



AUSTRALIAN BUSHFIRE CONSULTING SERVICES



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Bush Fire Assessment Report



Proposed Stage 1 works / two storey pavilion building:

**RYDE SECONDARY COLLEGE,
5 Malvina Street, Ryde NSW.**

20th August 2022
Reference 22-288

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Abbreviations:

ABCS	Australian Bushfire Consulting Services Pty Ltd
APZ	Asset protection zone
AS 2419	AS 2419.1 – 2021 Fire hydrant installations System design, installation and commissioning
AS3959-2018	Australian Standard 3959 – 2018 Construction of buildings in bushfire prone areas
BAL	Bushfire Attack Level
BCA	Building Code of Australia
BPMs	Bushfire Protection Measures
BPLM	Bushfire Prone Land Map
BFSA	Bush Fire Safety Authority
Council	Ryde City Council
EP&A Act	Environmental Planning and Assessment Act - 1979
ESD	Ecologically Sustainable Development
FR NSW	Fire & Rescue NSW
IPA	Inner protection area
LGA	Local Government Area
NASH Standard	National Association of Steel-Framed Housing Standard - Steel Framed Construction in Bushfire Areas 2014 (1.7.14 updated)
NCC	National Construction Codes
NP	National Park
NSP	Neighbourhood Safer Place
OPA	Outer protection area
PBP	Planning for Bush Fire Protection – 2019
ROW	Right of Way
RF Act	Rural Fires Act - 1997
RFS	NSW Rural Fire Service
SEPP	State Environmental Planning Policy
SFPP	Special Fire Protection Purpose
SWS	Static Water Supply

1.0 Introduction.

This report forms part of an environmental assessment under Part 5 of the *Environmental Planning and Assessment Act, 1979* for proposed upgrades to Ryde Secondary College. The scope of works subject to the environmental assessment are known as Stage 1 works in the master-planned redevelopment of Ryde Secondary College. Stage 1 works include:

- Demolition in the vicinity of the proposed pavilion;
- Two (2) storey pavilion building comprising:
 - Thirteen (13) GLS;
 - Learning commons;
 - Fitness lab;
 - Seminar spaces;
 - Staff room;
 - Store; and
 - Change rooms;
- Lift, stair and ramp access;
- Associated adjustments to the existing sports court; and
- Removal of demountable classrooms.

Ryde Secondary College is located at 5 Malvina Street, Ryde (Lot 284 and 285 in DP752035) within the City of Ryde Local Government Area. Ryde Secondary College has approximately 1,362 students currently enrolled.

Existing development includes single and double storey classrooms buildings, a multipurpose hall, covered outdoor learning areas, sports courts, demountable classrooms, landscaping, pathways and hardstand areas, vehicle circulation and carparking.

The site has street frontages to Malvina Street (north-western boundary) and Forrest Road (north-eastern boundary), with low density residential development located along the opposite road frontages. The site adjoins low density residential on the south-western boundary, Buffalo Creek along the southern boundary and Barton Reserve along the south-eastern boundary.

Council's bushfire prone land map depicts the subject site as containing Category 3 Vegetation and the 30 metre buffer zone from a Category 3 Vegetation. The subject site is mapped as being partly bushfire prone land and therefore the application of *Planning for Bush Fire Protection 2019* (PBP 2019) is a relevant consideration to the development proposal.

The location of the works subject to this review is not on any part of the land that is identified as bushfire prone land (being land for the time being recorded as bush fire prone land on a relevant map certified under section 10.3(2) of the *Environmental Planning and Assessment Act 1979*).

The purpose of this report is to provide an assessment of the proposed development and the Bushfire Attack Level to inform an application to the NSW Rural Fire Service for a Bush Fire Safety Authority under s100B of the Rural Fires Act.

The conclusion of this report is that the development is within an area that is rated as BAL Low and an informative overview of compliance with other specifications and requirements of *Planning for Bushfire Protection 2019* (PBP 2019) with respect to other matters such as access, service supply and emergency management planning has been included within the assessment.

The development is additions to an existing education establishment that was established prior to the commencement of *Planning for Bush Fire Protection* (in August 2002). In terms of PBP 2019 the development is considered to be infill Special Fire Protection Purpose Development under section 100b of the Rural Fires Act 1997.

PBP 2019 states:

The intention for any building work occurring within an existing SFPP development is to achieve a better bush fire outcome than if the development did not proceed. Achieving this may require a combination of measures including improved construction standards, APZs and evacuation management. This may result in a level of retrofitting of existing buildings and managing other portions of the site (i.e. APZs) to ensure an improved level of bush fire protection.

Intensification of the use or increase in occupancy must consider the risk to occupants and firefighters. Where practically achievable, full compliance should be provided before variations to the required BPMs are considered.

The proposed development does not seek to discount the requirements of PBP 2019 and will achieve full compliance with the policy necessities as if it were a greenfield site. The subject development has sought to provide a better bushfire outcome than the existing development offers, including;

- The existing Bush Fire Emergency Management Plan will be reviewed and, where necessary, edited to include the new building and compliance with the NSW RFS document *A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan*.
- Formal asset protection zones have been applied and recommendations to improve existing grounds maintenance have been included for the protection of existing buildings.
- Existing demountable buildings are being replaced by this new building, which is located further from the hazard interface than these existing demountable's.
- A review of access and services has been undertaken and found the existing site arrangements satisfactory.

2.0 Property details.

Address: 5 Malvina Street, Ryde NSW 2112
Lot/DP: Lots 284 & 285 DP 752035
Zoned: SP2 Infrastructure
LGA: Ryde City Council

3.0 Legislative context.

This report forms part of an environmental assessment under Part 5 of the *Environmental Planning and Assessment Act, 1979* for proposed upgrades to Ryde Secondary College. The proposed works are deemed permitted without consent by Section 3.37 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* which provides that:

- (1) *Development for any of the following purposes may be carried out by or on behalf of a public authority without development consent on land within the boundaries of an existing school –*
 - (a) *Construction, operation or maintenance, more than 5 metres from any property boundary with land in a residential zone and more than 1 metre from any property boundary with land in any other zone, of –*
 - (ii) *a portable classroom (including a modular or prefabricated classroom that is not more than 2 storeys high*
 - (b) *Minor alterations and additions...*
 - (e) *demolition of structures or buildings*

The development is classified as integrated development under s100B of the Rural Fires Act 1997. The purpose of this report is to provide an assessment of the proposed development in terms of Clause 45 of the Rural Fires Regulations 2022 and Bushfire Attack Level to inform an application to the NSW Rural Fire Service for a Bush Fire Safety Authority under s100B of the Rural Fires Act.

4.0 Copyright, scope and disclaimer.

This assessment of possible bushfire impact (including ember, radiant heat and flame contact) and compliance with matters such as asset protection zones, construction, access and service supply is pertinent to the subject site only. Where reference has been made to the surrounding lands, this report does not assess impact to those lands rather it is an assessment of possible bushfire progression and impact on or from those lands towards the subject site.

Apart from any use permitted under the Copyright Act 1968 no part of this document, including any wording, images, or graphics, can be modified, changed or altered in any way without written permission from Australian Bushfire Consulting Services Pty Ltd. This report may only be referenced, distributed or forwarded to other parties in its original format.

The statements and opinions contained in this report are given in good faith and in the belief that such statements and opinions are correct and not misleading. AS3959 – 2009 states that “...*there can be no guarantee that a building will survive a bushfire event of every occasion. This is substantially due to the unpredictable nature and behaviour of fire and extreme weather conditions*”. The NSW RFS state “*Homes are not designed to withstand fires in catastrophic conditions*”. Correspondingly any representation, statement of opinion, or advice expressed or implied in this document is made on the basis that Australian Bushfire Consulting Services Pty Ltd is not liable to any person for any damage or loss whatsoever which has occurred or may occur in relation to that person taking or not taking (as the case may be) action in respect of any representation, statement or advice made by Australian Bushfire Consulting Services Pty Ltd.

5.0 Referenced documents and people.

The following documents have been referenced in the preparation of this report;

- Ryde City Council’s Bushfire Prone Land Map,
- AS3959 – 2018 Construction of buildings in bushfire prone areas,
- AS 2419 – 2021 Fire hydrant installations System design, installation and commissioning,
- Planning for Bush Fire Protection 2019,
- Rural Fires Act 1997,
- Rural Fires Regulation 2022,
- 10/50 Vegetation Clearing Code of Practice,
- NSW RFS Guide for bush fire prone land mapping V5b Nov 2015,
- Ocean Shores to Desert Dunes – David Andrew Keith 2004.
- Company inspection of the subject site and surrounding area on 15th October 2020
- The Site Plan Setout Option 1 Sheet SK066 28/7/2022 has been reviewed and relied upon for this report.
- Personal site inspection by Australian Bushfire Consulting Services (Wayne Tucker) 11/08/2022.

6.0 Assessment summary table.

Aspect	Northwest & Northeast	South	Southeast	West
Vegetation Structure	Managed land	Remnant Wet Sclerophyll Forest	Forest mix (Wet & Dry Sclerophyll)	Managed land
Hazard slope	n/a	15-20° downslope	5-10° downslope	n/a
Required Asset Protection Zone Table A1.12.1 PBP 2019	n/a	81 metres	93 metres	n/a
Existing Asset Protection Zone	n/a	≥110 metres	≥155 metres	n/a
Features that may mitigate the impact of bush fire on the development.	The separation from the hazard interface includes existing maintained land wholly within the subject site.			
Noteworthy landform & environmental features.	Malvina Road / Forrest Road / maintained curtilages	Existing school buildings and managed landscaping surrounded by hard surfaces areas		Maintained curtilages
Table A1.12.5 Bushfire Attack Level	n/a	BAL Low	BAL Low	n/a
AS3959 – 2009 Proposed construction level	<p>The highest Bushfire Attack Level to the proposed new building was determined from Table A1.12.5 of PBP 2019 to be 'BAL Low'.</p> <p><i>AS3959 – 2018: This Standard does not provide construction requirements for buildings assessed in bushfire-prone areas in accordance with Section 2 as being BAL—LOW. The Bushfire Attack Level BAL—LOW is based on insufficient risk to warrant specific bushfire construction requirements.</i></p> <p><i>Table A1.7 PBP 2019: BAL Low - Minimal attack from radiant heat and flame due to the distance of the building from the vegetation, although some attack by burning debris is possible. There is insufficient threat to warrant specific construction requirements.</i></p> <p>There are no specific bushfire requirements applicable to the proposed new building.</p>			

7.0 Images and maps.



Image 01: Aerial image from Nearmaps database

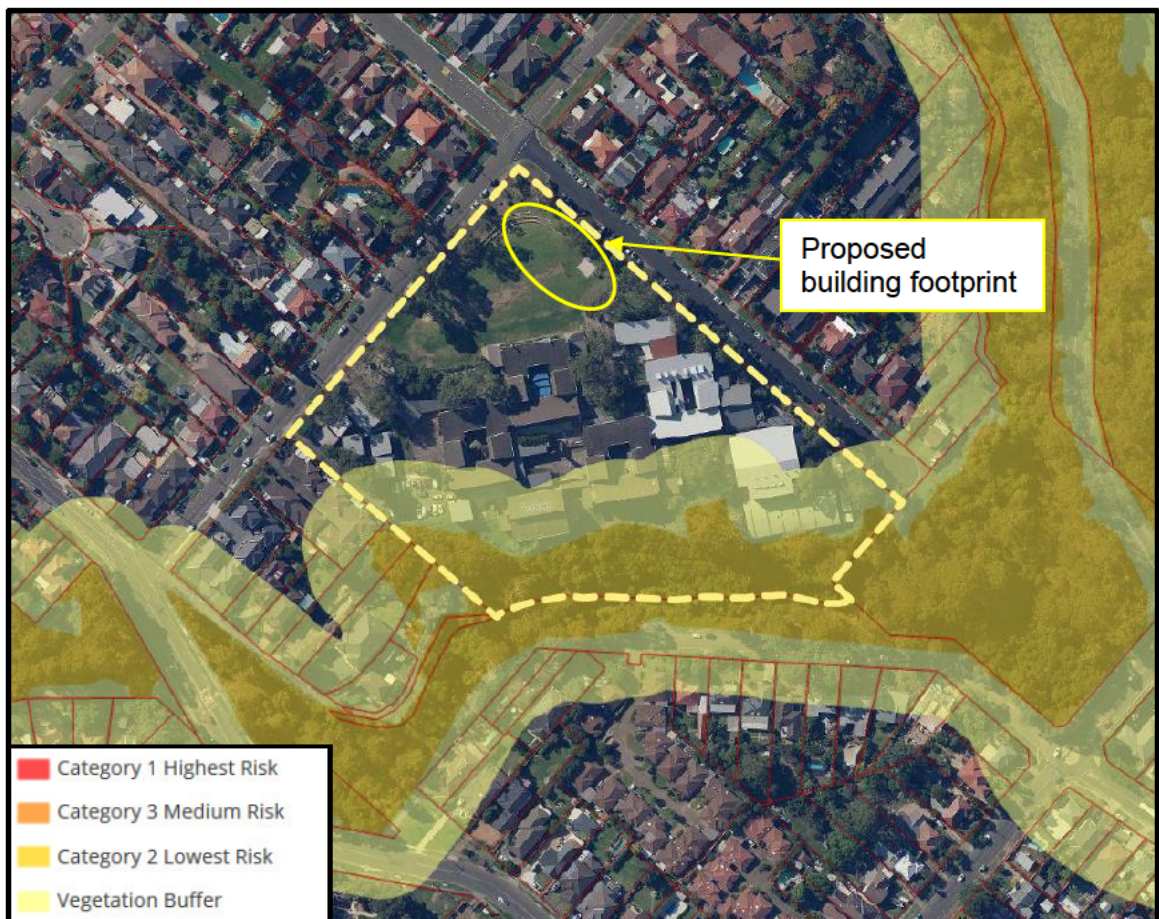


Image 02: Extract of Councils Bushfire Prone Land Map from NSW Dept Planning property information



Image 03: 1 m contour topographic image from NSW Government Elevation Foundation Data

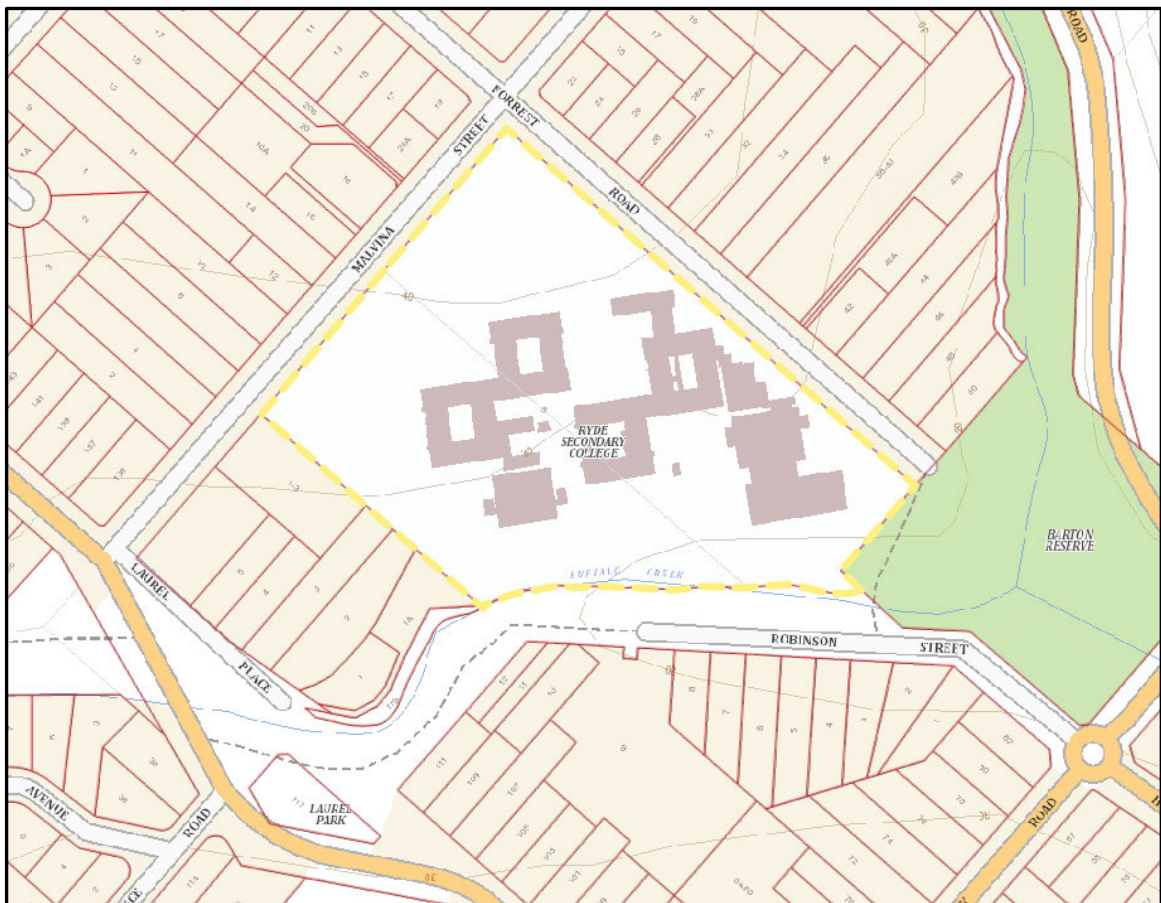


Image 04: 1:25k Topographic image from Dept Land SIX Maps database.

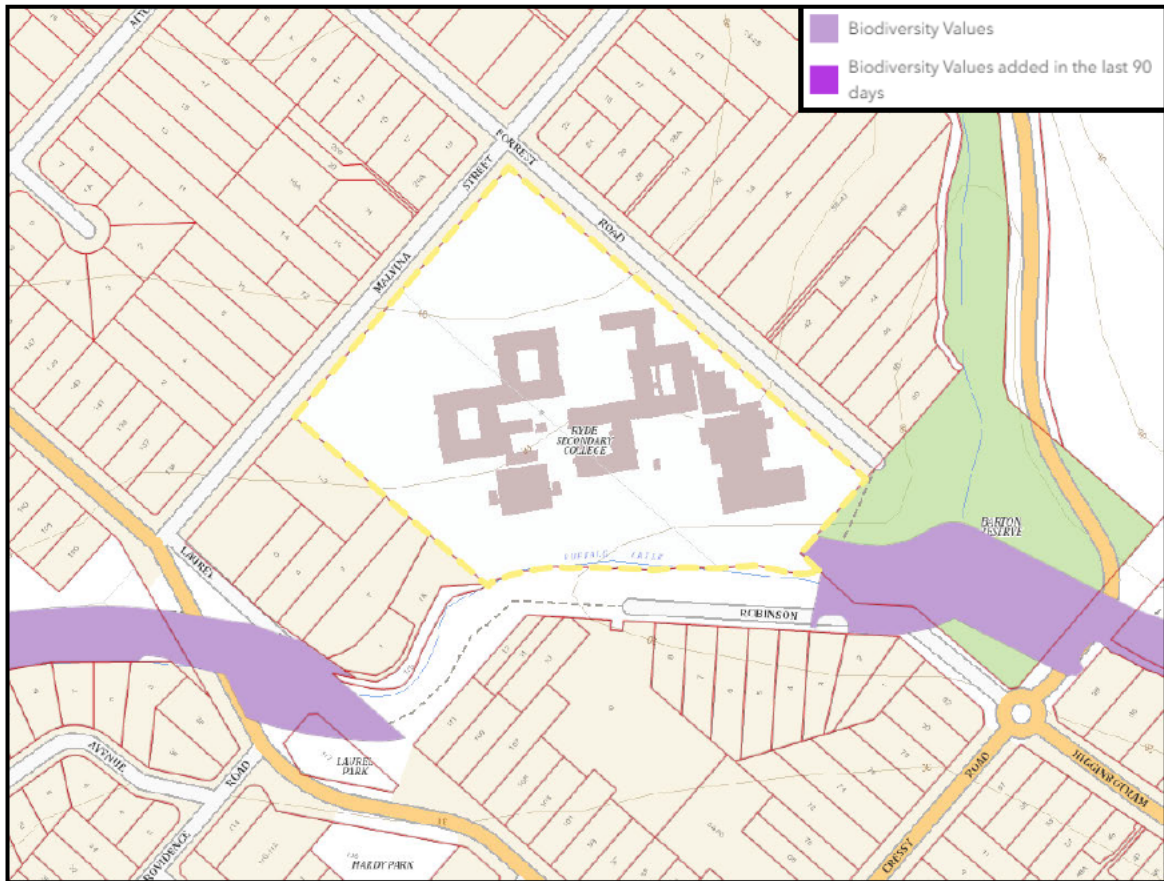


Image 05: Biodiversity Values Map from NSW Government Planning Portal Property Information

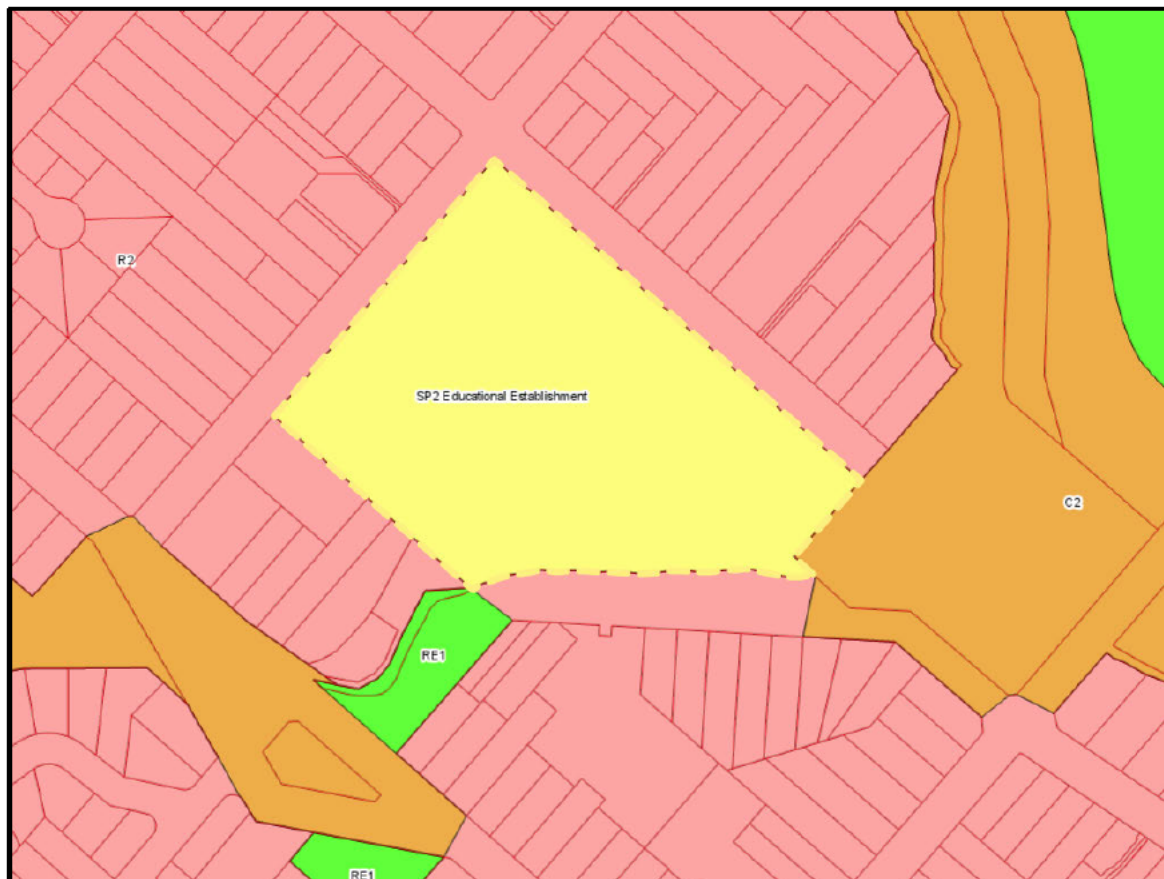


Image 06: LEP Zones extract from NSW Dept Planning property information mapping

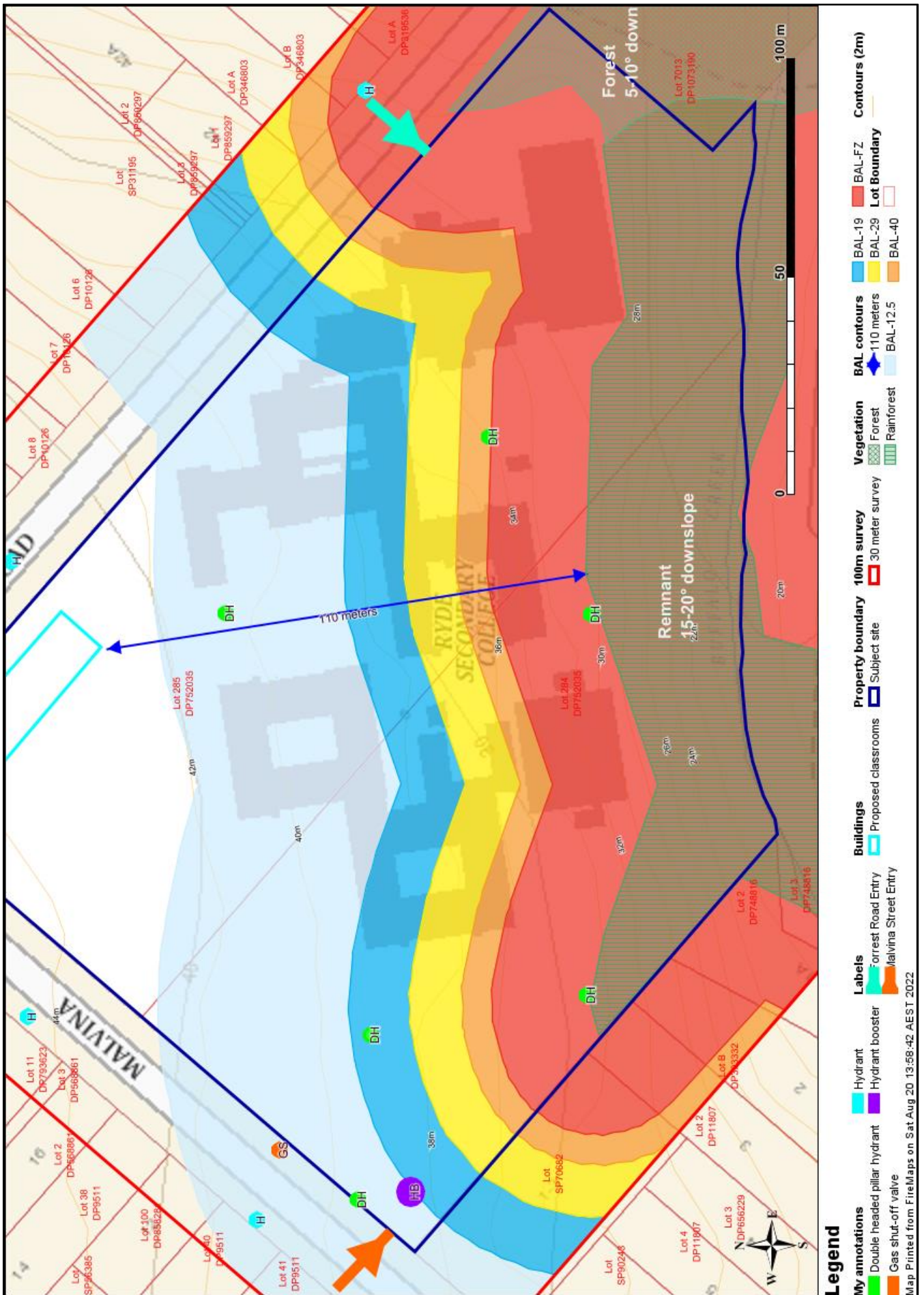


Image 07: BAL Ribbon / Access and services diagram basemap

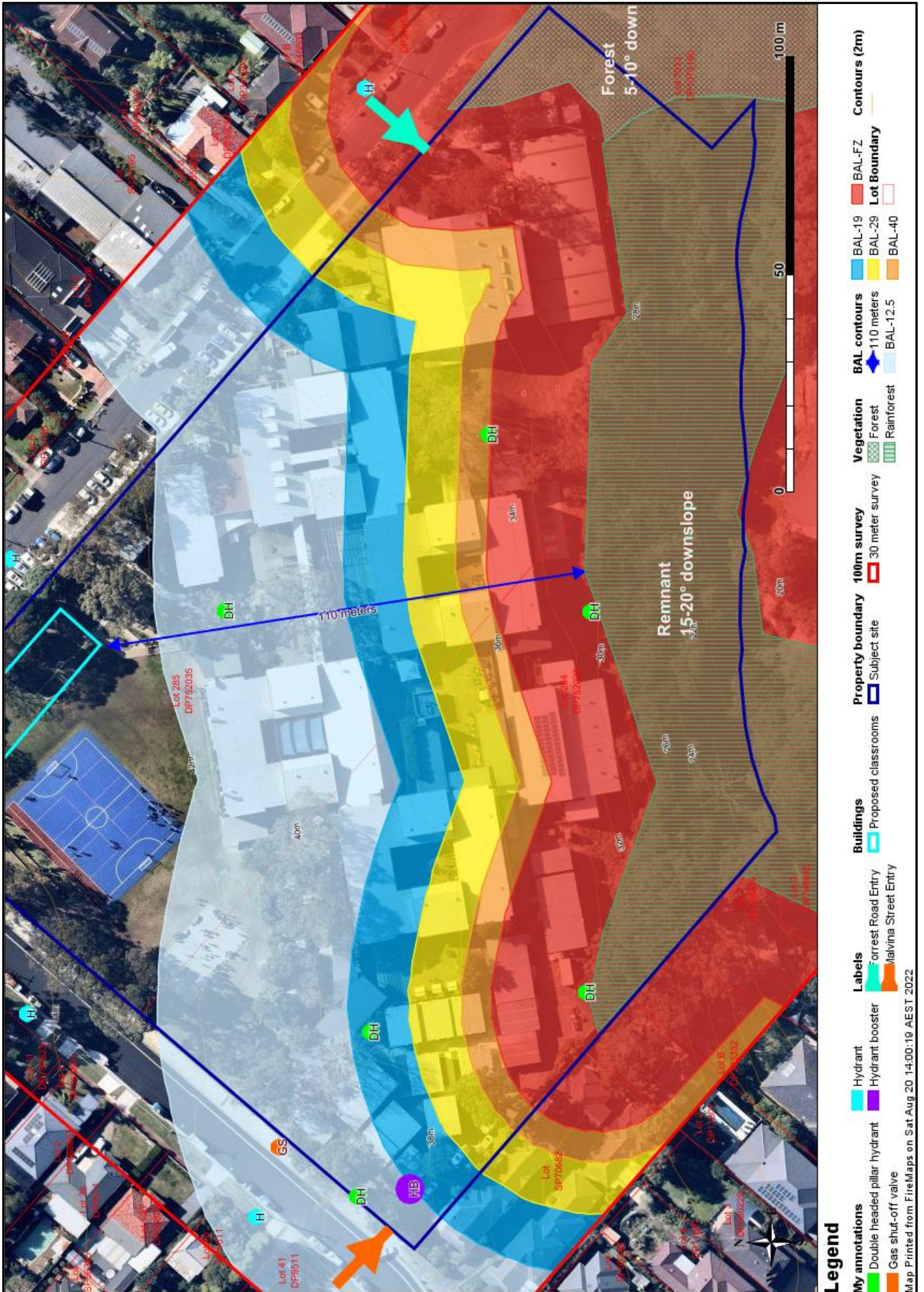


Image 08: BAL Ribbon / Access and services diagram Nearmap base



Image 09: APZ management plan diagram

8.0 Bushfire hazard assessment

Properties considered to be bushfire prone land are identified on Councils Bush Fire Prone Land Map as being:

- *within or within 100 m of Category 1 (high) hazards or,*
- *within or within 30 m of Category 2 (low) hazards or,*
- *within or within 30 m of Category 3 (medium) hazards.*

The NSW RFS document PBP – 2019 is applicable to all development on bushfire prone land, this includes an assessment of the proposals adequacy in providing an appropriate combination of bushfire protection measures in terms of asset protection zones, landscaping, access and service supply. This document also provides a means of determining the necessary level of building construction under AS3959 - 2018. All integrated development on bushfire prone land must be accompanied with a bushfire hazard assessment that includes;

- (a) a description (including the address) of the property on which the development the subject of the application is proposed to be carried out;*
- (b) a classification of the vegetation on and surrounding the property (out to a distance of 140 metres from the boundaries of the property) in accordance with the system for classification of vegetation contained in Planning for Bush Fire Protection;*
- (c) an assessment of the slope of the land on and surrounding the property (out to a distance of 100 metres from the boundaries of the property);*
- (d) identification of any significant environmental features on the property;*
- (e) the details of any threatened species, population or ecological community identified under the Threatened Species Conservation Act 1995 that is known to the applicant to exist on the property;*
- (f) the details and location of any Aboriginal object (within the meaning of the National Parks and Wildlife Act 1974) or Aboriginal place (within the meaning of that Act) that is known to the applicant to be situated on the property;*
- (g) a bush fire assessment for the proposed development (including the methodology used in the assessment) that addresses the following matters:*
 - (i) the extent to which the development is to provide for setbacks, including Asset Protection Zones;*
 - (ii) the siting and adequacy of water supplies for firefighting;*
 - (iii) the capacity of public roads in the vicinity to handle increased volumes of traffic in the event of a bush fire emergency;*
 - (iv) whether or not public roads in the vicinity that link with the fire trail network have two-way access;*
 - (v) the adequacy of arrangements for access to and egress from the development site for the purposes of an emergency response;*
 - (vi) the adequacy of bush fire maintenance plans and fire emergency procedures for the development site;*
 - (vii) the construction standards to be used for building elements in the development;*
 - (viii) the adequacy of sprinkler systems and other fire protection measures to be incorporated into the development;*
 - (h) an assessment of the extent to which the proposed development conforms with or deviates from the standards, specific objectives, performance criteria and acceptable solutions set out in Chapters 5-8 of PBP; and*
- (i) identify any fire trails that exist on the property that are on the Register of Certified Fire Trails under RF Acts.*

By incorporating bush fire protection measures into a development, the six objectives of PBP 2019 are addressed:

1. *afford buildings and their occupants protection from exposure to a bush fire;*
2. *provide for a defensible space to be located around buildings;*
3. *provide appropriate separation between a hazard and buildings which, in combination with other measures,*
4. *prevent the likely fire spread to buildings;*
5. *ensure that appropriate operational access and egress for emergency service personnel and occupants is available;*
6. *provide for ongoing management and maintenance of BPMs; and ensure that utility services are adequate to meet the needs of firefighters.*

FORMS OF BUSHFIRE ATTACK

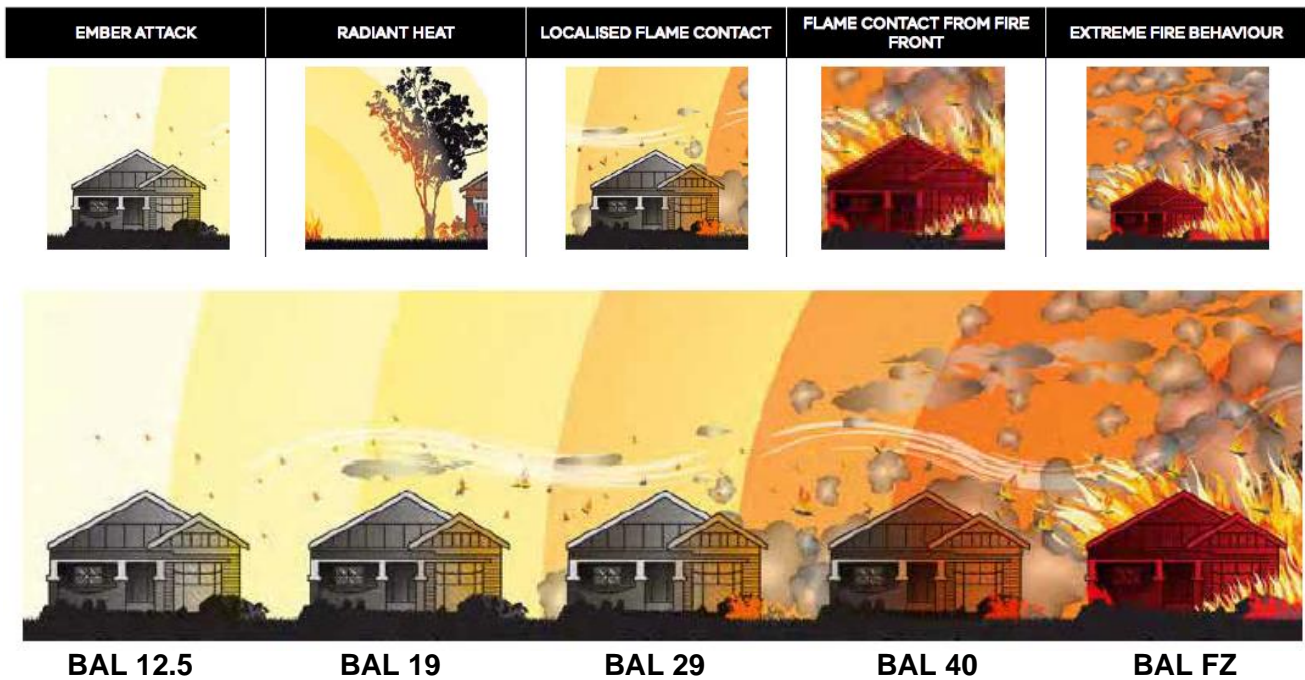
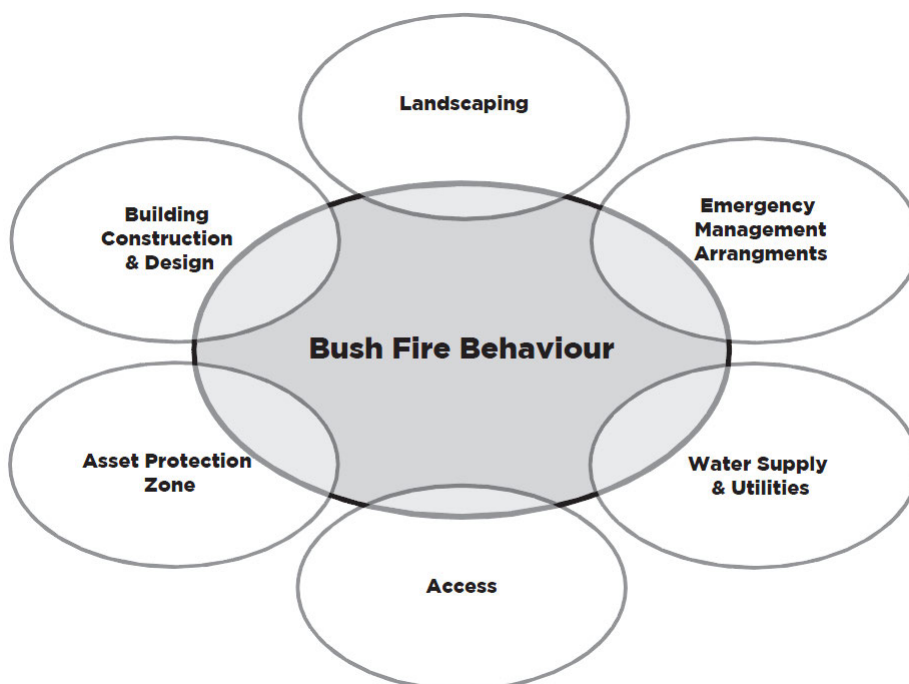


Image 7 & 8: Extract from *Planning Permit Applications, Bushfire Management Overlay. Technical Guide*, September 2017. Department of Environment Land Water and Planning, Victoria.



8.1 Site

The site has street frontages to Malvina Street (north-western boundary) and Forrest Road (north-eastern boundary), with low density residential development located along the opposite road frontages. The site adjoins low density residential on the south-western boundary, Buffalo Creek along the southern boundary and Barton Reserve along the south-eastern boundary.

The subject site is mapped as being partly bushfire prone land and therefore the application of *Planning for Bush Fire Protection 2019* (PBP 2019) is a relevant consideration to the development proposal.

8.2 Vegetation

In accordance with *Planning for Bush Fire Protection 2019* the vegetation structure must be determined under Keith 2004 for a distance out to 140 metres from the proposed development and, where a mix of vegetation classes are found, that representing the highest hazard is said to predominate.

Council's bushfire prone land map depicts the subject site as containing Category 1 and 3 Vegetation and the 100 and 30 metres buffer zones from Category 1 & 3 Vegetation. The bushfire hazardous vegetation identified on Council's bushfire prone land map is located to the south within the subject site and to the south and southeast adjacent to the site's boundaries.

The vegetation to the south within the subject site and beyond the site's southern boundary is mapped as:

PCT Id: 1841: Smooth-barked Apple - Turpentine - Blackbutt tall open forest on enriched sandstone slopes and gullies of the Sydney region
Vegetation Formation: Wet Sclerophyll Forests
Vegetation Class: North Coast Wet Sclerophyll Forests

The vegetation was found to consist of lantana, privet, crofton weed and bamboo mix. The area was almost devoid of emergent trees and any intact native structure resembling a tall open forest. The vegetation is restricted to a very narrow band and is limited by Robinson Street due south. Potential fire paths are restricted to runs of less than 50 metres directly towards the subject site. PBP 2019 states:

Remnant vegetation is a parcel of vegetation with a size of less than 1 Ha or a shape that provides a potential fire run that could threaten buildings not exceeding 50m. These remnants are considered a low hazard and APZ setbacks and building construction standards for these may be the same as for rainforests.

For the purpose of assessment under Tables A1.12.1 & A1.12.5 within PBP 2019 the vegetation to the south has been assessed as a remnant hazard which allows for the use of a rainforest class to determine any APZs and construction level requirements.

This vegetation continues southeast along Buffalo Creek and widens as it spreads through Barton Reserve, Field of Mars Reserve and Buffalo Creek Reserve in a southeast direction, eventually leading to Lane Cove River. This vegetation is structurally more intact native species and is mapped as a mixture of:

PCT Id: 1841: Smooth-barked Apple - Turpentine - Blackbutt tall open forest on enriched sandstone slopes and gullies of the Sydney region
Vegetation Formation: Wet Sclerophyll Forests
Vegetation Class: North Coast Wet Sclerophyll Forests

PCT Id: 1776: Smooth-barked Apple - Red Bloodwood open forest on enriched sandstone slopes around Sydney and the Central Coast
Vegetation Formation: Dry Sclerophyll Forests
Vegetation Class: Sydney Coastal Dry Sclerophyll Forests

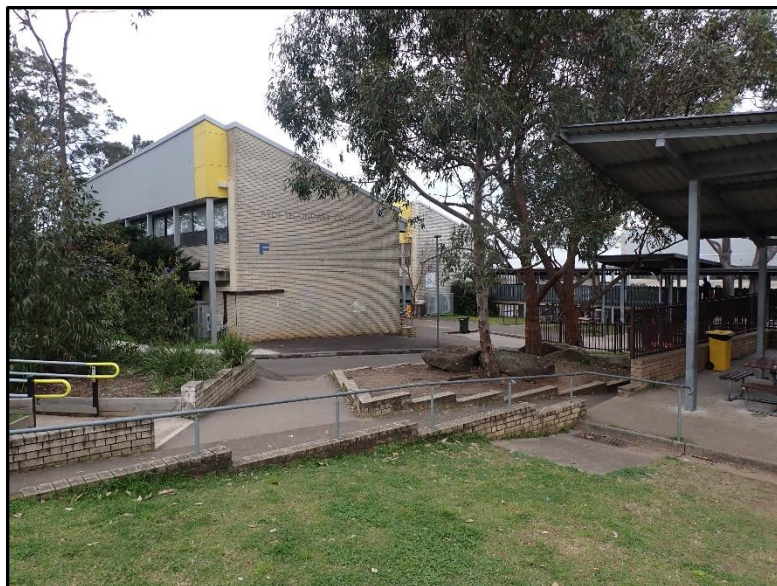
For the purposes of assessment under Tables A1.12.1 & A1.12.5 within PBP 2019 the vegetation to the southeast has been classified as a forest hazard.



Photograph 01: View north across Buffalo Creek towards the subject site from Robinson Street



Photograph 02: View north along the walkway from Robinson Street to Forrest Road



Photograph 03: View southeast within subject site showing existing asset protection zone



Photograph 04: View east within the subject site showing existing asset protection zone



Photograph 05: View east from Forrest Road adjacent to Buffalo Creek & Barton Reserve



Photograph 06: View east along Buffalo Creek within Barton Reserve taken southeast of the subject site

8.3 Topography

The slope must be assessed over a distance of at least 100 m from the building footprint towards the various vegetation communities constituting the hazard. In assessing the slope, it may be found that there are a variety of slopes covering different distances. The gradient within the hazard (vegetation) which will most significantly influence the fire behaviour must be determined.

The slope was determined onsite using an inclinometer and verified by topographic mapping to be;

- 15-20 degrees downslope to the south
- 5-10 degrees downslope to the southeast

8.4 Asset Protection Zones

The development proposal is the alterations, additions to an existing school. The APZ normally attributed to a greenfield development determined from Table A1.12.1 within PBP 2019 is 81 metres to the south and 93 metres to the southeast. The separation from the hazard interfaces has been measured onsite and verified from aerial imagery to be ≥ 110 metres to the south and ≥ 155 metres to the southeast.

In this circumstance the minimum required APZ determined from Table A1.12.1 within PBP 2019 for a greenfield site is exceeded to all aspects. The separation from the hazard interface includes existing maintained land within the subject site.

Recommendations will be included within this report that all grounds within the subject site and north of the existing cyclone wire fence are to be maintained as an Asset Protection Zone / Inner Protection Area (IPA) in accordance with Appendix 4 of PBP 2019 and the NSW RFS document Standards for Asset Protection Zones. The APZ area requires some minor maintenance only and includes an area as shown on Image 09 Page 12 within this report.

8.5 Access & water supply

The existing school has formal entry and exit crossovers from Malvina Street to the northwest and Forrest Road to the southeast. The location of carparking is such that two way vehicle access is provided to the central car park from the northwest corner of the site only.

Onsite the access width from Malvina Street is approximately 5 metres wide through to the car park. The hydrant booster pumpset is located at the crossover adjacent to Malvina Road. At this point a fire appliance can be parked on Malvina Street and have direct access to the booster set without impeding vehicle egress from the car park.

A fire appliance can also be located at the crossover to Forrest Road to the southeast which is approximately 6 metres wide. At this point a fire appliance can be parked off the main road and not obstructed the exit from the school site. This entry does not provide access to any onsite car parking.

The hydrant booster pumpset services double headed pillar hydrants located throughout the school and, most importantly, adjacent to the hazard interface. Pedestrian access is freely available between the two vehicle entry and exit points and parallel to the hazard interface. Fire services will retain unimpeded access to the hazard interface for fire suppression and hazard reduction activities and the boosted hydrant system that is located at strategic intervals along the hazard interface.

Unobstructed pedestrian access will remain available around the existing building envelopes and to other pillar hydrants located internally adjacent to these buildings.

The most disadvantaged point of the proposed new building will be within 70 metres of a public road where hydrants are available in the roadside verge immediately adjacent to the development site.

It is considered that the existing access meets the requirements of PBP 2019. No new recommendations or conditions are considered necessary for this development.

The existing water supply is also considered suitable for firefighting purposes. No new recommendations or conditions for water supply are required for this application

8.6 Services

The existing electrical supply to the site is overhead and underground services are provided internally within the property. Reticulated gas is also available in this area. Recommendations will be included to ensure that any new electrical services or gas installations are provided in accordance with Table 6.8c of PBP 2019.

8.7 Emergency management

The subject site has direct access to Malvina Street and Forrest Road to the northwest and southeast aspects. Occupants wishing to relocate from this site can do so in either direction via existing two way public road infrastructure and away from the hazard interface.

Recommendations will be included to ensure that the existing Bush Fire Emergency Management Plan is required to be reviewed and, where necessary upgraded to include this new building and comply with the NSW RFS document *A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan*.

8.8 Construction

The highest Bushfire Attack Level to the proposed new building was determined from Table A1.12.5 of PBP 2019 to be 'BAL Low'.

AS3959 – 2018: This Standard does not provide construction requirements for buildings assessed in bushfire-prone areas in accordance with Section 2 as being BAL—LOW. The Bushfire Attack Level BAL—LOW is based on insufficient risk to warrant specific bushfire construction requirements.

Table A1.7 PBP 2019: BAL Low - Minimal attack from radiant heat and flame due to the distance of the building from the vegetation, although some attack by burning debris is possible. There is insufficient threat to warrant specific construction requirements.

There are no specific bushfire requirements applicable to the proposed new building.

The subject development has sought to provide a better bushfire outcome than the existing development offers, including;

- The existing Bush Fire Emergency Management Plan will be reviewed and, where necessary, edited to include the new building and compliance with the NSW RFS document *A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan*.
- Formal asset protection zones have been applied and recommendations to improve existing grounds maintenance have been included for the protection of existing buildings.
- Existing demountable buildings are being replaced by this new building, which is located further from the hazard interface than these existing demountable's.
- A review of access and services has been undertaken and found the existing site arrangements satisfactory.

9.0 Recommendations

9.1 Asset Protection Zones / landscaping

1. That all grounds within the subject site and north of the existing cyclone wire fence are to be maintained as an Asset Protection Zone / Inner Protection Area (IPA) in accordance with Appendix 4 of PBP 2019 and the NSW RFS document Standards for Asset Protection Zones.

Note: The APZ area requires some minor maintenance only and includes an area as shown on Image 09 Page 12 within this report.

9.2 Emergency management plan.

2. That the existing Bush Fire Emergency Management Plan is to be reviewed and, where necessary upgraded to include this new building and comply with the NSW RFS document *A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan*.

9.3 Construction

3. None applicable.

9.4 Services

4. That any new electricity services supply is to comply with Table 6.8c of Planning for Bush Fire Protection 2019, in particular;
 - where practicable, electrical transmission lines are underground;
 - where overhead, electrical transmission lines are proposed as follow:
 - lines are installed with short pole spacing (30m), unless crossing gullies, gorges or riparian areas; and
 - no part of a tree is closer to a power line than the distance set out in accordance with the specifications in ISSC3 *Guideline for Managing Vegetation Near Power Lines*.
5. That any new gas services supply is to comply with Table 6.8c of Planning for Bush Fire Protection 2019, in particular;
 - reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities, and
 - metal piping is used;
 - all fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side; connections to and from gas cylinders are metal;
 - if gas cylinders need to be kept close to the building, safety valves are directed away from the building and at least 2m away from any combustible material, so they do not act as a catalyst to combustion;
 - polymer sheathed flexible gas supply lines to gas meters adjacent to buildings are not to be used; and
 - above-ground gas service pipes external to the building are metal, including and up to any outlets

9.5 Access

6. None applicable.

10.0 Conclusion

The subject property is determined to be bushfire prone land and the development is classified as integrated development under s100B of the Rural Fires Act 1997. The development proposal must receive a Bush Fire Safety Authority (BFSA) from the NSW RFS as part of the development approval process.

To receive a BFSA a development must, to the degree necessary, meet the intent of measures and performance requirements of PBP 2019. In special fire protection purpose development such as a school this is achieved with an appropriate combination of bushfire protection measures, especially an APZ, to ensure in a bushfire event no building will be exposed to radiant heat levels greater than 10 kW/m². In addition to an APZ suitable access, services supply and means of maintaining the bushfire protection measures for the life of the development are applied. Where necessary construction measures are also included.

This bushfire hazard and determination has been made on a site-specific basis which includes an assessment of the local bushland area and its possible impact to the subject property. Inclusive of the recommendations made herein the proposal meets the aims and objectives of PBP 2019 by compliance with the intent of measures and performance requirements of that document. I am satisfied these recommendations will provide a reasonable and satisfactory level of bushfire protection to the proposed development.

I am therefore in support of the proposed development and support the application to the NSW RFS seeking a Bush Fire Safety Authority.

Australian Bushfire Consulting Services Pty Ltd



Wayne Tucker

Managing Director
G. D. Design in Bushfire Prone Areas.
Certificate IV Fire Technology
Ass Dip Applied Science
FPA Australia BPAD Level 3 Accredited Practitioner
BPAD Accreditation No. BPAD9399



List of attachments

Attachment 01: Plans for