

APPENDICES

Appendix 1	Example A	Aerial and	Contour	Plan
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Appendix 2 Weather Charts

Appendix 3 Contour Mapping

Appendix 4 Slope Gradients

Appendix 5 Firebreak Agreement

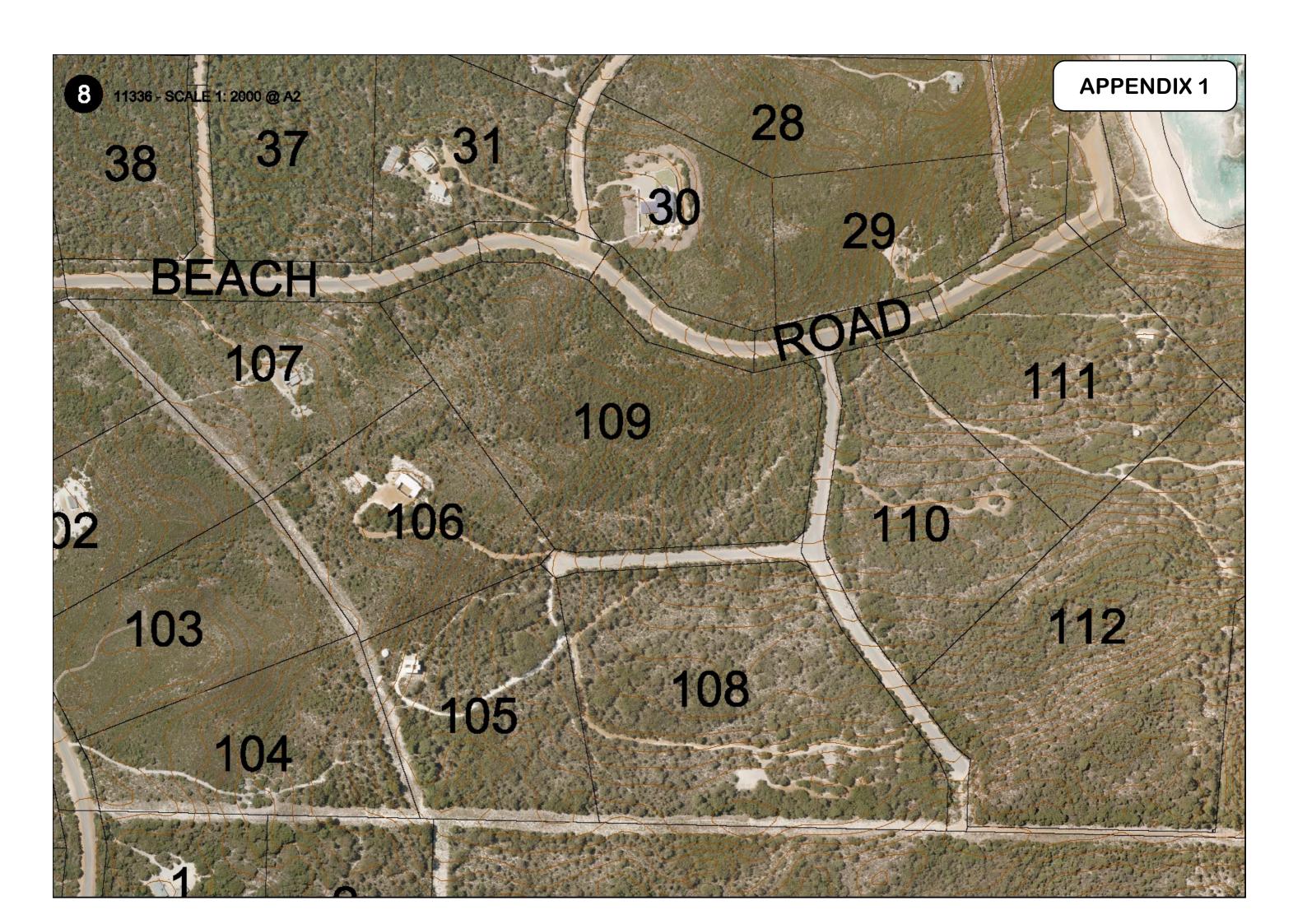
Appendix 6 BAL Summary

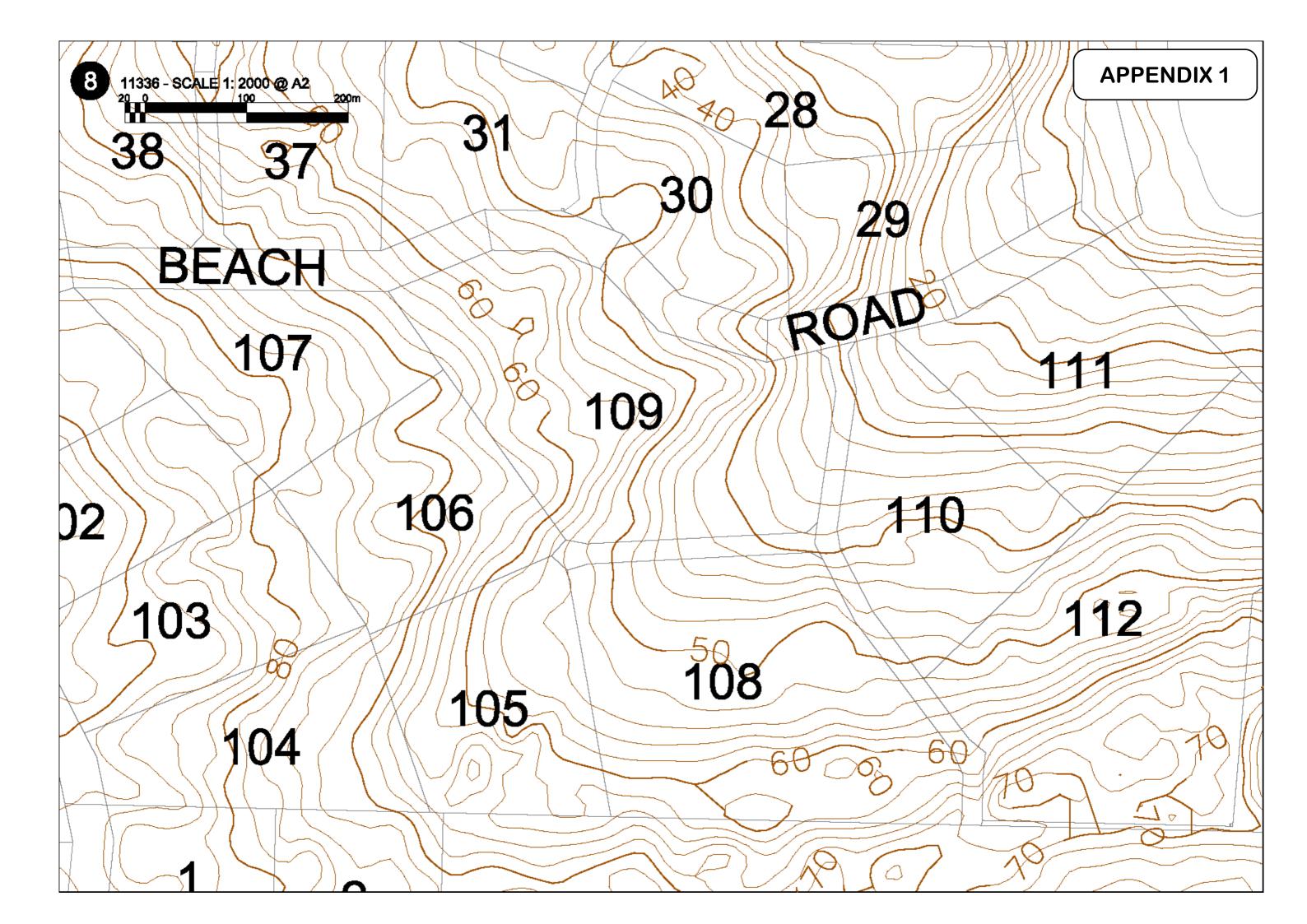
Appendix 7 DPaW Fact Sheet 20

Appendix 8 Vegetation Classification Table

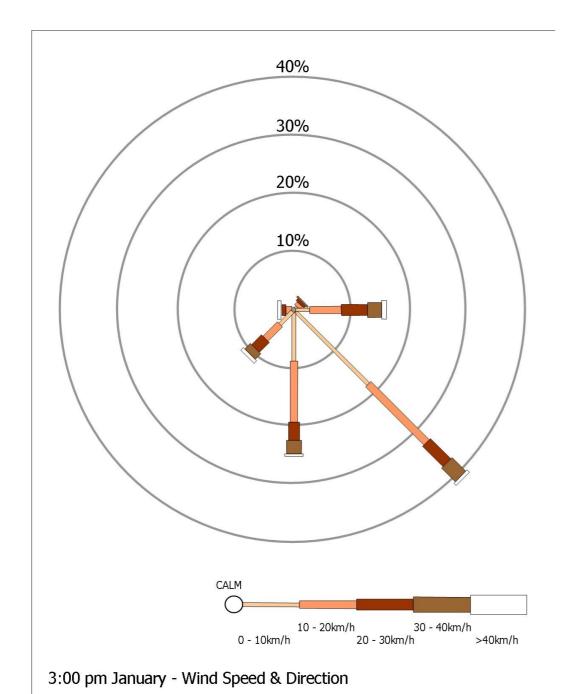
Appendix 9 BAL Assessment Sheets

Appendix 10 Draft Special Control Area Provisions





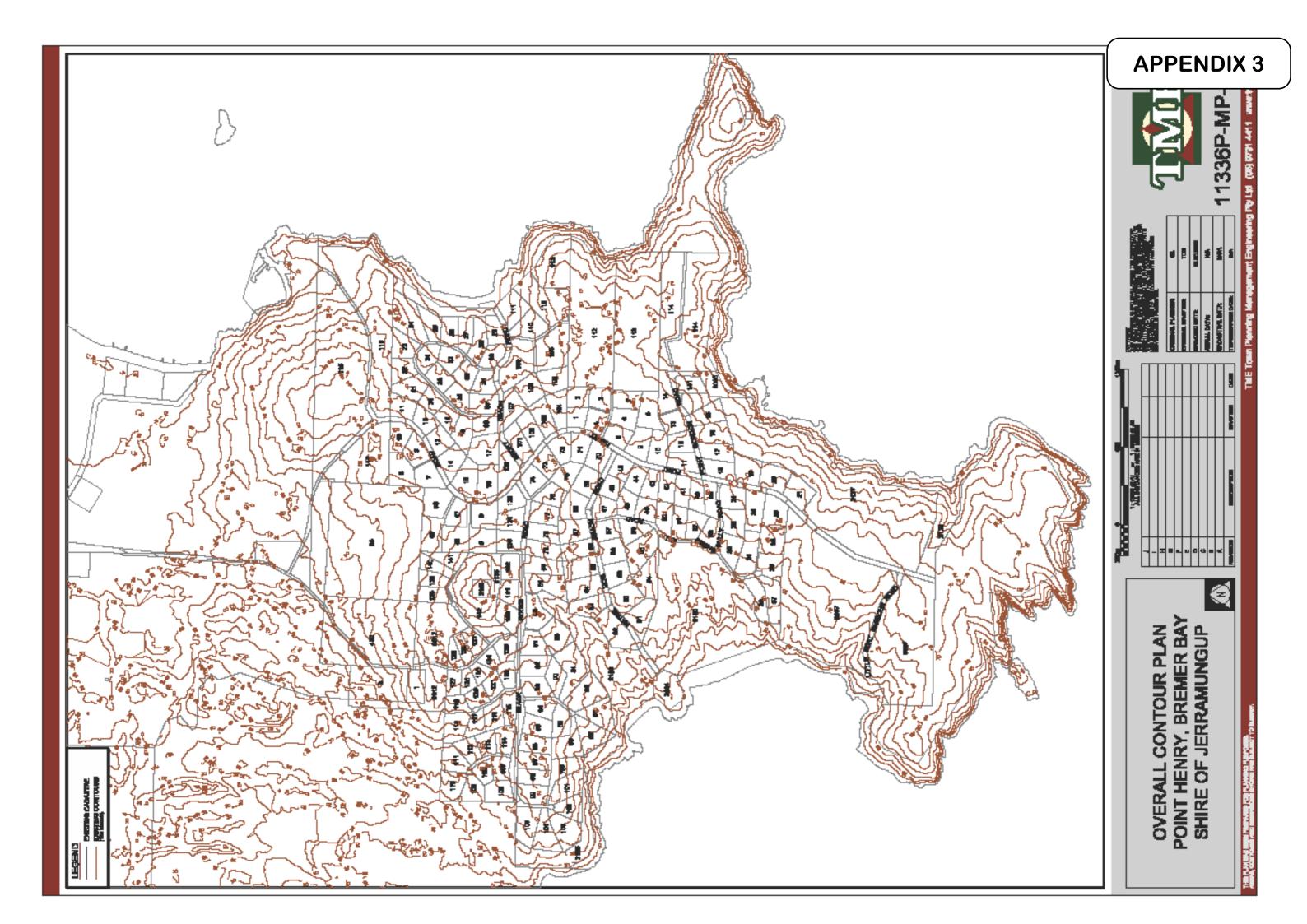
APPENDIX 2



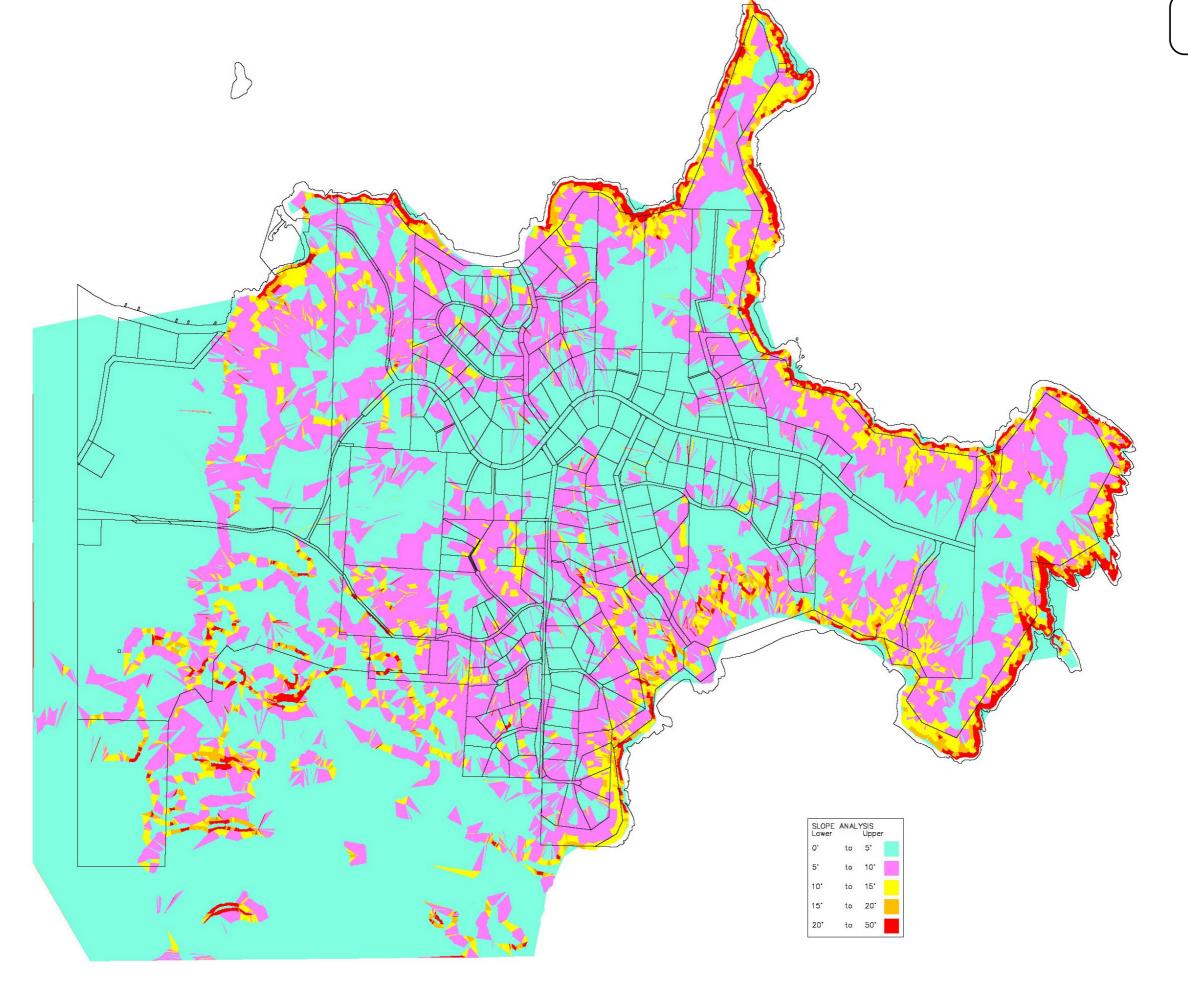
| Sep | Sep











SHIRE OF JERRAMUNGUP

AND

The Person(s) listed in Item 1 of the Schedule

Licence Agreement for the Construction, Maintenance and Use of Strategic Firebreaks

McLeods
Barristers & Solicitors



220-222 Stirling Highway | CLAREMONT WA 6010 Tel: (08) 9383 3133 | Fax: (08) 9383 4935

Email: mcleods@mcleods.com.au REF: TF: JERR:23850 THIS DEED is made the

day of

2009

Shire of Augusta Margaret River Information Sheet

AS3959 - 2009 Building in Bush Fire Prone Areas
SUMMARY ONLY - all of the detail of the standard is too complex to be included here. This is a guide only and proponents will need to refer to the full version of the current edition of AS 3959 - 2009 Building in Bush Fire Prone Areas. Section 3 of the standard is applicable to all construction

Bushfire Affack Level (BAL)	BAI 125	BAI 19	BAL 29	BAI 40	BAL FZ
Construction level	Section 3 & 5	Section 3 & 6	Section 3 & 7	Section 3 & 8	Section 3 & 9
SUB FLOOR SUPPORTS	NA	V.	Enclosed by walls or mesh with a 2mm aperture made of steel or bronze OR non combustible	Enclosed by walls or mesh with a 2mm aperture made of steel or bronze OR non combustible	Enclosed by walls, or unenclosed to have an FRL 30/-/-
FLOORS			As above, or unenclosed floors < 400 above ground shall be non combustible, or protected. Ply or particle sheet flooring to be sarked	Unenclosed floors to be non combustible, or protected with non combustible sheeting.	Unenclosed floors to have FRL 30/30/30 or meet AS1530 or
EXTERNAL WALLS	Walls within 400mm of the ground, and decks or verandahs, require protection; ie non combustible	Walls within 400mm of the ground, and decks or verandahs, require protection ie non combustible	All walls to be non combustible (masonry), or framed, sarked and clad with non combustible material.	All walls to be non combustible (masonry), or framed, sarked and clad with non combustible material.	Non combustible or FRL 30/30/30
EXTERNAL GLAZING ASSEMBLIES and DOORS	Windows & doors (including vehicle access doors) within 400mm of the ground, deck or verandah, require protection Openable part to be screened. All screens to be corrosion resistant steel, bronze, or aluminum < 2.0mm.	Windows & doors (including vehicle access doors) within 400mm of the ground, deck or verandah, require protection. Glazing within 400mm of deck or verandah to be toughened 5mm. Unprotected doors to be toughened 5mm glass. Openable part to be screened. All screens to be corrosion resistant steel, bronze, or aluminum < 2.0mm.	Protected with non combustible shutters; or, Metal frame or bush fire resisting timber with toughened Glass min 5mm Glass sliding doors to be 6mm toughened. Hinged glass doors to have lower 400mm with compliant screens. Openable part to be screened. All screens to be corrosion resistant steel, bronze, or aluminum < 2.0mm.	Protected with non combustible shutters; or, Metal frame with toughened Glass min 5mm Openable AND fixed parts to be screened. All screens to be corrosion resistant steel, or bronze < 2.0mm. Vehicle access doors to be non combustible	Non combustible shutters or openable part to be screened. All screens to be corrosion resistant steel, or bronze < 2.0mm; AND, window system to have FRL-/30/-, or pass AS1530.8.2 when tested from the outside.
ROOFS	Fully sarked and sealed Verandahs and carports to be non - combustible Vent pipes can be PVC	Fully sarked and sealed Verandahs and carports to be non-combustible.	Fully sarked and sealed Verandahs and carports to be non-combustible. Eaves linings, fascias and gables to be non combustible	Fully sarked and sealed Verandahs and carports to be Non-combustible. Eaves linings, fascias and gables to be non combustible	Roofs to have FRL 30/30/30 Verandahs - non combustible. Eaves linings, fascias and gables to be non combustible. Metal pipes and conduits
VERANDAHS and DECKS	NA Decking within 300 of glazed elements to be non combustible or hardwood (table E1) or protected	NA Decking within 300 of glazed elements to be non combustible or hardwood (table E1) or protected	Deck to be non combustible. Unenclosed sub floors to be non combustible.	Deck to be non combustible. Unenclosed sub floors to be to non combustible.	Deck to be non combustible. Unenclosed sub floors to be non combustible.
SERVICE PIPES	All above ground water and gas pipes to be metal	pipes to be metal			



Clearing for fire protection (Building Protection Zones)

Environmental Protection Act 1986

The Premier of Western Australia, Hon Colin Barnett MLA, issued Circular 2012/02 entitled Building Protection Zones (BPZs) on 3 September 2012. This document encouraged a shared responsibility of reducing bushfire risk in Western Australia by implementing or improving BPZs.

The Department of Fire and Emergency Services (DFES) describes a Building Protection Zone (BPZ) as an area for "managing and reducing fuel loads for a minimum of 20 metres around a building [to] increase its likely survival from a bushfire". Further information is available in an information note available

http://www.dfes.wa.gov.au/safetyinformation/fire/bushfire/Pages/BushfireProtectionZones.aspx

Bush fire prevention on private property is primarily the responsibility of local governments under the *Bush Fires Act 1954*. The Office of Bushfire Risk Management and local governments participate in and contribute to the implementation and approval of Bushfire Risk Management Plans that incorporate bushfire prevention and mitigation strategies.

It is common for local governments to issue a written notice under this legislation requiring an owner or occupier of land to clear firebreaks and the area within 20 metres of a building. This notice is sometimes known as a Firebreak Order. This legal requirement provides an exemption from the requirement for a permit for clearing native vegetation.

While the law in relation to BPZs is administered by DFES and local governments, the *Environmental Protection Act 1986* (EP Act) also recognises the need to clear vegetation for fire protection purposes. There is currently an exemption under Regulation 5, Item 15 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 from the requirement to obtain a permit to clear previously cleared native vegetation within 20 metres of a building, which applies except in environmentally sensitive areas. The Government recognises the need to remove any unnecessary restrictions to protect buildings and other assets, and it intends to amend the legislation to provide for this.

Until these legislative amendments are in place, DEC will exercise its discretion in the public interest in relation to enforcement action for clearing:

 for bush fire protection within 20 metres of a building to create or maintain a BPZ; and to implement the requirements of <u>approved</u> Bushfire Risk Management Plans.

Please be aware that this does not absolve landowners from all other statutory responsibilities under local, state and federal law.

More information

DEC provides a range of information at <www.dec.wa.gov/nvp>

Fact sheets provide basic information to cover the most common questions DEC receives about the EP Act clearing provisions

Application forms include guidance on what information is required to submit a valid application

Guides provide additional detail to what is covered in the facts sheets or forms

Environmentally sensitive areas can be viewed from the Native Vegetation Map Viewer at <www.dec.wa.gov.au/nvp> in the 'Data' section

Be clear before you clear – if you require assistance please contact DEC's **Native Vegetation Conservation Branch** on 6467 5020 or email rny@dec.wa.gov.au

If your clearing relates to mining or petroleum please contact the Department of Mines and Petroleum (DMP) Native Vegetation Assessment Branch for assistance on 9222 3333 or visit: www.dmp.wa.gov.au/nvabinfo

See information sheets from Department of Fire and Emergency Services <www.dfes.wa.gov.au/safetyinformation/fire/bushfire/BushfireInfoNotesPublications/infonote-_What_is _a_building_protection_zone.pdf>

Please note.....

The above information provides a general guide to the clearing provisions of the Environmental Protection Act 1986 (available at <www.slp.wa.gov.au>). DEC has endeavored to ensure the accuracy of the contents of this document, it accepts no responsibility for any inaccuracies and persons relying on this document do so at their own risk.



AS3959 – Table 2.3 Vegetation Classification

Vegetation Class	Vegetation Type	No	Description
A Forest	Tall open forest Tall woodland	01 02	Trees over 30 metres high with 30-70% foliage cover (may include understorey ranging from rainforest and tree ferns to low trees and tall shrubs). Found in areas of high reliable rainfall. Typically dominated by Eucalypts.
	Open forest Low open forest	03 04	Trees 10-30 metres high with 30-70% foliage cover (may include understorey of sclerophyllous low trees and tall scrubs or grass). Typically dominated by Eucalypts.
	Pine plantation	NA	Trees 10-30 metres in height at maturity, generally comprising <i>Pinus</i> species or other softwood species planted as a single species for the production of timber.
B Woodland	Woodland Open woodland	05 06	Trees 10-30 metres high with 10-30% foliage cover dominated by Eucalypts and an understorey of low trees to tall shrubs typically dominated by <i>Acacia, Callitris</i> or <i>Casuarina</i> .
	Low woodland Low open woodland Open shrubland	07 08 09	Low trees and shrubs 2-10 metres high with foliage cover less than 10%. Dominated by Eucalypts and Acacias. Often have a grassy or low shrub understorey. <i>Acacia</i> and <i>Casuarina</i> woodlands grade to <i>Atriplex</i> shrublands in the arid and semi-arid zones.
C Shrubland	Closed heath Open heath	10 11	Found in wet areas that are affected by poor soil fertility or shallow soils. Contains shrubs 1-2 metres high often comprising <i>Banksia, Acacia, Hakea</i> and <i>Grevillea</i> . Wet heaths occur in sands adjoining dunes of the littoral (shore) zone. Montane heaths occur on shallow or water-logged soils.
	Low shrubland	12	Shrubs less than 2 metres high with greater than 30% foliage cover. Understoreys can contain grasses. <i>Acacia</i> and <i>Casuarina</i> often dominant in the arid and semi arid zones.
D Scrub	Closed scrub	13	Found in areas wet enough to support Eucalyptus trees affected by poor soil fertility or shallow soils. Greater than 30% foliage cover. Dry heaths occur in rocky areas. Shrubs 1-2 metres high. Often coastal wetlands.
	Open scrub	14	Trees greater than 2 metres high with 10-30% foliage cover. Dominated by Eucalypts or co-dominant <i>Melaleuca</i> and <i>Myoporum</i> with a mixed understorey.
E Mallee / Mulga	Tall shrubland	15	Vegetation dominated by shrubs (especially Eucalypts and Acacias) with a multi-stemmed habit, usually greater than 2 metres in height with less than 30% foliage cover. Understorey of widespread to dense low shrubs (<i>Acacia</i>) or sparse grasses
F Rainforest	Tall closed forest Closed forest Low closed forest	16 17 18	Trees 10-40 metres in height with greater than 90% foliage cover. Understorey may contain a large number of species with a variety of heights.
G Grassland (see Note 1)	Low open shrubland Hummock grassland Closed tussock grassland Tussock grassland Open tussock Sparse open tussock Dense sown pasture Sown pasture Open herbfield Sparse open herbfield	19 20 21 22 23 24 25 26 27 28	All forms including situations with shrubs and trees if overstorey foliage cover is less than 10%.
Notes	 Grassland managed in a minimal fuel condition is regarded as low threat vegetation for the purpose of Clause 2.2.3.2 Overstoreys of open woodland, low open woodland, tall open shrubland and low open shrubland should be classified to the vegetation type on the basis of their understoreys, others may be classified on the basis of their overstoreys. Vegetation height is the average height of the top of the overstorey. 		

BUSHFIRE ATTACK LEVEL ASSESSMENT FORM

APPENDIX 9

Lot	DP	Street	Owner	_

CLASSIFIED VEGETATAION

Refer to Figure 2.3 of AS3949 (attached)

Where there is a mix of vegetation types, the vegetation with higher hazard rating is to be used.

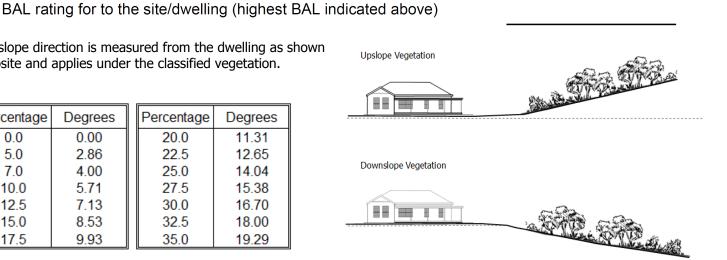
The minimum mapping unit for the vegetation classification is 2,500sqm i.e. 50m X 50m

	NORTH		SOUTH		EAST	WEST
	A Forest		A Forest		A Forest	A Forest
	B Woodland		B Woodland		B Woodland	B Woodland
	C Shrubland		C Shrubland		C Shrubland	C Shrubland
	D Scrub		D Scrub		D Scrub	D Scrub
	E Mallee/Mulga		E Mallee/Mulga		E Mallee/Mulga	E Mallee/Mulga
	F Rainforest		F Rainforest		F Rainforest	F Rainforest
	G Grassland		G Grassland		G Grassland	G Grassland
SI OPE	E - Measured unde	or the clas	sified vegetation -	over 100	m	
OLOI L	NORTH	i tric cias	SOUTH	0001 100	EAST	WEST
	flat/upslope		flat/upslope		flat/upslope	flat/upslope
	>0 - 5		>0 - 5		>0 - 5	>0 - 5
	>5 - 10		>5 - 10		>5 - 10	>5 - 10
	>10 - 15		>10 - 15		>10 - 15	>10 - 15
	>15 - 20		>15 - 20		>15 - 20	>15 - 20
Distand	ce from the dwellin	g to the c	lassified vegetatio	on		
	1		1		7	1
	NORTH		SOUTH		EAST	WEST
BUSHF	FIRE ATTACK LE	VEL (BAI	L)			
	NORTH	•	SOUTH		EAST	WEST
	Low		Low		Low	Low
	12.5		12.5		12.5	12.5
	19		19		19	19
	29		29		29	29
	40		40		40	40
	FZ		FZ		FZ	FZ

The slope direction is measured from the dwelling as shown opposite and applies under the classified vegetation.

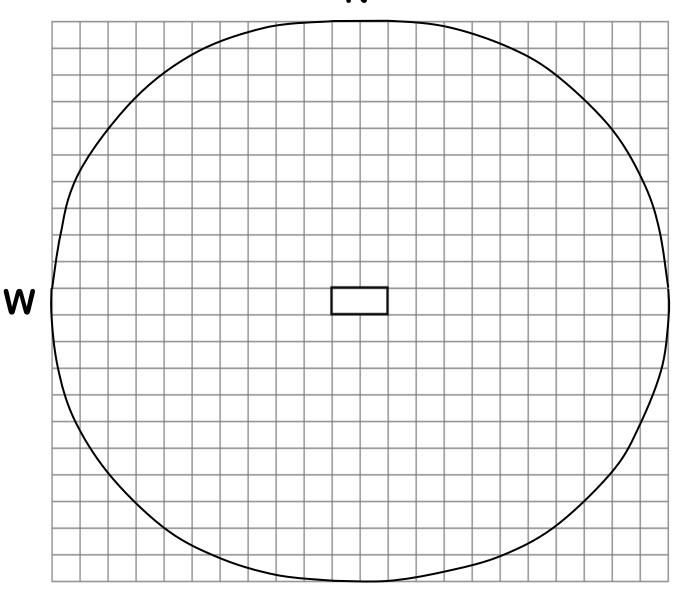
Percentage Degrees 0.0 0.00 5.0 2.86 4.00 7.0 10.0 5.71 12.5 7.13 15.0 8.53 17.5 9.93

Percentage	Degrees
20.0	11.31
22.5	12.65
25.0	14.04
27.5	15.38
30.0	16.70
32.5	18.00
35.0	19.29



SITE PLAN

N

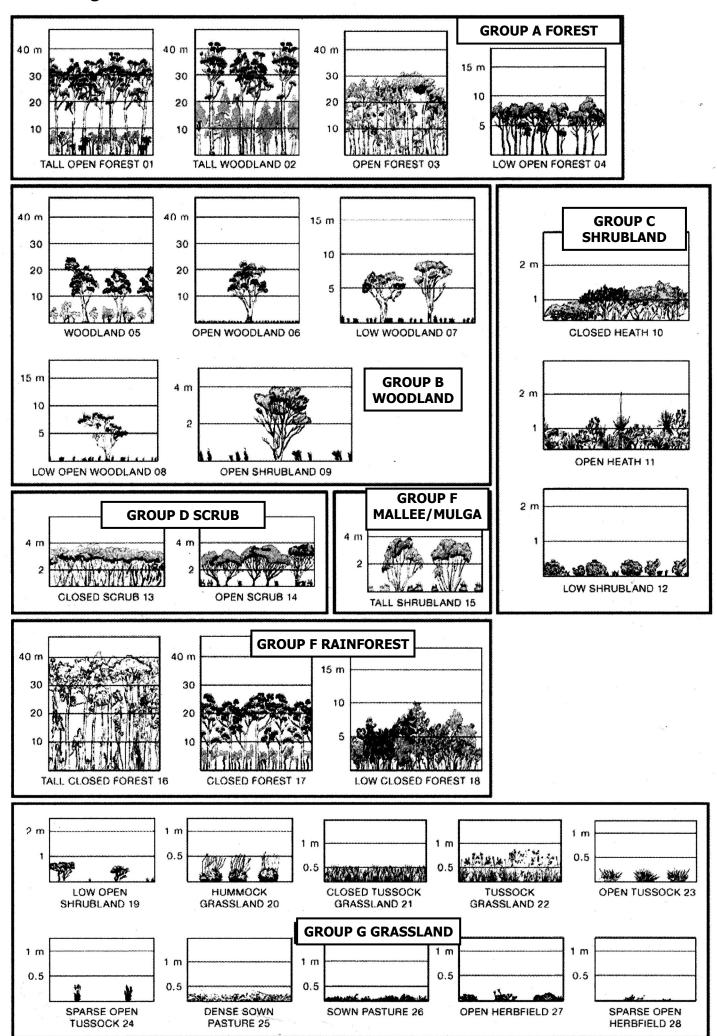


Each square is 10m X 10m measured from the proposed building site

S

Any property boundary which is less than 100m from the dwelling must be shown.

Prepared by	Approved by
Signature	Signature
Nate .	Date



Draft Bushfire Special Control Area Provisions

In clause 6.1.1 add

Bushfire Special Control Area

Add clause 6.4 as follows:

6.4 BUSHFIRE SPECIAL CONTROL AREA

6.4.1 Purpose of the bushfire hazard special control area

- 6.4.1.1 The purpose of the bushfire special control area is to:
 - a) implement State Planning Policy xx: Bushfire Planning (WAPC 2014) and the accompanying Bushfire Planning Guidelines (WAPC 2014);
 - b) identify land that is subject, or likely to be subject, to a bushfire hazard;
 - ensure a Bushfire Attack Level assessment is carried out on land that is subject, or likely to be subject, to bushfire hazard; and
 - ensure that development effectively addresses the level of bushfire hazard applying to the land.
- 6.4.1.2 Land subject of this special control area is considered bushfire-prone for the purpose of implementing Australian Standard 3959: Construction of buildings in bushfire-prone areas (Building Code of Australia 2009, as amended).

6.4.2 Development in the bushfire special control area

- 6.4.2.1 Should a structure plan be prepared resulting in the introduction or intensification of development, prior to the adoption or amendment of a structure plan, or approval of a subdivision or development application within a bushfire-prone area, a Bushfire Attack Level assessment satisfactorily addressing the level of bushfire hazard applying to the land is to be submitted and approved by Council.
- 6.4.2.2 In addition to development which otherwise requires approval under the scheme, planning approval is required for any development:
 - a) within the bushfire-prone area that does not comply with an approved bushfire hazard assessment undertaken as part of the structure planning or subdivision of an area;
 - that is inconsistent with Appendix xx of State Planning Policy xx: Bushfire Planning (WAPC 2014);
 - that is a single dwelling or addition that would require planning approval under the provisions in Schedule One of State Planning Policy xx: Bushfire Planning (WAPC 2014); and/or
 - d) proposes a vulnerable or high risk use.
- 6.4.2.3 In determining an application to carry out development in the bushfire-prone area, the local government may refuse the application, or impose conditions on any planning approval as to the:
 - Provision of a fire fighting water supply;

- Provision of fire services access;
- Preparation of a fire management plan in accordance with the Bushfire Planning Guidelines (WAPC 2014) and implementation of specific fire protection measures set out in the plan;
- Implementation of measures to ensure that prospective purchasers are aware of the relevant scheme provisions, fire management plan and publications addressing fire safety; and
- Requirement for financial contributions for ongoing fire equipment where a strategy
 that has been adopted by the local government and which clearly identifies the
 locations, estimated costs, required timeframes, and detail on the equitable
 apportionment of the costs of providing the fire equipment.

6.4.3 Additional information requirements

- 6.4.3.1 An application for development approval within the bushfire special control area must be accompanied by:
 - a) a Bushfire Attack Level assessment carried out in accordance with the methodology contained in the Planning for Bushfire Guidelines (WAPC 2014); and
 - b) a statement or report that demonstrates that all relevant bushfire protection acceptable solutions, or alternatively all relevant performance criteria, contained in Appendix xx of State Planning Policy xx: Bushfire Planning (WAPC 2014) have been considered and complied with, and effectively address the level of bushfire hazard applying to the land.

6.4.4 Referral of applications

6.4.4.1 The Local Government may refer any application to the Department of Fire and Emergency Services or to Department of Parks and Wildlife for advice prior to a decision being made.

6.4.5 Planning requirements

- 6.4.5.1 In considering proposals in the bushfire special control area, Council is to have regard to:
 - a) State Planning Policy xx: Bushfire Planning (WAPC 2014);
 - b) Bushfire Planning Guidelines (WAPC 2014);
 - c) Any advice obtained from DFES or DPaW; and
 - d) Any other planning considerations Council considers relevant