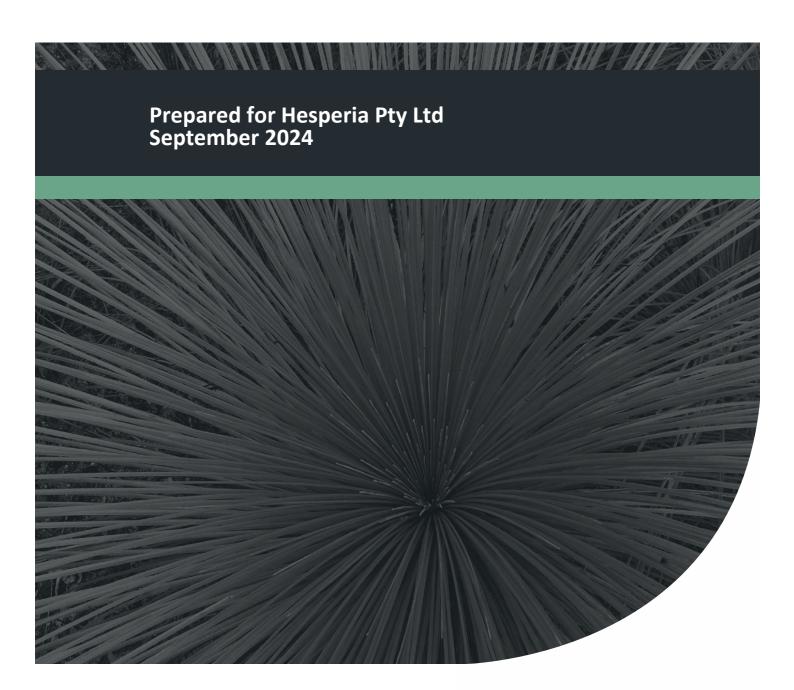


Rivermark Stage One Subdivision Area

Project No: EP19-105(46)





Document Control

Doc name:	Bushfire Attack Level Assessment Rivermark Stage One Subdivision Area							
Doc no.:	EP19-105(46)—085a BRB							
Version	Date Author Reviewer							
1	February 2022 Bianca Bertelli		BRB	Dana Elphinstone	DAE			
1	Report issued to client.							
	September	Common Ponton MCII in ann	CPW	Kirsten Knox	КК			
А	2024	Connor Porter-Wilkinson		Anthony Rowe	AJR			
	Site re-inspected for updated certificates. Report issued to client.							

Disclaimer:

This document has been prepared in good faith and is derived from sources believed to be reliable and accurate at the time of publication. Nevertheless, this publication is distributed on the terms and understanding that the author is not responsible for the results of any actions taken based on information in this publication or for any error in or omission from this publication.

The content of this document has been prepared primarily to consider the layout of the development or the appropriate building construction standard, where relevant. The measures outlined are considered to be prudent minimum standards only based on the relevant experience of the author and the standards prescribed by the relevant authorities. The level of implementation of the fire precautions achieved will depend upon the actions of the landowner or occupiers of the land and is not the responsibility of the author. The relevant local government and fire authority (i.e. Department of Fire and Emergency Services or local bushfire brigade) should be approached for guidance on preparing for and responding to a bushfire.

Notwithstanding the precautions adopted in this report, it should always be remembered that bushfires burn under a wide range of conditions. An element of risk, no matter how small always remains. The objective of the Australian Standard AS 3959-2018 is to "prescribe particular construction details for buildings to reduce the risk of ignition from a bushfire while the front passes" (Standards Australia 2018). Building to the standards outlined in AS 3959 does not guarantee a building will survive a bushfire or that lives will not be lost.

© 2024 Emerge Associates All Rights Reserved. Copyright in the whole and every part of this document belongs to Emerge Associates and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or in or on any media to any person without the prior written consent of Emerge Associates.



Rivermark Stage One Subdivision Area

Table of Contents

1	Intro	ductionduction	. 5			
	1.1	Background				
	1.2 1.3	Aim of this report				
2		Assessment				
2						
	2.1	Assessment inputs				
	2.2	2.1.1 Vegetation Classification				
	2.2	Construction of buildings and ongoing management				
	2.5	2.3.1 Construction of buildings				
		2.3.2 Ongoing management				
3	Certif	ication by Bushfire Consultant	18			
	3.1	Accreditation	18			
	3.2	Declaration				
4	Refer	References				
	4.1	General references	19			
	4.2	Online references	19			
ı :	- C -					
LIST	OT	Tables				
Table	1: Sum	mary of BAL ratings, heat flux thresholds and associated construction standards, as outlined				
		in AS 3959				
Table	2: AS39	959 Vegetation Classification (refer to Figure 2)	9			
List	of F	Plates				
LIJC	011					
Plate :	1: Area	s within and surrounding the site identified as 'bushfire prone areas' under the state-wide Ma	эp			
		ısh Fire Prone Areas				
Plate 2	2: The 1	fuel layers in a forest environment that could be associated with fire behaviour	8			
Fiσι	ırac					

Figures

Figure 1: Site Location

Figure 2: AS 3959 Vegetation Classification and Effective Slope

Figure 3: Bushfire Attack Level Contour Plan

Figure 4: Bushfire Attack Level Ratings for Individual Lots



Appendices

Appendix A

BAL Assessment Certificate



List of Abbreviations

Table A1: Abbreviations – General terms

General terms	
AHD	Australian Height Datum
APZ	Asset Protection Zone
AS 3959	Australian Standard 3959-2018 Construction of buildings in bushfire prone areas
BAL	Bushfire Attack Level
ВМР	Bushfire Management Plan
BPAD	Bushfire Planning and Design
CoS	City of Swan
FDI	Fire Danger Index
FZ	Flame Zone

Table A2: Abbreviations – Organisations

Organisations			
DFES	Department of Fire and Emergency Services		
OBRM	Office of Bushfire Risk Management		
WAPC	Western Australian Planning Commission		



1 Introduction

1.1 Background

This Bushfire Attack Level (BAL) Assessment has been prepared on behalf of Hesperia Pty Ltd (the proponent) to support the future construction of residential dwellings within Stage 1A and 1B of subdivision approval WAPC 158848 of the proponent's Rivermark residential development. Stages 1A and 1B (herein referred to as the 'site') are located at Winston Crescent, Eveline Road, Harford Avenue and Cranwood Crescent, Viveash in the City of Swan (CoS), as shown in **Figure 1**. The site comprises 44 subdivided residential lots.

A Bushfire Management Plan (BMP) was prepared for the entire subdivision area (Stages 1A, 1B and 2) by Emerge Associates (2019) and approved as part of the subdivision application.

The site is approximately 2 hectares (ha) and is generally bound by the future Bernley Drive and Reg Bond Reserve to the north, Eveline Road and adjacent Midland Brick brickworks to the east, Stage 2 of the subdivision to the south and Cranwood Crescent to the west. The Swan River is located north of Reg Bond Reserve, approximately 150 to 250 m north of the site.

Portions of the site are currently identified as a 'bushfire prone area' under the state-wide *Map of Bush Fire Prone Areas* as prepared by the Office of Bushfire Risk Management (OBRM 2021), as shown in **Plate 1** below. Where a Class 1, Class 2, Class 3 or Class 10a building is proposed to be located in an area identified as 'bushfire prone area', a Bushfire Attack Level (BAL) assessment in accordance with *Australian Standard AS 3959 – 2018 Construction of buildings in bushfire prone areas* (Standards Australia 2018) is required to support the building permit application to determine any related construction requirements.



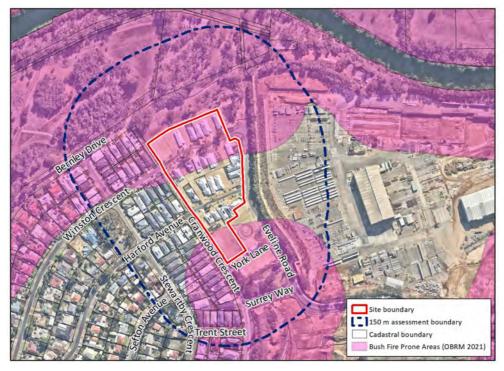


Plate 1: Areas within and surrounding the site identified as 'bushfire prone areas' (as indicated in purple) under the state-wide Map of Bush Fire Prone Areas (OBRM 2021).

1.2 Aim of this report

This BAL assessment aims to assess classified vegetation and effective slope in accordance with Method 1 of AS 3959 in order to determine the applicable BAL ratings for all lots within the site. The outcomes of this assessment can then be used to support the subdivision clearance and building permit application processes.

1.3 Statutory policy and framework

The following key legislation, policies and guidelines are relevant to the preparation of a BAL assessment:

- Fire and Emergency Services Act 1998
- Bush Fires Act 1954
- Planning and Development (Local Planning Scheme Amendment) Regulations 2015
- Building Regulations 2012
- State Planning Policy 3.7 Planning in Bushfire Prone Areas (SPP 3.7) (WAPC 2015)
- Guidelines for Planning in Bushfire Prone Areas version 1.4 (the Guidelines) (DPLH & WAPC 2021)
- Australian Standard AS 3959 2018 Construction of buildings in bushfire prone areas (AS 3959) (Standards Australia 2018).



2 BAL Assessment

A Method 1 BAL assessment has been completed for the site in accordance with AS 3959. This assessment considers the vegetation classification and effective slope for the site and surrounding 150 m (**Figure 2**). A BAL contour plan has been prepared in accordance with the Guidelines to demonstrate the determined BAL ratings (**Figure 3**).

AS 3959 specifies requirements for the construction of buildings in bushfire-prone areas in order to improve their resistance to bushfire attack from embers, burning debris, radiant heat, flame contact, and combinations of these attack forms. It provides six BAL ratings: BAL-LOW, BAL-12.5, BAL-19, BAL-29, BAL-40 and BAL-FZ, based on the radiant heat flux thresholds from vegetation within 100 m of a building. Each BAL rating is associated with specific national construction requirements, which have been summarised in **Table 1** below.

It is relevant to note that while buildings constructed to increased standards under AS 3959 are more likely to survive a bushfire than buildings that do not conform to these construction standards, building survival is not guaranteed.

Table 1: Summary of BAL ratings, heat flux thresholds and associated construction standards, as outlined within AS 3959

Bushfire Attack Level (BAL)	Classified vegetation within 100 m of the subject building and heat flux exposure thresholds	Description of the predicted bushfire attack and levels of exposure	Construction section (within AS 3959)
BAL-LOW	See Section 2.2.3.2 of AS 3959	There is insufficient risk to warrant specific construction requirements	4
BAL-12.5	≤ 12.5 kW/m ²	Ember attack	3 & 5
BAL-19	> 12.5 kW/m² to ≤ 19 kW/m²	Increasing levels of ember attack and burning debris ignited by windborne embers blown together with increasing heat flux	3 & 6
BAL-29	> 19 kW/m² to ≤ 29 kW/m²	Increasing levels of ember attack and burning debris ignited by windborne embers blown together with increasing heat flux	3 & 7
BAL-40	> 29 kW/m² to ≤ 40 kW/m²	Increasing levels of ember attack and burning debris ignited by windborne embers blown together with the increased likelihood of exposure to flame	3 & 8
BAL-FZ	> 40 kW/m ²	Direct exposure to flames from fire front in addition to heat flux and ember attack	3 & 9

Not all vegetation is a classified bushfire risk. Vegetation and ground surfaces that are exempt from classification as a potential hazard are identified as a low threat under Section 2.2.3.2 of AS 3959.



2.1 Assessment inputs

The classification of vegetation within the site and the surrounding 150 m has been undertaken in accordance with AS 3959. The assignment of vegetation classifications is based on Section 2.2.3 and Table 2.3 of AS 3959 and generally considers the various fuel layers of different vegetation types. For example, fuel layers in a typical forest environment can be broken down into five segments as illustrated in **Plate 2** below.



Plate 2: The fuel layers in a forest environment that could be associated with fire behaviour (Gould et al. 2007)

An assessment of existing vegetation within the site and surrounding 100 m was most recently undertaken on 2 August 2024 in accordance with AS 3959. Table 2 below outlines the determined vegetation classifications and associated effective slope, and where relevant outlines the existing management practices that have informed the vegetation classification. The plots referenced in Table 2 are also shown in Figure 2. Assumptions

The BAL assessment includes the following assumptions:

- Designated FDI: 80
- Flame temperature: 1090 K
- Effective slope beneath classified vegetation: downslope 0 5°, flat/upslope (see Figure 2)
- Areas of low threat vegetation outside Stage 1A and 1B will continue to be managed and/or considered to achieve low threat (in accordance with Section 2.2.3.2 of AS 3959) based on the existing maintenance regimes, and/or as per the CoS firebreak notice.
- Classified vegetation that has been identified outside of the proponent's landholdings has
 been assumed to remain in its current state (unless stated otherwise) and will therefore
 remain a bushfire hazard to development within the site. It is noted that future
 development within these areas will result in the removal and/or management of
 classified vegetation to a low threat standard; however, for the purposes of this BAL
 assessment, all bushfire hazards are assumed to remain as such.



2.1.1 Vegetation Classification

All vegetation within 100 m of the site was classified in accordance with Clause 2.2.3 of AS 3959-2018. Each distinguishable vegetation plot with the potential to determine the BAL rating is identified in **Table 2** and shown in **Figure 2**.

Table 2: AS3959 Vegetation Classification (refer to Figure 2)

Plot:	1	Photo ID:	1
Vegetation Clause	assificatio	on or Exclusion	n

Description / Justification for Classification

Forest (Class A)

Forest vegetation has been identified to the north of the site within Reg Bond Park. The vegetation is characterised by an overstorey comprising of predominantly mature trees growing to a height of between 10-15 m, with a greater than 30% foliage cover over an understorey of shrubs, grasses and juvenile trees.



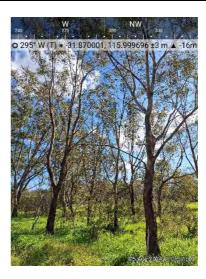
Plot: 1 Photo ID: 2

Vegetation Classification or Exclusion Clause

Forest (Class A)

Description / Justification for Classification

Forest vegetation has been identified to the north of the site within Reg Bond Park. The vegetation is characterised by an overstorey comprising of predominantly mature trees growing to a height of between 10-15 m, with a greater than 30% foliage cover over an understorey of shrubs, grasses and juvenile trees.



Rivermark Stage One Subdivision Area



Table 2: AS3959 Vegetation Classification (refer to Figure 2)(continued)

Plot: 2 Photo ID: 3

Vegetation Classification or Exclusion

Clause

Forest (Class A)

Description / Justification for Classification

Forest vegetation to the north-east of the site is characterised by an overstorey comprising of predominantly mature trees growing to a height of between 10-15 m, with a greater than 30% foliage cover over an understorey of shrubs, grasses and juvenile trees.



Plot:

2

Photo ID:

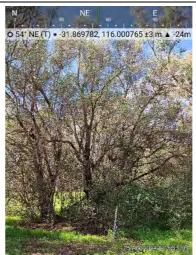
4

Vegetation Classification or Exclusion Clause

Forest (Class A)

Description / Justification for Classification

Forest vegetation to the north-east of the site is characterised by an overstorey comprising of predominantly mature trees growing to a height of between 10-15 m, with a greater than 30% foliage cover over an understorey of shrubs, grasses and juvenile trees.



Plot:

3

Photo ID: 5

Vegetation Classification or Exclusion Clause

Forest (Class A)

Description / Justification for Classification

Forrest vegetation abutting the Viveash residential development to the northwest of the site is characterised by an overstorey comprising of predominantly mature trees growing to a height of between 10-15 m, with a greater than 30% foliage cover over an understorey of shrubs, grasses and juvenile trees.



Rivermark Stage One Subdivision Area



Table 2: AS3959 Vegetation Classification (refer to Figure 2)(continued)

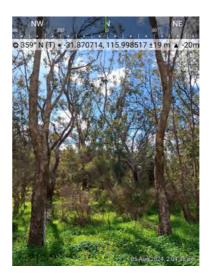
Plot: 3 Photo ID: 6

Vegetation Classification or Exclusion

Forest (Class A)

Description / Justification for Classification

Forrest vegetation abutting the Viveash residential development to the northwest of the site is characterised by an overstorey comprising of predominantly mature trees growing to a height of between 10-15 m, with a greater than 30% foliage cover over an understorey of shrubs, grasses and juvenile trees.



Plot:

4

Photo ID:

7

Vegetation Classification or Exclusion Clause

Forest (Class A)

Description / Justification for Classification

A strip of forest vegetation has been identified to the south of the site comprising of predominantly mature shrubs with juvenile eucalyptus trees. This strip has been assessed assuming its potential mature state, noting it will be removed in the future as part of subdivision development.



Plot:

5

Photo ID:

8

Vegetation Classification or Exclusion Clause

Woodland (Class B)

Description / Justification for Classification

Woodland vegetation abutting the future Bernley Drive reserve to the north-west of the site is characterised by an overstorey of mature trees 10-15 m in height with an understorey of unmanaged grassland and occasional scattered native shrubs.



Rivermark Stage One Subdivision Area



Table 2: AS3959 Vegetation Classification (refer to Figure 2)(continued)

Plot: 5 Photo ID: 9

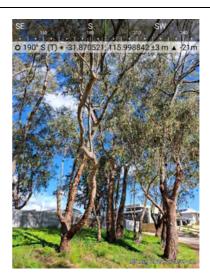
Vegetation Classification or Exclusion

Clause

Woodland (Class B)

Description / Justification for Classification

Woodland vegetation abutting the future Bernley Drive reserve to the north-west of the site is characterised by an overstorey of mature trees 10-15 m in height with an understorey of unmanaged grassland and occasional scattered native shrubs.



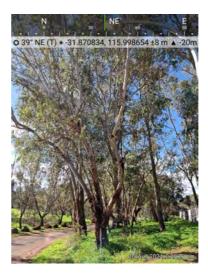
Plot: 5 Photo ID: 10

Vegetation Classification or Exclusion Clause

Woodland (Class B)

Description / Justification for Classification

Woodland vegetation abutting the future Bernley Drive reserve to the north-west of the site is characterised by an overstorey of mature trees 10-15 m in height with an understorey of unmanaged grassland and occasional scattered native shrubs.



Plot: 6 Photo ID:

11

Vegetation Classification or Exclusion Clause

Exclusion clause 2.2.3.2(f)

Description / Justification for Classification

The access road to Reg Bond Park consists of non-vegetated road surface and abutting rows of trees with an understorey maintained in a low-threat state.

Excluded under clauses 2.2.3.2(e&f).



Rivermark Stage One Subdivision Area



Table 2: AS3959 Vegetation Classification (refer to Figure 2)(continued)

Plot: 6 Photo ID: 12
Vegetation Classification or Exclusion

Clause

Exclusion clause 2.2.3.2(e)

Description / Justification for Classification

Lots yet to be developed are maintained in a non-vegetated state.



Plot: 6 Photo ID: 13

Vegetation Classification or Exclusion

Exclusion clause 2.2.3.2(e)

Description / Justification for

Recently cleared, non-vegetated mineral earth for future development is excluded under clause 2.2.3.2(e).



Plot: 7 Photo ID: 14

Vegetation Classification or Exclusion

Exclusion clause 2.2.3.2(e)

Description / Justification for Classification

Non-vegetated road with low threat vegetation identified within landscaped verges throughout the subdivision. The vegetation comprises planted species with mulch at the base of each plant or short lawn.

Excluded under clauses 2.2.3.2(e&f).



Rivermark Stage One Subdivision Area



Table 2: AS3959 Vegetation Classification (refer to Figure 2)(continued)

Plot: 7 Photo ID: 15

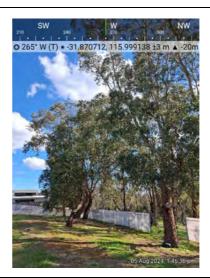
Vegetation Classification or Exclusion

Clause

Exclusion clause 2.2.3.2(f)

Description / Justification for Classification

Low threat vegetation to the north of the site. Trees have been retained within this area; however, the branches have been pruned to above 2 m in height and the density of the trees has been reduced to separate tree canopies. Fine fuel load (combustible dead vegetation matter) has been reduced to a minimal fuel condition.



Plot: 7 Photo ID: 16

Vegetation Classification or Exclusion

Exclusion clause 2.2.3.2(f)

Description / Justification for Classification

Low threat vegetation to the north-east of the site. Trees have been retained within this area; however, the branches have been pruned to above 2 m in height and the density of the trees has been reduced to separate tree canopies. Fine fuel load (combustible dead vegetation matter) has been reduced to a minimal fuel condition.



Plot:

7

Photo ID:

17

Vegetation Classification or Exclusion

Exclusion clause 2.2.3.2(f)

Description / Justification for Classification

Low threat vegetation to the north-east of the site. Trees have been retained within this area; however, the branches have been pruned to above 2 m in height and the density of the trees has been reduced to separate tree canopies. Fine fuel load (combustible dead vegetation matter) has been reduced to a minimal fuel condition.



Rivermark Stage One Subdivision Area



Table 2: AS3959 Vegetation Classification (refer to Figure 2)(continued)

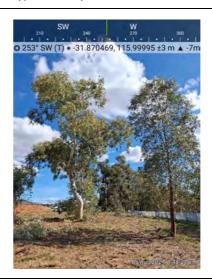
Plot: 7 Photo ID: 18

Vegetation Classification or Exclusion
Clause

Exclusion clause 2.2.3.2(f)

Description / Justification for Classification

Low threat vegetation to the north of the site. Trees have been retained within this area; however, the branches have been pruned to above 2 m in height and the density of the trees has been reduced to separate tree canopies. Fine fuel load (combustible dead vegetation matter) has been reduced to a minimal fuel condition.



Plot: 7 Photo ID: 19

Vegetation Classification or Exclusion Clause

Exclusion clause 2.2.3.2(f)

Description / Justification for Classification

Pedestrian access ways abutting the western portion of the site consist of juvenile trees and native groundcover. Vegetation in this area will be managed to a low threat standard in perpetuity.

Excluded under clauses 2.2.3.2(e&f).



Plot: 7 Photo ID: 20

Vegetation Classification or Exclusion

Exclusion clause 2.2.3.2(f)

Description / Justification for Classification

In the public open space area south of the site, low-threat vegetation is preserved. Trees are well-maintained, with no low branches and minimised canopy overlap. The fine fuel load is reduced to minimal fuel conditions.



Rivermark Stage One Subdivision Area



Table 2: AS3959 Vegetation Classification (refer to Figure 2)(continued)

Plot: 7 Photo ID: 21

Vegetation Classification or Exclusion
Clause

Exclusion clause 2.2.3.2(f)

Description / Justification for Classification

The public open space area south of the site, low-threat vegetation is preserved. Trees are well-maintained, with no low branches and minimised canopy overlap. The fine fuel load is reduced to minimal fuel conditions. Bordering planting zones feature manicured lawn, not over 100mm high. This vegetation will continue to be managed in a low-threat state.

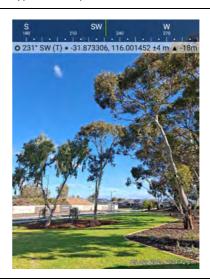


Vegetation Classification or Exclusion

Exclusion clause 2.2.3.2(f)

Description / Justification for Classification

Low threat vegetation to the east of the site comprising a narrow strip of vegetation with a largely cleared understorey planted for the purposes of a windbreak. The understorey grasses have been slashed to maintain a height of less than 100 mm where present leaving small shrubs. Vegetation in this area will be managed to a low threat standard in perpetuity.







2.2 Assessment outputs

A BAL Contour Plan (see **Figure 3**) has been prepared to outline the BAL ratings applicable to the lots within the site. It is based on the determined vegetation classifications and associated effective slopes and using the BAL distances detailed in Table 2.5 of AS 3959. Based on the outcomes of the BAL assessment:

- 29 lots are exposed to a BAL rating of BAL-LOW
- 12 lots are exposed to a BAL rating of BAL-12.5. Five of these lots can achieve BAL-LOW with an in-lot setback
- Three lots are exposed to a BAL rating of BAL-19. All three lots can achieve BAL 12.5 with an in-lot setback.

Individual BAL ratings are shown on Figure 4.

2.3 Construction of buildings and ongoing management

2.3.1 Construction of buildings

Appendix A specifies the BAL rating applicable to each building in the form of a BAL certificate can be used to support the building permit process. Construction requirements for each BAL rating are specified in AS 3959 and summarised in **Table 1**. It is noted that for buildings with a BAL-LOW rating, there is an insufficient risk from bushfire to warrant specific construction requirements, as outlined in Section 4 of AS 3959.

2.3.2 Ongoing management

All lot owners will be responsible for maintaining their own property to a low threat standard in accordance with the principles of the asset protection zone standards detailed in the Guidelines, and as per the requirements of the CoS Fire Hazard Reduction Notice (as published). Advice to lot owners on maintaining their property to a low threat standard can be provided by the CoS.

The proponent will be responsible for the maintenance of their undeveloped landholdings to the north and south of the site to a low-threat standard in accordance with Section 2.2.3.2 of AS 3959 (as indicated by **Figure 2**) and in line with the City of Swan Fire Hazard Reduction Notice requirements. Management of these areas may include:

- Install and maintain an asset protection zone.
- Clearing of vegetation.
- Regular maintenance including removal of weeds and dead material.
- Low pruning of trees (branches below 2 m in height removed where appropriate).
- Application of ground covers such as mulch or non-flammable materials.
- Regularly mowing/slashing of grass to less than 100 mm in height.

Areas of public open space identified in the subdivision approval will be formally landscaped in consultation with the CoS and maintained in perpetuity.



3 Certification by Bushfire Consultant

3.1 Accreditation

This BAL assessment has been prepared by Emerge Associates who have been providing bushfire risk management advice for more than 10 years, undertaking detailed bushfire assessments (and associated approvals) to support the land use development industry.

3.2 Declaration

I declare that the information provided is true and correct to the best of my knowledge.

Signature:

Name: Anthony Rowe

Company: Emerge Associates/Envision Bushfire Protection

Date: 9 September 2024

BPAD Accreditation: 36690



4 References

4.1 General references

Department of Planning, Lands and Heritage, and Western Australian Planning Commission, (DPLH & WAPC) 2021, *Guidelines for Planning in Bushfire Prone Areas Version 1.4*, Perth, Western Australia.

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

Western Australian Planning Commission (WAPC) 2015, State Planning Policy 3.7 Planning in Bushfire Prone Areas, Perth.

4.2 Online references

Department of Water 2008, *LIDAR derived 1 m elevation contours* dataset, Government of Western Australia.

Office of Bushfire Risk Management (OBRM) 2021, Map of Bush Fire Prone Areas, viewed August 2024, https://maps.slip.wa.gov.au/landgate/bushfireprone/



This page has been left blank intentionally.

Figures

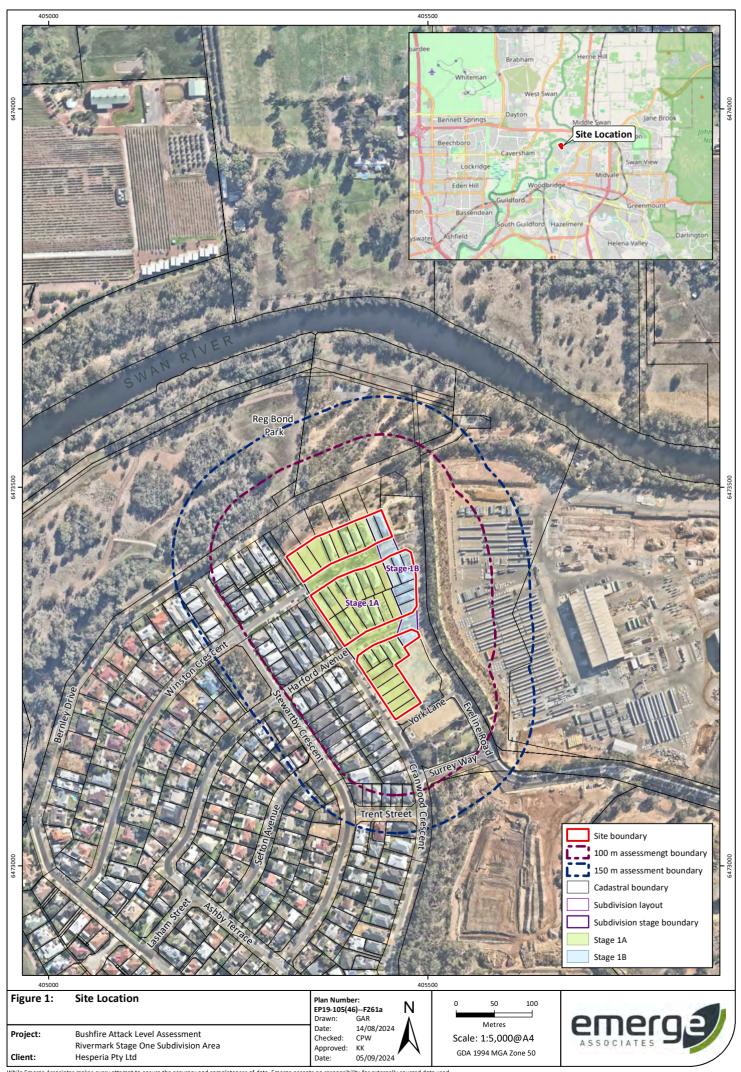


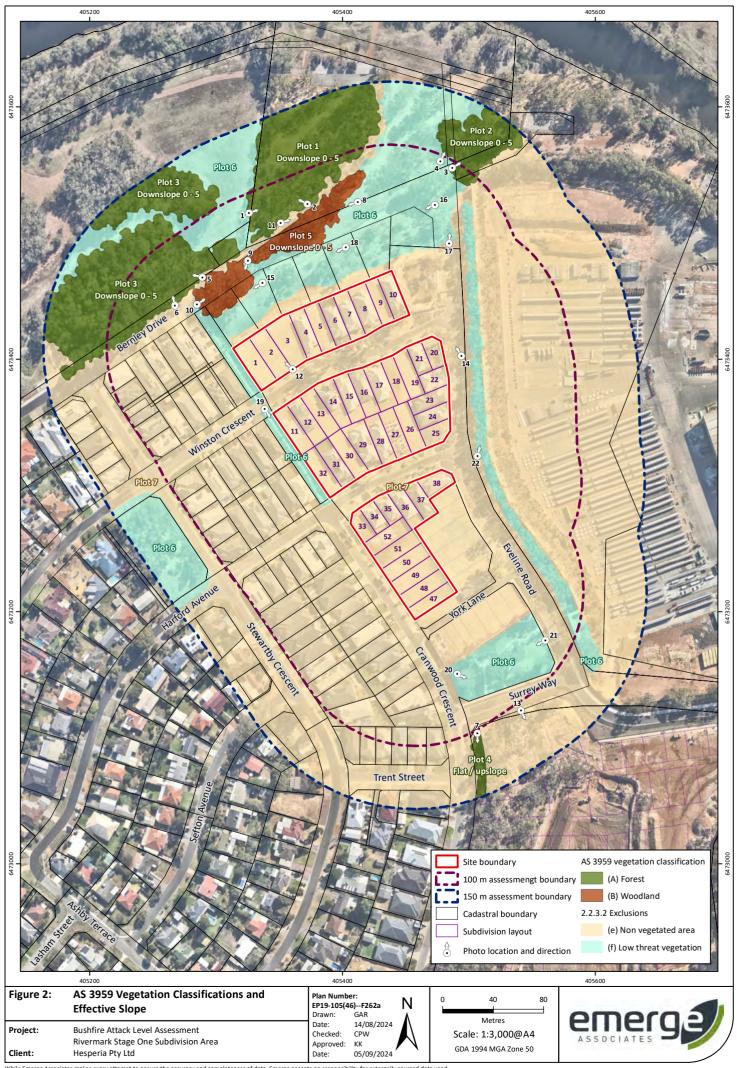
Figure 1: Site Location

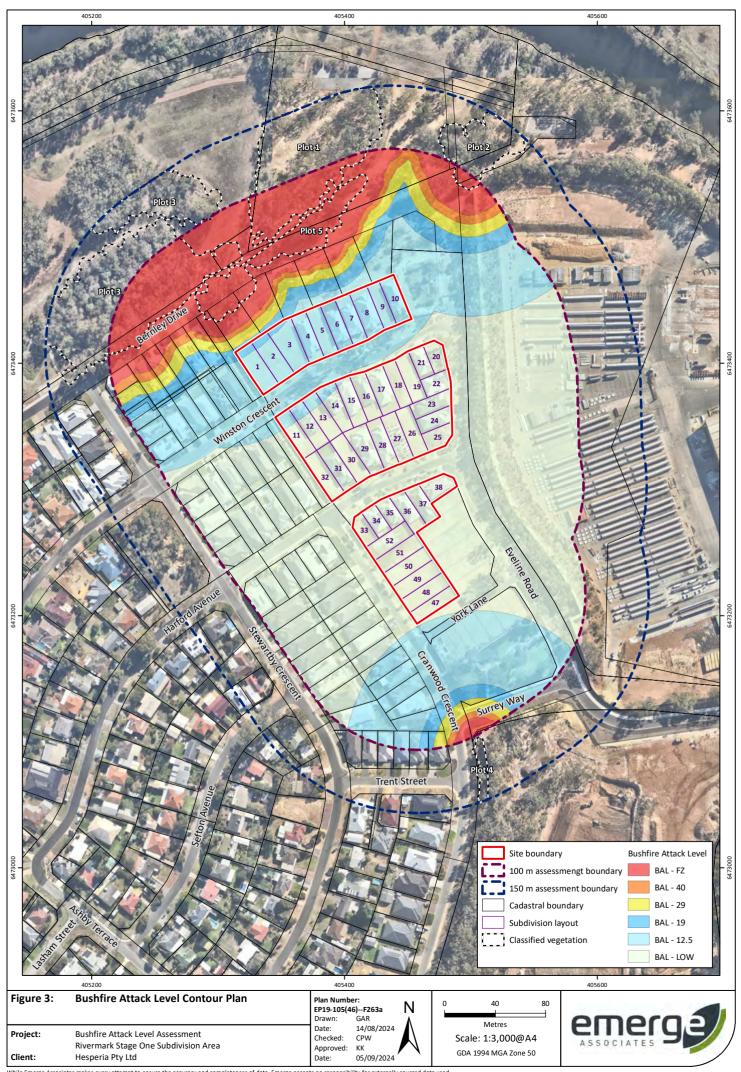
Figure 2: AS 3959 Vegetation Classification and Effective Slope

Figure 3: Bushfire Attack Level Contour Plan

Figure 4: Bushfire Attack Level Ratings for Individual Lots









Appendix A BAL Assessment Certificate





BUSHFIRE ATTACK LEVEL (BAL) CERTIFICATE

Determined in accordance with Australian Standard (AS) 3959-2018 Construction of buildings in bushfire prone areas

Site details							
Address	Lots 1 - 38 and 47 - 52 Winston Crescent, Hartford Avenue and Cranwood Crescent– Deposited Plate 421407 (Stage 1A) and Deposited Plan 422231 (Stage 1B)						
Suburb	Viveash State WA						
Local government area City of Swan							
Date of assessment	2 August 2024	Date of report	9 September 2024				
Project no.	EP19-105(47)	Document no.	EP19-105(47)—085A				

Deter	Determination of highest Bushfire Attack Level (BAL)						
Lot no.	Classified vegetation and plot number	Distance of lot boundary from vegetation	Effective slope	Building BAL rating (see Figure 4)	Exceptions/notes for building BAL rating		
1	Plot 5 - Woodland	28 m	Downslope 0 - 5	BAL – 19	A building on this lot can achieve BAL-12.5 with a minimum setback of 7 m from the northern boundary (see Figure 3).		
2	Plot 5 - Woodland	28 m	Downslope 0 - 5	BAL – 19	A building on this lot can achieve BAL-12.5 with a minimum setback of 7 m from the northern boundary (see Figure 3).		
3	Plot 5 - Woodland	28 m	Downslope 0 - 5	BAL – 19	A building on this lot can achieve BAL-12.5 with a minimum setback of 7 m from the northern boundary (see Figure 3).		
4	Plot 5 - Woodland	38 m	Downslope 0 - 5	BAL – 12.5	N/A		
5	Plot 5 - Woodland	38 m	Downslope 0 - 5	BAL – 12.5	N/A		
6	Plot 5 - Woodland	39 m	Downslope 0 - 5	BAL – 12.5	N/A		
7	Plot 5 - Woodland	38 m	Downslope 0 - 5	BAL – 12.5	N/A		
8	Plot 5 - Woodland	41 m	Downslope 0 - 5	BAL – 12.5	N/A		
9	Plot 5 - Woodland	60 m	Downslope 0 - 5	BAL – 12.5	N/A		
10	Plot 5 - Woodland	66 m	Downslope 0 - 5	BAL – 12.5	N/A		
11	Plot 5 - Woodland	88 m	Downslope 0 - 5	BAL – 12.5	A building on this lot can achieve BAL-LOW with a minimum setback of 12 m from northern boundary (see Figure 3).		
12	Plot 5 - Woodland	88 m	Downslope 0 - 5	BAL – 12.5	A building on this lot can achieve BAL-LOW with a minimum setback of 12 m from northern boundary (see Figure 3).		



Rivermark Stage One Subdivision Area

Lot no.	Classified vegetation and plot number	Distance of lot boundary from vegetation	Effective slope	Building BAL rating (see Figure 4)	Exceptions/notes for building BAL rating
13	Plot 5 - Woodland	88 m	Downslope 0 - 5	BAL – 12.5	A building on this lot can achieve BAL-LOW with a minimum setback of 12 m from northern boundary (see Figure 3).
14	Plot 5 - Woodland	88 m	Downslope 0 - 5	BAL – 12.5	A building on this lot can achieve BAL-LOW with a minimum setback of 12 m from northern boundary (see Figure 3).
15	Plot 5 - Woodland	92 m	Downslope 0 - 5	BAL – 12.5	A building on this lot can achieve BAL-LOW with a minimum setback of 8 m from northern boundary (see Figure 3).
16	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A
17	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A
18	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A
19	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A
20	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A
21	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A
22	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A
23	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A
24	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A
25	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A
26	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A
27	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A
28	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A
29	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A
30	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A



Rivermark Stage One Subdivision Area

Deter	Determination of highest Bushfire Attack Level (BAL)							
Lot no.	Classified vegetation and plot number	Distance of lot boundary from vegetation	Effective slope	Building BAL rating (see Figure 4)	Exceptions/notes for building BAL rating			
31	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A			
32	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A			
33	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A			
34	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A			
35	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A			
36	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A			
37	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A			
38	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A			
47	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A			
48	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A			
49	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A			
50	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A			
51	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A			
52	No classified vegetation identified within 100 m.	>100 m	Not applicable	BAL-LOW	N/A			

Accreditation 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 the National Construction Code and AS 3959-2018.

Name:	Anthony Rowe (BPAD 36690)
Signature:	All for
Certificate date:	9 September 2024



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no Street no 49		no	Lot 1	no	Street name / Plan Reference Winston Crescent	
	Suburb Viveash					State WA	Postcode 6056
Local government area	City of Swan						
Main BCA class of the building	N/A Use(s)		se(s) of the building		N/A		
Description of the building or works	Single lot						

Determination of Highest Bushfire Attack Level					
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL	
Method 1	Class B Woodland	Downslope 0-5	28 m	BAL – 19	

Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works								
Address Details	Unit no	Street n	10	Lot 2	no	Street nan Winston Cr	•	Reference
	Suburb Viveash						State WA	Postcode 6056
Local government area	City of Swan							
Main BCA class of the building	N/A			Use(s) of the building				
Description of the building or works	Single lot							

Determination of Highest Bushfire Attack Level					
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL	
Method 1	Class B Woodland	Downslope 0-5	28 m	BAL – 19	

Name	
Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details	practitioner.
Emerge Associates	
	BPAD
I hereby certify that I have undertaken the	Signature: Bushfire Planning & Design
assessment of the above site and determined	Level 1
the Bushfire Attack Level stated above in	1 nes
accordance with the requirements of AS 3959-	
2018	Date: 9 September 2024
2018	Date: 9 September 2024



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no Street no Lot no Street name / Plan Reference Signature 1 Street name / Plan Reference Name				Reference		
	Suburb Viveash					State WA	Postcode 6056
Local government area	City of Swan						
Main BCA class of the building	N/A		Use(s) of the building				
Description of the building or works	Single lot	·					

Determination of Highest Bushfire Attack Level					
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL	
Method 1	Class B Woodland	Downslope 0-5	28 m	BAL – 19	

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no Street no Lot no Street nar Winston Cr			me / Plan Reference rescent			
	Suburb Viveash					State WA	Postcode 6056
Local government area	City of Swan						
Main BCA class of the building	N/A		Jse(s) of the	he	N/A		
Description of the building or works	Single lot						

Determination of Highest Bushfire Attack Level					
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL	
Method 1	Class B Woodland	Downslope 0-5	38 m	BAL – 12.5	

BPAD Accredited Practitioner Details				
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire			
Company Details Emerge Associates	practitioner.			
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	Accredited Practitioner Level 1			



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no	Street no 57	no Lot no Street na Winston C			me / Plan Reference rescent	
	Suburb Viveash		State WA	Postcode 6056			
Local government area	City of Swan						
Main BCA class of the building	N/A		Jse(s) of the ouilding		N/A		
Description of the building or works	Single lot						

Determination of Highest Bushfire Attack Level							
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL			
Method 1	Class B Woodland	Downslope 0-5	38 m	BAL – 12.5			

BPAD Accredited Practitioner Details					
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire practitioner.				
Company Details Emerge Associates					
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	Accredited Practitioner Level 1				



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no	Unit no Street no Lot no Street nan Winston Cr				me / Plan Reference rescent	
	Suburb Viveash		•			State WA	Postcode 6056
Local government area	City of Swan						
Main BCA class of the building	N/A		Jse(s) of ouilding	the	N/A		
Description of the building or works	Single lot						

Determination of Highes	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B Woodland	Downslope 0-5	39 m	BAL – 12.5

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no	Unit no Street no Lot no Street name 61 7 Street name Winston Cres				e / Plan Reference escent	
	Suburb Viveash					State WA	Postcode 6056
Local government area	City of Swan						
Main BCA class of the building	N/A	N/A Use(s) of the building N/A			N/A		
Description of the building or works	Single lot						

Determination of Highest Bushfire Attack Level					
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL	
Method 1	Class B Woodland	Downslope 0-5	38 m	BAL – 12.5	

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no	Unit no Street no Lot no Street nam Winston Cr				me / Plan Reference rescent	
	Suburb Viveash					State WA	Postcode 6056
Local government area	City of Swan						
Main BCA class of the building	N/A	N/A Use(s) of the building N/A			N/A		
Description of the building or works	Single lot						

Determination of Highes	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B Woodland	Downslope 0-5	41 m	BAL – 12.5

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire practitioner.
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no	Unit no Street no Lot no Street name Winston Cre				ne / Plan Reference rescent	
	Suburb Viveash				•	State WA	Postcode 6056
Local government area	City of Swan						
Main BCA class of the building	N/A	N/A Use(s) of the building N/A			N/A		
Description of the building or works	Single lot						

Determination of Highes	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B Woodland	Downslope 0-5	60 m	BAL – 12.5

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no	Unit no Street no Lot no Street nar 10 Winston Cr				me / Plan Reference rescent	
	Suburb Viveash					State WA	Postcode 6056
Local government area	City of Swan						
Main BCA class of the building	N/A	N/A Use(s) of the building		N/A			
Description of the building or works	Single lot						

Determination of Highes	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B Woodland	Downslope 0-5	66 m	BAL – 12.5

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no	Unit no Street no Lot no Street nar Winston Cr				me / Plan Reference rescent	
	Suburb Viveash					State WA	Postcode 6056
Local government area	City of Swan						
Main BCA class of the building	N/A	N/A Use(s) of the building N/A			N/A		
Description of the building or works	Single lot						

Determination of Highest Bushfire Attack Level					
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL	
Method 1	Class B Woodland	Downslope 0-5	88 m	BAL – 12.5	

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates 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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no	Unit no Street no Lot no Street nar Winston Cr				me / Plan Reference rescent	
	Suburb Viveash					State WA	Postcode 6056
Local government area	City of Swan						
Main BCA class of the building	N/A	N/A Use(s) of the building			N/A		
Description of the building or works	Single lot						

Determination of Highes	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B Woodland	Downslope 0-5	88 m	BAL – 12.5

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no	Unit no Street no Lot no Street nar Winston Cr				me / Plan Reference rescent	
	Suburb Viveash					State WA	Postcode 6056
Local government area	City of Swan						
Main BCA class of the building	N/A	N/A Use(s) of the building		N/A			
Description of the building or works	Single lot						

Determination of Highes	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B Woodland	Downslope 0-5	88 m	BAL – 12.5

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no	Unit no Street no Lot no Street nar Winston Co				n e / Plan F rescent	Reference
	Suburb Viveash	•	•		•	State WA	Postcode 6056
Local government area	City of Swar	City of Swan					
Main BCA class of the building	N/A		Use(s) o		N/A		
Description of the building or works	Single lot	·					

Determination of Highest Bushfire Attack Level					
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL	
Method 1	Class B Woodland	Downslope 0-5	88 m	BAL – 12.5	

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and De	scription of W	Vorks					
Address Details	Unit no	Unit no Street no Lot no Street name of Street name				n e / Plan F escent	Reference
	Suburb Viveash					State WA	Postcode 6056
Local government area	City of Swar	City of Swan					
Main BCA class of the building	N/A		Jse(s) of ouilding	the	N/A		
Description of the building or works	Single lot						

Determination of Highest Bushfire Attack Level					
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL	
Method 1	Class B Woodland	Downslope 0-5	92 m	BAL – 12.5	

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no	Street no		Lot 16	no	Street name / Plan Reference Winston Crescent	
	Suburb Viveash		,			State WA	Postcode 6056
Local government area	City of Swar	City of Swan					
Main BCA class of the building	N/A L		Us	Use(s) of the building		N/A	
Description of the building or works	Single lot						

Determination of Highest Bushfire Attack Level				
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire practitioner.
Company Details Emerge Associates	Practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and De	scription of W	/orks						
Address Details	Unit no	Street n	10	Lot 17	no	Street nan Winston Cr	•	Reference
	Suburb Viveash						State WA	Postcode 6056
Local government area	City of Swar	1						
Main BCA class of the building	N/A			e(s) o	of the N/A			
Description of the building or works	Single lot							

Determination of Highest	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire practitioner.
Company Details Emerge Associates	BPAD
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and De	scription of W	/orks					
Address Details	Unit no	Unit no Street no Lot no Street na 18 Winston (n e / Plan F rescent	Reference
	Suburb Viveash					State WA	Postcode 6056
Local government area	City of Swar	City of Swan					
Main BCA class of the building	N/A		Jse(s) of thoulding	ne	N/A		
Description of the building or works	Single lot						

Determination of Highest	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and De	scription of W	/orks					
Address Details	Unit no				Street nam Winston Cre	me / Plan Reference rescent	
	Suburb Viveash		•		•	State WA	Postcode 6056
Local government area	City of Swar	City of Swan					
Main BCA class of the building	N/A		Jse(s) of ouilding	the	N/A		
Description of the building or works	Single lot						

Determination of Highest	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW

by declare that I am a BPAD accredited bushfire
tioner.
Bushfire Planning & Design Accredited Practitioner Level 1 9 September 2024
t



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and De	scription of W	Vorks				
Address Details	Unit no	Unit no Street no Lot no Street na Winston C			me / Plan Reference Trescent	
	Suburb Viveash				State WA	Postcode 6056
Local government area	City of Swar	City of Swan				
Main BCA class of the building	N/A		Ise(s) of the uilding	N/A		
Description of the building or works	Single lot					

Determination of Highes	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW

by declare that I am a BPAD accredited bushfire
tioner.
Bushfire Planning & Design Accredited Practitioner Level 1 9 September 2024
t



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and De	scription of W	/orks					
Address Details	Unit no	Unit no Street no Lot no Street name of the Street			n e / Plan I escent	Reference	
	Suburb Viveash		•		•	State WA	Postcode 6056
Local government area	City of Swar	City of Swan					
Main BCA class of the building	N/A		Jse(s) o	f the	N/A		
Description of the building or works	Single lot						

Determination of Highest	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW

Name	
Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
	practitioner.
Company Details	
Emerge Associates	
	BPAD
hereby certify that I have undertaken	the Signature:
assessment of the above site and determi	
the Bushfire Attack Level stated above	level 1
accordance with the requirements of AS 39	1 Del ~
2018	
2010	Date: 9 September 2024



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no	Street no	Lot 22	no	no Street name / Plan Reference Eveline Road		
	Suburb Viveash						Postcode 6056
Local government area	City of Swar	City of Swan					
Main BCA class of the building	N/A Use(s) of the building N/A						
Description of the building or works	Single lot	·					

Determination of Highest Bushfire Attack Level					
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL	
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW	

by declare that I am a BPAD accredited bushfire
tioner.
Bushfire Planning & Design Accredited Practitioner Level 1 9 September 2024
t



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no	Street no	Lot 23				Reference
	Suburb Viveash						Postcode 6056
Local government area	City of Swar	City of Swan					
Main BCA class of the building	N/A Use(s) of the building N/A						
Description of the building or works	Single lot	·					

Determination of Highest Bushfire Attack Level					
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL	
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW	

I hereby declare that I am a BPAD accredited bushfire
practitioner.
Signature: Bushfire Planning & Design Accredited Practitioner Level 1 Date: 9 September 2024



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no Street no Lot no Street name / Plan Referen				Reference		
	Suburb Viveash						Postcode 6056
Local government area	City of Swar	City of Swan					
Main BCA class of the building	N/A Use(s) of the building N/A						
Description of the building or works	Single lot						

Determination of Highest Bushfire Attack Level					
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL	
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW	

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details					Street nan Eveline Roa	ne / Plan R ad	eference
	Suburb Viveash						Postcode 6056
Local government area	City of Swar	City of Swan					
Main BCA class of the building	N/A Use(s) of the building N/A						
Description of the building or works	Single lot						

Determination of Highest Bushfire Attack Level					
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL	
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW	

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works						
Address Details	Unit no	Street no	me / Plan F venue	Reference		
	Suburb Viveash					Postcode 6056
Local government area	City of Swan					
Main BCA class of the building	N/A Use(s) of the building N/A					
Description of the building or works	Single lot					

Determination of Highes	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW

Name	
Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
	practitioner.
Company Details	
Emerge Associates	
	BPAD
I hereby certify that I have undertaken tl	Ne Signature:
assessment of the above site and determine	
the Bushfire Attack Level stated above	Level 1
accordance with the requirements of AS 395	1 Del ~
2018	
2018	Date: 9 September 2024



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no Street no Lot no Street name Harford Ave					n e / Plan R enue	deference
	Suburb Viveash					State WA	Postcode 6056
Local government area	City of Swan						
Main BCA class of the building	N/A Use(s) of the building N/A						
Description of the building or works	Single lot						

Determination of Highest Bushfire Attack Level					
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL	
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW	

by declare that I am a BPAD accredited bushfire
tioner.
Bushfire Planning & Design Accredited Practitioner Level 1 9 September 2024
t



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works						
Address Details	Unit no	Street no	me / Plan I venue	Reference		
	Suburb Viveash					Postcode 6056
Local government area	City of Swar	City of Swan				
Main BCA class of the building	N/A Use(s) of the building N/A					
Description of the building or works	Single lot					

Determination of Highes	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no Street no Lot no Street name / Pla 49 29 Harford Avenue				•	eference	
	Suburb Viveash						Postcode 6056
Local government area	City of Swan						
Main BCA class of the building	N/A Use(s) of the building N/A						
Description of the building or works	Single lot	·					

Determination of Highes	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details					Street nam Harford Ave	ame / Plan Reference evenue	
	Suburb Viveash					State WA	Postcode 6056
Local government area	City of Swan						
Main BCA class of the building	N/A Use(s) of the building			N/A			
Description of the building or works	Single lot						

Determination of Highest Bushfire Attack Level					
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL	
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW	

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no Street no 45		no	Lot no		Street name / Plan Reference Harford Avenue	
	Suburb Viveash					State WA	Postcode 6056
Local government area	City of Swan						
Main BCA class of the building	N/A Use(s) of the building				N/A		
Description of the building or works	Single lot						

Determination of Highest Bushfire Attack Level					
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL	
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW	

Name	
Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire practitioner.
Company Details	practitioner.
Emerge Associates	
	BPAD
hereby certify that I have undertaken assessment of the above site and determ	ined Accredited Practitioner Level 1
the Bushfire Attack Level stated abov accordance with the requirements of AS 3	1 0.1 ~
2018	Date: 9 September 2024



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works								
Address Details	Unit no	Unit no Street no Lot no Street name / Plan Reference 43 32 Street name / Plan Reference Harford Avenue				Reference		
	Suburb Viveash					•	State WA	Postcode 6056
Local government area	City of Swan							
Main BCA class of the building	I NI/A			e(s) of ilding	the	N/A		
Description of the building or works	Single lot							

Determination of Highest Bushfire Attack Level					
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL	
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW	

BPAD Accredited Practitioner Details				
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire			
Company Details Emerge Associates	practitioner.			
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	Accredited Practitioner Level 1			



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works						
Address Details	Unit no	Unit no Street no Lot no Street nan Harford Ave				Reference
	Suburb Viveash		<u>. </u>	<u> </u>	State WA	Postcode 6056
Local government area	City of Swan					
Main BCA class of the building	N/A		Jse(s) of the uilding	N/A		
Description of the building or works	Single lot					

Determination of Highest Bushfire Attack Level					
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL	
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW	

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no	Street n	_	Lot no Street name / Plan Reference Harford Avenue		eference	
	Suburb Viveash		•		•	State WA	Postcode 6056
Local government area	City of Swar	City of Swan					
Main BCA class of the building	N/A Use(s) of the building			N/A			
Description of the building or works	Single lot	·					

Determination of Highest	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no Street no Lot no Street name / Plan Reference 44				Reference		
	Suburb Viveash	•	•		•	State WA	Postcode 6056
Local government area	City of Swar	City of Swan					
Main BCA class of the building	N/A		Use(s) c building		the N/A		
Description of the building or works	Single lot	·					

Determination of Highes	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW

I hereby declare that I am a BPAD accredited bushfire
practitioner.
Signature: Bushfire Planning & Design Accredited Practitioner Level 1 Date: 9 September 2024



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no	Street no	Lot 36	no	Street name / Plan Reference Harford Avenue		eference
	Suburb Viveash		•		•	State WA	Postcode 6056
Local government area	City of Swar	City of Swan					
Main BCA class of the building	N/A		Use(s) o	e(s) of the N/A			
Description of the building or works	Single lot						

Determination of Highest	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no	Street no	Lot 37	no	Street name / Plan Reference Harford Avenue		
	Suburb Viveash				•	State WA	Postcode 6056
Local government area	City of Swar	City of Swan					
Main BCA class of the building	N/A		Use(s) of the building				
Description of the building or works	Single lot	·					

Determination of Highes	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW

I hereby declare that I am a BPAD accredited bushfire
practitioner.
Signature: Bushfire Planning & Design Accredited Practitioner Level 1 Date: 9 September 2024



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and De	scription of W	Vorks				
Address Details	Unit no Street no 99 Lot no Street name / Plan Reference Eveline Road				eference	
	Suburb Viveash				State WA	Postcode 6056
Local government area	City of Swar	1				
Main BCA class of the building	N/A		Ise(s) of the uilding	N/A		
Description of the building or works	Single lot	•				

Determination of Highest	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and De	scription of W	/orks				
Address Details	Unit no Street no Lot no Street name / Plan Re Cranwood Crescent				Reference	
	Suburb Viveash			·	State WA	Postcode 6056
Local government area	City of Swar	City of Swan				
Main BCA class of the building	N/A		Ise(s) of the uilding	N/A		
Description of the building or works	Single lot					

Determination of Highest	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and De	scription of W	Vorks					
Address Details	Unit no	Street no	Lot 48	no Street name / Plan Reference Cranwood Crescent			eference
	Suburb Viveash	•	•		•	State WA	Postcode 6056
Local government area	City of Swar	City of Swan					
Main BCA class of the building	N/A		Jse(s) o	f the	N/A		
Description of the building or works	Single lot						

Determination of Highest	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and De	scription of W	/orks					
Address Details	Unit no Street no Lot no Street name / Plan Reference Cranwood Crescent				Reference		
	Suburb Viveash		•			State WA	Postcode 6056
Local government area	City of Swar	1					
Main BCA class of the building	N/A		Jse(s) o	f the	N/A		
Description of the building or works	Single lot						

Determination of Highes	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW

by declare that I am a BPAD accredited bushfire
tioner.
Bushfire Planning & Design Accredited Practitioner Level 1 9 September 2024
t



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no	Street no 67	Lot no)	Street nan Cranwood	n e / Plan F Crescent	Reference
	Suburb Viveash					State WA	Postcode 6056
Local government area	City of Swar	City of Swan					
Main BCA class of the building	N/A Use(s) of the building N/A						
Description of the building or works	Single lot						

Determination of Highest Bushfire Attack Level						
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL		
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW		

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no	Street no	Lot 51	no	Street nan Cranwood	n e / Plan R Crescent	Reference
	Suburb Viveash					State WA	Postcode 6056
Local government area	City of Swar	City of Swan					
Main BCA class of the building	N/A Use(s) of the building N/A						
Description of the building or works	Single lot						

Determination of Highes	t Bushfire Attack Level			
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1



Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

Property Details and Description of Works							
Address Details	Unit no	Street no	Lot n	าด	Street nan Cranwood	ne / Plan F Crescent	Reference
	Suburb Viveash					State WA	Postcode 6056
Local government area	City of Swan						
Main BCA class of the building	N/A Use(s) of the building N/A						
Description of the building or works	Single lot						

Determination of Highest Bushfire Attack Level						
AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL		
Method 1	Excludable – Clause 2.2.3.2(a)	Not applicable	>100 m	BAL – LOW		

BPAD Accredited Practitioner Details	
Name Connor Porter-Wilkinson (57979)	I hereby declare that I am a BPAD accredited bushfire
Company Details Emerge Associates	practitioner.
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	Accredited Practitioner Level 1