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2 March 2022

GJ Gardner Homes Taree
63 Muldoon Street
TAREE NSW 2430

Attention: Kylie Hambilton

Our Ref: 22110

Dear Kylie

BUSHFIRE ASSESSMENT
LOT 11 DP 22781, 25 MARINE DRIVE, WALLABI POINT

I refer to your request for a Bushfire Assessment for a proposed development on the above land (the subject land).

The proposed development that is the subject of the assessment is the construction of a dwelling on the land.

The following is a summary of the assessment.

BAL Assessment Procedure	Appendix 1 (PBP 2019)
Council Area	Mid-Coast
FFDI	80 (North Coast)
Applicable PBP 2019 Table	A1.12.6
Proposed Development	Dwelling
Vegetation formation	short heath
Effective slope	>5-10° downslope
Land to be maintained as APZ	Land within the site
Highest BAL when assessed under Table A1.12.6 of PBP 2019	BAL-19

1 Introduction

The purpose of this assessment is to determine the category of bushfire attack and subsequent construction standard for the proposed erection of a dwelling on land at Lot 11 DP 22781, 25 Marine Drive, Wallabi Point.

Land within the site is mapped as 'bush fire prone land' for the purposes of Section 10.3 of the *Environmental Planning and Assessment Act 1979*.

As the land within the site is mapped as bushfire prone land, the purpose of this Bushfire Assessment is to assist in the planning process, to identify the proximity of the proposed development to any potential bushfire threat and to determine what, if any, level of construction is required in accordance with the RFS guideline entitled *Planning for Bush Fire Protection 2019* (PBP).

The site was inspected on 17 February 2022 for the purposes of assessment. The Bushfire Attack Level (BAL) for the proposed development has been assessed as per the site assessment methodology in Appendix 1 of PBP. Once the BAL is determined, construction requirements for the corresponding BAL apply subject to *AS3959-2018: Construction of Buildings in Bushfire Prone Areas* (subject to the provisions of Section 7.5.2 of PBP).

2 The Site

Address	25 Marine Drive, Wallabi Point
Real Property Description	Lot 11 DP 22781
Zoning	R1-General Residential
Local EPI	Greater Taree Local Environmental Plan 2010

The site is located on the western side of Marine Drive, about 60 metres north of the intersection with Pacific Street. The site has an overall area of approximately 580m² and is currently vacant.

The land within the site falls from south-west to north-east. The land within the site is clear of significant vegetation and is comprised of managed grasses.

Existing residential buildings exist on residential allotments to the north, west and south of the site.

Dunal vegetation, assessed as short heath vegetation, exists on land on the eastern/opposite side of Marine Drive, where the land slopes downwards towards the beach.

The vegetation on the opposite side of Marine Drive is the nearest potential bushfire hazard vegetation to the site.

Reticulated water supply is available to the site and hydrants are in the road reserve to Marine Drive near the site frontage.

3 The Proposal

The development is for construction of a dwelling-house on the land.

The siting of the proposed dwelling is shown in Figure 3.1 on the following page.

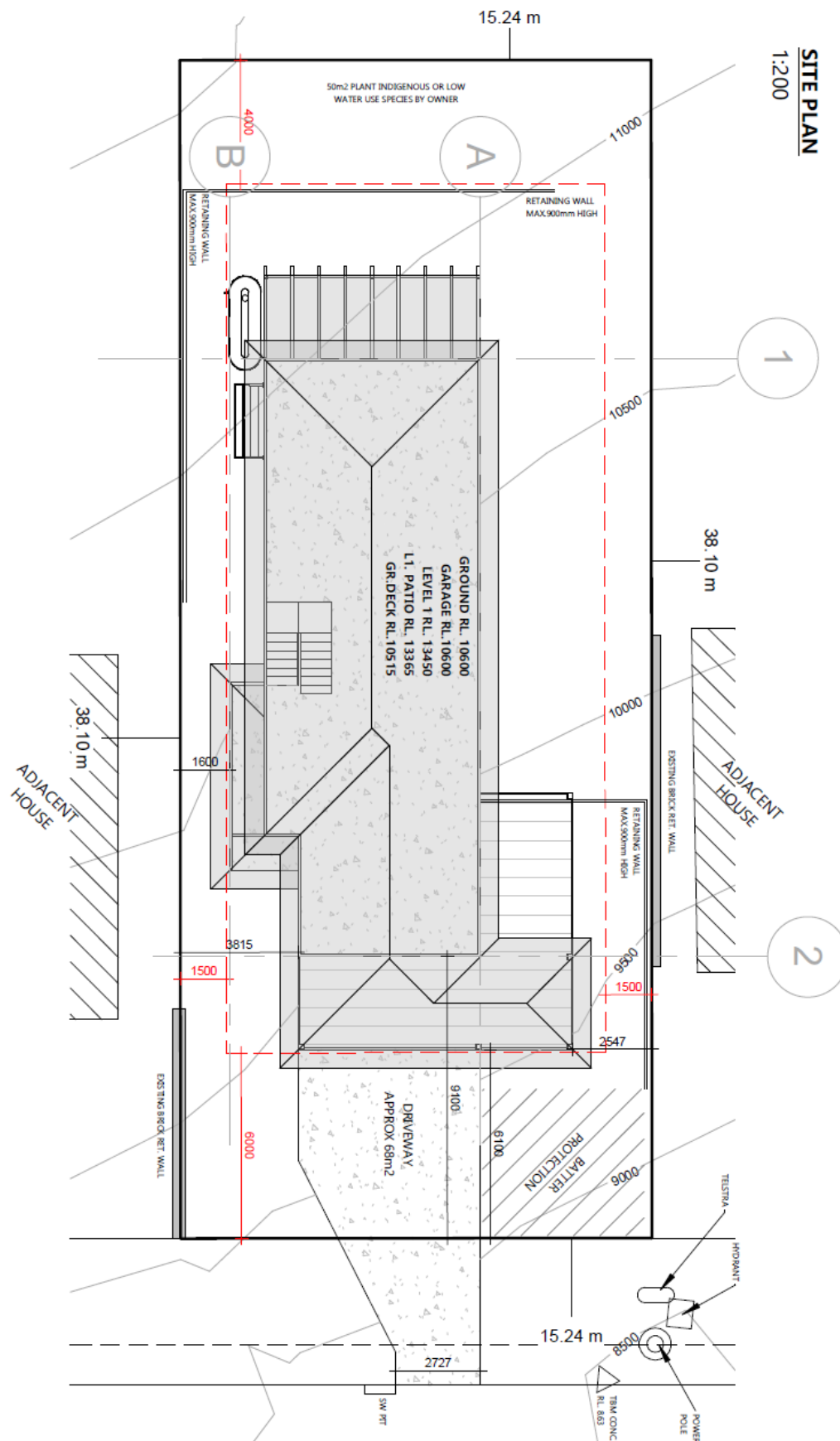


Figure 3.1: Site Plan Extract – Source: Client. Not to Scale.
Marine Drive to bottom of plan. North (approx.) to right of page.

4 Bushfire Assessment

The site assessment methodology as per Appendix 1 of *Planning for Bush Fire Protection 2019* (PBP 2019) outlines the procedure to determine Bushfire Attack Levels (BALs).

The site assessment methodology is summarised in the following steps:

- 4.1 Determine vegetation formation around building to a distance of 140 metres;
- 4.2 Determine effective slope of the land from the building for a distance of 100 metres;
- 4.3 Identify relevant Forest Fire Danger Index (FFDI) for the Council area;
- 4.4 Determine separation distance from the edge of the unmanaged vegetation to the closest external wall (or closest structural support element in the case of patios/porticos etc);
- 4.5 Match the relevant FFDI, appropriate vegetation, distance and effective slope to determine the appropriate BAL.

The steps are discussed in 4.1-4.5 below.

4.1 Vegetation

Vegetation within 140 metres of the proposed dwelling has been classified as short heath vegetation on land to the east of the site, on the opposite side of Marine Drive.

The vegetation is a very narrow strip (west to east), only about 20 metres wide/deep between the eastern side of Marine Drive and a creek which drains to the beach.

4.2 Effective Slope

The slope of the land under the nearest classified vegetation has been conservatively assessed as >5-10° downslope.

4.3 Relevant FFDI for Council area

The Council area in which the development is to be undertaken is the Mid-Coast Council area which is within the North Coast Fire Weather area and the applicable FFDI is 80.

The relevant table of PBP 2019 for determination of the appropriate BAL is Table A1.12.6.

4.4 Separation distance

The separation distance between the proposed dwelling footprint and the nearest vegetation on the eastern/opposite side of Marine Drive will be about 21.6 metres.

It is to be recommended that land within the site is to be maintained as an Inner Protection Area (IPA) for the purposes of *Planning for Bush Fire Protection 2019*.

Any grassy vegetation within the IPA is to be maintained to a height <100mm.

4.5 BAL Determination

The following table shows the determination of Bushfire Attack Level (BAL) as per Table A1.12.6 of PBP 2019 (Determination of BAL, FFDI 80 – residential development) for the proposed dwelling and subsequent required building standards.

Direction	Separation distance (metres)	Vegetation Formation	Effective Slope	Bushfire Attack Level (BAL)
East	18-<25	short heath	>5-10° downslope	BAL-19

The highest assessed BAL for the dwelling is BAL-19 and the dwelling will be subject to construction requirements for that BAL as per AS 3959-2018 (*Construction of buildings in bushfire-prone areas*).

According to Section A1.8 (Shielding) of PBP 2019, *where an elevation is shielded from direct radiant heat arising from bush fire attack, then the construction requirements for that elevation can be reduced to the next lower BAL*. A similar provision is contained in Section 3.5 of AS3959-2018.

The western elevation does not have any direct 'line of sight' to the vegetation on land to the east of the site. Applying Section A1.8 of PBP, consideration may be given to construction of that elevation being reduced by one level of construction to meet the construction requirements for BAL-12.5 as per AS3959-2018.

Additional construction requirements detailed in Section 7.5.2 of PBP apply in addition to any construction requirements detailed by AS 3959-2018 for the relevant BAL.

5 Recommendation

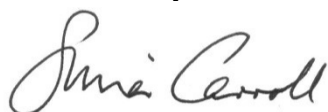
In relation to the proposed dwelling on land at Lot 11 DP 22781, 25 Marine Drive, Wallabi Point, it is recommended that:

- A. Land within the site is to be maintained as an Asset Protection Zone (APZ) for the purposes of *Planning for Bush Fire Protection 2019*.
- B. The APZ is to be maintained in accordance with the requirements for an Inner Protection Area (IPA) as described in Appendix 4 of *Planning for Bush Fire Protection 2019* and any grassy vegetation within the IPA is to be maintained to a height <100mm. A clear area of low-cut lawn or pavement is to be maintained adjacent to the dwelling.
- C. Subject to (A), (B) and (D), construction of the proposed dwelling is to comply with the construction requirements for BAL-19 as per AS 3959-2018 (*Construction of buildings in bushfire-prone areas*) and the additional construction requirements/variations as outlined in 7.5.2 (page 70) of *Planning for Bush Fire Protection 2019*.
- D. As per Section A1.8 of *Planning for Bush Fire Protection 2019* (and Section 3.5 of AS3959-2018), consideration may be given to construction of the west-facing elevation being reduced by one level of construction to comply with the construction requirements for BAL-12.5 as per AS3959-2018 (*Construction of buildings in bushfire-prone areas*) and any applicable additional construction requirements/variations as outlined in Part 7.5.2 of PBP.

E. Where relevant:

- (i) Any fences and/or gates should be made of either hardwood or non-combustible material.
- (ii) All above-ground water service pipes external to the building are to be metal, including and up to any taps.
- (iii) Any bottled gas is to be installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities, and:
 - (a) all fixed gas cylinders are to be kept clear of all flammable materials to a distance of 10 metres and shielded on the hazard side;
 - (b) if gas cylinders need to be kept close to the building, safety valves are directed away from the building and at least 2 metres away from any combustible material, so they do not act as a catalyst to combustion;
 - (c) above-ground gas service pipes external to the building are to be metal, including and up to any outlets; and
 - (d) connections to and from gas cylinders are to be metal (polymer-sheathed flexible gas supply lines to gas meters adjacent to buildings are not to be used).

Yours faithfully



SIMON CARROLL

Graduate Diploma in Design for Bushfire Prone Areas

Graduate Diploma in Building Fire Safety & Risk Engineering

Bushfire Planning and Design Accredited Practitioner Level 3 – NSW

Accreditation Number BPAD9326

Notes to assessment:

1. The assessment relates to a proposed dwelling (the proposed development) on the subject land only. Only the siting plan at Figure 3.1 has been considered.
2. This Assessment has been based on bushfire protection guidelines as outlined in the document entitled Planning for Bush Fire Protection 2019 (PBP).
3. Notwithstanding the precautions recommended, it should always be remembered that bushfires burn under a range of conditions and an element of risk, no matter how small, always remains.