
Bushfire Assessment Report

Proposed Development | **Multi-Dwelling (Four Dwellings), including lot consolidation**

Property Address | **39-41 Nuwarra Circuit Forster NSW 2428**

Lot/DP | **Lot 151 & 152 DP 1043081**

Property Owner | **S & B Freyler, W & S Freyler**

14 January 2025

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1. Summary

1.1. Overview

This report contains the assessment of potential bushfire constraints at 39-41 Nuwarra Circuit, Forster. The lot is identified on MidCoast Council's online mapping as being bushfire prone land. In accordance with Section 4.14 of the *Environmental Planning and Assessment Act 1979*, development consent cannot be granted on bushfire prone land unless the development meets the requirements of the NSW Rural Fire Service's document "*Planning for Bush Fire Protection 2019*" (PBP).

Site observations and measurements were considered against the assessment methodology from the NSW Rural Fire Service document "*Building in bush fire areas: Single dwelling application kit*". This document provides a streamlined approach to meeting the requirements of PBP. A summary of this assessment and BAL rating are contained in Section 1.2 of this report, while a detailed assessment is contained in Section 2 of this report.

1.2. Executive Summary

- An assessment of the bushfire vegetation surrounding the allotment was undertaken on 10 November 2024.
- The site is currently vacant and comprises only grasses. The proposal seeks consent for the construction four (4) single storey dwellings.
- 'Dry Sclerophyll Forest' vegetation was identified within 140m of the proposed development site.
- The south-western elevation of all dwelling is to be constructed to **BAL-12.5**.
- The area around the development, to the lot boundaries should be maintained in perpetuity as an Inner Protection Area (IPA) in accordance with Tables A1.12.3 and A1.12.4 of *Planning for Bush Fire Protection 2019*.
- Bushfire protection measures listed in Part 7.4 and 7.5 of *Planning for Bush Fire Protection 2019* should be incorporated into the development. Such measures include asset protection zones, access, water supply, services and construction standards. A hyperlink to Table 7.4a is contained in Appendix B of this document.

1.3. Site Details & Description

Property Address:	39-41 Nuwarra Circuit Forster NSW 2428
Land Description:	Lot 151 & 152 DP 1043081
Zoning:	R2 – Low Density Zone
Site Area:	Total Combined area = 1235.8m ²
Owner:	S & B Freyler, W & S Freyler

The subject land (the “site”) comprises land described as Lots 151 & 152 in DP 1043081 and is located at 39-41 Nuwarra Circuit, Forster. The allotment is located within the central part of Forster, within an established residential area.

The site comprises two (2) vacant allotments, both being regular shaped allotments, bound by Nuwarra Circuit along its northern-eastern (front) boundary. The adjoining allotments contain existing residential dwellings ranging in height and architectural styles.

Primary access to the site is from Nuwarra Circuit extending from the northern-eastern boundary.

The allotment is zoned R2 Low Density Residential zone under the provisions of the Great Lakes Local Environmental Plan 2014 and has a combined site area of approximately 1235.8m².

The site comprises a level landform with no significant vegetation. The site is classified as being bushfire prone land, and is also mapped as being flood prone land. The site contains class 3 potential acid sulphate soils.

A locality map and landuse zoning map depicting the subject land is provided in Figures 1 and 2 below.



Figure 1 –Site Locality Plan

[source: Midcoast Council online mapping]



Figure 2 –Bushfire Prone Mapping *[source: Midcoast Council online mapping]*

2. Proposal

The proposed development seeks consent for a multi-dwelling development. The development comprises four (4) single storey free-standing dwellings.

Dwellings 1 and 4, are located adjacent to the street frontage and comprise a mirrored floor plan. Dwellings 2 and 3, are located at the rear of the site, and also comprise a mirrored floor plan of each other.

The development will have a gross floor area of approximately 383m².

Vehicle access to all dwellings is via a new centrally located sealed driveway extending from Nuwarra Circuit. The proposal includes off street parking accommodation for six (6) vehicles.

The proposed development has been designed using slab on ground construction, with a masonry walls and metal roof design.

Given the proposed development is located over two (2) separate allotments, the proposal seeks consent to also consolidate the land.

The Site Plan for the proposed development is shown in Figure 3 below. Refer to **Appendix A** for full set of Architectural plan set.

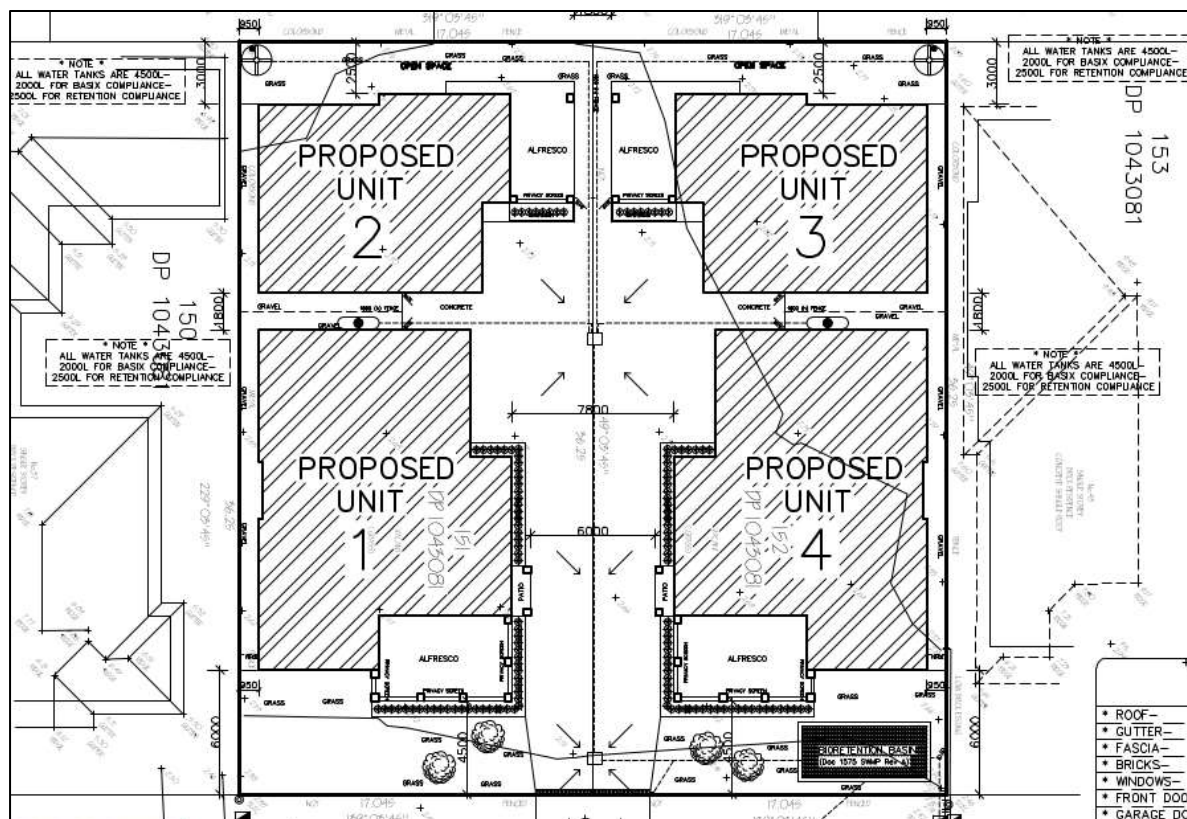


Figure 3 – Proposed Site Plan

(Source: Applicant)



Plate 1 – Dry Sclerophyll Forest vegetation located approximately 65m south-west of the site.

The following table provides a summary of the vegetation in the vicinity of the development:

	North-East	South-East	North West	South West
Dominant veg type	Road	Managed Land	Managed Land	Managed land & Forest
Height (metres)				20m

3.2. Distance to bushfire vegetation

The following table depicts the distance from the development to the nearest vegetation:

	North-East	South-East	North West	South West
Distance to vegetation				65m

Vegetation shown in the above table will be discussed in Section 2.5 (BAL).

3.3. Effective slope

Effective slope is the slope of the land underneath the vegetation identified at the site inspection. This information is used to calculate the most relevant bushfire attack level for the development.



Figure 5 – Effective slope under the vegetation

	North-East	South-East	North West	South West
Effective slope under vegetation	N/A	N/A	N/A	Flat

3.4. Fire Danger Index (FDI)

The Midcoast Local Government area has been classified by the NSW Rural Fire Service as having an FDI of 80.

3.5. Bushfire attack level (BAL)

Table A1.12.6 from *Planning for Bush Fire Protection 2019* is used to calculate the BAL for each elevation of the dwellings:

The site measurements taken at the time of the inspection are included in the summary table below, which is formatted to be consistent with Part C of the NSW Rural Fire Service's document *Guidelines for Single Dwelling Development Applications*.

Using Table A1.12.6 above, a bush fire attack level (BAL) for each elevation can be calculated and is detailed in the table below.

	North-East	South-East	North West	South West
Dominant veg type		Managed Land	Managed Land	Managed Land/Forest
Distance to vegetation	NA	NA	NA	65m
Effective slope under the predominant vegetation type	NA	NA	NA	Flat land
FDI	NA	NA	NA	80
BAL	NA	NA	NA	12.5

As can be seen from the table above, the BAL for the south-wester elevation of the development is **BAL-12.5**.

Table A1.12.6

Determination of BAL, FFDI 80 – residential development

KEITH VEGETATION FORMATION		BUSH FIRE ATTACK LEVEL (BAL)				
		BAL-FZ	BAL-40	BAL-29	BAL-19	BAL-12.5
		Distance (m) asset to predominant vegetation class				
ALL UPSLOPE AND FLATLAND	Rainforest	< 7	7 –< 9	9 –< 14	14 –< 20	20 –< 100
	Forest (wet and dry sclerophyll) including Coastal Swamp Forest, Pine Plantations and Sub-Alpine Woodland	< 15	15 –< 20	20 –< 29	29 –< 40	40 –< 100
	Grassy and Semi-Arid Woodland (including Mallee)	< 8	8 –< 11	11 –< 16	16 –< 22	22 –< 100
	Forested Wetland (excluding Coastal Swamp Forest)	< 6	6 –< 8	8 –< 12	12 –< 18	18 –< 100
	Tall Heath	< 12	12 –< 16	16 –< 23	23 –< 32	32 –< 100
	Short Heath	< 7	7 –< 9	9 –< 14	14 –< 20	20 –< 100
	Arid-Shrublands (acacia and chenopod)	< 5	5 –< 6	6 –< 9	9 –< 14	14 –< 100
	Freshwater Wetlands	< 4	4 –< 5	5 –< 7	7 –< 11	11 –< 100
	Grassland	< 7	7 –< 10	10 –< 14	14 –< 20	20 –< 50
	Rainforest	< 9	9 –< 12	12 –< 17	17 –< 25	25 –< 100
> 0 > 5 DEGREES – DOWNSLOPE	Forest (wet and dry sclerophyll) including Coastal Swamp Forest, Pine Plantations and Sub-Alpine Woodland	< 19	19 –< 25	25 –< 35	35 –< 47	47 –< 100
	Grassy and Semi-Arid Woodland (including Mallee)	< 10	10 –< 13	13 –< 19	19 –< 28	28 –< 100
	Forested Wetland (excluding Coastal Swamp Forest)	< 8	8 –< 10	10 –< 15	15 –< 22	22 –< 100
	Tall Heath	< 13	13 –< 18	18 –< 26	26 –< 36	36 –< 100
	Short Heath	< 8	8 –< 10	10 –< 15	15 –< 22	22 –< 100
	Arid-Shrublands (acacia and chenopod)	< 5	5 –< 7	7 –< 11	11 –< 16	16 –< 100
	Freshwater Wetlands	< 4	4 –< 6	6 –< 8	8 –< 12	12 –< 100
	Grassland	< 8	8 –< 11	11 –< 16	16 –< 23	23 –< 50
	Rainforest	< 11	11 –< 15	15 –< 22	22 –< 32	32 –< 100
	Forest (wet and dry sclerophyll) including Coastal Swamp Forest, Pine Plantations and Sub-Alpine Woodland	< 24	24 –< 31	31 –< 43	43 –< 57	57 –< 100
> 5 > 10 DEGREES – DOWNSLOPE	Grassy and Semi-Arid Woodland (including Mallee)	< 12	12 –< 17	17 –< 24	24 –< 34	34 –< 100
	Forested Wetland (excluding Coastal Swamp Forest)	< 10	10 –< 13	13 –< 20	20 –< 28	28 –< 100
	Tall Heath	< 15	15 –< 20	20 –< 29	29 –< 40	40 –< 100
	Short Heath	< 9	9 –< 12	12 –< 18	18 –< 25	25 –< 100
	Arid-Shrublands (acacia and chenopod)	< 6	6 –< 8	8 –< 12	12 –< 18	18 –< 100
	Freshwater Wetlands	< 5	5 –< 6	6 –< 10	10 –< 14	14 –< 100
	Grassland	< 9	9 –< 12	12 –< 18	18 –< 26	26 –< 50
	Rainforest	< 11	11 –< 15	15 –< 22	22 –< 32	32 –< 100

3.6. Proposed Development

Australian Standard *AS 3959-2018: Construction of Buildings in Bushfire Prone areas* contains the bushfire protection measures that will need to be incorporated into the proposed development. BAL-12.5 focuses on preparing the building to withstand attack from wind-borne embers and flame contact. Such measures include, but are not limited to:

- Fitting metal fly screens over the openable portion of windows.
- Installing draft seals to doors.
- Ensuring there are no gaps in the exterior of the building greater than 2mm.
- Use of non-combustible or bushfire-resisting timber for external elements.

A comprehensive list of the bushfire protection measures is provided in *AS 3959: Construction of buildings in bushfire-prone areas* and will need to be incorporated into any Construction Certificate or future Complying Development Certificate applications.

Additional construction requirements

In the wake of the 2009 Victorian Bush Fires Royal Commission, the NSW Rural Fire Service now requires additional construction requirements. These are listed in Part 7.5 of *Planning for Bushfire Protection 2019*, and should be incorporated into plans and specifications accompanying any Construction Certificate or future Complying Development Certificate applications.

4. Conclusion and Recommendations

An assessment of bushfire prone vegetation in the vicinity of the subject lot was undertaken in accordance with the NSW Rural Fire Service's documents *Planning for Bush Fire Protection 2019* and *Guidelines for Single Dwelling Development Applications*.

The following recommendations are made as a result of this assessment:

- The south-western elevation of all dwelling is to be constructed to **BAL-12.5**.
- The area around the development, to the lot boundaries should be maintained in perpetuity as an Inner Protection Area (IPA) in accordance with Tables A1.12.3 and A1.12.4 of *Planning for Bush Fire Protection 2019*.
- Bushfire protection measures listed in Part 7.4 and 7.5 of *Planning for Bush Fire Protection 2019* should be incorporated into the development. Such measures include

asset protection zones, access, water supply, services and construction standards. A hyperlink to Table 7.4a is contained in Appendix B of this document.