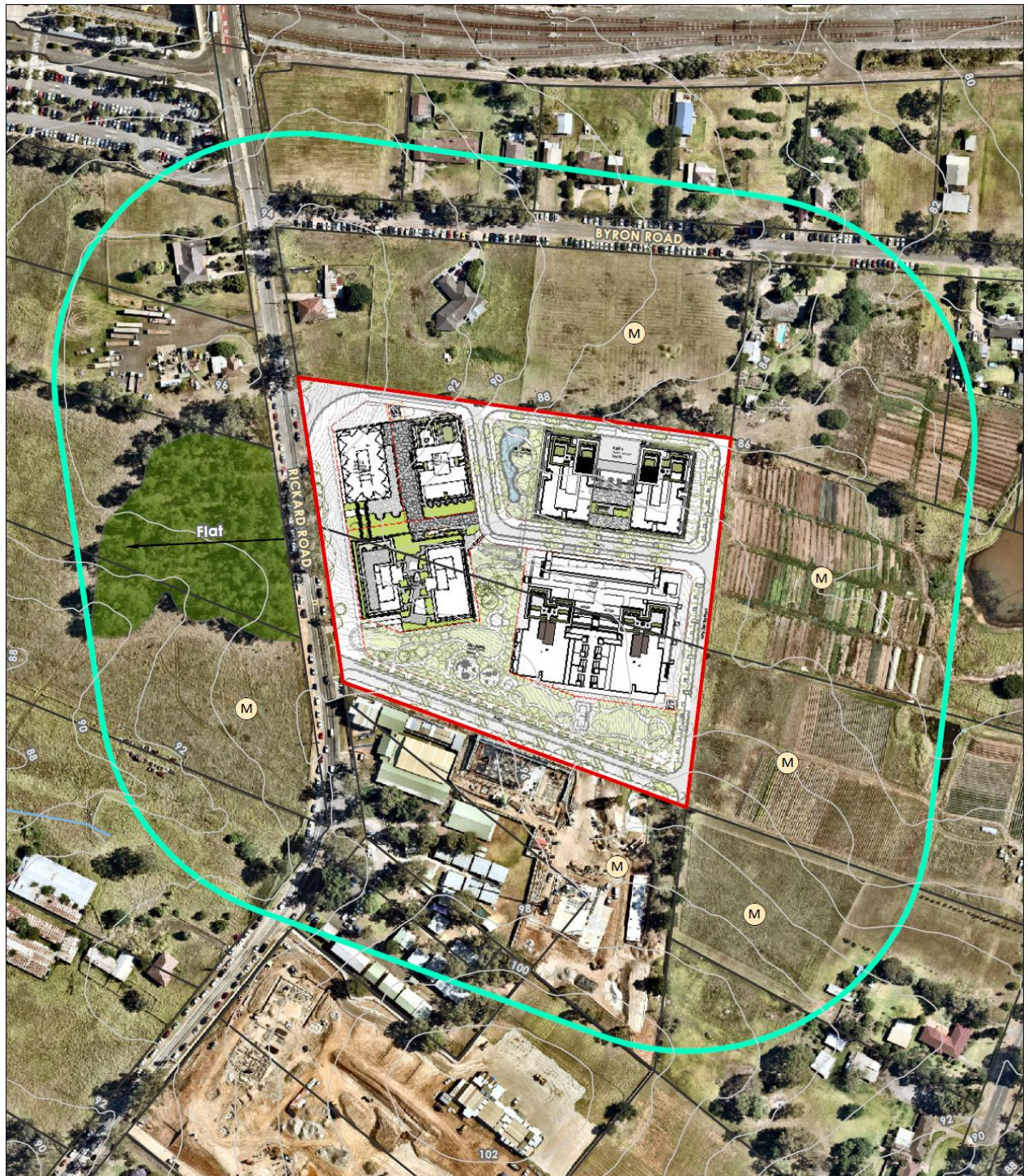
Vegetation types give rise to radiant heat and fire behaviour characteristics. The predominant vegetation has been determined for the site over a distance of at least 140 metres in all directions from the proposed site boundary or key assets on the development site. Where a mix of vegetation types exists, the type providing the greater hazard is said to predominate.

The site is surrounded by managed land on all sides, with the exception of an isolated pocket of Coastal Valley Grassy Woodlands located to the west of Rickard Road. This is the only area of bush fire prone vegetation in the immediate vicinity of the site (refer Figure 5).

12.4. Slopes Influencing Bushfire Behaviour

PBP 2019 requires assessment of slope. The slope of the land under the classified vegetation has a direct influence on the rate of fire spread, the intensity of the fire and the ultimate level of radiant heat flux. The effective slope is the slope of the ground under the hazard (vegetation). In identifying the effective slope, it may be found that there are a variety of slopes covering different distances within the vegetation. The effective slope is the slope under the vegetation which will most significantly influence the bushfire behaviour for each transect. This is usually the steepest slope.

An analysis of the slope has been shown at Figure 6 for the site. The site and surrounds all slope gently (<2 degrees). The effective slope for the isolated pocket of Coastal Valley Grassy Woodlands is considered as level.



Legend

- Watercourse
- Vegetation Assessment Buffer
- Contour - 2m
- Managed Land
- Subject Land
- Cadastre
- Coastal Valley Grassy Woodlands

Vegetation Class

- Coastal Valley Grassy Woodlands



Date: 6/05/2026

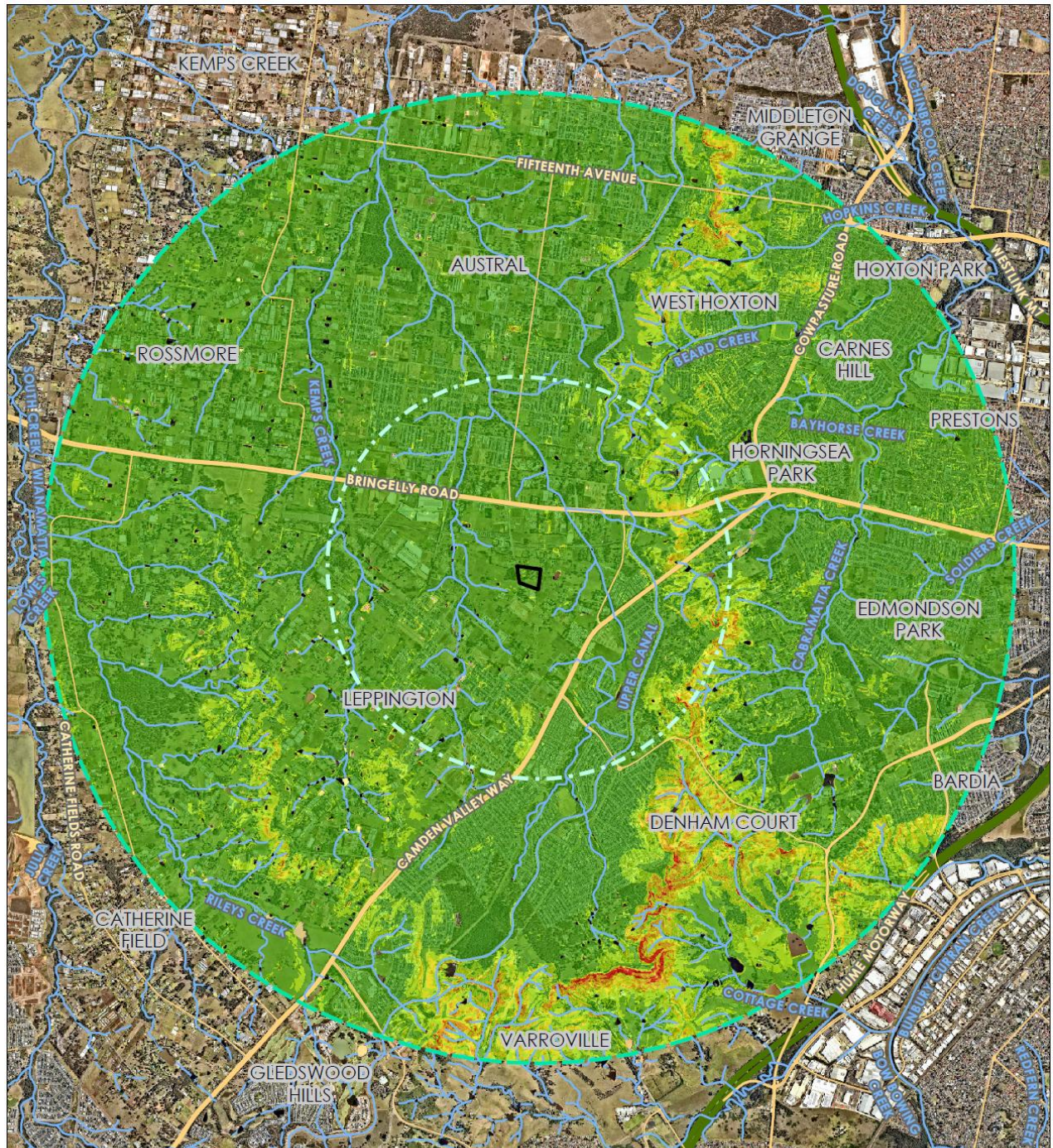
0 50 100

Meters

Coordinate System: GDA2020 MGA Zone 56

Imagery: © Nearmap

Figure 5: Vegetation Formations



Legend

- Watercourse
- Motorway
- Major Road
- Minor Road
- Subject Land
- Study Area - 5km Buffer
- Study Area - 2km Buffer



Date: 27/02/2026

Prepared By: FMC



Coordinate System:
GDA2020 MGA Zone 56

Base Data: NSW Spatial Services 27/02/2026; Slope: derived from 5m DEM © Commonwealth of Australia (Geoscience Australia) 27/02/2026; Imagery: ©Nearmap 14/12/2025

Figure 6: Slope Analysis

12.5. Potential Fire Behaviour

Given the surrounding development in the area, past and present rural management practices and the future development surrounding the site, there is limited bushfire behaviour potential within or surrounding the site.

12.6. Fire History

Given the limited substantial bushland within the area, the site has not been impacted by fire (see Figure 7). The previous fire history presents no concern to the site or any proposed development.

12.7. Potential Fire Runs

As discussed above, there is limited potential fire behaviour potential for the site or surrounding areas and the site cannot be impacted by large landscape scale fires. The Rezoning includes PBP 2019 compliant APZs and other measures that will allow fires to be managed onsite using the suite of Bushfire Protection Measures.

There is excellent public road access to the site and all future development. The Rezoning meets the acceptable solutions for APZs per Table A1.12.1. Lastly, while there is potential for small fires to impact the site from the west, there are no large, connected forested corridors able to carry fire into the site. (Figure 8)

12.8. Fire Suppression

There are no identified difficulties in accessing and suppressing the fires that could occur around or within the site. The site has excellent sealed two-lane public road access and reticulated water.

The overall area surrounding the site and the site itself, is characterised by either managed lands, existing development, roads or rural properties. The surrounding area is well broken up by existing development, grazed areas, roads and other small breaks providing a range of suppression options based on specific conditions during an incident.

Access for incoming firefighting resources is excellent, with multiple roads and directions, and well-maintained sealed roads which do not need to traverse bushfire prone areas.

There are RFS brigades at Leppington (1.5km) and Fire & Rescue NSW at Horningsea Park (4.3km). There are numerous other RFS and Fire & Rescue stations within a 15 minute drive. There are sufficient resources to manage localised fires.



- Study Area - 5km Buffer
Study Area - 2km Buffer

Fire History

- 2018
■ 2006 - 2015



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Date: 27/02/2026

Prepared By: FMC



Coordinate System:
GDA2020 MGA Zone 56

Base Data: NSW Spatial Services 27/02/2026; **Fire History:** NSW Fire History © NSWRFs 27/02/2026; **Imagery:** ©Nearmap 14/12/2025

Figure 7: Fire History



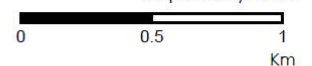
Legend

- Watercourse
- Major Road
- Minor Road
- Track
- Subject Land
- Study Area - 2km Buffer
- Fire Run



Date: 27/02/2026

Prepared By: FMC



Coordinate System:
GDA2020 MGA Zone 56

Base Data: NSW Spatial Services 27/02/2026; Imagery: ©Nearmap 14/12/2025

Figure 8: Potential Fire Runs

13. Land use assessment

13.1. Risk profiles

The intensity of a bushfire, which determines to a large extent how much damage it will do, is a product of the fuels burning (quantity, arrangement, size, moisture content), the weather at the time (temperature, wind speed and direction, relative humidity, atmospheric stability) and the topography of the land where the fire is burning (slope and aspect).

The risk profile of the site and future development area is very low due to the limited bushfire hazard in the area. The PBP 2019 compliant APZs will be more than adequate to mitigate the risk. See Managed Land Map (Figure 9).

Appropriately designed (in accordance with PBP 2019), constructed (in accordance with AS3959) and prepared buildings may offer people options for sheltering during most bushfires, reducing the likelihood of bushfire-related injury and death. The nationally agreed position is that the safest option is to leave a bushfire prone area early on days with a Fire Danger Rating of Severe or higher.

The bushfire risk is best mitigated by compliance with PBP 2019 and the ability of the Rezoning to provide complying APZs.

13.2. Asset Protection Zones

For proposed new development, PBP 2019 requires that a minimum separation is provided in the form of Asset Protection Zones (APZ). The APZ is a fuel-reduced, physical separation between buildings and bushfire hazards. The APZ requirements vary based on the type of development and the nature of the bushfire hazard.

The proposed residential development is required to demonstrate that radiant heat levels of no greater than 29 kW/m² will be experienced at the buildings. This is easily achieved given the adjoining managed land which dominates the landscape (see Figure 9).

All future buildings within the site are capable of achieve this requirement and ensuring compliance with AS3959 (as appropriate). See Figure 10.

Table 1: BAL Assessment.

Direction	Slope	Vegetation	Min APZ Required	APZ Provided
North	NA	Managed Land	NA	NA
East	NA	Managed Land	NA	NA
South	NA	Managed Land	NA	NA
West	Level	Coastal Valley Grassy Woodlands	12 metres	>20 metres

Adjoining Future Development

The subject site is situated within the Leppington Town Centre, a key precinct of the South West Growth Area identified by the NSW Government as a major urban renewal and development zone. This location forms part of a broader master planned area that will play a significant role in delivering much-needed housing, commercial spaces, and infrastructure to support Sydney's growing population.

Importantly, the broader precinct is earmarked for imminent future development, with adjoining and surrounding lands to be urbanised and built out in accordance with the Leppington Town Centre Master Plan. This staged urban rollout will see the current rural landscape transition rapidly into a high-density urban environment, effectively altering the bushfire risk profile of the area.

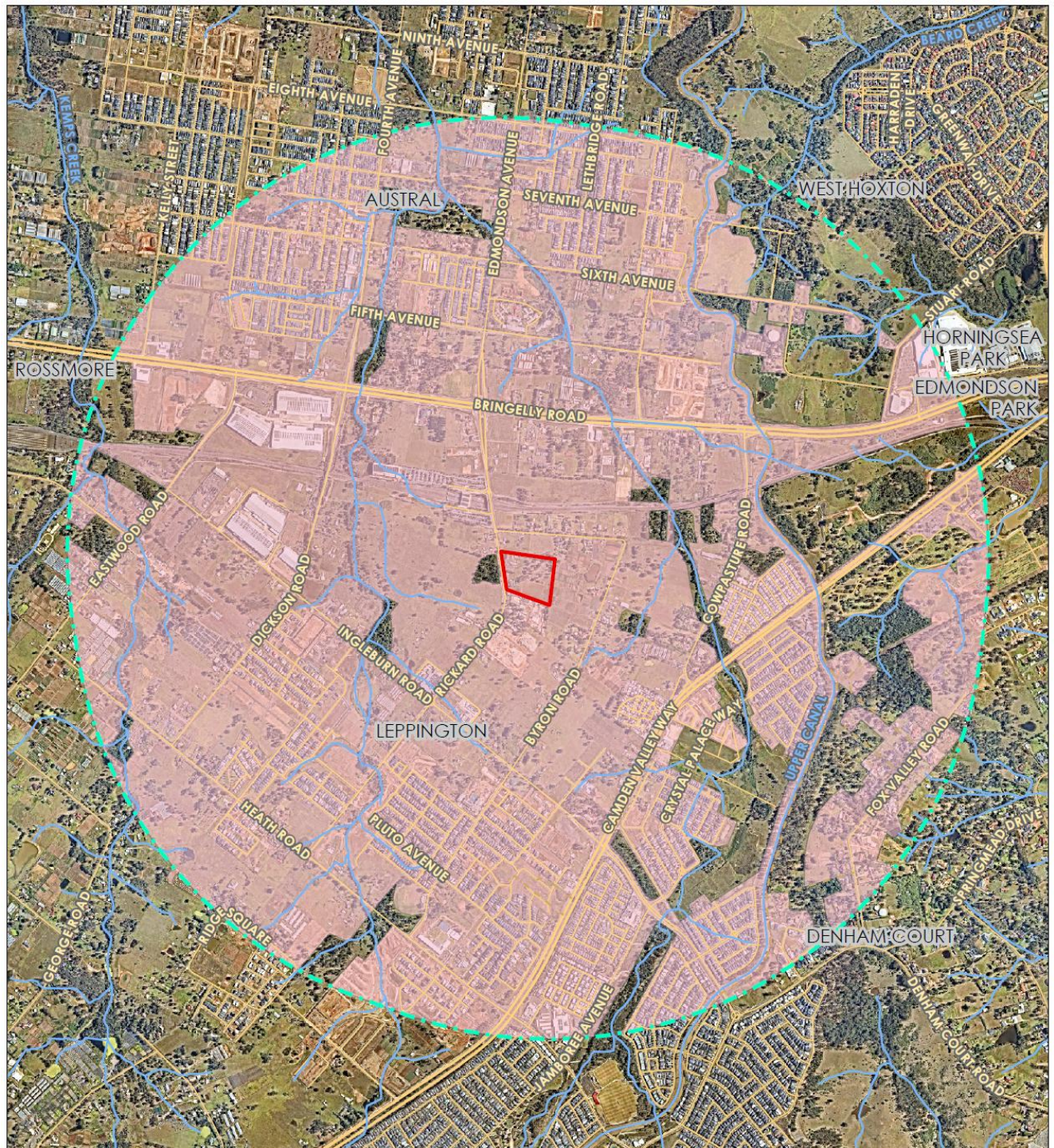
In this context, the application of bushfire protection measures must strike a balance between safety and practicality. Bushfire provisions should acknowledge evolving character of the area, the extensive future development that will substantially modify existing vegetation patterns and buffers, and the temporary nature of any current low risk bushfire hazards.

13.3. Building Construction

The Bushfire Attack Levels (BAL) is a means of measuring the ability of a building to withstand attack from bushfire. The form of bushfire attack and severity will vary according to the conditions (FDI, vegetation, slope and setback) on the site.

The BAL assesses the severity of a building's potential exposure to ember attack, radiant heat and direct flame contact, using increments of radiant heat expressed in kilowatts per square metre, which is the basis for establishing the requirements for construction to improve protection of a building from potential attack by a bushfire, as defined in Australian Standard AS 3959-2009 Construction of buildings in bushfire-prone areas (AS 3959-2018).

The BAL ratings are used as the basis for establishing the requirements for construction to improve protection of a (proposed) building from potential bushfire attack. The Bushfire Attack Levels to the site has been assessed from PBP 2019 Table A1.12.5 and determined as shown in Figure 11.



Legend

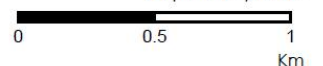
- Watercourse
- Major Road
- Minor Road
- Track

- Subject Land
- Study Area - 2km Buffer
- Managed Land within 2km



Date: 27/02/2026

Prepared By: FMC



Coordinate System:
GDA2020 MGA Zone 56

Base Data: NSW Spatial Services 27/02/2026; Imagery: ©Nearmap 14/12/2025

Figure 9: Managed Land



Legend

- Watercourse
- Contour - 2m
- Subject Land
- Cadastre
- Managed Land

Vegetation Class

- Coastal Valley Grassy Woodlands

Asset Protection Zone

- Asset Protection Zone - 12m

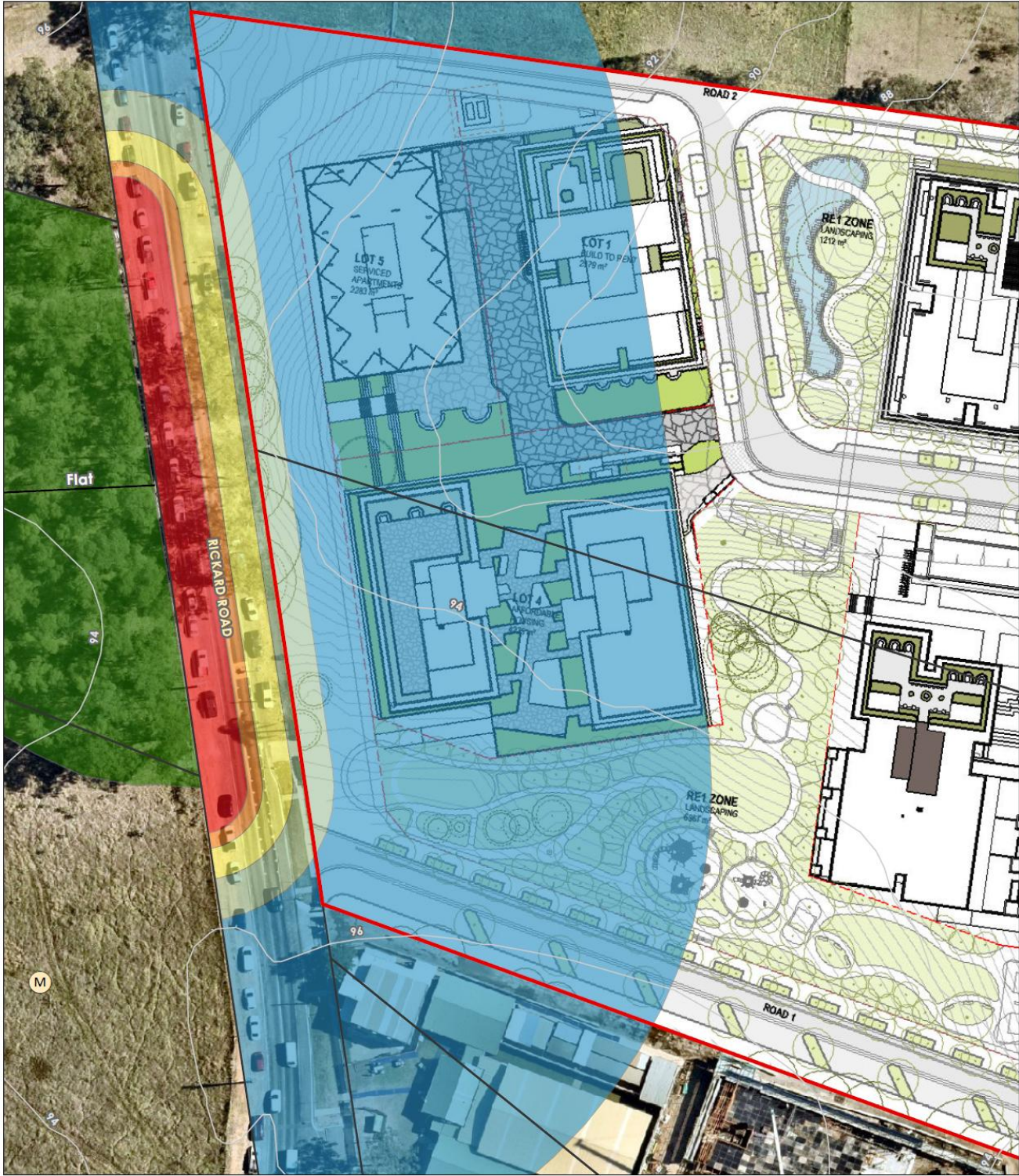


Date: 6/05/2026

0 10 20
Meters

Coordinate System: GDA2020 MGA Zone 56
Imagery: © Nearmap

Figure 10: Minimum Asset Protection Zone Requirements



Legend

- Watercourse
- Contour - 2m
- Subject Land
- Cadastre
- Managed Land

Vegetation Class

- Coastal Valley Grassy Woodlands

Bushfire Attack Level (BAL)

- BAL - Flame Zone
- BAL - 40
- BAL - 29
- BAL - 19
- BAL - 12.5

DKGIS
Date: 6/05/2026
0 10 20
Meters

Coordinate System: GDA2020 MGA Zone 56
Imagery: © Nearmap

Figure 11: Bushfire Attack Levels

14. Access and Egress

14.1. Capacity

The site has existing connections to the arterial and local road networks that service the region. This enables the effective distribution of traffic from the site to the wider road network. The future dwellings and buildings will have direct access to public roads. The local road network is capable of servicing the volumes of traffic generated by the proposed residential development and while not considered ever required, the roads could accommodate the evacuation of residents and concurrently the responding of emergency services.

The proposed road network meets the standards detailed in the provisions of Table 6.8b and the Rezoning therefore complies with PBP 2019. See Figure 12

14.2. The location of key access routes and direction of travel

The national position of fire agencies is that *the safest action to protect life is for people to be away from the bushfire or threat of bushfire*⁴. This is underpinned by comprehensive emergency management arrangements and operational fire management systems that focus on the provision of information, advice, and warnings to assist communities to make informed decisions prior to the impact of bushfire and if necessary be out of Bushfire Prone Areas well before the impact of fire.

Given the nature of the site and the limited bushfire risk, there are no key access roads which will be impacted by bushfire in a manner that will cause issues for residents or responding brigades. The site provides for travel in all directions with limited bushfire risk.

14.3. The potential for development to be isolated in the event of a bush fire.

There is no risk that the site can be isolated in the event of a bushfire.

⁴ Australasian Fire and Emergency Services Authorities Council. (2019) *Bushfires and Community Safety Position* (AFAC Publication No. 2028)



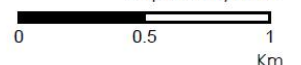
Legend

- Watercourse
- Subject Land
- Study Area - 2km Buffer
- Major Access Road for Emergency Management
- Major Road
- Minor Road
- Track
- Fire and Rescue NSW
- NSW Rural Fire Service



Date: 27/02/2026

Prepared By: FMC



Coordinate System:
GDA2020 MGA Zone 56

Base Data: NSW Spatial Services 27/02/2026; Emergency Services: NSW Features Of Interest - Emergency Services 27/02/2026; Imagery: ©Nearmap 14/12/2025

Figure 12: Road Infrastructure

15. Emergency Services

15.1. Demand for emergency services

The nature of the bushfire risk does not create a potential increase in demand for emergency services responding to a bush fire emergency considered above or beyond the typical demands for such a development.

15.2. Ability of emergency services to carry out fire suppression.

The nature of the bushfire risk and proposed development does not impact on the ability of emergency services to carry out fire suppression in a bushfire emergency.

There are RFS brigades at Leppington (1.5km) and Fire & Rescue NSW at Horningsea Park (4.3km). There are numerous other RFS and Fire & Rescue stations within a 15 minute drive. There are sufficient resources to manage localised fires. See Figure 13.

16. Infrastructure

16.1. Reticulated water

The Site is serviced by reticulated water and this servicing arrangement is relied upon for the SSDA detailed design assessed in this report. Given the site's low bushfire risk profile and urban context, reticulated water supply is appropriate to support bushfire preparedness and response consistent with PBP 2019.

Electricity supply for the SSDA detailed design assessed in this report complies with the relevant requirements of PBP 2019. Any gas services (where provided) are installed and maintained in accordance with AS/NZS 1596 – *The storage and handling of LP Gas* (Standards Australia, 2008), consistent with PBP 2019.

16.2. Life safety issues

There are no high voltage power lines or gas lines on the site.

17. Adjoining Land

17.1. Implications on Adjoining Land

The change in land use will have no negative implications on adjoining land from a bushfire perspective. The site will be fully self-sufficient in terms of BPMs and no increased bushfire risk will be created.



Legend

- | | |
|--|---|
|  Watercourse |  Study Area - 5km Buffer |
|  Motorway |  Study Area - 2km Buffer |
|  Major Road |  Fire and Rescue NSW |
|  Minor Road |  NSW Rural Fire Service |
|  Subject Land |  Neighbourhood Safer Place |



Date: 27/02/2026

Prepared By: FMC



Coordinate System:
GDA2020 MGA Zone 56

Base Data: NSW Spatial Services 27/02/2026; Emergency Services: NSW Features Of Interest - Emergency Services 27/02/2026; Neighbourhood Safer Places: © NSWRFSS 27/02/2026; Imagery: ©Nearmap 14/12/2025

Figure 13: Emergency Services & Neighborhood Safer Places

18. Bush Fire Strategic Study - Summary

As per the analysis in sections 11-17 above, the site is in a low bushfire risk area and can provide all BPMs as required by PBP 2019 and is therefore considered appropriate in the bush fire hazard context.

Table 2: Bushfire Assessment - compliance with PBP 2019 Table 4.2.1

Issue	Detail	Assessment considerations	Evidence	Suitable site
Bush fire landscape assessment	A bushfire landscape assessment considers the likelihood of a bush fire, its potential severity and intensity and the potential impact on life and property in the context of the broader surrounding landscape.	The bushfire hazard in the surrounding area including: - Vegetation - Topography - Weather	Landscape Scale Risk, Asset Protection Zones and consideration of BPMs.	
		The potential fire behaviour that might be generated based on the above.	Fire history map and fire run map completed. Assessment has been completed in accordance with fires up to Catastrophic Fire Danger Rating as required within PBP 2019.	
		Any history of bush fire in the area.	No significant fire history in the area. The Rezoning can comply with PBP 2019 requirements.	
		Potential fire runs into the site and the intensity of such fire runs.	Fire history map and fire run map completed. Assessment has been completed in accordance with fires up to Catastrophic Fire Danger Rating as required within PBP 2019.	
		The difficulty in accessing and suppressing a fire, the continuity of bush fire hazards or the fragmentation of landscape fuels and the complexity of the associated terrain.	No identified difficulties for accessing and suppressing the type of fires that may occur here. Acceptable terrain and consistent vegetation generally, good local road network.	
Land use assessment	The land use assessment will identify the most appropriate locations within the masterplan area or site layout for the proposed land uses.	The risk profile of different areas of the development layout based on the above landscape study.	The risk profile of the site is minimal and the scale of the site provides ample opportunity to provide a suitable suite of BPM.	
		The proposed land use zones and permitted uses.	The proposed development is a suitable and practical use of the land.	
		The most appropriate siting of different land uses based on risk profiles within the site (i.e. not locating development on ridge tops, SFPP development to be located in lower risk areas of the site).	The risk profile of the site is minimal and the scale of the site provides ample opportunity to provide a suitable suite of BPM.	
		the impact of siting on APZ provision.	The site can provide for compliant APZ.	

Issue	Detail	Assessment considerations	Evidence	Suitable site
Access and egress	A study of the existing and proposed road networks both within and external to the masterplan area or site layout.	The capacity for the proposed road network to deal with evacuating residents and responding emergency services, based on the existing and proposed community profile.	An early evacuation is the safest option, with the urban road network providing robust egress and is considered the primary method of managing life safety for the site. This will be supported by the layout, parking arrangements and compliance with PBP 2019. The surrounding road network is comprehensive and safe during bushfire events.	
		The location of key access routes and direction of travel.	The access is protected from bushfire through managed lands and APZ.	
		The potential for development to be isolated in the event of a bush fire.	There is little chance of isolation due to arterial road connection.	
Emergency services	An assessment of the future impact of new development on emergency services.	Consideration of the increase in demand for emergency services responding to a bush fire emergency including the need for new stations/brigades; and	Not likely that new emergency services generated by this development alone. New FRNSW stations will be considered at a jurisdictional level.	
		Impact on the ability of emergency services to carry out fire suppression in a bush fire emergency.	Insignificant negative impact.	
Infrastructure	An assessment of the issues associated with infrastructure and utilities.	The ability of the reticulated water system to deal with a major bush fire event in terms of pressures, flows, and spacing of hydrants; and	Water supplies will be conditioned as suitable for uses and locations on site.	
		Life safety issues associated with fire and proximity to high voltage power lines, natural gas supply lines etc.	No life safety issues identified.	
Adjoining land	The impact of new development on adjoining landowners and their ability to undertake bush fire management.	Consideration of the implications of a change in land use on adjoining land including increased pressure on BPMs through the implementation of Bush Fire Management Plans.	No negative impact identified. Potential positive impact related to additional people, active land management and investment locally.	

19. Suitability of the Rezoning

This assessment has demonstrated that the proposed rezoning has considered and responded to the requirements of PBP 2019. In a bushfire context, PBP 2019 (p. 34) requires that *strategic planning must ensure that future land uses are in appropriate locations to minimise the risk to life and property from bush fire attack. Services and infrastructure that facilitate effective suppression of bushfires also need to be provided for at the earliest stages of planning.*

The bushfire risk has been considered at the macro-scale, looking at fire runs, slopes, fire behaviour, bushfire attack into the site and it has addressed the access and evacuation requirements of PBP 2019.

This section assesses the broad principles outlined within PBP 2019 (p. 34) which are at Table 3 and the consideration of exclusion of development as required within PBP 2019 (p. 34) at Table 4.

Table 3: Strategic Principles

Principle within PBP 2019	Comment	Compliance
ensuring land is suitable for development in the context of bushfire risk	The site is in a low bushfire risk area and the Rezoning provides compliance with the deemed to satisfy requirements of PBP 2019 in all BPM. The bushfire risk to future occupants and emergency services can be appropriately managed by meeting the requirements of PBP 2019.	
ensuring new development on BPL will comply with PBP 2019	The Rezoning meets all deemed to satisfy requirements of PBP 2019. Future development will meet the standard of <29kW/m ² of radiant heat at building exposures (as appropriate). All BPMs comply with PBP 2019.	
minimising reliance on performance-based solutions	No performance-based solutions have been proposed or used in this assessment. All BPM have been met using acceptable solutions provisions within PBP 2019.	
providing adequate infrastructure associated with emergency evacuation and firefighting operations	The existing and proposed road network meets the minimum requirements of PBP 2019. All services can be provided in accordance with Table 5.8b of PBP 2019.	
facilitating appropriate ongoing land management practices	The future development will not burden or change the existing obligations or management actions of neighbours. The site will be full self-sufficient in terms of BPMs and no increased bushfire risk will be created.	

Table 4: Exclusion of Development

Principle within PBP 2019	Comment	Compliance
the development area is exposed to a high bush fire risk and should be avoided	The site is in a low bushfire risk area. The new development lots will comply with the minimum requirements of PBP 2019, and the risk has been managed to the appropriate level required by PBP 2019.	
the development is likely to be difficult to evacuate during a bush fire due to its siting in the landscape, access limitations, fire history and/or size and scale	The site has existing connections to the arterial and local road networks that service the region. The local road network can service the volumes of traffic generated by the future subdivision and while not considered ever required, the roads could accommodate the evacuation of residents and concurrently the responding of emergency services.	
the development will adversely effect other bush fire protection strategies or place existing development at increased risk	The change in land use will have no negative implications on adjoining land from a bushfire perspective. The site will be full self-sufficient in terms of BPMs and no increased bushfire risk will be created.	
the development is within an area of high bushfire risk where density of existing development may cause evacuation issues for both existing and new occupants	Given the nature of the site and the limited bushfire risk, there are no key access roads which will be impacted by bushfire in a manner that will cause issues for residents or responding brigades. The site provides for travel in all directions with limited bushfire risk.	
the development has environmental constraints to the area which cannot be overcome	The environmental constraints have been considered and assessed separately. The Rezoning layout reflects the environmental constraints.	

20. Assessment Against SEARs

The report has been completed having regard to Secretary for Planning and Environment's (the Secretary) Environmental Assessment Requirements (SEARs) issued for the proposal on 23 June 2025. Table 5 is a summary of the SEARs and compliance comments.

Table 5: Compliance with SEARs.

SEARs Item	Comment	Complies
If the development is on mapped bush fire prone land, or a bush/grass fire threat is identified on or adjoining the site, provide a bush fire assessment that details proposed bush fire protection measures and demonstrates compliance with Planning for Bush Fire Protection.	The site is mapped bush fire prone land. This Bushfire Assessment has therefore been undertaken to detail the proposed bush fire protection measures and demonstrate compliance with <i>Planning for Bush Fire Protection 2019</i> .	

21. Recommendations

The following recommendation has been made within this report to ensure the proposed development is compliant with *Planning for Bush Fire Protection 2019*:

Recommendation 1 – The entire site is to be established as an APZ. This is to be maintained as an Inner Protection Area (IPA) in accordance with Appendix 4 of *Planning for Bush Fire Protection 2019* and the NSW RFS “Asset protection zone standards”.

Recommendation 2 – The proposed new buildings are to be constructed to comply with the National Construction Code (2022), Australian Standard AS 3959:2018, *Construction of buildings in bush fire-prone areas* and/or NASH Standard (1.7.14 updated), *National Standard Steel Framed Construction in Bushfire Areas* – 2014, and Section 7.5 of *Planning for Bush Fire Protection 2019* on a prescriptive (deemed to satisfy and/or acceptable solution) basis and/or performance basis to the extend in Figure 11.

Recommendation 3 – Landscaping within the site must comply with Appendix 4 of *Planning for Bush Fire Protection 2019*.

Recommendation 4 – The provision of water, electricity and gas must comply with Table 5.3c of *Planning for Bush Fire Protection 2019*.

22. Conclusion

This Bushfire Assessment evaluates the suitability of the SSDA and concurrent rezoning in the context of bushfire risk, and responds to the relevant SEARs requirements by demonstrating how bushfire risk has been identified, assessed and mitigated consistent with *Planning for Bush Fire Protection 2019*.

Overall, the concurrent rezoning and SSDA are supportable given the low bushfire risk affecting the site and the demonstrated ability to achieve compliant bushfire protection outcomes. The proposal aligns with the aim and objectives of PBP 2019 by prioritising life safety, minimising property impact, and balancing development potential with site characteristics and environmental considerations.

The assessment has been undertaken with specific regard to PBP 2019 Section 2.3 (Strategic Planning) and the requirements of Chapter 4 – Strategic Planning, including consideration of both landscape-scale bushfire context and site-specific constraints/opportunities. In addition, and to inform the detailed SSDA assessment, the proposed layout has been considered against the relevant intent of Chapter 5 to demonstrate that the development can satisfy the applicable design criteria at the SSDA stage (rather than being deferred to a later approval).

The proposal can be supported by an APZ capable of achieving radiant heat exposure <29 kW/m² and is served by an existing and planned urban road network that provides effective access and egress, with a low likelihood of isolation during a bushfire event.

I Corey Shackleton, confirm this Bushfire Assessment addresses the requirement of SEAR No. 84430209 and relevant State and local legislation, policies, and guidelines including *Planning for Bush Fire Protection 2019*. I further confirm that none of the information contained in the Bushfire Assessment is false or misleading.



Corey Shackleton | Principal Bushfire & Resilience
Blackash Bushfire Consulting
B.Sc., Grad. Dip. (Design for Bushfire Prone Areas)
Fire Protection Association of Australia BPAD Level 3 - 34603



Appendix 1: References

Australasian Fire and Emergency Service Authorities Council (2012) *Bushfires and Community Safety*

Australasian Fire and Emergency Service Authorities Council (2019) *Bushfires and Community Safety*

Australian Institute for Disaster Resilience (2020) *Land Use Planning for Disaster Resilient Communities*

Keith, David (2004) – *Ocean Shores to Desert Dunes – The Native Vegetation of New South Wales and the ACT*. The Department of Environment and Climate Change

NSW Rural Fire Service (2015) *Guide for Bush Fire Prone Land Mapping*

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

NSW Rural Fire Service (2017) *Neighbourhood Safer Places: Guidelines for the Identification and Inspection of Neighbourhood Safer Places in NSW*. Issued November 2019.

NSW Government (1979) *Environmental Planning and Assessment Act 1979*. NSW Government Printer.

Standards Australia (2017) *Fire hydrant installations - System design, installation and commissioning*, AS 2419.1, SAI Global, Sydney.

Standards Australia (2018) *Construction of buildings in bushfire-prone areas*, AS 3959-2018. SAI Global, Sydney.

Standards Australia (2014) *The storage and handling of LP Gas*, AS/NZS 1596:2014. SAI Global, Sydney.

Appendix 2: EP&A Act 1979 – Section 9.1 Ministerial Direction

LOCAL PLANNING DIRECTIONS

Section 9.1(2) of the *Environmental Planning and Assessment Act 1979*

4.4 Planning for Bushfire Protection

Objectives

- (1) The objectives of this direction are:
 - (a) to protect life, property and the environment from bush fire hazards, by discouraging the establishment of incompatible land uses in bush fire prone areas, and
 - (b) to encourage sound management of bush fire prone areas.

Where this direction applies

- (2) This direction applies to all local government areas in which the responsible Council is required to prepare a bush fire prone land map under section 10.3 of the *Environmental Planning and Assessment Act 1979* (the EP&A Act), or, until such a map has been certified by the Commissioner of the NSW Rural Fire Service, a map referred to in Schedule 6 of that Act.

When this direction applies

- (3) This direction applies when a relevant planning authority prepares a planning proposal that will affect, or is in proximity to land mapped as bushfire prone land.

What a relevant planning authority must do if this direction applies

- (4) In the preparation of a planning proposal the relevant planning authority must consult with the Commissioner of the NSW Rural Fire Service following receipt of a gateway determination under section 3.34 of the Act, and prior to undertaking community consultation in satisfaction of Schedule 1, clause 4 of the Act, and take into account any comments so made,
- (5) A planning proposal must:
 - (a) have regard to *Planning for Bushfire Protection 2019*,
 - (b) introduce controls that avoid placing inappropriate developments in hazardous areas, and
 - (c) ensure that bushfire hazard reduction is not prohibited within the APZ.
- (6) A planning proposal must, where development is proposed, comply with the following provisions, as appropriate:
 - (a) provide an Asset Protection Zone (APZ) incorporating at a minimum:
 - (i) an Inner Protection Area bounded by a perimeter road or reserve which circumscribes the hazard side of the land intended for development and has a building line consistent with the incorporation of an APZ, within the property, and
 - (ii) an Outer Protection Area managed for hazard reduction and located on the bushland side of the perimeter road,
 - (b) for infill development (that is development within an already subdivided area), where an appropriate APZ cannot be achieved, provide for an appropriate performance standard, in consultation with the NSW Rural Fire Service. If the provisions of the planning proposal permit Special Fire Protection Purposes (as defined under section 100B of the *Rural Fires Act 1997*), the APZ provisions must be complied with,
 - (c) contain provisions for two-way access roads which links to perimeter roads and/or to fire trail networks,
 - (d) contain provisions for adequate water supply for firefighting purposes,
 - (e) minimise the perimeter of the area of land interfacing the hazard which may be developed,
 - (f) introduce controls on the placement of combustible materials in the Inner Protection Area.

Consistency

- (7) A planning proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) that the council has obtained written advice from the Commissioner of the NSW Rural Fire Service, to the effect that, notwithstanding the non-compliance, the NSW Rural Fire Service does not object to the progression of the planning proposal.

Direction 4.4 – issued 20 February 2020