

Bushfire management plan/Statement addressing the Bushfire Protection Criteria coversheet

Site address: Jindowie

Site visit: Yes ☒ No ☐

Date of site visit (if applicable): Day 14th Month January Year 2021

Report author: Gavin Fancote

WA BPAD accreditation level (please circle):

Not accredited ☐ Level 1 BAL assessor ☐ Level 2 practitioner ☒ Level 3 practitioner ☐

If accredited please provide the following.

BPAD accreditation number: 37922 Accreditation expiry: Month September Year 2021

Bushfire management plan version number: 0

Bushfire management plan date: Day 21st Month January Year 2021

Client/business name: Stuart Sinclair

	Yes	No
Has the BAL been calculated by a method other than method 1 as outlined in AS3959 (tick no if AS3959 method 1 has been used to calculate the BAL)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have any of the bushfire protection criteria elements been addressed through the use of a performance principle (tick no if only acceptable solutions have been used to address all of the bushfire protection criteria elements)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Is the proposal any of the following (see [SPP 3.7 for definitions](#))?

	Yes	No
Unavoidable development (in BAL-40 or BAL-FZ)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Strategic planning proposal (including rezoning applications)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Minor development (in BAL-40 or BAL-FZ)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
High risk land-use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Vulnerable land-use	<input type="checkbox"/>	<input checked="" type="checkbox"/>

None of the above ☒

Note: Only if one (or more) of the above answers in the tables is yes should the decision maker (e.g. local government or the WAPC) refer the proposal to DFES for comment.

Why has it been given one of the above listed classifications (E.g. Considered vulnerable land-use as the development is for accommodation of the elderly, etc.)?

The information provided within this bushfire management plan to the best of my knowledge is true and correct:

Signature of report author



Date 21/1/2021

Bushfire Management Plan

Prepared for Jindowie 6035 WA

Table of Contents

1: Proposal Details

2: Environmental Considerations

2.1: Native Vegetation – modification and clearing

2.2: Re-vegetation / Landscape Plans

3: Bushfire Assessment Results

3.1: BAL Assessment

4: Identification of Bushfire Hazard Issues

5. Assessment against the Bushfire Protection Criteria

5.1: Compliance Table

5.2: Additional management strategies

6: Responsibilities for Implementation and Management of the Bushfire Measures

List of figures

Figure 1: Copy of strategic planning proposal

Figure 2: Copy of Earthworks plan

Figure 3: Map of Bushfire Prone Areas for subject site

Figure 4: National Map Environmental Considerations for Subject Site - DBCA

Figure 5: National Map Environmental Considerations for Subject Site – DPLH & DWER

Figure 6: Vegetation Classification

Figure 7: BAL Contour Assessment

Figure 8: BAL Contour Assessment - Inset

Figure 10: Spatial representation of the bushfire management strategies

Figure 11: Spatial representation of the bushfire management strategies - Inset

Table 1: Lots post Earthworks, as per BAL Contour

List of appendices

A1: APZ - Asset Protection Zone Guidelines

A2: Vehicular access technical requirements

Document control

Report Version	Purpose	Author/reviewer accreditation details and	Date Submitted
Revision 0	For Approval and Implementation	Gavin Fancote 37922	21/1/2021

Disclaimer

This report is based on the site conditions surveyed at the time the document was prepared. The assessment of the bushfire threat made in this report is made in good faith based on the information available to Entire Fire Management at the time.

The recommendations contained in this report are considered to be minimum standards and they do not guarantee that a building or assets will not be damaged in a bushfire. In the making of these comments and recommendations it should be understood that the focus of this document is to minimise the threat and impact of a bushfire.

Finally, the implementation of the adopted measures and recommendations within this report will contribute to the amelioration of the potential impact of any bushfire upon the development, but they do not and cannot guarantee that the area will not be affected by bushfire at some time.

Section 1: Proposal Details

This BMP has been developed in support of a development application for the subdivision located at Jindowie.



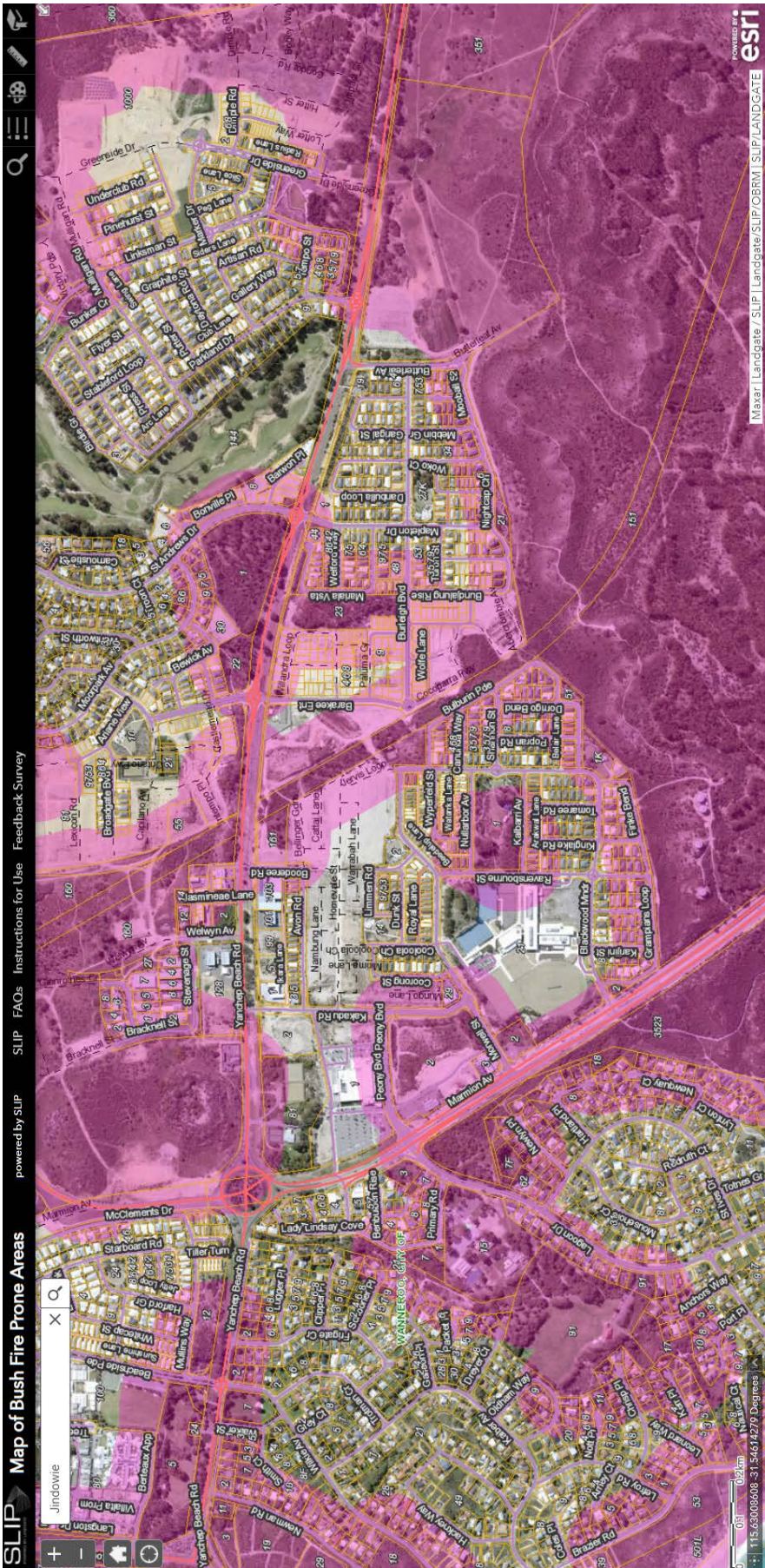
FIGURE 1: Copy of the Planning Proposal



[illegible]



FIGURE 3: Map of Bushfire Prone Areas for Subject Site



Section 2: Environmental Considerations

The proposed development site has been assessed for environmental values using the national database set www.nationalmap.gov.au to ensure that any clearing of native vegetation for bushfire protection does not adversely affect recognised conservational elements.

Datasets explored within NationalMap include the following:

Data sets checked	Identified	Consideration required	Comment
Department of Biodiversity, Conservation and Attractions:			
- Threatened Ecological Communities (DBCA-038)	Yes	Yes	Owner to consult with Local Government Environmental Officer.
- Carnabys Cockatoo Confirmed Roost (DBCA-050)	No	No	Not required to seek advice from Local Government Environmental Officer.
- Black Cockatoo Roosting Site (DBCA-064)	Yes	Yes	Owner to consult with Local Government Environmental Officer.
Department of Planning, Lands Heritage:			
- Bush Forever Areas 2000 (DPLH-019)	Partial	Yes	Owner to consult with Local Government Environmental Officer.
Department of Water and Environmental Regulation			
- Clearing Regulations – Environmentally Sensitive Areas (DWER-046)	Yes	Yes	Owner to consult with Local Government Environmental Officer.

The Visual representation is shown on the follow page & is taken from the NationalMap data base.

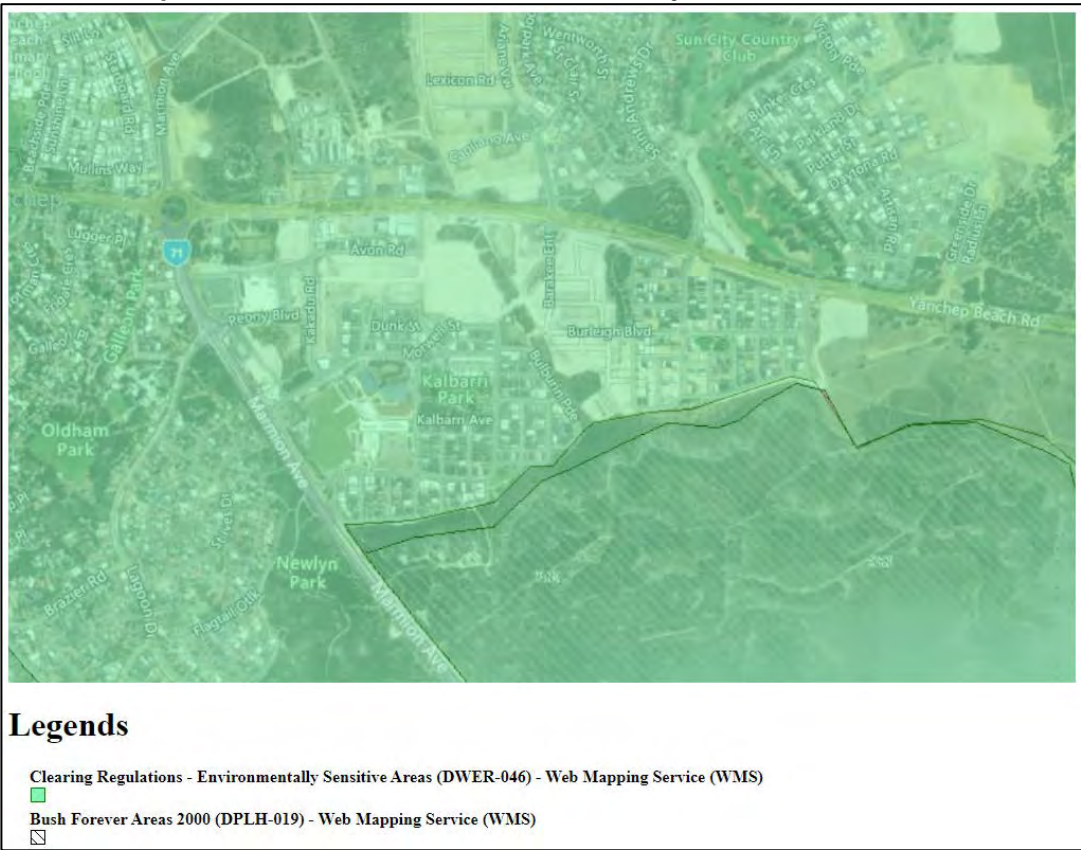
The Development's falls within a Threatened Ecological Community zone, in the event of the need to clear any native vegetation a permit should be obtained from the Department of Biodiversity, Conservation and Attractions prior to any clearing works.

Proposed Asset Protection Zones (APZ) and placement of buildings will not require clearing of trees. The APZ is to be maintained to APZ guidelines as per Appendix 1.

FIGURE 4: National Map Environmental Considerations for Subject Site - DBCA



FIGURE 5: National Map Environmental Considerations for Subject Site – DPLH & DWER





Subsection 2.1: Native Vegetation – Modification and Clearing

Some native vegetation is to be cleared.

Refer to Figure 2: Copy of the Earthworks Plan, and Figure 11: Spatial representation of the bushfire management strategies – Inset.

Subsection 2.2: Re-vegetation/Landscape Plans

N/A

Section 3: Bushfire Assessment Results


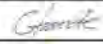
A Bushfire Attack Level (BAL) Assessment Report has been prepared to support the proposed development application.

The following BAL Map has been prepared in accordance with AS 3959 and provides evidence and justification gathered during a site assessment that was conducted to determine the potential BAL rating associated with the proposed development.

AS 3959 Bushfire Attack Level (BAL) Assessment Report

Site Details			
Address:	Jindowie		
Suburb:	Jindowie	Postcode:	6035
Local Government Area:	City of Wanneroo		
Description of Building Works:	Subdivision		

Report Details			
Report Number:	2-4372	Report Revision:	0
Assessment Date:	14/1/2021	Report Date:	21/1/2021

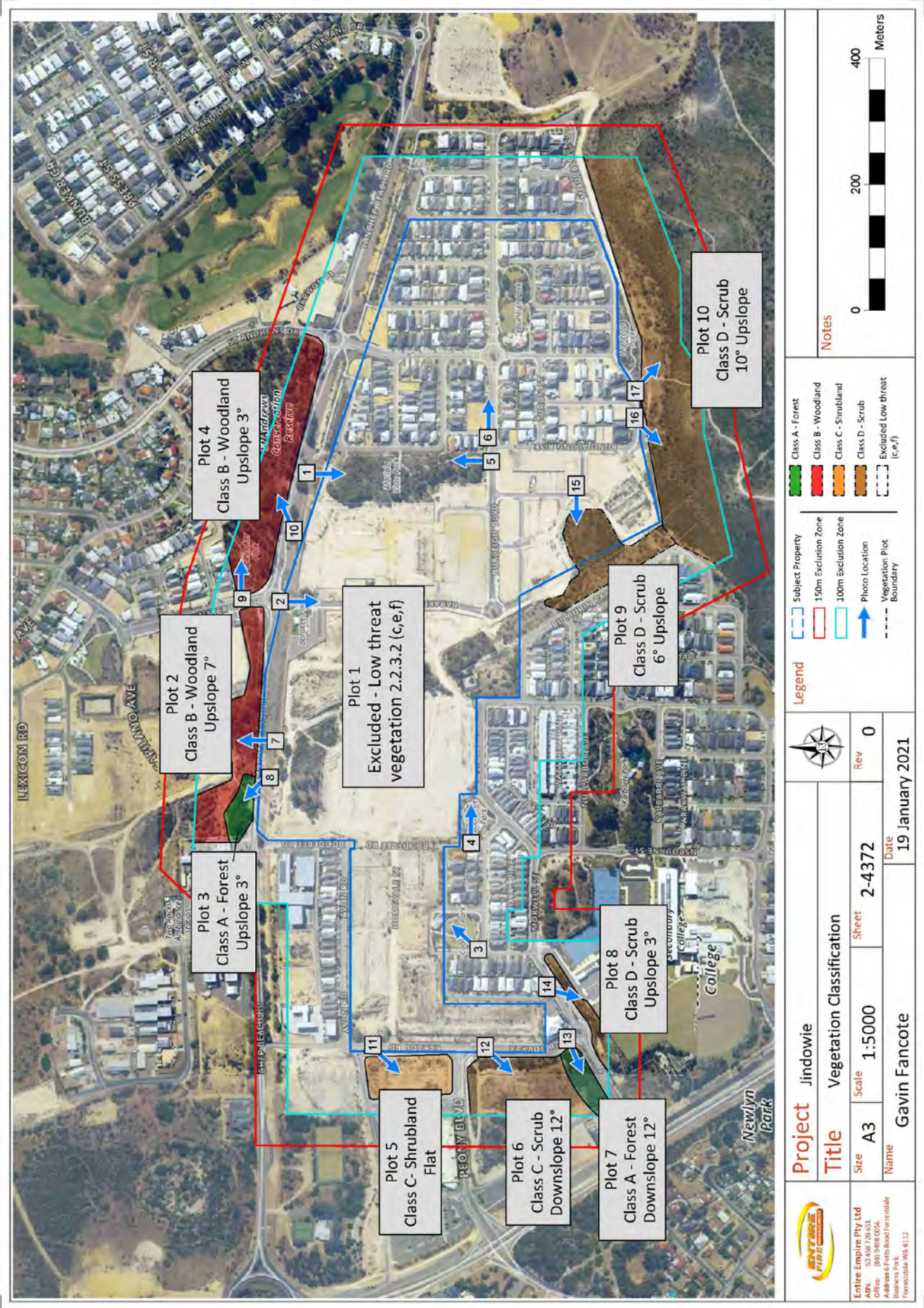
BPAD Accredited Practitioner Details			
Name:	Gavin Fancote	I hereby declare that I am a BPAD accredited bushfire practitioner. 	
Company Details:	Entire Fire Management		
I hereby certify that I have undertaken the assessment of the above-mentioned site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959 -2018 (Method 1)		Accreditation No.	BPAD37922
		Signature:	
		Authorised Practitioner Stamp	
<i>Reliance on the assessment and determination of the Bushfire Attack Level contained in this report should not extend beyond a period of 12 months from the Assessment date. If the assessment was completed more than 12 months ago, it is recommended that the validity of the determination be confirmed with the Accredited Practitioner and where required an updated report issued.</i>			

1.1.1 Site Assessment & Site Plans

(Attached as page 2 of this report)

The assessment of this site / development was undertaken on the above-mentioned date by an Accredited BPAD Practitioner for determining the Bushfire Attack Level in accordance with AS 3959 - 2018 Simplified Procedure (Method 1).

FIGURE 6: Vegetation Classification



	Project Jindowie		Vegetation Classification	
	Size	A3	Scale	1:5000
	Name	Gavin Fancote		
Entire Empire Pty Ltd ABN: 52 488 728 601 Office: (08) 2605 0056 Address 6 Fells Road Forres-Isle Forres-Isle WA 6112		Sheet	2-4372	Date
		Rev	0	19 January 2021

Vegetation Classification

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2018. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.


Photo ID:	1	Plot no:	1	
Vegetation Classification or Exclusion Clause				
Excluded - Low Threat Vegetation				
Description				
2.2.3.2 (f) Low threat vegetation: managed grasslands in a minimum fuel condition. Including public reserves, parklands , cultivated gardens.				



Photo ID:	2	Plot no:	1	
Vegetation Classification or Exclusion Clause				
Excluded - Low Threat Vegetation				
Description				
2.2.3.2 (e) Non vegetated areas that are permanently cleared of vegetation, roads , buildings and rocky outcrops.				

Photo ID:	3	Plot no:	1	
Vegetation Classification or Exclusion Clause				
Excluded - Low Threat Vegetation				
Description				
2.2.3.2 (e) Non vegetated areas that are permanently cleared of vegetation, roads , buildings and rocky outcrops. (f) Low threat vegetation: managed grasslands in a minimum fuel condition. Including public reserves , parklands , cultivated gardens.				

Vegetation Classification (continued)

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2018. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.


Photo ID:	4	Plot no:	1	
Vegetation Classification or Exclusion Clause				
Excluded - Low Threat Vegetation				
Description				
2.2.3.2 (f) Low threat vegetation: managed grasslands in a minimum fuel condition. Including public reserves, parklands, cultivated gardens.				



Photo ID:	5	Plot no:	1	
Vegetation Classification or Exclusion Clause				
Excluded - Low Threat Vegetation				
Description				
2.2.3.2 (f) Low threat vegetation: managed grasslands in a minimum fuel condition. Including public reserves, parklands, cultivated gardens.				

Photo ID:	6	Plot no:	1	
Vegetation Classification or Exclusion Clause				
Excluded - Low Threat Vegetation				
Description				
2.2.3.2 (e) Non vegetated areas that are permanently cleared of vegetation, roads, buildings and rocky outcrops.				

Vegetation Classification

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2018. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.


Photo ID:	7	Plot no:	2	
Vegetation Classification or Exclusion Clause				
Class B - Woodland				
Description				
Trees 10m-15m; 10%-30% foliage cover dominated by eucalypts with a prominent grassy understory. Contains shrubs.				



Photo ID:	8	Plot no:	3	
Vegetation Classification or Exclusion Clause				
Class A - Forest				
Description				
Trees 10-15m high 30%-70% foliage cover. Typically dominated by eucalypts. Includes low trees & shrubs.				

Photo ID:	9	Plot no:	4	
Vegetation Classification or Exclusion Clause				
Class B - Woodland				
Description				
Trees 10m-15m; 10%-30% foliage cover dominated by eucalypts with a prominent grassy understory. Contains shrubs.				

Vegetation Classification (continued)

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2018. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.


Photo ID:	10	Plot no:	4	
Vegetation Classification or Exclusion Clause				
Class B - Woodland				
Description				
Trees 10m-15m; 10%-30% foliage cover dominated by eucalypts with a prominent grassy understory. Contains shrubs.				



Photo ID:	11	Plot no:	5	
Vegetation Classification or Exclusion Clause				
Class C - Shrubland				
Description				
Found in area affected by poor quality soil or shallow soils. Shrubs 1m-2m high.				

Photo ID:	12	Plot no:	6	
Vegetation Classification or Exclusion Clause				
Class D - Scrub				
Description				
Found in areas with poor soil fertility. Shrubs >2m high up to 6m				

Vegetation Classification (continued)

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2018. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.


Photo ID:	13	Plot no:	7	
Vegetation Classification or Exclusion Clause				
Class A - Forest				
Description				
Trees 10-15m high 30%-70% foliage cover. Typically dominated by eucalypts. Includes low trees & shrubs.				

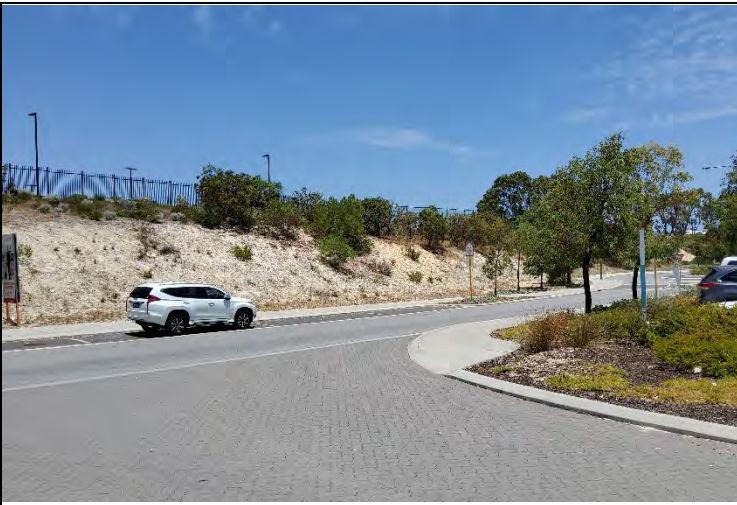

Photo ID:	14	Plot no:	8	
Vegetation Classification or Exclusion Clause				
Class D - Scrub				
Description				
Found in areas with poor soil fertility. Shrubs >2m high up to 6m				

Photo ID:	15	Plot no:	9	
Vegetation Classification or Exclusion Clause				
Class D - Scrub				
Description				
Found in areas with poor soil fertility. Shrubs >2m high up to 6m				

Vegetation Classification (continued)

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2018. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.


Photo ID:	16	Plot no:	10	
Vegetation Classification or Exclusion Clause				
Class D - Scrub				
Description				
Found in areas with poor soil fertility. Shrubs >2m high up to 6m				


Photo ID:	17	Plot no:	10	
Vegetation Classification or Exclusion Clause				
Class D - Scrub				
Description				
Found in areas with poor soil fertility. Shrubs >2m high up to 6m				



FIGURE 7: BAL Contour

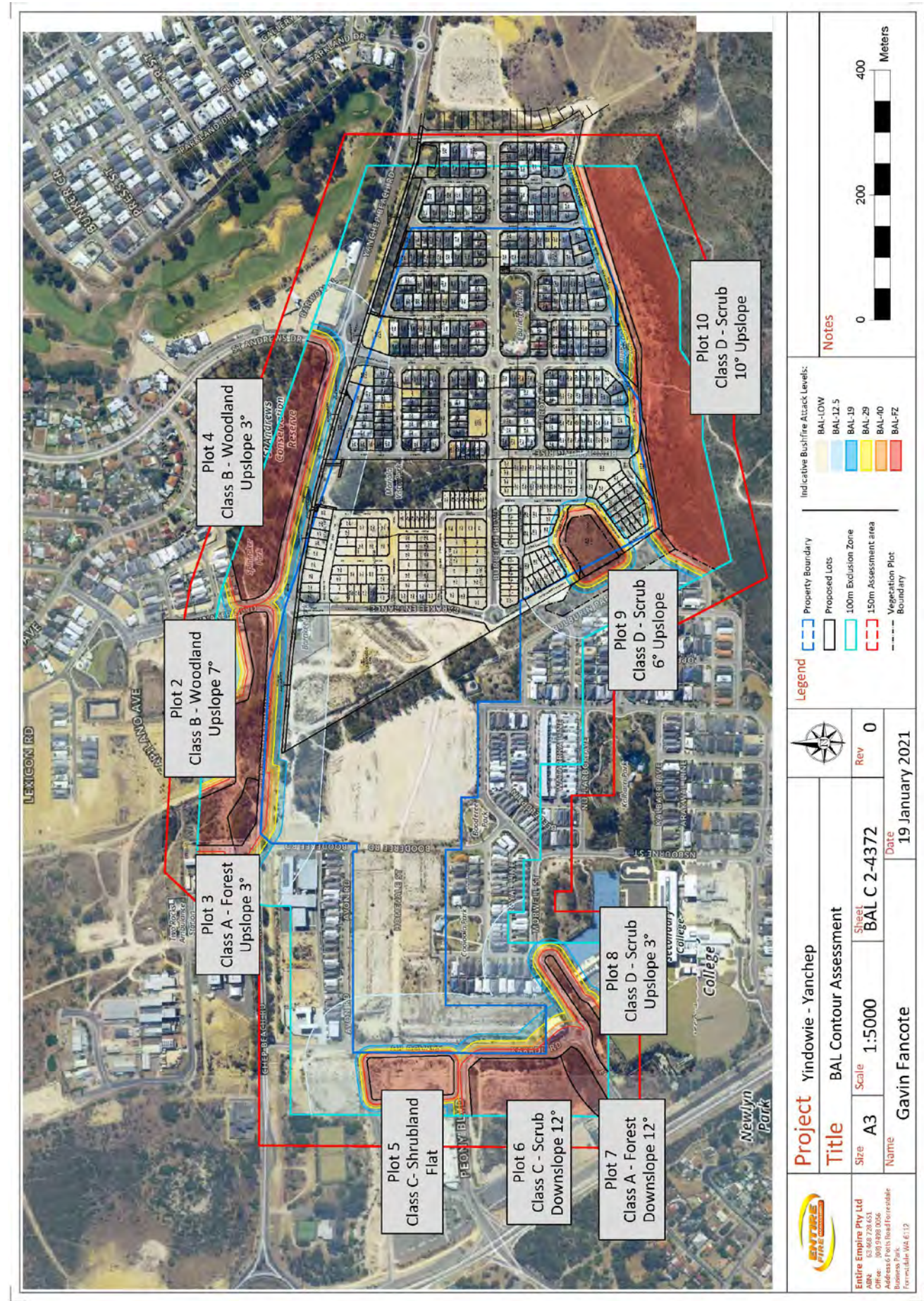




FIGURE 8: BAL Contour – North

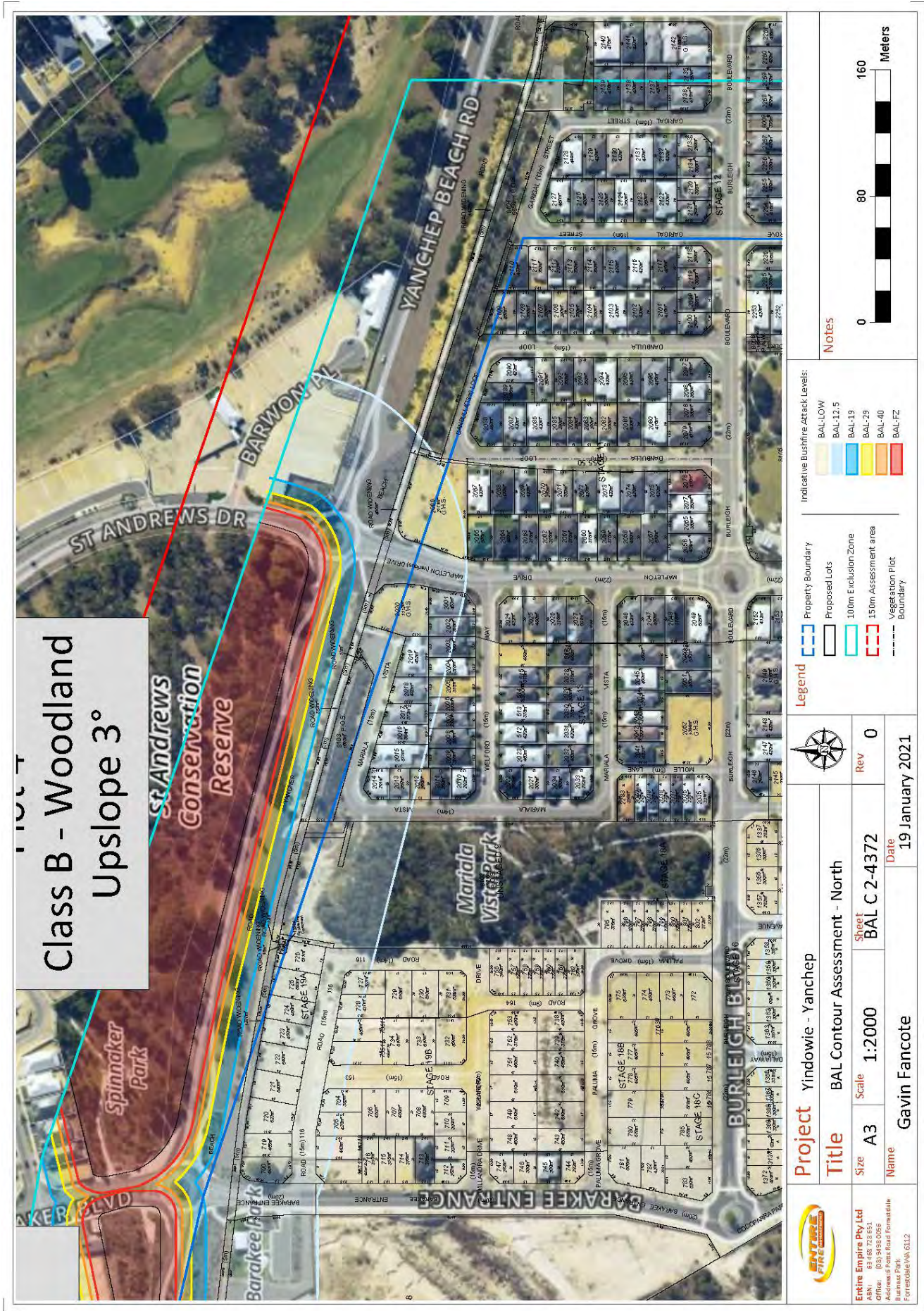




FIGURE 9: BAL Contour – South

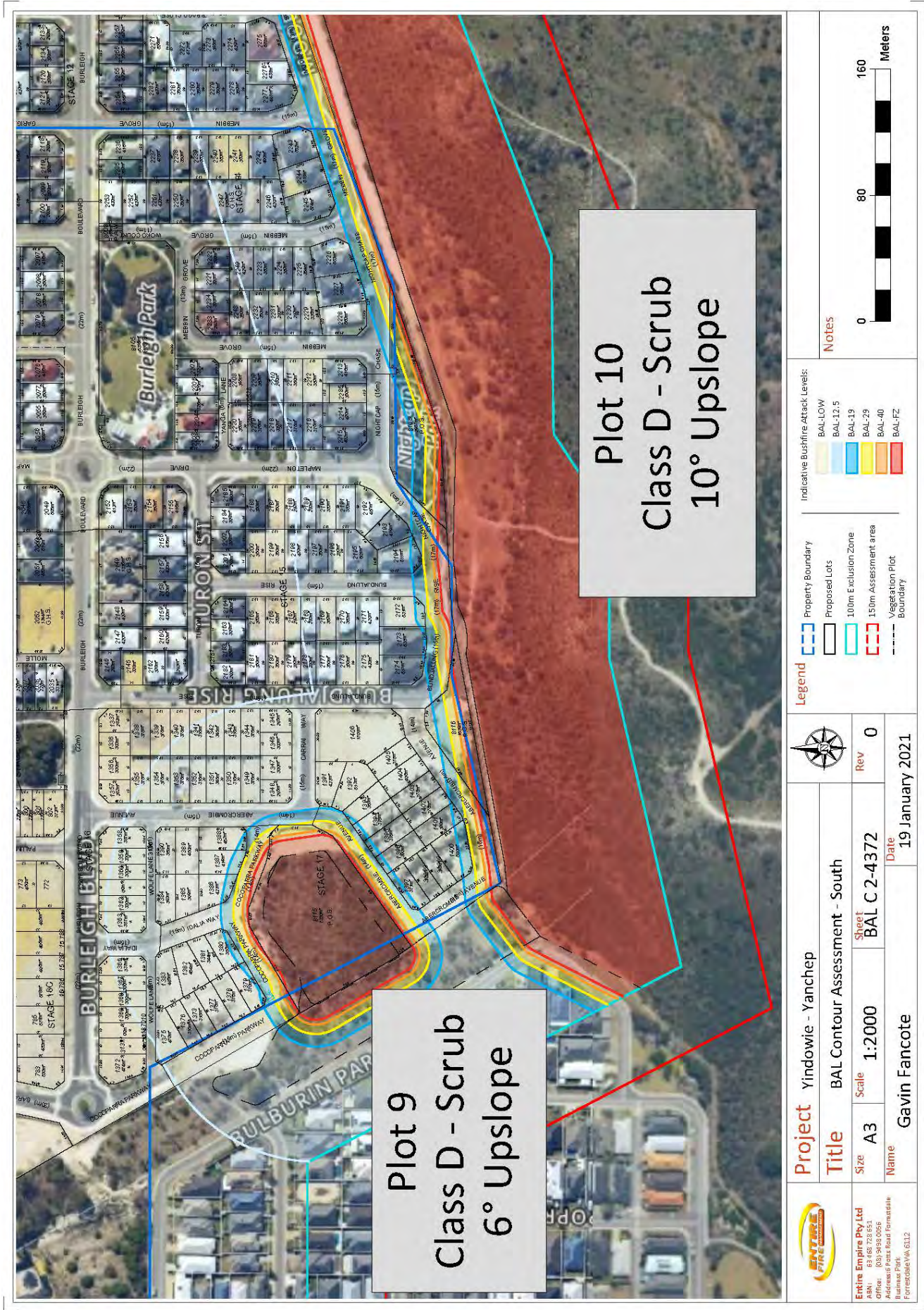


Table 1: Lots post Earthworks, as per FIGURE 7: BAL Contour

Lot 700	BAL 12.5
Lot 704	BAL 12.5
Lot 705	BAL 12.5
Lot 706	BAL LOW
Lot 707	BAL LOW
Lot 708	BAL LOW
Lot 709	BAL LOW
Lot 710	BAL LOW
Lot 711	BAL LOW
Lot 712	BAL LOW
Lot 713	BAL LOW
Lot 714	BAL LOW
Lot 715	BAL LOW
Lot 716	BAL LOW
Lot 717	BAL 12.5
Lot 718	BAL 12.5
Lot 719	BAL 12.5
Lot 720	BAL 12.5
Lot 721	BAL 12.5
Lot 722	BAL 12.5
Lot 723	BAL 12.5
Lot 724	BAL 12.5
Lot 725	BAL 12.5
Lot 726	BAL 12.5
Lot 727	BAL 12.5
Lot 728	BAL 12.5

Lot 729	BAL	LOW
Lot 730	BAL	LOW
Lot 731	BAL	LOW
Lot 732	BAL	LOW
Lot 733	BAL	LOW
Lot 734	BAL	LOW
Lot 735	BAL	12.5
Lot 736	BAL	12.5
Lot 738	BAL	LOW
Lot 739	BAL	LOW
Lot 740	BAL	LOW
Lot 741	BAL	LOW
Lot 742	BAL	LOW
Lot 743	BAL	LOW
Lot 744	BAL	LOW
Lot 745	BAL	LOW
Lot 746	BAL	LOW
Lot 747	BAL	LOW
Lot 748	BAL	LOW
Lot 749	BAL	LOW
Lot 750	BAL	LOW
Lot 751	BAL	LOW
Lot 752	BAL	LOW
Lot 753	BAL	LOW
Lot 756	BAL	LOW
Lot 757	BAL	LOW
Lot 758	BAL	LOW
Lot 759	BAL	LOW

Lot 760	BAL	LOW
Lot 761	BAL	LOW
Lot 762	BAL	LOW
Lot 772	BAL	LOW
Lot 773	BAL	LOW
Lot 774	BAL	LOW
Lot 775	BAL	LOW
Lot 776	BAL	LOW
Lot 777	BAL	LOW
Lot 778	BAL	LOW
Lot 779	BAL	LOW
Lot 780	BAL	LOW
Lot 781	BAL	LOW
Lot 782	BAL	LOW
Lot 783	BAL	LOW
Lot 784	BAL	LOW
Lot 785	BAL	LOW
Lot 786	BAL	LOW
Lot 787	BAL	LOW
Lot 788	BAL	LOW
Lot 789	BAL	LOW
Lot 795	BAL	LOW
Lot 796	BAL	LOW
Lot 797	BAL	LOW
Lot 798	BAL	LOW
Lot 799	BAL	LOW
Lot 800	BAL	LOW
Lot 801	BAL	LOW

Lot 802	BAL	LOW
Lot 1336	BAL	LOW
Lot 1337	BAL	LOW
Lot 1338	BAL	LOW
Lot 1339	BAL	12.5
Lot 1340	BAL	12.5
Lot 1341	BAL	12.5
Lot 1342	BAL	12.5
Lot 1343	BAL	12.5
Lot 1344	BAL	12.5
Lot 1345	BAL	12.5
Lot 1346	BAL	12.5
Lot 1347	BAL	12.5
Lot 1348	BAL	12.5
Lot 1349	BAL	12.5
Lot 1350	BAL	12.5
Lot 1351	BAL	12.5
Lot 1352	BAL	12.5
Lot 1353	BAL	12.5
Lot 1354	BAL	12.5
Lot 1355	BAL	12.5
Lot 1356	BAL	LOW
Lot 1357	BAL	LOW
Lot 1358	BAL	12.5
Lot 1359	BAL	12.5
Lot 1360	BAL	12.5
Lot 1361	BAL	12.5
Lot 1362	BAL	12.5

Lot 1363	BAL 12.5
Lot 1366	BAL 12.5
Lot 1367	BAL 12.5
Lot 1368	BAL 12.5
Lot 1369	BAL 12.5
Lot 1370	BAL 12.5
Lot 1371	BAL LOW
Lot 1372	BAL LOW
Lot 1373	BAL 12.5
Lot 1375	BAL 12.5
Lot 1376	BAL 12.5
Lot 1377	BAL 12.5
Lot 1378	BAL 12.5
Lot 1379	BAL 19
Lot 1380	BAL 19
Lot 1381	BAL 12.5
Lot 1382	BAL 12.5
Lot 1383	BAL 12.5
Lot 1384	BAL 12.5
Lot 1385	BAL 12.5
Lot 1386	BAL 19
Lot 1387	BAL 19
Lot 1388	BAL 19
Lot 1389	BAL 12.5
Lot 1390	BAL 12.5
Lot 1391	BAL 12.5
Lot 1392	BAL 12.5
Lot 1393	BAL 19

Lot 1394	BAL 19
Lot 1395	BAL 19
Lot 1396	BAL 19
Lot 1397	BAL 19
Lot 1398	BAL 12.5
Lot 1399	BAL 12.5
Lot 1400	BAL 19
Lot 1401	BAL 19
Lot 1402	BAL 19
Lot 1403	BAL 12.5
Lot 1404	BAL 12.5
Lot 1405	BAL 12.5
Lot 1406	BAL 12.5

Section 4: Identification of Bushfire Hazard Issues

N/A

Section 5: Assessment Against the Bushfire Protection Criteria

The proposed plan for development at Jindowie has been assessed against WAPC's Guidelines for Planning in Bushfire Prone Areas - Bushfire Protection Criteria.

The table on the following pages assess each element of the criteria and indicates how compliance can be achieved for each.

Bushfire protection criteria	Method of Compliance	Proposed bushfire management strategies
	Acceptable solutions	
Element 1: Location	A1.1 Development location	The proposed development is located sufficiently to be provided with an area at BAL-19 or below.
Element 2: Siting and design	A2.1 Asset Protection Zone	An Asset Protection Zone must be installed in accordance with Figure 10: Spatial Representation of Bushfire Management Strategies and Appendix 1: APZ Standards.
Element 3: Vehicular access	A3.1 Two access routes.	The development provides access to multiple alternative Routes.
	A3.2 Public road	All existing roads meet the minimum technical requirements set out in column 1 of Appendix 2: Vehicular access technical requirements.
	A3.3 Cul-de-sac (including a dead-end-road)	N/A
	A3.4 Battle-axe	N/A
	A3.5 Private driveway longer than 50 m A private driveway is to meet detailed requirements (refer to the Guidelines for detailed private driveway requirements).	N/A
	A3.6 Emergency access way	N/A
	A3.7 Fire service access routes (perimeter roads)	N/A
	A3.8 Firebreak width	N/A
Element 4: Water	A4.1 Reticulated areas	The development is serviced by reticulated water and does not require a water tank.
	A4.2 Non-reticulated areas	N/A
	A4.3 Individual lots within non-reticulated areas (Only for use if creating 1 additional lot and cannot be applied cumulatively)	N/A



FIGURE 10: Spatial Representation of the Bushfire Management Strategies

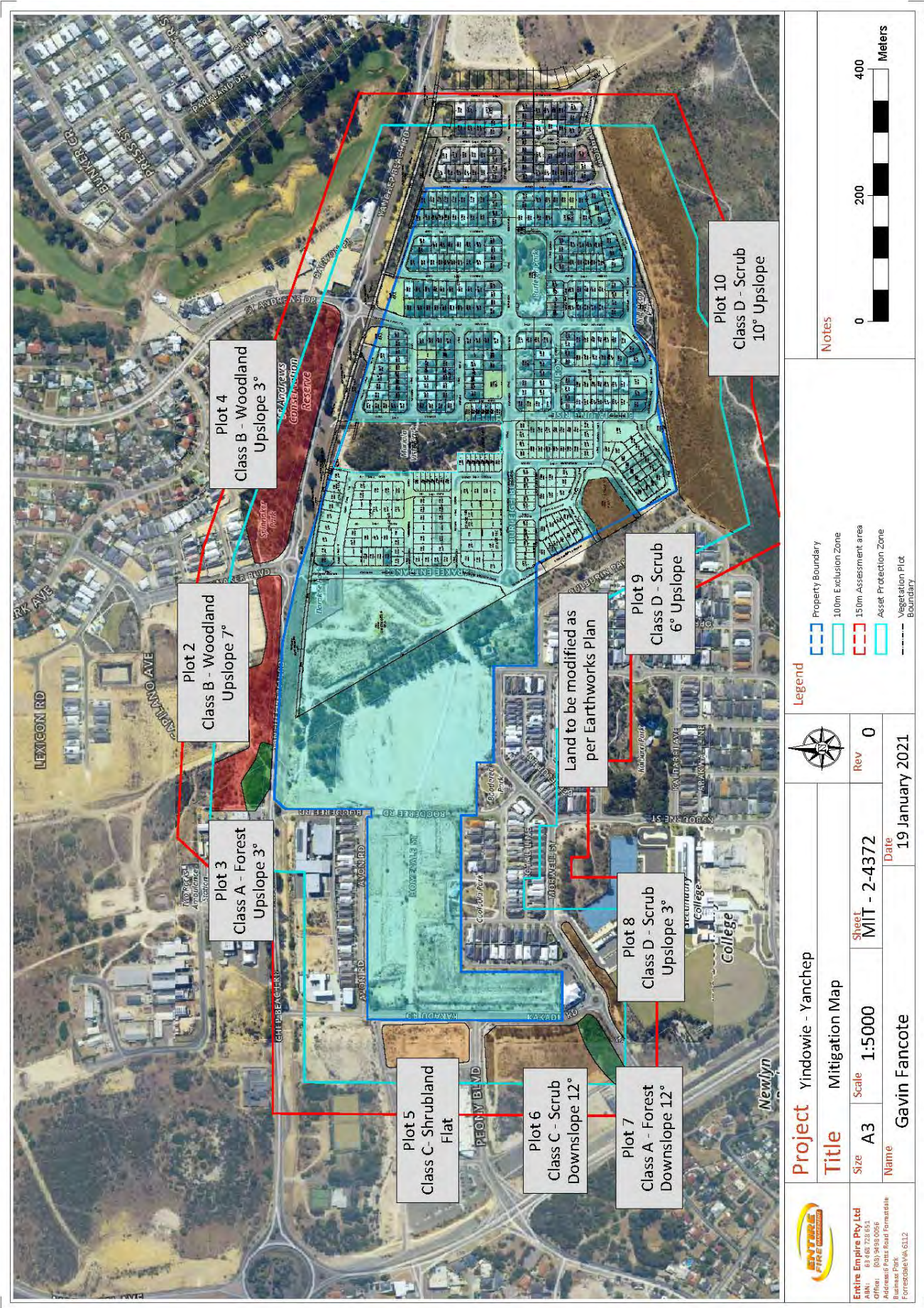


FIGURE 11: Spatial Representation of the Bushfire Management Strategies - Inset



Section 6: Responsibilities for Implementation & Management of the Bushfire Measures

DEVELOPER/SUBDIVIDER – PRIOR TO ISSUE OF CERTIFICATE OF TITLES FOR NEW LOTS	
No.	Implementation action
1	Landowner - Property owner shall install an Asset Protection Zone in accordance with <i>Figure 10: Spatial Representation of the Bushfire Management Strategies</i> and to comply with the Asset Protection Zone standards provided in Appendix 1 of this BMP.
2	Notification is to be placed on title of the lot that the land is within a designated bushfire prone area and is subject to an existing Bushfire Management Plan.

FUTURE LANDOWNER/OCCUPIER – RESPONSIBILITIES AND TASKS	
No.	Management action
1	Landowner - Property owner shall maintain the Asset Protection Zone in accordance with the standards provided in Appendix 1 of this BMP.
2	Each Lot is required to have a separate BAL report in order to provide accurate distances to relevant vegetation within 100m of the Lot. After the BAL report is completed, a BAL certificate may be provided.

Appendices

A1: APZ – Asset Protection Zone Guidelines

A2: Vehicular Access Technical Documents

A1: APZ - Asset Protection Zone Guidelines

The siting and design of the strategic planning proposal, subdivision, or development application, including roads, paths, and landscaping, is appropriate to the level of bushfire threat that applies to the site. That it incorporates a defensible space and significantly reduces the heat intensities at the building surface thereby minimising the bushfire risk to people, property, and infrastructure, including compliance with AS 3959-2018 if appropriate.

To achieve compliance with this Element the following acceptable solution must be met.

A2.1 Asset Protection Zone (APZ)

Every habitable building is surrounded by, and every proposed lot can achieve, an APZ depicted on submitted plans, which meets the following requirements:

- **Width:** Measured from any external wall or supporting post or column of the proposed building, and of sufficient size to ensure the potential radiant heat output does not exceed 29KW/m² (BAL-29) in all circumstances.
- **Location:** the APZ should be contained solely within the boundaries of the lot on which the building is situated, except in circumstances where the neighbouring lot or lots will be managed in a low-fuel state on an ongoing basis, in perpetuity.
- **Management:** the APZ is managed in accordance with the requirements of 'Standards for Asset Protection Zones'.

Hazard on one side

APZ



Hazard on three sides

APZ

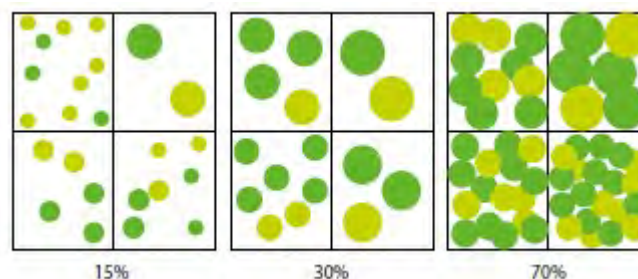


Design of Asset Protection Zone

The proportion of the APZ reflects the distance from the hazard to ensure adequate separation is achieved.

Standards for Asset Protection Zones

- **Fences:** within the APZ are constructed from non-combustible materials (e.g. iron, brick, metal post and wire). It is recommended that solid or slatted non-combustible perimeter fences are used.
- **Objects:** within 10 metres of a building, combustible objects must not be located close to the vulnerable parts of the building i.e. windows and doors.
- **Fine Fuel Load:** combustible dead vegetation matter less than 6 millimetres in thickness reduced to and maintained at an average of two tonnes per hectare.
- **Trees (>5 metres in height):** trunks at maturity should be a minimum distance of 6 metres from all elevations of the building, branches at maturity should not touch or overhang the building, lower branches should be removed to a height of 2 metres above the ground and or surface vegetation, canopy cover should be less than 15% with tree canopies at maturity well spread to at least 5 metres apart as to not form a continuous canopy.



Tree Canopy Cover – Ranging from 15 to 70 percent at maturity

- **Shrubs (0.5 metres to 5 metres in height):** should not be located under trees or within 3 metres of buildings, should not be planted in clumps greater than 5m² in area, clumps of shrubs should be separated from each other and any exposed window or door by at least 10 metres. Shrubs greater than 5 metres in height are to be treated as trees.
- **Ground Covers (<0.5 metres in height):** can be planted under trees but must be properly maintained to remove dead plant material and any parts within 2 metres of a structure, but 3 metres from windows or doors if greater than 100 millimetres in height. Ground covers greater than 0.5 metres in height are to be treated as shrubs.
- **Grass:** should be managed to maintain a height of 100 millimetres or less.

Reference; WAPC Guidelines for Planning in Bushfire Prone Areas – V1.3

A2: Vehicular Access Technical Requirements

TECHNICAL REQUIREMENTS	1 Public road	2 Cul-de-sac	3 Private driveway	4 Emergency access way	5 Fire service access routes
Minimum trafficable surface (m)	6*	6	4	6*	6*
Horizontal clearance (m)	6	6	6	6	6
Vertical clearance (m)	4.5	N/A	4.5	4.5	4.5
Maximum grade <50 metres	1 in 10	1 in 10	1 in 10	1 in 10	1 in 10
Minimum weight capacity (t)	15	15	15	15	15
Maximum crossfall	1 in 33	1 in 33	1 in 33	1 in 33	1 in 33
Curves minimum inner radius (m)	8.5	8.5	8.5	8.5	8.5
*Refer to E3.2 Public roads: Trafficable surface					