

8 September 2026

Our Ref: A24.076-RPT-BAL-STG4A_0_FINAL



Bushfire Attack Level (BAL) Assessment Report

Site details	
Address: Lot 9005 and 9006 Scott Road	
Suburb: Mundijong	State: Western Australia
Local Government Area: Shire of Serpentine-Jarrahdale	
Description of Building Works: Construction of Class 1a dwellings – Stage 4A Mundi Estate	

Report details			
Project number	A24.076	Report version	Final
Assessment date	13/08/2026	Report date	8/09/2026
Authors	Callan Baker Graduate Bushfire Consultant	Review	Dylan Wray Principal Bushfire Consultant (BPAD L3 - 44656)
	Beau Eaton Senior Bushfire Consultant		



Purpose of this BAL Assessment Report

This BAL Assessment Report has been prepared to accompany the BAL certificates for building licenses within Stage 4a of the Mundi Estate, given the lots are designated as bushfire prone. The BAL certificates provide the BAL rating and separation distance to the nearest bushfire hazard interface for each lot.

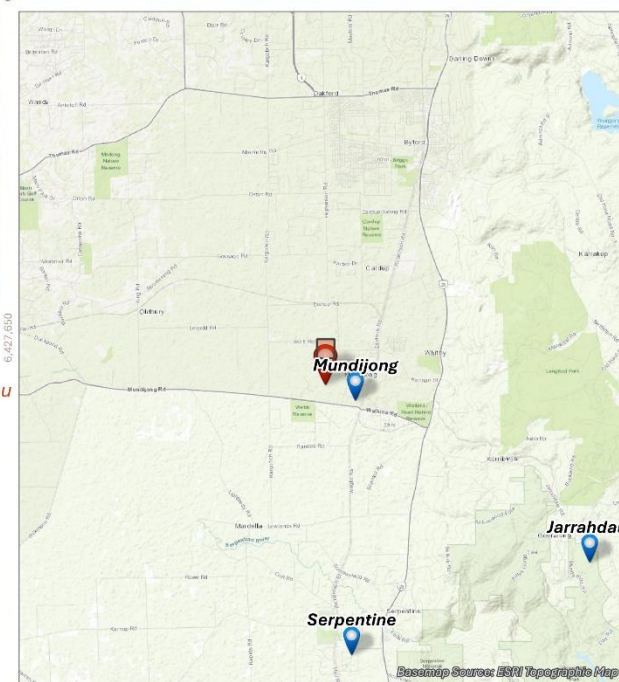
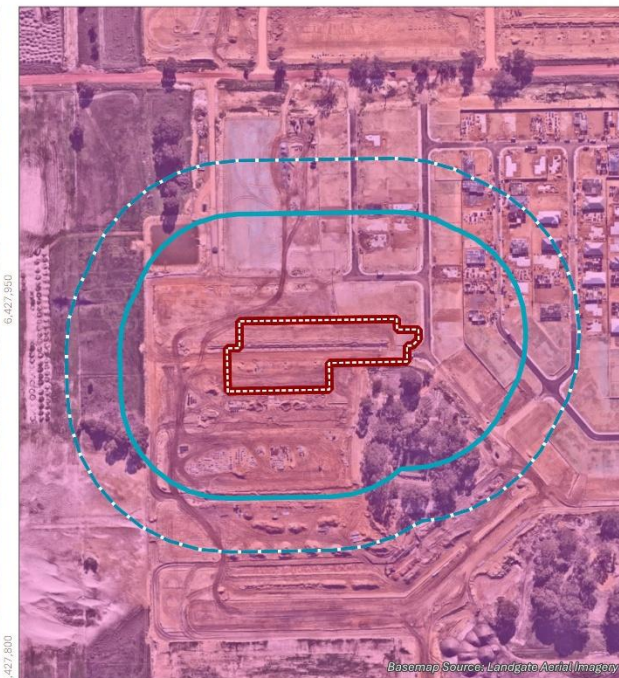
Site Assessment and Site Plan

The assessment of 19 lots (the subject lots) within stage 4A of Mundi Estate (subject site) was undertaken on 13/08/2026 for the purpose of determining the BAL in accordance with *Australian Standard AS 3959: 2018 Construction of Buildings in Bushfire Prone Areas* (AS 3959: 2018; SA, 2018) Simplified Procedure (Method 1). An overview of the subject site is presented in Figure 1.1.

Vegetation Classification

All vegetation within 100 m of the subject site was classified in accordance with Clause 2.2.3 of AS 3959: 2018. Each distinguishable vegetation class with the potential to determine the BAL is identified in Table 1.1 and presented in Figure 1.2.





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0 29 58 87 116 m

COORDINATE REFERENCE SYSTEM:
GDA2020 / MGA Zone 50

SCALE: PROJECT NUMBER:
1:3,000 A24.076

DRAWN BY / REVIEWED BY:
SC / CB 8/9/2026

Figure 1.1: Site Overview

- Subject Site
- Buffer 100m
- Buffer 150m
- Lot boundary
- Road Reserve
- Bushfire Prone Area 2 (OBRM-023)

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Table 1.1: Vegetation Classification

Plot 1 Photo 1 Grass in paddocks with an average height greater than 100 mm. The overstorey contains occasional trees which comprise less than 10% of the overall foliage cover. The slope under this vegetation was assessed to be flat/upslope.	Class G Grassland SE S 151°SE (T) • -32.280214, 115.970738 ±3m ▲ 0m  12 Aug 2026 10:30:29 am
Plot 1 Photo 2 Grass in paddocks with an average height greater than 100 mm. The overstorey contains occasional trees which comprise less than 10% of the overall canopy cover. The slope under this vegetation was assessed to be flat/upslope.	Class G Grassland S SW W 218°SW (T) • -32.280212, 115.970742 ±3m ▲ 0m  13 Aug 2026 10:30:59 am
Plot 2 Photo 3 Photo of recently constructed Grazing Road. These non-vegetated areas have been excluded in accordance with Clause 2.2.3.2 (e) of AS 3959: 2018.	Excluded - clause 2.2.3.2 (e) SW W NW 260°W (T) • -32.281817, 115.972634 ±3m ▲ 3m  13 Aug 2026 9:21:12 am

Plot 2**Photo 4**

Cleared land ahead of development in and surrounding the subject site.

These non-vegetated areas have been excluded in accordance with Clause 2.2.3.2 (e) of AS 3959: 2018.

Excluded - clause 2.2.3.2 (e)**Plot 2****Photo 5**

Roads, houses and foot paths. Photo taken on the corner of Woolshed Avenue and Barley Street located northeast of the subject site.

These non-vegetated areas have been excluded in accordance with Clause 2.2.3.2 (e) of AS 3959: 2018.

Excluded - clause 2.2.3.2 (e)**Plot 2****Photo 6**

Roads, houses and foot paths. Photo taken on the corner of Woolshed Avenue and Grazing Road at the entrance to the subject site.

These non-vegetated areas have been excluded in accordance with Clause 2.2.3.2 (e) of AS 3959: 2018.

Excluded - clause 2.2.3.2 (e)

Plot 3

Photo 7

Eucalyptus trees in future Public Open Space (POS) with an understorey of bare sand and slashed grass maintained in a low-threat state. Vegetation structure is considered open.

This vegetation is regarded as low-threat and has been excluded in accordance with Clause 2.2.3.2 (f) of AS 3959: 2018.

Note, once the POS is developed, it will still be excluded in accordance with Clause 2.2.3.2 (b) of AS 3959: 2018, given it will be less than 1ha in area and more than 100m from other areas of classified vegetation.

Excluded - clause 2.2.3.2 (f)



Plot 3

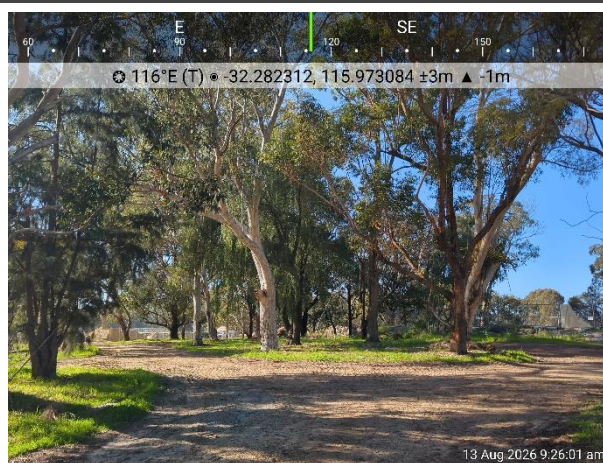
Photo 8

Eucalyptus trees in POS with an understorey of bare sand and slashed grass maintained in a low-threat state. Vegetation structure is considered open.

This vegetation is regarded as low-threat and has been excluded in accordance with Clause 2.2.3.2 (f) of AS 3959: 2018.

Note, once the POS is developed, it will still be excluded in accordance with Clause 2.2.3.2 (b) of AS 3959: 2018, given it will be less than 1ha in area and more than 100m from other areas of classified vegetation.

Excluded - clause 2.2.3.2 (f)



Plot 3

Photo 9 (Captured by Drone)

Eucalyptus trees in POS with an understorey of bare sand and slashed grass maintained in a low-threat state. Vegetation structure is considered open.

This vegetation is regarded as low-threat and has been excluded in accordance with Clause 2.2.3.2 (f) of AS 3959: 2018.

Note, once the POS is developed, it will still be excluded in accordance with Clause 2.2.3.2 (b) of AS 3959: 2018, given it will be less than 1ha in area and more than 100m from other areas of classified vegetation.

Photo point 9 has not been included in Figure 1.2 as the photo was captured by drone.

Excluded - clause 2.2.3.2 (f)



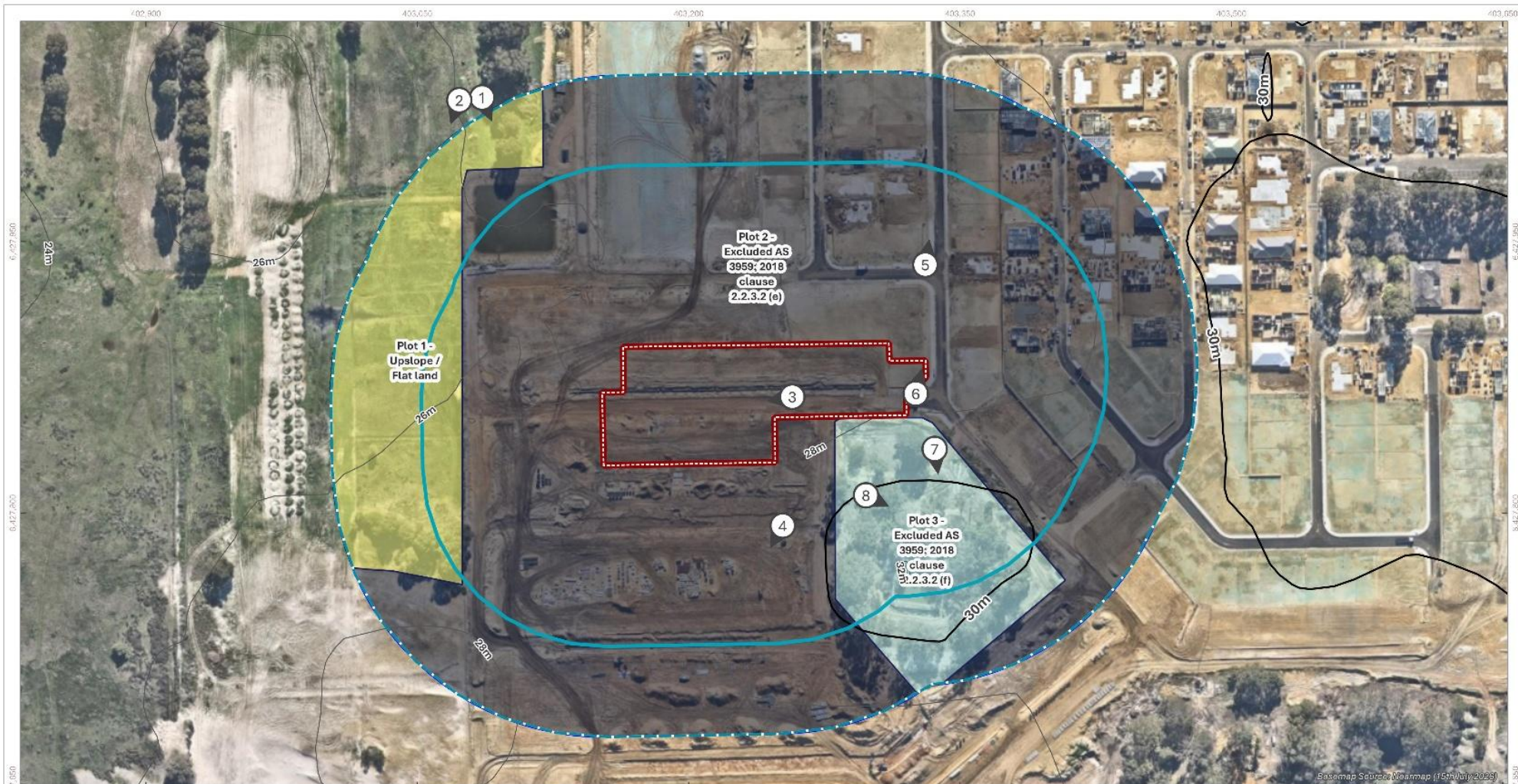


Figure 1.2: Vegetation Classification

- Subject Site
- Buffer 100m
- Buffer 150m

- Photo location
- Contours (DPIRD-072)**
- 2m
- 10m

Vegetation Classification

- Class G - Grassland
- Excluded AS 3959: 2018 2.2.3.2 (e)
- Excluded AS 3959: 2018 2.2.3.2 (f)



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0 20 40 60 80 m

COORDINATE REFERENCE SYSTEM:
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Relevant Fire Danger Index

The Fire Danger Index for this site has been determined in accordance with Table 2.1 of AS 3959: 2018 and is presented in Table 1.2.

Table 1.2: Fire Danger Index (FDI)

Relevant Fire Danger Index			
FDI 40 ☐	FDI 50 ☐	FDI 80 ☒	FDI 100 ☐
Table 2.4.5	Table 2.4.4	Table 2.4.3	Table 2.4.2

Potential Bushfire Impacts

The potential bushfire impact to the subject lots from each of the identified vegetation plots are identified below in Table 1.3.

Table 1.3: Method 1 BAL Calculation (BAL Contours)

Plot	Vegetation classification	Effective slope	Separation distances required (m)				
			BAL-FZ	BAL-40	BAL-29	BAL-19	BAL-12.5
1	Class G Grassland	All upslopes and flat land (0 degrees)	<6	6 < 8	8 - <12	12 - <17	17 - <50
2	Excluded - clause 2.2.3.2 (e)	-	No separation distances required - BAL-LOW				
3	Excluded - clause 2.2.3.2 (f)	-	No separation distances required - BAL-LOW				

Determined Bushfire Attack Level (BAL)

The determined Bushfire Attack Level (highest BAL) for the subject lots has been determined in accordance with Clause 2.2.6 of AS 3959: 2018. Relevant data from the subject site assessment is shown in Figure 1.3 and Table 1.4.

Table 1.4: BAL Assessment Summary

Affected Lot	BAL Rating	Construction sections to be consulted in AS 3959: 2018
205	BAL - LOW	4
206	BAL - LOW	4
207	BAL - LOW	4
208	BAL - LOW	4
209	BAL - LOW	4
210	BAL - LOW	4
211	BAL - LOW	4
212	BAL - LOW	4
213	BAL - LOW	4
214	BAL - LOW	4

Affected Lot	BAL Rating	Construction sections to be consulted in AS 3959: 2018
215	BAL - LOW	4
219	BAL - LOW	4
351	BAL - LOW	4
352	BAL - LOW	4
353	BAL - LOW	4
354	BAL - LOW	4
355	BAL - LOW	4
356	BAL - LOW	4
357	BAL - LOW	4

Assessment Validity

This BAL rating is based on the information current at the date of this document and is valid for 12 months.



Figure 1.3: Bushfire Attack Level (BAL) Contours

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Appendix A

Additional Information / Advisory Notes

This assessment was undertaken as per AS 3959: 2018. It is important that the current version of AS 3959, is consulted for construction purposes.

This BAL rating is based on the information current at the date of this letter and is valid for 12 months from the date of this letter.

Bushfire Attack Level (BAL) as set out in the *Australian Standard 3959 Construction of Buildings in Bushfire-Prone Areas* (AS 3959), as referenced in the Building Code of Australia.

Bushfire Attack Level (BAL)	Classified vegetation within 100 m of the subject site and radiant heat flux exposure thresholds	Description of predicted bush fire attack and levels of exposure	Construction Section as per AS 3959
BAL-LOW		There is insufficient risk to warrant specific construction requirements.	4
BAL-12.5	$\leq 12.5 \text{ kW/m}^2$	Ember attack	3 and 5
BAL-19	$> 12.5 \text{ kW/m}^2 \leq 19 \text{ kW/m}^2$	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing radiant heat flux.	3 and 6
BAL-29	$> 19 \text{ kW/m}^2 \leq 29 \text{ kW/m}^2$	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing radiant heat flux	3 and 7
BAL-40	$> 29 \text{ kW/m}^2 \leq 40 \text{ kW/m}^2$	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing radiant heat flux with the increased likelihood of exposure to flames.	3 and 8
BAL-FZ	$> 40 \text{ kW/m}^2$	Direct exposure to flames from fire front in addition to radiant heat flux and ember attack	3 and 9

Source: "AS 3959: 2018 Construction of buildings in bushfire-prone areas" published by Standards Australia, Sydney.