



BUSHFIRE
CONSULTING
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Designing Bushfire Protection Measures

Reference: J23/0379

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Bush Fire Assessment Report

in relation to the proposed
Eileen O'Connor Catholic School and
One into Two Lot Subdivision

at:



Lot 9 Section 4 DP 3368
84 Gavenlock Road Mardi
(Subject site)

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Document Tracking

Item	Detail
Project Name	Bush Fire Assessment Report, proposed K-12 Eileen O'Connor School and One into Two Lot Subdivision
Project Address	Lot 9 Section 4 DP 3368, 84 Gavenlock Road Mardi
Client Name	Stanton Dahl Architects for Catholic Schools Broken Bay (CSBB)
Project Number	J23/0379
Plan Reference	Site Plan by Stanton Dahl Architects numbered 2637.20 Revision P16 dated 31/03/2025 and Plan of Subdivision by Degotardi, Smith and Partners numbered 36592DP-1 dated 6 August 2024
Prepared by	Laura Richards
Approved by	Catherine Gorrie
Has maximum radiant heat level of 10kW/m ² been demonstrated?	Yes
BAL under AS3959-2018	BAL 19 (as required by NCC 2022) and the relevant additional construction requirements of PBP section 7.5

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It should be borne in mind that the measures recommended in this report cannot guarantee that a building will survive a bushfire event on every occasion. This is due to the degree of vegetation management, the unpredictable behaviour of bushfires and extreme weather conditions. As such, the author is not liable to any person for any damage or loss whatsoever which has occurred or may occur in relation to the person taking action or not taking action based on the recommendations of this report.

NOTE: This bush fire assessment shall remain valid for 12 months from the date of issue.

Executive Summary

Bushfire Consulting Services was commissioned by Stanton Dahl Architects for Catholic Schools Broken Bay (CSBB) to provide a bush fire assessment for the proposed Eileen O'Connor Catholic School and One into Two Lot Subdivision at Lot 9 Section 4 DP 3368, 84 Gavenlock Road Mardi. The subject site is mapped as designated bush fire prone land by Central Coast Council and is located within 100 metres of bush fire prone (hazardous) vegetation.

The proposal is a form of Special Fire Protection Purpose, which is a development that is occupied by people who are considered to be at-risk members of the community. In a bush fire event, these occupants may be more susceptible to the impacts of bush fire.

The maximum radiant heat level of 10kW/m² has been demonstrated, and a bush fire attack level (BAL) associated with the development of the subject building is recommended to be BAL 19 due to the requirements of PBP Addendum 2022.

The proposal is also a form of subdivision, which under the *EP&A Act*, is defined as the division of land into two or more parts that, after the division, would be adapted for separate occupation, use or disposition.

Under the Rural Fires (RF) Act section 100B (s.100B), a Bush Fire Safety Authority (BFSA) from the NSW RFS is required for SFPP and subdivision development.


This report makes recommendations in accordance with the tailored objectives for this development type, and at a minimum, addresses:

- establishment and maintenance of asset protection zones (APZs)
- adequate access for emergency personnel
- adequate water supply, and utility requirements
- provision of electrical or gas supplies that don't add to the bush fire risk to buildings
- siting and design of the development
- construction requirements under AS3959-2018 (Standards Australia 2018)

- landscaping to reduce the risk of ignition by embers, and to minimise flame contact and radiant heat on the proposed development commensurate with occupancy levels, assessed level of risk and the characteristics of occupants.

Where all recommendations are implemented, the report concludes that the proposal can comply with the objectives of Chapter 5 and 6 of the NSW RFS document 'Planning for Bush Fire Protection'.

Compliance Summary

<p>This Assessment has been Certified by:</p> <p>Catherine Gorrie</p> <p>BPAD-Level 3 Accredited Practitioner</p> <p>FPAA Cert No: BPAD20751</p>	
<p>Has the proposal demonstrated a maximum radiant heat level of 10kW/m²?</p>	<p>Yes</p>
<p>What is the recommended level of compliance with AS3959-2018?</p>	<p>BAL 19 due to the requirements of PBP Addendum 2022</p>
<p>Can this proposal comply with AS 3959-2018?</p>	<p>Yes</p>
<p>Does this development comply with the aim and objectives of PBP?</p>	<p>Yes</p>
<p>Is referral to the NSW Rural Fire Service (RFS) required?</p>	<p>Yes, a BFSA is required</p>

List of Abbreviations

APZ	Asset Protection Zone
AS3959	Australian Standard 3959 – 2018, <i>Construction of Buildings in Bushfire Prone Areas</i>
BAL	Bushfire Attack Level
BFSA	Bush Fire Safety Authority
BPAD	Bushfire Planning and Design (Accreditation Scheme)
BPMs	Bushfire Protection Measures
BPLM	Bushfire Prone Land Map
Council	Central Coast Council
DA	Development Application
DEM	Digital Elevation Model
EP&A Act	<i>Environmental Planning and Assessment Act – 1979</i>
EV Charger	Electric Vehicle Charger
FDI	Fire Danger Index
FPAA	Fire Protection Association of Australia
IPA	Inner Protection Area
kW/m ²	Kilowatts per metre squared
LiDAR	Light Detection and Ranging
LPMA	Land & Property Management Authority
NCC	National Construction Code
PBP	<i>Planning for Bush Fire Protection 2019</i>
RF Act	<i>Rural Fires Act – 1997</i>
RFS	NSW Rural Fire Service
SEPP	State Environmental Planning Policy
SFPP	Special Fire Protection Purpose
SIX	Spatial Information Exchange
SWS	Static Water Supply

1. Introduction

This report has been commissioned by Stanton Dahl Architects for Catholic Schools Broken Bay (CSBB) to provide a bush fire assessment for a the Eileen O'Connor Catholic School and One into Two Lot Subdivision at Lot 9 Section 4 DP 3368, 84 Gavenlock Road Mardi.

The subject property is “bushfire prone land” as per the local Council bushfire prone land map (Figure 3) as defined by section 10.3 (s10.3) of the Environmental Planning & Assessment Act (EP&A) 1979 and therefore the requirements stipulated by legislation apply to any new development on the site.

Planning for Bush Fire Protection 2019 (Chapter 5 and 6) describes this type of development as a subdivision and “SFPP development” and therefore the requirements of s100B of the *RF Act* are applicable, and a BFSAs is required to be issued by the NSW RFS. As such, an Integrated Development approval is required under the *EP&A Act s.4.46*.

The bush fire assessment and recommendations are derived from the *RF Act*, the Rural Fire Service document *Planning for Bush Fire Protection 2019* and Australian Standard 3959-2018 ‘*Construction of Buildings in Bushfire Prone Areas*’.

2. Purpose of this Report

The purpose of this report is to provide the owners, the Consent Authority, the Certifier and the RFS with a description of the proposed development as well as the vegetation type, slope and any other factors influencing the likely bushfire behaviour, sufficient to show that the development will be protected from the likely bushfire threat as outlined in current legislation.

This assessment includes an analysis of the hazard, threat and subsequent risk to the development and provides recommendations that satisfy the aim and objectives of Planning for Bush Fire Protection.

3. Location

The site is located and known as Eileen O'Connor Catholic School, Lot 9 Section 4 DP 3368, 84 Gavenlock Road Mardi. The property is part of the Central Coast local government area.

Figure 1. Location Map. Source: LPMA SIX Viewer (NSW Government 2023a)



Site location outlined in red

Figure 2. Aerial Map. Source: LPMA SIX Viewer (NSW Government 2023a)



**Figure 3. Bushfire Prone Land Map. Source: NSW Government Planning Portal
(NSW Government 2023b)**



4. Property Description

The property is comprised of Lot 9 Section 4 DP 3368, 84 Gavenlock Road Mardi, covering approximately 33175.19m² in area (Figure 2). It is bounded by private allotments to the approximate north and south, by Gavenlock Road to the east and Keepers Glen to the approximate west. It currently contains St Peters Catholic College, to be retained.














4.1 Zoning

The land is zoned R2: Low Density Residential and C3: Environmental Living under Central Coast Local Environmental Plan/SEPP 2022. (Figure 4).

**Figure 4. Zoning Map. Source: NSW Government Planning Viewer
(NSW Government 2023b)**



Site location outlined in yellow

	<i>R2: Low Density Residential</i>		<i>SP2: Infrastructure</i>
	<i>C3: Environmental Management</i>		<i>RE1: Public Recreation</i>
	<i>R3: Medium Density Residential</i>		<i>RE2: Private Recreation</i>
	<i>R1: General Residential</i>		<i>MU1: Mixed Use</i>
	<i>E4: General Industrial</i>		<i>RU6: Transition</i>
	<i>E3: Productivity Support</i>		<i>E2: Commercial Centre</i>
	<i>C2: Environmental Conservation</i>		

4.2 Biodiversity Values

A search of the NSW Office of Heritage and Environment and Heritage's Biodiversity Values Map (NSW Government 2023c) has been carried out and has not revealed any high biodiversity values on the land.

4.3 The Proposal

Catholic Schools Broken Bay (CSBB) is proposing construction of a new school for students with a disability at the purpose-built K-12 Eileen O'Connor Catholic School using land located in the northwestern corner of St Peter's Catholic School at 84 Gavenlock Road, Mardi. The school will have capacity for 200 students and will provide education and allied health facilities. The proposed development involves:

- Tree removal and infill of existing dam
- Site establishment and benching
- Construction of a part-two, part-three storey school campus comprising 20 General Learning Areas (GLA), flexible specialist learning areas, library, multipurpose hall, administration, staff facilities, storage, landscaping and play spaces
- Construction of two (2) new vehicle accessways from Keefers Glen and at-grade carpark (including bus parking) and covered drop off/pick up area
- Subdivision of land to create a new allotment for the school with proposed Lot 1 having an area of 1.284ha to contain the proposed school, and proposed Lot 2 having an area of 12.04ha and containing the existing school
- Widening of a portion of Keefers Glen
- Installation of EV Chargers

In terms of the NCC, the classification of the building is

- a. Class 9b (assembly buildings in which people may gather for social, theatrical, political, religious or civil purposes. They include schools, universities, childcare centres, pre-schools, sporting facilities, night clubs, or public transport buildings)
- b. Class 5 (office buildings used for professional or commercial purposes)
- c. Class 10 (non-habitable buildings including sheds, carports, and decks and amenities).

5. Site Assessment

Bushfire Consulting Services Pty Ltd attended the site on 11 July 2023. The assessment relates to the new development shown in the site plans (reference Appendix 1 below). The NSW Spatial Services mapping website has also been used as a reference (NSW Government 2023a), and 'Ocean Shores to Desert Dunes' by David Keith (Keith 2004), in determining the vegetation type.

6. Identify APZs

6.1 Determine Vegetation Formations

The hazardous vegetation formations for each aspect of the development within 140m of the asset have been identified according to Keith (2004). The bushfire threat emanates from bushland located to the east of the subject buildings. This vegetation is external to the subject site boundaries.

Apart from the hazard, within 140m of the site, lots to the north, south and west contain existing residential developments with curtilages comprising lawns, shrubs and occasional trees, which do not constitute a hazard. To the east within 140m of the proposal is St Peters Catholic College, assessed as managed land up to 140m.

Based on a site visit and determination of vegetation formation using the Keith (2004) Identification Key, the primary bushland vegetation having the potential to affect the subject building is most representative of Forested Wetland.

Figure 5. Hazardous vegetation affecting the subject building. Source: NearMap (2023) with overlays by BFCS P/L



6.2 The effective 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 level of radiant heat flux. The effective slope of the land from the new building for a distance of 100m is derived from a site assessment combined with the most detailed contour data available. The slope is then categorised into one of following classes, relative to the location of the hazard:

- all upslope vegetation (considered 0 degrees)
- >0 to 5 degrees downslope vegetation
- >5 degrees to 10 degrees downslope vegetation
- >10 degrees to 15 degrees downslope vegetation, and
- >15 degrees to 20 degrees downslope vegetation.

1m DEM data is sourced from NSW Spatial Services which is captured using LiDAR and has a horizontal accuracy of 0.3m and vertical accuracy of 0.8m at 95%.

The effective slope has been measured manually on site over a distance of 100m from the proposed development where accessible, under the classified vegetation community constituting the hazard. The slope was found to be consistent with the topographical information from NSW Spatial Services LiDAR data.

Figure 6. Slope Diagram. Source: NearMap (2023) and LiDAR (NSW Government 202a) with overlays by BFCS P/L



Site location outlined in red, 1m contours, Slope is $((6-5)/43.39) \times 1/\tan = \text{Downslope } 1.3^\circ$

Direction from Building Footprint	Slope Description
North	N/A
East	Downslope >0- 5°
South	N/A
West	N/A

6.3 Fire Weather

The development is located in the Central Coast Council area, a part of the Greater Sydney Region, which has a Fire Danger Index of 100.

6.4 Determination of APZs

An Asset Protection Zone (APZ) is a fuel-reduced area surrounding a built asset or structure. An APZ provides a buffer zone between a bush fire hazard and an asset and an area of reduced bush fire fuel that allows suppression of fire. It also provides an area from which backburning or hazard reduction can be conducted, and allows emergency services access as well as providing a relatively safe area for firefighters to defend property.

Potential bush fire fuels should be minimised within an APZ. This is so that the vegetation within the planned zone does not provide a path for the transfer of fire to the asset either from the ground level or through the tree canopy. PBP has minimum specifications for APZs to be established around a SFPP development to be managed as an Inner Protection Area (IPA).

An IPA should provide a tree canopy cover of less than 15% and should be located greater than 2 metres from any part of the roofline of a habitable building. Garden beds or flammable shrubs are not to be located under trees and should be no closer than 10m from an exposed window or door. Trees should have lower limbs removed up to a height of 2m above the ground.

To identify the appropriate APZ, the relevant FFDI, vegetation formation and effective slope are matched using Table A1.12.1 of PBP.

Table A1.12.1 of PBP - Minimum distances for APZs – SFPP development, FFDI 100 areas (<10kW/m², 1200K)

Aspect	Vegetation Classification	Slope Under Classified Vegetation	APZ required	Available APZ
North	N/A	N/A	N/A	N/A
East	Forested Wetland	Downslope >0- 5°	42m	76m
South	N/A	N/A	N/A	N/A
West	N/A	N/A	N/A	N/A

For the proposed subdivision, the minimum distances of Table A1.12.2 is referenced, which requires a minimum APZ of 12m, indicating that both lots achieve minimum APZ requirements.

7. Bushfire Protection Measures

7.1 APZs and building construction

Intent of measures: to provide suitable building design, construction and sufficient space to ensure that radiant heat levels do not exceed critical limits for firefighters and other emergency services personnel undertaking operations, including supporting or evacuating occupants.

Performance Criteria	Acceptable Solutions
Radiant heat levels of greater than 10kW/m ² (calculated at 1200K) will not be experienced on any part of the building	The building is provided with an APZ in accordance with Table A1.12.1 in Appendix 1, see above, partially within adjacent managed land and roadways as permitted by PBP 3.2 The recommended APZ is to the boundary to the north and west, and for a distance of 42m to the east and south

Performance Criteria	Acceptable Solutions
	For the proposed subdivision, the minimum distances of Table A1.12.2 of 12m is available
APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is minimised	APZs are located on lands with a slope less than 18 degrees The slope within the APZ is <5°
APZs are managed to prevent the spread of fire to the building	APZs are managed in accordance with PBP Appendix 4
APZs are provided in perpetuity	The APZ between the building and hazard is wholly within the boundaries of the development site
Landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions	landscaping is to be designed in accordance with Appendix 4; and All fences in bush fire prone areas should be made of either hardwood or non-combustible material. However, in circumstances where the fence is within 6m of a building or in areas of BAL-29 or greater, they should be made of non-combustible material only
The proposed building can withstand bush fire attack in the form of wind, embers, radiant heat and flame contact	a construction level of BAL-19 under AS 3959 or NASH Standard and section 7.5 of PBP is applied EV Chargers are to be located at least 10m from school buildings and the hazard, with above ground infrastructure being non-combustible

7.2 Access – New School

Table 3 (PBP Addendum 2022): SFPP Development Access – Specific requirements for schools

Performance Criteria	Acceptable Solutions	Exemption Requested
Firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation	Vehicular access must be capable of providing continuous access for emergency vehicles to enable travel in a forward direction from a public road around the entire building and	Complies
	Must have a minimum unobstructed width of 6m with no part of its furthest boundary more than 18m from the building and in no part of the 6m width be built upon or used for any purpose other than vehicular or pedestrian movement	Vehicular access is available to all sides of the building with a width of 6m, and pedestrian access is available internally and along the southern lot boundary
	Must provide reasonable pedestrian access from the vehicular access to the building	Complies
	Must have a load bearing capacity and unobstructed height to permit the operation and passage of fire fighting vehicles Must be wholly within the allotment except that a public road complying with above may serve as the vehicular access or part thereof	The entire school is within 70m of the western or eastern carparking area and it is therefore considered that firefighting access is available

7.3 Access – Subdivision

Performance Criteria	Acceptable Solutions/Comment
Firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation	Achieved as property access roads are two-wheel drive, all-weather roads
The capacity of access roads is adequate for firefighting vehicles	Achieved as it is assumed that the capacity of road surfaces is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes)
There is appropriate access to water supply	Achieved as it is assumed that the existing school within Proposed Lot 2 is equipped with a suitable fire hydrant system, and it is recommended that the entire lot ensure Hydrants are Designed, Installed and Commissioned in accordance with AS 2419.1:2021
Firefighting vehicles can access the development and exit the property safely	Achieved as the development is located within an urban area with an existing and proposed road network that supports the operational use of emergency firefighting vehicles

7.4 Services – Water, gas and electricity

Table 4 (PBP Addendum 2022): SFPP Development Water Supply – Specific requirements for schools

Performance Criteria	Acceptable Solutions	Comment
An adequate water supply for firefighting purposes is installed and maintained	Reticulated water is to be provided to the development, where available	Can Comply
	Water for firefighting purposes must be made available and consist of a fire hydrant system installed in accordance with AS2419.1	Can Comply

7.5 Electricity Services

Performance Criteria	Acceptable Solutions	Comment
Location of electricity services limits the possibility of ignition of surrounding bush land or the fabric of buildings	<p>Where practicable, electrical transmission lines are underground, and where overhead, electrical transmission lines are proposed as follows:</p> <p>Lines are installed with short pole spacing (30m), unless crossing gullies, gorges or riparian areas; and</p> <p>No part of a tree is closer to a power line than the distance set out in accordance with the specifications in <i>ISSC3 Guideline for Managing Vegetation Near Power Lines</i></p>	Can Comply, electricity is existing

7.6 Gas Services

Performance Criteria	Acceptable Solutions	Comment
Location and design of gas services will not lead to ignition of surrounding bushland or the fabric of buildings	<p>Where applicable, 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.</p> <p>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.</p> <p>if gas cylinders need to be kept close to the building, safety valves are directed away from the building and at least 2m</p>	Can Comply if applicable

Performance Criteria	Acceptable Solutions	Comment
	<p>away from any combustible material, so they do not act as a catalyst to combustion</p> <p>Polymer-sheathed flexible gas supply lines are not used, and above-ground gas service pipes are metal, including and up to any outlets.</p>	

7.7 Emergency management planning

Intent of measures: to provide suitable emergency and evacuation arrangements for occupants of SFPP developments

Performance Criteria	Acceptable Solutions/Comment	Comment
<p>A Bush Fire Emergency Management and Evacuation Plan is prepared</p>	<p>A Bush Fire Emergency Management and Evacuation Plan is prepared consistent with The NSW RFS document: <i>A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan</i> and <i>NSW RFS Schools Program Guide</i></p> <p>The Bush Fire Emergency Management and Evacuation Plan should include planning for the early relocation of occupants</p> <p>Note: A copy of the Bush Fire Emergency Management and Evacuation Plan should be provided to the Local Emergency Management Committee for its information prior to occupation of the development</p>	Can Comply

Performance Criteria	Acceptable Solutions/Comment	Comment
Appropriate and adequate management arrangements are established for consultation and implementation of the Bush Fire Emergency Management and Evacuation Plan	An Emergency Planning Committee is established to consult with residents (and their families in the case of schools) and staff in developing and implementing an Emergency Procedures Manual; and detailed plans of all emergency assembly areas including on site and off-site arrangements as stated in AS 3745:2010 are clearly displayed, and an annual emergency evacuation is conducted	Can Comply

8. Recommendations

The following recommendations are made for the bushfire measures for the proposed development of Eileen O'Connor Catholic School and One into Two Lot Subdivision at Lot 9 Section 4 DP 3368, 84 Gavenlock Road Mardi, and are based upon the relevant provisions of the NSW Rural Fire Service Guideline entitled Planning for Bush Fire Protection 2019 as amended by PBP 2022.

1. Asset Protection Zones

At the commencement of the development, and in perpetuity, the curtilage surrounding the subject buildings shall be managed as an IPA APZ from the proposal to the boundary to the north and west and for a distance of 42m to the east and south, as outlined in PBP 2019 Appendix 4.

Trees

- canopy cover should be less than 15% (at maturity)
- trees (at maturity) should not touch or overhang the building
- lower limbs should be removed up to a height of 2m above ground
- canopies should be separated by 2 to 5m
- preference should be given to smooth barked and evergreen trees

Shrubs

- create large discontinuities or gaps in the vegetation to slow down or break the progress of fire towards buildings
- shrubs should not be located under trees
- shrubs should not form more than 10% ground cover
- clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of the vegetation

Grass

- should be kept mown (as a guide grass should be kept to no more than 100mm in height)
- leaves and vegetation debris should be removed.

2. Water Supply

Water for firefighting purposes must be made available and consist of a fire hydrant system designed and installed in accordance with AS2419.1-2021 *Fire hydrant installations — System design, installation and commissioning*.

3. Construction Standards

New construction shall comply with Sections 3 and 6 (BAL 19) of AS3959-2018 'Construction of buildings in bush fire-prone areas', as varied by the applicable additional construction requirements of PBP section 7.5 (shown as Appendix 4 below).

EV Chargers are to be located at least 10m from school buildings and the hazard, with above ground infrastructure being non-combustible.

4. Electricity Services

Where practicable, electrical transmission lines are underground, and where overhead, electrical transmission lines are proposed as follows:

- i) lines are installed with short pole spacing (30m), unless crossing gullies, gorges or riparian areas; and

- ii) 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. Gas Services

Where applicable, 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.

Polymer-sheathed flexible gas supply lines are not used, and above-ground gas service pipes are metal, including and up to any outlets.

6. Fences and gates

All fences and gates are constructed of either hardwood or non-combustible material, however, if located within 6m of the building, they are to be constructed from non-combustible material only.

7. Landscaping

Landscaping within the APZ is to comply with the NSW RFS 'Asset protection zone standards' (PBP Appendix 4).

8. Emergency and Evacuation Planning

A Bush Fire Emergency Management and Evacuation Plan is prepared consistent with The NSW RFS document: *A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan* and *NSW RFS Schools Program Guide*.

An Emergency Planning Committee is established to consult with residents (and their families in the case of aged care accommodation and schools) and staff in developing and implementing an Emergency Procedures Manual; and detailed plans of all emergency assembly areas including on site and off-site arrangements as stated in AS 3745:2010 are clearly displayed, and an annual emergency evacuation is conducted.

Note: A copy of the Bush Fire Emergency Management and Evacuation Plan should be provided to the Local Emergency Management Committee for its information.

9. Summary

This report consists of a bush fire assessment for the proposed SFPP development of Eileen O'Connor Catholic School and One into Two Lot Subdivision at Lot 9 Section 4 DP 3368, 84 Gavenlock Road Mardi. The report concludes that the proposed development is on designated bushfire prone land and the legislative requirements for development in bushfire prone areas are applicable.

This report has considered all the elements of bushfire attack and the development satisfies the aim, specific objectives, the intent and performance criteria of Chapter 6 of the NSW RFS document 'Planning for Bush Fire Protection', as amended in 2022, subject to implementation of the recommendations made by this report.

Notwithstanding the precautions adopted, it should always be remembered that bushfires burn under a wide range of conditions and an element of risk, no matter how small, always remains and although the standard is designed to improve the performance of such buildings, there can be no guarantee because of the variable nature of bushfires that any one building will withstand bushfire attack on every occasion.

This report is a bush fire assessment that provides the required information to assist the Consent Authority and the Rural Fire Service in determining compliance in accordance with Planning for Bush Fire Protection and AS3959-2018. The proposal is considered a state significant development. The Department of Planning, Housing and Infrastructure is the final Consent Authority and the construction of the building must comply with the recommendations included in the consent authority's conditions of consent.



Catherine Gorrie

(a person who is recognised by the NSW Rural Fire Service as a suitably qualified consultant in bush fire risk assessment)

Accredited Bushfire Planning and Design Practitioner

Fire Protection Association Australia BPAD-Level 3 (BPAD 20751)

Grad Dip Bushfire Protection (UWS 2010)

Diploma Environmental Health & Building Surveying (TAFE 2005)

Corporate Silver Member Fire Protection Association Australia

Bushfire Consulting Services Pty Ltd

Tel: 02 4744 5800 | Mob: 0425 833 893

10. References

Keith D 2004, *Ocean Shores to Desert Dunes, the Native Vegetation of NSW and the ACT*, Department of Environment and Conservation, Sydney

NearMap 2023, *NearMap Photomap Aerial Imagery*, NearMap Australia, Barrangaroo, NSW

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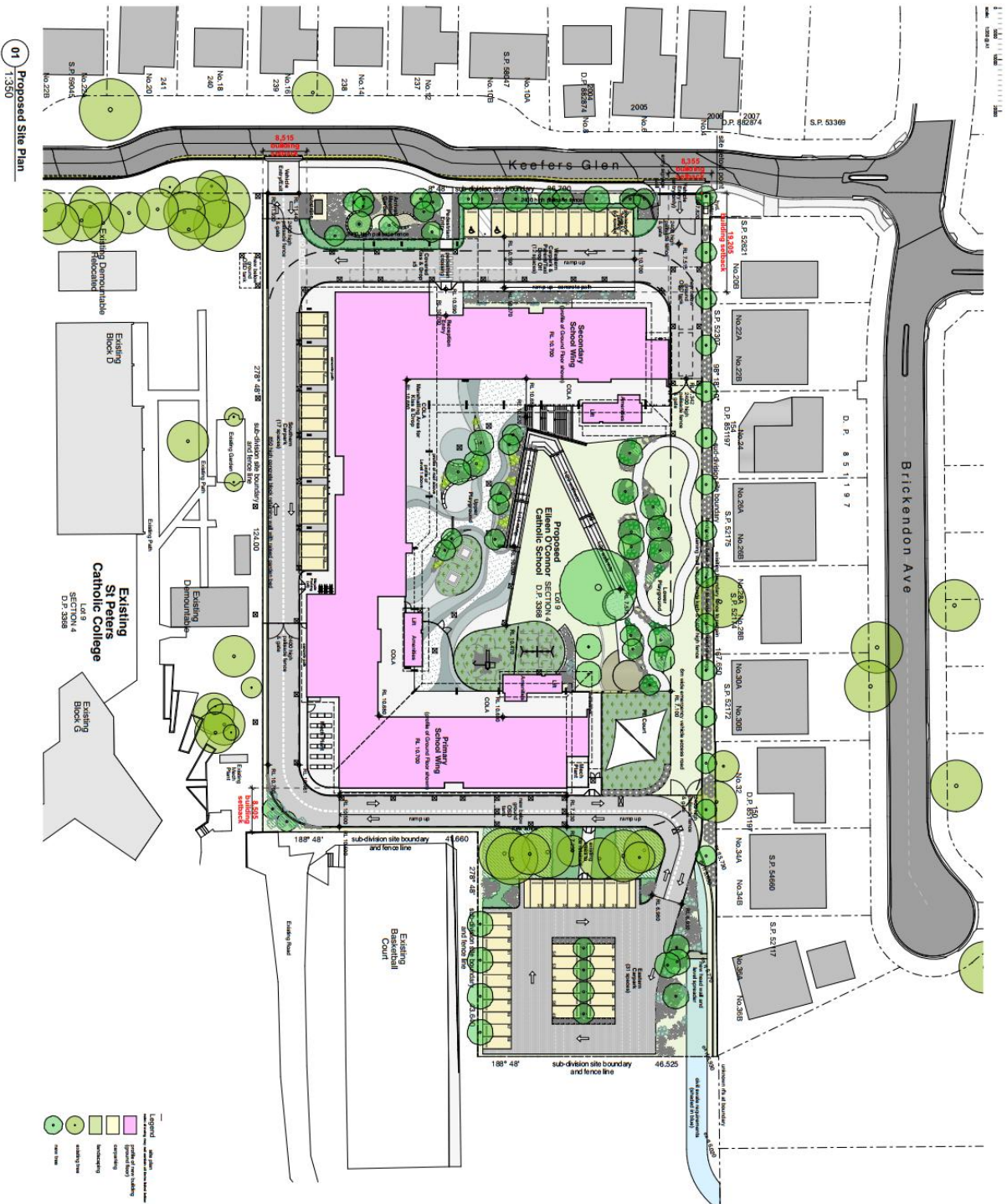
11. Legislation

Environmental Planning & Assessment Act 1979

Rural Fires Act 1997

Rural Fires Regulation 2013

Appendix 1 – Proposed Site Plan



Proposed Site Plan
01
1:350

Existing
St Peter's
Catholic College
SECTION 4
D.P. 3368

Existing
Basketball
Court

Existing
Demolition

Existing
Fencing

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Fencing

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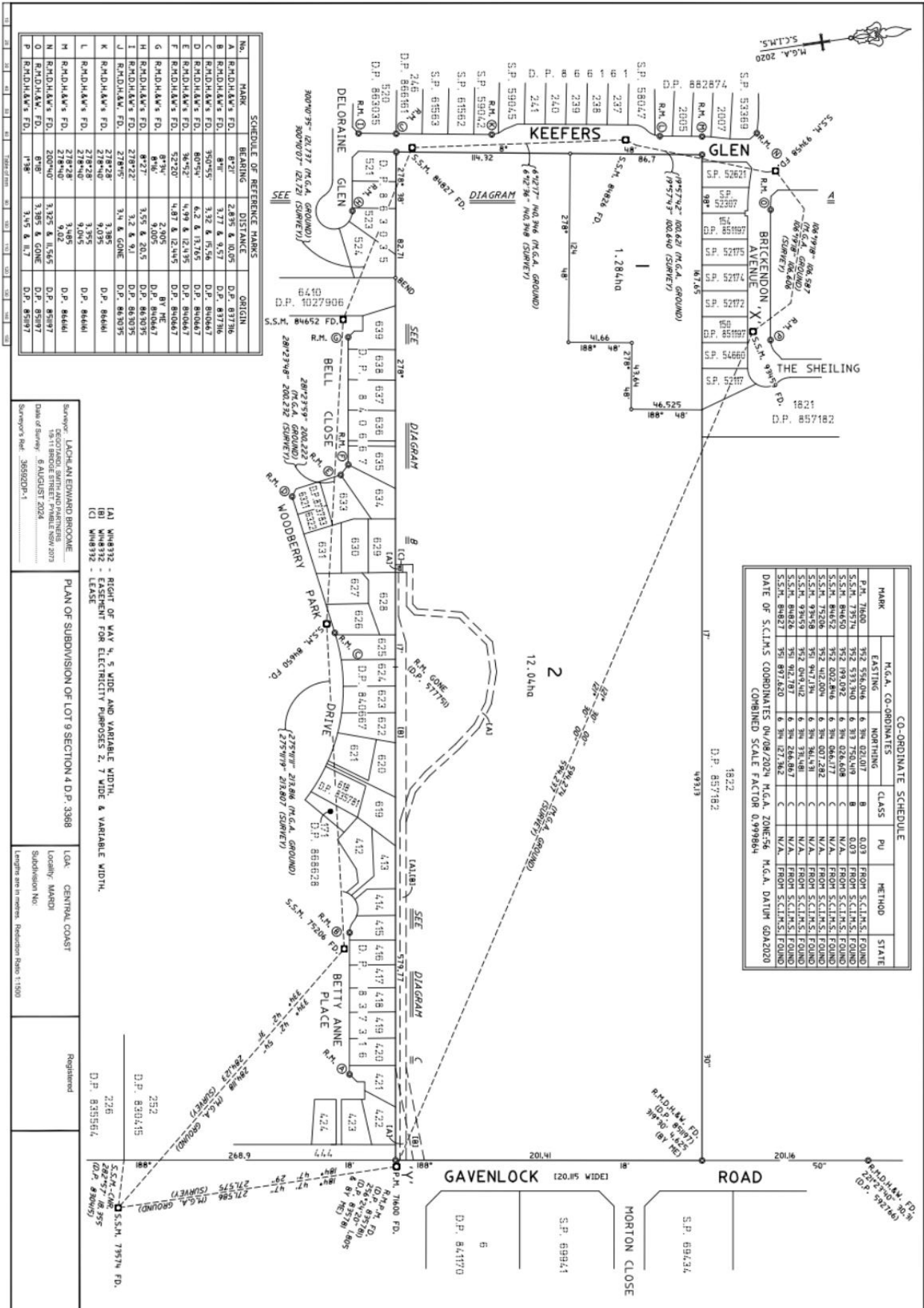
Existing
Fencing

Existing
Fencing

Existing
Fencing

Existing
Fencing

Plan of Subdivision



No.	MARK	BEARING	DISTANCE	ORIGIN
A	R.M.D.H.A.V. FD.	2.87	8.57	D.P. 81716
B	R.M.D.H.A.V. FD.	8.1	3.27	D.P. 81716
C	R.M.D.H.A.V. FD.	30.55	3.32 & 15.54	D.P. 81047
D	R.M.D.H.A.V. FD.	60.55	4.2 & 13.05	D.P. 81047
E	R.M.D.H.A.V. FD.	34.52	4.99 & 12.135	D.P. 81047
F	R.M.D.H.A.V. FD.	52.20	4.87 & 12.445	D.P. 81047
G	R.M.D.H.A.V. FD.	8.74	2.905	D.P. 81047
H	R.M.D.H.A.V. FD.	8.74	3.55 & 20.5	D.P. 86395
I	R.M.D.H.A.V. FD.	8.74	3.2 & 9.1	D.P. 86395
J	R.M.D.H.A.V. FD.	27.822	3.1 & 4.05	D.P. 86395
K	R.M.D.H.A.V. FD.	27.822	3.185	D.P. 86461
L	R.M.D.H.A.V. FD.	27.840	3.035	D.P. 86461
M	R.M.D.H.A.V. FD.	27.840	3.485	D.P. 86461
N	R.M.D.H.A.V. FD.	200.40	3.325 & 11.545	D.P. 85197
O	R.M.D.H.A.V. FD.	8.74	3.395 & 11.7	D.P. 85197
P	R.M.D.H.A.V. FD.	1.98	3.15 & 11.7	D.P. 85197

MARK	CO-ORDINATE		CLASS	PU	METHOD	STATE
	EASTING	NORTHING				
P.M. 7160	752 556.016	6 39 02.017	B	0.03	FROM S.C.L.M.S. FOUND	
S.M. 7574	752 533.340	6 39 750.149	B	0.03	FROM S.C.L.M.S. FOUND	
S.M. 84650	752 199.092	6 39 026.608	C	N/A	FROM S.C.L.M.S. FOUND	
S.M. 84652	752 002.846	6 39 026.608	C	N/A	FROM S.C.L.M.S. FOUND	
S.M. 75206	752 142.004	6 39 007.282	C	N/A	FROM S.C.L.M.S. FOUND	
S.M. 75208	752 142.004	6 39 007.282	C	N/A	FROM S.C.L.M.S. FOUND	
S.M. 93859	752 912.787	6 39 256.487	C	N/A	FROM S.C.L.M.S. FOUND	
S.M. 84826	751 912.787	6 39 256.487	C	N/A	FROM S.C.L.M.S. FOUND	
S.M. 84827	751 897.420	6 39 271.342	C	N/A	FROM S.C.L.M.S. FOUND	

DATE OF S.C.L.M.S. COORDINATES 04/08/2024 H.G.A. ZONE:56 M.G.A. DATUM: GDA2020
COMBINED SCALE FACTOR 0.999864

Surveyor: LACHLAN EDWARD BROOKE
 13011 BROOKER STREET, MARRONG VIC 3070
 Date of Survey: 6 AUGUST 2024
 Surveyor's Ref.: 36550DM-1

PLAN OF SUBDIVISION OF LOT 9 SECTION 4 D.P. 3368
 RIGHT OF WAY 4.5 M WIDE AND VARIABLE WIDTH.
 DRIVE 2.75 M WIDE 213.8 M (M.G.A. GROUND)
 DRIVE 2.75 M WIDE 218.807 (SUMMIT)
 DRIVE 2.75 M WIDE 218.807 (SUMMIT)
 DRIVE 2.75 M WIDE 218.807 (SUMMIT)

LOCALITY: MARRONG
 SUBDIVISION NO: 11580
 IGA: CENTRAL COAST
 REGISTERED

D.P. 835162
 D.P. 835162
 D.P. 835162
 D.P. 835162

Appendix 2 – Photos of Site and Surrounds

Source: BFCS P/L 11/07/2023



View toward the northwest at front entrance of school



View toward east at existing basketball court



View toward northeast at tennis courts behind dam



View toward south at maintained area next to existing buildings



View toward north at fire hydrant 39m from demountable building



View toward east at maintained area within existing school



View toward the south at maintained area next to Keepers Road



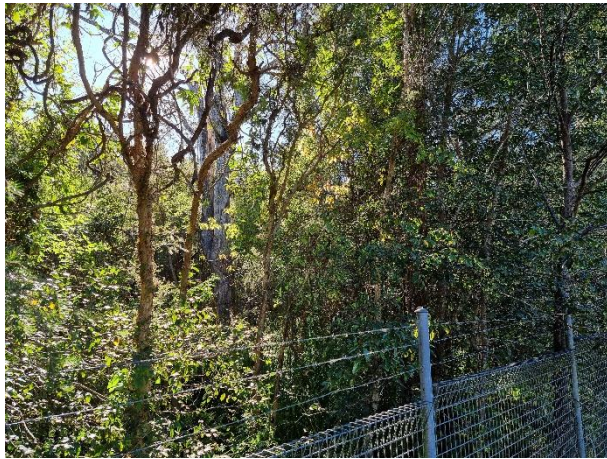
View toward the northeast showing vegetation next to tennis courts



View toward the east at vegetation next to proposed building



View toward the northeast at hazard vegetation



View toward the northeast at hazard vegetation