

9 October 2020

Our ref: 16864

Parcel Property  
Level 3/14 Walters Drive,  
OSBORNE PARK,  
WA 6017

## Bushfire Attack Level (BAL) Assessment Report for Stages 4 and 5, Beenyup Grove Estate, Byford

### Site Details

**Address:** Beenyup Grove Estate: (Lots 319-340, 382-385, 400-403, 418-424, 470, 511-514, 535-538, 558-561, 571-583, 594-600, 606, 637-640 and 658)

**Suburb:** Byford, 6122 **State:** Western Australia

**Local Government Area:** Shire of Serpentine Jarrahdale

**Description of building works:** Residential development, future buildings

### Report details

<b>Report/Job number:</b>	20PER-16864	<b>Report version:</b>	v1
<b>Assessment date:</b>	8/10/2020	<b>Report date:</b>	9/10/2020
<b>Author:</b>	Stephen Moore and Daniel Panickar	<b>Review:</b>	Daniel Panickar (BPAD Level 3 – 37802)



### SITE ASSESSMENT AND SITE PLAN


The assessment of the 76 subject lots was undertaken on 8 October 2020 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* (SA 2018) Simplified Procedure (Method 1). An overview of the site is presented in Figure 1.

### VEGETATION CLASSIFICATION

All vegetation within 100 m of the 76 subject lots 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 below and presented in Figure 1.

It is currently assumed that areas of landscaped vegetation within the site and assessment area will be managed and maintained by Parcel Property (the developer) until replaced by residential dwellings and associated infrastructure or handed over to the Shire of Serpentine-Jarrahdale in the future.

Plot	1	Classification or Exclusion Clause	Excluded – clause 2.2.3.2 (e) & (f)
		<b>Photo Point 1</b>	
		This plot has been excluded under Clause 2.2.3.2 (e) & (f) of AS 3959-2018. This is an area of low threat, maintained vegetation and footpaths.	
Plot	1	Classification or Exclusion Clause	Excluded – clause 2.2.3.2 (e) & (f)
		<b>Photo Point 2</b>	
		This plot has been excluded under Clause 2.2.3.2 (e) & (f) of AS 3959-2018. This is an area that has been cleared for construction and will contain residential lots, roads and low threat, maintained vegetation.	
Plot	1	Classification or Exclusion Clause	Excluded – clause 2.2.3.2 (f)
		<b>Photo Point 3</b>	
		This plot has been excluded under Clause 2.2.3.2 (f) of AS 3959-2018. This is an area of low threat, maintained grass.	

Plot	1	Classification or Exclusion Clause	Excluded – clause 2.2.3.2 (f)
<b>Photo Point 4</b> This plot has been excluded under Clause 2.2.3.2 (f) of AS 3959-2018. This is an area of low threat, maintained grass.			
			
Plot	1	Classification or Exclusion Clause	Excluded under clause 2.2.3.2 (e) and (f)
<b>Photo Point 5</b> This plot has been excluded under Clause 2.2.3.2 (e) & (f) of AS 3959-2018. This is an area that has been cleared for construction and will contain residential lots, roads and low threat, maintained vegetation.			
			
Plot	3	Classification or Exclusion Clause	Excluded under clause 2.2.3.2 (e) and (f)
<b>Photo Point 6</b> This plot has been excluded under Clause 2.2.3.2 (e) & (f) of AS 3959-2018. This is an area that has been cleared for construction and will contain residential lots, roads and low threat, maintained vegetation.			
			

RELEVANT FIRE DANGER INDEX

The Fire Danger Index (FDI) for this site has been determined in accordance with Table 2.1 of AS 3959-2018. The FDI for WA is FDI 80.

POTENTIAL BUSHFIRE IMPACTS

The potential bushfire impact to the site / proposed development from each of the identified vegetation plots are identified below, Table 1 and Figure 1.

Table 1: BAL Analysis AS 3959-2018

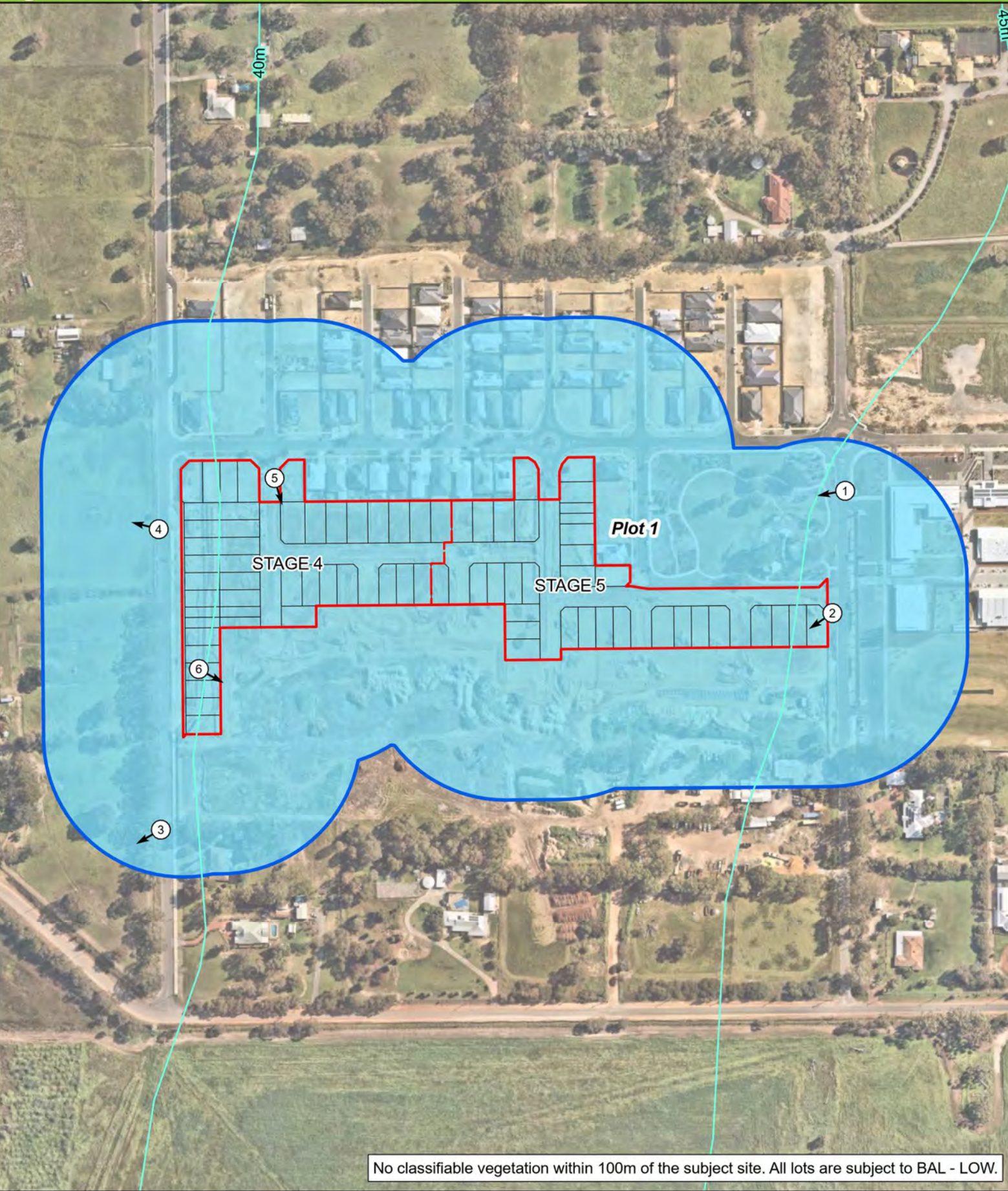
Plot	Vegetation Classification	Effective Slope	Separation distances required				
			BAL-FZ	BAL-40	BAL-29	BAL-19	BAL-12.5
1	Excluded under Clause 2.2.3.2 (e) & (f)	N/A	No separation distances required – BAL-LOW				

DETERMINED BUSHFIRE ATTACK LEVEL (BAL)

The determined Bushfire Attack Level (highest BAL) for the site has been determined in accordance with Clause 2.2.6 of AS 3959-2018 using the above analysis. All lots within the site are subject to BAL ratings of **BAL-LOW**.


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

Figure 1: Vegetation Classification



**Legend**

- Subject site
- 100m site assessment
- Stage boundary
- Lot boundary
- Contour (5m)

 Photo location


**Vegetation classification**

- Excluded as per clause 2.2.3.2 (e) and (f)

0 25 50 100  
Metres

Datum/Projection:  
GDA 1994 MGA Zone 50

N



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Project: 16846-SM Date: 9/10/2020

## Appendix A – Additional Information / Advisory Notes

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 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

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 319, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

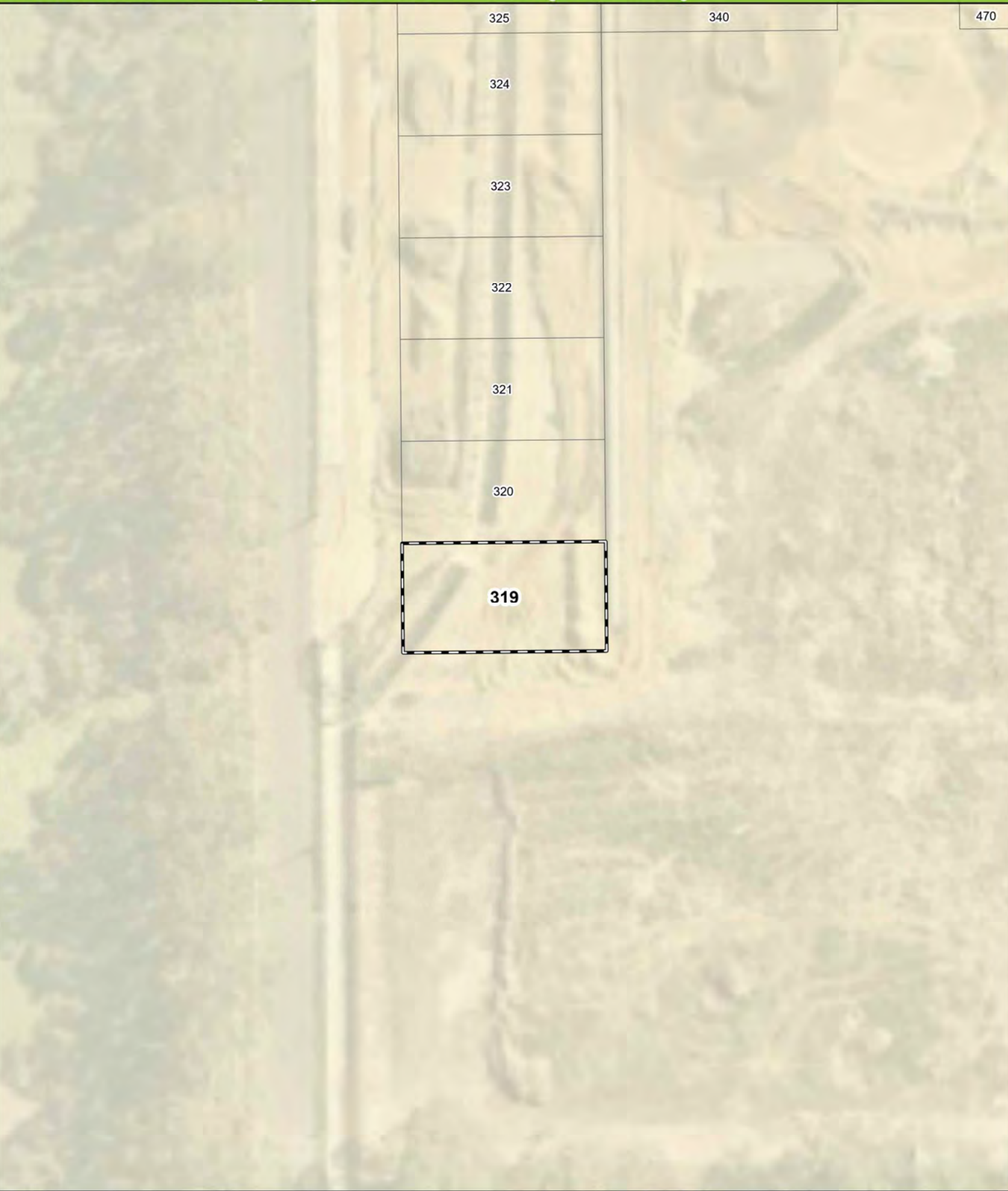
Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 319 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

**Bushfire attack level (BAL)**

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



0 5 10 20  
Metres

Datum/Projection:  
GDA 1994 MGA Zone 50

N

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Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 320, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

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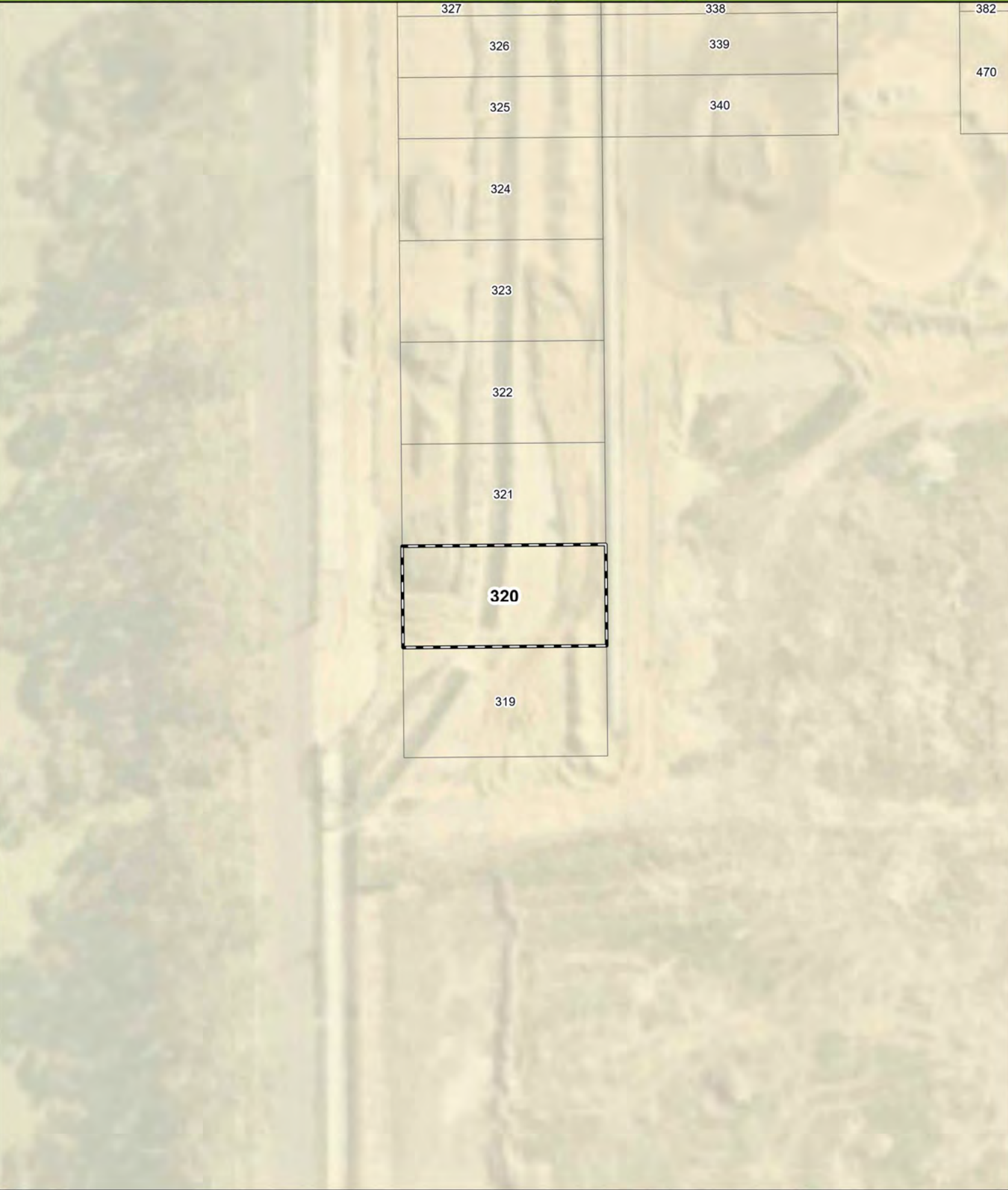
Signature: 

Certificate Date: 09/10/2020



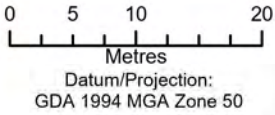
Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 320 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 321, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

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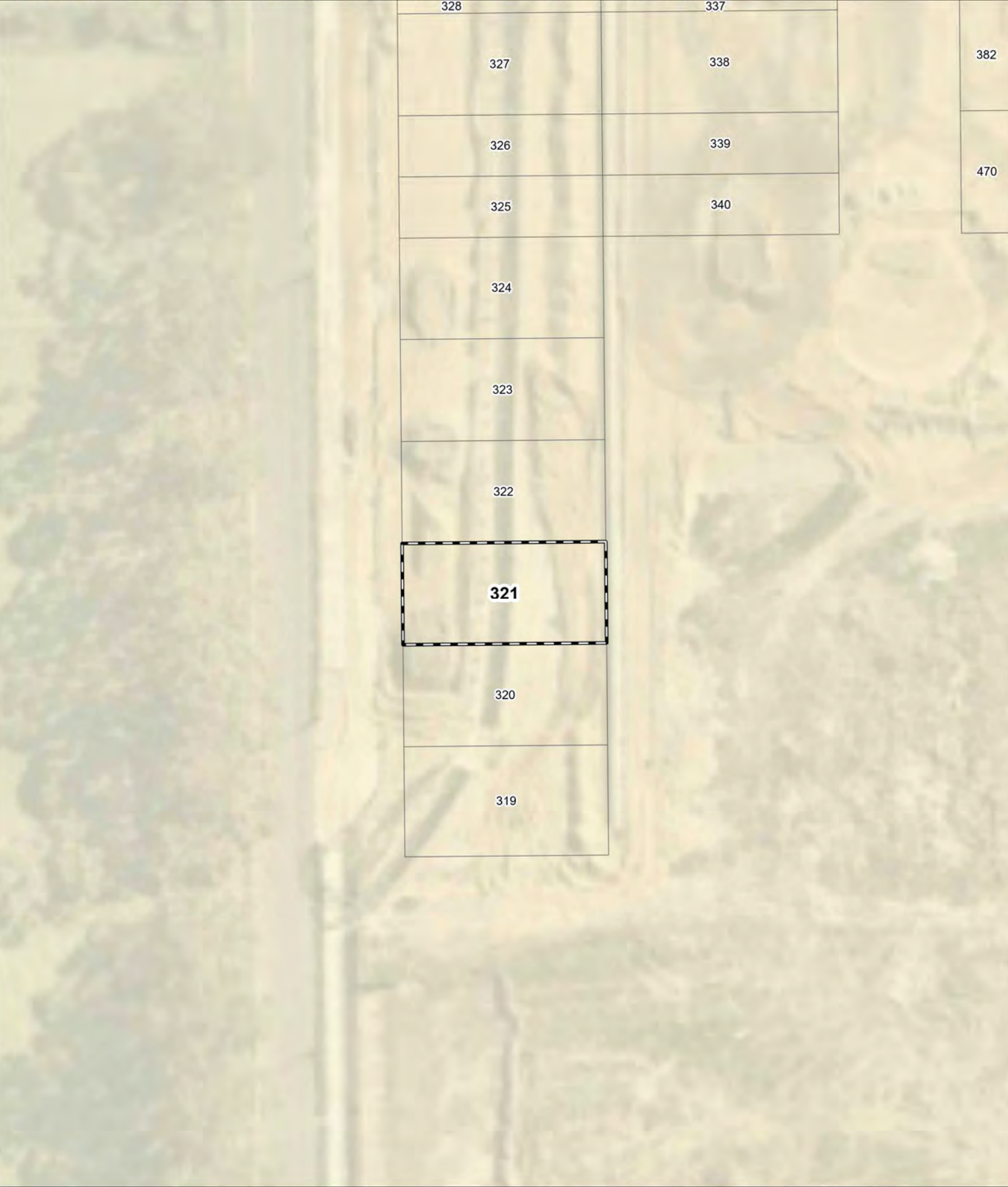
Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 321 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

**Bushfire attack level (BAL)**

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



0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

N

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# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 322, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

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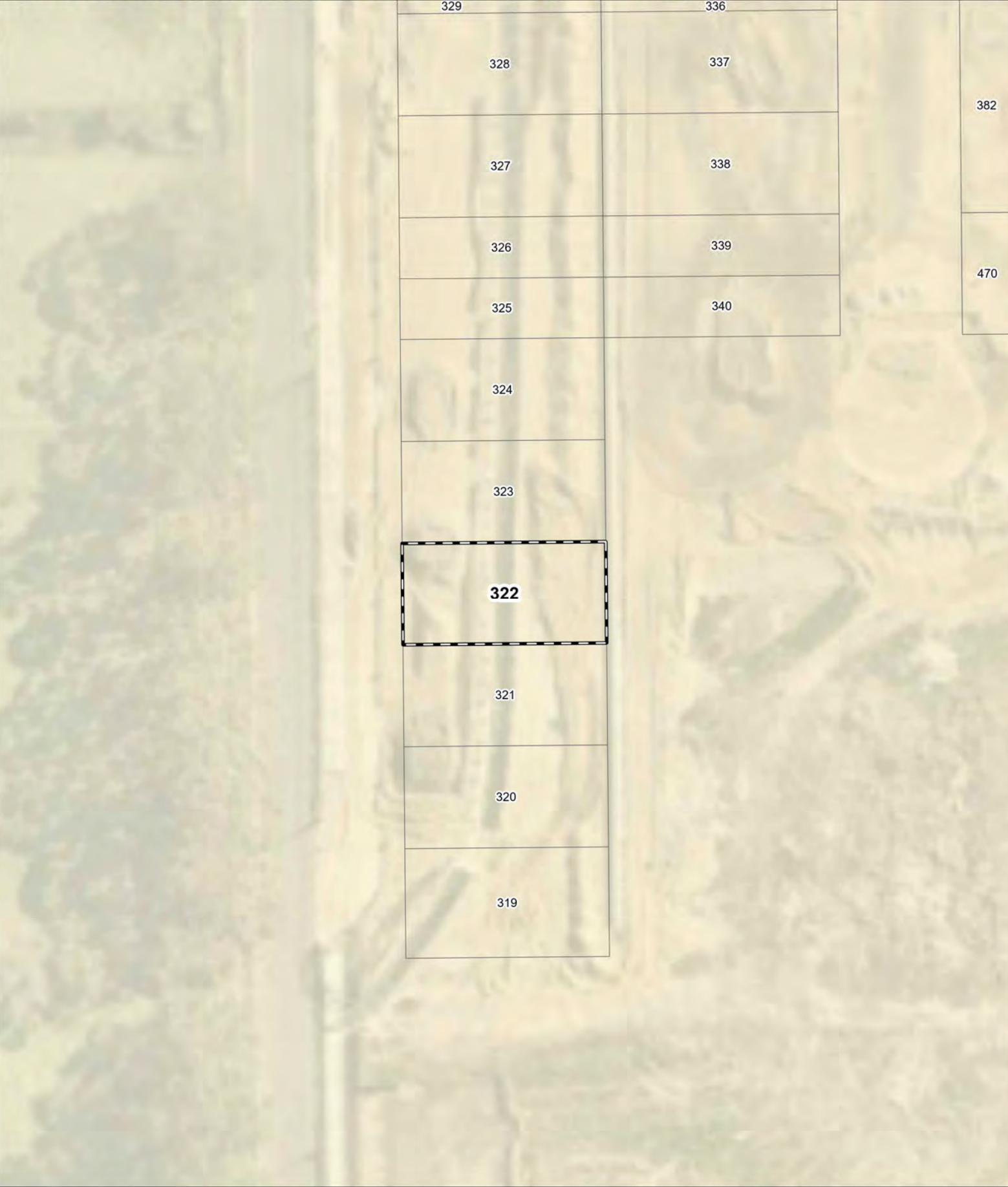
Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 322 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

N

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Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 323, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

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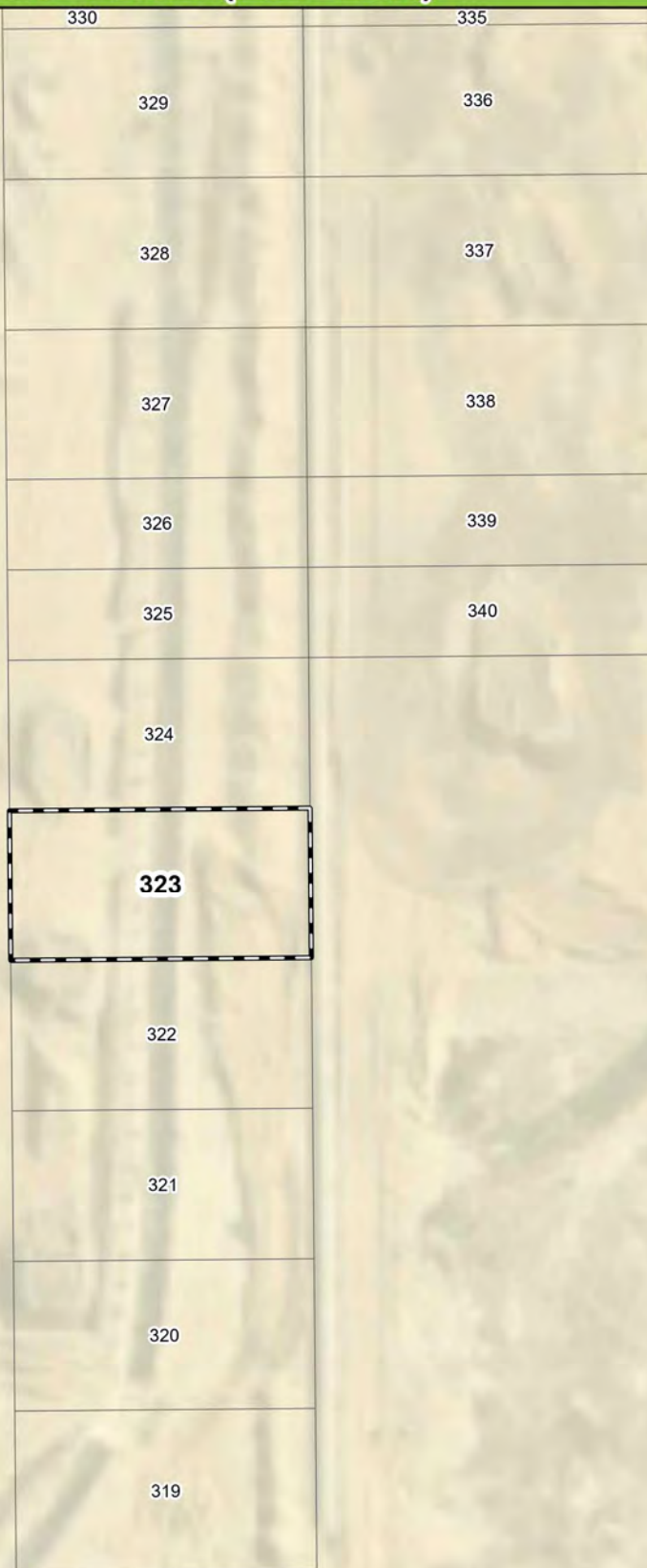
Signature: 

Certificate Date: 09/10/2020






Accreditation No: BPAD 37802  
Expiry: December 2020

## Bushfire Attack Level (BAL) Contours - Lot 323 (BAL - LOW)









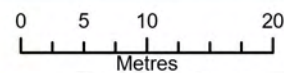
470

### Legend

-  100m site assessment  
 150m site assessment  
 Lot location

### Bushfire attack level (BAL)

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



Datum/Projection:  
GDA 1994 MGA Zone 50



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Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 324, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

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Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 324 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

N

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Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 325, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

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Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 325 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
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0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

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Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 326, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

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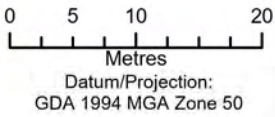
Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 326 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 327, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

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Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 327 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
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0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

N

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AUSTRALIA  
A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

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Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
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Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 328 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
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0 5 10 20  
Metres  
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GDA 1994 MGA Zone 50

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## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
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Bushfire Attack Level (BAL) Contours - Lot 329 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
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  - BAL - 29
  - BAL - 19
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0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

N

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Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 330, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

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*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 330 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 637, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

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Name Daniel Panickar  
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Signature: 

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Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 637 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 638, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 638 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

Bushfire attack level (BAL)	
	BAL - FZ
	BAL - 40
	BAL - 29
	BAL - 19
	BAL - 12.5
	BAL - LOW



051020

Metres

Datum/Projection:  
GDA 1994 MGA Zone 50

N

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A TETRA TECH COMPANY

Project: 16846-SM

Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 331, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 331 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

**Bushfire attack level (BAL)**

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



0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

N

**eco logical**  
AUSTRALIA  
A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 332, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

**Bushfire Attack Level (BAL) Contours - Lot 332 (BAL - LOW)**



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

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AUSTRALIA  
A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 333, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 333 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



0 5 10 20  
Metres

Datum/Projection:  
GDA 1994 MGA Zone 50

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AUSTRALIA  
A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 334, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 334 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

Bushfire attack level (BAL)	
	BAL - FZ
	BAL - 40
	BAL - 29
	BAL - 19
	BAL - 12.5
	BAL - LOW



051020

Metres

Datum/Projection:  
GDA 1994 MGA Zone 50

N

eco  
logical  
AUSTRALIA

A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 639, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 639 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

Bushfire attack level (BAL)	
<span style="display:inline-block; width:15px; height:15px; background-color:red; border:1px solid black;"></span>	BAL - FZ
<span style="display:inline-block; width:15px; height:15px; background-color:orange; border:1px solid black;"></span>	BAL - 40
<span style="display:inline-block; width:15px; height:15px; background-color:yellow; border:1px solid black;"></span>	BAL - 29
<span style="display:inline-block; width:15px; height:15px; background-color:lightblue; border:1px solid black;"></span>	BAL - 19
<span style="display:inline-block; width:15px; height:15px; background-color:lightblue; border:1px solid black;"></span>	BAL - 12.5
<span style="display:inline-block; width:15px; height:15px; background-color:lightgreen; border:1px solid black;"></span>	BAL - LOW



051020

Metres

Datum/Projection:  
GDA 1994 MGA Zone 50

N

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A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 640, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 640 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

**Bushfire attack level (BAL)**

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



0 5 10 20  
Metres

Datum/Projection:  
GDA 1994 MGA Zone 50

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A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 335, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



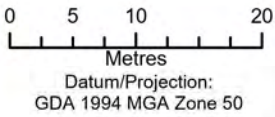
Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 335 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

Bushfire attack level (BAL)	
	BAL - FZ
	BAL - 40
	BAL - 29
	BAL - 19
	BAL - 12.5
	BAL - LOW



# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 336, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



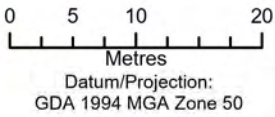
Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 336 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

Bushfire attack level (BAL)	
	BAL - FZ
	BAL - 40
	BAL - 29
	BAL - 19
	BAL - 12.5
	BAL - LOW



# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 337, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 337 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

N

eco  
logical  
AUSTRALIA  
A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 338, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 338 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

N

**eco logical**  
AUSTRALIA  
A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 339, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

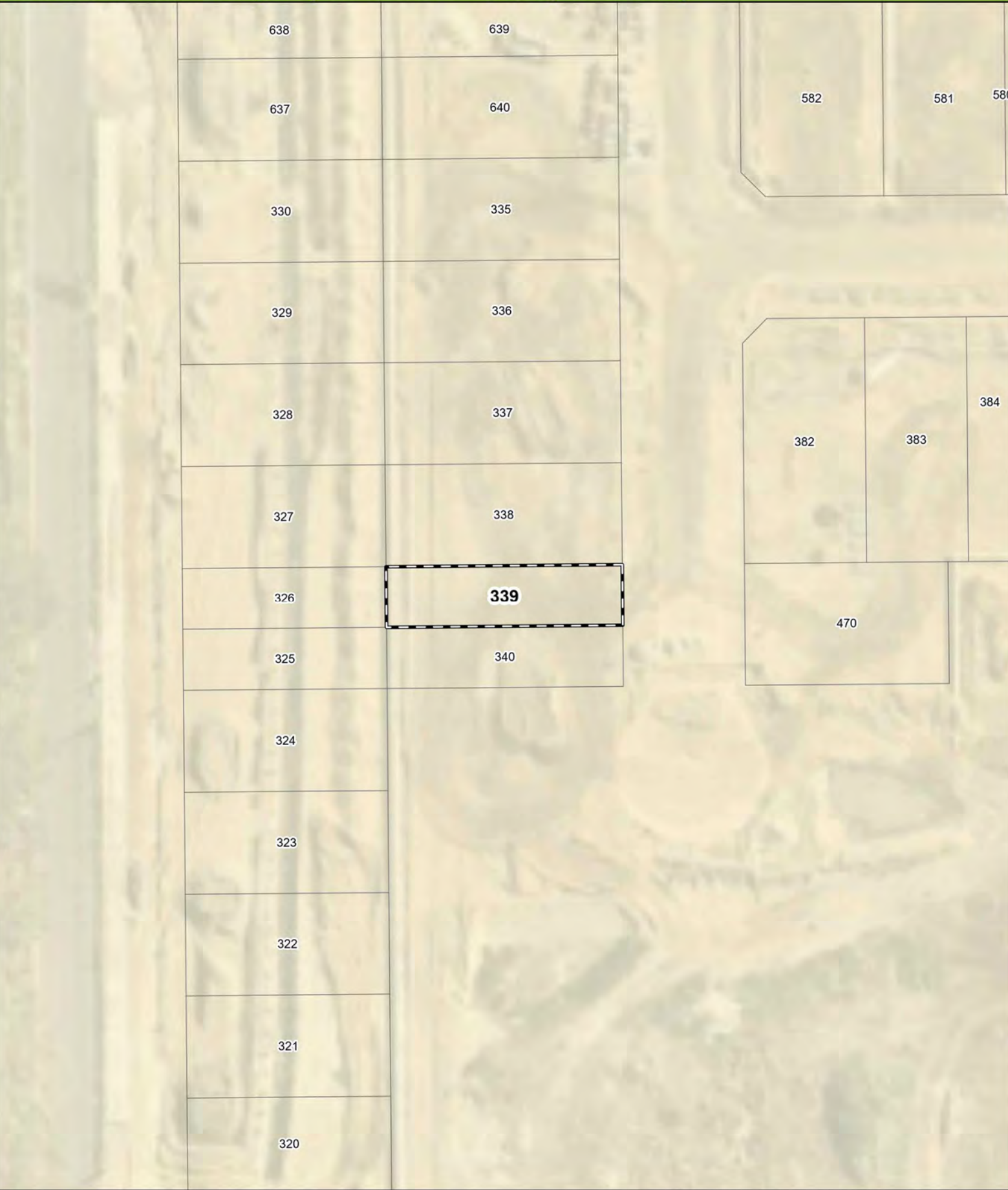
Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

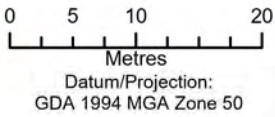
Bushfire Attack Level (BAL) Contours - Lot 339 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

**Bushfire attack level (BAL)**

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



# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 340, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 340 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

**eco logical AUSTRALIA**  
A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 470, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 470 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50



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AUSTRALIA  
A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 382, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

**Bushfire Attack Level (BAL) Contours - Lot 382 (BAL - LOW)**



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

N

A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 383, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 383 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

**Bushfire attack level (BAL)**

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



0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

**eco logical AUSTRALIA**  
A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 384, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

**Bushfire Attack Level (BAL) Contours - Lot 384 (BAL - LOW)**



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

**Bushfire attack level (BAL)**

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



0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

N

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AUSTRALIA  
A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 385, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 385 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

Bushfire attack level (BAL)	
<div></div>	BAL - FZ
<div></div>	BAL - 40
<div></div>	BAL - 29
<div></div>	BAL - 19
<div></div>	BAL - 12.5
<div></div>	BAL - LOW



051020

Metres

Datum/Projection:  
GDA 1994 MGA Zone 50

N

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A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 400, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 400 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

Bushfire attack level (BAL)	
	BAL - FZ
	BAL - 40
	BAL - 29
	BAL - 19
	BAL - 12.5
	BAL - LOW



051020

Metres

Datum/Projection:  
GDA 1994 MGA Zone 50

N

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A TETRA TECH COMPANY

Project: 16846-SM

Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 401, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

**Bushfire Attack Level (BAL) Contours - Lot 401 (BAL - LOW)**



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

Bushfire attack level (BAL)	
<div></div>	BAL - FZ
<div></div>	BAL - 40
<div></div>	BAL - 29
<div></div>	BAL - 19
<div></div>	BAL - 12.5
<div></div>	BAL - LOW



0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 402, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 402 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

**Bushfire attack level (BAL)**

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



0 5 10 20  
Metres

Datum/Projection:  
GDA 1994 MGA Zone 50

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A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 575, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

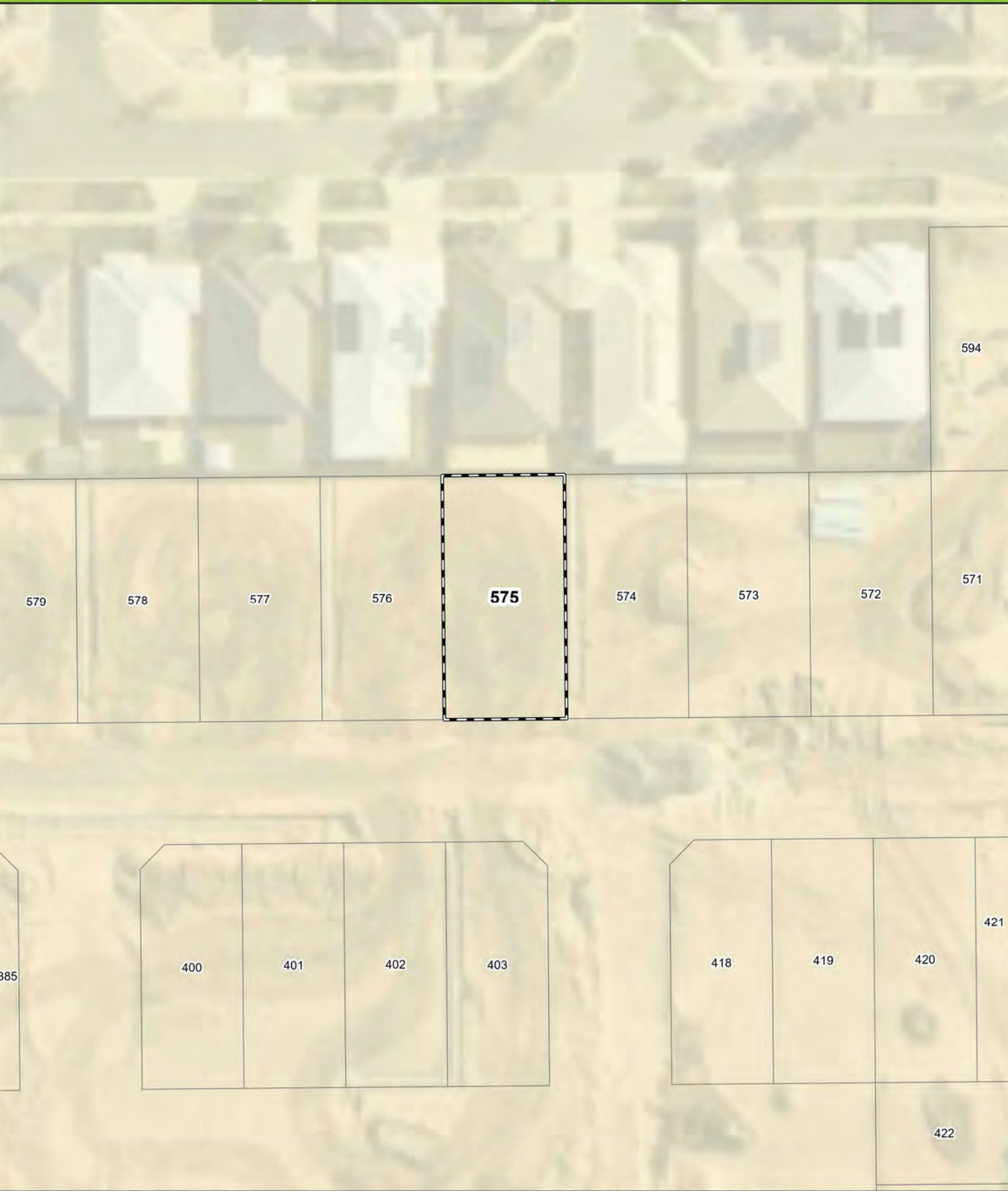
Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 575 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

N

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AUSTRALIA  
A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 576, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

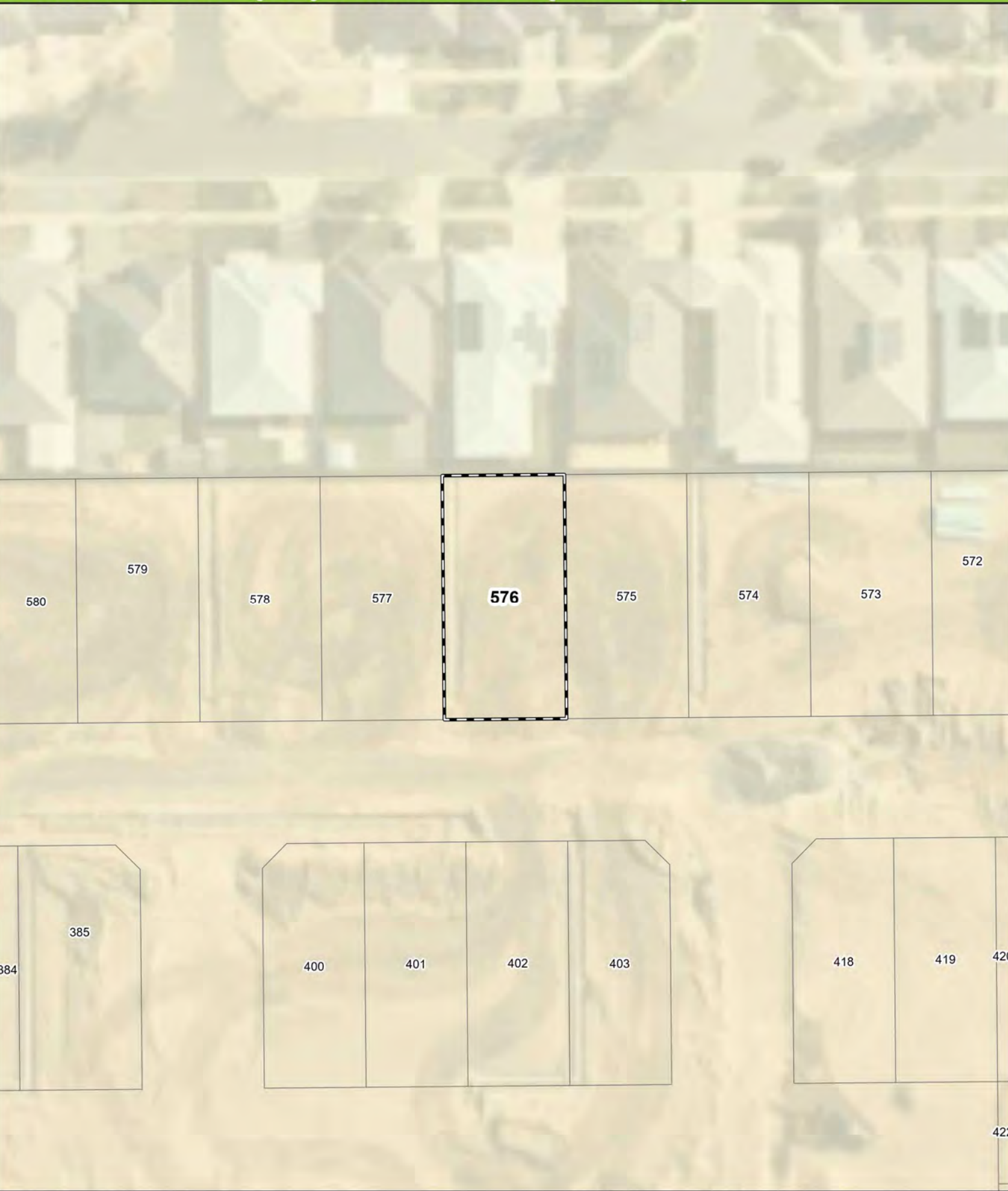
Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

**Bushfire Attack Level (BAL) Contours - Lot 576 (BAL - LOW)**



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



0 5 10 20  
Metres

Datum/Projection:  
GDA 1994 MGA Zone 50

N

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AUSTRALIA  
A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 577, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

**Bushfire Attack Level (BAL) Contours - Lot 577 (BAL - LOW)**



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



0 5 10 20  
Metres

Datum/Projection:  
GDA 1994 MGA Zone 50

N

A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 578, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

**Bushfire Attack Level (BAL) Contours - Lot 578 (BAL - LOW)**



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



0 5 10 20  
Metres

Datum/Projection:  
GDA 1994 MGA Zone 50

N

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A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 579, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

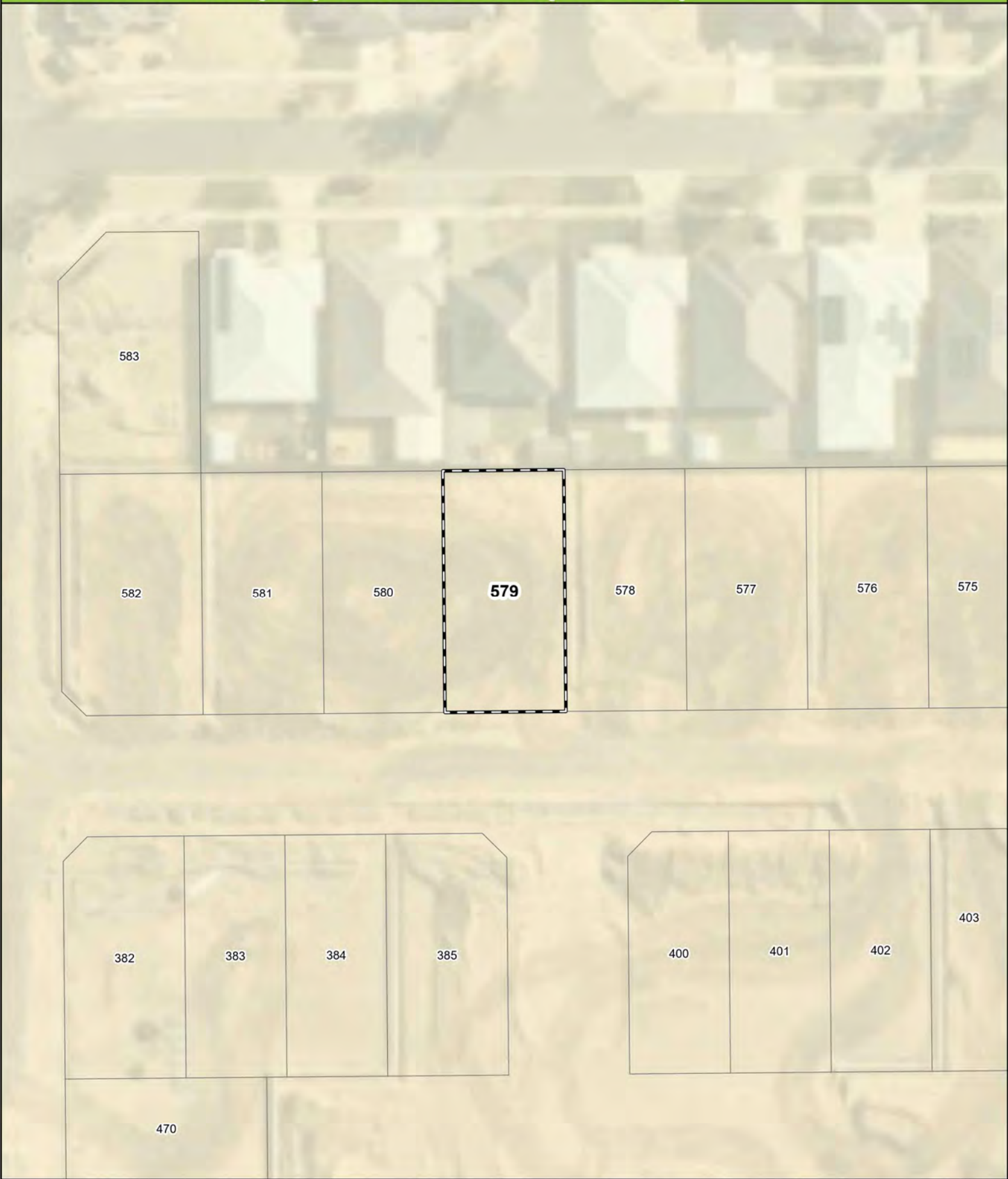
Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 579 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



0 5 10 20  
Metres

Datum/Projection:  
GDA 1994 MGA Zone 50

N

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AUSTRALIA  
A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 580, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

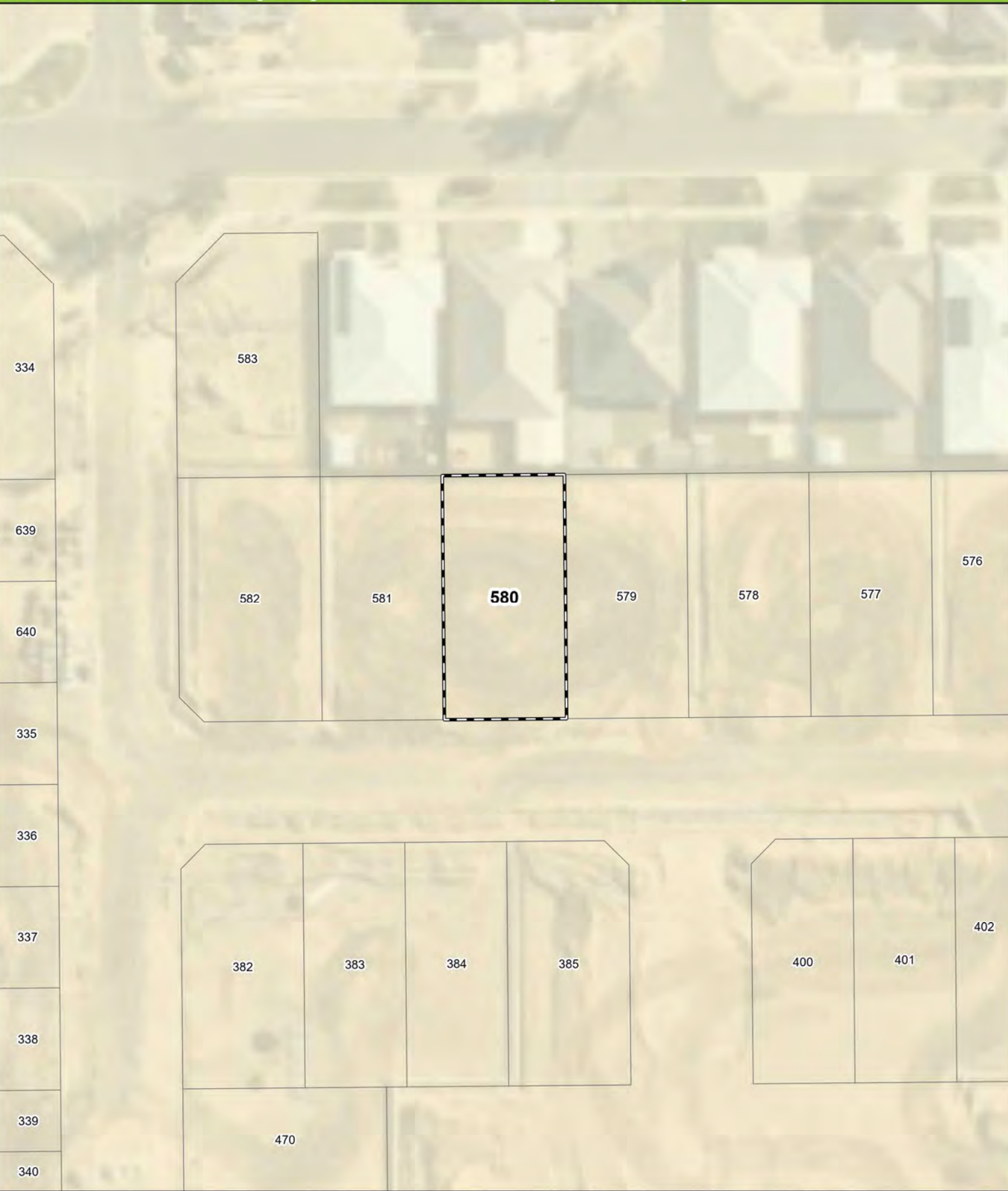
Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

**Bushfire Attack Level (BAL) Contours - Lot 580 (BAL - LOW)**



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

**Bushfire attack level (BAL)**

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



0 5 10 20  
Metres

Datum/Projection:  
GDA 1994 MGA Zone 50

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AUSTRALIA  
A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 581, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

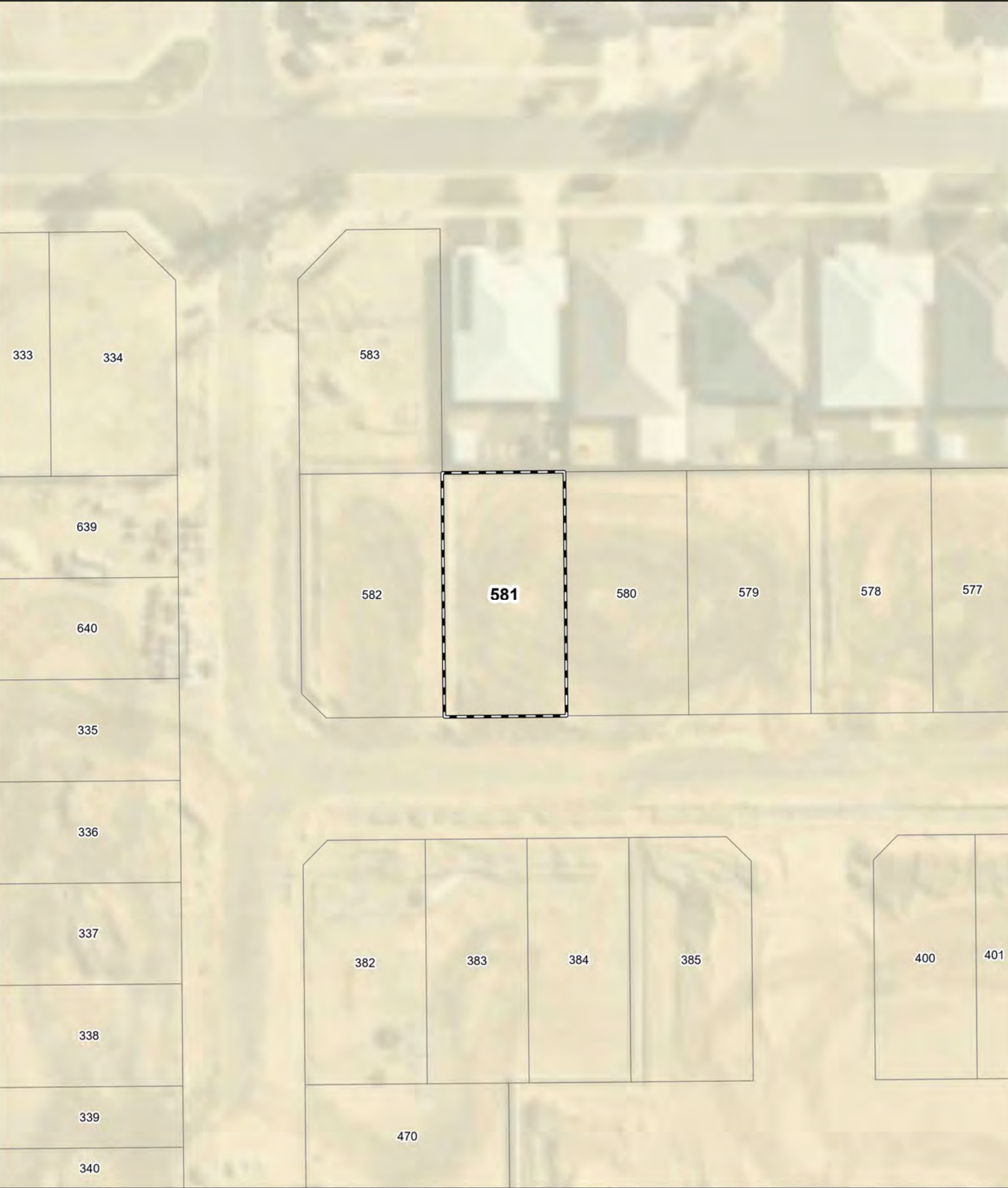
Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

**Bushfire Attack Level (BAL) Contours - Lot 581 (BAL - LOW)**



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 582, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 582 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

**N**

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AUSTRALIA  
A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

## Site Details

Address:	Lot 583, Beenyup Grove Estate		
Suburb:	Byford, 6122	State:	WA
Local Government Area:	Shire of Serpentine Jarrahdale		
Use of building	Residential Dwelling	Main BCA class:	Class 1a
Report / Job Number:	20PER-16864	Report Date:	09/10/2020

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excluded as per clause 2.2.3.2 (e) and (f)	N/A	N/A	BAL - LOW

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

Name Daniel Panickar  
*Eco Logical Australia*

Signature: 

Certificate Date: 09/10/2020



Accreditation No: BPAD 37802  
Expiry: December 2020

Bushfire Attack Level (BAL) Contours - Lot 583 (BAL - LOW)



- Legend**
- 100m site assessment
  - 150m site assessment
  - Lot location

- Bushfire attack level (BAL)**
- BAL - FZ
  - BAL - 40
  - BAL - 29
  - BAL - 19
  - BAL - 12.5
  - BAL - LOW



0 5 10 20  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 50

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AUSTRALIA  
A TETRA TECH COMPANY

Project: 16846-SM Date: 9/10/2020