

16/08/2024

Andrea Smith,
Development Manager, Villawood Properties
PO Box 1104, Bendigo VIC 3552
Email: andrea@villawoodproperties.com
Phone: (03) 5444 0002

Dear Andrea,

DRAFT Bushfire Attack Level Assessment Imagine Estate, Strathfieldsaye: Stage 16C

Practical Ecology was commissioned by Villawood Properties to provide a Bushfire Attack Level Assessment for the residential subdivision of Stage 16C of Imagine Estate, Strathfieldsaye. It is understood a planning permit has been granted for the subdivision plan and a BAL assessment for the building permit is all that is required. An overview of the site is presented in Map 1.

The land is located within a Bushfire Prone Area under the *Victorian Building Regulations 2018*. As such, the provisions within the Building Code of Australia (BCA) require residential development to be protected from the effects of bushfire. The deemed-to-satisfy solutions require an assessment of the Bushfire Attack Level (BAL) in accordance with *Australian Standards 3959-2018: Construction of buildings in bushfire-prone areas* (AS3959-2018). Dwellings must then be built to the relevant BAL as per the BCA.

Currently there are two deemed-to-satisfy methods of building construction to satisfy the BAL:

- AS3959-2018, and
- NASH Standard 'Steel Framed Construction in Bushfire Areas'

The land is zoned General Residential Zone (GRZ) and is not covered by a Bushfire Management Overlay (BMO). Planning authorities may seek assurance that bushfire protection measures have been considered at the subdivision application stage.

There are three potential methods of BAL assessment under the building and planning regulations:

- Method 1 of AS3959-2018
- Method 2 of AS3959-2018
- An Alternative Solution in accordance with the BCA for building permits or as approved by the Relevant Authority for planning permits.

Considering the nature of the development and the condition of the surrounding vegetation. Method 1 as per AS3959-2018 is considered suitable in relation to the subdivision of Stage 16C.

SUMMARY OF RESULTS

Document date & version	08/08/2024 - Version 1.0
Assessors	Maria Koulaginis
Assessors Contact	Email: mariak@practicalecology.com.au Phone: (03) 9484 1555 Mobile: 0473 915 448

Lot No	BAL rating as per AS3959-2018	Setback from boundary required	Shielding as per AS3959-2018 Section 3.5 applicable
1634	BAL-12.5	N/A	N/A
1635	BAL-12.5	N/A	N/A
1636	BAL-12.5	N/A	N/A
1637	BAL-12.5	N/A	N/A
1638	BAL-12.5	N/A	N/A
1639	BAL-12.5	N/A	N/A
1640	BAL-12.5	N/A	N/A
1641	BAL-12.5	N/A	N/A
1642	BAL-12.5	N/A	N/A
1643	BAL-12.5	N/A	N/A
1644	BAL-12.5	N/A	N/A
B	BAL-12.5	N/A	N/A

* Assuming that the Grassland and Woodland vegetation directly east of the site is managed by future developments within the near future as indicated from previous assessments.

Bushfire Attack Level Assessment

Document date & version	14/08/2024 - Version 0.0
Assessors	Maria Koulaginis
Assessors Contact	Email: mariak@practicalecology.com.au Phone: (03) 9484 1555 Mobile: 0473 915 448

SITE DETAILS

Municipality	Greater Bendigo
Address	Stage 16C – 80 Dukes Lane & 418 Somerset Park Road, Strathfieldsaye, Victoria
Applicant	c/o Andrea Smith Development Manager, Villawood Properties PO Box 1104, Bendigo VIC 3552 andrea@villawoodproperties.com
Zoning	General Residential Zone (GRZ)
Overlays	<ul style="list-style-type: none"> Development Plan Overlay – Schedule 26 (DPO26)
Bushfire Prone Area	Yes
Proposal	Residential subdivision

AS3959 METHOD 1

The Study Area consists of parcels situated between Dukes Lane and Somerset Park Road within the suburb of Strathfieldsaye, 12 kilometers south-east of the regional city of Bendigo. The majority of this area has already been cleared for the residential subdivisions on adjacent properties although there is some vegetation to the south and east. There is also vegetation located along the Sheepwash Creek corridor to the north. The results of the BAL assessment are provided in Table 1.

Table 1. Bushfire hazard site assessment

Vegetation patch	1	2	3	4	5
Direction in relation to site	North	East	South	East	South and west
Fire Danger Index	100	100	100	100	100
Vegetation type	Woodland	Woodland	Grassland	Grassland	Low Threat
Exclusions (from Section 2.2.3.2 b, c, d, e or f)	N/A	N/A	N/A	N/A	e, f
Effective Slope (up/down)	Down	Up	Down	Up	Up
Slope (degrees)	0–5°	0°	0–5°	0°	0–5°
Defendable space requirements for BAL–12.5 (m)	41	33	22	19	N/A
Defendable space requirements for BAL–19 (m)	29	24	15	13	N/A
Defendable space requirements for BAL–29 (m)	21	16	10	9	N/A

Vegetation to the east has been assessed as largely being Grassland with a small area of Woodland Vegetation. This area is to be cleared within the immediate future, prior to construction of the Subject Site. This vegetation has not been considered in regard to this Bushfire Attack Level assessment. A gentle downslope is observed to the north, containing Grassland and Woodland vegetation. This area is expected to be cleared in the immediate future due to being rezoned as 'General Residential Zone' and having permits recently approved for similar subdivisions. As a result, no setback should be required for any of the proposed lots and BAL-12.5 can be obtained across the Subject Site.

A Bushfire Risk Assessment was performed by *Practical Ecology* for 90 Dukes Lane and 410 Somerset Park Road, Strathfieldsaye ('Bushfire Risk Assessment – 90 Dukes Lane and 410 Somerset Park Road, Strathfieldsaye', *Practical Ecology*, 2021) which includes the land to the north where the Classified vegetation was recorded. Bushfire Risk Assessments were also performed for properties to the east and west (including properties which contained the Stage 16 lots) which confirmed the assessment above.

QUALIFICATIONS

We have taken all reasonable steps to ensure that the information provided in this assessment is accurate and reflects the conditions on and around the site on the date of this assessment. This assessment cannot guarantee safety during a bushfire event. There are additional measures that should be considered and implemented to improve the bushfire performance of buildings and the safety of occupants such as:

- a Personal Bushfire Plan for each household to detail how occupants will respond to an emergency event
- building design: e.g. minimise re-entrant corners, elevated floors, vulnerable elements
- access and egress for emergency services
- static water supply in case mains water is not available
- defensible space around building by managing vegetation and removing other fuel sources.

Please don't hesitate to contact us if you have any issues or queries,

Yours sincerely,

Maria Koulaginis

Senior Consulting Arborist

Bushfire Consultant

Ph: (03) 9484 1555 | E-mail: juliand@practicalecology.com.au




Web: www.practicalecology.com.au Address: PO Box 228 | Preston Vic 3072



Map 1. Subject Site

Imagine Estate – Stage 16C

Legend

-  Study area
-  Parcels
-  Contours (10m)

Details

Mapping by: Julian Drummond
Date: 23/07/2024
Version: 1
Aerial photography from Nearmap (June 2024).
Data Source: Base layers courtesy of VicMap,
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Scale: 1:750 (Page size A3)

Disclaimer

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




p (03) 9484 1555 e enquiries@practical-ecology.com.au

Map 2. BAL Assessment – Vegetation

Imagine Estate – Stage 16C



Legend

-  Study area
-  Assessment area (100m)
-  Parcels
-  Contours (10m)
-  Natural watercourse
-  Calculated slope from contours

Classified vegetation

-  0-5° Downslope Woodland
-  Upslope Woodland
-  0-5° Downslope Grassland
-  Upslope Grassland
-  Low Threat

Details

Mapping by: Julian Drummond
 Date: 8/08/2024
 Version: 1
 Aerial photography from Nearmap (June 2024).
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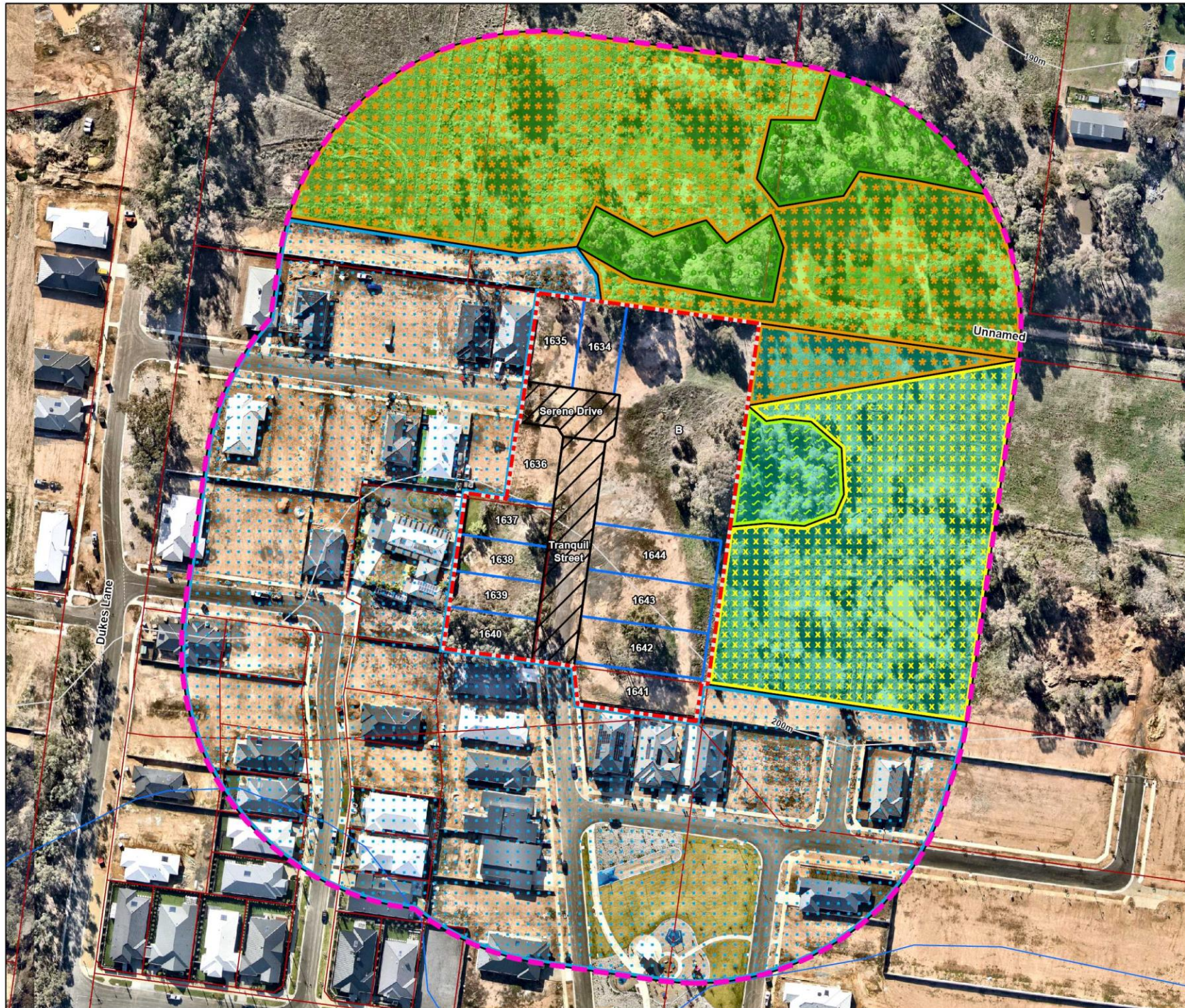


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Map 3. BAL Assessment – Setback requirements

Imagine Estate – Stage 16C



Legend

- Study area
- Assessment area (100m)
- Parcels
- Contours (10m)

Classified vegetation

- 0-5° Downslope Woodland
- Upslope Woodland
- 0-5° Downslope Grassland
- Upslope Grassland
- Low Threat

Status of surrounding vegetation

- To be removed in the immediate future
- To be removed in the next few years (permits have been obtained)

Proposed developments

- Lot
- Road

Details

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