

7 July 2026

Our Ref: A26.021-RPT-BMPC-STG1B_0_FINAL



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Bushfire Management Plan Compliance Certification: Stage 2 Valencia Estate, Wanneroo

Document Purpose

Terravias has prepared this Bushfire Management Plan (BMP) compliance report for 39 residential lots within Stage 1B Valencia Estate, in Wanneroo (the subject site; Figure 1.1). Lots within Stage 1B are subject to Western Australian Planning Commission (WAPC) subdivision approval 162249.

This report provides a post-subdivisional works compliance assessment of bushfire management measures required to clear Condition 8 of subdivision approval as follows:

8. Information is to be provided to demonstrate that the measures numbered 1-9, 11-12 and 14-15 contained in Section 4; Table 4 of the bushfire management plan prepared by EcoLogical Australia Pty Ltd, dated 9 March 2022 (v1) have been implemented during subdivisional works. This information should include a completed 'Certification by Bushfire Consultant' from the bushfire management plan. (Local Government)

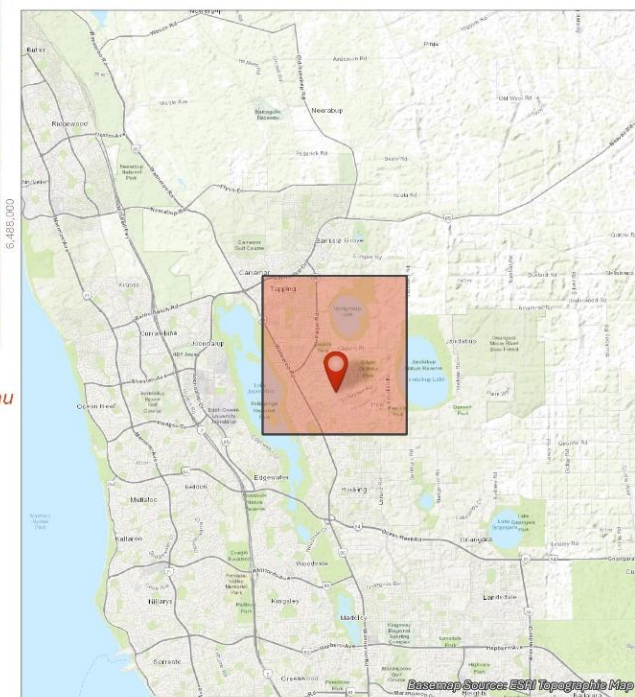
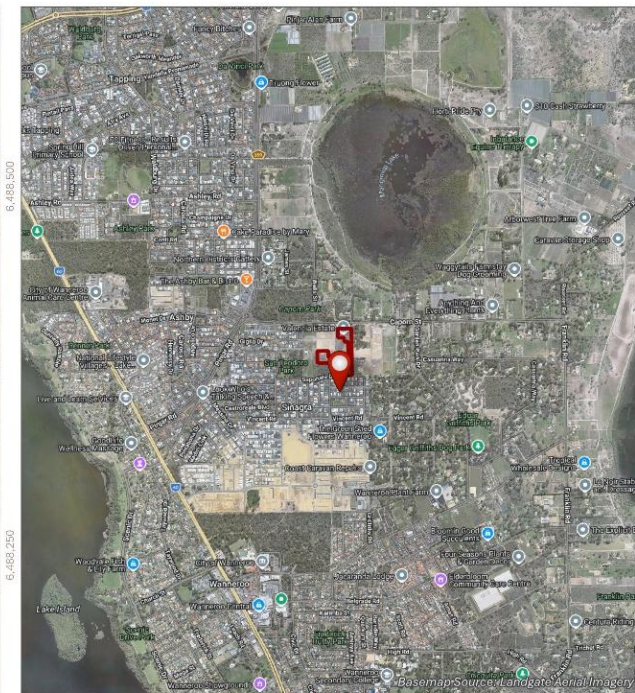
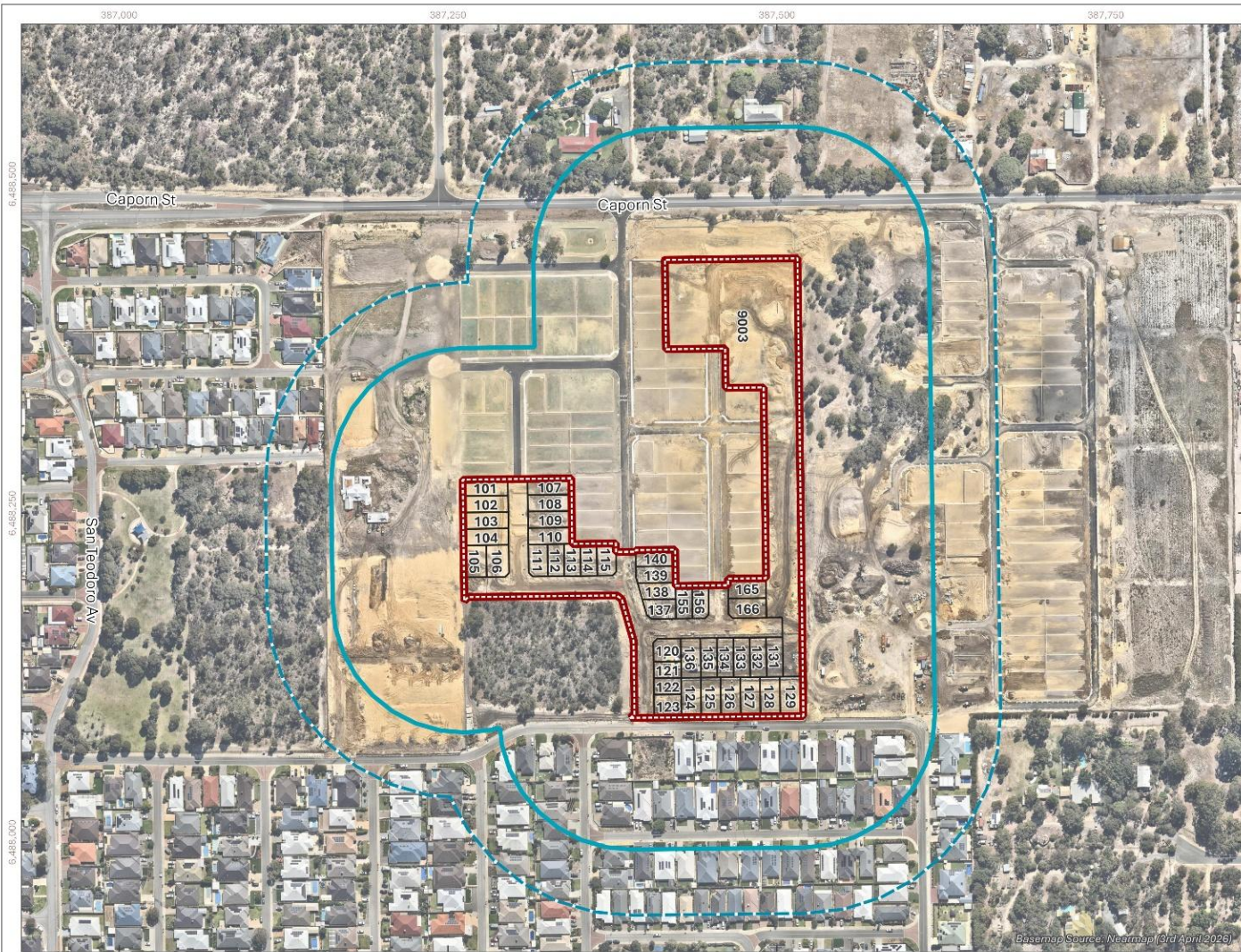
The approach for preparation of this BMP compliance report is consistent with Section A.3.4 of Appendix A to the *Planning for Bushfire Guidelines* (the Guidelines; WAPC, 2024).

Compliance Assessment

As per Condition 8, the approved subdivision is required to demonstrate compliance with 13 of the bushfire management measures set out in ELA (2022) to ensure the proposed development will comply with the Bushfire Protection Criteria in the *Guidelines for Planning in Bushfire Prone Areas Version 1.4* (WAPC, 2021; current at the time of preparation of the BMP). A bushfire risk assessment and compliance assessment were undertaken to determine if the relevant bushfire management measures documented in the endorsed BMP have been implemented (Table 1.1).

Based on our assessment, Terravias can confirm that the relevant bushfire management measures detailed in the endorsed BMP have been implemented as intended or have been progressed to a point that they are likely to be compliant, once completed.





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0 40 80 120 160 m

COORDINATE REFERENCE SYSTEM:
GDA2020 / MGA Zone 50

SCALE: PROJECT NUMBER:
1:5,000 A26.021

DRAWN BY / REVIEWED BY:
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Table 1.1: BMP Compliance Assessment

BMP reference	Action	Implementation status	Compliance assessment
1	Ensure proposed buildings are located outside of areas subject to BAL-FZ and BAL-40 as per the design in Figure 7	A new BAL assessment was undertaken at the subject site for the purposes of assessing compliance with this management action, the results of which are contained in Appendix A. None of the lots are subject to BAL-40 or BAL-FZ and as such, future dwellings on these lots will be sited appropriately in areas subject to BAL-29 or lower. Further explanation of the implications of the BAL ratings is contained in Appendix B.	Compliant
2	Maintain Asset Protection Zones to Standards for Asset Protection Zones in Appendix C as depicted in Figure 5	At the time of assessment, the vegetation within the Caporn Street road reserve (which was depicted as an APZ in the BMP) had been maintained to the <i>Standards for Asset Protection Zones</i> (refer to Plate 1 in Appendix C)	Compliant
3	Ensure that 100 m wide APZs are cleared and maintained around each stage of subdivision if the entirety of the development depicted in Figure 7 is not developed in a single stage.	No Class G Grassland was present within 50 m and no other classifiable vegetation was present within 100 m of Stage 1B in the Developer's landholding at the time of assessment (refer to Plate 2 in Appendix C).	Compliant
4	Landscape the proposed POS areas such that they can be excluded from classification under clause 2.2.3.2 of AS 3959: 2018.	No Public Open Space (POS) reserves are proposed in Stage 1B and, as such, this management action is not applicable to this stage of development.	Not Applicable
5	Undertake a new BAL assessment for each stage of development to ensure that all future dwellings can achieve BAL ratings of $\leq$ BAL-29 within the subject site.	A BAL assessment was undertaken for Valencia Estate, the results of which are contained in Appendix A. As per the BAL assessment, all proposed lots within Valencia Estate will be subject to BAL ratings of BAL-LOW, which is consistent with the ratings contained in the approved BMP.	Compliant
6	If BAL ratings $>$ BAL-29 are identified following the completion of Item No. 5 above, withhold Titles from the lots with these ratings until such a time that the BAL rating is reduced to $\leq$ BAL-29.	None of the lots within Valencia Estate are subject to a BAL rating exceeding BAL-29 (Appendix A).	Not Applicable
7	Place Section 165 Notification on Title for all lots within Bushfire Prone Areas.	No residential lots within Stage 1B are subject to BAL ratings exceeding BAL-LOW.	Not Applicable

BMP reference	Action	Implementation status	Compliance assessment
8	Construct road network as per plan in Figure 7.	At the time of assessment, the construction of all roads within the subject site had been completed (refer to Plate 3 in Appendix C).	Compliant
9	Construct 17.5 m diameter turning circles at their head of any temporary cul-de-sacs created during staged development.	Temporary turning bowls are not required. At this stage of development the public roads within Stages 1A and 1B facilitate through access and provide adequate space to perform a three-point-turn as pictured in Plate 4 within Appendix C. The intent of this measure has therefore been met.	Compliant
11	Provide reticulated water supply to all lots and install hydrants in accordance with Water Corporation standards.	Reticulated water had been installed at the subject site at the time of inspection for Stage 1 (refer to Plate 5 and Plate 6 in Appendix C).	Compliant
12	Maintain Asset Protection Zones to Standards for Asset Protection Zones in Appendix C as depicted in Figure 7.	At the time of assessment, the vegetation within the Caporn Street road reserve (which was depicted as an APZ in the BMP) had been maintained to the <i>Standards for Asset Protection Zones</i> (refer to Plate 1 in Appendix C)	Compliant
14	Construct proposed building to relevant construction standard in AS 3959: 2018.	No dwellings have been constructed yet given this compliance assessment precedes the sale of lots within the subject site. Responsibility for this management measure lies with the landowner/builder upon acquiring the land from the Developer.	Not Applicable
15	Maintain Asset Protection Zones to Standards for Asset Protection Zones in Appendix C as depicted in Figure 7.	At the time of assessment, the vegetation within the Caporn Street road reserve (which was depicted as an APZ in the BMP) had been maintained to the <i>Standards for Asset Protection Zones</i> (refer to Plate 1 in Appendix C)	Compliant

References

Department of Planning (DoP). (2016). *Visual guide for bushfire risk assessment in Western Australia*. Government of Western Australia.

Department of Planning, Lands and Heritage(DPLH). (2026). *Residential Design Codes: Volume 1*. Government of Western Australia.

Eco Logical Australia (ELA). (2022). *Bushfire Management Plan: Subdivision: Lots 1, 12, 13, 36, 37 and 38 Caporn Street, Wanneroo*. QUBE Property Group.

Standards Australia (SA). (2018). *Construction of buildings in bushfire-prone areas* (AS 3959: 2018).

Western Australian Planning Commission (WAPC). (2024). *Planning for Bushfire Guidelines*. Government of Western Australia.



Appendix A:

Bushfire Attack Level Assessment



Site Assessment and Site Plan

The assessment of 39 lots (subject lots) within Stage 1B of Valencia Estate (subject site) was undertaken on 26/06/2026 for the purpose of determining the Bushfire Attack Level (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).

Vegetation Classification

All vegetation within 100 m of the Stage 1B 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 1.2 and presented in Figure 1.2.



Table 1.2: Vegetation Classification

Plot 1 Photo 1 This plot is dominated by trees and shrubs reaching up to 6 m in height at maturity. Some sparse trees exceeding 6 m in height at maturity are present, however these are only few and have isolated canopies so are not expected to significantly intensify fire behaviour beyond what is modelled for a Scrub fire. Overstorey canopy cover exceeds 30% and understorey vegetation structure is multi-tiered. Banksia species are present throughout the plot. The slope under this vegetation was assessed to be downslope >0 - 5 degrees.	Class D Scrub
Plot 1 Photo 2 (vegetation in background) This plot is dominated by trees and shrubs reaching up to 6 m in height at maturity. Some sparse trees exceeding 6 m in height at maturity are present, however these are only few and have isolated canopies so are not expected to significantly intensify fire behaviour beyond what is modelled for a Scrub fire. Overstorey canopy cover exceeds 30% and understorey vegetation structure is multi-tiered. Banksia species are present throughout the plot. The slope under this vegetation was assessed to be downslope >0 - 5 degrees.	Class D Scrub
Plot 2 Photo 3 (vegetation in background) This plot is dominated by grasses in the understorey. Some trees are present in this plot, however these are restricted to wind breaks along property fencelines or are sparsely spread throughout the plot with isolated canopies. Canopy cover was assessed to be less than 10%. The slope under this vegetation was assessed to be downslope >0 - 5 degrees.	Class G Grassland

Plot 2	Class G Grassland
Photo 4 (vegetation in background) This plot is dominated by grasses in the understorey. Some trees are present in this plot, however these are restricted to wind breaks along property fencelines or are sparsely spread throughout the plot with isolated canopies. Canopy cover was assessed to be less than 10%. The slope under this vegetation was assessed to be downslope >0 - 5 degrees.	 26 June 2026 10:45:06 am 31°44'0.33615"S 115°48'48.71261"E ±2.00m 337° NW
Plot 3 Photo 5 This area of vegetation is more than 100 m from the subject site. This plot has been excluded in accordance with Clause 2.2.3.2 (a) of AS 3959: 2018.	Excluded - clause 2.2.3.2 (a)  SE S SW W 120 150 180 210 240 270 193°S (T) 31°44'6"S, 115°48'31"E ±4m ▲ 74m 26 Jun 2026 10:58:32
Plot 3 Photo 6 This area of vegetation is more than 100 m from the subject site. This plot has been excluded in accordance with Clause 2.2.3.2 (a) of AS 3959: 2018.	Excluded - clause 2.2.3.2 (a)  26 June 2026 10:51:58 am 31°44'0.37598"S 115°48'37.2534"E ±8.50m 305° NW

Plot 4	Excluded - clause 2.2.3.2 (b)
Photo 7 This plot is less than 1 ha is size and more than 100 m from any other areas of classifiable vegetation. Given the small patch size and discontinuity of fuels, this plot has been excluded under clause 2.2.3.2 (b) of AS 3959:2018.	
Plot 4	Excluded - clause 2.2.3.2 (b)
Photo 8 This plot is less than 1 ha is size and more than 100 m from any other areas of classifiable vegetation. Given the small patch size and discontinuity of fuels, this plot has been excluded under clause 2.2.3.2 (b) of AS 3959:2018.	
Plot 5	Excluded - clause 2.2.3.2 (c)
Photo 9 Residential areas to the south of the subject site which contain dwellings and roads. This plot has been excluded under clause 2.2.3.2 (e) of AS 3959:2018.	

Plot 6	Excluded - clause 2.2.3.2 (e)
Photo 10 Areas within the subject site such as roads and lots cleared for development which are devoid of vegetation. This plot has been excluded under clause 2.2.3.2 (e) of AS 3959:2018.	
Plot 6	Excluded - clause 2.2.3.2 (e)
Photo 11 Land east of the the subject site which has been cleared for development and is devoid of vegetation. This plot has been excluded under clause 2.2.3.2 (e) of AS 3959:2018.	
Plot 6	Excluded - clause 2.2.3.2 (e)
Photo 12 Areas within the subject site such as roads and residential lots which are devoid of vegetation. This plot has been excluded under clause 2.2.3.2 (e) of AS 3959:2018.	

Photo 13

Vegetation within this plot consists predominantly of grasses and a few shrubs associated with a drainage basin. It has been excluded as low-threat vegetation for the following reasons:

- **Fuel Load:** As pictured, the fuels are continuous in some areas, whilst bare earth is visible in others.
- **Fuel Moisture Content:** The fuel moisture content throughout the plot is expected to be relatively high throughout most of the year whilst it is performing a drainage function.
- **Plot Size:** The plot size is relatively small (0.11 ha) which does not allow sufficient time for a fire to develop to the full height of that modelled under AS 3959: 2018.
- **Distance From Subject Site:** The plot is approximately 16 m from the nearest lot within the subject site. Had this distance been 20 m, the plot would have been excluded under clause 2.2.3.2 (c) of AS 3959:2018. Previous assessments in the area have also excluded this vegetation as low-threat, evidenced by the approval of ELA (2022) over the subject site, in addition to houses to the east of the drainage basin having been constructed directly abutting the vegetated area, far closer than the future dwellings proposed within the subject site.
- **Shielding:** Vegetation, relative to the subject site, is situated behind a 1.8 m tall colourbond fence. This fence, given it's significantly taller than the average vegetation height, will likely should much of the radiant heat from a fire in the drainage basin.
- **Bushfire Prone Area Mapping:** The drainage basin does not appear to be considered bushfire prone vegetation and is only contained within a bushfire prone area given it is within 100 m of other bushfire prone vegetation to the north.

Given the above justification, lots within the subject site are not expected to be adversely affected by a fire in this plot.



Plot 7**Excluded - clause 2.2.3.2 (f)****Photo 14**

Areas of vegetation to the east of the subject site which contain managed vegetation with a cropped understory maintained to a low-threat state. This plot has been excluded under clause 2.2.3.2 (f) of AS 3959:2018.

**Plot 7****Excluded - clause 2.2.3.2 (f)****Photo 15**

Residential areas surrounding the subject site which contain dwellings, roads and gardens which are established and maintained to a low-threat state. This plot has been excluded under clause 2.2.3.2 (f) of AS 3959:2018.



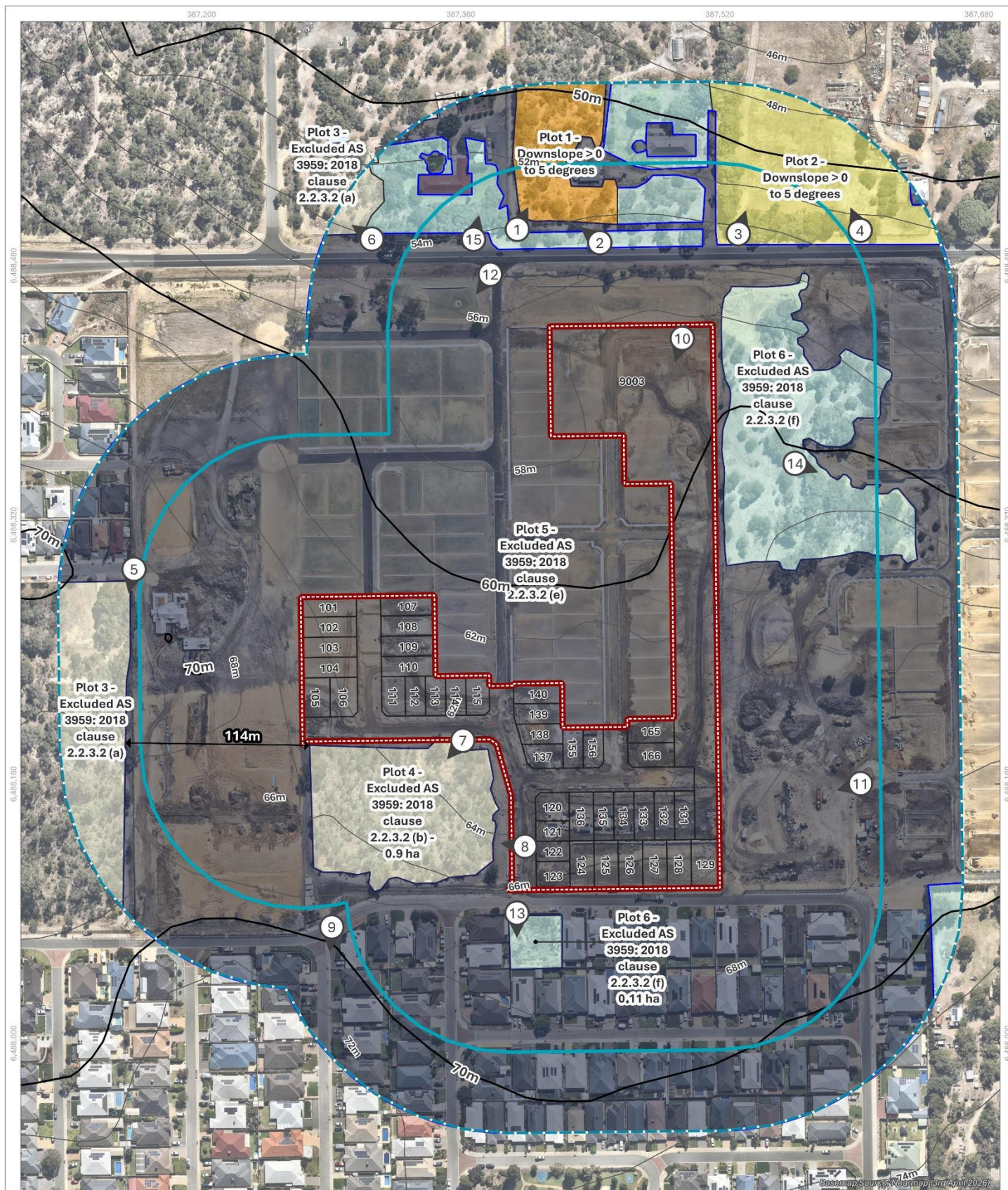


Figure 1.2: Pre-Development Vegetation Classification

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0 20 40 60 80 m

COORDINATE REFERENCE SYSTEM:
GDA2020 / MGA Zone 50

SCALE: PROJECT NUMBER:
1:3,200 A26.021

DRAWN BY / REVIEWED BY:
SM / CB 7/7/2026

- Subject Site
- Buffer 100m
- Buffer 150m
- Lot boundary

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

Vegetation Classification

- Class D - Scrub
- Class G - Grassland
- Excluded AS 3959: 2018 2.2.3.2 (a)
- Excluded AS 3959: 2018 2.2.3.2 (b)
- Excluded AS 3959: 2018 2.2.3.2 (e)
- Excluded AS 3959: 2018 2.2.3.2 (f)

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 1.3.

Table 1.3: 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 site / proposed development from each of the identified vegetation plots are identified below in Table 1.4.

Table 1.4: 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 D Scrub	Downslope >0 to 5 degrees	<11	11 - <15	15 - <22	22 - <31	31 - <100
2	Class G Grassland	Downslope >0 to 5 degrees	<7	7 - <9	9 - <14	14 - <20	20 - <50
3	Excluded - clause 2.2.3.2 (a)	-	No separation distances required - BAL-LOW				
4	Excluded - clause 2.2.3.2 (b)	-	No separation distances required - BAL-LOW				
5	Excluded - clause 2.2.3.2 (e)	-	No separation distances required - BAL-LOW				
6	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 proposed works 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 1.5.

Table 1.5: BAL Assessment Summary

Affected Lot	BAL Rating	Construction sections to be consulted in AS 3959: 2018
101	BAL-LOW	4
102	BAL-LOW	4
103	BAL-LOW	4
104	BAL-LOW	4
105	BAL-LOW	4
106	BAL-LOW	4
107	BAL-LOW	4
108	BAL-LOW	4
109	BAL-LOW	4
11-	BAL-LOW	4
111	BAL-LOW	4
112	BAL-LOW	4
113	BAL-LOW	4
114	BAL-LOW	4
115	BAL-LOW	4
120	BAL-LOW	4
121	BAL-LOW	4
122	BAL-LOW	4
123	BAL-LOW	4
124	BAL-LOW	4
125	BAL-LOW	4
126	BAL-LOW	4
127	BAL-LOW	4
128	BAL-LOW	4
129	BAL-LOW	4
131	BAL-LOW	4
132	BAL-LOW	4
133	BAL-LOW	4
134	BAL-LOW	4
135	BAL-LOW	4
136	BAL-LOW	4
137	BAL-LOW	4
138	BAL-LOW	4
139	BAL-LOW	4
140	BAL-LOW	4
155	BAL-LOW	4

Affected Lot	BAL Rating	Construction sections to be consulted in AS 3959: 2018
156	BAL-LOW	4
165	BAL-LOW	4
166	BAL-LOW	4

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

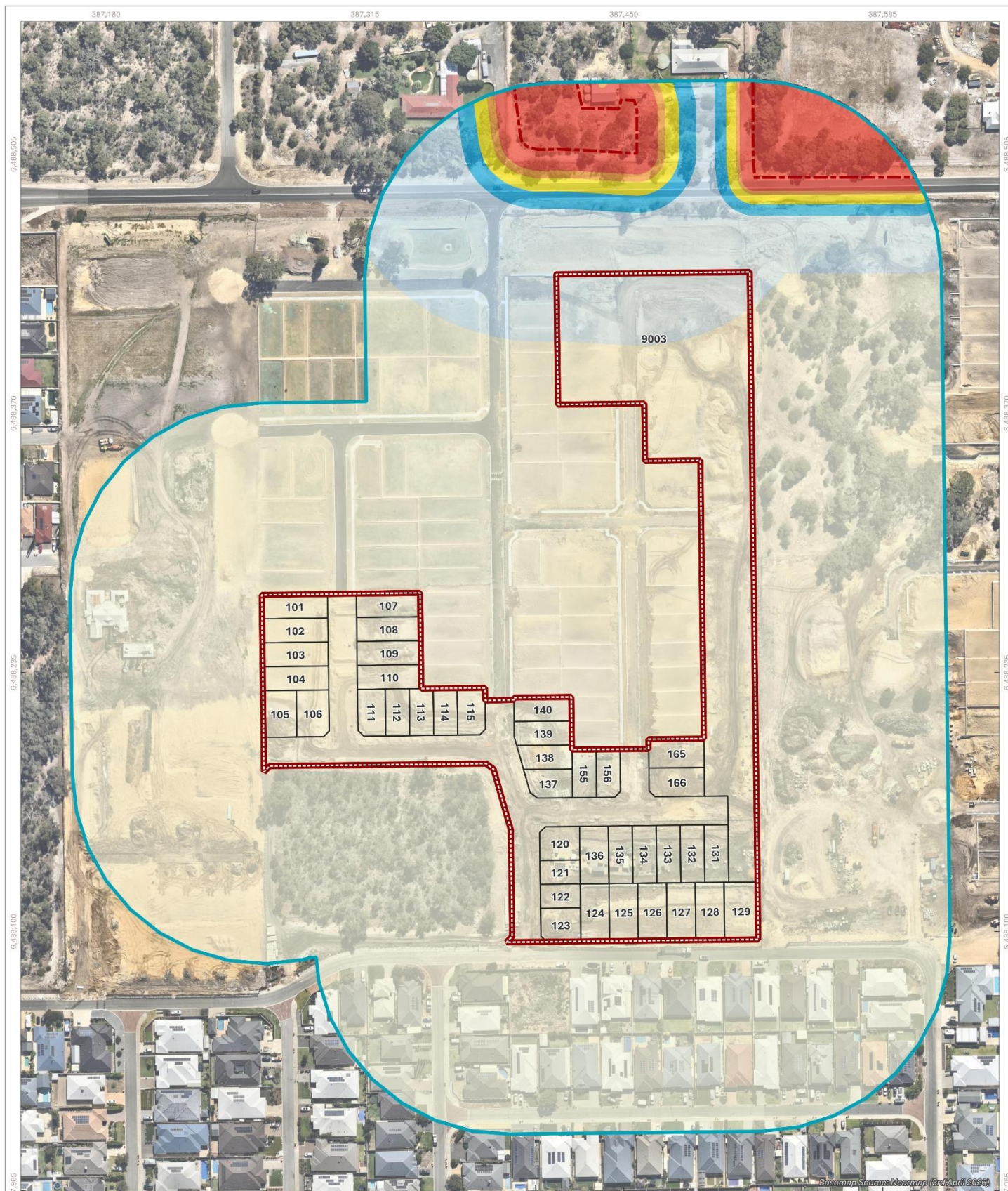


Figure 1.3: Bushfire Attack Level (BAL) Contours

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0 20 40 60 80 m

COORDINATE REFERENCE SYSTEM:
GDA2020 / MGA Zone 50

SCALE: PROJECT NUMBER:
1:2,700 A26.021

DRAWN BY / REVIEWED BY:
SM / CB 2/7/2026



- Subject Site
- Buffer 100m
- Lot boundary
- Bushfire Hazard Interface

Bushfire Attack Level (BAL)

- BAL-FZ
- BAL-40
- BAL-29
- BAL-19
- BAL-12.5
- BAL-LOW

Appendix B

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.

Appendix C:

Photographic Evidence



Plate 1: Vegetation maintained to Asset Protection Zone standards within the Caporn Street road reserve.



Plate 2: Areas surrounding the subject site which are devoid of vegetation.



Plate 3: Roads within the subject site which have been constructed during Stage 1B development.



Plate 4: Temporary turning heads within the subject site (at the intersection of Hibbertia Road and Buttercup Road).



Plate 5: Hydrants installed within Stage 1B of Valencia Estate.



Plate 6: Reticulated water had been installed at the time of assessment.